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**ANIMAL & NATURAL
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PEER REVIEW COMMITTEE CONTINUED

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In my previous article, *Welcome to the Jungle: How Loopholes in the Federal Endangered Species Act and Animal Welfare Act are Feeding a Tiger Crisis in America* (2016), I explained how regulatory deficiencies and inadequate enforcement have created a surplus of big cats who end up in the exotic pet trade, forced to live their lives warehoused in cramped cages at roadside menageries, or dead. Since 2016, the U.S. Fish & Wildlife Service has closed what was commonly referred to as “The Generic Tiger Loophole”; however, it is advocacy organizations—not federal agencies—that have driven the most progress for captive exotic animals in the past six years through a series of precedent setting citizen suits against roadside zoos. This article will explain how recent citizen suits under the federal Endangered Species Act have improved the legal landscape for tigers and other captive big cats in the United States, how federal agencies have contributed to or impeded progress since 2016, and what federal legislative changes are still necessary to end the game of legal whack-a-mole and resolve America’s Tiger Crisis once and for all.

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through an animal rights perspective, systems which threaten humans and nonhumans from a common source, and a framework for threading animal rights into social justice more generally to overcome those specific actors—many of whom masquerade as animal activists—behind the power imbalance. It also offers a test for the success of the transition, whereby normative systems come to rely on true consent more than coercion or incentives, as a sign that power is being redistributed from the powerful to the vulnerable.

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industry is more pressing than ever before. Through a reconceptualization of what constitutes ‘unnecessary suffering,’ the introduction of a new National Animal Welfare Department, and improvements to standing and sentencing requirements, such necessary changes may be realised. In manifesting these changes, the Australian government would not only be representing the values of the public that they have a duty to represent, but would be acting to change an industrial status quo that is shameful and pervasively cruel.

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The discussion surrounding de-objectification should be understood as part of the tension between the animal welfare approach and a more radical position striving for animal rights recognition. Although de-objectification does not intend to abolish animal ownership, it shifts the paradigm of animal treatment from a welfarism of rules and prohibitions to one of principles. The importance of de-objectification is not only rhetorical, and although de-objectification does not necessary imply a revolution in animal law, it aims to produce a gradual change in the boundaries of the proprietary status of animals.

The Article goes beyond the debate about de-objectification and deals with the idea of recognizing animals as legal persons. Accordingly, comparison between animals and corporations, artificial intelligence or natural resources is carried out. The Article certainly supports the process of de-objectification of animals, but it is rather skeptical regarding personification.

Since de-objectification is in the first stages of its legal recognition around the world, it is hard to point out univocal conclusions. Nevertheless, even if there are not clear cut answers to all the quandaries, the analysis of de-objectification is an important part of the debate about the relationship between human and not-human animals.

WELCOME (BACK) TO THE JUNGLE: THE STATUS OF AMERICA'S TIGER CRISIS

CARNEY ANNE NASSER*

*"It is not part of a true culture to tame tigers, any more
than it is to make sheep ferocious."*¹

INTRODUCTION

In 2016, four years before the Covid-19 pandemic left America locked inside with the contrived Netflix reality show *Tiger King*,² and in the middle of a federal investigation into the formerly-bedazzled-now-

* Carney Anne Nasser is a career animal protection attorney, animal law professor, and big cat expert who has been described by Rachel Nuwer of the New York Times as "the go-to person in the country for laws pertaining to big cat ownership." Indeed, it is Ms. Nasser who pitched the wildlife trafficking case against the infamous "Tiger King" Joe Exotic to the Department of Justice and federal investigators that triggered a multi-year investigation leading to his conviction for numerous federal crimes. Nasser holds a B.A. in political science from University of California San Diego, a J.D. from Tulane University Law School, and graduate degree in community advocacy from the George Washington University Graduate School of Political Management. After nearly a decade working in the non-profit sector on creative litigation and legislative strategies for animals, Ms. Nasser became the second full-time animal law professor in the world when Michigan State University hired her to be its founding director of the animal welfare clinic at MSU College of Law. She recently took a break from teaching to do a research fellowship at Harvard Law School, where she works with the Brooks McComick, Jr. Animal Law & Policy Program. Ms. Nasser sits on the Board of Advisors for the Big Cat Sanctuary Alliance and was featured in the award-winning documentary, *The Conservation Game*, which won best social justice documentary at the 2021 Santa Barbara International Film Festival, and exposes the link between celebrity conservationists and the exotic pet trade. The film, directed and produced by renowned filmmaker, Michael Webber (*The Elephant in the Living Room*, *The Student Body*), premiered to widespread acclaim by critics who compared its impact to that of films like *Blackfish* and *The Cove* and had an immediate impact on the zoological community and the entertainment industry. Ms. Nasser would like to dedicate this article to the memory of her mom, Carney Small, who raised her to be a fearless advocate against injustices, and to the team of extraordinary individuals who made *The Conservation Game*, visionary director Michael Webber and fearless castmates Tim Harrison, Keith Gad, Jeff Kremer, Russ Muntz, Cy Vierstra, Carole Baskin, and Howard Baskin who prove that Margaret Mead was right when she said "never doubt that a small group of thoughtful, committed citizens can change the world; indeed it is the only thing that ever has." Special thanks goes to Delcianna Winders, Brittany Peet, Rachel Matthews, and the incomparable team of attorneys at the PETA Foundation who are bringing big cat abusers to their knees one citizen suit at a time.

¹ Henry David Thoreau, *Journal*, ed. by B. Torrey, 1837-1846, 1850-Nov. 3, 1861 (ed. 1906).

² *Tiger King: Murder, Mayhem, and Madness* (Netflix 2020).

federal-felon subject of *Tiger King*, Joseph Schreibvogel Maldonado Passage (“Joe Exotic”) that would result in his federal indictment³ for a multitude of wildlife crimes, I wrote about America’s tiger crisis.⁴ In *Welcome to the Jungle*, I described the systematic exploitation of big cats by roadside zoo-owners like Joe Exotic, his *Tiger King* cohort, Bhagavan “Doc” Antle, and former roadside zoo Dade City’s Wild Things, and explained how deficiencies in regulation and enforcement of the very laws that are meant to protect big cats have enabled widespread puppy mill-style breeding of tigers and other big cats for entertainment and the exotic pet trade.⁵ I described how closing a loophole in the Endangered Species Act, colloquially known as the “Generic Tiger Loophole,” and

³ See U.S. Attorney’s Office Western District of Oklahoma, *Grand Jury Adds Wildlife Charges to Murder-For-Hire Allegations Against “Joe Exotic”*, U.S. DEP’T OF JUST. (Nov. 7, 2018), <https://www.justice.gov/usao-wdok/pr/grand-jury-adds-wildlife-charges-murder-hire-allegations-against-joe-exotic>. Schreibvogel Maldonado Passage was indicted for two counts of murder for hire in connection with his attempts to have big cat sanctuary founder Carole Baskin murdered, five counts of criminal Endangered Species Act violations for killing five tigers, one count of violating the Endangered Species Act for offering tiger cubs for sale in interstate commerce without a permit, three counts of criminal Endangered Species Act violations for the sale of three tigers without permits, nine counts of criminal Lacey Act violations for the falsification of records in connection with the sale of three tigers and eight lions without a permit, and one additional count for a criminal Lacey Act violation in connection with the falsification of records for the sale of a lemur. *Id.* He was convicted on both murder for hire counts, eight Lacey Act counts, and nine Endangered Species Act counts. *Id.* On January 22, 2020, U.S. District Judge Scott L. Palk—noting that Joe Exotic was a “master manipulator” who was engaged in “systematic trafficking” of endangered species, sentenced him to 22 years in federal prison. *Id.*; see also U.S. Attorney’s Office Western District of Oklahoma, “*Joe Exotic*” *Sentenced to 22 years for Murder-For-Hire and for Violating the Lacey Act and Endangered Species Act*, U.S. DEP’T OF JUST. (Jan. 22, 2020), <https://www.justice.gov/usao-wdok/pr/joe-exotic-sentenced-22-years-murder-hire-and-violating-lacey-act-and-endangered>. “On January 22, 2020, U.S. District Judge Scott L. Palk sentenced Maldonado-Passage to 264 months in federal prison. That sentence includes (1) 108 months on each of the two murder-for-hire counts to run consecutively to each other, (2) 12 months on each of the Endangered Species Act violations to run concurrently to each other and to all other counts, and (3) 48 months on each of the Lacey Act violations to run concurrently with each other but consecutive to the two murder-for-hire counts. Judge Palk also ordered Maldonado-Passage to spend three years of supervised release upon release from prison.” *Id.* But see David Lee, “*Tiger King*” *Resentenced to 21 Years in Murder-For-Hire Plot*, COURTHOUSE NEWS SERV. (Jan. 28, 2022), <https://www.courthousenews.com/tiger-king-resentenced-to-21-years-in-murder-for-hire-plot/>. On January 28, 2022, Judge Palk resentenced Joe Exotic to 21 months in prison (a one month reduction) following a July 14, 2021, 10th Circuit Order ruling that the lower court should have grouped the two murder-for-hire convictions together for purposes of sentencing. *Id.*; see generally *United States v. Joseph Maldonado-Passage*, 4 F.4th 1097 (10th Cir. 2021).

⁴ See generally Carney Anne Nasser, *Welcome To The Jungle: How Loopholes In The Federal Endangered Species Act And Animal Welfare Act Are Feeding A Tiger Crisis In America*, 9 ALB. GOV’T L. REV. 196 (2016).

⁵ See generally *id.*

ending public contact with big cats of all ages is necessary for public safety, fulfillment of the statutory intent of both the Endangered Species Act and Animal Welfare Act, and ending the breed-and-dump cycle that ultimately supplies the exotic pet trade.⁶ It has been six years, and there has been progress above and beyond the convictions and imprisonment of Joe Exotic;⁷ however, the most significant progress we have seen has come because of legal precedent set in cases brought by advocacy organizations—not federal agencies.

The legal and policy landscape for captive big cats has shifted dramatically in the past five years. Indeed, we have seen significant legal and regulatory changes, game-changing federal court precedent, closure of the Generic Tiger Loophole,⁸ and advocacy efforts that have culminated in seismic industry shifts like the end of Ringling Bros. Circus⁹ and the revocation of Columbus Zoo’s accreditation by the Association of Zoos and Aquariums due to exposure of the zoo’s past relationships with roadside zoos and animal auctions.¹⁰ While it’s easy

⁶ *Id.*; see also Sharon Guynup, *Captive Tigers in the U.S. Outnumber Those in the Wild. It’s a Problem.*, NAT’L GEOGRAPHIC (Nov. 14, 2019), <https://www.nationalgeographic.com/animals/article/tigers-in-the-united-states-outnumber-those-in-the-wild-feature>.

⁷ See, e.g., U.S. Attorney’s Office, *supra* note 3; *contra* Lee, *supra* note 3; see generally Joseph Maldonado-Passage, 4 F.4th 1097.

⁸ Endangered and Threatened Wildlife and Plants; U.S. Captive-Bred Inter-specific Crossed or Generic Tigers, 81 Fed. Reg. 19923 (Apr. 6, 2016) (to be codified at 50 C.F.R. pt. 17).

⁹ Ringling Bros. first step was to phase out the use of elephants, noting at the time that there had been “somewhat of a mood shift with our customers.” See James Gerken, *Ringling Bros. Circus to Phase Out Elephant Acts*, HUFFPOST (March 5, 2015), https://www.huffpost.com/entry/ringling-bros-elephants_n_6807340; see also Arin Greenwood, *Ringling Bros. Closure Hasn’t Stopped Advocates from Trying to Ban Other Performing Circus Animals*, AM. BAR ASS’N (Aug. 1, 2017), https://www.abajournal.com/magazine/article/ringling_performing_animals_circus (noting that not long after phasing out the use of elephants, the circus shuttered entirely). But see Angie Angers, *Ringling Bros Circus to Return, But Animal-Free*, SPECTRUM NEWS (Oct. 31, 2021), <https://www.baynews9.com/fl/tampa/news/2021/10/27/ringling-bros-circus-returns--but-animal-free>. The circus is reportedly considering a comeback in 2023 without the controversial animal acts. *Id.* (“Right now, we are currently still in the planning phase for the relaunch of The Greatest Show On Earth, which will not include animals.”).

¹⁰ See, e.g., *AZA Statement on AZA Accreditation Commission’s Denial of Accreditation to Columbus Zoo and Aquarium*, ASS’N OF ZOOS & AQUARIUMS (Oct. 6, 2021), <https://www.aza.org/aza-news-releases/posts/aza-statement-on-aza-accreditation-commissions-denial-of-accreditation-to-columbus-zoo-and-aquarium?locale=en> (citing the zoo’s “long record of intentional and repeated transfers with non-AZA members intended to supply baby animals—mainly big cats—for entertainment purposes”); *AZA Board Upholds Accreditation Commission Denial of Columbus Zoo and Aquarium Accreditation*, ASS’N OF ZOOS & AQUARIUMS (Dec. 14, 2021), <https://www.aza.org/aza-news-releases/posts/aza-board-upholds-accreditation->

and tempting to lay responsibility for the source of “America’s Tiger Crisis” at the feet of the over-the-top roadside zoo owners depicted in *Tiger King*, animal abusers like Joe Exotic, Tim Stark, and Jeff Lowe are only symptoms of a problem created, enabled, and perpetuated by the U.S. Department of Agriculture (USDA).¹¹ The USDA is responsible for enforcing the federal Animal Welfare Act, and “insur[ing] [sic] the humane care and treatment of animals,”¹² but has virtually commodified tigers and other big cats by allowing, and therefore encouraging, exhibitors like Joe Exotic, Doc Antle, Jeff Lowe, Tim Stark, and their cohorts to offer big cats for lucrative public contact sessions¹³ despite universally-accepted expert opinions that cub petting is harmful and inhumane.¹⁴ Not only is the very practice of offering young cubs for bottle-feeding, photo ops, and other public handling sessions stressful and harmful in and of itself,¹⁵ common practices that roadside zoos employ—like pulling cubs from their mothers upon birth¹⁶ and partially amputating their digits¹⁷ to make them easier to control and less of a

commission-denial-of-columbus-zoo-and-aquariums-accreditation?locale=en (denying the zoo’s appeal because “in view of the serious and persistent violations of AZA standards, over at least the past 5 years, we cannot accredit at this time”); Jennifer Smola Shaffer, *Columbus Zoo Loses Accreditation Over Animal Program, Leadership Issues, But Plans Appeal*, THE COLUMBUS DISPATCH (Oct. 6, 2021), <https://www.dispatch.com/story/news/local/2021/10/06/columbus-zoo-loses-accreditation-plans-appeal-after-leadersperhip-issues/6017990001/>. The changes followed the recent documentary film, *The Conservation Game*, which raised questions about the way celebrity conservationists, including longtime Columbus Zoo director Jack Hanna, acquire exotic animals. *Id.* The film alleged baby tigers and snow leopards that appeared with Hanna on late-night talk shows often didn’t come from or return to accredited zoos, but were instead shuffled among backyard breeders and unaccredited zoos that don’t have to adhere to the same strict animal care standards and ethics rules as accredited facilities. *Id.*

¹¹ See *infra*, Section 1A: A Glimpse at the Exotic Pet Trade.

¹² See 7 U.S.C. § 2131(1).

¹³ These encounters range from bottle-feeding, photo ops, swim-with-tigers, birthday party rentals, but herein are collectively referred to as “cub petting.”

¹⁴ See *Handling of Husbandry of Neonatal Nondomestic Cats*, U.S. DEP’T OF AGRIC. (Mar. 2016), https://www.aphis.usda.gov/publications/animal_welfare/2016/tech-neonatal-nondomestic-cats.pdf.

¹⁵ See, e.g., A09004 MEMO, N.Y. State Assembly, https://assembly.state.ny.us/leg/?default_fld=&leg_video=&bn=A09004&term=2013&Memo=Y (“There is no safe or humane result when direct contact with wild animals is allowed.”).

¹⁶ See, e.g., Permanent Injunction, *People for the Ethical Treatment of Animals v. Wildlife in Need & Wildlife Indeed*, No. 4:17-cv-00186-RLY-DML (S.D. Ind. Aug. 3, 2020), ¶1 [hereinafter Permanent Injunction]. Individuals who watched *Tiger King* may recall a scene at G.W. Exotic Animal Park in which Joe Exotic pulled a just-born cub away from their mother through the fence. *Tiger King: Murder, Mayhem, and Madness*, *supra* note 2.

¹⁷ See Permanent Injunction, *supra* note 16, at ¶2. Declawing has been interpreted as a violation of the Animal Welfare Act since 2006. See *Information Sheet*

liability—to facilitate these sessions have been adjudicated by federal courts to constitute illegal harm and harassment.¹⁸ However, despite voluminous expert opinions from the veterinary, animal behavior, and zoological communities that cub petting is harmful,¹⁹ despite federal court precedent that premature maternal separation and declawing violate the Endangered Species Act,²⁰ and despite evidence that it is

on Declawing and Tooth Removal, U.S. DEP’T OF AGRIC. (Aug. 2006), http://www.aphis.usda.gov/animal_welfare/downloads/big_cat/declaw_tooth.pdf (clarifying that declawing is “no longer allowed under the Animal Welfare Act”). Because of this, it has been “condemned” by the American Veterinary Medical Association. See *Policy on Declawing Captive Exotic and Wild Indigenous Cats*, AVMA, <https://www.avma.org/resources-tools/avma-policies/declawing-captive-exotic-and-wild-indigenous-cats> (last visited Apr. 18, 2022) (“The AVMA condemns declawing captive exotic and other wild indigenous cats for nonmedical reasons.”). Despite the USDA’s prohibition on declawing big cats, the agency has failed to take meaningful steps to enforce its own regulations. For example, Nevada-based magician, Dirk Arthur, dba Illusioneering, Inc., who used tigers and other big cats in his now-shuttered Las Vegas act until 2017, continued to openly engage in the inhumane and unlawful practice of declawing his big cats despite a USDA policy prohibiting it because the USDA cited him, but never sought enforcement action against him to stop the practice. See *Information Sheet on Declawing and Tooth Removal*, *supra* note 17; U.S. Dep’t of Agric., Animal & Plant Health Inspection Serv., Inspection Report of Illusioneering, Inc., Dirk Arthur, and Stage Magic (license no. 88-C-0151, 4370 W. Torino Ave., Las Vegas, NV 89139) (Dec. 28, 2013) (citing Arthur for multiple AWA violations, including the illegal declawing of two tigers and one lion, and noting that “[s]ince 2006...[declawing] procedures are no longer considered to be acceptable when performed solely for handling or husbandry purposes since they can cause significant pain and discomfort and may result in chronic health problems”). Exhibitors like Dirk Arthur and Tim Stark are only a few of many exhibitors who openly engaged in the practice of illegally declawing big cats—likely because the USDA never took any meaningful enforcement action to stop it. See, e.g., *Petition for Rulemaking to Prohibit Direct Contact with Big Cats, Bears, and Nonhuman Primates* (Jan. 7, 2013), p. 39.

¹⁸ See Permanent Injunction, *supra* note 17, at ¶¶ 1-2 (“1. The WIN Defendants violated the Endangered Species Act (“ESA”), 16 U.S.C. §1538(a)(1)(B), (G) and its implementing regulations, 50 C.F.R. §§ 17.21(c), 17.31(a), 17.40(r), by taking tigers, lions, and hybrids thereof (“Big Cats”) within the meaning of the ESA when they wounded, harmed, and/or harassed at least twenty-two Big Cats via declawing. 2. The WIN Defendants violated the ESA, 16 U.S.C. § 1538(a)(1)(B), (G) and its implementing regulations, 50 C.F.R. §§ 17.21(c), 17.31(a), 17.40(r), by taking Big Cats within the meaning of the ESA when they harmed and harassed at least fifty-three Big Cats by prematurely separating Big Cat Cubs from their mothers.”).

¹⁹ See *Policy on Declawing Captive Exotic and Wild Indigenous Cats*, *supra* note 17 (“The AVMA condemns declawing captive exotic and other wild indigenous cats for nonmedical reasons.”); *People for the Ethical Treatment of Animals, Inc. v. Wildlife in Need and Wildlife in Deed, Inc.*, No. 4:17-cv-00186-RLY-DML, 2018 WL 828461 at *4 (S.D. Ind. Feb. 12, 2018) (citing to testimony of Jay Pratte, now Deputy Director at the AZA-accredited Utica Zoo, that declawing causes behavioral harm to big cats).

²⁰ Permanent Injunction, *supra* note 17; see also *People for the Ethical Treatment of Animals, Inc.*, No. 4:17-cv-00186-RLY-DML, 2018 WL 828461 at

the cub petting industry that supplies the exotic pet trade,²¹ the USDA has refused to stop cub petting or take steps to meaningfully fulfill its statutory obligation “to insure [sic] that animals intended . . . for exhibition purposes . . . are provided humane care and treatment.”²²

While advocacy organizations like People for the Ethical Treatment of Animals²³ and Big Cat Rescue²⁴ have been laser-focused on executing meaningful steps to ending big cat exploitation and trafficking in the United States, the USDA’s apparent focus in the past five years has been on protecting big exploiters rather than regulating them.²⁵ Despite

*3-4 (S.D. Ind. Feb. 12, 2018) (citing to the testimony of veterinarian Dr. Jennifer Conrad that declawed big cats can suffer a lifetime of pain, permanent lameness, arthritis, abnormal standing conformation, and other long-term complications and that declawing violates acceptable veterinary medical standards, generally accepted husbandry practices, and medical guidance from the USDA).

²¹ See, e.g., A09004 MEMO, N.Y. State Assembly, https://assembly.state.ny.us/leg/?default_fld=&leg_video=&bn=A09004&term=2013&Memo=Y (“[Cub petting] also requires an ongoing supply of young animals. Infant animals are prematurely separated from their mothers to be groomed for human handling, often die due to constant handling and travel, and are even subjected to abusive training and painful declawing or deranging procedures in a futile attempt to make them safe for public contact once they mature. After the animals grow too big for handling, they are held on leashes with no protective barriers. Often they are dumped and sent to substandard facilities.”); Sharon Guynup, *‘Tiger King’ Stars’ Legal Woes Could Transform Cub-Petting Industry*, NAT’L GEOGRAPHIC (Apr. 15, 2021), <https://www.nationalgeographic.com/animals/article/tiger-king-stars-legal-cases-change-industry?fbclid=IwAR0w17wwSEx5dZAI7hBCBDZYzn6z7tgxyeb9kxlb6gg7Q42aDyItATQ9JIE> (“Big cats are subject to factory-like breeding to produce a constant supply of cubs, and few visitors realize that many of them die young. Those that survive are too big and dangerous to pet by the age of 12 weeks, USDA regulations say. Those cubs usually are then sold off to other facilities, dumped, or simply disappear.”).

²² 7 U.S.C. § 2131(1).

²³ PETA has had more success than any other advocacy organization in bringing ESA citizen suits against roadside zoos. Dade City’s Wild Things, Wildlife in Need, Jeff Lowe, and Tri-State Zoological Park are all out of business thanks largely to litigation brought by PETA.

²⁴ Big Cat Rescue and its founder, Carole Baskin, have been leading the effort to ban cub petting for over two decades, and have been architects of the Big Cat Public Safety Act since it was first introduced in 2012. The Big Cat Public Safety Act would establish much-needed uniformity of law across all 50 states by prohibiting private ownership of big cats and prohibiting exhibitors from offering public contact with big cats. See Maria Cramer, *One Year After Tiger King, Bill Aims to Protect Big Cats*, N.Y. TIMES (Apr. 20, 2021), <https://www.nytimes.com/2021/04/20/us/politics/tiger-king-bill.html> (“Ms. Baskin’s organization, Big Cat Rescue, has long pushed for the Big Cat Public Safety Act, which was first introduced in 2012. The organization has been calling for a ban on cub petting for more than 20 years.”); see also Big Cat Public Safety Act, HR 263/S.1210.

²⁵ See, e.g., Rachel Fobar, *USDA Accused of Ignoring Animal Welfare Violations in Favor of Business Interests*, NAT’L GEOGRAPHIC (Oct. 13, 2021), <https://www.nationalgeographic.com/animals/article/usda-accused-of-ignoring-animal->

the agency’s sandbagging, significant progress has been made. Indeed, of the infamous roadside zoo operators and big cat dealers featured in *Tiger King*, all but one²⁶ of them is in prison, indicted, convicted, or otherwise out of business. Joe Exotic is serving a twenty-one year prison sentence for wildlife trafficking, shooting tigers, and murder-for-hire; Jeff Lowe’s USDA license was permanently revoked, and the federal government seized more than 80 endangered animals from his custody following a consent decree that Lowe and his wife signed in order to avoid further federal enforcement action. A federal judge recently found that Lowe treated big cats with “appalling cruelty”²⁷ in violation of the Endangered Species Act. Tim Stark, owner of Wildlife in Need, is permanently out of business and no longer allowed to keep animals after facing USDA license revocation, hundreds of thousands of dollars in civil penalties, dissolution of his nonprofit corporation by the Indiana Attorney General, and a federal court order finding that he violated the Endangered Species Act by removing neonatal cubs from their mothers, declawing big cats (several of whom died as a result), forcing animals to live in unsanitary conditions, and denying them veterinary care. Bhagavan “Doc” Antle is facing multiple trials after being indicted by the State of Virginia for wildlife trafficking and animal cruelty²⁸ and

welfare-for-business-interest; Karen Brulliard, *USDA’s Enforcement of Animal Welfare Laws Plummeted in 2018, Agency Figures Show*, WASH. POST (Oct. 18, 2018), <https://www.washingtonpost.com/science/2018/10/18/usdas-enforcement-animal-welfare-laws-plummeted-agency-figures-show/>.

²⁶ Mario Tabraue, owner of Zoological Wildlife Foundation of Florida, which has been cited numerous times for violations of the Animal Welfare Act and has been the site of numerous animal attacks, previously served a prison sentence in connection with a homicide conviction. He is the only roadside zoo owner featured in *Tiger King* who hasn’t been shut down or indicted with wildlife crimes. Tabraue’s business includes public encounters with big cats and other exotic animals that cost up to thousands of dollars per person. See *Meet our Team*, ZOOLOGICAL WILDLIFE FOUND., <https://zoologicalwildlifefoundation.com/about/team/> (last visited Apr. 25, 2022).

²⁷ See Findings of Fact and Conclusions of Law, *People for the Ethical Treatment of Animals, Inc. v. Jeffrey Lowe*, No. CIV-21-0671-F (W.D. Okla. Feb. 25, 2022).

²⁸ Mark Herring, Owner of Myrtle Beach Safari and Owner of Virginia “Roadside Zoo” Indicted on Wildlife Trafficking Charges, Commonwealth of Virginia Office of the Attorney General (Oct. 9, 2020), <https://www.oag.state.va.us/media-center/news-releases/1848-october-9-2020-owner-of-myrtle-beach-safari-and-owner-of-virginia-roadside-zoo-indicted-on-wildlife-trafficking-charges>; see also *Winchester Wildlife Park Raided By Authorities, With More Than 100 Animals Seized*, ABC7 NEWS (Aug. 20, 2019), <https://wjla.com/news/local/winchester-wildlife-park-raided-by-authorities-with-more-than-100-animals-seized> (“On August 15, 2019, Virginia authorities raided Wilson’s Wild Animal Park, a roadside zoo in Winchester, Virginia, seizing 119 wild and exotic animals found living in deplorable conditions.”); In the Circuit Court of Frederick County Commonwealth of Virginia County of Frederick, to-wit, Indictment, No. C720-902, PERMA (Feb. 22, 2022), <https://perma.cc/TKK3->

has been separately charged with federal money laundering crimes and wildlife trafficking by the U.S. Department of Justice in two separate federal indictments.²⁹

This Article will explore the progress and setbacks of the legal landscape, the effects of the entertainment industry, and the legal steps necessary to end big cat trafficking in America once and for all. Part I gives an overview of the current state of the big cat trade in the U.S. Part II explores legal and regulatory developments under the federal Endangered Species Act. Part III explains some of the many ways that the USDA has failed to fulfill its statutory obligation to enforce the federal Animal Welfare Act. Part IV offers a current glimpse at state enforcement and legislative efforts, and finally concludes with an assessment of the most important legal change that must be accomplished in order to end America's Tiger Crisis.

KBC4; In the Circuit Court of Frederick County Commonwealth of Virginia County of Frederick, to-wit, Indictment, No. C720-902- C720-920, No. C720-814-C720-899, COMMONWEALTH OF VA. OFF. OF THE ATT'Y GEN. (Oct. 2020), <https://www.oag.state.va.us/files/2020/WilsonIndictments.pdf> (alleging that Bhagavan "Doc" Antle conspired with Keith Wilson to traffic lions in violation of federal and state law); VA. CODE ANN. § 29.1-505 (providing that "[i]f any person conspires with another to commit any [wildlife] offense defined in this title or any of the regulations of the Board, and one or more such persons does any act to effect the object of the conspiracy, he shall be guilty of conspiracy to commit the underlying offense and shall be subject to the same punishment prescribed for the offense the commission of which was the object of the conspiracy"); VA. CODE ANN. § 29.1-564 ("The taking, transportation, possession, sale, or offer for sale within the Commonwealth of any fish or wildlife appearing on any list of threatened or endangered species published by the United States Secretary of the Interior pursuant to the provisions of the federal Endangered Species Act of 1973 (P.L. 93-205), or any modifications or amendments thereto, is prohibited."); U.S. Fish & Wildlife Service Final Rule, 80 Fed. Reg. 80000-80056 (Dec. 23, 2015) (indicating that all subspecies of lions have been protected by the Endangered Species Act since January 22, 2016).

²⁹ Complaint at 1, *United States v. Mahamayavi Antle a/k/a Doc Antle and Andrew Jon Sawyer a/k/a Omar Sawyer*, No. 4:22-mj-00023-MCRI (D.S.C. 2022), <https://www.justice.gov/usao-sc/press-release/file/1510816/download>; *see also Doc Antle, Owner of Myrtle Beach Safari, and Employee Charged with Federal Money Laundering Crimes*, DIST. OF S.C. OFF. OF THE ATT'Y GEN. (June 6, 2020), <https://www.justice.gov/usao-sc/pr/doc-antle-owner-myrtle-beach-safari-and-employee-charged-federal-money-laundering-crimes?fbclid=IwAR3k1ILW4FUfL4BN5P1r8odVd-BWBau4iEIAJxZCqebtCPC4SJKsHqqd4-M>; Indictment, *United States v. Bhagavan Mahamayavi Antle et al.*, No. 4:22-cr-00580-CRI (D.S.C. 2022), <https://perma.cc/K4T9-8G7K>.

I. OVERVIEW

In 2008, TRAFFIC,³⁰ the leading non-governmental wildlife trafficking monitoring organization, voiced its concerns that "the fact that the United States continues to generate Tigers [sic] that end up unwanted indicates that the U.S. could become a source for parts in the illegal trade in the future."³¹ Unfortunately, federal agencies have done little, and in some cases, created more obstacles to ending the exploitation of big cats since I wrote about America's tiger crisis in 2016.³²

In the meantime, TRAFFIC's 2008 prediction has proved to be accurate. On August 1, 2018, a New York man pleaded guilty to trafficking tiger and lion parts from the United States to Thailand and was sentenced in federal court.³³ As part of his guilty plea, Arongkron Malasukum admitted to purchasing "skulls, claws, and [other] parts" from protected species and sending 68 packages containing protected species parts to Thailand between April 9, 2015, and June 29, 2016.³⁴ On January 22, 2020, just two months before *Tiger King* kept millions of viewers occupied during Covid-19 lockdown, a Reno, Nevada man named Robert Barkman pleaded guilty to wildlife trafficking in connection with his sale of a lion skull and leopard claws³⁵ to Malasukum.³⁶ As part of his guilty plea, Barkman admitted that he received \$6,000 for the interstate sale of threatened or endangered wildlife between January

³⁰ *See* Rick Scobey, *Our Mission*, TRAFFIC, <https://www.traffic.org/about-us/our-mission/> (last visited Apr. 25, 2022) ("TRAFFIC is a leading non-governmental [organization] working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development.").

³¹ Douglas F. Williamson & Leigh A. Henry, *Paper Tigers? The Role of the U.S. Captive Tiger Population in the Trade in Tiger Parts*, TRAFFIC (July 2008), <https://www.traffic.org/site/assets/files/5400/paper-tigers.pdf>.

³² *See generally* Nasser, *supra* note 4.

³³ U.S. Attorney's Office Eastern District of Texas, *New York Man Sentenced to Prison for Trafficking in Endangered Lion and Tiger Parts*, U.S. DEP'T OF JUST. (Aug. 1, 2018), https://www.justice.gov/usao-edtx/pr/new-york-man-sentenced-prison-trafficking-endangered-lion-and-tiger-parts?fbclid=IwAR0ju6h-TJY2PkxMS3gMyjwj_VvKJ8hYD24yZ-nur3PUFha18hKqAe3c6Kw.

³⁴ *Id.*

³⁵ Patrick Greenfield, *Wildlife Traffickers Target Lion, Jaguar, and Leopard Body Parts as Tiger Substitutes*, THE GUARDIAN (July 10, 2020), <https://www.theguardian.com/environment/2020/jul/10/wildlife-traffickers-target-lion-jaguar-and-leopard-body-parts-as-tiger-substitutes-aoe>. Lion, leopard, and jaguar parts are increasingly being used as substitutes for, and passed off as tiger parts to meet the demand for tiger parts in Asia. *Id.*

³⁶ U.S. Attorney's Office District of Nevada, *Reno Man Sentenced for Trafficking in Endangered Lion and Leopard Parts*, U.S. DEP'T OF JUST. (Jan. 22, 2020), <https://www.justice.gov/usao-nv/pr/reno-man-sentenced-trafficking-endangered-lion-and-leopard-parts>.

2016 and October 2016.³⁷ These parts came from captive-bred cats; meaning, these transactions almost certainly were made possible by roadside zoos or backyard breeders who dump animals into the black hole of the exotic pet trade.³⁸

a. A Glimpse at the Exotic Pet Trade

On November 7, 2016 police arrested Trisha Meyer for child endangerment after finding multiple tigers and other exotic animals living in her Houston home.³⁹ Her story, while surprising, is not unique. Indeed, on February 11, 2019, law enforcement officers removed a 400-pound adult tiger from a 4'x8' cage in an abandoned home in Houston, Texas.⁴⁰ The owner, 24-year-old Brittany Garza, had reportedly purchased the cat in 2017 “through a man she knew” and was later arrested and charged with misdemeanor animal cruelty for leaving the cat in a tiny cage, in his own feces, and without adequate food, water, or veterinary care.⁴¹ Following Ms. Garza’s arrest and refusal to disclose how she obtained the tiger, who now lives at an accredited sanctuary in Murchison, Tex.,⁴² three more tigers were observed on the loose

³⁷ *Id.*

³⁸ See, e.g., Rachel Nuwer, *The Strange and Dangerous World of America’s Cat People*, LONGREADS (Mar. 2020), <https://longreads.com/2020/03/16/tiger-trafficking-in-america/>. Big cats in roadside zoos “are most likely confined to... cramped cages... where they spend the rest of their life being speed-bred to crank out more adorable cubs. Or [they] might be sold to another breeder, or to someone who wants to keep [them] as a pet. Although no one tracks big cat ownership in the U.S., it’s estimated that there are likely more pet tigers in America than there are left in the wild.” *Id.*

³⁹ Brittany Taylor, *Tigers, Cougar, Skunk Found in Cypress Woman’s Home, Police Say*, CLICK2HOUSTON (Nov. 14, 2016), https://www.click2houston.com/news/2016/11/14/tigers-cougar-skunk-found-in-cypress-womans-home-police-say/?fbclid=IwAR2tr-sGgLPa0x6mqavsZZsHEP10M4bnIama5uAjnBT_hqaMPWBVqLYVxqQ.

⁴⁰ Nicole Hensley, *Wildlife Refuge Allowed to Keep Tiger Seized from Houston Home*, HOUS. CHRON., <https://perma.cc/P4NE-B4VG> (Apr. 3, 2019, 7:46 PM). In the April 5, 2019, civil hearing in which a justice of the peace transferred ownership of the tiger to GFAS-accredited Cleveland Amory Black Beauty Ranch in Murchison, Texas, the justice of the peace found that Garza had subjected the cat to unlawful cruelty by leaving the tiger confined in a 4'x8' cage in his own waste and in apparently poor condition without adequate food or water. *Id.*; see also Emily Foxhall, *Houston has a Tiger King Ending of Its Own. But This One has a Happy Ending.*, HOUS. CHRON., <https://perma.cc/2Z8C-ZPUF> (Apr. 2, 2020, 6:35 PM).

⁴¹ Taisha Walker, *Tiger Found in Vacant Houston Home was Never Abandoned, Former Owner Says*, CLICK2HOUSTON (May 14, 2019, 8:20 PM), <https://www.click2houston.com/news/2019/05/15/tiger-found-in-vacant-houston-home-was-never-abandoned-former-owner-says/>.

⁴² Amanda Jackson, *Mystery Behind Tiger Found in Vacant Houston Home*

in suburban Texas neighborhoods in a span of three months in 2021. Indeed, a resident of the Southwest Side neighborhood of San Antonio reported seeing a tiger cub walk through her back yard on February 6, 2021;⁴³ law enforcement seized an adult tiger from the Southwest Side neighborhood of San Antonio on February 13, 2021;⁴⁴ and a third tiger was seen loose in suburban Houston on May 9, 2021.⁴⁵ These cats are some of the faces of the big cat trade in the United States. Indeed, another Texas woman, Angela Bazzel, bragged on social media about purchasing a liger cub for \$6,800⁴⁶ but would not disclose who the seller was; paperwork obtained through a public records request later showed that she had bought the cat from Joe Exotic.⁴⁷

These incidents are far from isolated. In October 2021, the Audubon Zoo in New Orleans was called upon to care for a 7-month-old jaguar who was rescued from illegal trafficking by the U.S. Fish & Wildlife Service.⁴⁸ The Audubon Zoo is no stranger to providing emergency care to trafficked animals—I personally helped rehome

Solved. One Woman Arrested, CNN, <https://www.cnn.com/2019/05/15/us/tiger-found-in-houston-house-owner-arrested-trnd/index.html> (May 16, 2019, 2:22 PM).

⁴³ Cody King, *Investigation Underway by ACS After Tiger Cub Spotted on Southwest Side*, KSAT (Feb. 6, 2021, 9:33 AM), <https://www.ksat.com/news/local/2021/02/06/investigation-underway-by-acs-after-tiger-cub-spotted-on-southwest-side>.

⁴⁴ Rebecca Salinas, *BCSO Deputies Seize Tiger on Southwest Side Property, Owner Cited*, KSAT, <https://www.ksat.com/news/local/2021/02/14/bcso-deputies-seize-tiger-on-southwest-side-property-owner-cited/> (Feb. 14, 2021, 10:16 PM).

⁴⁵ VIDEO: *Tiger Spotted in West Houston Neighborhood*, KHOU 11, https://www.khou.com/article/news/local/houston-tiger/285-77f8a185-c10c-4af6-8b94-1e1b637bf9d3?fbclid=IwAR1gJiBR8G-YxygO_2hXU7Mlj_l32fkJZjfgmg_jfS9B8gV-A2_2BLtKgMA (May 10, 2021, 10:12 AM).

⁴⁶ See People for the Ethical Treatment of Animals, et al., *Petition to the U.S. Dep’t of Agric. Requesting Rulemaking to Ensure the Use of Appropriate Methods to Prevent, Control, Diagnose, and Treat Diseases and Injuries in Big Cats Under the Animal Welfare Act*, at 22-23 (May 19, 2017) (“So I purchased a baby liliger. It cost me a lot of money but it was well worth it. I had to give her to a sanctuary today, but the experience will be a lifetime of memories! One day I will open my own sanctuary! Her name was Kamani Corinne and she has our hearts.” And further stating in the comments under the post that “I had no choice but to give her up but I could have chosen where and even taken Kamani back to get my 6800 I paid for her...”) (quoting Angela Bazzell, Facebook (Sept. 4, 2015)) (on file with the author).

⁴⁷ See Certificate of Veterinary Inspection No. 2018560, Oklahoma Dep’t of Agric., Food & Forestry (Aug. 22, 2015). Ms. Bazzel ended up having to give the cat to another facility in Texas called Pride Rock because it was illegal in her locality to keep dangerous wild animals as pets. The cat, like most exotic pets, was dead before her first birthday according to a phone conversation I had with the director of Pride Rock.

⁴⁸ Vanessa Romo, *New Orleans Audubon Zoo Welcomes a Trafficked Jaguar Cub*, NPR (Nov. 19, 2021, 6:01 AM), <https://www.npr.org/2021/11/19/1057082084/new-orleans-audubon-zoo-welcomes-a-trafficked-jaguar-cub>.

a tiger to an accredited big cat sanctuary in California after she was confiscated from a Baton Rouge, Louisiana-area backyard in 2017 and rehabilitated at the Audubon Zoo.⁴⁹ Based on the identical facial markings of a tiger of similar age featured in a YouTube video⁵⁰ with rapper “NBA (Never Broke Again) YoungBoy,” Kentrell Gaulden, the tiger—now named Nola—is believed to have been the same animal.⁵¹

Just three months prior to Nola’s rescue, U.S. Customs and Border Protection agents at the San Diego-Tijuana border confiscated a tiger cub⁵² from two men who were attempting to traffic him into the U.S.⁵³ The U.S. Department of Justice charged Louis Eudoro Valencia with wildlife trafficking⁵⁴ and, despite evidence that Valencia was a seasoned wildlife trafficker rather than a young man who made one error in judgment, a federal judge sentenced him to just six months incarceration.⁵⁵ Animal advocates and conservationists cried foul at the light sentence, which appears out of step with the enormity of the wildlife trafficking problem in the United States.⁵⁶ Indeed, wildlife trafficking is estimated to be a \$7 billion—\$23 billion global industry, with the United States serving as the second-largest market after China.⁵⁷ While the United States may be second to China in the demand for illegal wildlife, we are the country with the largest demand for exotic pets,⁵⁸ and that demand is met by

⁴⁹ VIDEO: *White Tiger Cub Seized in Louisiana, Possibly Belonging BR Rapper NBA Youngboy, Finds New Home*, WAFB9, <https://www.wafb.com/story/37206508/video-white-tiger-cub-seized-in-louisiana-possibly-belonging-br-rapper-nba-youngboy/> (Jan. 6, 2018, 1:59 PM).

⁵⁰ Loud Genius, *NBA YoungBoy Shows off His Tiger*, YOUTUBE (Oct. 12, 2017), <https://www.youtube.com/shorts/OIU61CNfDtQ>.

⁵¹ Alina Bradford, *Tigers: The Largest Cats in the World*, LIVESCIENCE (June 4, 2019) <https://www.livescience.com/27441-tigers.html> (“No two tigers have the same markings, and their stripes are as individual as fingerprints are for humans.”).

⁵² Coincidentally, the cubs rescued from Louisiana and at the U.S.-Mexico border in Otay Mesa, California, were fortunate enough to end up at the same reputable, accredited sanctuary in Alpine, California. Bradley J. Fikes, *Moka the Tiger Gets a New Home—and a New Playmate*, ORLANDO SENTINEL (July 27, 2018), <https://www.orlandosentinel.com/sd-me-moka-nola-20180727-story.html>.

⁵³ Adam Popescu, *How Did America End Up With the World’s Largest Tiger Population?*, THE GUARDIAN (Sept. 21, 2021, 4:00 AM), <https://perma.cc/2BKC-PGCH>.

⁵⁴ Press Release, Melanie K. Pierson, Assistant U.S. Att’y, U.S. Att’y’s Off. S. Dist. of Cal., *Perris Man Charged With Smuggling Tiger Cub* (Aug. 24, 2017), <https://www.justice.gov/usao-sdca/pr/perris-man-charged-smuggling-tiger-cub> [hereinafter Pierson Press Release].

⁵⁵ Kristina Davis & Joshua Smith, *Teen Sentenced to Six Months in Prison for Smuggling Border Tiger*, SAN DIEGO UNION-TRIB. (Feb. 20, 2018), <https://www.sandiegouniontribune.com/news/courts/sd-me-tiger-sentence-20180220-story.html>.

⁵⁶ *See id.*

⁵⁷ *See id.*

⁵⁸ Andres Paciuc, *Two Birds With One Stone: Disrupting the Illegal Wildlife*

roadside zoos who speed-breed cats for cub-petting, then discard them when they become too big, too expensive, and too dangerous to continue using for lucrative public contact experiences.⁵⁹ Make no mistake about it, the woefully underregulated roadside zoo cub-petting industry is the reason that there are more captive tigers in the United States than there are left in the wild.⁶⁰

Each trafficked cat who is fortunate enough to be rescued and rehomed to a reputable sanctuary is a reminder of the vast majority who will never be rescued. Tigers like Nola and Moka,⁶¹ who now share a habitat at the Global Federation of Animal Sanctuaries⁶²-accredited Lions, Tigers, and Bears,⁶³ are among the few victims of the exotic pet trade who have ended up in reputable sanctuaries: vast, state of the art refuges that species-specific care and habitats and do not engage in breeding, trade, or commercial use.⁶⁴ For each of these examples of cats

Trade and Transnational Criminal Organizations, AM. BAR ASS’N (Nov. 9, 2021), https://www.americanbar.org/groups/environment_energy_resources/publications/es/20211109-disrupting-the-illegal-wildlife-trade/.

⁵⁹ *See, e.g.*, Nuwer, *supra* note 38; *see also* THE CONSERVATION GAME (NiftyFly Entertainment 2021).

⁶⁰ *See, e.g.*, Nuwer, *supra* note 38; *see also* Nasser, *supra* note 4, at 196-97.

⁶¹ Moka is the name given to the tiger confiscated from Louis Eudoro Valencia. *See* Pierson Press Release, *supra* note 54. Moka and Nola have become a bonded pair, which is unusual for tigers who are customarily solitary animals. *See* Fikes, *supra* note 52.

⁶² The Global Federation of Animal Sanctuaries (GFAS) is the gold standard and most reputable accrediting body for true sanctuaries. GFAS imposes the most rigorous accreditation standards—even above and beyond the Association of Zoos and Aquariums—of any accrediting body for facilities that hold captive wildlife. *Standards of Excellence*, GLOB. FED’N OF ANIMAL SANCTUARIES, <https://www.sanctuaryfederation.org/accreditation/standards/> (last visited Apr. 19, 2022).

⁶³ *Lions Tigers and Bears: A Big Cat & Exotic Animal Rescue*, LIONS TIGERS & BEARS, <https://www.lionstigersandbears.org/> (last visited Apr. 19, 2022).

⁶⁴ According to the U.S. Fish & Wildlife Service (FWS), a true sanctuary meets the following threshold criteria: (1) approved by the United States Internal Revenue Service as a corporation that is exempt from taxation under § 501(a) of the Internal Revenue Code of 1986, which is described in §§ 501(c)(3) and 170(b)(1)(A)(vi) of that code; (2) not commercially traded in prohibited wildlife species, including offspring, parts, and products; (3) does not propagate any of the prohibited wildlife species; and (4) does not allow any direct contact between the public and the prohibited wildlife species. 50 C.F.R. § 14.252 (2007); *see also* 16 U.S.C. § 3372(2)(c)(i)-(iv) (2012). The Global Federation of Animal Sanctuaries (GFAS) has much more stringent standards than FWS. GFAS will only consider accrediting organizations that are non-profit and meet the following threshold criteria:

- No captive breeding (with a potential exception for only those organizations having a bona fide release/ reintroduction program to return wildlife to their native habitat)
- No commercial trade in animals or animal parts
- No tours allowed that are not guided and conducted in a careful

who have been rescued despite lackluster law enforcement, the elephant in the room is the inexcusable reality that we still lack sufficient legal mechanisms to track big cats in the United States, which begs the question of how many big cats have never been discovered—let alone rescued.⁶⁵

b. Revisiting and Revising the Legal Framework

Despite the fact that numerous roadside zoos have been shuttered in the past five years for trafficking, abuse, and neglect of big cats,⁶⁶ it is still easier to buy a tiger than adopt a kitten from an animal shelter in multiple U.S. jurisdictions.⁶⁷ While it's easy to blame states and

manner that minimizes the impact on the animals and their environment, does not cause them stress, and gives them the ability to seek undisturbed privacy and quiet

- Animals are not exhibited or taken from the sanctuary or enclosures/habitats for non-medical reasons, with some limited exceptions for certain animal species, such as horses, under approved circumstances
- The public does not have direct contact with wildlife (with some limited exceptions as outlined in the Standards for some birds and small reptiles)

In addition, organizations must demonstrate:

- Adherence to standards of animal care including housing, veterinary care, nutrition, animal well-being and handling policies, as well as standards on physical facilities, records and staff safety, confirmed by an extensive questionnaire, site visit, and interviews.
- Ethical practices in fundraising
- Ethical acquisition and disposition of animals
- Restrictions on research—limited to non-invasive projects that provide a health, welfare or conservation benefit to the individual animal and/or captive animal management and/or population conservation
- The existence of a contingency plan, if the property where the sanctuary is located is not owned by the sanctuary or its governing organization.

See *Who Can Apply*, GLOB. FED'N OF ANIMAL SANCTUARIES, <https://www.sanctuaryfederation.org/accreditation/definitions/> (last visited Apr. 19, 2022).

⁶⁵ See THE CONSERVATION GAME, *supra* note 59 (referencing Carney Anne Nasser at 00:31:28-00:31:37: “[Nola] is one of the lucky ones. So many of these animals, they are going to end up dying on the end of that chain, never to be found.”; 00:32:22-00:32:4: “The current state of the law, the patchwork state laws we have, the insufficient federal laws that are fraught with loopholes, really give us no meaningful way of tracking the coming and going of these critically endangered animals.”).

⁶⁶ See Guynup, *supra* note 21.

⁶⁷ Guynup, *supra* note 6; see also Nuwer, *supra* note 38 (“In some states, it’s easier to buy a lion—a 400-pound predatory killer—than it is to get a dog.”).

localities for failing to impose sufficient oversight, if federal agencies responsible for oversight of the trade and use of big cats—particularly the USDA—were not derelict in their duties, the problem of patchwork state laws wouldn’t actually be a problem.

The primary federal laws governing captive tigers in the U.S. are the Endangered Species Act (ESA),⁶⁸ the Lacey Act,⁶⁹ and the Animal Welfare Act (AWA).⁷⁰ The ESA, enforced by the U.S. Fish & Wildlife Service (FWS), exists “to conserve endangered species,”⁷¹ and works with the Lacey Act, which, as amended by the Captive Wildlife Safety Act, aims to limit the interstate trafficking of wildlife—particularly tigers and other big cats.⁷² The AWA vests enforcement authority with the U.S. Department of Agriculture (USDA) for the ostensible purpose to “insure [sic] that animals intended for use...for exhibition purposes or for use as pets are provided humane care and treatment.”⁷³ Yet, existing loopholes in implementation of the ESA and sheer apathy and conscious non-enforcement of the AWA⁷⁴ have worked in tandem, not just to enable, but to *incentivize* the very captive breeding that fuels the exotic pet trade—a problem further exacerbated by inconsistent and insufficient state regulation.⁷⁵ Indeed, misapplication of existing

⁶⁸ See 16 U.S.C. §§1531-1544.

⁶⁹ See 16 U.S.C. §§ 3371-3378.

⁷⁰ See 7 U.S.C. §§ 2131-2160.

⁷¹ See 16 U.S.C. § 1531(c)(1).

⁷² See 16 U.S.C. §§ 3371-3378.

⁷³ See 7 U.S.C. § 2131(1).

⁷⁴ See *Animal Care Program Oversight of Dog Breeders*, U.S. DEP’T OF AGRIC. (June 2021), https://www.usda.gov/sites/default/files/audit-reports/33601-0002-31_final_distribution.pdf; see also *Follow-Up to Animal and Plant Health Inspection Service’s Controls Over Licensing of Animal Exhibitors*, U.S. DEP’T OF AGRIC. (Mar. 2021), <https://www.oversight.gov/sites/default/files/oig-reports/USDAOIG/33601-0003-23RevisedFinalDistribution.pdf>; *Animal and Plant Health Inspection Service Oversight of Research Facilities*, U.S. DEP’T OF AGRIC. (Dec. 2014), <https://www.oversight.gov/sites/default/files/oig-reports/33601-0001-41.pdf>; *Animal and Plant Health Inspection Service Animal Care Program Inspections of Problematic Dealers*, U.S. DEP’T OF AGRIC. (May 2010), https://www.aspc.org/sites/default/files/oig_audit_33002-4-sf.pdf; Nuwer, *supra* note 38 (“[T]here’s almost no oversight of big cat ownership by the federal government. The Animal Welfare Act is supposed to ensure humane treatment of big cats and other captive animals, but the inspectors are overworked and many of the rules are weak, vague, or both.”).

⁷⁵ As of February 2022, there were four states that still have failed to enact any statutory or regulatory oversight pertaining to the private ownership of big cats: Nevada, Wisconsin, Alabama, and North Carolina. See *State Laws for Keeping Exotic Cats as Pets*, BIG CAT RESCUE (July 2021), <https://bigcatrescue.org/state-laws-exotic-cats/>. When I published *Welcome to the Jungle* in 2016, there were five states that had failed to enact any statutory or regulatory oversight pertaining to private ownership of big cats—Nevada, Wisconsin, Alabama, North Carolina, and South Carolina. See *Dangerous Wild Animal Laws*, THE HUMANE SOC’Y OF THE U.S. (Jan. 2015), <https://www.humanesociety.org/resources/dangerous-wild-animal-laws>.

statutory and regulatory schemes by the federal agencies that are meant to protect and further tiger conservation has not only failed to provide a reliable way of ascertaining how many captive tigers there are in the U.S.,⁷⁶ but also the conditions in which they are kept, where they are being transferred, and how many may fall into the illegal and lucrative exotics trafficking market.⁷⁷ It is paradoxically and tragically the source of the problem in the first place. Therefore, it is not surprising that the most significant progress for big cats in the past five years has been driven by advocacy organizations and citizen suits—not by federal agencies.

II. THE STATE OF THE ENDANGERED SPECIES ACT

Tigers are listed as endangered⁷⁸ at the *species level* under the federal ESA, meaning that all subspecies⁷⁹ and tigers who are of mixed or unascertainable pedigree⁸⁰ are included in the listing. The ESA was enacted in 1973, in pertinent part, to “conserve endangered...

www.humanesociety.org/sites/default/files/docs/state-laws-dangerous-wild-animals.pdf. Indeed, since May 2016, only South Carolina has removed itself from the list of states who have failed to act. *Id.* Effective since January 1, 2018, South Carolina has enacted legislation ostensibly prohibiting the private ownership of big cats and certain other exotic animals. See S.C. CODE ANN. § 47-2-30. However, the legislation broadly exempts USDA licensees, leaving roadside zoo owners like Doc Antle beyond the reach of the statute. See S.C. CODE ANN. § 47-2-20 (A)(6)-(7).

⁷⁶ Williamson & Henry, *supra* note 31, at 15-16; see Philip J. Nyhus & Ron L. Tilson, *The Conservation Value of Tigers: Separating Science from Fiction*, 1 J. OF THE WILDCAT CONSERVATION LEGAL AID SOC’Y 29, 29 (2009) (“No clear census or regulatory system exists to detail the precise numbers or whereabouts of Tigers in captivity in the United States.”); see also Phillip J. Nyhus et al., *The Status and Evolution of Laws and Policies Regulating Privately Owned Tigers in the United States*, 1 J. OF THE WILDCAT CONSERVATION LEGAL AID SOC’Y 47, 49 (2009).

⁷⁷ See Nyhus & Tilson, *supra* note 76, at 34. The illegal trade in exotic animals is estimated to be an illicit global business worth five to twenty billion dollars annually, with tiger parts being among the most lucrative and sought-after commodities on the black market. See Liana Sun Wyler & Pervaze A. Sheikh, *International Illegal Trade in Wildlife: Threats and U.S. Policy*, U.S. DEP’T OF STATE (2008), <http://fpc.state.gov/documents/organization/102621.pdf>. The international retail value of a tiger skin is approximately \$1,300—20,000 and the value of a set of tiger bones is estimated to be between \$3,300 and \$7,000. *Id.* at CRS-7 t.3; see also Williamson & Henry, *supra* note 31, at 39.

⁷⁸ The ESA and its implementing regulations distinguish between two levels of protection: endangered and threatened. “Endangered” is the highest level of protection available under the ESA. 16 U.S.C. § 1532.

⁷⁹ See generally Nyhus & Tilson, *supra* note 76, at 31.

⁸⁰ See 50 C.F.R. § 17.11; see also 76 Fed. Reg. 52298 (Aug. 22, 2011) (clarifying that the listing is “at the species level and, thus, includes all sub-species of tiger (including those that are of unknown subspecies, referred to as ‘generic’ tigers) and inter-subspecific crosses”).

species⁸¹ and, in furtherance of this objective, prohibits the import and export;⁸² “take”;⁸³ possession and other conduct with illegally taken wildlife;⁸⁴ delivery, receipt, transport, or shipping in interstate or foreign commerce;⁸⁵ and sale or offer for sale in interstate or foreign commerce⁸⁶ of listed species. Administered and enforced by the U.S. Fish and Wildlife Service (FWS),⁸⁷ the ESA gives the agency authority to issue permits to allow activities with endangered species that would otherwise be prohibited. However, such permits (frequently referred to as “Section 10” permits because they are authorized in Section 10 of the ESA) are only supposed to be granted “for scientific purposes or to enhance the propagation or survival of the affected species”⁸⁸ or for takes that are “incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.”⁸⁹ In practice, roadside zoo owners like Joe

⁸¹ 16 U.S.C. § 1531(c) (2012); see also 119 Cong. Rec. H11834-40 (daily ed. Dec. 20, 1973); *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 194 (1978) (“Congress has spoken in the plainest words, making it clear that endangered species are to be accorded the highest priorities.”).

⁸² See 16 U.S.C. § 1538 (a)(1)(A).

⁸³ 16 U.S.C. § 1538 (a)(1)(B), (C). The term “take” includes harming or harassing an individual member of a protected species, and applies to any—i.e., wild or captive-bred—member of the protected species. 16 U.S.C. § 1532(19); see also 63 Fed. Reg. 48634-02 (Sept. 11, 1998) (“‘Take’ was defined by Congress in Section 3 of the Act as... ‘to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect... endangered or threatened wildlife, whether wild or captive.’”). “The [ESA] defines ‘take’ to mean ‘harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.’” 16 U.S.C. § 1532; *Strahan v. Coxe*, 127 F.3d 155, 162 (1st Cir. 1997) (noting ‘take’ is defined broadly to encompass every conceivable way in which a person can ‘take’ an endangered species) (citing S.Rep. No. 93-307, at 7 (1973)); *People for the Ethical Treatment of Animals v. Wildlife in Need & Wildlife in Deed*, 476 F. Supp. 3d 765, 775-76 (S.D. Ind. 2020).

⁸⁴ 16 U.S.C. § 1538 (a)(1)(D).

⁸⁵ 16 U.S.C. § 1538 (a)(1)(E).

⁸⁶ 16 U.S.C. § 1538(a)(1)(F).

⁸⁷ See, e.g., 16 U.S.C. § 1537(a); see also 50 C.F.R. § 10.1.

⁸⁸ 16 U.S.C. § 1539(a)(1)(A); see also *infra* Section III.B.

⁸⁹ 16 U.S.C. § 1539(a)(1)(B). FWS is required to public notice of each Section 10 permit application in the Federal Register, and accept public comments for a period of 30 days. 16 U.S.C. § 1539(c). The ESA allows FWS to issue section 10 permits only after a determination the permits “were applied for in good faith,” permit issuance “will not operate to the disadvantage of such endangered species,” and “will be consistent with” the endangered species conservation policies set forth in section 1531 of the ESA. See 16 U.S.C. § 1539(d). The ESA works in tandem with the Lacey Act, which also is enforced by FWS. See 16 U.S.C. §§ 3371-3378; see also 50 C.F.R. §§ 14.250-14.255. The Lacey Act provides that it is unlawful for any person to “import, export, transport, sell, receive, acquire, or purchase any fish or wildlife or plant taken, possessed, transported, or sold in violation of any law, treaty, or regulation of the United States or in violation of any Indian tribal law.” 16 U.S.C. § 3372(a)(1). The Captive Wildlife Safety Act (CWSA), signed into law on December

Exotic have circumvented the permitting requirement by marking sale transactions that never would have qualified for permit issuance rather as for “feeding,” “donation,” or “exhibition.”⁹⁰

a. Closure of the Generic Tiger Loophole

In *Welcome to the Jungle*, I wrote at length about The Generic Tiger Loophole and how it had contributed to the unascertainable number of captive tigers with no conservation value in the United States.⁹¹ In 1979, FWS amended the ESA regulations to provide an exception to the Section 10 permit process by extending general, conditional permission

19, 2003, is an amendment to the Lacey Act, passed in an attempt to “further the conservation of [big cats]” by prohibiting the interstate transport of tigers and other big cats for use as pets. *See* Statement by the White House Press Secretary, 2003 WL 22977745 (Dec. 19, 2003); 16 U.S.C. §§ 3371(g), 3372; *Captive Wildlife Safety Act: What Big Cat Owners Need to Know*, BIG CAT RESCUE, <https://bigcatrescue.org/wp-content/uploads/2013/08/CaptiveWildlifeSafetyActFactsheet.pdf> (last visited April 19, 2022). The CWSA makes it unlawful to “import, export, transport, sell, receive, acquire, or purchase in interstate or foreign commerce” any “lion, tiger, leopard, cheetah, jaguar, or cougar or any hybrid of such a species.” *See* 16 U.S.C. §§ 3371, 3372(a)(2). However, due to broad exemptions that open the door for circumvention by private owners, the CWSA does not sufficiently curtail the permissible transfer of tigers, regardless of their intended use. *See* 16 U.S.C. § 3372(e)(2)(A), (C); *see also* Nuwer, *supra* note 38 (“Depending on what state you live in, owning one of these animals might be entirely legal. And even if it’s not, there’s almost always a way to sidestep the rules, which can be confusing and are rarely enforced.”).

⁹⁰ *See, e.g.*, Certificate of Veterinary Inspection, Oklahoma Dep’t of Agric. Food & Forestry, Transfer of 4-week-old tiger from GW Exotic Zoo to Brown’s Oakridge Exotics in Smithfield, Ill. (marked for “exhibition”); Certificate of Veterinary Inspection, Oklahoma Dep’t of Agric. Food & Forestry, Transfer of 4-week-old liger from G.W. Zoo in Wynnewood, Okla. to Angela Bazzell in Rockwall, Tex. (marked “for feeding.”). Ms. Bazzell revealed in a Facebook post that she paid \$6800 for the cat. *See* People for the Ethical Treatment of Animals, et al., Petition to the U.S. Dep’t of Agric. Requesting Rulemaking to Ensure the Use of Appropriate Methods to Prevent, Control, Diagnose, and Treat Diseases and Injuries in Big Cats Under the Animal Welfare Act, at 22-23 (May 19, 2017) (referencing Angela Bazzell, Facebook (Sept. 4, 2015)) (on file with the author). “Although the Fish and Wildlife Service (FWS) does technically require a permit to sell endangered species such as tigers, lions, leopards, or jaguars across state lines, unscrupulous sellers and buyers often don’t want to bother with permits and deal in untraceable cash payments. At trial, one buyer even testified to participating in sales marked as ‘donations.’ Joe Exotic used this tactic for years to evade the gaze of law enforcement. He wasn’t the only one. At Joe’s trial, that same tiger owner testified: ‘Everybody marks donation.’” Nuwer, *supra* note 38. Beyond utilizing the “donation” workaround, unscrupulous breeder-dealers have also benefited from the fact that, while the ESA always applies to the take of, or harm to, any tiger, it does not apply to transfers and trade that are purely *intra*-state. *See infra* Part II.A.

⁹¹ *See* Nasser, *supra* note 4, at § II: U.S. Fish & Wildlife Service Oversight of Tigers.

to “take; export or re-import; deliver, receive, carry, transport or ship in interstate or foreign commerce, in the course of a commercial activity; or sell or offer for sale in interstate or foreign commerce any endangered wildlife that is *bred in captivity* in the United States”⁹² where it can be demonstrated that the “the principal purpose of the activities is *captive breeding for conservation purposes*.”⁹³ Such permission first requires application and approval for captive bred wildlife (CBW) registration by FWS,⁹⁴ and a demonstration that the proposed activity will “enhance the propagation or survival of the affected species.”⁹⁵ In the absence of CBW registration, Section 10 permits are still required for otherwise

⁹² *See* 50 C.F.R. § 17.21(g)(1); *see also* Captive-bred Wildlife Regulation, 44 Fed. Reg. 54002 (Sept. 17, 1979) (The CBW registration regulations pertain primarily to species that—like tigers—are not native to the U.S.); 50 C.F.R. § 17.22(g)(1)(i).

⁹³ *See* U.S. Fish & Wildlife Service, *Captive Bred Wildlife Registration Under the U.S. Endangered Species Act*, (Jan. 2012); *see also* Captive-bred Wildlife Regulation, 57 Fed. Reg. 548 (Jan. 7, 1992) (restating that “conservation of wild populations must be the [FWS] primary goal” in administering the CBW registration program); Captive Wildlife Regulation, 44 Fed. Reg. 54002 (Sept. 17, 1979) (announcing that the CBW registration system is “designed to protect wild populations.”); 16 U.S.C. § 1532(3) (defining “conservation” to mean “to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary”).

⁹⁴ 50 C.F.R. § 17.21(g).

⁹⁵ 50 C.F.R. § 17.21(g)(1)(ii). In 1993, after articulating a concern that “captive-bred animals... might be used for purposes that do not contribute to conservation, such as for pets, research that does not benefit the species, or for entertainment.” 57 Fed. Reg. 54-801 (Jan. 2, 1992). FWS amended the definition of “enhancement” in the CBW regulations to clarify that “[p]ublic education activities may not be the sole basis to justify issuance of a [CBW] registration.” Captive-bred Wildlife Regulation, 58 Fed. Reg. 68323 (Dec. 27, 1993); *see also* 50 C.F.R. § 17.21(g)(3)(i). Moreover, CWB registration applicants must include information specified in 50 C.F.R. section 17.22(a) (1), including “[a] full statement of the reasons why the applicant is justified in obtaining a permit including the details of the activities sought to be authorized by the permit.” 50 C.F.R. § 17.22(a)(1)(vii). The FWS is obligated to consider the issuance criteria specified in section 17.22(a)(2), including whether “the expertise, facilities, or other resources available to the applicant appear adequate to successfully accomplish the objectives stated in the application.” 50 C.F.R. § 17.22(a)(2)(vi). A CBW registrant must also comply with the general ESA permit conditions, including that it maintain any “live wildlife possessed under a permit... under humane and healthful conditions.” 50 C.F.R. §§ 13.3, 13.41. In addition, section 13.42 provides that “[t]he authorizations on the face of a permit are to be strictly interpreted and will not be interpreted to permit similar or related matters outside the scope of strict construction.” Although section 13.42 is a general permitting regulation, this provision applies equally to CBW registration. *See* 50 C.F.R. § 13.3 (“The provisions in this part are in addition to, and are not in lieu of, other permit regulations of this subchapter and apply to all permits issued thereunder, including... ‘Endangered and Threatened Wildlife and Plants’ (Part 17)... . As used in this part, the term ‘permit’ will refer to a license, permit, certificate, letter of authorization, or other document as the context may require.”).

prohibited activities, including the initial import of endangered species who are bred outside of the U.S.⁹⁶

Between 1979 and 1998, the CBW registration requirement applied to all captive tigers in the U.S. However, in 1998, FWS amended the CBW regulations to eliminate the CBW registration requirement for otherwise prohibited transactions with inter-subspecific crossed or generic tigers.⁹⁷ This generic tiger exemption (the “Generic Tiger Loophole”) from CBW registration requirements was created because of “the lack of conservation value...due to [the] mixed or unknown genetic composition”⁹⁸ of generic tigers, and purportedly to enable the FWS to focus its oversight on conservation breeding and use of pure-bred tigers.⁹⁹

However, rather than helping tigers, the Generic Tiger Loophole plunged the species into deeper peril by incentivizing commercial and private owners to purposefully breed and use generic tigers in order to evade FWS oversight. Consequently, due to patchwork regulation at the state and local levels,¹⁰⁰ and the Generic Tiger Loophole,¹⁰¹ an estimated 95% of tigers in America were left outside of FWS oversight¹⁰² unless

⁹⁶ See, e.g., U.S. Fish & Wildlife Service, *supra* note 93. For example, in order for a U.S.-based circus to lawfully exhibit tigers abroad, it must first apply for and obtain Section 10 permits for the export and re-import of the tigers. See, e.g., Williamson & Henry, *supra* note 31, at 38; 80 Fed. Reg. 28296-97 (May 15, 2015) (publishing notice of a Florida-based circus exhibitor’s application, No. PRT-58231B, for a Section 10 permit to acquire and import 6 tigers from a Mexico-based exhibitor).

⁹⁷ Captive-bred Wildlife Regulation, 63 Fed. Reg. 48634 (Sept. 11, 1998); see also 50 C.F.R. 17.22(g)(6). The Generic Tiger Loophole is ostensibly conditioned upon the requirement that “the purpose of such activity is to enhance the propagation or survival of the affected exempted species.” See *id.* § 17.22 (g)(6)(i). However, given that generic tiger owners aren’t required to register with FWS, it was virtually impossible for the FWS to enforce the foregoing requirement. An existing law review note confuses the issue by suggesting that generic tigers are totally “exempted from the ESA.” See Adele Young, *Caged Cats: Private Ownership of Lions and Tigers*, 38 WM. & MARY ENV’T L. & POL’Y 535, 540, 542 (2014). While the Generic Tiger Loophole in the CBW registration requirements is indeed a gaping exemption, Ms. Young’s note omits any reference to the CBW registration system, thus apparently attributing the Generic Tiger Loophole to *all sections* of the ESA. In the process, Ms. Young’s discussion in Section II of her note suggests an *additional* Generic Tiger Loophole in the ESA that fortunately does not exist. As discussed, *supra*, the ESA has always prohibited the take of a tiger, since tigers are protected at the *species* level—even when the Generic Tiger Loophole was in place.

⁹⁸ Endangered and Threatened Wildlife and Plants; U.S. Captive-Bred Inter-Subspecific Crossed or Generic Tigers, 76 Fed. Reg. 52298 (Aug. 22, 2011).

⁹⁹ Captive-bred Wildlife Regulation, 63 Fed. Reg. 48634 (Sept. 11, 1998).

¹⁰⁰ See *The Big Cat Public Safety Act*, BIG CAT SANCTUARY ALL., <https://www.bigcatalliance.org/learn-more/calls-to-action/> (Apr. 21, 2021).

¹⁰¹ See 50 C.F.R. § 17.21(g).

they were used for import, export, or subjected to an illegal “take.”¹⁰³ FWS finally closed the Generic Tiger Loophole¹⁰⁴ effective May 6, 2016,¹⁰⁵ coincidentally on the very day that *Welcome to the Jungle*

¹⁰² See Nyhus & Tilson, *supra* note 76, at 34; see also Philip J. Nyhus & Ronald Tilson, *The Conservation Value of Privately Owned Tigers*, in AZA ANNUAL CONFERENCE PROCEEDINGS 55-59 (Doherty & Girton, eds., 2003).

¹⁰³ 16 U.S.C. § 1538(a)(1)(B)-(C), 1532(19). Tigers have always been listed at the *species* level, which means that all subspecies and inter-subspecific “hybrids” (colloquially referred to as “generic” tigers) have always had the same level of protection from prohibited conduct under the ESA. Meaning, even when the Generic Tiger Loophole was in effect, it has always been a violation of the ESA to kill a tiger. Indeed, in affirming the federal criminal conviction of William Kapp for multiple violations of the Endangered Species Act and the Lacey Act connected with the killing of, and trafficking in, tigers and leopards and their meat, hides, and other parts, the Seventh Circuit Court of Appeals rejected Kapp’s argument that captive generic tigers were not protected by the ESA, clarifying that “[b]ecause these animals are protected at the species level, all tiger...subspecies are similarly protected, as set forth in the regulations. Pursuant to the regulations and USFWS policy, therefore, all members of all subspecies of tiger, ...including the offspring of different subspecies of tigers... are protected under the ESA.” *United States v. Kapp*, 419 F.3d 666, 673 (7th Cir. 2005) (citing 50 C.F.R. § 17.11(h)). The court further underscored that “the [ESA] implementing regulations make clear that subspecies of tiger (and therefore, inter-subspecific crosses of tiger) are endangered and protected because tigers are listed at the species level.” *Id.* at 675-76 (citing 50 C.F.R. § 17.11(g)).

¹⁰⁴ Dan Ashe, who is now CEO of the Association of Zoos and Aquariums and was Director of the U.S. Fish & Wildlife Service when FWS closed the Generic Tiger Loophole, stated that “[r]emoving the loophole that enabled some tigers to be sold for purposes that do not benefit tigers in the wild will strengthen protections for these magnificent creatures and help reduce the trade in tigers that is so detrimental to wild populations.” See Matthew Daley, *U.S. Strengthens Protections for Captive Tigers Held in Backyards and Private Breeding Facilities*, U.S. NEWS & WORLD REP. (Apr. 5, 2016, 11:20 AM), <https://www.usnews.com/news/politics/articles/2016-04-05/us-strengthens-protections-for-captive-tigers?fbclid=IwAR09mhDCoK44JYXyr1d2Xa-KzQ6dz7vi-wlCx7oDFGFwyRAAn4lebZycN18>.

¹⁰⁵ See Endangered and Threatened Wildlife and Plants; U.S. Captive-Bred Inter-subspecific Crossed or Generic Tigers, 81 Fed. Reg. 19923 (Apr. 5, 2016) (“We, the U.S. Fish and Wildlife Service (Service), are amending the regulations that implement the Endangered Species Act (Act) by removing inter-subspecific crossed or generic tiger (*Panthera tigris*) (i.e., specimens not identified or identifiable as members of Bengal, Sumatran, Siberian, or Indochinese subspecies (*Panthera tigris tigris*, *P. t. sumatrae*, *P. t. altaica*, and *P. t. corbetti*, respectively)) from the list of species that are exempt from registration under the Captive-bred Wildlife (CBW) regulations. The exemption currently allows those individuals or breeding operations who want to conduct otherwise prohibited activities, such as take, interstate commerce, and export under the Act with U.S. captive-bred, live inter-subspecific crossed or generic tigers, to do so without becoming registered. We make this change to the regulations to strengthen control over commercial movement and sale of tigers in the United States and to ensure that activities involving inter-subspecific crossed or generic tigers are consistent with the purposes of the Act. Inter-subspecific crossed or generic tigers are listed as endangered under the Act, and a person will need to obtain authorization

was published. Eighteen years of virtually no FWS oversight of the trade in tigers in America has had near catastrophic consequences for endangered species who have been bred puppy-mill style for profit—not conservation—and distributed with reckless abandon and virtually no tracking, resulting in what I refer to as “America’s Tiger Crisis.”

In its notice of intent to institute the CBW registration system in the first instance, the FWS acknowledged that the primary purpose of the ESA is “to conserve wild populations of Endangered and Threatened species,”¹⁰⁶ and further articulated that the intent of the CBW registration system is to “encourage *responsible* breeding efforts with listed species.”¹⁰⁷ Given those representations, it is nearly impossible to do the mental gymnastics required to understand how FWS did not foresee how the Generic Tiger Loophole would encourage irresponsible breeding practices and result in the virtual impossibility of accurately tracing the location of a rapidly growing population of captive tigers in the U.S.¹⁰⁸

Long before he faced state wildlife trafficking and animal cruelty indictments¹⁰⁹ and federal money laundering charges,¹¹⁰ Doc Antle—known for his sweeping narcissistic claims that he is “*the only one* qualified in this activity of raising [big cat] cubs”¹¹¹ has expressly

under the current statutory and regulatory requirements to conduct any otherwise prohibited activities with them.”).

¹⁰⁶ See Captive Wildlife Regulation, 44 Fed. Reg. 30044 (May 23, 1979).

¹⁰⁷ Captive-bred Wildlife Regulation, 58 Fed. Reg. 68323 (Dec. 27, 1993) (emphasis added).

¹⁰⁸ See Nyhus et al., *supra* note 76, at 49; see also Nyhus & Tilson, *supra* note 76, at 34.

¹⁰⁹ See generally Keith Wilson Indictments, <https://www.oag.state.va.us/files/2020/WilsonIndictments.pdf> (last visited Apr. 25, 2022).

¹¹⁰ See *United States v. Antle*, No. 4:22mj23 (MCRI) (D.S.C. June 1, 2022), <https://www.justice.gov/usao-sc/press-release/file/1510816/download>.

¹¹¹ *Trafficked with Mariana van Zeller: Tigers* (National Geographic Jan. 6, 2021) at 31:54-32:00 (emphasis added). It is worth noting that claims like those made by Doc Antle that his puppy-mill-style breeding of big cats contributes in some benevolent way to survival of the species is expressly refuted by the U.S. Fish & Wildlife Service which makes clear that “Captive [big cats] in general are not suitable for reintroduction due to their uncertain genetic origins, potential maladaptive behaviors, and higher failure risk compared to translocated individuals. Research has indicated that restoration efforts using wild-caught individuals have a much higher rate of success than those using captive-raised individuals for a large variety of species.” See Listing Two Lion Subspecies, 80 Fed. Reg. 79999 (Dec. 23, 2015) (to be codified at 50 C.F.R. pt. 17) (internal citations omitted). FWS has also reminded us that, even where reintroduction is possible, it does not solve the underlying contributing factors that are decimating wild populations of lions and tigers. See *id.* Therefore, the circular logic that roadside zoo owners use to suggest that their captive breeding of endangered big cats helps solve the very problem that they are creating by breeding endangered big cats and contributing to the “over-exploitation for economic gain” that

acknowledged that the captive supply of white tigers—all of whom are presumptively generic¹¹²—now “exist[s] in captivity in great abundance” due to the FWS’ removal of generic tigers from CBW registration requirements.¹¹³ It is indeed progress that FWS finally repealed the

is plunging big cats into further peril simply collapses on itself. See Alan Neuhauser, *75 Percent of Animal Species to be Wiped Out in ‘Sixth Mass Extinction’*, U.S. NEWS & WORLD REP. (June 19, 2015, 2:00 PM), <https://www.usnews.com/news/blogs/data-mine/2015/06/19/75-percent-of-animal-species-to-be-wiped-out-in-sixth-mass-extinction#:~:text=News-,75%20Percent%20of%20Animal%20Species%20to%20be%20Wiped%20Out%20in,lifetimes%2C%20a%20new%20study%20finds.>

¹¹² No populations of white tigers exist in the wild, and leading experts in tiger conservation including the late Dr. Ronald Tilson and Prof. Philip Nyhus have stated with certainty that all white tigers in the United States are generic and lack conservation value. See Philip J. Nyhus et al., *Thirteen Thousand and Counting: How the Growing Captive Tiger Populations Threaten Wild Tigers*, in *TIGERS OF THE WORLD* 234-35 (Philip J. Nyhus et al. eds., 2d ed. 2010); Nyhus & Tilson, *supra* note 76, at 30. White tigers are the result of a genetic anomaly that occurs so rarely that only twelve white tigers have been confirmed in the wild in over a century. See Sarda Sahney, *The Myth of the Endangered White Tiger*, SCIENCE 2.0 (Aug 20, 2017, 3:38 AM), https://www.science20.com/fish_feet/white_tigers_species_mortality_and_conservation_value. In contrast, numerous U.S. roadside zoos purposefully breed to create white tigers. Those who breed white tigers for profit demonstrate not only a disregard for legitimate conservation of the species, and a comfort deceiving the public, but also significant lack of concern for the welfare of the animals. See *White Tigers: All White Tigers Are Inbred and Not Purebred*, BIG CAT RESCUE, <https://bigcatrescue.org/abuse-issues/issues/white-tigers/> (last visited Apr. 25, 2022); ASSOCIATION OF ZOOS & AQUARIUMS, WELFARE AND CONSERVATION IMPLICATIONS OF INTENTIONAL BREEDING FOR THE EXPRESSION OF RARE RECESSIVE ALLELES 1, 3, 4 (2011). The recessive allele responsible for the expression of white coloring in tigers also carries a higher neonatal mortality rate and an increased risk for numerous serious health conditions, including: crossed eyes, cleft palate, clubbed feet, kidney abnormalities, scoliosis, strabismus, blindness, vascular anomalies that inhibit the ability to feed and swallow, congenital defects in cranial and skull development, and diminished life expectancy. See *White Tiger’s Coat Down to One Change in a Gene*, BBC NEWS (May 23, 2013), <https://www.bbc.com/news/science-environment-22638341>; *White Tigers: All White Tigers Are Inbred and Not Purebred*, *supra* note 112; ASSOCIATION OF ZOOS & AQUARIUMS, *supra* note 112, at 1, 3, 4. The harmful breeding practices employed by roadside zoos to purposefully create white tigers prompted a coalition of animal protection organizations to petition the U.S. Department of Agriculture to prohibit the practice in 2017. See Frankencat Petition for Rulemaking (May 15, 2017), <https://perma.cc/N5US-PADH>; see also Tim Devaney, *Animal Rights Groups Urge Feds to Halt Lion Tiger Cross Breeding*, THE HILL (May 19, 2017, 3:42 PM), <https://thehill.com/regulation/334282-animal-rights-groups-urge-feds-to-halt-lion-tiger-cross-breeding>. As of the date of this writing, the USDA has not responded to the petition.

¹¹³ See, e.g., White Tiger History, Doc Antle, USDA License no. 56-C-0116, http://bhagavanantle.com/white_tiger_facts.html (“A big boost to the diversity of the white tiger genetics happened after the U.S. Fish & Wildlife Services Generic Tiger Ruling in 1998 eliminated the CBW permit requirement, allowing breeders to purchase new bloodlines in interstate commerce without restriction—and they did. Unfortunately the boom in breeding tigers for color produced an abundance of tigers that exceed the

Generic Tiger Loophole, but a gaping loophole still exists because FWS lacks jurisdiction over intrastate transactions with tigers as well as interstate transactions with tigers that are not for purchase or sale—resulting in a common practice among breeder-dealers like Joe Exotic who falsify paperwork in an attempt to circumvent FWS jurisdiction.¹¹⁴ The more significant progress under the Endangered Species Act for big cats in the past five years has been the result of citizen suits¹¹⁵—not agency action.

b. Precedent Set by Citizen Suits

The Endangered Species Act expressly authorizes “any person”¹¹⁶ to seek injunctive relief against individuals or FWS for perceived violations of the ESA and its implementing regulations. The ESA states that:

any person may commence a civil suit on his own behalf—

(A) to enjoin any person, including the United States and any other governmental instrumentality or agency (to the extent permitted by the eleventh amendment to the Constitution), who is alleged to be in violation of any provision of this Act or regulation issued under the authority thereof[.]¹¹⁷

People for the Ethical Treatment of Animals (PETA) has achieved historic, and industry-changing precedent through numerous ESA citizen suits that the advocacy organization has litigated in the past five years to broaden the application of the ESA’s prohibition on illegal “take[s].”¹¹⁸

carrying capacity of the available captive habitat.”). Not surprisingly, exhibitors who profit off of such breeding also vehemently defend the private ownership of tigers. See Bhagavan “Doc” Antle, *Big Cat Safety, Handling, and Training*, REXANO (2005), http://www.rexano.org/ResponsibleOwnership/Husbandry/big_cat_training_Frame.htm (last visited Apr. 25, 2022).

¹¹⁴ See U.S. Attorney’s Office Eastern District of Oklahoma, “Joe Exotic” Convicted of Murder-for-Hire and Violating Both the Lacey Act and Endangered Species Act, U.S. DEP’T OF JUST. (Apr. 2, 2019), <https://www.justice.gov/usao-wdok/pr/joe-exotic-convicted-murder-hire-and-violating-both-lacey-act-and-endangered-species> (“In addition to the murder-for-hire counts, the trial included evidence of violations of the Lacey Act, which makes it a crime to falsify records of wildlife transactions in interstate commerce. According to these counts, Maldonado-Passage designated on delivery forms and Certificates of Veterinary Inspection that tigers, lions, and a baby lemur were being donated to the recipient or transported for exhibition only, when he knew they were being sold in interstate commerce.”).

¹¹⁵ See 16 U.S.C. § 1540(g)(1).

¹¹⁶ See *id.*

¹¹⁷ See *id.*

¹¹⁸ 16 U.S.C. § 1538(a)(1)(B), (C). The term “take” includes harming or

While the USDA has failed to exercise its authority under the AWA to take meaningful action to prohibit cruel practices used on big cats that are commonplace among roadside zoos like premature maternal separation¹¹⁹ and declawing,¹²⁰ and FWS had never interpreted the ESA to prohibit those practices as illegal “harm” or “harassment,”¹²¹ PETA prevailed in establishing federal court precedent that partial amputation of an endangered species’ digits, forcible removal of neonatal protected species from their mothers, use of infant endangered species for stressful public encounters, depriving an endangered animal of adequate veterinary care, forcing protected species to live in inadequate enclosures without sufficient space or enrichment, and denying protected species a wholesome and species-appropriate diet, all *are illegal takes* that violate the Endangered Species Act.¹²² Moreover, PETA’s citizen suits have also served to clarify that the protections of the ESA apply equally to tigers, lions, and their interspecies and intersubspecific hybrids.¹²³

i. Premature Maternal Separation is an Illegal Take

In 2017, People for the Ethical Treatment of Animals sued Dade City’s Wild Things (DCWT),¹²⁴ a now-defunct roadside zoo that was notorious for the \$200 swim-with-tigers experiences it offered, and even

harassing an individual member of a protected species, and applies to any—i.e., wild or captive-bred—member of the protected species. 16 U.S.C. § 1532(19); see also *People for the Ethical Treatment of Animals, Inc. v. Tri-State Zoological Park of W. Md., Inc.*, 843 F.App’x. 493, 494 (4th Cir. 2021).

¹¹⁹ For instance, Karl Mogensen, whose Virginia roadside zoo, Natural Bridge Zoo, has been cited for a multitude of serious AWA violations relating to the care and handling of tiger cubs he has used for interactive public contact experiences. Whereas in the wild, cubs stay with their mothers for their first two and a half to three years of life, Mogensen had a practice of removing tiger cubs from their mothers immediately upon birth, after which they were hand-raised by a human caretaker, placed on display in the roadside zoo’s gift shop when they were only 2-3 weeks old, and then made available for public contact during photo shoots and interactive play sessions at only 3-4 weeks of age. See Nasser, *supra* note 4 at 227-33; see also *Petition for Rulemaking to Prohibit Public Contact with Big Cats, Bears, and Nonhuman Primates*, *supra* note 17, at 59 (“In the wild, a tiger cub will stay with its mother until sexual maturity, typically 2.5 to 3 years.”).

¹²⁰ See generally *People for the Ethical Treatment of Animals, Inc. v. Wildlife in Need and Wildlife In Deed, Inc.*, 476 F.Supp.3d 765 (S.D. Ind. 2020).

¹²¹ PETA has been urging FWS to take action against exhibitors who declaw tigers and other protected species to no avail since at least 2014. See, e.g., *Caesars’ Tiger-Abusing Magician Under Fire*, PETA (July 21, 2014), <https://www.peta.org/media/news-releases/caesars-tiger-abusing-magician-fire/>.

¹²² See *infra* pp. 28-37.

¹²³ See generally *People for the Ethical Treatment of Animals, Inc. v. Wildlife in Need and Wildlife In Deed, Inc.*, 476 F.Supp.3d 765 (S.D. Ind. 2020).

showcased, on morning shows like Fox and Friends,¹²⁵ for allegedly violating the Endangered Species Act by harming and harassing tiger cubs who were forcibly removed from their mothers immediately upon birth, forced to participate in grueling public contact sessions in a chlorinated pool, and subjected to vastly inadequate living conditions.¹²⁶ The Florida roadside zoo bred tigers puppy-mill-style, selling expensive hands-on experiences with tigers after forcibly removing them from their mothers as neonates,¹²⁷ and was cited by the USDA for a multitude of failures to comply with the AWA's minimum standards of care and handling.¹²⁸

On March 23, 2020, a federal judge entered default judgment in favor of PETA on all of its claims against DCWT, finding that DCWT's treatment of tigers did, indeed, violate the Endangered Species Act.¹²⁹

¹²⁴ First Amended Complaint for Injunctive and Other Relief, *People for the Ethical Treatment of Animals, Inc. v. Wildlife in Need and Wildlife In Deed, Inc.*, 476 F.Supp.3d 765 (S.D. Ind. 2020).

¹²⁵ *Swimming with Tiger Cubs in Florida*, FOX NEWS (Oct. 10, 2012), <https://video.foxnews.com/v/1891330856001#sp=show-clips>.

¹²⁶ See Plaintiff's Second Amended Complaint for Declaratory and Injunctive Relief, at 1-2, *People for the Ethical Treatment of Animals, Inc. v. Wildlife in Need and Wildlife In Deed, Inc.*, 476 F. Supp. 3d 765 (S.D. Ind. 2020). "Defendants prematurely separate cubs from their mothers within days of birth to exploit them for public encounters; force unwilling cubs to interact with the public for profit; force unwilling cubs to swim with the public for profit; use abusive methods to compel the cubs' participation in these profitable encounters; and house tigers in woefully inadequate enclosures. These practices 'harm' and 'harass' the tigers in violation of the ESA's 'take' prohibition by causing them pain and discomfort; exposing them to a high risk of serious illness and injury; distressing them, which poses a threat of serious harm; preventing them from carrying out their natural behaviors; impairing the cubs' development; and depriving the cubs of the companionship and care of their mothers." First Amended Complaint for Injunctive and Other Relief, *People for the Ethical Treatment of Animals, Inc. v. Wildlife in Need and Wildlife In Deed, Inc.*, 476 F. Supp. 3d 765 (S.D. Ind. 2020).

¹²⁷ The USDA defines neonatal big cats as those who are 28 days of age or younger. See *Handling of Husbandry of Neonatal Nondomestic Cats*, *supra* note 14.

¹²⁸ See, e.g., *In re Stearns Zoological Rescue & Rehab*, U.S. Dep't of Agric., AWA Docket No. 15-0146 (July 17, 2015). Records also show that DCWT acquired neonatal big cats, including at least one cat who was just *one week old*. See Certificate of Veterinary Inspection for G.W. Zoo, Okla. Dep't of Agric. Food, & Indus. (June 11, 2015).

¹²⁹ See Final Judgment and Permanent Injunction, *People for the Ethical Treatment of Animals, Inc. v. Dade City Wild Things, Inc.*, No. 8:16-cv-T-36AAS (M.D. Fla. 2020).

¹³⁰ See *id.* In a subsequent federal court case also brought by PETA, the U.S. District Court for the Southern District of Indiana also ruled that premature maternal separation violates the ESA, finding that "the evidence is clear that the...Defendants have both harmed and harassed Big Cat Cubs by prematurely separating them from their mothers and using them in Tiger Baby Playtime." See 476 F. Supp. 3d at 782.

The ruling marked the first federal court decision that prematurely separating tiger cubs from their mothers, forcing them to participate in public encounters, and confining them in inadequate spaces constitutes an illegal take under the Endangered Species Act.¹³⁰ In its final judgment and permanent injunction, the court enjoined DCWT and its owners from owning or exhibiting tigers again.¹³¹

While PETA achieved this precedent-setting ruling, it begs the question "What about the USDA?" The USDA had previously filed an administrative complaint against DCWT in 2015¹³² after the roadside zoo accumulated numerous AWA citations for mishandling juvenile tigers during public encounters and subjecting them to physical abuse. However, in the same year that PETA filed its ESA case against DCWT, an administrative law judge allowed DCWT to keep its USDA license, finding that "the lack of clear communication [by the USDA] to [DCWT] regarding the full nature and scope of the problems with its baby tiger swim program...demonstrates mitigating circumstances which are appropriate for consideration of...a lesser sanction than [license]revocation."¹³³ The ALJ's basis for holding DCWT to a lower

¹³¹ See Final Judgment and Permanent Injunction, *People for the Ethical Treatment of Animals, Inc. v. Dade City Wild Things, Inc.*, No. 8:16-cv-T-36AAS (M.D. Fla. 2020).

¹³² Decision & Order, *Stearns Zoological Rescue & Rehab Ctr., Inc., v. Dade City Wild Things*, No. 15-0146 (finding that, despite previous USDA citations, Dade City Wild Things "continued to mishandle animals, particularly infant and juvenile tigers, exposing these animals and the public to injury, disease and harm"). The administrative complaint describes the exhibitor's lack of good faith, and details at least four instances in which tiger cubs were forced to participate in public handling in swimming pools despite their visible distress and repeated attempts to get out of the water. See *id.* at ¶¶ 8(a)-(d). The USDA complaint also references numerous disturbing instances during which the exhibitor reportedly used "physical abuse to handle or work" tiger cubs, as well as additional allegations that the exhibitor subjected tigers to "excessive handling" that is "detrimental to their health or wellbeing" in addition to circumstances where the exhibitor allegedly endangered tigers and the public by exhibiting big cats without sufficient distance or barriers between tigers and the public. See *id.* at ¶¶ 9(a)-(b), 10(b)-(d), 11; *USDA Files Complaint Against Dade City Wild Things*, SPECTRUM NEWS (Aug. 23, 2015), https://www.baynews9.com/fl/tampa/news/2015/8/23/usda_files_complaint.

¹³³ See *Stearns Zoological Rescue & Rehab Ctr., Inc.*, 76 Agric. Dec. 45, 81 (U.S.D.A. Feb. 15, 2017). The ALJ allowed DCWT to keep its exhibitor's license, merely imposing a 60-day suspension and a \$21,000 civil penalty, despite finding that "[DCWT's] baby tiger swim program is not consistent with the requirements of 9 C.F.R. § 2.131(c)(3) that 'young or immature animals shall not be exposed to rough or excessive public handling or exhibited for periods of time which would be detrimental to their health or wellbeing.'" *Id.* During the course of litigation, DCWT had interfered in the case by shipping 19 cats to Joe Exotic and Jeff Lowe, resulting in the death of three cubs born during the 1200-mile journey in a cattle trailer without air conditioning or water in the middle of July.

standard just because USDA inspectors didn't sufficiently articulate the breadth and depth of the problems associated with offering tigers for swim-with-the-public exhibitions eschewed any mention of the AWA regulation requiring that "[a]ll licensees who maintain wild or exotic animals must demonstrate adequate experience and knowledge of the species they maintain."¹³⁴ Put another way, exhibitors who use tigers for public exhibitions shouldn't need to be told by the USDA that their public encounters are dangerous to the public or harmful to tigers because the AWA places the burden on the licensee to have sufficient knowledge and qualifications. DCWT appealed, and the administrative proceedings hung in limbo until February 7, 2020, when an administrative law judge finally entered a new order, imposing a 90-day license suspension and a \$16,000 civil penalty on the soon-to-be shuttered roadside zoo.¹³⁵

ii. Declawing is an Illegal Take

When Tim Stark, of *Tiger King* infamy, started offering "Tiger Baby Playtime" at his "Wildlife in Need & Wildlife Indeed" (hereinafter "Wildlife in Need") Indiana roadside zoo in 2013, his annual revenue increased from a previous maximum of \$100,000 annually, to over \$1 million annually.¹³⁶ Indeed, tiger cubs are big business for roadside zoos who sell direct contact experiences for up to thousands of dollars per session.¹³⁷ Stark subjected the animals in his care to a virtual house of horrors—feeding cats rancid meat, subjecting them to partial amputation procedures on site without pain medicine, forcibly removing neonatal cubs from their mothers, forcing big cats to subsist on larvae-infested water, confining big cats to tiny, feces-filled enclosures, denying them veterinary care, and using "blunt force trauma to the head" to kill cats he no longer wanted.¹³⁸ PETA wrote to the USDA on May 18, 2017, urging

¹³⁴ 9 C.F.R. § 2.131 (2022); *see also* 9 C.F.R. § 3.132 (2022) ("A sufficient number of adequately trained employees shall be utilized to maintain the professionally acceptable level of husbandry practices set forth in this subpart. Such practices shall be under a supervisor who has a background in animal care.").

¹³⁵ *See* Decision & Order, Stearns Zoological Rescue & Rehab Ctr, Inc., No. 15-0146, 69 (U.S.D.A. Feb. 2, 2020).

¹³⁶ *See* Findings, Conclusions, Order & Judgment, *Indiana v. Wildlife in Need and Wildlife in Deed, Inc., et al.*, No. 49D12-2002-PL-006192, 8 (Ind. Super. Ct. Apr. 6, 2021).

¹³⁷ *See, e.g., Book Your Tour, ZOOLOGICAL WILDLIFE FOUND.*, <https://zoologicalwildlifefoundation.com/visit/tours/> (last visited Apr. 25, 2022).

¹³⁸ Decision and Order, Timothy L. Stark, No. 16-0124 & 16-0125 (U.S.D.A. Feb. 8, 2020). The USDA's Supervisory Medical Officer, Dr. Dana Miller, DVM, relayed that "Stark stated that...he euthanizes animals himself and has never called the veterinarian to do this...Stark stated that he sometimes uses a gunshot, but that the 'bat method' works better. Stark described using the baseball [bat] to bludgeon animals to death as 'euthanasia.'" *See id.* at n.98.

the agency to inspect and take enforcement action against Stark,¹³⁹ but the agency demonstrated a shocking, asleep-at-the-wheel, approach to timely enforcement of the Animal Welfare Act at Wildlife in Need.

In 2007, Stark had pleaded guilty to wildlife trafficking in violation of the Endangered Species Act, an offense for which the USDA should have immediately terminated his Animal Welfare Act license.¹⁴⁰ In a display of what appears to be institutionally-sanctioned apathy at the USDA,¹⁴¹ the agency continued to renew Stark's license annually, despite documenting routine and serious violations of the AWA in the interim,¹⁴² until finally seeking to terminate it in 2015.¹⁴³ In denying the USDA's outrageously late attempt to terminate Stark's license, Administrative Law Judge Janice Bullard ruled that it would be "arbitrary and capricious" for the USDA to "terminate [Stark's] license for conduct occurring more than ten years in the past,"¹⁴⁴ particularly given that the agency "has renewed [Stark's] AWA license following his conviction," and has "issued an AWA license to [Stark] many times in years following his conviction."¹⁴⁵

On October 2, 2017, more than a decade after Stark's wildlife trafficking conviction and after many years of the USDA's apparently deliberate impotence, PETA filed a lawsuit against Stark under the citizen suit provision of the Endangered Species Act, seeking the court to rule that declawing big cats and prematurely separating neonatal cubs from their mothers constitutes illegal harm and harassment of an endangered species.¹⁴⁶ In support of their positions, PETA presented

¹³⁹ *See* Letter from Brittany Peet, Esq., Dir. of Captive Animal L. Enf't, to Elizabeth Goldentyer, D.V.A., Dir. of Animal Welfare Operations, USDA/APHIS/AC Eastern Division (May 18, 2017) (<https://perma.cc/UH6B-LSLM>).

¹⁴⁰ 9 CFR § 2.11 (a)(6) (2022).

¹⁴¹ *See, e.g., Animal Care Program Oversight of Dog Breeders, supra* note 74; *Follow-Up to Animal and Plant Health Inspection Service's Controls Over Licensing of Animal Exhibitors, supra* note 74; *Animal and Plant Health Inspection Service Oversight of Research Facilities, supra* note 74; *Animal and Plant Health Inspection Service Animal Care Program Inspections of Problematic Dealers supra* note 74; *see also* Brulliard, *supra* note 25.

¹⁴² *PETA v. Wildlife in Need & Wildlife in Deed, Inc.*, 476 F. Supp. 3d 765 (S.D. Ind. 2020). Just between 2013-2014, USDA inspectors cited Stark for failing to have an attending veterinarian, killing a leopard with a baseball bat, failing to safely and humanely handle cubs during public contact experiences, and physical abuse of cubs. *See id.*

¹⁴³ *See* Order to Show Cause, Timothy L. Stark, No.15-0080 (U.S.D.A. Jan. 11, 2016).

¹⁴⁴ *See* In re Timothy L. Stark, Decision and Order Granting and Denying Summary Judgment, 75 Agric. Dec. 70 (Jan. 11, 2016).

¹⁴⁵ *Id.*

¹⁴⁶ *See* Complaint for Injunctive and Other Relief at 4-7, *PETA v. Wildlife in Need and Wildlife in Deed, Inc.*, No. 4:17-cv-00186-RLY-DML, 476 F. Supp. 3d 765 (S.D. Ind. 2020).

expert testimony that declawing and premature maternal separation cause extreme physical *and* psychological harm to big cats.¹⁴⁷ On October 19, 2017, the court entered a restraining order that temporarily prohibited Stark from declawing big cats.¹⁴⁸ On August 3, 2020, a federal court in Indiana entered partial summary judgment in favor of PETA's ESA claims,¹⁴⁹ finding that “no reasonable factfinder could find otherwise”¹⁵⁰ than to declare declawing to illegally harm and harass big cats—particularly in the manner in which Stark facilitated it,¹⁵¹ and that there is “little room to doubt that prematurely separating Cubs and using them in Tiger Baby Playtime violates the ESA.”¹⁵² In granting PETA's

¹⁴⁷ Jay Pratte, now Deputy Director at the AZA-accredited Utica Zoo, testified that declawing causes behavioral harm to big cats. *PETA v. Wildlife in Need and Wildlife in Deed, Inc.*, No. 4:17-cv-00186-RLY-DML, 2018 WL 828461, at *4 (S.D. Ind. Feb. 12, 2018). He explained that declawing disrupts species-specific predispositions by creating different stress responses to the procedures. *Id.* Stress responses can change a big cat's physiology, brain, and hormone system which in turn affects a big cat's ability to walk, run, jump, climb, and scratch. *Id.* Pratte also testified that removing neonatal big cats from their mothers and using them in Tiger Baby Playtime causes behavioral harm to big cats. *Id.* He explained big cats usually stay with their mothers for at least two years following birth. *Id.* It was Pratte's expert opinion that Stark stunted the cats' growth and ability to nurse, learn, and develop healthy behaviors. *Id.* Enduring the regular stress of public handling exacerbates the harm. *Id.*; *PETA v. Wildlife in Need and Wildlife in Deed, Inc.*, 476 F. Supp. 3d at 772.

¹⁴⁸ *PETA v. Wildlife in Need and Wildlife in Deed, Inc.*, 476 F. Supp. 3d at 771. Another of PETA's experts, Dr. Jenifer Conrad, D.V.M., who specializes in corrective procedures to attempt to ameliorate the painful effects of declawing big cats, explained that declawing, or ‘onycheotomy,’ is an irreversible surgical procedure that permanently removes the distal phalanx and severs nerves, ligaments, tendons, and blood vessels. *PETA v. Wildlife in Need and Wildlife in Deed, Inc.*, 2018 WL 828461, at *3-4. Dr. Conrad testified that declawed big cats can suffer a lifetime of pain, permanent lameness, arthritis, abnormal standing conformation, and other long-term complications. *Id.* She testified that declawing violates acceptable veterinary medical standards, generally accepted husbandry practices, and medical guidance from the USDA. *Id.* She also offered her expert opinion that at least four of Stark's cats died as a result of declawing complications. *Id.*; *PETA v. Wildlife in Need and Wildlife in Deed, Inc.*, 476 F. Supp. 3d at 772.

¹⁴⁹ *PETA v. Wildlife in Need and Wildlife in Deed, Inc.*, 476 F. Supp. 3d at 785.

¹⁵⁰ *Id.* at 781.

¹⁵¹ Stark's veterinarian “severed the Cubs' claws using a scalpel or guillotine; he admits the procedure causes pain but did not prescribe any pain medication or post-operative care; two cubs died as a result of the veterinarian's ‘treatment’; and others suffered from swollen paws and long-term adverse effects.” *Id.* at 778.

¹⁵² *PETA v. Wildlife in Need and Wildlife in Deed, Inc.*, 476 F. Supp. 3d at 784. The court further found that premature maternal separation and use for Tiger Baby Playtime “constitutes harassment because it creates a likelihood of injury to Big Cat Cubs by annoying them to such an extent as to significantly disrupt normal behavior patterns.... And such conduct harms Big Cat Cubs because it actually injures them.” *Id.* (citation omitted).

motion for summary judgment and request for permanent injunction, the court stated “declawing and prematurely separating Cubs from their mothers for Tiger Baby Playtime poses a *serious* harm—in many cases a deadly one,”¹⁵³ thus ending cruel practices that roadside zoos, circuses, magicians, and numerous others who use big cats for profit have employed for decades without meaningful, and in some cases, any, consequences from the federal agencies that are meant to be protecting the animals.

With its ruling, the court entered a permanent injunction after finding that Stark had illegally taken 22 big cats by declawing them and taken 53 big cats by prematurely removing them from their mothers for public encounters.¹⁵⁴ The court permanently enjoined Stark and his co-defendants from declawing big cats, prematurely separating big cats from their mothers and subjecting them to public encounters, and possessing illegally taken big cats.¹⁵⁵ The permanent injunction entered by the U.S. District Court for the Southern District of Indiana also immediately terminated Stark's ownership of the illegally taken big cats.¹⁵⁶

In 2020, the USDA *finally* permanently revoked¹⁵⁷ Tim Stark's AWA license, finding more than 100 violations of the federal Animal Welfare Act and imposing \$300,000 in civil penalties on Wildlife in Need.¹⁵⁸ It also fined Stark \$40,000.¹⁵⁹ The 7th Circuit Court of Appeals declined to consider Stark's request for review.¹⁶⁰ Finally, on April 7,

¹⁵³ *Id.*

¹⁵⁴ See Permanent Injunction at 1-3, *PETA v. Wildlife in Need and Wildlife in Deed, Inc.*, No. 4:17-cv-00186-RLY-DML, 476 F. Supp. 3d 765.

¹⁵⁵ *Id.*

¹⁵⁶ *Id.* Within days of the court's order, PETA rehomed the remaining big cats, many of whom were in critical condition, to two GFAS-accredited sanctuaries: Turpentine Creek Wildlife Refuge in Arkansas and The Wild Animal Sanctuary in Colorado. See Guynup, *supra* note 21.

¹⁵⁷ Revocation is always permanent, and there are AWA regulations prohibiting attempts to circumvent license revocation.

¹⁵⁸ Findings, Conclusions, Order and Judgment at 19, *Indiana v. Wildlife in Need and Wildlife in Deed, Inc.*, No. 49D12-2002-PL-006192 (Ind. Super. Ct. 2021), <https://interactive.whas11.com/pdfs/Findings-of-Fact-Conclusions-an.pdf>.

¹⁵⁹ See *id.*; Order Affirming Initial Decision, 79 Agric. Dec. 1 (U.S.D.A. 2020) (revoking Stark's license on February 3, 2020, and dismissing the appeal for lack of jurisdiction because Stark submitted his appeal after the deadline passed, finalizing the permanent revocation in August 2020); Order for Dismissal, *Stark v. Adm'r of the Animal & Plant Health Inspection Serv.*, No. 20-2024 (7th Cir. Aug. 5, 2020), <https://www.peta.org/wp-content/uploads/2020/08/2020-08-05-Tim-Stark-v-APHIS-Order-Appeal-Dismissed.pdf>.

¹⁶⁰ Findings, Conclusions, Order and Judgment at 19, *Indiana v. Wildlife in Need and Wildlife in Deed, Inc.*, No. 49D12-2002-PL-006192 (Ind. Super. Ct. 2021), <https://interactive.whas11.com/pdfs/Findings-of-Fact-Conclusions-an.pdf>.

2021, an Indiana state court dissolved Tim Stark's non-profit after finding that Stark had used non-profit funds to buy exotic animals from known animal dealers and to subsidize his own personal expenses.¹⁶¹ The state court also enjoined Stark from ever owning or exhibiting any mammals, birds, reptiles, or amphibians again, placing all of his remaining animals in receivership.¹⁶²

iii. Failure to Provide Adequate Diet, Enrichment, and Veterinary Care are Illegal Takes

On November 10, 2021, Jeff Lowe and Lauren Lowe, who had previously been business partners with Joe Schreibvogel Maldonado Passage, and later with Tim Stark, in the business of breeding, trading, and exhibiting big cats, settled a complaint brought by the U.S. Department of Justice for alleged violations of the federal Animal Welfare Act and Endangered Species Act.¹⁶³ The enforcement action resulted in the permanent revocation of the Lowes' license to exhibit animals and the seizure and rehoming of 82 tigers, lions, and tiger-lion hybrids, one jaguar, and eleven ring-tailed lemurs who were found living in deplorable conditions, deprived of urgently-needed veterinary care.¹⁶⁴

PETA's citizen suits against Stark and Lowe have also achieved clarity for exhibitors and FWS alike that the Endangered Species Act protects the progeny of two different listed species.¹⁶⁵ Parties to the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES),¹⁶⁶ the most comprehensive and significant

¹⁶¹ *Id.*

¹⁶² *Id.* The state of Indiana reportedly identified "wire transfers totaling hundreds of thousands of dollars from [Wildlife in Need]'s bank accounts to known and/or suspected animal dealers." See Guynup, *supra* note 21. On September 11, 2020, the Indianapolis Zoo began removing 161 animals from Stark's property. See *After Weeks on the Run, Wildlife in Need's Tim Stark Arrested in New York*, WLKY NEWS (Oct. 8, 2020), <https://www.wlky.com/article/wildlife-in-needs-tim-stark-arrested-in-new-york-indiana-officials-confirm/34312644#>. When nearly two dozen animals—reportedly valued at a combined total of \$120,000—could not be found, Indiana authorities accused Stark of hiding them, prompting a judge to order his arrest. *Id.* Stark was subsequently arrested in New York in October 2020. *Id.*

¹⁶³ See Opinion and Order, *United States v. Lowe*, No. 20-cv-0423-JFH, 2021 U.S. Dist. LEXIS 8328 (E.D. Okla. June 15, 2021).

¹⁶⁴ *Id.*

¹⁶⁵ See 16 U.S.C. § 1532(8) (); see also Opinion and Order, *supra* note 163.

¹⁶⁶ See *What is CITES?*, CITES, <https://cites.org/eng/disc/what.php> (last visited Apr. 22, 2022). CITES, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, is an international agreement between governments. *Id.* Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species." *Id.*; see generally *List of Contracting Parties*, CITES, <https://cites.org/eng/disc/parties/chronolo.php> (last visited Apr. 22,

multilateral wildlife treaty, including the United States by virtue of its being a ratifying party, have long agreed that hybrids who are the progeny of at least one species that is on either Appendix I or Appendix II should be treated as if they are purebred members of the listed species.¹⁶⁷ However, the FWS and federal courts have not only interpreted and applied the Endangered Species Act protections to exclude hybrids of a listed species and an un-listed species,¹⁶⁸ but FWS has—in practice—excluded enforcement of the ESA where the progeny of two different *listed species* are concerned.¹⁶⁹ PETA's citizen suit against Tim Stark and the associated case against his former business partner, Jeff Lowe, clarified the protected status of ligers (the offspring of a male lion and a female tiger), tigons (the offspring of a male tiger and a female lion), li-ligers (the offspring of a male lion and a female liger), and other "Frankencats" that Joe Exotic, Doc Antle, Jeff Lowe, Tim Stark, and their cohorts have purposefully created in order to evade FWS oversight and enforcement.¹⁷⁰ The FWS will be bound going forward by important

2022). The United States became a party to CITES when its membership was first ratified in 1974. *Id.*

¹⁶⁷ The CITES parties agreed upon a resolution that:

- a) hybrid animals that have in their recent lineage one or more specimens of species included in Appendix I or II shall be subject to the provisions of the Convention just as if they were full species, even if the hybrid concerned is not specifically included in the Appendices;
- b) if at least one of the animals in the recent lineage is of a species included in Appendix I, the hybrids shall be treated as specimens of species included in Appendix I (and shall be eligible for the exemptions of Article VII when applicable);
- c) if at least one of the animals in the recent lineage is of a species included in Appendix II, and there are no specimens of an Appendix-I species in such lineage, the hybrids shall be treated as specimens of species included in Appendix II; and
- d) as a guideline, the words "recent lineage", as used in this Resolution, shall generally be interpreted to refer to the previous four generations of the lineage[.]

See *Animal Hybrids*, CITES, <https://cites.org/eng/res/10/10-17R14.php> (last visited Apr. 25, 2022).

¹⁶⁸ See *United States v. Kapp*, 419 F.3d 666, 672 (7th Cir. 2005) ("Neither the ESA nor the regulations, however, refer specifically to hybrids, which are crosses between listed and unlisted animals. The U.S. Fish and Wildlife Service (USFWS) has enforced a policy, consistent with 50 C.F.R. § 17.11(g), in which hybrids of a listed species and an unlisted species are not protected under the ESA. Similarly, the USFWS policy did not allow for protection of hybrids of animals listed at the subspecies level and unlisted subspecies.").

¹⁶⁹ See, e.g., Nuwer, *supra* note 38.

¹⁷⁰ See, e.g., *United States v. Lowe*, 2021 U.S. Dist. LEXIS 8328, at *11-12

precedent that “[t]he offspring of two different ESA-listed species, such as a lion-tiger hybrid, are considered also protected ‘fish or wildlife’ under the ESA.”¹⁷¹

On November 19, 2020, the Department of Justice pursued civil enforcement action against Jeff Lowe, Lauren Lowe, GW Exotic Animal Park, LLC, and Tiger King, LLC, for persistent violations of the Endangered Species Act and Animal Welfare Act.¹⁷² The parties entered a consent decree, which was approved by the U.S. District Court for the Eastern District of Oklahoma on December 23, 2021.¹⁷³ On the same day, the court entered default judgment against Lowe and his co-defendants, had illegally taken protected big cats by denying them adequate veterinary care, and that they had illegally taken big cat cubs and ring-tailed lemur pups through premature material separation and public handling sessions, and they had taken big cats by forcing them to live in unsanitary conditions.¹⁷⁴ They had also violated the Animal Welfare Act by exhibiting without a license and “placing the health of the animals in serious danger.”¹⁷⁵ The court permanently enjoined Lowe and his co-defendants from exhibiting animals to the public,¹⁷⁶ taking ESA-protected animals, and possessing illegally-taken protected animals.¹⁷⁷

PETA’s ESA citizen suit against Jeff Lowe, which narrowly targeted the treatment of four lions, originated in the U.S. District Court for the Southern District of Indiana because of his business relationship with Tim Stark, but was transferred to the U.S. District Court for the Western District of Oklahoma on July 1, 2021, following final judgment against Stark and Wildlife in Need.¹⁷⁸ Following a bench trial on February 2, 2022, the court concluded that Lowe had treated four lions with “appalling cruelty” by feeding cubs a domestic cat milk replacer followed by a diet of rancid meat as their only food source, directly causing bone deformities and other preventable injuries; failing to mitigate and treat

(E.D. Okla. June 15, 2021) (citing 16 U.S.C. § 1532(8)).

¹⁷¹ See *id.*

¹⁷² See Dep’t Just., Justice Department Files Complaint Against Jeffrey Lowe and Tiger King LLC for Violations of the Endangered Species Act and the Animal Welfare Act (Nov. 19, 2020), <https://www.justice.gov/opa/pr/justice-department-files-complaint-against-jeffrey-lowe-and-tiger-king-llc-violations>.

¹⁷³ See Opinion and Order, *supra* note 163.

¹⁷⁴ See *id.*

¹⁷⁵ *Id.*

¹⁷⁶ *Id.* “The Lowes shall permanently refrain from exhibiting any animals covered by the AWA. Exhibition includes making an animal available to a member of the public. Exhibition can occur in person regardless of compensation or through any other platform, including online for compensation in exchange for viewing the animals or to promote a future zoo.” *Id.*

¹⁷⁷ *Id.*

¹⁷⁸ See Findings of Fact and Conclusions of Law, PETA v. Lowe, No. CIV-21-0671-F (W.D. Okla. Feb. 25, 2022).

fly-strike, a condition in which blood-thirsty flies bite animals and lay eggs which hatch maggots that start eating the animals’ flesh, resulting in long-term painful wounds to the big cats; confining big cats to virtually barren enclosures without “sufficient environmental features, shelters, or enhancements designed to encourage species-appropriate behaviors”; denying the big cats adequate enrichment; placing the lions’ health in jeopardy by failing to follow industry guidance on personal protective equipment and crowding, thereby “expos[ing] the four lions to a high degree of infection risk from SARS-CoV-2”;¹⁷⁹ and denying the lions access to veterinary care by a veterinarian with experience caring for exotic animals.¹⁸⁰ The court concluded that Lowe’s deplorable treatment of the lions violated the Endangered Species Act, effectively ruling that failing to provide protected species with an adequate diet, failing to take measures to control fly-strike and mitigate the risk of Covid-19 transmission, failing to provide adequate enclosures or enrichment to big cats, and “failing to obtain the services of a veterinarian with sufficient training or experience in the care of lions” all constitute illegal takes.¹⁸¹

III. THE STATE OF THE ANIMAL WELFARE ACT

Congress enacted the Animal Welfare Act (AWA) in 1966 to “ensure the humane treatment of animals used in medical research.”¹⁸² Congress amended the AWA in 1970 to include “exhibitors,”¹⁸³ defined as

any person (public or private) exhibiting any animals, which were purchased in commerce or the intended distribution of which affects commerce, or will affect commerce, to the public for compensation, as determined

¹⁷⁹ Coronavirus has impacted a multitude of captive big cats in the United States. See, e.g., Natasha Daly, *Seven More Big Cats Test Positive for Coronavirus at Bronx Zoo*, NAT’L GEOGRAPHIC (Apr. 22, 2020), <https://www.nationalgeographic.com/animals/article/tiger-coronavirus-covid19-positive-test-bronx-zoo>. In fact, at least three snow leopards have died due to complications from Covid-19. Reis Thebault, *A Zoo’s Three ‘Beloved’ Snow Leopards Die of Covid-19*, WASH. POST (Nov. 14, 2021, 8:00 PM), <https://www.washingtonpost.com/science/2021/11/14/snow-leopard-death-covid/>.

¹⁸⁰ See Findings of Fact and Conclusions of Law, *supra* note 178, at ¶¶ 20-21.

¹⁸¹ *Id.* at ¶¶ 8-16. The court, again, also clarified that “As previously determined in this action, all lions, regardless of subspecies, hybrid status, or captive status are fully protected under the ESA.” *Id.* at ¶ 1; see also PETA v. Tri-State Zoological Park of W. Md., Inc., 2018 U.S. Dist. LEXIS 187778, at *14, *14 n.5 (D. Md. Nov. 1, 2018) (Clarifying that “[A]ll lions, captive or wild, enjoy ESA protection,” and that “Defendants’ stray line suggesting that their lions are hybrid lion subspecies, and thus unprotected by the ESA, is also unavailing”); 80 Fed. Reg. 80055.

¹⁸² Animal Legal Def. Fund, Inc. v. Perdue, 872 F.3d 602, 607 (D.C. Cir. 2017).

¹⁸³ *Id.* at 607; see also 7 U.S.C. § 2132(h).

by the Secretary, and such term includes carnivals, circuses, and zoos exhibiting such animals whether operated for profit or not [.]¹⁸⁴

The statutory intent of the AWA is “to insure [sic] that animals intended for use in research facilities or for exhibition purposes or for use as pets are provided humane care and treatment”¹⁸⁵ by regulating minimum standards of “transportation, purchase, sale, housing, care, handling, and treatment of animals by carriers or by persons or organizations engaged in using them for research or experimental purposes or for exhibition purposes or holding them for sale as pets or for any such purpose or use.”¹⁸⁶ Operating as a dealer,¹⁸⁷ or exhibitor,¹⁸⁸ requires an AWA license.¹⁸⁹ The United States Department of Agriculture (USDA) is empowered to administer and enforce the AWA, promulgate regulations, and periodically inspect licensees to determine compliance with the AWA and its implementing regulations.¹⁹⁰ The USDA’s enforcement of the AWA is carried out by the agency’s Animal and Plant Health Inspection Service (APHIS).¹⁹¹ While exceedingly rare, chronic AWA violators

¹⁸⁴ 7 U.S.C. § 2132(h).

¹⁸⁵ 7 U.S.C. § 2131.

¹⁸⁶ *Id.*

¹⁸⁷ The AWA defines “dealer” as “any person who, in commerce, for compensation or profit, delivers for transportation, or transports, except as a carrier, buys, or sells, or negotiates the purchase or sale of, (1) any dog or other animal whether alive or dead for research, teaching, exhibition, or use as a pet, or (2) any dog for hunting, security, or breeding purposes. Such a term does not include a retail pet store (other than a retail pet store which sells any animals to a research facility, an exhibitor, or another dealer).” 7 U.S.C. § 2132(f).

¹⁸⁸ The AWA defines “exhibitor” as “any person (public or private) exhibiting any animals, which were purchased in commerce or the intended distribution of which affects commerce, or will affect commerce, to the public for compensation, as determined by the Secretary, and such term includes carnivals, circuses, and zoos exhibiting such animals whether operated for profit or not; but such term excludes retail pet stores, an owner of a common, domesticated household pet who derives less than a substantial portion of income from a non-primary source (as determined by the Secretary) for exhibiting an animal that exclusively resides at the residence of the pet owner, organizations sponsoring and all persons participating in State and country fairs, livestock shows, rodeos, purebred dog and cat shows, and any other fairs or exhibitions intended to advance agricultural arts and sciences, as may be determined by the Secretary.” 7 U.S.C. § 2132(h).

¹⁸⁹ 7 U.S.C. § 2134. If a person operates as both an exhibitor and a dealer, then the USDA guidance is that they “must be licensed according to what type of activity is [their] predominant business.” USDA, LICENSING AND REGISTRATION UNDER THE ANIMAL WELFARE ACT: GUIDELINES FOR DEALERS, EXHIBITORS, TRANSPORTERS, AND RESEARCHERS 9 (1992).

¹⁹⁰ 7 U.S.C. § 2146(a); *see also* Animal Legal Def. Fund, Inc. v. Perdue, 872 F.3d 602, 606 (D.C. Cir. 2017).

¹⁹¹ *See* U.S. DEP’T OF AGRIC., OFFICE OF THE INSPECTOR GENERAL AUDIT REPORT

may face license suspension, revocation, civil or criminal penalties,¹⁹² or agency confiscation of animals.¹⁹³ The USDA is also able to circumvent the protracted rulemaking process by issuing policy interpretations of existing regulations. For instance, the AWA regulations do not expressly prohibit declawing or defanging large carnivores; in August 2006, however, the USDA issued a policy interpretation of the existing veterinary care regulation,¹⁹⁴ stating that “[a]ll AWA licensees must no longer routinely perform these procedures (declawing and removal of canine teeth) on their wild or exotic carnivores and nonhuman primates. Continuing to routinely use these procedures may subject the licensee to citation for noncompliance with the AWA, and may result in enforcement action.”¹⁹⁵ The AWA is not a federal animal cruelty law, but rather sets *bare minimum* standards for handling and housing “certain warm blooded animals used for research, exhibition, and commerce...”¹⁹⁶ Obtaining an exhibitor license from APHIS, and submitting to periodic inspections, are minimum threshold requirements for circuses, zoos, roadside animal parks, and any other big cat exhibitors to operate legally.¹⁹⁷ Minimum standards of care for tigers housed by exhibitors are found in 9 C.F.R. §§ 3.125-3.142 of the AWA regulations (“Subpart F”).¹⁹⁸

33601-10-CH: CONTROLS OVER APHIS LICENSING OF ANIMAL EXHIBITORS 1 (2010).

¹⁹² *See generally* 7 U.S.C. § 2149.

¹⁹³ *See* 7 U.S.C. § 2146(a); *see also* 9 C.F.R. § 2.129.

¹⁹⁴ *See* 9 C.F.R. § 2.40(b) (“Each dealer or exhibitor shall establish and maintain programs of adequate veterinary care.”).

¹⁹⁵ *Information Sheet on Declawing and Tooth Removal, supra* note 17.

¹⁹⁶ *See* U.S. DEP’T OF AGRIC., *supra* note 191, at 1. The OIG has repeatedly criticized APHIS for failing to enforce the AWA. *See, e.g.*, U.S. DEP’T AGRIC. OFF. INSPECTOR GEN., AUDIT REP. 33601-001-41: ANIMAL AND PLANT HEALTH INSPECTION SERVICE OVERSIGHT OF RESEARCH FACILITIES 13-15 (Dec. 2014) (identifying numerous instances in which the USDA took no enforcement action despite “grave” or repeated violations of the AWA, or animal deaths); U.S. DEP’T AGRIC. OFF. INSPECTOR GEN., AUDIT REP. 33002-3-SF: ANIMAL AND PLANT HEALTH INSPECTION SERVICE ANIMAL CARE PROGRAM INSPECTION AND ENFORCEMENT ACTIVITIES i-ii (Sept. 2005) (finding that the USDA was “not aggressively pursuing enforcement actions against violators of the AWA” and that when the agency imposed monetary penalties, such penalties were so low as to be considered a mere “cost of conducting business” for the licensees); U.S. DEP’T AGRIC. OFF. INSPECTOR GEN., AUDIT REP. 33002-4-SF: ANIMAL AND PLANT HEALTH INSPECTION SERVICE ANIMAL CARE PROGRAM INSPECTIONS OF PROBLEMATIC DEALERS 4-7 (May 2010) (documenting a multitude of ongoing deficiencies in the USDA’s administration of the AWA, including a finding that licensees have “little incentive to comply with AWA because monetary penalties were, in some cases arbitrarily reduced and...often so low that violators regarded them as a cost of business”).

¹⁹⁷ *See* U.S. DEP’T OF AGRIC., *supra* note 191, at 1. While some of the OIG audits are focused on one particular type of licensee, there exist serious concerns about under-enforcement of the AWA with respect to the activities by *all* licensees (e.g., exhibitors, dealers, and research facilities).

¹⁹⁸ *See* 9 C.F.R. §§ 3.125-3.142.

Subpart F is a catch-all section, with regulations that are *not* species-specific. In other words, the minimum standards of handling, care, and transportation it contains apply equally to tigers as well as kangaroos, raccoons, goats, and any other “warmblooded animals other than dogs, cats, rabbits, hamsters, guinea pigs, nonhuman primates, and marine mammals.”¹⁹⁹ The broad range of animals covered by Subpart F, and their vastly varying basic needs, belies the rudimentary nature of the minimum care standards that the AWA regulations establish.

In *Welcome to the Jungle*, I stressed that, equally if not more important than repealing the Generic Tiger Loophole, “it is critical that the USDA also does its part to curtail the lucrative photo, bottle feeding, and swimming sessions with tigers that incentivize the indiscriminate breeding practices that are fueling a surplus of tigers with no conservation value in America.”²⁰⁰ USDA could have listened to experts and prohibited public contact with big cats through rulemaking or policy interpretation,²⁰¹ thus removing the financial incentive for exhibitors like Joe Exotic, Tim Stark, and Jeff Lowe to breed as quickly as possible and subject big cats to cruel practices like declawing and premature maternal separation; however, the USDA has done virtually nothing in the past five years beyond the long-overdue enforcement actions mentioned *supra* Part II.²⁰²

¹⁹⁹ 9 C.F.R. ch. 1, subch. A, pt. 3, subpt. F. For example, space requirements for tigers and other animals who fall under the regulations articulated in Subpart F merely require licensees to provide “sufficient space to allow each animal to make normal postural and social adjustments with adequate freedom of movement.” 9 C.F.R. § 3.128. These terms are left undefined, and in many cases amount to “broadly-worded guidance” which inspectors “have difficulty interpreting.” See U.S. DEP’T OF AGRIC., *supra* note 191, at 2. Indeed, as recently as 2010, the USDA has acknowledged that inspectors require “better guidance” in order to “more effectively evaluate exhibitor compliance.” *Id.*

²⁰⁰ See Williamson & Henry, *supra* note 31, at 44 (estimating that there are hundreds of unwanted adult tigers in the U.S. with not enough reputable sanctuaries to take them all); Carole Baskin & Carney Anne Nasser, *First Responders Shouldn’t Have to Tackle Tigers*, THE HILL (July 17, 2021, 11:00 AM), <https://thehill.com/opinion/energy-environment/563400-first-responders-shouldnt-have-to-tackle-tigers/#bottom-story-socials>.

²⁰¹ Petition for Rulemaking to Prohibit Public Contact with Big Cats, Bears, and Nonhuman Primates, *supra* note 17.

²⁰² In March 2016, the USDA responded to a Petition for Rulemaking for the prohibition of public contact with big cats that had been submitted by a coalition of advocacy organizations, accredited sanctuaries, and big cat experts, with a “Tech Note,” essentially doing no more than restating existing rules about public contact and stating a milque-toast intent to take a closer look at how cubs are handled. See *Handling and Husbandry of Neonatal Nondomestic Cats*, *supra* note 14.

Indeed, not only has the USDA failed to fulfill the spirit and intent of the federal Animal Welfare Act by continuing to allow harmful, exploitative, and lucrative public encounters with cubs at roadside zoos, it has articulated its priority on protecting exhibitors from embarrassment over disclosure of information about how many animals exhibitors house and how animals are treated.²⁰³ Between 2016-2019, USDA enforcement action—which has been lackluster at best to begin with²⁰⁴—declined by a cataclysmic 93%.²⁰⁵ Additionally, between February 2017 and July 2020, the agency removed public records about exhibitors from its website, denying its obligation to ensure public access to the agency’s inspection reports, animal inventories, and other commonly-requested public records about exhibitors and other AWA licensees.²⁰⁶

²⁰³ See, e.g., Animal & Plant Health Inspection Serv., Certificate No. 93-C-0440, Inspection Rep. (2017).

²⁰⁴ See, e.g., Delcianna Winders, *Fulfilling the Promise of EFOIA’s Affirmative Disclosure Mandate*, 95 DENV. L. REV. 909, 919-20 (2018) (“[T]he AWA has been plagued by longstanding enforcement problems. For decades the USDA’s own Office of Inspector General (OIG) has issued audit after audit condemning the Agency’s enforcement of the AWA. A 2014 audit, for example, found that the Agency did not follow its own criteria in closing dozens of cases involving animal deaths or other grave or repeat welfare violations, severely reduced and under-assessed penalties, and failed to ensure that experimental procedures on animals were adequately monitored, putting animals at risk. A 2010 audit found that AWA enforcement was “ineffective” and penalties for violators were inappropriately reduced. A 2005 audit found that the USDA ‘was not aggressively pursuing enforcement actions against violators of AWA and was assessing minimal monetary penalties...making penalties basically meaningless.’ As a result, as the OIG found, violators considered the penalties ‘as a normal cost of business, rather than a deterrent for violating the law.’ The OIG has also criticized the USDA for automatically renewing the licenses of chronic violators, and the Agency has also faced litigation over this practice.”); U.S. DEP’T OF AGRIC., *supra* note 191, at 1. The OIG has repeatedly criticized APHIS for failing to enforce the AWA. See, e.g., *id.* at 14 (identifying numerous instances in which the USDA took no enforcement action despite “grave” or repeated violations of the AWA, or animal deaths); U.S. DEP’T AGIC. OFF. INSPECTOR GEN., AUDIT REP. 33002-3-SF, *supra* note 196, at i-ii (finding that the USDA was “not aggressively pursuing enforcement actions against violators of the AWA” and that when the agency imposed monetary penalties, such penalties were so low as to be considered a mere “cost of conducting business” for the licensees); see generally U.S. DEP’T AGIC. OFF. INSPECTOR GEN., AUDIT REP. 33002-4-SF, *supra* note 196, at 4-7 (documenting a multitude of ongoing deficiencies in the USDA’s administration of the AWA, including a finding that licensees have “little incentive to comply with AWA because monetary penalties were, in some cases arbitrarily reduced and...often so low that violators regarded them as a cost of business”).

²⁰⁵ Guynup, *supra* note 21.

²⁰⁶ While the focus of this article is on the state of the legal landscape directly governing the exhibition and ownership of big cats in the United States, it is important for practitioners to be simultaneously aware of the litigation that was necessary to restore access to public information under the Freedom of Information Act and the justifications that federal agencies like the USDA and FWS relied upon

Despite the U.S. Supreme Court's very clear articulation that "the basic purpose of the Freedom of Information Act [is] to open agency action to the light of public scrutiny,"²⁰⁷ the agency also stopped responding to FOIA requests for inspection and investigation reports for a period of three years on the basis that "revealing the inspection findings could cause embarrassment, harassment, or other stigma" to chronic AWA violators like Joe Exotic.²⁰⁸ While the USDA has never vigorously enforced the AWA,²⁰⁹ the "USDA Blackout"²¹⁰ marked a period of three years where the agency openly and proactively *shielded* licensees from the inconvenience of AWA compliance or public scrutiny rather than feigning fulfillment of its statutory mandate to enforce the AWA. The USDA *ceased enforcement action* against abusive and neglectful licensees while the Blackout was in place.²¹¹

in order to shield exhibitors and big cat owners from embarrassment. *See, e.g.*, People for the Ethical Treatment of Animals and Delcianna Winders v. U.S. Dep't of Agric., <https://www.peta.org/wp-content/uploads/2018/06/001-Complaint-PETA-v.-USDA-Enforcement-Records.pdf> (last visited Aug. 7, 2022); Delcianna Winders, *Why I Sued the USDA*, THE HILL (Feb. 16, 2017), <https://thehill.com/blogs/congress-blog/judicial/319916-why-i-sued-the-usda/>; Meredith Wadman, *Lawsuit Aims to Force USDA to Repost Scrubbed Animal Welfare Records*, SCIENCE INSIDER (Feb. 13, 2017), <https://www.science.org/content/article/lawsuit-aims-force-usda-repost-scrubbed-animal-welfare-records>; *PETA Marks Victory in Third USDA FOIA Lawsuit*, PETA (Oct. 5, 2020), <https://www.peta.org/media/news-releases/peta-marks-victory-in-third-usda-foia-lawsuit/>; *Victory for Animal Rights Groups in 'USDA Blackout' Lawsuits*, PETA (July 20, 2020), <https://www.peta.org/media/news-releases/victory-for-animal-rights-groups-in-usda-blackout-lawsuits/>.

²⁰⁷ Dep't of Air Force v. Rose, 425 U.S. 352, 372 (1976).

²⁰⁸ *See, e.g.*, Letter from Tonya Woods, FOIA Dir., to Teresa Marshall, PETA Found. (Dec. 26, 2017) (on file with the USDA); Letter from Larina Coleman, USDA, to Teresa Marshall, PETA Found. (Mar. 9, 2018) (on file with the USDA). While the USDA took the approach of shielding abusers from public embarrassment, numerous states are currently considering bills that would establish publicly-available animal abuser registries and impose registration and neighborhood notice requirements on animal cruelty offenders. *See, e.g.*, H.R. 4681, 85th Leg., Reg. Sess. (W. Va. 2022); S.B. 448, 220th Cong., 1st Sess. (N.J. 2022); S.B. 2328, 137th Leg. Sess. (Miss. 2022); H.R. 1341, 124th Reg. Sess. (Fla. 2022).

²⁰⁹ Delcianna Winders, *Fulfilling the Promise of EFOIA's Affirmative Disclosure Mandate*, 95 DENV. L. REV. 909, 919-20 (2018).

²¹⁰ A term coined based on the agency's response to FOIA requests with piles of paper that were fully redacted with blocks of black ink. *See Victory for Animal Rights Groups in 'USDA Blackout' Lawsuits*, PETA (July 20, 2020), <https://www.peta.org/media/news-releases/victory-for-animal-rights-groups-in-usda-blackout-lawsuits/>. In 2020, advocacy organizations prevailed in their litigation challenging the Blackout, and Congress ordered the agency to restore public access to public records. *See id.*; *see also Blackout Over? Congress Demands That USDA Restore Animal Welfare Records*, ASPCA (Feb. 18, 2020), <https://www.aspc.org/news/blackout-over-congress-demands-usda-restore-animal-welfare-records>.

²¹¹ *See Brulliard, supra note 25.*

Former USDA inspectors and officials have confirmed that the priority has been on protecting licensees.²¹² For example, "[s]everal former USDA inspectors and senior staff interviewed by *National Geographic* say overlooked welfare concerns...have become more common in the past six years, because of what they assert became a practice of prioritizing business interests over animal welfare."²¹³ William Stokes, who served as an assistant director of animal welfare operations at the USDA from 2014-2018, disclosed that the USDA's transition to prioritizing business interests began during the Obama administration, when the agency's five year strategic plan emphasized cost-cutting for licensees and resulted in "a systematic dismantling of [the] animal welfare inspection process and enforcement[.]"²¹⁴

a. USDA's Failure to Prohibit Harmful Public Handling of Cubs

Tiger cubs are money makers,²¹⁵ and the U.S. Department of Agriculture has enabled this exploitative and lucrative practice by allowing public contact, thereby incentivizing owners to engage in rapid breed-and-dump.²¹⁶ While true sanctuaries neither breed nor permit members of the public to have direct contact with tigers of any age,²¹⁷ roadside zoos and other exhibitors across the U.S. frequently engage in breeding and facilitate public handling of tigers.²¹⁸ For example, Doc Antle, the South

²¹² *See Fobar, supra note 25.*

²¹³ *Id.*

²¹⁴ *Id.*; *see also* ANIMAL & PLANT HEALTH INSPECTION SERV., STRATEGIC PLAN FY 2019-2023 (re-articulating the agency's intent to "[c]ontinue...deregulatory processes to reduce burdens on stakeholders"). It is worth noting, though not at all confidence-inspiring, that the USDA is once again under the stewardship of the same secretary, Secretary Tom Vilsack, under the Biden administration as it was during the Obama administration.

²¹⁵ *See Findings, Conclusions, Order & Judgment, Indiana v. Wildlife in Need and Wildlife in Deed, Inc., et al., supra note 136; see also Book Your Tour, supra note 137; see also Tiger King* (Netflix 2020) ("From the time that they're four weeks old to the time that they're sixteen weeks old, you can profit \$100,000 on that cub... interaction, playtime, photos," said Joseph Schreibvogel Maldonado Passage).

²¹⁶ Williamson & Henry, *supra note 31*, at 16; *see also* THE CONSERVATION GAME, *supra note 59.*

²¹⁷ *See, e.g., Standards for Field Sanctuaries*, GLOB. FED'N OF ANIMAL SANCTUARIES 29, 35, <http://www.sanctuaryfederation.org/gfas/wp-content/uploads/2013/07/FelidStandardsJuly2013HA.pdf> (last visited Apr. 23, 2022).

²¹⁸ *See, e.g., supra notes 113-15; see also ANIMAL FINDERS GUIDE*, Vol. 32, Iss. 7, 5 (Aug. 1, 2015) (advertising two infant tiger cubs "for sale or trade" and two juvenile white tigers "for sale" who make a "beautiful exhibit"); *ANIMAL FINDERS GUIDE*, Vol. 32, Iss. 3, 5 (Apr. 1, 2015) (advertising the sale of a "[t]iger cub, female, 5 1/2 months old. She would continue to make for an exceptional exhibit. Very entertaining, social, and loves attention"). The Animal Finders Guide was a monthly subscription publication that operated like classified ads, with pages and pages of want ads or for sale ads for exotic animals. It is no longer in circulation.

Carolina-based tiger breeder and exhibitor featured in *Tiger King*, sells opportunities to have a photo taken with a tiger cub for \$100 a piece at his roadside zoo.²¹⁹ Mario Tabraue, the Florida roadside zoo owner who previously served a prison sentence in connection with narcotics trafficking and homicide,²²⁰ and was also featured in *Tiger King*, offers similar “hands on” encounters with tiger cubs that can cost thousands of dollars per person.²²¹ However, it’s not just the infamous *Tiger King* characters who engage in this practice; indeed, roadside zoos across the country are making money off of these lucrative public encounters—whether they are quick photo ops or lavish private birthday parties.²²²

USDA policy interpreting AWA handling regulations²²³ merely discourages public contact with tiger cubs (and other big cats), but allows it between approximately eight and twelve weeks of age.²²⁴ This narrow window of opportunity for legal direct public contact with tigers²²⁵ means that exhibitors must maintain a constant supply of tiger cubs in order to generate steady income from these lucrative photo and bottle feeding sessions.²²⁶

²¹⁹ *Private Encounters*, MYRTLE BEACH SAFARI, <https://myrtlebeachsafari.com/swim-with-the-animals/> (last visited Apr. 23, 2022); *About T.I.G.E.R.S.*, THE INST. OF GREATLY ENDANGERED & RARE SPECIES (T.I.G.E.R.S.), <http://www.tigerfriends.com/about.html> (last visited Apr. 23, 2022).

²²⁰ See, e.g., Josh St. Clair, *Tiger King’s Mario Tabraue Was Sentenced to 100 Years in Prison. Then He Got Out.*, MEN’S HEALTH (Mar. 27, 2020), <https://www.menshealth.com/entertainment/a31955789/who-is-mario-tabraue-netflix-tiger-king/>.

²²¹ See *Book Your Tour*, *supra* note 137.

²²² See, e.g., *Parties and Events*, WILD WORLD OF ANIMALS, <https://wildworldofanimals.org/our-work/parties-events> (last visited Apr. 23, 2022).

²²³ See 9 C.F.R. § 2.131 (c)(1) (2004) (requiring that “any animal must be handled so there is minimal risk of harm to the animal and to the public, with sufficient distance and/or barriers between the animal and the general viewing public.”); see also 9 C.F.R. § 2.131 (b)(1) (requiring that “[h]andling of all animals shall be done as expeditiously and carefully as possible in a manner that does not cause trauma, overheating, excessive cooling, behavioral stress, physical harm, or unnecessary discomfort”); 9 C.F.R. § 2.131(c)(3) (requiring that “[y]oung or immature animals shall not be exposed to rough or excessive public handling or exhibited for periods of time which would be detrimental to their health or wellbeing”); 9 C.F.R. § 2.131(d) (1) (requiring that animals are exhibited only under circumstances that are “consistent with their good health and wellbeing”); Animal & Plant Health Inspection Service, *Big Cat Question and Answer*, U.S. DEP’T OF AGRIC, http://www.aphis.usda.gov/animal_welfare/downloads/big_cat/big_cat_q&a.pdf (last visited Apr. 23, 2022).

²²⁴ See Animal & Plant Health Inspection Service, *supra* note 223; see also In re: Jamie Michelle Palazzo, AWA Docket No. 07-0207 at 5 (2010) (noting that the USDA has found there is “an inherent danger present for both the viewing public and the exhibited animal(s) where there is any chance that the public could come into direct contact with juvenile or adult big cats” and that “big cats...become juveniles when they reach 12 weeks of age”) (internal quotation marks omitted).

²²⁵ Williamson & Henry, *supra* note 31, at 16.

²²⁶ Guynup, *supra* note 21.

AWA handling regulations, elucidated in an enforcement action against the ignominious Doc Antle, ostensibly require a barrier between the public and a juvenile²²⁷ or an adult cat during public exhibition.²²⁸ However, the USDA has been selective when enforcing safe handling and other AWA regulations,²²⁹ and has disregarded the agency’s own internal auditing reports which called on APHIS to institute clear guidelines pertaining to barriers between big cats and the viewing public:

APHIS agreed with OIG’s recommendations to issue clear regulations and guidance that define what constitutes a sufficient public barrier and to require exhibitors to report all escapes and/or attacks involving dangerous animals to APHIS’ ACIs. APHIS agreed to develop a work plan for a change in regulation and to issue guidance...APHIS officials performed an economic analysis, which was completed in January 2014. For the next 5 years, APHIS took no further action.²³⁰

Furthermore, as discussed *supra*, many exhibitors simply disregard the USDA’s regulations and handling guidelines by forcibly removing tiger cubs from their mothers shortly after birth,²³¹ and allowing public contact with the cubs when they are only a few weeks old and still immunocompromised.²³² Even celebrity conservationists like Jack

²²⁷ See In re: Jamie Michelle Palazzo, *supra* note 224, at 5.

²²⁸ Antle v. Johanns, No. CIV.A. 4:06-1008, 2007 WL 5209982, at *3 (D.S.C. June 5, 2007), *aff’d*, 264 F. App’x 271 (4th Cir. 2008) (dismissing an action to set aside a United States Department of Agriculture decision that interpreted 9 C.F.R. § 2.131 to be violated when persons who are to be photographed with a big cat are allowed to stand behind the cat without any barrier between the cat and the persons being photographed); See also Animal & Plant Health Inspection Service, *supra* note 223.

²²⁹ See, e.g., Letter from Rachel Mathews, Dir. of Captive Animal Law Enf’t, PETA Found., to Thomas Vilsack, Sec’y of Agric., U.S. Dep’t of Agric., and Phyllis Fong, Inspector Gen., U.S. Dep’t of Agric. (June 3, 2021) (on file with author); see also Fobar, *supra* note 25.

²³⁰ U.S. Dep’t of Agric. Off. of the Inspector Gen., Follow-Up to Animal and Plant Health Inspection Services Controls Over Licensing of Animal Exhibitors (Mar. 2021) (Rev. Feb. 2022), <https://www.oversight.gov/sites/default/files/oig-reports/USDAOIG/33601-0003-23RevisedFinalDistribution.pdf>.

²³¹ See e.g., Decision and Order, Timothy L. Stark., No. 16-0124 & 16-0125 (U.S.D.A. Feb. 8, 2020); Animal & Plant Health Inspection Serv., Certificate No. 92-C-0159, Inspection Rep. (July 25, 2017) (citing exhibitor Steven Higgs for transporting a neonatal tiger cub he acquired in Oklahoma across state lines to his roadside zoo, A Walk on the Wild Side, in Oregon), <https://perma.cc/49D8-G86Q>; see also *Tiger King*, *supra* note 215;

²³² See, e.g., Animal & Plant Health Inspection Serv., Certificate No. 52-C-0035, 12, Inspection Report of Karl Mogensen (2015); see also Petition for Rulemaking to Prohibit Public Contact with Big Cats, Bears, and Nonhuman Primates,

Hanna have been caught lying about the age of the cubs they take on television,²³³ since it is a well-known industry standard that cubs should not be subject to public handling prior to eight weeks of age.²³⁴ Beyond

supra note 17, at 59 (“Prematurely removing a [tiger] cub from its mother is not condoned by the majority of animal care professionals because it may have significant developmental and welfare impacts for both the cubs and its mother.... Tiger experts... agree that it is normally in a cub’s best interest to stay with its mother until the species-typical age of dispersal, i.e., 2.5-3 years.”), included with Petition for Rulemaking to Prohibit Direct Contact with Big Cats, Bears, and Nonhuman Primates, submitted by the Humane Society of the United States, World Wildlife Fund, Global Federation of Animal Sanctuaries, International Fund for Animal Welfare, Born Free USA, The Fund for Animals, Big Cat Rescue, and the Detroit Zoological Society. Tigers are born blind, fragile, and totally dependent upon their mother’s milk and body heat for survival, which is why “legitimate conservation propagation programs allow dams and their cubs to be left undisturbed after birth to allow the mother and offspring to bond and establish a feeding routine.” *Id.* at 60. During the HSUS’ undercover investigation at Tiger Safari, investigators found that cubs were subjected to as many as *sixty* public contact sessions in one day. Wayne Pacelle, *HSUS Undercover Investigations at Roadside Zoos in Virginia, Oklahoma Reveal Severe Abuse*, HUFFINGTON POST (Jan. 22, 2015), http://www.huffingtonpost.com/wayne-pacelle/hsus-undercover-investiga_b_6527062.html. Excessive public handling interferes with a tiger cub’s ability to get proper rest. See Petition for Rulemaking to Prohibit Public Contact with Big Cats, Bears, and Nonhuman Primates, *supra* note 17, at 60. Tigers sleep up to twenty hours per day, and depriving them of their natural sleep cycle can further compromise their young immune systems by causing “exhaustion, anxiety, irritability, and associated physiological consequences.” *Id.*

²³³ For instance, Jack Hanna took a 5-week-old snow leopard cub on Good Morning America (while representing that the cub was 8 weeks old), prompting host Sam Champion to query, “[w]hen do the eyes open? Because they look like they’re just barely opening up.” See *THE CONSERVATION GAME*, *supra* note 59, at 1:12:50-1:13:23. In 2021, *The Conservation Game* premiered and won Best Social Justice Documentary at the Santa Barbara International Film Festival. The film highlights the link between celebrity conservationists and the exotic pet trade. The film premiered to widespread critical acclaim, triggering immediate changes. Jack Hanna removed himself from public life the day after the movie premiered, the Vice President of Animal Programs at the Columbus Zoo who had worked closely with Hanna on hands-on animal encounters suddenly “retired” and the Columbus Zoo—already embroiled in controversy due to financial misdealings of its former CEO and CFO—immediately severed ties with roadside zoos it had formerly partnered with and instituted a new policy prohibiting the removal of big cats and primates from the premises. And several months later, the Association of Zoos and Aquariums sent shockwaves through the zoological community by stripping the Columbus Zoo of its AZA accreditation. Jennifer Smola Shaffer & Alisa Widman Neese, *Conservation Game Documentary Ties Columbus Zoo, Jack Hanna to Unchecked Big Cat Trade*, THE COLUMBUS DISPATCH (Aug. 17, 2021), <https://www.dispatch.com/story/news/local/2021/08/17/first-look-conservation-game-documentary/8149879002/>; *AZA Statement on AZA Accreditation Comm’n’s Denial of Accreditation to the Columbus Zoo and Aquarium*, *supra* note 10; see also Shaffer, *supra* note 10.

²³⁴ See Animal & Plant Health Inspection Service, *supra* note 224 (“Although we do not encourage public contact with cubs, it is possible for an exhibitor to exhibit

dragging its feet in taking interest in safe encounters between big cats and the viewing public, the USDA has apparently applied a different set of rules for deep-pocketed exhibitors. Indeed, the agency *never cited* Siegfried & Roy²³⁵ for unsafe handling despite the fact that the Feld Entertainment²³⁶-produced magic show never employed the use of protective barriers or restraints between the big cats and the audience.²³⁷ This lack of enforcement resulted in numerous big cat attacks on adults and at least one child,²³⁸ culminating in the near-fatal attack on Roy Horn that forced the duo to retire.²³⁹ More recently, PETA has called upon the USDA to cease the special treatment it apparently gives to Doc Antle, who facilitates a multitude of direct contact experiences with adult big cats at his roadside zoo, Myrtle Beach Safari, despite a previous court order affirming a USDA decision requiring Antle to use barriers between members of the public and adult big cats.²⁴⁰ Indeed, the Myrtle Beach Safari Instagram account is replete with recent photos of professional athletes having hands-on experiences with juvenile and adult big cats²⁴¹—with apparently no enforcement action by the

cubs over approximately 8 weeks of age (i.e., when their immune systems have developed sufficiently to protect them from most communicable diseases), to the public, and still comply with all of the regulatory requirements.”).

²³⁵ The show reportedly generated \$44 million per year in revenue. Adam Goldman, *Tiger Attack May Cost Mirage Huge Loss*, ASSOCIATED PRESS (Oct. 7, 2003), <https://apnews.com/article/db52675d97fbd73bdfd5421a4c0760d8>.

²³⁶ Feld Entertainment is the multi-billion-dollar entertainment company that owned the now-shuttered Ringling Bros. Circus and was forced to pay a \$270,000 fine to settle numerous serious violations of the federal Animal Welfare Act in 2011. See Settlement Agreement, U.S. Dep’t of Agric. Animal & Plant Health Inspection Serv. and Feld Entertainment (Nov. 23, 2011), <https://perma.cc/2FCG-SMRA>.

²³⁷ *Wild Things: Siegfried & Roy* (Apple 2022).

²³⁸ See John L. Smith, *Decade After Roy Horn’s Mauling, Earlier Attack Recalled*, L.V. REV. J. (Oct. 20, 2013), <https://www.reviewjournal.com/news/decade-after-roy-horns-mauling-earlier-attack-recalled/>; *20 Years Before Famous Attack, Siegfried and Roy Stagehand Mauled by Tiger*, NEWSBREAK (Nov. 12, 2019), <https://www.newsbreak.com/news/1457614331398/20-years-before-famous-attack-siegfried-and-roy-stagehand-mauled-by-tiger>.

²³⁹ See *Wild Things*, *supra* note 237; Gary Baum, *The Tiger and the Tragic Trick: Siegfried & Roy’s Animal Handler Breaks Silence on Mauling, Alleges Cover-Up*, THE HOLLYWOOD REP. (Mar. 28, 2019), <https://www.hollywoodreporter.com/movies/movie-features/siegfried-roys-animal-handler-breaks-silence-tiger-mauling-alleges-cover-up-1197216/>.

²⁴⁰ See Letter from Michelle Sinnott, PETA Foundation, to Dr. Robert Gibbens, Director of Animal Welfare Operations, USDA (Dec. 8, 2021), (<https://www.peta.org/wp-content/uploads/2021/12/2021-12-08-usda-investigate-preferential-treatment-of-doc-antle-redacted.pdf>).

²⁴¹ See Myrtle Beach Safari (@myrtlebeachsafari), INSTAGRAM (July 18, 2021), <https://www.instagram.com/p/CRfMBEPD4MP/>; Jaylen Mills (@greengoblin), INSTAGRAM (July 22, 2021), https://www.instagram.com/p/CZ9_Kp6qI2V/; Jaylen Mills (@greengoblin), INSTAGRAM (Feb. 14, 2021) <https://www.instagram.com/p/>

CRox7-wJi80/. While the USDA is primarily to blame for allowing Myrtle Beach Safari and other exhibitors to facilitate direct contact with big cats without enforcement action, professional sports leagues and teams are also culpable in failing their own rules and contracts. *See, e.g.*, NFL Contract App'x A, §3 (“Without prior written consent of the Club, Player will not...engage in any activity other than football which may involve a significant risk of personal injury.”); A National Basketball Association Uniform Player Contract Paragraph 12, Prohibited Activities (“[T]he Player agrees that he will not, without the written consent of the Team, engage in any activity that a reasonable person would recognize as involving or exposing the participant to a substantial risk of bodily injury.”); Section XVI of the 2019 MLB Rules (stating that all MLB players shall refrain from “any...activity involving a substantial risk of personal injury”). Showcasing celebrity encounters with tigers and other big cats isn’t just dangerous and irresponsible. It serves to make illegal trafficking in endangered species more viable by making cub petting—the source of big cats who get dumped into the exotic pet trade—attractive to their fans, and giving a stamp of legitimacy to roadside zoos who are churning out tigers and other big cats for profit. My colleague, Tim Harrison, calls it the “monkey see, monkey do mindset.” *See* THE CONSERVATION GAME, *supra* note 59, at 00:03:48-00:04:00. Whenever animals are featured in movies or on television or with our favorite celebrities, there is a direct correlation to public demand for animals without regard to special needs of the animals, or special training and expertise they demand from their caretakers. Stefano Ghirlanda et al., *Dog Movie Stars and Dog Breed Popularity: A Case Study in Media Influence on Choice*, 9 PLOS ONE 1, 1 (2014) (“The release of movies featuring dogs is often associated with an increase in popularity of featured breeds, for up to 10 years after movie release.”). Indeed, the trend has been well-documented in the demand for certain dog breeds, but “[d]ogs aren’t the only pets subject to this phenomenon...[N]o creature is safe from the consequences of its adorable depiction on screen.” Michele Debczak, *Ten Movies That Inspired Pet Trends*, MENTAL FLOSS (Dec. 29, 2015), <https://www.mentalfloss.com/article/71877/10-movies-inspired-pet-trends> (noting that the demand for Dalmatians (and the consequential dumping in shelters) spiked following *101 Dalmatians*, demand for collies increased 40% following *Lassie*, the popularity of Old English Sheepdogs increased 100-fold after *The Shaggy Dog*, and the movie Turner and Hooch triggered a spike in popularity of French mastiffs); *see also* Emilee White, *7 Movies that Inspired Animal Trends*, DESERET NEWS (Sept. 29, 2016), <https://www.deseret.com/2016/9/29/20597141/7-movies-that-inspired-animal-trends#teenage-mutant-ninja-turtles-1990>; Mireya Navarro, *After Movies, Unwanted Dalmatians*, N.Y. TIMES, Sept. 14, 1997, at 30, <https://www.nytimes.com/1997/09/14/us/after-movies-unwanted-dalmatians.html> (“Animal shelters around the country have reported sharp increases in the number of unwanted Dalmatian dogs this year, many of them given to children as gifts last Christmas after the release of Disney’s remake of the movie ‘101 Dalmatians.’”). As a retired police officer-fire-fighter-paramedic and expert on safe wildlife interactions, Harrison has discussed at length his first-hand experience pulling tigers out of basements and backyards with increasing frequency after big cat handling became popularized on late night television shows, morning shows, and contrived animal-interaction shows like *The Crocodile Hunter*. *See* THE CONSERVATION GAME, *supra* note 59 (depicting how Harrison witnessed the “celebrity conservationist” world collide with the exotic pet trade while filming undercover at an exotic animal auction, where he witnessed a number of television personalities or their roadside zoo partners purchasing and selling animals for television). The hugely profitable practice of offering tigers, lions, and other exotic and endangered species for human handling

USDA. These interactions, and the widespread circulation of images of tiger baby playtime and lion cub bottle-feeding on social media—have consequences. Indeed, there is a direct correlation between the exploitation of big cats for entertainment (whether it is bottle feeding and photo ops at roadside zoos or celebrity conservationists on late-night and morning television shows) and the explosion of America’s exotic pet trade.²⁴²

My colleague Tim Harrison, who is featured in documentaries like *The Elephant in the Living Room* and *The Conservation Game*, is the founder of Outreach for Animals, is an expert on safe wildlife interactions, and is someone who has written and discussed the correlation at length.²⁴³ As a retired police officer-fire fighter-paramedic, Harrison had first-hand experience pulling tigers out of basements and backyards with increasing frequency after big cat handling became popularized on late night television shows, morning shows, and contrived animal-interaction shows like *The Crocodile Hunter*.²⁴⁴ The 2021 documentary, *The Conservation Game*, depicts how Harrison witnessed the “celebrity conservationist” world collide with the exotic pet trade while filming undercover at an exotic animal auction, where he witnessed a number of television personalities or their roadside zoo partners purchasing and selling animals for television.²⁴⁵ The hugely profitable practice of offering tigers, lions, and other exotic and endangered species for human handling sessions, photo ops, and bottle feeding with the public is a practice that has been popularized by “celebrity conservationists” like Jack Hanna, who normalized the use of big cats on late night shows like *The Late Show with David Letterman* and morning talk shows like *Good Morning America*.²⁴⁶ Harrison noticed a direct correlation between

sessions, photo opportunities, and bottle feeding to the public is a practice that has been popularized by celebrity conservationists like Jack Hanna who popularized the use of big cats on late night shows like *The Tonight Show* and morning magazines like *Good Morning America*. *See id.*

²⁴² *See* Nuwer, *supra* note 38.

²⁴³ *See* THE ELEPHANT IN THE LIVING ROOM (NightFly Entertainment 2010); THE CONSERVATION GAME, *supra* note 59. (NightFly Entertainment Apr. 6, 2021); *see generally* Home, Outreach for Animals, <https://outreachforanimals.org> (last visited July 28, 2022).

²⁴⁴ *See* Nuwer, *supra* note 38.

²⁴⁵ *See* THE CONSERVATION GAME, *supra* note 59; Baskin & Nasser, *supra* note 200; Shaffer, *supra* note 10.

²⁴⁶ *See, e.g.*, Shara Ignat, *Jack Hanna on David Letterman Show 9 May, 2013*, YOUTUBE (Aug. 12, 2013), <https://www.youtube.com/watch?v=iKeJshShkWQ>; Asad fallik, *Jungle Jack Hanna (Leopard and Cobra) on David Letterman (2015)*, YOUTUBE (June 14, 2017), <https://www.youtube.com/watch?v=hfWq3VVgDf4>; Don Giller, *Jack Hanna Collection on Letterman, Part 1 of 11: 1985-1986*, YOUTUBE (Apr. 25, 2021), https://www.youtube.com/watch?v=YKyrTm_xcrs; The Late Late Show with James Corden, *Leopards, a Bearcat & Penguin w/ Jack Hanna*, YOUTUBE (Apr. 26,

the popularity of shows that depicted characters like Jack Hanna and Steve Irwin parading exotic animals on television or wrestling with them and the dramatic increase in phone calls he received about big cats in basements and gaboon vipers in garages. Indeed, “[a]fter removing an unruly pet from someone’s property, he would ask people why he or she thought it was a good idea to own a lion or tiger. Many responded it was because they had seen it on TV.”²⁴⁷

b. USDA Licensure as a Way to Circumvent State and Local Laws

While private ownership of tigers does not require a USDA license, private owners still may obtain a “Class C”²⁴⁸ exhibitor license from the USDA if they meet minimum standards of care—irrespective of whether or not they are engaged in AWA-regulated conduct.²⁴⁹ It may seem counterintuitive for an owner of a dangerous wild animal to seek federal licensure and oversight where it is not mandated, however, it is incentivized in jurisdictions like Illinois, New York, and Oregon, which have state prohibitions on keeping tigers and other dangerous wild animals as pets but contain express exemptions for any holder of a USDA license.²⁵⁰ The monetary cost associated with obtaining a USDA

2016), <https://www.youtube.com/watch?v=E4MUXs4IHtY>; Good Morning America, *Jack Hanna and His Furry Friends Visit ‘GMA’*, YOUTUBE (June 7, 2016), https://www.youtube.com/watch?v=1xJ_4V-tjD8; THE CONSERVATION GAME, *supra* note 59.

²⁴⁷ See Nuwer, *supra* note 38.

²⁴⁸ See, e.g., 9 C.F.R. § 2.6 (2004) (explaining license fees and classifications of licenses for brokers, dealers, and exhibitors).

²⁴⁹ See 7 U.S.C. § 2133-34 (2014) (“The Secretary is further authorized to license, as dealers or exhibitors, persons who do not qualify as dealers or exhibitors within the meaning of this chapter upon such persons’ complying with the requirements specified above and agreeing, in writing, to comply with all the requirements of this chapter and the regulations promulgated by the Secretary hereunder.”). This, of course, means that an even greater percentage of captive tigers in the U.S. may be kept as pets if some of the 341 USDA licensees who have tigers in their inventories are actually private owners. Note that some authors have referred to a USDA “ownership license,” which does not exist. See Cassidy Cohick, Comment, *The Forgotten Cool Cats and Kittens: How a Lack of Federal Oversight in the USDA Led to Inhumane Loopholes in the Exploitation of Big Cats in America*, ADMIN. L. REV. ACCORD 125, 128 (2021) (mistakenly suggesting that “ownership licenses” should be revoked more frequently by the USDA).

²⁵⁰ See 720 ILL. COMP. STAT. § 5/48-10 (b) (2015) (providing that federally licensed exhibitors are exempt from the prohibition on keeping dangerous wild animals, including tigers); see also ILL. COMP. STAT. § 5/48-10(a) (defining “dangerous animal” to include tigers.); N.Y. ENV’T CONSERV. LAW § 11-0512(1), (2)(b) (LexisNexis 2021). New York’s exemption for USDA licensees attempts to address private owners’ circumvention by requiring that owners demonstrate “that the sole purpose for which the wild animal or animals are used is for exhibition to the public for profit or compensation.” See O.R.S. § 609.345(1)(b) (exempting USDA licensees from the

license is *de minimus* and a very low bar to clear in order to obtain a golden ticket to keep a tiger as a pet.

Obtaining an inexpensive USDA license and submitting to infrequent inspections²⁵¹ An internal audit report released in 1996 by the USDA’s Office of the Inspector General (USDA OIG) revealed that 70% of the sampled exhibitors with four or fewer regulated animals “obtained their licenses to aid them in circumventing state or local laws that restricted private ownership of dangerous exotic animals.”²⁵² Since that 1996 audit report, the AWA regulations have been updated in an attempt to better restrict this apparent circumvention.²⁵³ Yet still, a subsequent OIG report from 2010 revealed that it was still “possible for a licensee to maintain his or her status as an exhibitor indefinitely without ever actually exhibiting their animals,”²⁵⁴ and that, despite “significant progress”²⁵⁵ in reducing the number of AWA-licensees who were nothing more than private owners, licensees were still able to renew an exhibitor license “based solely on a stated intent to exhibit.”²⁵⁶ It was not until the OIG’s 2021 report that USDA auditors found that corrective action had been taken to better prevent licensure of private owners,²⁵⁷ including by removal of the agency’s previous system of automatic license renewal²⁵⁸

state restrictions on keeping tigers in Oregon); see also Douglas & Henry, *supra* note 31, at 19.

²⁵¹ See 7 U.S.C. § 2146(a).

²⁵² U.S. Dep’t of Agric. Off. of the Inspector Gen., Audit Report 33601-10-Ch, Controls Over APHIS Licensing of Animal Exhibitors 15 (June 2010), <http://www.usda.gov/oig/webdocs/33601-10-CH.pdf>.

²⁵³ See 9 C.F.R. § 2.11 (a)(5) (2004) (providing that a license will not be issued to “any applicant who...[i]s or would be operating in violation or circumvention of any Federal, State, or local laws[.]”); see also Animal Welfare; Inspection, Licensing, and Procurement of Animals, 65 Fed. Reg. 47908-02 (Aug. 4, 2000).

²⁵⁴ See U.S. Dep’t of Agric. Off. of the Inspector Gen., *supra* note 252, at 15.

²⁵⁵ *Id.* at 17.

²⁵⁶ *Id.*

²⁵⁷ U.S. Dep’t of Agric. Off. of the Inspector Gen., *supra* note 230.

²⁵⁸ The USDA promulgated new rules, removing annual automatic license renewal and rather instituting three-year licenses and a requirement for licensees to re-apply and demonstrate AWA compliance prior to license issuance every three years. See 9 C.F.R. § 2.5(a) (“A license issued under this part shall be valid and effective for 3 years unless: (1) The license has been revoked or suspended pursuant to section 19 of the Act or terminated pursuant to § 2.12; (2) The license is voluntarily terminated upon request of the licensee, in writing, to the Deputy Administrator; (3) The license has expired, except that: (i) The Deputy Administrator may issue a temporary license, which automatically expires after 120 days, to an applicant whose immediately preceding 3-year license has expired, if: (A) The applicant submits the appropriate application form before the expiration date of a preceding license; and (B) The applicant had no noncompliances with the Act and the regulations and standards in parts 2 and 3 of this subchapter documented in any inspection report during the preceding period of licensure.”); see also U.S. Dep’t of Agric. Off. of the Inspector Gen., *supra* note 230.

regardless of any noncompliances or violations of local, state, or federal animal protection laws.²⁵⁹ Indeed, it was the USDA's prior practice to rubberstamp license renewals *without even looking* at previous inspection reports.²⁶⁰

The new rules came after multiple legal challenges to the USDA's practice of rubber-stamping license renewals—even while licensees were under investigation for chronic AWA violations—rather than requiring licensees to demonstrate AWA compliance, leading to the renewal of numerous USDA licenses after exhibitors had been found in violation of state animal welfare laws, during USDA investigations for chronic AWA violations, or following enforcement action for ESA violations. In one such case, two concerned citizens in North Carolina challenged the USDA's renewal of a license for a roadside zoo that had accumulated numerous AWA citations and had been adjudged by a state court to be in violation of North Carolina's cruelty to animals laws. *See generally* Ray v. Vilsack, 2014 U.S. Dist. LEXIS 101087, at 9 (ruling that Plaintiffs' case was mooted because the USDA had suspended the roadside zoo's license after Plaintiffs sued the USDA, despite the courts finding that "Plaintiffs are correct that the USDA intends to continue its policy of rubberstamping AWA license renewal applications"); *In re* Timothy L. Stark, No. 15-0080 (U.S. Dep't of Agric. Jan. 11, 2016) (noting that the USDA had continued to rubber-stamp the roadside zoo's AWA license annually despite a prior guilty plea for illegal wildlife trafficking in violation of the Endangered Species Act). In a subsequent case, the Animal Legal Defense Fund sued then-Secretary of Agriculture Sunny Perdue, challenging the USDA's automatic license renewal, after the USDA continued to rubber-stamp AWA license renewal of a now-defunct roadside zoo in Iowa called Cricket Hollow Zoo, after ALDF prevailed in an ESA citizen suit against the facility for subjecting big cats and other protected animals to deplorable living conditions and depriving them of an adequate diet and veterinary care. *See* Kuehl v. Sellner, No. C14-2034 (N.D. Iowa Jun. 28, 2016). The USDA had documented dozens of serious violations of the AWA at the facility between 2013-2016, noting a "chronic management problem" at the roadside zoo. *See* Animal Legal Def. Fund, Inc. v. Perdue, 872 F.3d 602, 609 (D.C. Cir. 2017). Yet, even on the day it inspected and documented AWA violations at Cricket Hollow, the USDA still renewed the facility's exhibitor license. *See id.* at 620 (ruling that federal courts may not uphold the USDA's automatic license renewal based solely on an applicant's self-certification "when it has concrete evidence that the applicant is routinely and currently out of compliance with AWA standards," without a determination that the USDA "acted rationally and engaged in reasoned decision making"). One month before the D.C. Circuit Court of Appeals ruled in *ALDF v. Perdue*, the USDA published an Advanced Notice of Proposed Rulemaking (ANPR) in the Federal Register that it was soliciting public input on the possibility of revising its license issuance and renewal scheme. *See* Animal Welfare: Procedures for Applying for Licenses and Renewals, 82 Fed. Reg. 40,077 (Aug. 24, 2017). Following the consideration of public comments on the ANPR, the USDA published notice of the final rule in the Federal Register on May 13, 2020, announcing that the new license issuance structure would be effective November 9, 2020. *See* Animal Welfare: Amendments to Licensing Provisions and to Requirements for Dogs, 85 Fed. Reg. 28,772 (May 13, 2020).

²⁵⁹ *See, e.g.*, Perdue, 872 F.3d 602.

²⁶⁰ *See id.* at 617-18 (referencing that the USDA did not rely upon previous inspection records in its license renewal process).

But for some key enforcement actions that were likely spurred by advocacy organization citizen suits under the ESA, the USDA has done very little to "insure [sic]...humane care and treatment"²⁶¹ of big cats in America. Indeed, the agency continues to prove its apathy again and again where meaningful action to ameliorate America's Tiger Crisis is warranted. Some have suggested that the answer to America's Tiger Crisis is for the USDA to promulgate more rules,²⁶² but I disagree. It is a fool's errand to continue urging a federal agency that has demonstrated its impotence in effective enforcement of the AWA,²⁶³ and has looked for every opportunity to pamper licensees and not enforce the existing regulations²⁶⁴—which, if interpreted effectively and enforced vigorously, would be sufficient to end the practice of cub petting that is supplying the pet trade—to promulgate more rules when it will just find new ways and new reasons not to enforce them.

IV. PROGRESS OUTSIDE THE COURTROOM

a. State Action

Many states are finally catching onto the roadside zoo conservation con and are cracking down on profit-hungry exploiters. For instance, after many years of allowing big cat exhibitors to bring cats on morning shows and late night shows, the State of New York finally took action against a Pennsylvania-based roadside menagerie owner, exposed in *The Conservation Game* as one of the primary suppliers of animals for Jack Hanna and the Columbus Zoo's "ambassador animal" program,²⁶⁵ who frequently defied the state prohibition against facilitating

²⁶¹ 7 U.S.C.A. § 2131.

²⁶² *See* Cohick, *supra* note 249, at 128 ("[T]he USDA must strengthen its regulations to adequately protect big cats and meet animal welfare standards.").

²⁶³ *See* Brulliard, *supra* note 25; *see also* Fobar, *supra* note 25.

²⁶⁴ "Teachable Moments," where licensees avoid having their failures to meet minimum standards of care cited in favor of conversations that are meant to help the licensees better understand how to comply with the AWA. *See Teachable Moments Information*, U.S. DEP'T OF AGRIC., <https://aphis-efile.force.com/PublicSearchTool/s/teachable-moments> (last visited Apr. 12, 2022). Professor Delcianna Winders, Director of the Animal Law & Policy Program at Vermont Law School and the preeminent AWA scholar and expert, has described the Teachable Moments policy as a "specious" defiance of the USDA's Congressional mandate. *See* Delcianna (Delci) Winders (@DelciannaW), TWITTER (Feb. 18, 2020, 03:05 PM), <https://twitter.com/DelciannaW/status/1229859462560829441>; *see also, e.g.*, Letter from Rachel Mathews, Esq., Dir. of Captive Animal Law Enf't, PETA Foundation, to Thomas Vilsack, Sec'y of Agric., & Phyllis Fong, U.S. Dep't of Agric. Inspector Gen. (June 3, 2021) (https://www.peta.org/wp-content/uploads/2021/06/2021-06-03_PETA-Letter-to-USDA_Monterey-Zoo-records-and-AWA-enforcement_Redacted.pdf).

²⁶⁵ The Late Show with David Letterman, *Jungle Jack Hanna (Aardvark, Lion*

direct contact between the public and big cats of any age.²⁶⁶ Beyond enforcement action, numerous states are not waiting for the USDA to do any better and are rather attempting to pass their own legislation that would ban cub petting and reduce the exotic pet trade.²⁶⁷

Cub, Japanese Macaque) on David Letterman (2015), YouTube (2015), https://www.youtube.com/watch?v=42X_gkCPVyg. Suzi Rapp, then Vice President of Animal Programs and ironically a member of the AZA's animal welfare committee, came to his defense in order to help Kemmerer keep his exhibitor's license—calling Kemmerer's outfit “top-notch institution.” Letter from Suzi Rapp, Vice President Animal Programs, Columbus Zoo & Aquarium, to the State of N.Y. (Feb. 12, 2018) (on file with author). Since the nature of his business was further exposed in *The Conservation Game*, the State of New York declined to issue Kemmerer a license, making him ineligible to continue acting as an animal supplier for bits on morning shows and late night shows until at least 2023. See Shaffer & Neese, *supra* note 233. The year 2021 saw sweeping changes with those in Kemmerer's circle: the Columbus Zoo lost its AZA accreditation, the zoo's longtime director emeritus Jack Hanna removed himself from public life, Suzi Rapp suddenly “retired,” and the zoo announced that it would no longer do business with roadside zoos or take big cats or primates off-site in the immediate aftermath of an award-winning documentary called *The Conservation Game. Id.* The Columbus Zoo finally announced its support for the Big Cat Public Safety Act, which would prohibit public contact with big cats and end private ownership in all 50 states. Press Release, Columbus Zoo & Aquarium, Columbus Zoo & Aquarium Increases Efforts to Protect Endangered Cats with Conservation & Support of Legislation to Protect Big Cats & the Public (Apr. 23, 2021) (<https://www.columbuszoo.org/home/about/press-releases/press-release-articles/2021/04/23/columbus-zoo-and-aquarium-increases-efforts-to-protect-endangered-cats-with-conservation-and-support-of-legislation-to-protect-big-cats-and-the-public>).

²⁶⁶ N.Y. ENV'T. CONSERV. LAW § 11-0538(2) (2015). One of Jack Hanna's primary animal suppliers was Grant Kemmerer, who runs an exotic animal rental business in Pennsylvania, and was cited by the State of New York for facilitating direct contact with big cats at a birthday party. See Order on Consent, NYSDEC v. Grant Kemmerer III, No. R1-20180119-44 (N.Y. App. Term, June 28, 2018), https://www.peta.org/wp-content/uploads/2018/11/Grant_Kemmerer_III_Wild_World_of_AnimalsRedacted.pdf.

²⁶⁷ See H.B. 2711, 101st Gen. Assemb., 2nd Reg. Sess. (Mo. 2022) (providing that “no person shall allow any member of the public to come into direct contact with any live [big cat, bear, or nonhuman primate]”); S.B. 0381, Gen. Assemb. (Md. 2022) (prohibiting the *intrastate* sales of tigers, lions, jaguars, cheetahs, leopards, and certain other exotic and endangered species and their parts); H.B. 1248, Gen. Assemb., 2022 Sess. (Ind. 2022) (providing that “a person that owns or possesses a [big cat or bear] may not allow a member of the public to: (1) come into direct contact with; or (2) enter into a proximity that allows for or permits direct contact with; the specified animal, regardless of the age of the specified animal” was signed by Indiana Governor Eric Holcomb on March 11, 2022); S.B. 344, 81st Sess. (Nev. 2021) (providing in pertinent part that “[a] person shall not allow a dangerous wild animal to come in direct contact with a member of the public” and that “[d]angerous wild animal” is defined to include big cats, bears, primates, elephants, wolves, and hyenas). The Nevada legislation is significant because it is the first legislation the state has ever enacted that pertains to captive exotic animals. See S.B. 344, 81st Sess. (Nev. 2021). *But see* H.B. 0066, 66th Leg. (Wy. 2022) (proposing to prohibit localities from enacting or

b. Federal Action: The Big Cat Public Safety Act

While it is important that states are taking action with increasing vigor, no one state can establish the uniformity of law that is desperately needed in order to truly bring an end to America's Tiger Crisis. There is still a patchwork of state laws that do not provide sufficient oversight to make meaningful progress towards ending the big cat trade in America.²⁶⁸ The most critical change for tigers and other big cats that can be achieved in 2022, The Year of the Tiger, is for Congress to pass, and President Biden to sign, the Big Cat Public Safety Act.²⁶⁹ The bill seeks to amend the Lacey Act²⁷⁰ by establishing much-needed, and long-overdue, uniformity of law by phasing out private ownership of big cats in all states, and by prohibiting licensed exhibitors from using big cats of any age for photo ops and other hands-on public encounters.²⁷¹ As Carole Baskin and I wrote for *The Hill*,

Eliminating the exploitative use of tiger cubs for lucrative public contacts such as at privately run petting zoos will remove the financial incentive for today's puppy-mill-style rampant breeding of big cats which, when they become too big to pet, are discarded, used for more breeding, possibly destroyed, or may end up in the illegal trade for their body parts.²⁷²

The bill, which has broad bipartisan support,²⁷³ has previously passed in the House of Representatives,²⁷⁴ but died before it could be voted on in the Senate. It was reintroduced this congressional session by Rep. Mike Quigley,²⁷⁵ and now—with long overdue support from the Columbus Zoo's new leadership²⁷⁶—has its best chance of passing that we have

enforcing ordinances that limit the use big cats for circuses, cub petting, and other commercial entertainment).

²⁶⁸ *The Big Cat Public Safety Act*, BIG CAT SANCTUARY ALL., https://www.bigcatalliance.org/learn-more/calls-to-action/?fbclid=IwAR31TUtdF7_fzIIPw_A0loifkQk0rL9Vcx5XbEy4M5ZXXYEutnXGAIojBLY (last visited Apr. 17, 2022).

²⁶⁹ See H.R. 263, 117th Cong. (2021); Baskin & Nasser, *supra* note 200.

²⁷⁰ 16 U.S.C. §§ 3371-3378 (2006).

²⁷¹ H.R. 263.

²⁷² Baskin & Nasser, *supra* note 200.

²⁷³ *Id.*

²⁷⁴ Press Release, Rep. Brian Fitzpatrick, Fitzpatrick's Bipartisan Big Cat Public Safety Act Passes House (Dec. 4, 2020) (<https://fitzpatrick.house.gov/2020/12/fitzpatrick-s-bipartisan-big-cat-public-safety-act-passes-house>).

²⁷⁵ Press Release, Rep. Mike Quigley, Quigley Reintroduces Legislation to End Private Ownership of Big Cats (Jan. 21, 2021) (<https://quigley.house.gov/media-center/press-releases/quigley-reintroduces-legislation-end-private-ownership-big-cats>).

²⁷⁶ Press Release, Columbus Zoo & Aquarium Increases Efforts to Protect

ever seen. Indeed, as this article went to publishing, the U.S. House of Representatives passed H.R. 263, the Big Cat Public Safety Act once again by a bipartisan vote of 215-134.²⁷⁷

CONCLUSION

It is remarkable that one advocacy organization has been responsible for such significant progress for the conservation and welfare of big cats in such a short period of time. However, it is impossible to ignore that the only reason a non-profit has been forced to pursue a seemingly never-ending docket of cases against roadside zoos is because a \$146,000,000,000 federal agency won't do the job that taxpayers are already paying it to do.²⁷⁸ Rather than leaving it up to non-profit advocacy organizations to continue to pursue a costly and protracted game of legal whack-a-mole against roadside zoos and exploitative owners, the common-sense solution is to establish uniformity of law across the entire country to prevent the abusive practice that drives the illegal pet trade in the first place.²⁷⁹ While the U.S. Department of Agriculture could have achieved this quickly and effectively outside of the rulemaking process by issuing a policy interpretation to prohibit public contact with cubs, the agency clearly has neither the desire nor the intent to institute such a common-sense adjustment to its application of the Animal Welfare Act regulations.

The cast of *Tiger King* made it tempting to dismiss big cat trafficking and exploitation as the province of a handful of eccentric, publicity-hungry, criminals; or to brush off the tigers found in backyards and suburbia as ignorance; but they are all symptoms of the same underlying problem: the U.S. Department of Agriculture's commodification of big cat cubs, apathy at AWA enforcement, and creation of the breed-and-dump industry that starts in roadside zoos and ends with big cats found in Houston suburbs,²⁸⁰ Baton Rouge backyards,²⁸¹ and even the parts trade.²⁸² The USDA's intentional failures

Endangered Cats With Conservation & Support of Legislation to Protect Big Cats & the Public, *supra* note 265; Shaffer & Neese, *supra* note 233.

²⁷⁷ Big Cat Public Safety Act, H.R. 263, 117th Cong. (2022); *see also*, Roll Call 415, U.S. House of Representatives, 117th Congress (July 29, 2022), <https://clerk.house.gov/Votes/2022415>.

²⁷⁸ *See* U.S. DEP'T OF AGRIC., FY 2021 USDA BUDGET SUMMARY (2021), <https://www.usda.gov/sites/default/files/documents/usda-fy2021-budget-summary.pdf>.

²⁷⁹ Baskin & Nasser, *supra* note 200.

²⁸⁰ VIDEO: *Tiger Spotted in West Houston Neighborhood*, *supra* note 45.

²⁸¹ VIDEO: *White Tiger Cub Seized in Louisiana, Possibly Belonging BR Rapper NBA Youngboy, Finds New Home*, *supra* note 49.

²⁸² *See generally* Baskin & Nasser, *supra* note 200; Nuwer, *supra* note

are widespread and have global implications. By enabling America's Tiger Crisis, the USDA has damaged our credibility as a nation in conversations about the international trade in big cats, the urgency of protecting their habitats, and ending the demand for their parts.²⁸³ Indeed, U.S. officials have been laughed at when probing Chinese delegates at treaty meetings for the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES)²⁸⁴ about their tiger farming practices²⁸⁵ and demand for parts: "At least we know how many tigers [China has]."²⁸⁶ Indeed, despite the lip service that the U.S. government pays to its priority on closing tiger farms in Asian countries at CITES,²⁸⁷ the United States is rapidly losing credibility in multilateral conservation conversations because we have no answer to queries about what America is doing to end its backyard tiger problem, or how roadside zoo exploitation is any different than tiger farming.²⁸⁸ It is a fair question, and when the CITES parties meet again this year in Panama City,²⁸⁹ the United States has to show up with something to show since the parties last met in Geneva three years ago,²⁹⁰ and with the ability to offer a new answer this time: "We enacted the Big Cat Public Safety Act. Your move, China."

38; Petition for Rulemaking to Prohibit Public Contact with Big Cats, Bears, and Nonhuman Primates, *supra* note 17, at 61.

²⁸³ Guynup, *supra* note 6; *see also* Nuwer, *supra* note 38; Cohick, *supra* note 249.

²⁸⁴ CITES is the most significant multilateral treaty pertaining to the international trade and trafficking of imperiled wildlife. It has more than 180 signatory nations, which meet every three years to discuss necessary updates to the treaty. *What is CITES?*, *supra* note 166. The year 2022 is not only the Year of the Tiger, but it is also a CITES treaty meeting year, which will convene in Panama City, Panama in November 2022 for the 19th Conference of the Parties. *Nineteenth Meeting of the Conference of the Parties*, CITES, <https://cites.org/eng/cop19#:~:text=seconds,host%20CoP19%20in%20November%202022> (last visited Apr. 8, 2022).

²⁸⁵ China's demand for tiger parts "is fueled both by wild tigers and by about 200 commercial breeding facilities—that house at least 5,000 tigers. Many of those cats live miserable caged lives under deplorable conditions. In no way do these 'farms' protect the wild tiger from extinction; rather they increase the availability of tiger parts, driving up demand. Nor can these farm-bred cats be used to restock wild populations. A captive tiger has never been successfully released into the wild." *See* Guynup, *supra* note 6.

²⁸⁶ *Id.*; *see also* Nuwer, *supra* note 38.

²⁸⁷ *See* Guynup, *supra* note 6; Nuwer, *supra* note 38.

²⁸⁸ *See* Guynup, *supra* note 6; Nuwer, *supra* note 38.

²⁸⁹ CITES CoP 19 will take place November 19-25, 2022, in Panama City, Panama. *Nineteenth Meeting of the Conference of the Parties*, *supra* note 284.

²⁹⁰ *Id.*

FROM SOCIAL JUSTICE TO ANIMAL LIBERATION

CARTER DILLARD & MATTHEW HAMITY*

INTRODUCTION

When a billion dollar corporation tortured thousands of pigs by roasting them to death as they screamed, the punishment was swift and severe—not for the corporation, but for the activist who filmed it.¹

Nine years earlier, the same corporation, Iowa Select Farms, was exposed in a similarly harrowing video: piglets hurled about like refuse, their skulls smashed into concrete, open sores festered, caged skin-tight, mouths desperately gnawed on bars, and more screams.² Yet Iowa responded not by passing new regulations to prevent further brutality, but rather by passing the Nation's first ag-gag law, which criminalized the release of the incriminating footage.³ That same year, the United States Supreme Court unanimously held that California could not require that dying cows and pigs, broken by years of brutality and neglect, receive the mercy of a quick death.⁴

* Special thanks to Julia Nagle for the work on corporate liability she contributed to this article.

¹ See Donnelle Eller, *Charges Dropped Against Animal Rights Activist Who Secretly Filmed Iowa Pigs Being Killed*, DES MOINES REG. (Jan. 29, 2021), <https://www.desmoinesregister.com/story/money/agriculture/2021/01/29/secret-filming-grundy-county-iowa-pig-killings-felony-charge-dropped/4310605001/>. Matt Johnson, the activist who exposed the cruelty at Iowa Select Farms, initially faced felony trespass charges. *Id.* However, Iowa Select Farms “asked that the [] case be dismissed after Johnson subpoenaed employees to testify,” including the owner. *Id.* Johnson has since been charged. *Id.*

² Anne-Marie Dorning, *Iowa Pig Farm Filmed, Accused of Animal Abuse*, ABC NEWS (June 29, 2011), <https://abcnews.go.com/Business/iowa-pig-farm-filmed-accused-animal-abuse/story?id=13956009>.

³ Dan Flynn, *Iowa Approves Nation's First 'Ag-Gag' Law*, FOOD SAFETY NEWS (Mar. 1, 2012), <https://www.foodsafetynews.com/2012/03/iowa-approves-nations-first-ag-gag-law/>; see generally Krissy Kasserian, *Ag-Gag Laws Are Unconstitutional But Iowa Sure Keeps Trying*, FOOD & WATER WATCH (June 29, 2020), <https://www.foodandwaterwatch.org/news/ag-gag-laws-are-unconstitutional-iowa-sure-keeps-trying>. Notably, ALDF went on to challenge Iowa's ag-gag law as unconstitutional, succeeding in court, only to have the Iowa legislature pass yet another ag-gag law. *Id.* Iowa then passed a second ag-gag law, which ALDF again successfully challenged, only to have the Iowa legislature make yet another attempt, passing a third ag-gag law. *Id.*

⁴ *National Meat Ass'n. v. Harris*, 565 U.S. 452 (2012) (holding that the Federal Meat Inspection Act preempted the California Penal Code provision requiring immediate euthanasia of nonambulatory animals); see also David N. Cassuto, *Meat*

Given the deeply entrenched anthropocentric status quo, where animal cruelty is legally justified so long as the cruelty is “standardized” (i.e. profitable to industry);⁵ where the percentage of American vegetarians has remained a paltry 1% since the mid 1990’s;⁶ where the global, long-term impacts of animal industries threaten the right of both future human and nonhuman animals to thrive,⁷ this Article calls for a fundamental reimagining of animal law and policy, oriented around the cultivation of transgenerational empathy.

Recognizing that upstream policies aimed at long-term change have been neglected in the animal advocacy space—and guided by the principle that animal rights and human rights are ultimately interdependent—this Article proposes investments in family planning and early childhood education to ensure that every future child has the resources to thrive. Endowed with a fair start in life, those children, and their children’s children, may develop and express greater empathy and, in turn, better protect the rights of those most vulnerable among us, both two and four-legged. By the same token, the interdependence of animal and human rights necessitates the reorientation of current animal law and policy initiatives toward a rallying cry of social justice for all sentient beings. While remedying things like the animal rights movement’s relative silence in the face of recent attacks on women’s bodily autonomy⁸ will be one example of threading animal protection into the larger social justice movements, such a reorientation might begin with holding corporations accountable rather than animal industry laborers, who are themselves frequently victims of corporate cruelty.

Animals, Humane Standards, & Other Legal Fictions, LAW, CULTURE & THE HUMAN, 1, 12 (2012) (“A slaughterhouse facility can seriously injure an animal, take in and slaughter animals already gravely sick or injured, and process them into the human food supply, all the while treating them humanely. This humane treatment is accomplished through the oversight of meat inspectors whose mandate has literally nothing to do with animal welfare.”).

⁵ As Professor David Cassuto & Amy O’Brien note, “animal cruelty laws define necessity in terms of the needs of the person inflicting the cruelty.” David N. Cassuto & Amy O’Brien, *Don’t Be Cruel (Anymore): A Look at the Animal Cruelty Laws of the United States & Brazil with a Call for a New Animal Welfare Agency*, 43 B.C. ENV’T AFF. L. REV. 1, 16 (2016).

⁶ While the percentage of “self-identified vegetarians” has increased in recent years, the majority of self-identified vegetarians report having eaten meat when asked to list everything they ate during two non-consecutive 24-hour periods. Saulius Šimčikas, *Is The Percentage Of Vegetarians and Vegans In The U.S. Increasing?*, ANIMAL CHARITY EVALUATORS (Aug. 16, 2018), <https://animalcharityevaluators.org/blog/is-the-percentage-of-vegetarians-and-vegans-in-the-u-s-increasing/#2>.

⁷ See, e.g., Kyle H. Landis-Marinello, Comment, *The Environmental Effects of Cruelty to Agricultural Animals*, 106 MICH. L. REV. FIRST IMPRESSIONS 147 (2008), <http://www.michiganlawreview.org/firstimpressions/vol106/landis-marinello.pdf>.

⁸ See *Dobbs v. Jackson Women’s Health Organization*, 142 S. Ct. 2228 (2022).

Buoyed by a broader coalition across the social justice spectrum and a more empathetic future populace, along with the continued rise of cruelty-free alternatives and corresponding decreased dependence upon animal-exploiting industries,⁹ the end of legalized, standardized cruelty is possible.

But it will take a reconceptualization of “animal law” itself as an aspiration, not as top down provisions of law handed down by anthropocentric concentrations of power disconnected from the actual practice of social, political, economic and environmental justice—the system that created the climate crisis—but as the ideal of bottom up, inclusive and just systems that have aligned the matching values of animal liberation, ecological restoration, economic equity, and participatory and reflective democracy,

I. ANIMAL LAW AS MISNOMER

Given the abundant evidence that “animal law” in its current form is but a misnomer, the need to reimagine animal law and policy becomes clear.

a. *Personification of Corporations and Objectification of Animals*

Animal lawyers have long been hamstrung by the persistent jurisprudential objectification of sentient beings, with courts embracing an ostensibly narrow definition of legal personhood,¹⁰ notwithstanding the expansion of rights afforded corporate “persons.”¹¹

⁹ See, e.g., Bill Gates, *The Future of Food*, GATES NOTES (Mar. 18, 2013), <https://www.gatesnotes.com/about-bill-gates/future-of-food>; *11 Industries Responding to the Meatless Revolution*, CBI INSIGHTS (Oct. 15, 2019), <https://www.cbinsights.com/research/meatless-transforming-industries/>.

¹⁰ See, e.g., *ALDF v. USDA*, 933 F.3d 1088 (9th Cir. 2019); *People ex rel. Nonhuman Rts. Project, Inc. v. Lavery*, 124 A.D.3d 148 (N.Y. App. Div. 2014); *Tilikum ex rel. People for the Ethical Treatment of Animals, Inc. v. Sea World Parks & Entm’t, Inc.*, 842 F. Supp. 2d 1259 (S.D. Cal. 2012). *But see* *Community Of Hippopotamuses Living In The Magdalena River, Applicant, To Issue Subpoenas For The Taking Of Depositions Pursuant To 28 U.S.C. § 1782, No. 1:21-mc-23*, 2021 WL 5025353 (S.D. Ohio Oct. 15, 2021) (Verdict, Agreement and Settlement) (allowing hippopotamuses as “interested persons” under 28 U.S.C. § 1782 to receive discovery).

¹¹ See, e.g., *Citizens United v. Fed. Election Comm’n*, 558 U.S. 310 (2010) (holding that the First Amendment prohibits the government from restricting political independent expenditures by corporations); *Burwell v. Hobby Lobby*, 573 U.S. 682 (2014) (holding corporation had a right under the Religious Freedom Restoration Act to deny employees health coverage for contraception, which employees would otherwise be entitled to); Kent Greefield & Adam Winkler, *The U.S. Supreme Court’s Cultivation of Corporate Personhood*, THE ATLANTIC (June 24, 2015), <https://www.theatlantic.com/politics/archive/2015/06/raisins-hotels-corporate-personhood-supreme-court/396773/>.

In *United States v. Martin Linen Supply Co.*, the Supreme Court included corporations within the Fifth Amendment's protection against double jeopardy because such protection was necessary to protect corporations from "anxiety" and "insecurity."¹² Of course, it is animals, not corporations, that possess the capacity to suffer anxiety, insecurity, stress, and pain.¹³ And yet, courts refer to animals as "property,"¹⁴ "the consumed,"¹⁵ and "goods,"¹⁶ with one court conducting a thorough textual analysis to determine whether 72 pigs who had perished on an airplane flight were "damaged goods" or "destroyed goods."¹⁷ (The USDA refers to animals as "units," where "an animal unit is equivalent to 1,000 pounds of live weight."¹⁸)

While corporate "persons" may spend money to influence (1) the elections of political representatives, (2) the positions that those representatives take on particular issues, and (3) the officials chosen to head the administrative bodies that regulate them,¹⁹ animals have virtually no legal protections or remedies. This inverse relationship between corporate power and that of animal welfare plays out in stark terms under anti-cruelty statutes: all fifty states have laws against animal cruelty, and all fifty states have explicit or implicit exemptions that immunize standardized corporate cruelty—exemptions secured through industry lobbying and regulatory capture.²⁰

¹² *United States v. Martin Linen Supply Co.*, 430 U.S. 564, 569 (1977).

¹³ Jeffrey Moussaieff Masson & Susan McCarthy, *WHEN ELEPHANTS WEEP: THE EMOTIONAL LIVES OF ANIMALS* 232 (1995); Tim Carman, *Scientists Say Fish Feel Pain*, WASHINGTON POST (May 24, 2018), <https://www.washingtonpost.com/news/food/wp/2018/05/24/scientists-say-fish-feel-pain-it-could-lead-to-major-changes-in-the-fishing-industry/>.

¹⁴ *See, e.g.*, *Matter of Ruth H. v. Marie H.*, 159 A.D.3d 1487, 1490 (N.Y. App. Div. 2018) (finding the court exceeded its authority in directing petitioner to find foster care for respondents' cat because the cat was "property").

¹⁵ *Animal Legal Defense Fund v. Hormel*, Public Justice Food Project (Apr. 8, 2019) ("ALDF, however, is organized and operating to promote not the interests and rights of the consumers of Hormel meat products, but rather those of the consumed.").

¹⁶ *Nuijens v. Novy*, 543 N.Y.S.2d 887, 890 (N.Y. Town Ct. 1989).

¹⁷ *Hughes-Gibb & Co. v. Flying Tiger Line, Inc.*, 504 F. Supp. 1239, 1242 (N.D. Ill. 1981). *But see* OR. REV. STAT. § 167.305(1) (2017) ("Animals are sentient beings capable of experiencing pain, stress and fear.").

¹⁸ Robert L. Kellogg, *Profile of Farms with Livestock in the United States: A Statistical Summary*, U.S. DEP'T OF AGRIC. (Feb. 4, 2002), https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/home/?cid=nrcs143_014121.

¹⁹ *See, e.g.*, Lee Drutman, *How Corporate Lobbyists Conquered American Democracy*, THE ATLANTIC (Apr. 20, 2015), <https://www.theatlantic.com/business/archive/2015/04/how-corporate-lobbyists-conquered-american-democracy/390822/?mclid=ce0018caae0111ecb0fee24273cbaa89>.

²⁰ *See, e.g.*, Dion Casey, *Agency Capture: The USDA's Struggle to Pass Food Safety Regulations*, 7 KAN. J.L. & PUB. POL'Y 142, 142 (1998) (discussing the capture of the USDA by the meat industry); Katharine M. Swanson, *Carte Blanche for Cruelty:*

Standard industry practices that ostensibly fall outside the scope of the cruelty laws include ventilation shutdowns,²¹ water-based foam,²² anal and genital electrocution,²³ thoracic compression,²⁴ maceration,²⁵

The Non-Enforcement of the Animal Welfare Act, 35 U. MICH. J.L. REFORM 937, 953 (2002) (describing how the regulatory requirements for exercise of dogs under the AWA were weakened in response to pressure from the biomedical industry); Rebecca P. Lewandoski, *Spreading the Liability Net: Overcoming Agricultural Exemption with EPA's Proposed Co-Permitting Regulation Under the Clean Water Act*, 27 VT. L. REV. 149, 149 (2002); John C.P. Goldberg, *Twentieth-Century Tort Theory*, 91 GEO. L.J. 513, 560 (2003) ("[P]harmaceutical companies capture the regulatory process."); Collette L. Adkins Giese, *Twenty Years Wasted: Inadequate Usda Regulations Fail to Protect Primate Psychological Well-Being*, 1 J. ANIMAL L. & ETHICS 221, 244–45 (2006) (discussing USDA's willingness to significantly weaken its proposed primate regulations in response to concerns from the biomedical industry); J.B. Ruhl, *Farms, Their Environmental Harms, and Environmental Law*, 27 ECOLOGY L.Q. 263, 308–09 (2000) (stating that, under "tremendous farm industry lobby pressure," Congress extended the implementation phase-out date for methyl bromide, a dangerous pesticide used on crops); Betsy Tao, *A Stitch in Time: Addressing the Environmental, Health, and Animal Welfare Effects of China's Expanding Meat Industry*, 15 GEO. INT'L ENV'T L. REV. 321, 349 (2003) (arguing that the weakening of U.S. anticruelty statutes through exemptions and lack of enforcement is due to the significant political power wielded by the American agricultural industry); Dena M. Jones & Sheila Hughes Rodriguez, *Restricting the Use of Animal Traps in the United States: An Overview of Laws and Strategy*, 9 ANIMAL L. 135, 152 (2003) (attributing the failure of federal anti-trapping legislation to the efforts of powerful lobby groups representing hunting, trapping, agricultural, and commercial fur interests).

²¹ "Ventilation shutdown" means sealing the building in which farmed animals are confined, shutting the inlets, and turning off the fans. AVMA GUIDELINES FOR THE DEPOPULATION OF ANIMALS: 2019 EDITION, AM. VETERINARY MED. ASS'N (2019), <https://www.avma.org/sites/default/files/resources/AVMA-Guidelines-for-the-Depopulation-of-Animals.pdf>. The farmed animals' body heat raises the temperature in the building until they die from hyperthermia and hypoxia. *Id.*

²² "Water-based foam" means pumping foam into a building housing farmed animals in order to suffocate and drown them. Letter from Lloyd Doggett, U.S. House Representative, to Sonny Perdue, Secretary of Agric., U.S. Dep't of Agric., <https://doggett.house.gov/media/press-releases/avoiding-prolonged-death-animals-meat-industry>.

²³ On fur farms, animals are often killed via anal or genital electrocution, to avoid damaging the fur. *See Animal Suffering in the Fur Trade*, HUMANE SOC'Y INT'L (Oct. 13, 2015), <https://www.hsi.org/news-media/animal-suffering/>.

²⁴ "Thoracic compression is the application of pressure to an animal's chest to prevent respiration and/or cardiac movements to cause death." *Welfare Implications of Thoracic Compression*, AM. VETERINARY MED. ASS'N (Oct. 11, 2011), <https://www.avma.org/resources-tools/literature-reviews/welfare-implications-thoracic-compression>.

²⁵ Male chicks are ground up alive or "macerated," as a standard industry practice. *See* Maryn McKenna, *By 2020, Male Chicks May Avoid Death By Grinder*, NAT'L GEOGRAPHIC (June 13, 2016), <https://www.nationalgeographic.com/culture/food/the-plate/2016/06/by-2020--male-chicks-could-avoid-death-by-grinder/>.

live exsanguination,²⁶ force-feeding,²⁷ and starvation.²⁸ Thus, the anti-cruelty laws are “drafted in such a way as to make common (and cruel) agricultural practices acceptable, make enforcing the law impracticable, and render offenders immune from prosecution.”²⁹

b. The Minimal Animal Welfare Protections and Related Regulations that Do Exist are Absurdly Interpreted, and Politically Undermined

In 1972, under pressure from the animal research industry, the Secretary of Agriculture excluded birds, mice, rats, and farmed animals from the definition of “animal” under the Animal Welfare Act, i.e. the vast majority of the animals we experiment on.³⁰ The Animal Legal Defense Fund successfully challenged this exclusion on the merits in *ALDF v. Madigan* as the court found that the exclusion conflicted with the plain meaning of the statute since laboratory birds, mice, rats, and farmed animals all clearly fell within the statute’s category of any “such other warm-blooded animal.”³¹ When the judgment was vacated on the grounds that the plaintiff lacked standing, the Alternative Research and

²⁶ “The Scientific Panel of Animal Health and Welfare of the European Food Safety Authority concluded that exsanguination without stunning is inhumane and should not be used for slaughter.” Yet this method remains in commercial use. Stephanie Yue, *An HSUS Report: The Welfare of Farmed Fish at Slaughter*, HUMANE SOCIETY OF THE U.S., <https://www.humanesociety.org/sites/default/files/docs/hsus-report-animal-welfare-farmed-fish-at-slaughter.pdf> (last visited Apr. 17, 2022).

²⁷ Foie gras production, for example, involves force feeding ducks by pinning them down and jamming a half-inch diameter, one-foot metal pipe down each duck’s esophagus, resulting in livers over 10 times their normal size. *Ducks and Geese Are Tortured to Produce Foie Gras*, PETA U.K., <https://www.peta.org.uk/features/ducks-and-geese-are-tortured-to-produce-foie-gras/> (last visited Apr. 17, 2022). The process leaves ducks on the verge of death: bloated, panting, and barely able to walk from the diseased, distended liver pressing against their lungs. *Id.*

²⁸ Molting, for example, has traditionally been induced by withdrawing feed from four days to as long as two weeks. Recognizing the cruelty of this practice, the United Egg Producers guidelines now state that only non-feed-withdrawal molt methods—such as using specialized feed for non-producing hens and minimizing exposure to light—will be permitted for United Egg Producers (UEP) members. That being said, adherence to UEP guidelines is voluntary. See D. D. Bell, *Historical and Current Molting Practices in the U.S. Table Egg Industry*, 82 ANIM. SCI. J. 965, 968 (2003).

²⁹ Cassuto & O’Brien, *supra* note 5, at 10-12.

³⁰ Birds, mice, and rats represent more than ninety-five percent of the feeling creatures using in research facilities. “[It is] estimated as many as 100 million birds, rats and mice are also used and killed in research and for education each year.” BRUCE A. WAGMAN ET AL., ANIMAL LAW: CASES AND MATERIALS 506-07 (4th ed. 2010).

³¹ *Animal Legal Def. Fund v. Madigan*, 781 F. Supp. 797, 799 (D.D.C. 1992).

Development Foundation challenged the exclusion,³² finally resulting in a settlement in 2000 where the USDA agreed to initiate a rulemaking procedure that included the regulation of rats, mice, and birds under the AWA. A victory nearly thirty years in the making proved illusory, however, when Congress intervened, passing an amendment to the 2002 federal “Farm Bill” that specifically excluded birds, mice and rats from the protections of the AWA.³³

Of course, this is not an isolated case of government agencies adopting nonsensical statutory interpretations in order to maximize the profits of animal industries. Consider, for example, the Twenty-Eight Hour Law,³⁴ where until 2006, the USDA interpreted the word “vehicle” in the statute not to include “trucks” thereby depriving billions of animals of the modest right of being let out of those vehicles transporting them to slaughter once every twenty-eight hours so that they could eat, drink, and exercise.³⁵ The Twenty-Eight-Hour law continues to be interpreted by the USDA to exclude chickens, though the law applies to all “animals.”³⁶ Apparently, once again, “birds are not animals.”³⁷

In California, a court held that Proposition 2, an animal welfare ballot initiative, actually *reduced* the legal protections for certain animals, in clear conflict with the voters’ intent. ALDF had alleged that nursing mother pigs were placed in body-gripping “farrowing crates” for three weeks at the 2013 California State Fair, rendering them unable to walk, turn around, or stand comfortably in violation of California Penal Code 597t³⁸, which prohibited the confinement of any animal without adequate exercise. And yet, the court held that Proposition 2—which prohibited some forms of confinement but did not prohibit farrowing crates—superseded 597t and the court dismissed the case on those grounds.³⁹

³² See *Animal Legal. Def. Fund v. Glickman*, 204 F.3d 229 (2000) (holding that the plaintiff had standing because she was a college student who suffered a direct and personal injury from regularly observing the inhumane treatment of rats in laboratory experiments which she was obliged to participate in as part of the school’s course requirements).

³³ Farm Security and Rural Investment Act of 2002, Pub. L. No. 107-171, § 10301, 116 Stat. 491 (2002); 7 U.S.C. § 2132(g).

³⁴ 49 U.S.C. § 80502.

³⁵ The 28 Hour Law only applies to the transport of animals raised for food across state lines.

³⁶ The exclusion of chickens is particularly significant since chickens make up ninety percent of the animals transported and killed for food. See WAGMAN ET AL., *supra* note 30, at 420.

³⁷ See *Clay v. New York Cent. R.R. Co.*, 231 N.Y.S. 424, 428 (N.Y. App. Div. 1928).

³⁸ CAL. PEN. CODE § 597t.

³⁹ *Hearing Today on Mistreated Mother Pigs at State Fair*, ANIMAL LEGAL DEF. FUND (June 16, 2015), <https://aldf.org/article/hearing-today-on-mistreated-mother-pigs-at-state-fair/>.

The California Department of Food and Agriculture (CDFA) similarly allowed industry to exploit a technical ambiguity in Proposition 2 by the denial of billions of egg-laying hens adequate space to “fully spread both wings without touching the side of an enclosure.” While space to “fully spread both wings without touching the side of an enclosure” is a simple enough concept, and sufficiently specific to survive Constitutional scrutiny,⁴⁰ in practice, the lack of a numerical minimum space requirement allowed producers to legally avoid the additional space requirement.

A study commissioned by the CA Dept. of Food and Ag, “Determination of Space Use by Laying Hens,” concluded that while an individual hen would require 322 square inches in compliance with Proposition 2’s wing flapping requirement, *as little as 90 square inches* per hen might be sufficient in an enclosure holding 60 hens because “of the lack of clarity of the Proposition with respect to how many hens need to be able to simultaneously perform the particular behavior(s) listed.”⁴¹ Yet the egg industry itself, in the lead-up to the passage of Proposition 2, concluded that “a reasonable interpretation of the practical effect of the language in the initiative is that each hen, whether caged or cage-free, would be required to have a minimum of 784 square inches of space (28 × 28) which is 5.4 square feet.”⁴² In other words, a law that reasonably required at least 784 square inches of space for laying hens was entirely undercut by an unreasonable interpretation advanced by a government-funded study, and that is to say nothing of Section 597t, which on its terms already provided substantially more space than allotted under Proposition 2.

A decade later, voters passed Proposition 12 in a second attempt to provide incremental improvements in the lives of farmed animals, this time with a specific numerical requirement of 144 square inches until 2022, followed by cage free housing that will still allow hens to be confined by the thousands in sheds, spending their entire lives indoors (assuming the Legislature doesn’t change its mind before then, as is allowed to under the statute without voter approval). In the three years since Proposition 12’s passage, state officials have continued to miss deadlines for promulgating corresponding regulations, and a coalition of California restaurants and grocery stores have, in turn, filed suit to delay

⁴⁰ Dan Flynn, *Appeals Court: CA’s Proposition 2 Passes Constitutional Muster*, FOOD SAFETY NEWS (Feb. 5, 2015), <http://www.foodsafetynews.com/2015/02/language-used-in-sizing-laying-hen-cages-passes-constitutional-test/>.

⁴¹ Joy A. Mench & Richard A. Blatchford, *Determination of Space Use by Laying Hens Using Kinematic Analysis*, 93(4) POULTRY SCI. 794, 794-98 (2014).

⁴² *What the Ag Industry & UC Davis Say*, U.S. HUMANE SOC’Y, <http://cagefreeca.com/what-they-say/what-the-ag-industry-uc-davis-say/> (last visited Feb. 11, 2021).

the enforcement of the law as applied to pigs until those regulations are adopted.⁴³ The upshot is that after fourteen years, two ballot initiatives, and multiple lawsuits, laying hens in California will continue to be deprived of “space for adequate exercise,”⁴⁴ i.e. less than a reasonable interpretation of 597t would require, under a law whose enforcement remains in jeopardy.

c. Animal Law as a Misconception, and Aspiration

There are other reasons to question the nature of what we often call animal law: What we refer to as animal law is really human law that happens refer to animals, while excluding legal and practical protection for the vast majority of nonhumans, and designating the vast majority—wildlife—as property, quietly bundled into an anthropocentric concept of the environment as a human resource designated to absorb and be altered by things like greenhouse gas emissions.⁴⁵ That conception hurts animals,⁴⁶ having little to do with the fundamental and existential threat to nonhumans—our replacing them.⁴⁷

How might our thinking of “animal law” or other terms that imply a benefit to nonhumans have been different? Were, long ago, humans to have seen themselves as equal parts of a complex ecology rather than a dominant species capable of shaping the world to its needs, we would have been obligated—in family, food, land use, and dozens of other policy areas—to limit ourselves *existentially* to such just such an ecology.⁴⁸ That means smaller families, parenting delay

⁴³ See Scott McFetridge, *Will New Bacon Law Begin? California Grocers Seek Delay*, ASSOCIATED PRESS (Dec. 12, 2021), <https://www.usnews.com/news/business/articles/2021-12-12/will-new-bacon-law-begin-california-grocers-see-delay>.

⁴⁴ See Katie Crumpley, *How Cage-Free Egg Clwilderaims May Be Deceptive*, FACTORY FARMING AWARENESS COAL. (Nov. 18, 2021), <https://ffacoalition.org/articles/how-cage-free-egg-claims-may-be-deceptive/>.

⁴⁵ See *The Paris Agreement: What is the Paris Agreement?*, U.N. CLIMATE CHANGE, <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement> (last visited July 12, 2022); see also Carter Dillard, *Earth Day 2022: Climate Reparations, Existential Justice, and Our Open Letter to Exxon*, FAIR START MOVEMENT (Apr. 14, 2022), <https://fairstartmovement.org/earth-day-2022-climate-reparations-existential-justice-and-our-open-letter-to-exxon/>.

⁴⁶ See, e.g., Justin Marceau & Angela Fernandez, *Happy the Elephant: Lessons for the Future of Animal Rights Law*, SLATE (June 17, 2022, 9:32 AM), <https://slate.com/news-and-politics/2022/06/happy-the-elephant-lessons-for-the-future-of-animal-rights-law.html> (discussing positive law as a form of misdirection).

⁴⁷ See Jane Marsh, *How Human Population Leads to Animal Extinction*, ENVIRONMENT (July 19, 2018), <https://environment.co/how-overpopulation-leads-to-animal-extinction/>.

⁴⁸ See Carter Dillard & Nandita Bajaj, *Humane Families: Towards Existential*

and readiness, and redistribution to wealth to incentivize these things and ensure equal empowerment of children.⁴⁹ Such a move would have required fundamentally challenging the anthropocentric nature of our legal systems, something many of the originators of the term “animal law” and other protective terms evaded doing. To the extent Peter Singer evaded these reforms with a misleading focus on farmed animals⁵⁰—rather than all future animals and future persons’ relations with those animals⁵¹—as the majority for whom we should be concerned if we want to maximize impact, he played a large role in this misdirection. The climatological effects of that misdirection, alone, cannot be overstated, preventing family reforms that could have saved countless animal lives.⁵² But nothing is “animal law” or animal-benefitting—except in the thinnest and most useless of senses—if it does not orient from their (and hence our) biodiverse and life-giving world.⁵³ In other words, there is no such thing as anthropocentric animal law, unless you want to disregard the function of law—to protect its subjects.⁵⁴ Thinking there is commits the common mistake of trying to magically separate humans from their language and ideation as well as the ecologies in which they live,⁵⁵ a mistake with massive consequences given the climate crisis.

The misnomer argument is true for conceptual reasons, in that a fundamentally ecocentric system necessitating smaller populations of prosocial persons would have maintained the capacity to be more reflective of its human subjects,⁵⁶ but also practical reasons—because

Justice and Freedom, REWILDING EARTH (Feb. 1, 2022), <https://rewilding.org/humane-families-towards-existential-justice-and-freedom/>.

⁴⁹ See Matthew Hamity et al., *A Human Rights Approach to Planning Families*, 49(3) SOC. CHANGE 469 (2019).

⁵⁰ See PETER SINGER, *ANIMAL LIBERATION* 7-18 (1973).

⁵¹ See Robert Wiblin, *Toby Ord on Why the Long-Term Future of Humanity Matters More than Anything Else, and What We Should Do About It*, 80,000 HOURS (Sept. 6, 2017), <https://80000hours.org/podcast/episodes/why-the-long-run-future-matters-more-than-anything-else-and-what-we-should-do-about-it/>.

⁵² See Craig K. Chandler, *How Family Size Shapes Your Carbon Footprint*, YALE CLIMATE CONNECTIONS (Mar. 29, 2019), <https://yaleclimateconnections.org/2019/03/how-family-size-shapes-your-carbon-footprint/>.

⁵³ *An Enduring American Heritage: A Substantive Due Process Right to Public Wild Lands*, 51 E.L.R. 10026 (2021), <https://fairstartmovement.org/wp-content/uploads/2021/02/51.10026.pdf>.

⁵⁴ See Damian Carrington, *Global Heating Linked to Early Birth and Damage to Babies’ Health, Scientists Find*, THE GUARDIAN (Jan. 15, 2022), <https://www.theguardian.com/environment/2022/jan/15/global-heating-linked-early-birth-damage-babies-health>; see also Abigail E. Cahill et al., *How Does Climate Change Cause Extinction?*, ROYAL SOC’Y (Oct. 17, 2012), <https://royalsociety.org/news/2012/climate-change-extinction/>.

⁵⁵ Dillard & Bajaj, *supra* note 48.

⁵⁶ See Gregory Michener et al., *The Remoteness of Democratic Representation*, PARTY POLITICS (2021); see also Carter Dillard, *Empathy with Animals: A Litmus Test*

requiring our systems to be actually inclusive of its subjects so that they can meaningfully participate, and hence ecocentric rather than anthropocentric, would have avoided much of the climate crisis which now threatens the system such “law” was meant to protect.⁵⁷ Surely there is no concept of law, including positivism, that would not require its obligations to actually relate to and ideally reflect the inclinations of its subjects, something dependent on their actuality, their quantities and qualities.⁵⁸

The pathway forward is to treat an ecocentric future, and democracy where the average person maintains the quantitative and qualitative capacity to actually have an impact on the outcomes,⁵⁹ as the precondition for the legitimacy of any norms and to alter rights and obligations accordingly. This starts with family law and policy oriented around deep ecology and equity, as a pathway towards true animal law and protection.⁶⁰ This answers the otherwise open question left by many theorists,⁶¹ of who the people should be that will actually carry animal-benefitting theories into action.

That pathway is animal protection in the most comprehensive sense because it actually includes the full biodiversity of nonhumans, as well as the future persons with whom they would interact. This is a pathway that could be bricked by an untold number of activists creating compelling narratives about the next big social movement, bottom up, limiting and decentralizing human power, rather than simply waiting for institutional change to come from the top down.⁶²

for Legal Personhood?, 19 ANIMAL L. 1, 20–21 (2012); Joseph Raz, *The Social Thesis and the Sources Thesis*, in THE QUEST FOR THE DESCRIPTION OF THE LAW 27, 27–28 (2009).

⁵⁷ See William Brangham et al., *UN Releases Dire Climate Report Highlighting Rapid Environmental Degradation*, PBS NEWSHOUR (Feb. 28, 2022, 6:35 PM), <https://www.pbs.org/newshour/show/un-releases-dire-climate-report-highlighting-rapid-environmental-degradation>.

⁵⁸ *Id.*

⁵⁹ See *Human Rights and Democracy*, FAIR START MOVEMENT, <https://fairstartmovement.org/human-rights-democracy/> (last visited July 12, 2022); Carter Dillard, *A Simple Litmus Test for Democracy and Freedom*, 18(5) J. OF SOLIDARITY & SUSTAINABILITY (2022), <http://www.pelicanweb.org/solisustv18n05page8.html>.

⁶⁰ See Dillard, *supra* note 45; see also Phil Cafaro, *What is the Optimal Human Population? An Eminent Economist Weighs In*, OVERPOPULATION PROJECT (Mar. 8, 2021), <https://overpopulation-project.com/what-is-the-optimal-human-population-an-eminant-economist-weighs-in/>.

⁶¹ See generally WILL KYMLICKA & SUE DONALDSON, *ZOOPOLIS: A POLITICAL THEORY OF ANIMAL RIGHTS* (Oxford Univ. Press 2011).

⁶² See Marina Bolotnikova, *Why the Anti-Factory Farming Movement Needs Direct Action*, CURRENT AFFAIRS (Mar. 14, 2022), <https://www.currentaffairs.org/2022/03/why-the-anti-factory-farming-movement-needs-direct-action>.

II. CULTIVATING TRANSGENERATIONAL EMPATHY FOR ANIMALS AND HUMANS ALIKE

Recognizing that animal law in its current form is a misnomer, that animal rights and human rights are interdependent, and that the greatest potential for reducing suffering lies in a focus on long-term outcomes, this Article calls for the pursuit of policies that cultivate transgenerational empathy.

a. *Why Focus on Human and Nonhuman Animals Alike?*

Any discussion of the “law as misnomer” must recognize that systematic, legalized exploitation of the most vulnerable by the legal and political systems is obviously not unique to nonhuman animals. And seeing as the oppression of vulnerable human beings by the most powerful institutions, and corporations in particular,⁶³ proliferates to this day, human rights advocates are wont to question why anyone would focus their energies on bettering the lives of nonhuman animals.⁶⁴ Empathy, however, is not a zero sum game; empathy for nonhuman animals begets empathy for vulnerable human beings, and vice versa.

Recently, increasing awareness of the interconnectedness of human, animal and ecosystem health has led to an integrative One Welfare approach. As the Islamabad High Court noted in the case of Kaavan the elephant, it is “obvious that neglect of the welfare, wellbeing of the animal species, or any treatment of an animal that subjects it to unnecessary pain or suffering, has implications for the right to life of humans.”⁶⁵ Court concludes that any violation constitutes an “infringement of the right to life of humans.”⁶⁶

In particular, studies have found that ethical vegetarians and vegans have higher levels of empathy for humans and animals alike.⁶⁷ Humane education programs, for example, have “not only enhanced children’s attitudes towards animals...but this change generalized to

⁶³ See, e.g., *Tomasella v. Nestle USA, Inc.*, 962 F.3d 60 (1st Cir. 2020).

⁶⁴ See Natalie Proulx, *Is It Wrong to Focus on Animal Welfare When Humans Are Suffering?*, N.Y. TIMES (Apr. 11, 2018), <https://www.nytimes.com/2018/04/11/learning/is-it-wrong-to-focus-on-animal-welfare-when-humans-are-suffering.html>.

⁶⁵ Saskia Stucki & Tom Sparks, *The Elephant in the (Court)Room: Interdependence of Human and Animal Rights in the Anthropocene*, BLOG OF THE EUR. J. OF INT’L L. (June 9, 2020), <https://www.ejiltalk.org/the-elephant-in-the-courtroom-interdependence-of-human-and-animal-rights-in-the-anthropocene/>.

⁶⁶ *Id.*

⁶⁷ See generally Massimo Filippi et al., *The Brain Functional Networks Associated to Human and Animal Suffering Differ among Omnivores, Vegetarians and Vegans*, 5 PLOS ONE 1, 1-9 (May 2010) (discussing brain responses to conditions of animal and human suffering between omnivores, vegetarians, and vegans).

a measure of human-directed empathy.”⁶⁸ Nor is this a new idea, with the father of the American public school system, Horace Mann, having emphasized the importance of compassion for animals as a precursor to human generosity: “From the youthful benevolence that rejoices to see an animal happy, one grows up into a world-wide benefactor, into the healer of diseases, the restorer of sight to the blind, the giver of a tongue to the dumb, the founder of hospitals.”⁶⁹

By the same token, since our levels of empathy are largely contingent on the conditions in which we are born and raised,⁷⁰ children provided with the resources needed to thrive are more likely to be kind to the most vulnerable among us, both two and four-legged.⁷¹ As one animal and child welfare scholar notes:

The introduction of new humans into the world matters to its nonhuman inhabitants. It matters both in terms of how many new humans come into the world, and who those new humans are: In particular, their propensity to eat, wear, experiment upon, hunt, torture, and occupy the habitats of nonhumans. To the extent those humans are not aware of, cannot understand, or do not comply with the norms that purport to control how they treat animals, the introduction of new humans into the world-- and who those humans are and will become--is what matters most of all.⁷²

The right of wildlife to thrive is also interdependent with the right of future generations of humans to thrive. Obviously, wildlife requires food, water, cover, and space to survive. In the truest sense, future generations depend on these same “life requirements” to survive. This interdependence has become more readily apparent during the pandemic: the scientific community has repeatedly stressed, conserving biodiversity while reducing contact with humans can limit the spread

⁶⁸ Frank R. Ascione, *Children Who Are Cruel to Animals: A Review of Research and Implications for Developmental Psychopathology*, 6 ANTHROZOOS 226, 234 (1993).

⁶⁹ HORACE MANN, TWELVE SERMONS: DELIVERED AT ANTIOCH COLLEGE 121 (Kessinger Publ’g 2010).

⁷⁰ Nancy Eisenberg et al., *Prosocial Development*, in 2 THE OXFORD HANDBOOK OF DEVELOPMENTAL PSYCHOLOGY: SELF AND OTHER 1 (Philip David Zelazo ed., 2013).

⁷¹ See generally Carter Dillard, *Comprehensive Animal Rights*, FAIR START MOVEMENT (Mar. 15, 2022), <https://fairstartmovement.org/comprehensive-animal-rights/> (discussing the ways in which family planning is logically intertwined with animal rights).

⁷² Dillard, *supra* note 56, at 20-21.

of pathogens that cause infectious diseases like COVID-19.⁷³ When we convert wilderness for industrialized exploitation, the plants and animals that survive are more likely to carry disease, their populations flourishing without predators and competitors.⁷⁴

b. Why Transgenerational Empathy?

Focus on the cultivation of long-term, transgenerational empathy is largely a matter of necessity. That is, the kind of value change proposed by this Article requires decades, if not centuries to achieve, since societal values tend to be stable. By the same token, once society comes to better respect the rights of vulnerable humans and animals, that is likely to be a long-lasting change.

Second, there's the matter of sheer numbers: there will be far more animals (human and nonhuman) in future generations than exist today.⁷⁵

Finally, protecting future generations has long been under-emphasized as a matter of law and policy. After all, "Future generations matter, but they can't vote, they can't buy things, they can't stand up for their interests."⁷⁶ In this way, future generations are, by definition, a voiceless group in need of protection.⁷⁷

c. Policies to Promote Transgenerational Empathy

Empathy with, and/or prosocial behavior towards, vulnerable entities like nonhumans and future children necessarily entails ensuring future children, minimum levels of wellbeing, equitable positions relative to other persons, safe/healthy/natural environments, and civic capacities and effective voices in their democracies—the things that would free them from others. Ensuring these things, in turn, liberate nonhumans by creating smaller human families that would invest more in each child (including in the development of their empathy) and do so equitably. It's existential justice, for humans and nonhumans alike.⁷⁸

⁷³ Natasha Gilbert, *More Species Means Less Disease*, NATURE (Dec. 1, 2010), <https://www.nature.com/news/2010/101201/full/news.2010.644.html>.

⁷⁴ Felicia Keesing et al., *Impacts of Biodiversity on the Emergence and Transmission of Infectious Diseases*, 468 NATURE 647, 652 (2010).

⁷⁵ See Benjamin Todd, *Which Problems in the World are the Most Pressing to Solve?*, 80,000 HOURS (Mar. 2017), <https://80000hours.org/career-guide/world-problems/>.

⁷⁶ *Id.*

⁷⁷ See generally JOEL FEINBERG, *THE RIGHTS OF ANIMALS AND UNBORN GENERATIONS* (Routledge, 1st ed. 2012).

⁷⁸ See generally *id.*

The hallmark of "constituting"⁷⁹ future generations in ways where humans and nonhumans experience relative autonomy or the capacity for self-determination in a way that is aligned involves the physical limitation and decentralization of power through family planning reforms.

Assuming the nation in question is a human rights-based democracy, the state's interest in future persons is in ensuring all children a fair start in life and thus the creation and eventual emancipation of persons with the mutual capacity to be relatively self-determining.

To ensure that capacity we would have to start at some border of human influence, or nature/nonpolity—the nonhuman world, and maintain a neutral position so that as any particular group of persons grows the capacity for self-determination gives way (or is directly inverse) to the capacity for determination by others. To maintain the neutral position, at a certain range, the group in question has to divide. Knowing and acting according to that inversion is proof that people are free and equal, or that they matter politically, because their capacity to equally self and other determine is recognized.

For example, we would need to change family planning policies to minimize the impact climate related heat rises have on infants and their self-determination.⁸⁰ We would have to ensure smaller families creating less emissions, in which each child had health care sufficient to mitigate the harm—perhaps by targeting those responsible for the crisis to pay for family planning incentives/entitlements and care. And those children would have to be raised capable of eventually constituting autonomous political units, if they chose to do so, the sort where people are empowered to prevent crises like the climate crisis from occurring in the future.⁸¹

The simplest analogy for such groups of truly, but relatively, self-determining people would be the notion of functional constitutional conventions convening in a sea biodiverse nature, whose numbers are pegged to historic representative ratios such that voices are meant to matter.⁸² This vision reflects the fact that the ultimate orders of human power are not lines on a map, but bodies and their influence. Not limiting the right to have children to account for this interest, or the interests of the future child, is like a room full of people where not all are permitted to speak. Those speaking feel free to do what they like, but the total quantity of autonomy is reduced.

⁷⁹ See Carter Dillard, *Constituting Over Constitutions*, 6 U. BOLOGNA L. REV. 48, 48 (2021).

⁸⁰ See Colin D. Butler et al., *Climate Change and Human Health*, in SUSTAINABILITY AND THE NEW ECONOMICS 51, 51-68 (2022).

⁸¹ See Dillard, *supra* note 56, at 20.

⁸² See Michener et al., *supra* note 56.

There are no obligations that precede the obligation to maintain this neutral position—in other words, the obligation to ensure all children ecosocial fair starts in life. A system is fair and obligatory when it goes all the way back—or fully accounts for its power. We are skipping a crucial step if we don't do this. And adhering to obligations, like honoring government issued property rights to wealth before using that wealth to create people in a fair way, would thus be being dishonest.⁸³ The owners of that wealth would have never paid the price of freedom in terms of orienting from a system of relatively self-determining people capable of setting the rules that then set market costs and benefits. Such people never come from a just place by fully accounting for the power of the system in which they live. In other words, maintaining ourselves as a consensual “We the People,” which is contingent on procreation (which acts almost as a first election of the ultimate source of political authority—the people) in a unique way, precedes the list of rights “we” might enjoy.

More specifically, this process involves redistributing wealth, and with it power, to ensure ecosocial fair starts in life for every child through devices like universal “small family” policies, significant baby bonds that could be used to incentivize fertility delay and parental readiness. This would enable equitable investment in future generations. This is feasible, based on research regarding the efficacy of family planning incentives,⁸⁴ and would have a substantial impact on animal welfare—reductions in total fertility and all of the impacts it has on the nonhuman world aside—by closing the massive gap between rich and poor that exists today.

Per a recent study “[i]n a country with large GDP but high-income inequality, a sizeable part of the population may struggle to meet such basic demands for life satisfaction, which would diminish overall public demand for stricter animal protection policies.”⁸⁵ This maximizes both freedom from others, and freedom to equitable and morally valuable⁸⁶ options in life, via a new peremptory creation norm.

This process of normal change around family planning entails a fairly clear pathway in law and policy, one that branches into institutional reforms, cultural (or social learning)⁸⁷ and direct action moves as well.

⁸³ See LIAM MURPHY & THOMAS NAGEL, *THE MYTH OF OWNERSHIP: TAXES AND JUSTICE* (2002).

⁸⁴ See generally Sarah Bexell et al., *How Subsidizing Delayed Parenthood Will Let Children Lead the Way to a Fairer World*, 51 *LOY. U. CHI. L.J.* 1 (2020).

⁸⁵ Michael C. Morris, *Improved Nonhuman Animal Welfare Is Related More to Income Equality Than It Is to Income*, 16(3) *J. OF APPLIED ANIMAL WELFARE SCI.* 272, 272-93 (2013).

⁸⁶ See generally JOSEPH RAZ, *THE MORTALITY OF FREEDOM* (1986).

⁸⁷ See Albert Bandura, *The Evolution of Social Cognitive Theory*, in *GREAT MINDS IN MANAGEMENT: THE PROCESS OF THEORY DEVELOPMENT* 9 (2005).

It begins, not surprisingly, with revisions of erroneous soft law interpretations of the right to have children based on various provisions of the International Bill of Human Rights.⁸⁸ Those interpretations, ostensibly to prop up population growth-based economies in the late 20th Century, read the right as protecting unlimited choice for would-be parents to choose the timing, spacing, and number of children, instead of a future child-centric focus that cooperatively ensured parental readiness, smaller and more sustainable families, and a fair start in life for all kids.⁸⁹ The actual revision could start with informal statements by United Nations Secretary General on the need for reform. This is so given that the current model was adopted before the advent of the climate and other ecological crises, unprecedented levels of global inequality, new threats to what were assumed to be stable examples of human rights and democracy, and the Covid-19 pandemic.

That statement, and process of soft law revisions probably culminating in a more formal revision at the next world population conference,⁹⁰ could link to the simultaneous embracing of fair start family planning reforms by leadership at the United Nations Population Fund, Children's Convention governing bodies, and at the World Health Organization. The latter is especially crucial given the relationship between overcrowding, growth, the spread and impact of disease, and the exacerbated conditions that will cause the next pandemic.⁹¹

Within nations, the change could come through specialized legislation, both at the national and state and local level. Change through specialized legislation has four aspects. First, it shifts child care payments, child tax credits, baby bonds or comparable guaranteed minimum income schemes, and similar devices towards family planning incentives⁹² that promote parental readiness,⁹³ minimum standards of welfare approaching equitable birth positioning, and a universal ethic of smaller and more sustainable families. Secondly, it links this programming to environmental reforms, like the proposed Green New Deal.⁹⁴ Thirdly, the shift also links the family planning

⁸⁸ See Dillard, *supra* note 56, at 21.

⁸⁹ *Id.*

⁹⁰ See J. Nalubega Ross, *Chapter One and Chapter Two from “Program of Action of the International Conference on Population and Development” (1994)*, by United Nations Population Fund, *EMBRYO PROJECT ENCYCLOPEDIA* (Jan. 15, 2021), <https://embryo.asu.edu/pages/chapter-one-and-chapter-two-program-action-international-conference-population-and-development>.

⁹¹ See Anne McNicholas et al., *Overcrowding and Infectious Diseases—When will We Learn the Lessons of our Past?*, 113 *N.Z. MED. J.* 453 (2000).

⁹² See Dillard, *supra* note 56, at 20.

⁹³ See Matthew Hamity, *The Human Right to a Fair Start in Life*, 7 *CHILD & FAM. L.J.* 109, 109 (2019).

⁹⁴ See Riccardo Mastini et al., *A Green New Deal Without Growth?*, 179 *ECOLOGICAL ECON.* 1, 2 (2021).

reforms to education policy, incentivizing planning that aligns with early childhood development and educational outcomes. Fourthly, the incentives are linked to the availability and subsidization of new contraceptives, (especially male contraceptives), and programming that includes default for use by all persons under specified ages.⁹⁵

Beyond legislation, there are a variety of strategic impact litigation opportunities, such as the case pending before the Ninth Circuit described above. There is also imminent litigation challenging abortion bans based on the fair start rights of future generations,⁹⁶ challenges to National Environmental Policy Act regulations that blatantly failed to implement the Act's prioritization of population stabilization,⁹⁷ and using the legislation above to draw defensive challenges that will clarify *Skinner v. Oklahoma* and other key precedents.

Turning to institutional reform, both for-profit and non-profit institutions can shift toward supporting fair start family planning in their programming, and many, choosing to do the right thing, have edged towards doing so.⁹⁸ For those that have not, obstacles have been that public messaging from a variety of institutions, from socially conscious investment funds, companies reliant on their public goodwill, to massive charities who have made claims for years regarding the socially beneficial impact of their work, have in fact been misleading. Public messaging consistently omitted material information about the offsetting impacts of population growth on the efficacy of programming (most of which had no family planning elements). In some cases, these messages—many of which were used in fundraising campaigns—were blatantly false. This process enabled climate change denial and blocked reforms that could have been done years ago. Work in this area can be combined with campaigns urging divestment from industries lobbying for unsustainable pronatal policies and industries that are engaged in supporting public narratives about baby busts and underpopulation.⁹⁹ This can be done concurrently with investments in private funds that promote sustainable and equitable family planning that invest more in each child to produce long-run returns.

A more cultural level, following the social cognitive theory work of Albert Bandura,¹⁰⁰ public influencers, and role models can be urged

⁹⁵ See Mark Hathaway et al., *Increasing LARC Utilization: Any Woman, Any Place, Any Time*, 57 *CLINICAL OBSTETRICS & GYNECOLOGY* 718, 718-28 (2014).

⁹⁶ Carter Dillard, *Ready for Something Different? Fair Start Concept Changes Everything*, FAIR START MOVEMENT (Mar. 15, 2022), <https://fairstartmovement.org/texas-abortion-fight-a-new-way-forward/>.

⁹⁷ See 42 U.S.C. § 4321(1970).

⁹⁸ See *Sustainable Families: Surviving and Even Thriving During COVID-19*, FAIR START MOVEMENT (Mar. 22, 2022), <https://havingkids.org/tag/huggable/>.

⁹⁹ See *id.*

¹⁰⁰ See generally Bandura, *supra* note 87.

to step forward to promote and, in some cases, model fair start family planning. While several families have done so,¹⁰¹ and some prominent persons have moved their messaging in this direction,¹⁰² we have yet to see truly prominent icons break the taboo (ironically reinforced by static, short-run social justice movements) that surrounds family planning discussions.

At a more of a grassroots level, there are opportunities for smaller and more sustainable families to lead as a force for change, given the way pronatal policies discriminate against them and their children.¹⁰³ And finally, given that fair start is rightly treated as a peremptory norm—and perhaps *the* peremptory norm—there are a variety of civil disobedience and direct action tactics that would demonstrate the overriding nature of the claim. These include demonstrating its supremacy over existing property rights, especially the rights of those particular and culpable entities at the top of the economic pyramid whose wealth would have the greatest impact on furthering fair start reforms were it shifted to support them.¹⁰⁴

III. ANIMAL LAW AND SOCIAL JUSTICE IN THE SHORT-TERM

Given that long-term value change takes decades, if not centuries, animal advocates would be well advised to continue to push for reforms in the here and now that will lay the groundwork for more radical action in the future, while simultaneously transitioning animal advocacy toward a modern social justice movement.

a. *Circumventing Industry-Captured State Bodies Through Democratic Engagement*

By solely targeting corporate perpetrators of animal cruelty (as opposed to individual workers), and seeking justice through citizens rather than police and prosecutors, the movement may more easily transition to a social justice movement that speaks truth to power, while also better protecting the rights and welfare of billions of animals.

¹⁰¹ See *The Model Up Close*, FAIR START MOVEMENT, <https://havingkids.org/featuredfamilies/> (last visited April 7, 2022).

¹⁰² See, e.g., Ashley Berke, *Kate Middleton Speaks for Children's Rights to Equal Starts in Life*, FAIR START MOVEMENT (Dec. 28, 2020), <https://fairstartmovement.org/kate-middleton-speaks-out-for-all-childrens-right-to-an-equal-start-in-life-take-action/>.

¹⁰³ See *Are Small Families Subsidizing Larger and Less Sustainable Ones? Tell Us Your Story*, FAIR START MOVEMENT (Mar. 15, 2022), <https://fairstartmovement.org/are-subtle-funding-policies-hurting-your-familys-future/>.

¹⁰⁴ See Dillard, *supra* note 96, at 70-71, 73.

i. Protections for Vulnerable Workers in Animal Industries

In a recent lawsuit by Animal Rescue and Protection League, advocates allege that Hudson Valley Foie Gras “violate[s] state and federal labor laws in their exploitation and abuse of migrant farmworkers, including sexual abuse and molestation of female workers by managers at HVFG’s farm, where hundreds of the migrants live in squalid conditions.”¹⁰⁵ Per the complaint: The New York State Senate official YouTube channel has the following video of former Senator Pedro Espada visiting HVFG on September 15, 2009.¹⁰⁶ In the beginning of the video, a female worker describes the sexual abuse perpetrated by her bosses at HVFG.¹⁰⁷ At 2:20 in the video, a local priest describes how owners Ginor and Yanay fired all the migrant farmworkers and brought in new ones when they complained about illegally low wages and other labor violations.¹⁰⁸ The workers had nowhere to go, and the local church had to house them in their basement. At 8:40, Senator Espada confronts HVFG manager Marcus Henley directly about the sexual abuse of workers occurring at HVFG.¹⁰⁹ Henley responds by calling the police and screaming at Senator Espada to leave HVFG’s property.¹¹⁰ New York Times Op-Ed Columnist Bob Herbert wrote a column on June 8, 2009 called “State of Shame,” describing the horrific working conditions of the migrant workers at HVFG.¹¹¹

Recognizing the overlapping interests of vulnerable and oppressed workers at factory farms with the abused animals at farms, it becomes obvious that undercover investigations that result in animal cruelty charges against a few workers, rather than the corporation and its executives, are simultaneously ineffective and unjust.¹¹²

Admittedly, advocacy for workers in animal industries can be complicated by the fact that animal lawyers seek to hold their bosses accountable, which could then lead to reduced profits and job loss. It is important that animal advocates continue to invest time and resources

¹⁰⁵ First Amended Verified Complaint at 16, Animal Prot. & Rescue League, Inc. v. Ginor, No. 20STCV34229 (Cal. Super. Ct. Sept. 16, 2020), https://www.bryanpease.com/ginor?fbclid=IwAR3etexKQ0jCWuwQer0p-D7usHiuPkPR8K2vWVQQkqrS-bxcbY_8psWISEL.

¹⁰⁶ N.Y. Senate, *Senator Espada Talks to Farm Workers on a Duck Farm*, YOUTUBE (Sept. 15, 2009), <https://www.youtube.com/watch?v=qUOPYu8NNug>.

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ Bob Herbert, *State of Shame*, N.Y. TIMES (June 8, 2009), <https://www.nytimes.com/2009/06/09/opinion/09herbert.html>.

¹¹² See generally JUSTIN MARCEAU, BEYOND CAGES: ANIMAL LAW AND CRIMINAL PUNISHMENT (2019).

into further development of efforts, like the Rancher Advocacy Program, which helps meat and dairy operations transition into ethical vegan operations.¹¹³ Much like the Green New Deal aims to create new green jobs to compensate for the transition away from fossil fuels, animal advocates should prepare a Humane New Deal campaign. While the specifics of such a campaign are beyond the scope of this article, it stands to reason that the burgeoning market for “clean meat” and plant-based alternatives would create new opportunities for workers previously employed in the animal industries. Given the mammoth size of the animal industries, replacing those jobs would not happen overnight, but the converse is true as well: the elimination of these industries will be a slow process, requiring decades to be sure.

ii. Eliminate Exemptions for Standardized Industry Cruelty and Create Private Civil Rights of Action under the Cruelty Law via Ballot Initiatives

In the face of pervasive corporate capture of agencies, legislators, and prosecutors by the animal torturing industries,¹¹⁴ animal advocacy organizations may have felt compelled early in the movement to make a “deal with the devil,” focusing instead on the lower hanging fruit of harsher punishments of individual abusers of companion animals. As Professor Justin Marceau notes, “a full one-third of the states with exemptions for factory farming practices enacted these exemptions in conjunction with passing their felony [animal cruelty] laws.”¹¹⁵

The time has come to right that wrong by shifting the focus away from individual offenders, and instead targeting standardized, corporate cruelty via repeal of the statutory exemptions. While it is true that standardized, corporate cruelty is treated as impliedly exempt by prosecutors even in those states without explicit statutory exemptions,¹¹⁶

¹¹³ Home Page, RANCHER ADVOCACY PROGRAM, <https://rancheradvocacy.org/> (last visited July 12, 2022).

¹¹⁴ See Drutman, *supra*, note 19.

¹¹⁵ MARCEAU, *supra* note 112, at 104.

¹¹⁶ Minnesota, for example, provides no statutory exemptions to its anti-cruelty laws; as in New York, the word “unjustifiable,” does all the work of immunizing standard industry practices in Minnesota, with prosecutors presuming that standard industry practices are *ipso facto* “justifiable.” See MINN. STAT. § 343.21. “No person shall overdrive, overload, torture, cruelly beat, neglect, or unjustifiably injure, maim, mutilate, or kill any animal.”). Additionally, Mississippi, has no statutory exemptions to its animal cruelty laws, with qualifiers such as “unjustifiably,” “cruelly,” and “needlessly,” apparently immunizing the standard industry practices. MISS. CODE ANN. § 97-41-1 (“if any person shall intentionally or with criminal negligence override, overdrive, overload, torture, *torment, unjustifiably injure, deprive of necessary sustenance, food, or drink; or cruelly beat or needlessly mutilate; or cause or procure

eliminating statutory exemptions for standardized cruelty allows for the cultivation of a new legal and moral baseline, where the burden shifts to the industry to prove a particular practice “un-cruel,” in both the normative and legal senses. *Conversely, providing an explicit statutory exemption has ceded the definition of animal cruelty entirely to industry, i.e. the very perpetrator of said cruelty.* In the United Kingdom, a court specifically rejected that approach because “[t]o do so would be to hand the decision as to what is cruel to the food industry completely, moved as it must be by economic as well as animal welfare considerations.”¹¹⁷ When McDonald’s sued English animal advocates for defamation after the advocates accused the corporation of animal cruelty and torture, the Court concluded that, “McDonald’s [was] responsible for torture and murder.” The Court added that “[o]f course the commercial urge to rear and slaughter as many animals as economically and therefore quickly as possible may lead to cruel practices... which could be avoided if less attention was paid to profit and high production and more to animals.”¹¹⁸ In the U.S., McDonald’s could simply have pointed to the various statutory exemptions for standard factory farming practices, making their defamation case substantially stronger.

Currently, a ballot initiative in Oregon (“IP 13”) is underway for the 2024 election that proposes repealing Oregon’s statutory exemptions to the anti-cruelty laws for, “[a]ny practice of good animal husbandry[;]” “[t]he treatment of livestock being transported by owner or common carrier;” “[a]nimals involved in rodeos or similar exhibitions;” “[c]ommercially grown poultry;” “[t]he killing of livestock according to the provisions of ORS 603.065 (Slaughter methods);” “[I]awful fishing, hunting and trapping activities;... [w]ildlife management practices under color of law;” “[I]awful scientific or agricultural research or teaching that involves the use of animals;... [r]easonable activities undertaken in connection with the control of vermin or pests; and... [r]easonable handling and training techniques.”¹¹⁹

Under Oregon’s initiative petition process, IP 13 organizers must gather the 112,020 signatures needed to get the initiative onto

to be overridden, overdriven, overloaded, tortured, unjustifiably injured, tormented, or deprived of necessary sustenance, food or drink.”).

¹¹⁷ Chief Justice Bell, *The Verdict Section 8: The Rearing and Slaughtering of Animals*, McSPOTLIGHT (Oct. 18, 2003), https://www.mcspotlight.org/case/trial/verdict/verdict8_sum.html.

¹¹⁸ *Id.*

¹¹⁹ David Andrew Michelson, *Abuse, Neglect, and Assault Exemption Modification and Improvement Act*, OR. SEC’Y STATE ELECTIONS DIV., https://egov.sos.state.or.us/elec/web_irr_search.record_detail?p_reference=20220013..LSCYYYABUSE,_NEGLECT,_AND_ASSAULT_EXEMPTION_MODIFICATION_AND_IMPROVEMENT_ACT (last visited April 4, 2022) (providing the ballot initiative was withdrawn on March 28, 2022).

the November 2024 ballot.¹²⁰ Should the initiative pass, the cruelty law would prove far more difficult for prosecutors to treat as having implied exemptions than in New York, Minnesota, and Mississippi, as the Oregon statute lacks any qualifiers along the lines of “unjustifiably injury,” or “maliciously kill;” rather “intentionally caus[ing] physical injury to an animal” is sufficient.¹²¹ The language of a previous version of the ballot initiative (since withdrawn) was recently amended *at the urging of the animal industries* to specify that its enactment would criminalize “killing for food, hunting, fishing.”¹²² Industry groups sought the change to emphasize the wide-ranging effects of the initiative in the hopes of deterring signers. Ironically, however, the clarifying language will make it next to impossible for prosecutors and courts to find the intent of the bill was not to criminalize standard industry practices.¹²³

Unfortunately, even if the initiative passes, Oregon is highly unlikely to become a “sanctuary state for animals,” as author of the initiative, David Michelson hopes.¹²⁴ The Oregon legislature could seek to overturn the initiative, as occurred in Missouri after voters passed an initiative banning puppy mills.¹²⁵ And indeed, Oregon is one of eleven states in which the Legislature may repeal a voter initiative by simple majority.¹²⁶ While proponents of the initiative may take solace in in a 2010 survey that found 89% of Oregon legislators disagreed that “Legislators should feel free to displace content and try to move policy outcomes closer to ones they prefer,”¹²⁷ legislators may feel differently toward a bill with this kind of impact on animal exploiting industries.

In Colorado, activists proposed a more narrow ballot initiative, which would have eliminated statutory exemptions for animal agriculture standard practices, while leaving the exemptions for research and pest and predator control intact.¹²⁸ The initiative would have mandated the

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

¹²⁴ Jeff Rice, *Anti-Livestock Initiative Petitions Now Circulating in Oregon*, J.-ADVOC. (May 4, 2021), <https://www.journal-advocate.com/2021/04/30/anti-livestock-initiative-petitions-now-circulating-in-oregon/>.

¹²⁵ When Missouri voters passed a ban on puppy mills, Missouri legislators promptly overturned the voter initiated ban. See Associated Press, *Missouri Legislators Undo Puppy Mill Law*, WASH. TIMES (Apr. 14, 2011), <http://www.washingtontimes.com/news/2011/apr/14/missouri-legislators-undo-puppy-mill-law/>.

¹²⁶ Kathleen Ferraiolo, *State Legislative Response to Direct Democracy and the Politics of Partial Compliance*, AM. REV. OF POL. 31, 41-64 (2010).

¹²⁷ *Id.*

¹²⁸ See Colorado State Ballot Initiative, *Protect Animals from Unnecessary Suffering and Exploitation*, COLO. SEC’Y OF STATE (Feb. 22, 2021, 12:40 PM), <https://www.sos.state.co.us/pubs/elections/Initiatives/titleBoard/filings/2021-2022/16OriginalFinal.pdf>.

slaughtering of farmed animals only occur if an animal had lived a quarter of its natural lifespan, as well as redefined what constituted a “sexual act with an animal,” to include artificial insemination.¹²⁹ However, the Colorado Supreme Court rejected the measure, finding that it violated the State’s “single subject” requirement, because “expanding the definition of ‘sexual act with an animal’ isn’t necessarily and properly connected to the measure’s central focus of incorporating livestock into the animal cruelty statutes.”¹³⁰ Colorado’s Democratic governor, Jared Polis, came out in opposition to the initiative, stating he “stands in solidarity with Colorado farmers and ranchers in opposition to the PAUSE ballot initiative because it would hurt Colorado and destroy jobs.”¹³¹ It is now up to the proponents of the initiative to decide whether to revise the title in keeping with the Court’s holding. Should the initiative ultimately pass, the Legislature may repeal it by majority vote, much like Oregon.

Even if the Colorado or Oregon initiative passes and is not repealed by the Legislature, enforcement of the laws will face key obstacles. That is, while the initiatives may be clear in their criminalization of categories of standard industry practices, prosecutors would still have the discretion to not enforce the law, much as California prosecutors did not do so in the case of California’s 597t minimum exercise requirement, and as prosecutors in Minnesota do not enforce its similar requirement that “[n]o person shall keep any cow or other animal in any enclosure without providing wholesome exercise and change of air.”¹³² Additionally, Oregon’s ban on animal slaughter could potentially be preempted by the Federal Meat Inspection Act.¹³³

The preliminary lessons, then, from Oregon’s IP 13 and Colorado’s Initiative 16, are that advocates should (1) seek passage of the initiative in a state that does not allow the Legislature to repeal initiatives, such as California and Washington, and (2) include a private right of action as part of the initiative, thereby circumventing industry-captured prosecutors.

That the country is far from ready for legislation as far-reaching as Oregon’s IP 13 and Colorado’s Initiative 16 is underscored by the fact that no national animal advocacy organizations have come out in support of either one.¹³⁴ This may be due to fear that the bill is too

¹²⁹ *Id.*

¹³⁰ See In Re Title, Ballot Title & Submission Clause for 2021-2022 #16, 489 P.3d 1217, 1225 (Colo. 2021).

¹³¹ See John Aguilar, *Animal Cruelty Ballot Measure Is Invalid, Colorado Supreme Court Rules*, DENVER POST (June 21, 2021, 1:49 PM), <https://www.denverpost.com/2021/06/21/animal-cruelty-livestock-colorado-ballot-measure-initiative-16-invalid/>.

¹³² MINN. STAT. ANN. § 343.21.

¹³³ See *National Meat Ass’n v. Harris*, 565 U.S. 452 (2012).

¹³⁴ Tim Hearnden, *National Animal Groups Shun Oregon, Colorado Initiatives*,

extreme, driving away those in the “middle ground of public opinion.”¹³⁵ Alternatively, the national organizations may simply expect that the initiative is likely to fail, and therefore do not want to be associated with a losing cause.

Seeing as numerous national animal organizations specifically decry the statutory exemptions under the cruelty laws for standard industry practices, it seems more likely that the mainstream animal protection movement could get behind an iteration of the Oregon initiative that eliminates exemptions but adds a “justifiable” qualifier, so that it would be up to a jury to decide which standard industry practices are indeed cruel. If such an initiative were combined with a private right of action, this would allow advocates to challenge extreme forms of cruelty that juries may reasonably find to be cruel (regardless of the profitability of such cruelty), such as that previously discussed in foie gras production, as well as, for example, molting,¹³⁶ maternal deprivation experiments, toxicity testing, Draize tests,¹³⁷ confined without access to the outdoors, surgery without anesthetic (e.g. debeaking, castration, tail docking, etc), and solitary confinement).

In order to ensure that the private right of action could go before a jury rather than a judge, the cause of action would have to be civil (lest the criminal corporate defendant be able to opt for a bench trial). This could be in the form of a civil analogue to the cruelty statute, as exists in North Carolina (and discussed further *infra*.)

FARM PROGRESS (Apr. 28, 2021), <https://www.farmprogress.com/livestock/national-animal-groups-shun-oregon-colorado-initiatives>.

¹³⁵ LYLE MUNRO, *COMPASSIONATE BEASTS: THE QUEST FOR ANIMAL RIGHTS* 101 (2001).

¹³⁶ Molting has traditionally been induced by withdrawing feed from four days to as long as two weeks. Recognizing the cruelty of this practice, the United Egg Producers guidelines now state that only non-feed-withdrawal molt methods—such as using specialized feed for non-producing hens and minimizing exposure to light—will be permitted for United Egg Producers (UEP) members. That being said, adherence to UEP guidelines is voluntary. See *Guidelines for Cage Housing*, UNITED EGG PRODUCERS CERTIFIED 10 (2017), https://uepcertified.com/wp-content/uploads/2021/08/Caged-UEP-Guidelines_17.pdf.

¹³⁷ Courts have held that states and localities may prohibit even those activities for which a particular person holds an AWA license, so long as (1) the law does not interfere with the animal welfare purpose of the Act (i.e. “to foster humane treatment and care of animals”), and (2) it is not “physically impossible to comply with both the federal and local regulations.” See *DeHart v. Town of Austin*, 39 F.3d 718, 720 (7th Cir. 1994) (upholding “total prohibition” on possession of exotic or wild animals, despite plaintiff being licensed under the AWA as a dealer whose business includes the purchase and/or resale of wild or exotic animals); *N.Y. Pet Welfare Ass’n, Inc. v. City of New York*, 850 F.3d 79, 88 (2d Cir. 2017) (upholding law providing that City pet shops may obtain dogs or cats only directly from federally-licensed Class A breeders, despite plaintiffs having valid Class B animal dealers’ license).

iii. Leverage Private Rights of Action to seek Corporate Liability for Standard Cruelty before a Jury, and Amend Codes to make Corporations more Liable for Cruelty

Given the difficulties of securing standing to challenge animal cruelty, and the reluctance of prosecutors to hold corporate offenders accountable, statutes that grant standing to any person or organization to halt animal cruelty via injunction is essential. North Carolina employs such a statute, though it is rife with exemptions for corporate cruelty.¹³⁸ Several other states allow limited private prosecution specifically for violations of animal abuse and neglect laws such as Wisconsin (allowing a humane officer to request law enforcement officers and district attorneys to enforce and prosecute violations of state law and cooperate in those prosecutions),¹³⁹ Minnesota (allowing a citizen to apply to any court with allegation of animal cruelty for a warrant and for investigation),¹⁴⁰ Pennsylvania (allowing an agent of any society or association for the prevention of cruelty to animals to have the same powers to initiate criminal proceedings provided for police officers and to have standing to request a court to enjoin a violation of animal cruelty laws),¹⁴¹ and Hawaii (allowing an agent of any society for the prevention of cruelty to animals to make arrests and bring offenders before a judge).¹⁴²

Of course, these statutes that limit powers to humane organizations have largely proven ineffective at addressing corporate cruelty. Hudson Valley Foie Gras, for example, is located in New York, where the ASPCA is empowered by statute to make arrests arising out of animal cruelty,¹⁴³ and yet, they have refused to act in spite of the documented animal cruelty at Hudson Valley.

New Jersey, however, provides a broader opportunity for a private right of action of a criminal violation:

If the board of chosen freeholders of a county or the governing body of a municipality fails to prosecute a claim or demand of the county or municipality, any court in which an action on such claim or demand is cognizable may, upon terms, allow a taxpayer and resident of the county or municipality to commence and prosecute an

¹³⁸ William A. Reppy, Jr., *Citizen Standing to Enforce Anti-Cruelty Laws by Obtaining Injunctions: The North Carolina Experience*, 11 *ANIMAL L.* 39, 41 (2005).

¹³⁹ WIS. STAT. § 173.07 (4M).

¹⁴⁰ MINN. STAT. § 343.22(1).

¹⁴¹ 18 PA. STAT. ANN. § 5511(i).

¹⁴² HAW. REV. STAT. § 711-1110 (2018).

¹⁴³ See N.Y. AGRIC. & MKTS. LAW § 37.

action upon the claim or demand in the name and on behalf of the county or municipality, if in the opinion of the court the interests of the county or municipality would be promoted thereby.¹⁴⁴

This type of law may garner more support since it does not target animal cruelty specifically. If a separate cause of action specifically for animal cruelty is created, the North Carolina experience warns that exemptions may be created over time.¹⁴⁵ Enacting a more general statute that would still allow for private citizens to pursue claims of animal cruelty may ultimately protect the integrity of the criminal animal cruelty statute. In order for the New Jersey law to prove useful, it would need to eliminate the provision that allows for a court's discretion in determining if the private action would promote the interests of the county or municipality.

Challenges through private rights of action should initially target those states lacking explicit exemptions for standardized animal cruelty. HVFG would make the ideal target for animal lawyers going forward. The product is already illegal in NYC and California precisely because it is so obviously cruel. Moreover, foie gras is not a staple of working families, but a decadent "treat" for the rich. Importantly, any such action should not attack the workers, themselves victims of abuse, recognizing that powerful corporate executives should be held accountable, whereas the opposite is generally the case after undercover investigations of factory farms.¹⁴⁶

Per the Model Penal Code (MPC) provisions for corporate liability, an advocate would need to prove that the cruelty "was authorized, requested, commanded, performed or recklessly tolerated by the board of directors or by a high managerial agent acting in behalf of the corporation within the scope of his office or employment."¹⁴⁷ It is worth noting that ISE Farms in New Jersey was convicted for animal cruelty based on the neglect of hens who had been discarded by a farm employee on a pile of dead hens and left to die.¹⁴⁸ While the conviction was later overturned on other grounds, the issue of corporate liability

¹⁴⁴ N.J. STAT. ANN. § 2A:15-18 (WEST 2009).

¹⁴⁵ See generally Reppy, *supra* note 138.

¹⁴⁶ ALDF previously sought, through "Bella's Bill," to rehome New York's animal cruelty statute outside of the "Agriculture and Markets" title in the hopes of getting stronger enforcement. ALDF continues to push this bill, but it will do so with a focus on including corporate liability for animal cruelty and the addition of a private right of action. Unfortunately, courts have thus far rejected private rights of action under the cruelty code in New York. See generally *Hammer v. Am. Kennel Club*, 1 N.Y.3d 294 (N.Y. 2003). Foie gras is not produced elsewhere in the United States.

¹⁴⁷ MODEL PENAL CODE § 2.07(1)(c) (1962).

¹⁴⁸ *State of New Jersey v. ISE Farms, Inc.*, Transcript of Sup. Ct. Warren Co. (March 8, 2001).

was readily established under New Jersey's corporate liability statute.¹⁴⁹ The New Jersey statute is based on the MPC but differs slightly:

- a) A corporation may be convicted of the commission of an offense if:
 1. The conduct constituting the offense is engaged in by an agent of the corporation while acting within the scope of his employment and in behalf of the corporation unless the offense is one defined by a statute which indicates a legislative purpose not to impose criminal liability on corporations. If the law governing the offense designates the agents for whose conduct the corporation is accountable or the circumstances under which it is accountable, such provisions shall apply;
 2. The offense consists of an omission to discharge a specific duty of affirmative performance imposed on corporations by law; or
 3. The conduct constituting the offense is engaged in, authorized, solicited, requested, commanded, or recklessly tolerated by the board of directors or by a high managerial agent acting within the scope of his employment and in behalf of the corporation.¹⁵⁰

The first section of the New Jersey statute does not limit liability for agents acting within the scope of their employment and on behalf of the corporation to offenses outside of the criminal code.¹⁵¹ While this is a small change from the MPC, it could have major implications for holding corporations and individual employees liable for animal cruelty. Because the State would not be confined to the third provision of the MPC for corporate liability which requires evidence that the corporation "recklessly tolerated" criminal animal cruelty.¹⁵²

Finally, as a general matter, in pursuing private actions under the cruelty code, advocates should focus on those states that lack the federal standing requirements, such that an advocate may bring case on behalf of animal victims without alleging an injury on his or her behalf.¹⁵³

¹⁴⁹ *Id.*

¹⁵⁰ N.J. STAT. ANN. § 2C:2-7 (West 2022).

¹⁵¹ *Id.*

¹⁵² *Id.*

¹⁵³ *See, e.g.,* Nat'l Paint & Coatings Ass'n v. State, 68 Cal. Rptr. 2d 360, 365 (Cal. Ct. App. 1997); Nichols v. Kan. Gov't Ethics Comm'n, 18 P.3d 270, 276-

These changes could be combined with specific legislative reforms that would make prosecuting corporations for animal cruelty easier.

A model statute could have different types of acts be strict liability, for instance, misdemeanor animal cruelty, and could additionally note that acts of felony animal cruelty should impute to the corporation under traditional respondeat superior principles. This would allow prosecutors to bring charges against corporations for the most common acts of animal cruelty, those classified as misdemeanors, in a more straightforward application.

Some reform proposals in other contexts have included imputing only a strict liability or negligence standard for corporations to be held liable for criminal offenses. In a memo sent by the Deputy Attorney General to "all component heads and United States attorneys" in June 1999, it explicitly declares that "corporations should not be treated leniently because of their artificial nature nor should they be subject to harsher treatment."¹⁵⁴

Examples of "organizational" liability include provisions in Part 2.5 of the Australian Commonwealth Criminal Code and art. 102(2) of the Swiss Penal Code. Each includes provisions for holding corporations directly liable for criminal offenses in circumstances where features of the organization of a corporation, including its 'corporate culture', directed, encouraged, tolerated, or led to the commission of the offense. This approach focuses on the corporation as an entity in and of itself and accepts the proposition that a corporation can be held blameworthy through its practices, policies, and procedures.

In April 2019, Warren introduced the Corporate Executive Accountability Act, S. 1010, 116th Cong. § 451 (2019). The bill, which was referred to the Committee on the Judiciary, would authorize prosecution of an executive officer of any corporation that generates more than \$1 billion in annual revenue for "negligently permit[ing] or fail[ing] to prevent" either a criminal or civil violation by the company. Thus, an executive could be criminally liable if the company he or she worked for committed a civil violation.

77 (Kan. Ct. App. 2001); Minn. Pub. Int. Rsch. Grp. v. Minn. Dep't of Labor, 249 N.W.2d 437, 441 (Minn. 1976); City of Picayune v. S. Reg'l Corp., 916 So. 2d 510, 525 (Miss. 2005); Animal Legal Def. Fund v. Woodley, 640 S.E.2d 777, 778 (N.C. Ct. App. 2007); Kellas v. Dep't of Corr., 145 P.3d 139, 141-42 (Or. 2006); Hous. Auth. of Chester v. Penn. State Civil Serv. Comm'n, 730 A.2d 935, 940-41 (Pa. 1999).

¹⁵⁴ Memorandum from Deputy Dir. Gen. to all Component Heads & U.S. Att'ys (June 16, 1999), <https://www.justice.gov/sites/default/files/criminal-fraud/legacy/2010/04/11/charging-corps.PDF>.

Warren's bill provides that the corporation needs to either be convicted of or entered into a DPA or NPA related to the criminal violation of federal or state law for the executive to be criminally liable. It further states that an individual executive also may be prosecuted under the Act for any civil violation of federal or state law by his or her corporation if the corporation:

1. was found liable for such civil violation or entered into a settlement agreement with any federal or state agency regarding the violation; and
2. the violation affected the health, safety, finances, or personal data of not less than one percent of the population of either the United States or prosecuting state.

The bill is meant to target large corporations, and to penalize executives who play a role in the decision-making that leads to the corporations' civil and criminal offenses. By imputing similar liability to executives of corporations that commit animal cruelty, the law would better deter corporations and corporate executives from turning a blind eye to cruelty, incentivizing self-policing by imputing individual liability on top of corporate liability.

Working within current frameworks for general corporate criminal liability, one step forward would be to have more states adopt respondeat superior liability as opposed to the MPC § 2.07 provision. By utilizing the federal standard of liability, corporate liability is easier to impute on the basis that an agent was acting within the scope of employment, at least in part to benefit the corporation. While showing that cruelty "benefits the corporation" could still be difficult, it is easier than to show any involvement or knowledge of a high managerial agent.

One could argue that the processes and incentives in place make cruelty benefit the corporation. In current practice we see egregious cruelty prosecuted against individuals and not often against the corporation. However, systemic cruelty—the kind that is incentivized by the corporate structure, could be shown to benefit the corporation more directly. In terms of reform, while disparities exist between state and federal prosecutors, respondeat superior would certainly be a better place to start than the MPC § 2.07 provisions when working to prosecute corporations within a state for animal cruelty.

Finally, states that currently allow a compliance defense to corporate criminal liability provide another loophole for corporations to escape animal cruelty charges. Even if we look to move states to respondeat superior liability instead of MPC's narrow liability, we should include reforming the availability of this defense to corporations

facing charges. In practice, this loophole can provide corporations the ability to implement policies that do not target the underlying reasons or incentives for the cruelty that occurs in the corporate context. Therefore, staying within current frameworks for corporate liability, removing the availability of this defense for cases of animal cruelty will be crucial.

b. Reification and Expansion of the Rights of Animals and Activists at the Local Level

The importance of recognizing animal rights for their own sake, absent some benefit to human beings, has major importance for the future of animal law, both as a precedent that can be leveraged in future rights-based litigation, and as a way of shifting the way in which the aforementioned voters, jurors, etc. perceive animals to rights-bearers rather than beings upon whom we may treat with varying levels of empathy, limited by the extent to which that empathy may interfere with human desires. Absent a corresponding shift in the way in which society views animals, progress through democratic engagement has a utilitarian ceiling, i.e. a jury, while unaccountable to industry pressures and therefore unsusceptible to concerns about political donations, reelection, job security, corporate profitability, etc., will still reflect the overarching social values and customs, which remain deeply anthropocentric, if a contradiction in terms.¹⁵⁵

i. Codify Animal Rights, Some of which Already Exist

When ALDF brought suit on behalf of Justice the horse in Oregon arising from injuries he suffered due to severe neglect, the circuit court held that "Justice lacks the legal status or qualifications necessary for the assertion of legal rights and duties in a court of law."¹⁵⁶In actuality however, and as ALDF contends on appeal, Justice, along with every other animal in Oregon, already has the "legal right" under

¹⁵⁵ See Cathy Siegner, *Survey: Most Consumers Like Meat, Slaughterhouses Not so Much*, FOODDRIVE (Jan. 25, 2018), <https://www.fooddrive.com/news/survey-most-consumers-like-meat-slaughterhouses-not-so-much/515301/> (noting a survey from Oklahoma State University which found that while more than 90% of U.S. consumers eat meat, 47% of them agreed with the statement, "I support a ban on slaughterhouses"); *New Poll Shows Majority Uncomfortable with Animal Farming Despite Eating Turkeys for Thanksgiving*, SCI. INST. (Nov. 20, 2017), <https://www.sentenceinstitute.org/press/animal-farming-attitudes-survey-2017> (noting a second survey that had nearly identical results).

¹⁵⁶ Or. Jud. Dep't, Wash. Cnty. Circuit Ct., Twentieth Jud. Dist., Opinion Letter re. Justice vs Gwendolyn Vercher (Sept. 17, 2018), <https://www.animallaw.info/sites/default/files/Justice%20the%20horse%20opinion%20letter.pdf> [hereinafter Justice Opinion Letter].

Oregon's cruelty statute not to be neglected or abused, including the right to adequate food, potable water, shelter, and veterinary care.¹⁵⁷ The same could be said of animals throughout the country under each state's respective cruelty statutes. Of course, the statutes do not specifically frame these statutes in terms of the animal's "right," but that right is implied by the corresponding duty of the human custodian or guardian.¹⁵⁸

Given the court's reluctance to recognize Justice the horse's rights under the cruelty statute in Oregon, it would be prudent for advocates to draw upon explicit rights-oriented language in future animal-related legislation, i.e. "animals have the right not to be neglected and abused." Specifically confirming that animals have rights under state animal cruelty laws (limited though they may be), will prove helpful in efforts to expand those rights at the local level (as discussed in the next section).

ii Establish Animal Personhood at the Local Level

As Justice Douglas noted in his *Wheeling Steel Corp. v. Glander* dissent, the definition of legal personhood has been stretched and reshaped by courts without coherent legal justification, with the Supreme Court engaging in "distortion to read 'person' as meaning one thing, then another within the same clause and from clause to clause."¹⁵⁹ When juxtaposed with the absurdity of over a century's worth of "make it up as you go" corporate personhood jurisprudence, the notion that animals, as rights-bearers, might be considered legal persons is not such a radical leap. Indeed, renowned legal scholars have recognized the sound legal basis for local ordinances that establish standing for persons to bring actions directly on behalf of nonhuman animal plaintiffs.¹⁶⁰

¹⁵⁷ OR. REV. STAT. § 167.33(1)(1) (prohibiting criminally negligent failure to provide minimum care); OR. REV. STAT. § 167.322 (prohibiting maliciously killing or intentionally torturing an animal). The Court did not find it compelling that Oregon had amended the state's animal cruelty statute in 2013 to specifically highlight that the purpose of the law is to protect animals as "sentient beings capable of experiencing pain, stress and fear" who "should be cared for in ways that minimize pain, stress, fear and suffering." OR. REV. STAT. § 167.305(1), (2); see Justice Opinion Letter, *supra* note 156.

¹⁵⁸ Cetacean Cmty. v. Bush, 386 F.3d 1169, 1175 (9th Cir. 2004) ("[a]nimals have many legal rights, protected under both federal and state laws."); see also Cass R. Sunstein, *Standing for Animals (with Notes on Animal Rights) A Tribute to Kenneth L. Karst*, 47 UCLA L. REV. 1333, 1335 (2000) ("it is entirely clear that animals have legal rights, at least of a certain kind").

¹⁵⁹ *Wheeling Steel Corp. v. Glander*, 337 U.S. 562, 579 (1949).

¹⁶⁰ See, e.g., Steven M. Wise et al., *The Power of Municipalities to Enact Legislation Granting Legal Rights to Nonhuman Animals Pursuant to Home Rule*, 67 SYRACUSE L. REV. 31 (2017); Sunstein, *supra* note 158, at 1367.

Under California law standing can be created by local ordinance.¹⁶¹ Alternatively, a city might reclassify animals as "sentient beings,"¹⁶² replacing all references to ownership and possession of dogs and cats in the municipal code with "guardianship" and "custody."

iii. Protect and Expand the Right to Document Animal Cruelty and Rescue Animals

In addition to eliminating statutory exemption for standardized cruelty and establishing private rights of action to hold corporations accountable, it is vital that advocates continue to defend and expand the right to document corporate cruelty, otherwise corporations will be able to hide said cruelty behind closed doors. ALDF has joined with a coalition of advocacy organizations in challenging ag-gag laws in court to great success, with ag-gag laws ruled unconstitutional on free speech grounds in Kansas, North Carolina, Wyoming, Idaho, Utah, and Iowa (twice), a challenge of Arkansas' ag-gag statute currently before the Eighth Circuit.¹⁶³

While documenting animal cruelty by corporations, advocates invariably come upon animals in need of urgent veterinary care. In some instances, advocates have rescued those animals, and have subsequently faced felony charges for trespass and theft. The notion that concerned individuals have a right to rescue sick or dying animals has basis in law, albeit in limited circumstances. Several states already have codified the right to rescue animals from "hot cars," so long as the person notifies law enforcement. And while most of these "hot car" laws are limited to the

¹⁶¹ California is not subject to the federal standing requirements as the California Constitution contains no "case or controversy" requirement. See, e.g., *Nat'l Paint & Coatings Ass'n v. State*, 58 Cal. App. 4th 753, 761 (Cal. Ct. App. 1997) (rejecting claimed standing requirement based on federal citations, noting that the California Constitution "contains no 'case or controversy' requirement").

¹⁶² While not going so far as to explicitly remove animals from the property paradigm, Oregon has declared via statute that animals are "sentient beings capable of experiencing pain, stress and fear." OR. REV. STAT. § 167.305(1) (2017).

¹⁶³ Nicole Pallotta, *Though Ruled Unconstitutional, Industry Continues Pushing Ag-Gag Laws: Updates in North Carolina, Kansas, Iowa, and Ontario*, ANIMAL LEGAL DEF. FUND (Sept. 15, 2020), <https://aldf.org/article/though-ruled-unconstitutional-industry-continues-pushing-ag-gag-laws-updates-in-north-carolina-kansas-iowa-ontario/>.

rescue of companion animals, California,¹⁶⁴ Ohio,¹⁶⁵ and Massachusetts¹⁶⁶ each allow for private persons to rescue any animal victim in imminent danger from a vehicle.¹⁶⁷ Washington¹⁶⁸ and California¹⁶⁹ allow persons to provide aid to animals impounded or confined without necessary

¹⁶⁴ California grants civil immunity for any person who takes reasonable steps to remove an animal from a vehicle if that animal's "safety appears to be in immediate danger from heat, cold, lack of adequate ventilation, lack of food or water, or other circumstances that could reasonably be expected to cause suffering, disability, or death to the animal," and that person calls law enforcement after entry. CAL. CIV. CODE § 43.100 (2017). In addition, California grants criminal immunity if that person takes specific steps first, such as contacting law enforcement, has a good faith belief that entry is necessary, remains with the animal in a safe location, and uses only as much force as necessary. CAL. PENAL CODE § 597.7(b) (2017)

¹⁶⁵ Ohio grants civil immunity for damage resulting from forcible entry of a vehicle "for the purpose of removing an animal" or a minor from the vehicle if certain conditions are met, including having a good faith belief that the animal is in imminent danger, making a good faith effort to call 9-1-1 before entry, not using more force than is reasonably necessary, and making a good faith effort to leave notice on the vehicle's windshield about the reason for entry into the vehicle. OHIO REV. CODE ANN. § 959.133(a) (2016).

¹⁶⁶ Massachusetts grants civil and criminal immunity for entering a motor vehicle to remove an animal if certain requirements are met, such as making reasonable efforts to locate the vehicle owner and notifying law enforcement. MASS. GEN. LAWS ANN. ch. 140, § 174F (West 2018).

¹⁶⁷ To the extent that the 28 Hour Law might preempt these state "hot car" laws as to farmed animals, advocates could nonetheless advocate that persons leverage these laws to rescue poultry, since the statute does not protect it. *See* 49 U.S.C. § 80502.

¹⁶⁸ WASH. REV. CODE ANN. § 16.52.100 (West 2020) ("If any domestic animal is impounded or confined without necessary food and water for more than thirty-six consecutive hours, any person may, from time to time, as is necessary, enter into and open any pound or place of confinement in which any domestic animal is confined, and supply it with necessary food and water so long as it is confined. The person shall not be liable to action for the entry, and may collect from the animal's owner the reasonable cost of the food and water."). While "domestic animal" is not explicitly defined, the term refers to farmed animals in other sections of this chapter. *See* WASH. REV. CODE ANN. § 16.52.110 (West 2020) ("Every sick, disabled, infirm, or crippled horse, ox, mule, cow, or other domestic animal."); WASH. REV. CODE ANN. § 16.52.095 (West 2020) ("It shall not be lawful for any person to cut off more than one-half of the ear or ears of any domestic animal such as an ox, cow, bull, calf, sheep, goat or hog, or dog.").

¹⁶⁹ CAL. PENAL CODE § 597e (Deering 2022) ("In case any domestic animal is at any time so impounded and continues to be without necessary food and water for more than 12 consecutive hours, it is lawful for any person, from time to time, as may be deemed necessary, to enter into and upon any pound in which the animal is confined, and supply it with necessary food and water so long as it remains so confined. That person is not liable for the entry and may collect the reasonable cost of the food and water from the owner of the animal, and the animal is subject to enforcement of a money judgment for the reasonable cost of such food and water.").

food and water. Animal lawyers should be prepared to defend activists who act to protect animals under these laws, an undertaking that might include leveraging the necessity defense in instances where activists rescued sick or dying animals.¹⁷⁰

¹⁷⁰ *See, e.g.,* Jenni James, *When is Rescue Necessary? Applying the Necessity Defense to the Rescue of Animals*, 7 STAN. J. OF ANIMAL L. & POL'Y 1 (2014).

THE ALLOCATION & EXPLOITATION OF NATURAL RESOURCES IN SPACE

MONICA KAMIN

INTRODUCTION

The body of law surrounding outer space is notoriously lacking. There is no internationally recognized, fully developed legal framework that concerns itself with international activities in outer space, nor is there an internationally recognized regulatory body to create and enforce international space law. This reality is extremely problematic, considering the advent of space mining looming imminently on the horizon. Previous attempts to create such a framework have proved largely unsuccessful, considering the political tensions between the major players in the Space Race, this reality is both unsurprising and unlikely to change.¹

Private capital has played a significant role in the economic development and technological innovation of the twenty-first century.² Space law does not remain unaffected by this; the participation of commercial entities in the space industry has recast the Space Race from a public, national enterprise to a private and commercialized venture.³ However, the stagnated development of international space law has put a hold on the entire space mining industry, as it has contained far

¹ Graham Peebles, *Tribal Nationalism vs. Global Unity*, COUNTERPUNCH (Jan. 4, 2019), <https://www.counterpunch.org/2019/01/04/tribal-nationalism-vs-global-unity> (not to mention the rise in nationalist mentalities sweeping the globe today: “Tribal nationalism plays on notions of identity, encouraging allegiance to a national and in some cases racial ideal; national bonds of belonging and personal identity rooted in the nation state are fostered...[b]ut far from creating security this type of nationalism (like all forms of conditioned constructs) isolates and excludes, strengthening false notions of superiority and inferiority, creating an atmosphere of distrust, and establishing a climate in which fear can flourish.”).

² Timothy G. Nelson, *The Moon Agreement and Private Enterprise*, 17 ILSA J. INT’L & COMP. L. 393, 410-11 (2010).

³ Zach Meyer, *Private Commercialization of Space in an International Regime: A Proposal for a Space District*, 30 NW J. INT’L L. & BUS. 241, 260 (2010); Paul Rincon, *Jeff Bezos Launches to Space Aboard New Shephard Rocket Ship*, BBC NEWS (Jul. 20, 2021), <https://www.bbc.com/news/science-environment-57849364>; Michah Maidenburg, *Elon Musk’s SpaceX Launches First All-Civilian Flight to Orbit*, WALL STREET J. (Sept. 15, 2021, 8:48 PM), <https://www.wsj.com/articles/elon-musks-spacex-launches-first-all-civilian-flight-to-orbit-11631750630>.

too much legal uncertainty to attract investors.⁴ Yet, several states have recently reevaluated the existing body of space law to determine the feasibility of commercially mining the vast array of natural resources located in outer space.⁵ Motivated by the growing scarcity of natural resources on Earth and the high potential for economic benefit, global sentiment favoring the legalization of commercial extraction of space resources has steadily gained momentum; states are more motivated than ever before to legalize and undertake such activities.⁶

This article evaluates various legal principles and systems that the international community has previously used to determine the ownership and allocation of natural resources falling outside of recognized domestic jurisdictions, analyzes the extent to which existing domestic laws complement the sparse body of international space law, discusses possible approaches to the ownership and allocation of space resources, and explores the future dynamic between domestic and international space law.

I. EXAMINING THE CONTROLLING LAW

The advent of space exploration in the mid-twentieth century rendered outer space accessible to humankind for the first time and created an imminent need for the development of a legal framework pertaining to space law.⁷ Cognizant of this, the United Nations began developing legal principles and general treaties to facilitate international cooperation and interaction in outer space.⁸ *The Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies* created a loose legal framework that outlined in general terms the activities states could undertake in

⁴ Philip De Man, *Luxembourg's Law on Space Resources Rests on a Contentious Relationship with International Framework*, SPACE REV. (Oct. 23, 2017), <https://www.thespaceview.com/article/3355/1>.

⁵ Meyer, *supra* note 3, at 11.

⁶ De Man, *supra* note 4 (attempting to create a degree of legal certainty in order to encourage and facilitate investments from entities interested in space mining endeavors or activities); *see generally* U.S. Commercial Space Launch Competitiveness Act, Pub. L. No. 114-90, 129 Stat. 705 (2015) [hereinafter U.S. Space Act]; Luxembourg Law on the Exploration and Use of Space Resources, art. 3 (No. A674, 2017) (available at LUXEMBOURG SPACE AGENCY, LEGAL FRAMEWORK, https://space-agency.public.lu/en/agency/legal-framework/law_space_resources_english_translation.html) [hereinafter Luxembourg Law] (clarifying that both the United States and Luxembourg have enacted legislation that permits commercial space mining).

⁷ Louis de Gouyon Matignon, *The United Nations and Space Law*, SPACE LEGAL ISSUES (Jul. 19, 2019), <https://www.spacelegalissues.com/the-united-nations-and-space-law>.

⁸ *Id.* (the United Nations has been involved in space law since the late 1950s).

outer space.⁹ *The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies* expanded upon this framework and discussed the exploitation and allocation of space resources.¹⁰

Neither the Outer Space Treaty nor the Moon Agreement expressly preclude the mining and acquisition of property rights of space resources by national, international, or private enterprises. However, both subject states and private entities interested in pursuing activities in outer space to certain broad-strokes obligations. The Outer Space Treaty refers to it as “the province of mankind” and the Moon Agreement calls it “the common heritage of mankind”—these principles are considered indistinguishable.¹¹ Both doctrines oblige parties who gain advantage from space-related activities to share an ill-defined amount of the benefits with the rest of mankind.¹² More simply stated, so long as parties who engage in space-mining enterprises spread some of the benefits thereof, they will have the ability to appropriate outer space and celestial bodies. For the purposes of this article, these doctrines are synonymous and will be referred to collectively as the common heritage doctrine.

a. *The Outer Space Treaty*

In 1967, the United Nations put into force a treaty to address unsettled matters of international space law and to create a “general legal basis for the peaceful uses of outer space,” thus “providing a [legal] framework for the developing law of outer space.”¹³ Its authors chose to include an often-cited ethical concept in international law known as the ‘common heritage doctrine,’¹⁴ which provides that members of humanity have an equal right to enjoy nature and its resources.¹⁵ The authors

⁹ *See generally* United Nations Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and other Celestial Bodies, Jan. 27, 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205 [hereinafter Outer Space Treaty].

¹⁰ *See generally* Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, Dec. 5, 1979, 1363 U.N.T.S. 3 [hereinafter Moon Agreement].

¹¹ J. I. Gabrynowicz, *The “Province” and “Heritage” of Mankind Reconsidered: A New Beginning*, 3166 NASA CONF. PUBL’N 691, 692 (1992).

¹² Richard B. Bilder, *A Legal Regime for the Mining of Helium-3 on the Moon: U.S. Policy Options*, 33 FORDHAM INT’L L.J. 243, 272.

¹³ U.N. OFFICE FOR OUTER SPACE AFFAIRS, U.N. TREATIES AND PRINCIPLES ON OUTER SPACE, at vi, ST/SPACE/11, Sales No. E.02.I.20 (2002).

¹⁴ Ian Hedges, Note, *How the Rest Was Won: Creating a Universally Beneficial Legal Regime for Space-Based Natural Resource Utilization*, 40 VT. L. REV. 365, 377 (2015).

¹⁵ Prue Taylor, *The Common Heritage of Mankind: A Bold Doctrine Kept Within Strict Boundaries*, WEALTH OF THE COMMONS (adapted from Prue Taylor, *Common Heritage of Mankind Principle*, in 3 THE ENCYCLOPEDIA OF SUSTAINABILITY: THE LAW AND POLITICS OF SUSTAINABILITY, 64-69 (Bosselman et al. eds., 2011)).

of the Outer Space Treaty hoped that by incorporating the common heritage doctrine into space law, that they could encourage continued international cooperation in space and promote fairness, equity, and a lack of discrimination.

The Outer Space Treaty encourages free access to all celestial bodies in the name of scientific exploration and advancement.¹⁶ It declares: “[t]he exploration and use of outer space...shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific developments, and shall be the province of all mankind.”¹⁷ It further states “[o]uter space...is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.”¹⁸

Yet, the Outer Space Treaty is a mere starting point in the development of space law. It leaves many questions unanswered by failing to define important terms. For example, some states interpret the word “use” in the phrase “use the Moon for peaceful purposes” to indicate activities of scientific *or* commercial nature are acceptable, so long as actors share the benefits of their uses with other countries, per the common heritage doctrine.¹⁹ Others debate the requirement of the common heritage doctrine entirely as its language is so general and there are many ways the provision could be interpreted and implemented.²⁰ Additionally, while the Outer Space Treaty appears to ban the ownership of extra-terrestrial property on its face, a more recent interpretation asserts that sovereign ownership is forbidden but the ownership of extracted natural resources may be permissible.²¹

First, the Outer Space Treaty fails to define “celestial body.” Therefore, “celestial bodies” could be interpreted to include asteroids, planets, and moons, or any combination thereof. Second, the Outer Space Treaty does not address the topic of ownership of materials *extracted* from the undefined celestial bodies.²² Third, while the Outer Space Treaty provides that “[s]tates [p]art[y] to the [t]reaty shall bear

¹⁶ Outer Space Treaty, *supra* note 9, at arts. I, VI.

¹⁷ *Id.* at art. I.

¹⁸ *Id.* at art. II.

¹⁹ Scot Anderson et al., *The “Space Resources Institute Act” and the Future of Space Mining*, GLOBAL POL’Y J. (Apr. 16, 2019), <https://www.globalpolicyjournal.com/blog/16/04/2019/space-resources-institute-act-and-future-space-mining> (discussing whether the Common Heritage Doctrine requires the implementation of an international profit-sharing mechanism, or the sharing of resources such as technology and information but *not* revenue, or whether it merely reiterates the right of free access for all).

²⁰ *Id.*

²¹ See Outer Space Treaty, *supra* note 9, at art. II.; *contra* Anderson et al., *supra* note 19.

²² See Hedges, *supra* note 14, at 401.

international responsibility for national activities in outer space,” it makes no mention of a higher system of enforcement.²³ Officially, “celestial body” remains undefined.²⁴

b. *The Moon Agreement*

In 1979, the U.N. again gathered to address the ownership of extracted space resources and discuss the creation of an international space regulatory body.²⁵ Unfortunately, the resulting treaty, known colloquially as ‘the Moon Agreement,’ is widely regarded as a failure because it failed to create a stable legal foundation.²⁶ Most states refused to sign the Moon Agreement: to date, only six have ratified it.²⁷

Although the Moon Agreement is considered non-binding, it would be unwise for a state to dismiss the Moon Agreement altogether.²⁸ In effect, the Moon Agreement was drafted to supplement the Outer Space Treaty, and it clarifies and reinforces the articles of the Outer Space Treaty, while offering more detailed provisions regarding potential human activities in outer space.²⁹ While its low signatory count

²³ Outer Space Treaty, *supra* note 9, at art. VI (asserting that inter-state issues are to be resolved by the states involved and specifying state parties could implicitly exclude all other types of actors); *see id.*, art. IX (“States [p]art[y] to the [t]reaty shall be guided by the principle[s] of cooperation and mutual assistance.”).

²⁴ Taylor R. Dalton, *Developing the Final Frontier: Defining Private Property Rights on Celestial Bodies for the Benefit of All Mankind*, 4 (Oct. 6, 2010) (unpublished Graduate Student Paper, No. 25, Cornell Law School) (on file with Cornell University Law Library) (“[a] celestial body is not defined in [sic] under law. The things that likely fall into the category of celestial bodies include planets, planetary satellites—like the Moon, astronomical objects, asteroids, comets, and stars. It seems that *celestial bodies* encompasses all extraterritorial, physical objects hurdling through outer space.”) (emphasis added); *see also* Hedges, *supra* note 14, at 400-02.

²⁵ Senjuti Mallick & Rajeswari Pillai Rajagopalan, *If Space is the ‘Province of Mankind’, Who Owns its Resources?*, OBSERVER RSCH. FOUND. 11 (Jan. 2019), https://www.orfonline.org/wp-content/uploads/2019/01/ORF_Occasional_Paper_182_Space_Mining.pdf; *see generally* Moon Agreement, *supra* note 10.

²⁶ Mallick & Rajagopalan, *supra* note 25, at 14; *see also* Nelson, *supra* note 2, at 403-04 (discouraging private investors and causing many to place their bets elsewhere rather than invest in a tenuous, uncertain industry); Michael Listner, *The Moon Treaty: Failed International Law or Waiting in the Shadows?*, SPACE REV. (Oct. 12, 2011), <https://www.thespacereview.com/article/1954/1>; *see generally* Moon Agreement, *supra* note 10.

²⁷ Listner, *supra* note 26 (asserting that this could change if Russia, the United States, or China ever decided to become a signatory as each state pulls enough political clout that their acquiescence of the Moon Agreement would serve to considerably legitimize its provisions).

²⁸ *Id.* at 14 (“Assuming that the Moon Treaty has no legal effect because of the non-participation of the Big Three [Russia, the United States, and China] is folly.”).

²⁹ Richard B. Bilder, *A Legal Regime for the Mining of H-3 on the Moon: U.S. Policy Options*, 33 FORDHAM INT’L L.J. 243, 269 (2010).

weakens the Moon Agreement's legitimacy, it will likely influence future discussions pertaining to the continued evolution of space law.³⁰ At the very least, it provides states with a platform from which discussions can begin.³¹ Among other things, the Moon Agreement clarifies that parties have the right to extract space resources for scientific purposes and goes so far as to allow parties to use space resources "for the support of their missions."³²

Both the Outer Space Treaty and the Moon Agreement "resist private ownership and appropriation" but do not "prohibit the commercialization of outer space outright."³³ However, the Moon Agreement prohibits *commercial* exploitation of the same without the creation of an international regime to equitably regulate those activities.³⁴ The largely undeveloped legal structure of international space law leaves nations looking to enter the realm of space resource extraction with many questions and nowhere to turn.

While sentiments reflected in both documents are wholesome and well-meaning, they are naïve: choosing the self over others is human nature.³⁵ The recent global rise of nationalism does little to inspire hope of states working together "for the benefit and in the interest of all countries"; it is much more likely states will actively compete for resources in space in the same way they do on Earth.³⁶

³⁰ Listner, *supra* note 26 at 14 ("[E]ven though the Moon Treaty is technically not binding...it is technically valid international law. Even with only six nations ratifying the Moon Treaty, the fact that eleven other nations...have acceded to or become signatories to the Moon Treaty creates a shadow of customary law that could grow such that non-parties could find themselves overshadowed by the penumbra of the Moon Treaty, especially if those non-parties take no action to refute its legitimacy.").

³¹ Bilder, *supra* note 29, at 259.

³² Moon Agreement, *supra* note 10, at art. 6(2).

³³ Meyer, *supra* note 3, at 250.

³⁴ Moon Agreement, *supra* note 10, at art. 11(5); *see* Meyer, *supra* note 3, at 11 (discussing how each treaty seeks to create barriers against the unilateral appropriation of a commercial entity in a manner that conflicts with international interests); *see generally* Mallick & Rajagopalan, *supra* note 25.

³⁵ ANDREW M. KAMARCK, *ECONOMICS AS A SOCIAL SCIENCE: AN APPROACH TO NONAUTISTIC THEORY* 22 (2002) ("A fundamental assumption of economics is that the dominant drive in individuals is a rational striving to maximize self-interest. This behavior is in essence a constant in all human nature: it is inherited in our genes and is a characteristic of the human biogram.").

³⁶ Prasenjit Duara, *Development and the Crisis of Global Nationalism*, BROOKINGS INST. (October 4, 2018), <https://www.brookings.edu/blog/future-development/2018/10/04/development-and-the-crisis-of-global-nationalism> ("[C]entral to the modern history of nation-states is the alternation between capitalist expansion and a closing off of the national economy based on 'the principle of social protection' but also on ethnic exclusivism and hostile nationalism. Today, aided by the volatility of the global economy, a narrower ethnic—sometimes even racist—vision of the nation has reasserted itself, which can be seen in the support of the can be seen

II. PRINCIPLES OF OWNERSHIP AND THE CREATION OF LEGAL TITLE

No controlling body of law states that international law shall apply in outer space.³⁷ Therefore, it is unclear what method may be used in the future to determine the ownership of anything existing in space. On Earth, the ownership of property describes a collection of legally protected rights and interests, including the right to transfer, exclude, use, destroy, enjoy the fruits of, and possess, and neither ownership nor possession of a property is indicative of the other.³⁸ While the Outer Space Treaty prohibits the ownership of extra-terrestrial property, it leaves the question of extracted space resources open.³⁹ Several legal doctrines exist which states could utilize to claim rights over space resources, including the principles of discovery and conquest, possession, split estates, and adverse possession.

Colonial powers used the Discovery Doctrine during the Age of Discovery to allocate ownership and sovereignty of undiscovered territories.⁴⁰ The Discovery Doctrine granted sole and exclusive rights to the first government whose explorers discovered and possessed the land.⁴¹ Ownership rights over a property historically adhered to the *ad coelum* doctrine, which gave real property owners control over the land itself, and the air above it and the ground below it.⁴²

in the support of elected populist leaders around the globe."); Hedges, *supra* note 14, at 377; *see generally* Outer Space Treaty, *supra* note 9.

³⁷ Cestmir Cepelka et al., *The Application of General International Law in Outer Space*, 36 J. AIR L. & COM. 30, 30 (1970) ("However, there are also a large number of rules of general international law which, although not expressly mentioned by the [Outer] Space Treaty, are ipso iure to be applied to outer space (including the Moon and other celestial bodies) thus forming an *ingredient* of its legal regime.") (emphasis added).

³⁸ *See generally* Popov v. Hayashi, No. 400545, 2002 WL 31833731 (Ca. Sup. Ct. 2002) (finding that the possession of property occurs when a party intends to take control of an object or place and physically manifests that intent).

³⁹ John G. Wrench, *Non-Appropriation, No Problem: The Outer Space Treaty Is Ready for Asteroid Mining*, 51 CASE W. RES. J. INT'L L. 437, 437 (2019) ("[T]he non-appropriation principle is most accurately viewed as a flexible premise from which the international community is free to fashion unique laws governing resource extraction in outer space.").

⁴⁰ *See* Peter Mancall, *The Age of Discovery*, 26 JOHNS HOPKINS U. PRESS 26, 27 (1998) (defining 'the Age of Discovery' as "the 'long' sixteenth century, running from 1492 to the establishment of English colonies in mainland North America during the early seventeenth century").

⁴¹ Johnson v. M'Intosh, 21 U.S. 543, 562 (1823) ("The accepted principle governing the discovery of barbarous countries by civilized people is that discovery gave the state by whose subjects or by whose authority it was made the exclusive right to settle, possess, and govern the new land, and the absolute title to the soil, subject to certain rights of occupancy only in the natives.").

⁴² *See generally* Chad J. Pomeroy, *All Your Air Right Are Belong to Us*, 13

The Rule of Capture was a method to gain rights of ownership to territory following a forceful possession or war.⁴³ Since the end of World War II, however, states refuse to recognize this method as a legitimate tactic to create rights of ownership or possession.⁴⁴ Possession is the intentional physical dominion or control of an object or land.⁴⁵ One may have possession of an object or real property without owning it.⁴⁶

Fugitive resources are natural resources that move freely between properties and may be claimed by any landowner whose property is affected by such resource.⁴⁷ Examples include oil and water, as neither is considered to be a landowner's property until the landowner captures it in some manner.⁴⁸ Often, as landowners compete for control of the resource, they create a "race to pump" situation, which often results in detrimental impacts to the environment and a tragedy of the commons.⁴⁹

Split estates occur where a landowner severs ownership rights between the land above and below the surface of the property to transfer or sell either of those rights to another party.⁵⁰ This form of ownership most often is used where minerals are present.⁵¹

The law of acquisition by adverse possession states that a property owner may lose the title of their property to another who possesses it without the owner's permission for a period of time exceeding the statute of limitations in that particular jurisdiction.⁵² Therefore, adverse possession is a legal process that allows a party to create a new title for property already under the ownership of another.⁵³ The only methods

NW. J. TECH. & INTELL. PROP. 277, 287-96 (2015) (describing how, once the majority of Earth's landmasses were claimed, states no longer relied upon this method to settle issues of territorial distribution).

⁴³ See Jason Scott Johnston, *The Rule of Capture and the Economic Dynamics of Natural Resource Use and Survival Under Open Access Management Regimes*, 35 ENV'T L. 855, 856 (2005).

⁴⁴ G. A. Res. 3314 (XXIX), annex, Definition of Aggression (Dec. 14, 1974) [hereinafter Definition of Aggression].

⁴⁵ Allen v. Welch, 770 S.W.2d 521, 522 n.1 (Mo. Ct. App. 1989).

⁴⁶ *Id.*

⁴⁷ *The Rights and Duties Inherent in the Ownership of Real Property: Oil and Gas and Other Natural Resources*, LAW SHELF, <https://lawshelf.com/courseware/entry/oil-and-gas-and-other-natural-resources> (last visited Jan. 6, 2020) [hereinafter Rights & Duties].

⁴⁸ *Id.*

⁴⁹ Garrett Hardin, *The Tragedy of the Commons*, 162 AM. ASS'N FOR THE ADVANCEMENT OF SCI. 1243, 1244 (1968); see also Rights & Duties, *supra* note 47.

⁵⁰ U.S. Dep't of the Interior: Bureau of Land Mgmt., *Leasing & Dev. of Split Estate*, BLM, <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/split-estate> (last visited Jan. 5, 2020).

⁵¹ *Id.*

⁵² *Adverse Possession*, JUSTIA (Dec. 2021), <https://www.justia.com/real-estate/home-ownership/owning-a-home/adverse-possession/>.

⁵³ JESSE DUKEMINIER ET AL., PROPERTY: CONCISE EDITION 132-34 (Rachel E.

a true owner has to combat the process of adverse possession is to interrupt the statute of limitations before it has run to its entirety or give the adverse possessor permission to use the land.⁵⁴ The true owner can achieve the former of these in two manners: either bringing forth a successful ejectment action against the adverse party or by re-entering the property and establishing possession thereof.⁵⁵ As this concept is one of title creation, it requires the presence of an existing owner with property rights.⁵⁶

III. APPROACHES TO THE ALLOCATION OF UNSETTLED REGIONS AND TERRITORIES

Over the course of the twentieth century, the international community was presented with the practical challenges of determining the ownership and allocation of natural resources in neutral territories such as Antarctica, the ocean, the International Space Station, the Moon, and outer space. The solutions to some of the aforementioned entities were unique and have enjoyed varying degrees of success to date. Yet, as space mining becomes an ever-more certain reality for humanity, the issue of the ownership and allocation of space resources remains unresolved. While the Outer Space Treaty and the Moon Agreement began the process of developing general principles of space law, neither does so with the degree of detail necessary to establish a legal framework relevant to the exploitation of space resources.⁵⁷

Barkow et al. eds., 2d ed. 2017) (adding that, to trigger the statute of limitations, the adverse party must meet the five criterion of adverse possession: (1) *actual entry*, which requires the adverse party to possess the land and somehow use or change it; (2) *exclusive possession*, which states the adverse party's use and possession of the disputed land cannot be shared by the public or the true owner; (3) *open and notorious*, which mandates the adverse party must be upfront about their intention of possessing the property rather than hiding and punishes the negligent or dormant true owner's passivity; (4) *hostile and adverse*, which requires that the adverse party's possession of the land cannot occur with the true owner's permission; and (5) *continuous and uninterrupted*, which states that while the adverse party's possession must be continuous for the statutory period, it does not have to be constant, so long as the adverse party uses the land in the same manner and with the same frequency that the true owner would have).

⁵⁴ Emily Doskow, *Adverse Possession: When Trespassers Become Property Owners*, NOLO LEGAL ARTICLES, <https://www.nolo.com/legal-encyclopedia/adverse-possession-trespassers-become-owners-46934.html> (last visited Jan. 4, 2020) (explaining that the latter is defeated because they no longer fulfill the element requiring the adverse possessor to be hostile and adverse).

⁵⁵ DUKEMINIER ET AL., *supra* note 53.

⁵⁶ *Id.*

⁵⁷ Bilder, *supra* note 29, at 257.

a. *Antarctica*

As early as the second century C.E., Greek scholars theorized that the Arctic Circle had a southern counterpart: hence the name *Antarctica*, or “opposite the Arctic Circle”.⁵⁸ Throughout the 1700s, various expeditions originating from a myriad of states explored the waters where Antarctica was thought to be; however, it was not until 1820 that a confirmed sighting of the continent took place.⁵⁹ Carsten Borchgrevink and his crew became the first to build huts and spend winter on Antarctica in 1899 as the continent’s inaccessibility, harsh conditions, and lack of technology had previously proven to be unscalable barriers.⁶⁰

Most Antarctic expeditions performed in the second half of the nineteenth century were sent to survey the landmass, although some parties also conducted scientific research as well, and some voyages were undertaken for purposes of sealing and whaling.⁶¹ Generally, activities were peaceful during this time, although several countries, mindful of the possibility of discovering exploitable economic resources and the resulting possible future disputes for control, laid various claims on Antarctic territory.⁶² None of these claims (based on the law of discovery, not capture) were ever formally recognized, but they caused enough international friction that the U.N. finalized the Antarctic Treaty in 1959.⁶³

The Antarctic Treaty is an international agreement that frames the use of Antarctica as “exclusively for peaceful purposes” and guarantees the right of any observer to complete access and inspection of all areas of Antarctica south of 60° latitude.⁶⁴ It bans future claims on its territory, as well as research done for commercial purposes, and weapons development or testing, while promoting international

⁵⁸ See Oceanwide Expeditions, *A Brief History of Antarctica in Maps*, MAR. EXEC.: INTELL. CAP. FOR LEADERS (Feb. 4, 2018, 7:31 PM), <https://www.maritime-executive.com/features/a-brief-history-of-antarctica-in-maps> (alleging that the origin of the name “Antarctica” is attributed to Marinus of Tyre).

⁵⁹ *Id.*

⁶⁰ *An Antarctic Time Line: 1519-1959*, SOUTH-POLE.COM, <https://www.south-pole.com/p0000052.htm> (last visited Dec. 18, 2019).

⁶¹ *Id.*

⁶² Robin Marks, *The Real No-Man’s Land*, ORIGINS, <https://www.exploratorium.edu/origins/antarctica/place/nomansland.html> (last visited Jan. 2, 2020) (discussing countries who made a claim include Britain, Norway, France, Australia, New Zealand, Argentina, and Chile; additionally, Russia and the U.S. have reserved the right to make a claim); see The Antarctic Treaty, art. IV § 2, Dec. 1, 1959, 402 U.N.T.S. 71 (banning all future claims on its territory) [hereinafter Antarctic Treaty].

⁶³ See generally KLAUS DODDS, *THE ANTARCTIC: A VERY SHORT INTRODUCTION* (2012).

⁶⁴ See Antarctic Treaty, *supra* note 62; see generally *An Antarctic Time Line*, *supra* note 60.

cooperation, environmental preservation, and conservation; it is widely viewed as a model treaty in international cooperation.⁶⁵ Similarly to the manner in which outer space is currently treated, Antarctica is seen as common, neutral ground.⁶⁶

Almost all activity in Antarctica today is in furtherance of science.⁶⁷ Nonetheless, actors and states often have diverging interests, goals, and priorities. With so much variance present, conflict is bound to arise. Unfortunately, much like the Moon Agreement, the Antarctic Treaty failed to set a precedent or create a system or organization equipped to deal with conflict between parties.⁶⁸ In their review of the Antarctic Treaty, the writers of the Origins Project state: “[W]here everyone and no one is at the helm...decisions that can make or break the preservation of Antarctica’s unique scientific opportunities depend on an unprecedented political system designed to have no particular decision-making leader.”⁶⁹

Like Antarctica, outer space is notable for its inaccessibility, harsh conditions, and wealth of natural resources. Neither Antarctica nor outer space is owned or legitimately claimed by any entity or state in any capacity, and the exploration of both Antarctica and outer space are reserved strictly for scientific purposes.⁷⁰ However, Antarctica’s natural resources are shrouded in an additional layer of protection that space resources lack: the Protocol on Environmental Protection to the Antarctic Treaty. This treaty sets Antarctica and its resources aside as a “natural reserve devoted to peace and science,” and places an absolute ban on mining, a sentiment to which signatories have recommitted as recently as 2016.⁷¹ Officially up for review in 2041, the Antarctic mining ban is

⁶⁵ Marks, *supra* note 62; see generally Antarctic Treaty, *supra* note 62.

⁶⁶ Justin Calderon, *The Tiny Nation Leading a New Space Race*, BBCFUTURE (July 16, 2018), <https://www.bbc.com/future/article/20180716-the-tiny-nation-leading-a-new-space-race>.

⁶⁷ COMMITTEE ON ANTARCTIC POLICY & SCIENCE, NAT’L RES. COUNSEL, SCIENCE & STEWARDSHIP IN THE ATLANTIC 22 (1993); Melissa Wiley, *Tourism in Antarctica*, BUS. INSIDER (Dec. 31, 2019, 2:11 PM), <https://www.businessinsider.com/how-to-visit-antarctica-travel-tourism-increase-luxury-2019-12> (excepting tourism, which has increased by 50% in the last four years).

⁶⁸ Marks, *supra* note 62 (meaning when controversy occurs, parties involved have no vehicle through which to resolve their issue and often matters remain unsettled).

⁶⁹ *Id.* (lamenting the fact that no higher authority exists to oversee Antarctic activities).

⁷⁰ Outer Space Treaty, *supra* note 9, at arts. I, III; see also Antarctic Treaty, *supra* note 62, at art. IX(b).

⁷¹ Protocol on Environmental Protection to the Antarctic Treaty, art. 7, Oct. 4, 1991, 2941 U.N.T.S. [hereinafter Madrid Protocol]; *Protocol on Environmental Protection to the Antarctic Treaty (The Madrid Protocol)*, AUSTL. ANTARCTIC PROGRAM, <http://www.antarctica.gov.au/law-and-treaty/the-madrid-protocol#mining> (last visited Dec. 28, 2019) [hereinafter AAD].

likely to stay in force despite the pushback it receives from countries interested in exploiting Antarctic resources such as the U.S., Japan, and Russia.⁷² The Madrid Protocol contains lengthy procedures on this matter in order to dissuade such a change of heart.⁷³ The environmental concerns coupled with the technological impracticalities will continue to outweigh the cost of mining in Antarctica for some time to come.⁷⁴

While the Antarctic Treaty limits use of resources and stresses preservation and conservation, the Outer Space Treaty does not.⁷⁵ Further, the Outer Space Treaty does not address the issue of space mining: it was not until the Moon Agreement that space mining for purposes of commercial exploitation was prohibited.⁷⁶

b. *The Law of the Sea*

One of the oldest representations of maritime legal code is the *Nomos Rhodion Nautikos*, a collection of Byzantine laws written around 800 B.C.E. that regulated maritime activity in the Mediterranean.⁷⁷ Little is known about Rhodian Sea Law as most of its provisions are lost to history, but its spirit survived for centuries and inspired Roman and medieval legal codes, which in turn, influenced modern-day maritime law.⁷⁸

⁷² AAD, *supra* note 71; see Madrid Protocol, *supra* note 71, at art. 7.

⁷³ See generally Madrid Protocol, *supra* note 71.

⁷⁴ *Human Impacts on Antarctica and Threats to the Environment—Mining and Oil*, COOL ANTARCTICA, https://www.coolantarctica.com/Antarctica%20fact%20file/science/threats_mining_oil.php (last visited Feb. 4, 2020) (“Antarctica’s weather, ice and distance from any industrialized areas mean that mineral extraction would be extremely expensive and also extremely dangerous.”); Cecilia Jamasmie, *Mining the Antarctic A Big No-No*, MINING (Nov. 3, 2014, 3:39 PM), <https://www.mining.com/mining-the-antarctic-a-big-no-no-57506> (featuring Fred Olsen, a Norwegian shipping magnate, regarding his views on Antarctic mining: “There is absolutely no hurry... [t] here is much too much oil right now. And in any case it will be the most expensive oil in the world.”).

⁷⁵ Compare Outer Space Treaty, *supra* note 9, at arts. II, VIII (permitting the use of natural resources for scientific purposes implicitly grants limited ownership status over undetermined amounts of space resources—as discussed in the Introduction, the Outer Space Treaty is mainly about freedom of scientific exploration and *use* for all of mankind—it does not attempt to address the issues of environmental protection and preservation), with Antarctic Treaty, *supra* note 62, at arts. IX(a), IX(f) (relating to the *use* and *preservation and conservation* of the natural resources of Antarctica) (emphasis added).

⁷⁶ Moon Agreement, *supra* note 10, at art. 11(5) (until such time that an international regime is created to equitably regulate those activities); see also Mallick & Rajagopalan, *supra* note 25, at 11.

⁷⁷ Lloyd Duhaime, *Lex Rhodia: The Ancient Ancestor of Maritime Law—800 BC*, DUHAIME.ORG, <http://www.duhaime.org/LawMuseum/LawArticle-383/Lex-Rhodia-The-Ancient-Ancestor-of-Maritime-Law—800-BC.aspx> (last visited Jan. 28, 2022).

⁷⁸ *Id.* (“Rhodian maritime law... is explicitly mentioned in Book 2, Title 7 of

International sea law remained largely undeveloped until the dawn of the Age of Discovery in the early seventeenth century when European states collectively increased their seafaring activities.⁷⁹ The need for more established maritime principles was clear to all involved as different states were conducting their affairs according to contrasting legal principles.⁸⁰ Notably, Spain and Portugal declared exclusive control and ownership of lands and bodies of water their explorers discovered, and justified their actions under the principle of *mare clausium*, meaning “closed sea.”⁸¹ In response, philosopher Hugo Grotius published *Mare Liberum*, or “Freedom of the Seas,” which asserted all nations had the right of free and equal access to oceans for purposes of trade⁸² and declared nearly all of the ocean to be international territory, except for portions directly abutting a nation’s coast.⁸³ European powers adopted Grotius’ maritime philosophy and acknowledged that a country’s reach or coastal rights extended roughly three nautical miles from its shorelines.⁸⁴ The “three mile rule” stated that a nation had sole legal jurisdiction and control over the natural resources that fell within the distance previously stated; anything further fell into the realm of international waters.⁸⁵

the Roman law text, *Opinions of Julius Paulus*... [t]he five meager provisions which have survived only [provide] as to emergency cargo jettisoning.”).

⁷⁹ Amanda Briney, *A Brief History of the Age of Exploration*, THOUGHTCO, <https://www.thoughtco.com/age-of-exploration-1435006> (Jan. 23, 2020) (clarifying it was necessary for each state to make these advances within a similar timeframe so as to remain competitive with their neighbors).

⁸⁰ Dennis Bryant, *Mare Clausium*, MARITIME LOGISTICS PRO. (Mar. 1, 2011), <https://www.maritimeprofessional.com/blogs/post/mare-clausum-13317>; see also William Lytle Schurtz, *The Spanish Lake*, 5 HISP. AM. HIST. REV. 181, 182 (1922) (“[B]y 1542 Spain held, or claimed... the whole eastern shore of the Pacific from the region of Cape Mendocino to that of Cape Horn. The southern entrance at the Straits of Magellan it later guarded with an occasional fleet, when there was danger of an invader.”).

⁸¹ Bryant, *supra* note 80.

⁸² See HUGO GROTIUS, *MARE LIBERUM* 7 (1609) (arguing the right to innocent passage over land should be extended to the sea “every nation is free to travel to every other nation, and to trade with it”); see *id.* at 28 (comparing the ocean to air: neither resource can be occupied because they are so limitless while the use of both is necessitated by all); see The United Nations Convention on the Law of the Sea, art. 19, art. 87(1), Dec. 10, 1982, 1833 U.N.T.S. 397 [hereinafter *Law of the Sea*] (clarifying that the right to innocent passage survives to this day and freedom of the high seas is the law of the day).

⁸³ Ricardo J. Romulo, *Unclos: ‘Mare Liberum’ or ‘Mare Clausum’?*, INQUIRER (Aug. 13, 2016, 12:31 AM), <https://opinion.inquirer.net/96462/unclos-mare-liberum-or-mare-clausum>.

⁸⁴ H. S. K. Kent, *The Historical Origins of the Three-Mile Limit*, 48 THE AM. J. OF INT’L L. 537, 543 (1954) (positing that, alternatively, coastal rights extended as far as the reach of a cannon fired from land).

⁸⁵ *Id.*

By the middle of the twentieth century, however, states began again to struggle with the allocation and ownership of the ocean. The development of technology that enabled countries to detect natural resources occurring outside of their coastal waters ignited a new wave of territorial disputes, as many states expanded the scope of their coastal waters to include newfound resources they wished to exploit.⁸⁶ This, in turn, led to the first conference on the Law of the Sea in 1956, which lasted until 1958 and settled some areas of maritime law.⁸⁷ The conference produced four documents, but left some questions unanswered, so in 1973 and again in 1982, the United Nations held two more conferences on this matter “to settle, in a spirit of mutual understanding and cooperation, all issues relating to the law of the sea.”⁸⁸

The third conference on the Law of the Sea produced the international agreement that dictates the rights and obligations of nations engaging in ocean activity.⁸⁹ The Law of the Sea has made many great strides towards settling “all issues relating to the law of the sea” by establishing “clear rights, duties, and [coastal] jurisdictions of maritime states...defin[ing] the limits of a country’s ‘territorial sea’...establish[ing] rules for transit through ‘international straits,’ and defin[ing] ‘exclusive economic zones’...”⁹⁰ Additionally, the Law of the Sea reasserted the common heritage doctrine that exists in space law, addressed and settled topics such as utilization and conservation of natural resources, both living and nonliving, and outlined acceptable uses of the ocean.⁹¹ While it is permissible for any state to capitalize on resources occurring in international waters, the Law of the Sea expressly decrees that parties must be mindful of maintaining yearly quotas when exploiting such resources.⁹² It also codified the principle of freedom of the seas and innocent passage, cementing Grotius’ philosophies into international law.⁹³

⁸⁶ Romulo, *supra* note 83.

⁸⁷ See generally Convention on the Territorial Sea and the Contiguous Zone, Apr. 29, 1958, 516 U.N.T.S. 205.

⁸⁸ Law of the Sea, *supra* note 82, at pmb1.

⁸⁹ See generally Law of the Sea, *supra* note 82 (describing how the Law of the Sea has since been amended multiple times, most notably in 1994 when deep-sea mining provisions were added).

⁹⁰ Stewart M. Patrick, *(Almost) Everyone Agrees: The U.S. Should Ratify the Law of the Sea Treaty*, THE ATLANTIC (June 10, 2012), <https://www.theatlantic.com/international/archive/2012/06/almost-everyone-agrees-the-us-should-ratify-the-law-of-the-sea-treaty/258301>.

⁹¹ Hedges, *supra* note 14, at 385; Law of the Sea, *supra* note 82, at arts. 61, 145, 246, 249 (discussing a selection of articles on the Law of the Sea that pertains to natural resource use).

⁹² Law of the Sea, *supra* note 82, at art. 62.

⁹³ *Id.*, arts. 19, 87(1).

The Law of the Sea is considered the supreme law of the sea, nevertheless a number of countries have failed to sign it.⁹⁴ Further, it presents a tragedy of the commons dilemma: equal access and use of the ocean can lead to increased exploitation of natural resources and decreased concern regarding pollution created by individual parties moving through the international waters.⁹⁵ This flagrant lack of commitment to conservation of the ocean’s resources by member states is one of the gravest threats to preservation and integrity of Earth’s oceans today: a treaty has little or no worth if its signatories disrespect or ignore the very contents to which they have agreed. To date, no states have officially denounced the Law of the Sea, although they may choose to exit the treaty at any time without cause or penalty.⁹⁶

The Law of the Sea definitively settles deep-sea mining.⁹⁷ Under the Law of the Sea, deep-sea mining, drilling, and the extraction of natural resources is permitted, yet the role of private enterprise is significantly restricted.⁹⁸ As things stand, mining seabed minerals is only permitted under the eye of an international authority.⁹⁹ In practice, such an authority

⁹⁴ Bilder, *supra* note 29, at 262 (reviewing the United States’ refusal to sign the Law of the Sea, despite its implementation of provision in part XI, which specifically addresses the portions of the treatise that gave the United States and other countries pause in 1982).

⁹⁵ See Hardin, *supra* note 49 (stating that, with so many diverse parties at play in international waters, it can be difficult to isolate the consequences of one’s individual actions and gather a measure their impact, making it easy for states to avoid taking responsibility for their actions: this is the crux of the paradox the tragedy of commons presents); see also Fikret Berkes, *Fishermen and the Tragedy of the Commons*, 12 ENV’T CONSERVATION 199 (1985); see also Gaia Vince, *How the World’s Oceans Could be Running Out of Fish*, BBC FUTURE (Sept. 20, 2012), <https://www.bbc.com/future/article/20120920-are-we-running-out-of-fish> (explaining that a classic example of states falling prey to the tragedy of the commons mindset is demonstrated by the fishing industry); Todd Woody, *The Sea is Running Out of Fish, Despite Nations’ Pledges to Stop It*, NAT’L GEOGRAPHIC (Oct. 8, 2019), <https://www.nationalgeographic.com/science/2019/10/sea-running-out-of-fish-despite-nations-pledges-to-stop/#close> (describing the BBC’s 2012 estimation: that approximately 85 percent of global fish populations were overexploited, as fish consumption had quadrupled since 1950, a trend which has not changed since then, while bluefin tuna populations have plummeted 97 percent).

⁹⁶ See Law of the Sea, *supra* note 82, art. 317; see generally *Japan Whaling: Why Commercial Hunts Have Resumed Despite Outcry*, BBC NEWS (July 2, 2019), <https://www.bbc.com/news/world-asia-48592682> (discussing the reasons behind Japan’s exit from the the International Whaling Commission—one of three regulatory entities of the Law of the Sea—and resumed its commercial whaling practices in July 2019, after repeatedly failing to convince the commission to lift its whale hunting moratorium).

⁹⁷ Law of the Sea, *supra* note 82, at annex III, art. 13.

⁹⁸ Bilder, *supra* note 29, at 262.

⁹⁹ Law of the Sea, *supra* note 82, at annex III, art. 13(1)(e).

would effectively be dominated by developing countries, which has given developed countries such as the United States pause.¹⁰⁰ To date, no state has yet attempted such an undertaking due to the associated high costs, the availability of more accessible alternative natural resources, and the devastating environmental impact.¹⁰¹ However, in recent years several states have expressed an interest in partaking in deep-sea mining endeavors in the near future.¹⁰² Deep-sea laws and regulations will most likely come under heightened levels of scrutiny at such time. It will be extremely advantageous that the protocols governing those activities are already firmly established and accepted.

Like deep-sea mining, several states have expressed an interest in commercial space mining.¹⁰³ Although space mining seems abstract and futuristic, several techniques have been identified and the necessary technology is on the cusp of being finalized.¹⁰⁴ Though the methods for settling ownership, allocation, and regulation of oceanic resources have been proscribed, the lack of determined laws and regulations governing space mining will almost certainly cause heated international debates as states take the next steps towards extracting natural resources from outer space.¹⁰⁵

The Law of the Sea is broader than the Madrid Protocol—it allows parties to extract limited amounts of natural resources from international waters for commercial purposes, a factor that could motivate otherwise unwilling countries to join in signing an agreement modeled after it for

¹⁰⁰ Nelson, *supra* note 2, at 405.

[I]nstead, the United States enacted legislation to license and authorize deep sea-bed mining by US companies. Ultimately, however, the United States recognized that proceeding in a totally unilateral manner would rock the international boat, the United States negotiated separate agreements with its major trading partners “to resolve overlapping claims with respect to mining areas.”

Id.

¹⁰¹ See Law of the Sea, *supra* note 82, art. 76; see also Olive Heffernan, *Seabed Mining is Coming—Bringing Mineral Riches and Fears of Epic Extinctions*, NATURE (July 25, 2019), <https://www.nature.com/articles/d41586-019-02242-y> (noting that scientists are still testing the environmental impacts of sea-bed mining; to date methods of sea-bed extraction have been found to have far-reaching and destructive impacts on marine life).

¹⁰² Wil S. Hylton, *20,000 Feet Under the Sea*, THE ATLANTIC (Jan./Feb. 2020), <https://www.theatlantic.com/magazine/archive/2020/01/20000-feet-under-the-sea/603040>.

¹⁰³ De Man, *supra* note 4; see Luxembourg Law, *supra* note 6; see generally U.S. Space Act, *supra* note 6.

¹⁰⁴ De Man, *supra* note 4. However, with only a handful of nations currently involved in space-related activities it is easy for states to prioritize matters other than the development of outer space law. See *id.*

¹⁰⁵ See generally Law of the Sea, *supra* note 82.

space resources.¹⁰⁶ In contrast, regulating the exploitation of oceanic resources is a priority: the barriers to entry are much lower for seafaring than they are for space travel and space mining.¹⁰⁷ Any state may access international waters and participate in ocean activity, all that is needed is a ship and sufficient funds to pay port fees.¹⁰⁸

Feasibility seems to matter, as the Goldman Sachs 2017 report contended the true barrier to space mining was not financial cost but rather psychological.¹⁰⁹ The United States has already invested three times as much in car-sharing technologies than the estimated cost for a future mission to find and bring a 500 ton asteroid to low-Earth orbit.¹¹⁰ But if society as a whole contends activities such as space mining to be unrealistic, they are less likely to get involved. As demonstrated by the higher levels of maritime involvement during the Age of Discovery, higher levels of diverse sea traffic interacting in a neutral space “free to all and belong[ing] to none,”¹¹¹ is ultimately what spurred nations in the 1700s to regulate such conduct.¹¹²

c. The International Space Station

Space stations, or orbital stations, are satellites capable of enabling humans to survive in orbit for prolonged amounts of time.¹¹³ As such, space stations differ from other spacecraft in their lack of

¹⁰⁶ See Madrid Protocol, *supra* note 71, at art. 7 (banning the extraction of natural resources for commercial purposes); see also Law of the Sea, *supra* note 82, at arts. 8, 153 (allowing the extraction of natural resources for commercial purposes).

¹⁰⁷ Law of the Sea, *supra* note 82, at art. 125 (clarifying that part X of the treaty covers the right of access of land-locked states to the oceans as well as the freedom of transit generally).

¹⁰⁸ *Id.*

¹⁰⁹ Jared Lindzon, *The Biggest Barrier to Future Space Exploration is in Our Heads*, FAST CO. (Oct. 22, 2019), <https://www.fastcompany.com/90419017/the-biggest-barrier-to-future-space-exploration-is-in-our-heads> (“[A]ccording to the experts who recently gathered to discuss the subject [of space exploration] in Germany, the biggest obstacle standing in the way of our progress toward going where no man or woman has gone before is entirely in our heads.”); see also Mallick & Rajagopalan, *supra* note 25, at 5.

¹¹⁰ Mallick & Rajagopalan, *supra* note 25, at 5 (referencing a study by the Keck Institute for Space Studies estimated the cost of such a mission to be approximately \$2.6 billion, not including the costs of developing the necessary technology, while the 2017 Goldman Sachs report found this was less than a third of what the United States has already invested in Uber).

¹¹¹ Oceans and the Law of the Sea, UNITED NATIONS, <https://www.un.org/en/global-issues/oceans-and-the-law-of-the-sea> (last visited Dec. 2, 2019).

¹¹² See Mancall, *supra* note 40.

¹¹³ Sharon Omondi, *How Many Space Stations Are There in Space?*, WORLD ATLAS (July 9, 2019), <https://www.worldatlas.com/articles/how-many-space-stations-are-there-in-space.html>.

landing facilities or major propulsion systems.¹¹⁴ Although multiple countries have built and launched space stations over the course of the twentieth century, only one space station was in orbit: the International Space Station (ISS), at the time this article was written.¹¹⁵ The ISS is a coordinated effort between the United States, Russia, Japan, Canada, and Europe launched in 1998, and has been manned continuously since 2000.¹¹⁶ The ISS has been used primarily as a platform for scientific research and experiments.¹¹⁷

Recognizing the desirability of an established framework “for the design, development, operation, and utilization of the Space Station,” and in an effort to promote cooperation in the use of outer space, the members of the ISS drafted the International Space Station Intergovernmental Agreement (IGA).¹¹⁸ However, the IGA provides only the basis for the law of the ISS and is additionally determined by two other levels of international agreements.¹¹⁹

At first glance, the nature of this structure can seem overly convoluted, but the principle sentiment guiding the actions of those on the ISS is simple: “each partner shall retain jurisdiction and control over the elements it registers and over personnel in or on the Space Station who are its nationals.”¹²⁰ This approach has been described as a “hub and spoke” structure,¹²¹ placing NASA at the center, or “hub,” and granting each participating country, or “partner,” the ability to extend its national jurisdictions to the elements they provide to the ISS.¹²² The legal ramification of this arrangement is the creation of a kaleidoscopic approach

¹¹⁴ See Jaime Trosper, *Who Owns the International Space Station (ISS)?*, FUTURISM (Jan. 9, 2015), <https://futurism.com/owns-international-space-station-iss>.

¹¹⁵ Omondi, *supra* note 113.

¹¹⁶ Mark Garcia ed., *International Space Station Facts and Figures*, NASA (Oct. 28, 2019), <https://www.nasa.gov/feature/facts-and-figures>.

¹¹⁷ *International Space Station Legal Framework*, Eur. Space Agency, https://www.esa.int/Science_Exploration/Human_and_Robotic_Exploration/International_Space_Station/International_Space_Station_legal_framework (last visited Jan. 8, 2020) (including a study on the prolonged effects of space flight on the human body) [hereinafter ISS Framework].

¹¹⁸ International Space Station Intergovernmental Agreement, pmb., Jan. 29, 1998, T.S. 12927 (entered into force 2001) [hereinafter IGA]; see also *id.*

¹¹⁹ See generally ISS Framework, *supra* note 117 (containing four memoranda of understandings between NASA and the other participating space agencies, as well as various bilateral implementing arrangements between the space agencies, which distribute concrete guidelines and tasks among the national agencies “defining the rights, obligations, jurisdiction, and control of each of the countries regarding their contributions and property on the ISS”).

¹²⁰ IGA, *supra* note 118, at art. 5.

¹²¹ Nelson, *supra* note 2, at 410.

¹²² ISS Framework, *supra* note 117 (including the ability to apply their national laws to issues of liability, criminal conduct, and, notably, the protection of intellectual property).

to the allocation of ownership and control of the ISS, as the governing law, control, and ownership of each section in the ISS is designated to the state that provided the elements used to construct that area.¹²³

This “hub and spoke” concept extends to the ownership status of inventions developed on the ISS.¹²⁴ Article 21 of the IGA provides “activity occurring in or on a Space Station flight element shall be deemed to have occurred *only* in the territory of the Partner State of that element’s registry...except...any European Partner State may deem the activity to have occurred within its territory.”¹²⁵

IV. THE IMMINENCE OF SPACE MINING

It is thought that water droplets could be extracted from asteroids within the next five years.¹²⁶ With or without a controlling legal framework in place, the age of near-Earth asteroid mining is upon us, irrespective of the confusion, contention, and debate that surrounds the topic of space resources.¹²⁷ As mentioned in the Controlling Law section, neither the Outer Space Treaty nor the Moon Agreement appears to enjoin mining and acquisition of property rights in outer space by national, international, or private enterprises outright.¹²⁸ Accordingly, some nations interpret the provision that prohibits states from owning celestial bodies to allow for the ownership of any extracted space resources.¹²⁹

¹²³ See Garcia, *supra* note 116 (focusing specifically the diagram of the ISS designating its sections).

¹²⁴ IGA, *supra* note 118, art. 21(2-3) (meaning the country of inventorship shall be determined by the ownership of the section of the ISS where the invention was created or developed. To date, the IGA has been signed by fourteen governments: the United States of America, Canada, Japan, the Russian Federation, and 10 Member States of the European Space Agency (Belgium, Denmark, France, Germany, Italy, The Netherlands, Norway, Spain, Sweden and Switzerland); the UK joined in 2012, with Hungary and Luxembourg committing to the Space Station program in 2019, along with ESA-cooperating state Slovenia).

¹²⁵ *Id.* at arts. 16, 22 (discussing how the European states are considered one homogenous entity and are referred to as ‘the European Partner’ but also any European state may extend its laws and regulations to the European elements, equipment and personnel).

¹²⁶ Erin C. Bennett, *To Infinity & Beyond: The Future Legal Regime Governing Near-Earth Asteroid Mining*, 48 TEX. ENV’T L.J. 81, 82 (2018).

¹²⁷ Chris Calam, *First Asteroids, Now the Moon: Space Mining Inches Closer to Reality*, THERMOFISHER SCI. (Apr. 30, 2019), <https://www.thermofisher.com/blog/mining/first-asteroids-now-the-moon-space-mining-inches-closer-to-reality>; see also Bennett, *supra* note 126, at 82.

¹²⁸ Bilder, *supra* note 29, at 272-73 (stating that these activities are merely qualified by the aforementioned “common heritage” duties, obligating individuals or entities who engage in commercial space mining endeavors to share the benefits or proceeds with those who cannot access outer space).

¹²⁹ Anderson et al., *supra* note 19 (regarding such views are shared by the International Institute of Space Law).

a. State-Initiatives

It is no secret that outer space contains a wealth of natural resources.¹³⁰ As the prices of resources rise and the availability of resources fall, states are beginning to look to outer space to fill their needs: in 2015 and 2017, the United States and Luxembourg passed initiatives that legalized space mining for commercial purposes.¹³¹ Both states argue that no international treaty exists that expressly provides for the legal status of space resources once they have been extracted from their celestial body of origin.¹³² Mindful of the Outer Space Treaty's ban of the ownership of extra-terrestrial property, both countries are quick to distinguish between *property* and *extracted resources*.¹³³ Neither country seeks to claim rights of ownership over celestial bodies—only over the extracted resources themselves.¹³⁴

Thus far, neither the United States nor Luxembourg has been pressured to justify the profit-based focus of their legislation, despite the verbiage prohibiting the commercial exploitation of space resources contained within the Moon Agreement.¹³⁵ Although neither the United States nor Luxembourg has signed the Moon Agreement, dismissing it entirely could be a mistake, considering some regard it as a clarification and reinforcement of the terms of the Outer Space Treaty rather than an entirely new and separate agreement.¹³⁶

Unsurprisingly, other countries have shown an interest in joining the United States and Luxembourg in the commercial extraction of space resources. During the Age of Discovery, nations followed a “race to own” system in order to allocate lands and resources rather than create a cooperative legal framework.¹³⁷ When the issues of access and ownership of Antarctica and the oceans were addressed, countries

¹³⁰ *Id.* (noting that the asteroid belt alone contains millions of tons of metals and mineral ore).

¹³¹ U.S. Space Act, *supra* note 6; Luxembourg Law, *supra* note 6.

¹³² *See* De Man, *supra* note 4.

¹³³ *See id.* (proposing the right to *possession* of celestial bodies, which would enable parties to claim the fugitive resources therefrom. The resulting ownership status is comparable to one who owns the mineral rights in a split-estate but has no rights over the land itself or the air above).

¹³⁴ U.S. Space Act, *supra* note 6, at § 403; Luxembourg Law, *supra* note 6, at art. 3.

¹³⁵ *See* Moon Agreement, *supra* note 10, at art. 11(7) (specifying as such without an international regime in place first); Mallick & Rajagopalan, *supra* note 254, at 11.

¹³⁶ *See* Bilder, *supra* note 29, at 268.

¹³⁷ *See* Carol R. Buxton, *Property in Outer Space: The Common Heritage of Mankind Principle vs. the “First in Time, First in Right” Rule of Property Law*, 69 J. AIR L. & COM. 689, 690-91 (2004).

sought to avoid that “hurry-hurry state of mind” preferring to guarantee themselves a share of the natural resources contained within those zones.¹³⁸ As members of the international community prepare to finally settle the issues of ownership and allocation of space resources, two further determinations must be made: whether members will adhere to the “race to own” method of allocation or seek to avoid it, and whether international law or domestic law will determine future developments in space law. Currently, only the United States and Luxembourg have produced state initiatives that address the legality of the commercial extraction of space resources. The remainder of this article section details three different approaches to the commercial extraction of space resources.

i. The United States

The Commercial Space Launch Competitiveness Act signaled the United States' intent to pursue commercial mining the spite of the Moon Agreement.¹³⁹ At its core, the U.S. Space Act legalized commercial exploration and exploitation of asteroid resources for American citizens. Additionally, it confirmed that entities are conferred property rights over resources they have obtained from such commercial activities.¹⁴⁰ As a result, the U.S. Space Act entitles American entities to mine asteroids that are free from harmful interference and to transfer, sell, and use any extracted space resources they obtain.¹⁴¹ While the U.S. Space Act focuses on asteroids specifically, it is reasonable to assume that the legalization of commercial extraction of ‘asteroid resources’ will set the precedent for all natural resources occurring in outer space, regardless of what type of celestial body from which they are extracted.

Supporters of the U.S. Space Act point out that its passage promotes the private exploration and utilization of natural resources in space, removes barriers to the development of an economically profitable and stable space resources industry, and fills a gaping hole in international space law's legal framework regarding the regulation and

¹³⁸ *Id.* at 697, 700 (suggesting this is counter-intuitive to the natural inclinations of mankind: “[t]hough this intention seems noble, reversing human behavior spanning several thousand years may prove impossible. Man intuitively exploits resources with his reach to better himself, not necessarily his neighbor”).

¹³⁹ U.S. Space Act, *supra* note 6, at §§ 108(a)(1), (a)(3) (permitting and encouraging commercial space mining activity without the prior existence of an intergovernmental regulatory entity); *see also id.*, at § 111(4) (“Nothing in this section shall be construed to *limit* the authority of the Secretary to discuss potential regulatory approaches.”) (emphasis added).

¹⁴⁰ *Id.* at § 108; Fabio Tronchetti, *The Space Resource Exploration and Utilization Act: A Move Forward or a Step Back?*, 34 SPACE POL'Y 1, 6 (2015).

¹⁴¹ Tronchetti, *supra* note 140, at 7.

exploitation of natural resources in space.¹⁴² Further, the U.S. Space Act indicates its contents do not violate any existing international obligations and that the right to collect and take possession of *in-situ* space resources, meaning resources in their original location, has been affirmed by state practice.¹⁴³ However, this does not negate the fact that the Act could be seen as an attempt by the United States to outmaneuver the Outer Space Treaty's non-appropriation clause and claim property rights over space resources.¹⁴⁴ The lack of consensus as to the definition of a celestial body further complicates this matter, because it is unclear what exactly constitutes a celestial body.¹⁴⁵ Therefore, the issue of whether asteroid resources can be exploited is uncertain.¹⁴⁶ Without any higher regulatory power in place, and the United Nations' refusal to act in such a capacity, it falls on other nations to recognize or criticize the U.S. Space Act.¹⁴⁷

To date, the consensus among the majority of states seems to be in support of the U.S. Space Act, with the notable exceptions of Russia and China.¹⁴⁸ Russia's official position appears critical of the U.S. Space Act, claiming it violates the Outer Space Treaty's non-appropriation clause.¹⁴⁹ However, even Russia expressed an interest in the commercial space mining industry and has taken steps to prepare for future endeavors in the field.¹⁵⁰ Meanwhile, China has taken the position that while it

¹⁴² *Id.* at 6-7.

¹⁴³ U.S. Space Act, *supra* note 6, at § 403 ("It is the sense of Congress that by the enactment of this Act, the United States does not thereby assert sovereignty or sovereign or exclusive rights or jurisdiction over, or the ownership of, any celestial body."); Julian Ku, *More on Why the U.S. is not Violating the Outer Space Treaty By Allowing Asteroid Mining*, OPINION JURIS (Nov. 29, 2015), <http://opiniojuris.org/2015/11/29/more-on-why-the-u-s-is-not-violating-the-outer-space-treaty-by-allowing-asteroid-mining> (stating that the U.S. House of Representatives Committee on Science, Space, and Technology studied whether the U.S. Space Act violated the Outer Space Treaty and "reasonably concluded that allowing private companies to exploit celestial bodies is not a 'national appropriation' within the meaning of the Outer Space Treaty").

¹⁴⁴ Tronchetti, *supra* note 140, at 6.

¹⁴⁵ Hedges, *supra* note 14, at 400-02; *see also* Tronchetti, *supra* note 140, at 5.

¹⁴⁶ Tronchetti, *supra* note 140, at 8.

¹⁴⁷ Catherine Doldirina, *Outer Space Laws and Legislation: Regulating the Province of All Mankind*, ENG'G & TECH. (Jan. 22, 2018), <https://eandt.theiet.org/content/articles/2018/01/outer-space-laws-and-legislation-regulating-the-province-of-all-mankind> (adding that the United Nations limits itself to providing the international community with a forum to discuss space policy—as with all international law the difficulty lies in finding a higher power or authority to make final determinations—this is no different in the area of space law; the United Nation's refusal to fill such a position is unsurprising and yet devastating, as few other international organizations connote a similar amount of legitimacy or political clout).

¹⁴⁸ Tronchetti, *supra* note 140, at 5.

¹⁴⁹ Mallick & Rajagopalan, *supra* note 25, at 9.

¹⁵⁰ JP Casey, *Russia Begins Talks with Luxembourg Over Space Mining Agreement*, MINING TECH. (Mar. 7, 2019), <https://www.mining-technology.com/>

is interested in commercial space mining, it will not adhere to any international or domestic laws attempting to regulate the exploitation of natural resources in space.¹⁵¹

ii. Luxembourg

The absence of an established international framework served to stagnate legal development in the realm of commercialized space mining since the Moon Agreement's passage in 1979.¹⁵² Only two years after the United States passed its Act, Luxembourg declared space resources "capable of being appropriated" and entered into force the Luxembourg Law on the exploration and use of space resources.¹⁵³ Currently, Luxembourg's economy is steel-based, but in recognition of the fact that supplies of steel on Earth are finite, Luxembourg strives to base its economy entirely off of space resources.¹⁵⁴ Like the United States, Luxembourg's primary objective in creating a domestic legal framework in regard to commercial space mining was to create legal certainty for private space mining companies and investors.¹⁵⁵

The Luxembourg Law has a similar attitude towards natural resources as that of the Law of the Sea; one provision compares fish and shellfish to space resources, explaining that both can be appropriated similarly, while oceans and celestial bodies cannot.¹⁵⁶ The provision specifies that, although the high seas are neutral territory, domestic laws protect property rights over resources extracted from the ocean—and domestic laws should also protect property rights in outer space.¹⁵⁷

[news/russia-begins-talks-with-luxembourg-over-space-mining-agreement](#) (including signing an agreement with Luxembourg to jointly mine for minerals in space); Mallick & Rajagopalan, *supra* note 25, at 9.

¹⁵¹ Stephen Chen, *China's Nuclear Spaceships Will be 'Mining Asteroids and Flying Tourists' as it Aims to Overtake US in Space Race*, S. CHINA MORNING POST (Nov. 17, 2020, 9:30 PM), <https://www.scmp.com/news/china/policies-politics/article/2120425/chinas-nuclear-spaceships-will-be-mining-asteroids>.

¹⁵² Brandon C. Gruner, *A New Hope for International Space Law*, 35 SETON HALL L. REV. 299, 356 (2005) ("By placing a moratorium on property rights in outer space, the space treaties do nothing more than stagnate the development of outer space and serve the interests of Third World countries,"—the U.S. Space Act offered states a method to sidestep the barriers of the Moon Agreement and move forward without an international regulatory body for the first time).

¹⁵³ Luxembourg Law, *supra* note 6, at art. 1; De Man, *supra* note 4.

¹⁵⁴ Charles Bjork, *The Luxembourg Space Resources Act and International Law*, DIPLAWMATIC DIALOGUES (Dec. 12, 2018), <https://fcilsis.wordpress.com/2018/12/12/the-luxembourg-space-resources-act-and-international-law/>.

¹⁵⁵ De Man, *supra* note 4.

¹⁵⁶ *Id.* (citing Conseil d'État, Advice N° CE 51.987, N° dossier parl. 7093, Apr. 7, 2017); *see also* Bjork, *supra* note 154.

¹⁵⁷ De Man, *supra* note 4 (citing Conseil d'État, Advice N° CE 51.987, N° dossier parl. 7093, Apr. 7, 2017).

Although the Luxembourg Law is very similar to the U.S. Space Act, it diverges from its American counterpart in two key areas: Luxembourg Law established an accreditation and licensing regime to limit and control who could conduct space mining activities, and it does not contain a nationality clause, meaning any entity established or registered in Luxembourg may apply to be accredited and licensed.¹⁵⁸ These provisions allow Luxembourg to not only benefit from the space mining industry more passively than the United States by issuing accreditations and licenses to entities of any nationality wishing to partake in commercial space mining endeavors and collecting the respective fees.

Eager to definitively quash any claims that Luxembourg sought to undermine the Outer Space Treaty, Etienne Schneider, Luxembourg's Deputy Prime Minister and Minister of the Economy asserted, "[t]he legal framework we put in place is perfectly in line with the Outer Space Treaty. It does not suggest to either establish or imply in any way sovereignty over a territory or celestial body. Only the appropriation of space resources is addressed in the legal framework."¹⁵⁹ Amid the growing international acceptance of the United States' interpretation of the Outer Space Treaty, many states received the Luxembourg Law positively.¹⁶⁰

b. Other Actors

Other states have expressed interest in creating domestic legal frameworks and expanding the scope of their space activities over the next decades; in 2017, the United Arab Emirates indicated interest in enacting a similar policy to the U.S. Space Act and the Luxembourg Law.¹⁶¹ Additionally, the European Space Agency announced plans to start mining for water and oxygen on the Moon by 2025.¹⁶²

¹⁵⁸ See Bjork, *supra* note 154; see also Luxembourg Law, *supra* note 6, at art. 4 (requiring entities interested in commercial space mining to first apply); *id.* art. 7 (providing the U.S. Space Act only applies to American citizens).

¹⁵⁹ Tanja Masson-Zwaan & Neta Palkovitz, *Regulation of Space Resource Rights: Meeting the Needs of States and Private Parties*, QIL (Jan. 30, 2017, 3:03 PM), http://www.qil-qdi.org/regulation-space-resource-rights-meeting-needs-states-private-parties/#_ftnref24 (signifying a global shift away from a narrow, literal interpretation of the Outer Space Treaty and towards a future in which the appropriation of space resources is legal).

¹⁶⁰ Alex Létourneau, *Asteroid Mining Becoming More of a Reality*, FORBES (Jan. 25, 2013, 3:28 PM), <https://www.forbes.com/sites/kitchconews/2013/01/25/asteroid-mining-becoming-more-of-a-reality/#1ae1033b74b5> (alleging that space resources can be utilized and appropriated without nations claiming sovereignty over the celestial bodies the resources are extracted from); see also Jolene Creighton, *Humanity's Future in Space Depends on Asteroid Mining*, FUTURISM (June 23, 2016), <https://futurism.com/humanitys-future-in-space-depends-on-asteroid-mining>.

¹⁶¹ Creighton, *supra* note 160.

¹⁶² Lauren Kent, *The European Space Agency Plans to Start Mining for*

Russia, China, and the United States have all signaled some level of intention to build a lunar base within the next few decades for two key reasons: to mine the Moon for helium-3 and to assist in the mining of asteroids.¹⁶³ In the more distant future, a lunar base would also serve to bring down the costs associated with interplanetary travel.¹⁶⁴ Japan is already in the process of developing a lunar base for these reasons and additionally hopes to establish a lunar colony on the Moon by 2030.¹⁶⁵ Japan was one of the first countries to enter into an agreement with Luxembourg for mining operations in celestial bodies.¹⁶⁶

According to Chinese state media, the Chinese government has many ambitions related to space exploration and mining.¹⁶⁷ Further, China has expressed an unwillingness to adhere to any regulatory scheme that would dictate its actions relating to the commercial extraction of space resources.¹⁶⁸ These intentions have not gone unnoticed by other major space players; concern for China's behavior in other areas flush with natural resources, such as Tibet and the South China Sea, may be indicative of the attitude the rest of the international community can expect from China in space.¹⁶⁹

Natural Resources on the Moon, CNN (Jan. 22, 2019, 6:01 PM), <https://www.cnn.com/2019/01/22/europe/mining-on-moon-trnd/index.html>.

¹⁶³ Mallick & Rajagopalan, *supra* note 25, at 9; Christopher Barnatt, *Resources From Space, A GUIDE TO THE FUTURE* (Feb. 6, 2016), https://www.explainingthefuture.com/resources_from_space.html (explaining that helium-3 is a compound emitted by the Sun that could serve as a clean energy source to power Earth for hundreds of years; a lunar base could also conserve the amount of rocket fuel needed for activities in space including space resource extraction—the Moon's gravitational pull is much lower than Earth's and requires less fuel to escape its atmosphere).

¹⁶⁴ Chen, *supra* note 151 (launching rockets from Earth requires over twenty times the amount of energy than launches from the Moon due to Earth's relatively stronger gravity).

¹⁶⁵ Richard Carter, *Out of this World: Inside Japan's Space Colony Centre*, PHYS.ORG (Mar. 30, 2018), <https://phys.org/news/2018-03-world-japan-space-colony-centre.html>.

¹⁶⁶ Mallick & Rajagopalan, *supra* note 25, at 7 (reaching such agreement very shortly after the Luxembourg Law was enacted in 2017).

¹⁶⁷ Chen, *supra* note 151 (alleging that China has plans to capture a near-Earth asteroid and transport it closer to Earth to extract its resources by 2034. Additionally, China hopes to build a permanent research base on the Moon by 2035 and develop nuclear powered space shuttles by 2040. If successful, the state media claims China will have the ability to build solar power plants in space soon thereafter); see also Mallick & Rajagopalan, *supra* note 25, at 9 (speculating that China has plans of using an asteroid as the base for a permanent space station in the future).

¹⁶⁸ Chen, *supra* note 151 (predicting that China will act according to the first capture doctrine).

¹⁶⁹ Namrata Goswami, *China's Get-Rich Space Program*, DIPLOMAT (Feb. 28, 2019), <https://thediplomat.com/2019/02/chinas-get-rich-space-program/> ("China's behavior in resource rich areas like Tibet and the South China Sea (SCS) reflects a story of unilateral coercion where it denied others their rights, established presence,

Dr. Namrata Goswami, a strategic analyst and expert in Chinese space and lunar policy, has stated:

[W]e must plan for a future in outer space where China will emerge dominant and establish its own legal frameworks benefitting its space industries and emerging private space startups. To believe otherwise of a political system where loyalty to the CCP [Chinese Communist Party] is paramount is to risk democratic access to space.¹⁷⁰

In contrast with China, India has not expressed much desire to participate in space mining activities thus far; India's current focus is on launching satellites.¹⁷¹ However, one function of satellites is to provide imaging that could aid in India's future endeavors to detect natural resources in space if India chooses to more fully pursue space mining activities at a later time.¹⁷² Additionally, as one of the few developing nations with an actively functioning space station, India acts as a model for developing countries facing issues on how to grow their space programs.¹⁷³

Finally, aside from state and national space programs, a number of private companies have expressed interest in engaging in some of the aforementioned space activities.¹⁷⁴ The early 2010s saw the rise of what was dubbed the asteroid-mining 'bubble' and the creation of leaders in the space-mining field, such as Deep Space Industries¹⁷⁵ and Planetary Resources.¹⁷⁶ Both companies planned to mine asteroids in the mid-to-late 2010s, but ran out of money and were subsequently purchased.¹⁷⁷

and then claimed those areas as Chinese Territory.”)

¹⁷⁰ *Id.*

¹⁷¹ See generally Ian A. Christiansen et al., *National Development Through Space: India as a Model*, in *SPACE TECHNOLOGIES FOR THE BENEFIT OF HUMAN SOCIETY AND EARTH* 453, 479 (Phillip Olla ed., 2009).

¹⁷² *Satellite Imagery for Natural Resources*, SATELLITE IMAGING CORP., <https://www.satimagingcorp.com/applications/natural-resources/> (last visited Jan. 7, 2020); see also Creighton, *supra* note 160.

¹⁷³ See Christiansen et al., *supra* note 171, at 459-63 (analyzing the set of elements that enabled the success of India's space efforts).

¹⁷⁴ See Barnatt, *supra* note 163.

¹⁷⁵ See *History*, BRADFORD SPACE, <https://www.bradford-space.com/about#history> (last visited Jan 14, 2020) (detailing how Bradford Space purchased Deep Space Industries in 2018, whose stated goal was to democratize access to deep space by fundamentally changing the paradigm for accessing deep space and substantially lowering the cost, noting “the resource potential of space outstrips that of any previous frontier—without the environmental impacts”).

¹⁷⁶ *Timeline*, PLANETARY RESOURCES, <https://web.archive.org/web/20180908070157/https://www.planetaryresources.com/company/timeline/> (last visited Jan 14, 2020) (stating their goal was to expand Earth's natural resource base and “bring the natural resources of space within humanity's economic sphere of influence”).

¹⁷⁷ *Company Profile*, BRADFORD SPACE, <https://www.bradford-space.com/>

By 2018, sources began to report that the so-called ‘asteroid-mining bubble’ had burst “for now,” citing cost and lack of vision as the main contributing factors.¹⁷⁸

More recently, private entities, such as SpaceX, and private citizens, such as Jeff Bezos, have begun dipping their toes in space travel and exploration.¹⁷⁹ It is only a matter of time before they and other private actors move on to the extraction of space resources. In the future, governments and private enterprises might merge into a diverse megacorporation in the spirit of the Dutch East India Trading Company, which was structured such that merchants could spread out the risk of investment by funding portions of several ships at a time.¹⁸⁰ Alternatively, states might fund research directly.¹⁸¹

Non-governmental agencies, such as The Hague International Space Resources Governance Working Group, have prepared “building blocks” to aid in the ultimate process of creating an international regulatory framework and clarify the legal uncertainties surrounding space resource utilization.¹⁸² One of these “blocks” would allow entities

about-bradford-company-profile.php (last visited Jan. 14, 2020); Jeff Foust, *Asteroid Mining Company Planetary Resources Acquired by Blockchain Firm*, SPACE NEWS (Oct. 31, 2018), <https://spacenews.com/asteroid-mining-company-planetary-resources-acquired-by-blockchain-firm/>.

¹⁷⁸ Atossa Araxia Abrahamian, *How the Asteroid-Mining Bubble Burst*, MIT TECH. REV. (June 26, 2019), <https://www.technologyreview.com/s/613758/asteroid-mining-bubble-burst-history/>; see also Tronchetti, *supra* note 140, at 6.

¹⁷⁹ Rincon, *supra* note 3; Maidenburg, *supra* note 3.

¹⁸⁰ Oscar Gelderblom et al., *An Admiralty for Asia: The Corporate Governance of the Dutch East India Company 21* (Erasmus Rsch. Inst. of Mgmt., Working Paper No. ERS-2010-026-F&A, 2010) (“The hot rivalry between the *voorcompagnieën* undermined the country's fragile political unity and economic prosperity, and seriously limited the prospects of competing successfully against other Asian traders from Europe.... An agreement was finally reached on March 20th, 1602, after which the Estates General issued a charter granting a monopoly on the Asian trade for 21 years.”); Bryan Taylor, *The Rise And Fall Of The Largest Corporation In History*, BUS. INSIDER (Nov. 6, 2013, 1:48 PM), <https://www.businessinsider.com/rise-and-fall-of-united-east-india-2013-11> (ensuring a merchant would not be ruined if a ship did not return, while also allowing for the simultaneous funding of hundreds of ships by hundreds of investors).

¹⁸¹ Alexander Zaitchik, *Taxpayers—Not Big Pharma—Have Funded the Research Behind Every New Drug Since 2010*, OTHER98.COM (Mar. 2, 2018, 12:10 AM), <https://other98.com/taxpayers-fund-pharma-research-development/>; Jeffrey Marvis, *Data Check: U.S. Government Share of Basic Research Funding Falls Below 50%*, SCIENCEMAG (Mar. 9, 2017), <https://www.sciencemag.org/news/2017/03/data-check-us-government-share-basic-research-funding-falls-below-50> (explaining that the American government heavily invests in private companies conducting medical research, which leads to a plethora of medical advances and breakthroughs).

¹⁸² De Man, *supra* note 4, at Conclusion; Anderson et al., *supra* note 19 (alleging such efforts are made in an attempt to “create an enabling environment for space resource activities that takes into account all interests and benefits all

unrestricted access to explore for space resources and grant them property rights over any space resource they extracted as a result.¹⁸³ Notwithstanding these efforts, legal certainty for parties interested in space resource utilization and exploration will depend on their own government's willingness to engage in multilateral efforts to clarify their international obligations.¹⁸⁴ Unfortunately, the very states who developed domestic legal frameworks regarding space resource extraction are now proving unwilling to engage on the international stage in regard to an international framework.¹⁸⁵ Therefore, until sufficient pressure for an international framework exists, it is safe to assume that further developments in space law will take place at the domestic level.

The international reception to the Space Act and the Luxembourg Law indicate that development of space law will be primarily driven by domestic law in the foreseeable future.¹⁸⁶ Additionally, the participation of commercial enterprises in the space industry has "recast" the Space Race from an endeavor that was largely public and national to one that is private and commercialized.¹⁸⁷ International laws may evolve in parallel with domestic legislation in the future, but in the interim, where territory and resources remain unclaimed by any nation, it is far more likely that deference will be given to existing domestic laws than a weak, oft-overlooked international treaty.¹⁸⁸

countries and humankind").

¹⁸³ De Man, *supra* note 4, at Conclusion; Anderson et al., *supra* note 19 (providing such property rights would be registered on an international registry, subject to time and area limitations and could be extended if/when an entity made a discovery and stated a claim).

¹⁸⁴ De Man, *supra* note 4, at Conclusion; Anderson et al., *supra* note 19.

Like the right of prospectors in the American West to stake claims for mineral prospecting, one building block would allow unrestricted access to explore for space resources on a priority basis. Rights obtained would be registered on an international registry, and time and area limitations would be put in place. Once a space prospector states a claim and makes a discovery, the right to develop could be extended. An international framework would be put in place to ensure that space miners have recognized property rights over the space resources that they extract.

Anderson et al., *supra* note 19.

¹⁸⁵ De Man, *supra* note 4.

¹⁸⁶ See Masson-Zwaan & Palkovitz, *supra* note 159.

¹⁸⁷ Meyer, *supra* note 3, at 261 (adding an additional complication to the creation of future regulation for the industry, as corporations and other private entities interested in the extraction of space resources will likely seek to influence the development of such domestic legal frameworks in ways that are favorable to their interests rather than the common heritage of mankind).

¹⁸⁸ Masson-Zwaan & Palkovitz, *supra* note 159.

V. WHAT (PROBABLY) COMES NEXT, AND WHY IT MATTERS

In 2018, NASA predicted that twenty-first century space activities will rely upon mining asteroids and estimated the industry could generate upwards of \$700 quintillion.¹⁸⁹ While it seems natural to fall into the 'hurry-hurry' mindset that dominated the Age of Discovery, the sheer vastness of space and its resources does not justify such an approach for the foreseeable future. For all of the celestial bodies and resources it contains, space is largely a barren expanse. Additionally the term "space race" is misleading because it implies that participating actors will chaotically scramble during a narrow timeframe.¹⁹⁰ However, the limited number of actors able to engage in space exploration, resource utilization activities, and the infinite size of outer space itself indicates that any "space race" that will occur will be quiet as opposed to confrontational.¹⁹¹

Many methods and systems have been suggested to fairly allocate space resources and celestial bodies between all nations, and extensive discussion of which is beyond the scope of this article.¹⁹²

¹⁸⁹ Creighton, *supra* note 160 (describing the necessity of raw materials to build space structures and predicting that comets will become "the watering holes and gas stations for interplanetary space craft"); Robert Garcia, *Regulating International Space Mining, an Enormous Industry*, PAC. COUNS. ON INT'L POL'Y (Oct. 23, 2018), <https://www.pacificcouncil.org/newsroom/regulating-international-space-mining-enormous-industry>.

¹⁹⁰ See generally Barnatt, *supra* note 163.

¹⁹¹ *Id.*

¹⁹² See Sarah Coffey, *Establishing a Legal Framework for Property Rights to Natural Resources in Outer Space*, 41 CASE W. RES. J. INT'L L. 119, 133-47 (2009) (detailing four suggested methods of allocating space resources fairly, including (1) creating an international regulatory regime similar to what the Moon Agreement proscribes; (2) a credit system; (3) the idea of unlimited ownership; and (4) a model similar to the ISS, and presenting her own new proposal: a hybrid of the aforementioned methods that includes a credit system and an international regulatory body); see also Meyer, *supra* note 3, at 258 (discussing the possibility of "space jurisdictions" to assign rights over regions of outer space, a difficult proposal to swallow due to the very nature of outer space itself—it is directionless and contains many moving/orbiting objects; the logical conclusion would not be states claiming "areas of the universe" to make up "space districts" but rather states should claim specifically the celestial bodies themselves, or claim orbital rights over the celestial bodies to account for their movement); see also Hedges, *supra* note 14, at 405 (advocating to keep the common heritage doctrine alive in any legal framework pertaining to outer space); Nelson, *supra* note 2, at 413 (suggesting the drafting of a new Moon Agreement and proposing eleven investment principles); David Everett Marko, *A Kinder, Gentler Moon Treaty: A Critical Review of the Current Moon Treaty and a Proposed Alternative*, 8 J. NAT. RES. & ENV'T L. 293, 345 (1993) (positing that "clearing up ambiguous concepts and recognizing the concerns of all interested parties in the test of a moon [sic] treaty are the first steps toward reconciling the competitive concerns of developed and

Suffice it to say each suggested method falls prey to the same fatal flaw: the mere implementation of any such system is predicated upon an international agreement to create such a legal framework and would present a variety of procedural obstacles that would have to be settled before any system could be created. Therefore, it is likely the doctrines of first discovery and/or first capture method that will be applied to stake ownership claims over newly discovered celestial bodies and space resources, and that nations involved in space activities will extend their jurisdictions to govern actors under their authority.

In the absence of an established legal framework, actors will likely rely on bilateral non-interference or cooperation contracts to provide some sense of stability regarding space activity. Actors could agree to reciprocal avoidance of each other's space resource extraction activities or agree to undertake them cooperatively.¹⁹³ Alternatively, participating actors could license out their services.¹⁹⁴

While increasing the availability of resources would be beneficial, flooding the global market with space resources could create widespread rippling effects and ultimately hurt the space mining industry itself.¹⁹⁵ The Moon Agreement requires actors engaged in space resources utilization activities to distribute the benefits provided by the extracted resources with those who lack such ability in an equitable manner.¹⁹⁶ As "equitable sharing" lacks definition, this requirement is not necessarily as hostile to private commercialization as it might initially seem.¹⁹⁷ However, to ensure that all countries will receive some benefit from utilizing space resources, a compulsory tax could be imposed on the profits and put into a fund.¹⁹⁸

The United States and Luxembourg both declared their respective frameworks to be in full compliance with the Outer Space Treaty and the Moon Agreement, yet neither treaty addressed the equitable dis-

underdeveloped states over the exploitation of the moon [sic] and other celestial bodies"). Like Hedges, Marko proposes drafting a new Moon Agreement. *See id.*

¹⁹³ *See generally* Barnatt, *supra* note 163 (operating under a module of vertical integration and performing all space resource utilization operations in-house, or specializing their activities to focus on one aspect of space resource utilization including the discovery, extraction, or production of space resources).

¹⁹⁴ *Id.* (limiting the scope of operations in such a way would allow more actors to profit from activities in space and dilute the burden of developing technology among more players).

¹⁹⁵ Mallick & Rajagopalan, *supra* note 25, at 6 (stating that in order to prevent space mining entities from enriching themselves at the cost of bankrupting other nations or industries, prices should be artificially regulated or taxed accordingly).

¹⁹⁶ Moon Agreement, *supra* note 10, at art. 11(7)(d).

¹⁹⁷ *Id.*; *see* Barnatt, *supra* note 163.

¹⁹⁸ Barnatt, *supra* note 163 (conceding that this would still involve a regulatory body to oversee the collection and distribution of such tax).

tribution of profits.¹⁹⁹ In spite of the United States' unwillingness to sign international laws such as the Law of the Sea or the Moon Agreement, it has refrained from directly disrespecting them.²⁰⁰ Hopefully, when the time comes, countries will acknowledge the importance of complying with this edict as well. After all, when all boats rise with the same tide, all participants benefit.

So long as countries form an inter-governmental regime to clarify the legal framework related to space mining and resource allocation, the Moon Agreement permits states to commercially mine space resources. However, it seems unlikely that states will actually adhere to this provision—the international community has had ample time to do so and has not. Lack of capability to negotiate and agree on acceptable terms cannot be cited as the reason—the existence of the International Tribunal for the Law of the Sea, which the Law of the Sea created by mandate, is evidence that speaks directly to the contrary.²⁰¹

There simply has been less motivation to create an international regime for space activities than to regulate activities in the oceans or Antarctica, which are much more accessible than outer space. Mining in either Antarctica or the oceans pose more immediately harmful and dangerous environmental consequences to everyone on Earth than mining space resources; states therefore had a higher level of interest in resolving mining issues 'closer to home.'²⁰² Assuming that all existing countries could agree to apply the same or a similar system of law to settle the allocation and ownership rights of outer space, negotiations would likely take years, as there are so many issues to address.²⁰³ A big issue would be determining what model the new or amended space law framework would follow, if at all.

¹⁹⁹ De Man, *supra* note 4 (implying the reason is because the Outer Space Treaty left it so ambiguous—this oversight does not mean either framework is not in compliance with existing space law *per se*—merely that more work remains to be done in the future).

²⁰⁰ *See* Nelson, *supra* note 2, at 405.

²⁰¹ *See* John E. Noyes, *The International Tribunal for the Law of the Sea*, 32-1 CORNELL INT'L L.J. 110, 111-39 (1999) (indicating that if the international community wished to create such a body of law for the oceans, most likely it could do the same for space); *The Tribunal*, INT'L TRIBUNAL FOR THE L. OF THE SEA, <https://www.itlos.org/en/main/the-tribunal/the-tribunal/> (last visited May 21, 2022) (presiding over skirmishes or legal disputes that arise in open waters and make final determinations should the need arise).

²⁰² *See generally* *Human Impacts on Antarctica and Threats to the Environment—Mining and Oil*, *supra* note 74 (conceding that the economic benefit gained by mining space resources outweighs concern for potential environmental consequences arising therefrom in outer space).

²⁰³ Alan Wasser & Douglas Jobs, *Space Settlements, Property Rights, and International Law: Could a Lunar Settlement Claim the Lunar Real Estate It Needs to Survive?*, 73 J. AIR L. & COM. 37, 47, 52 (2008) (including the potential for armed conflict and the fear of a U.S. land grab).

The Antarctic Treaty will most likely not be considered, as it bans mining outright and does not designate a presiding authority. The Law of the Sea will likely not be used as a template for such regulation, as it stresses freedom of use for all outside of specified coastal jurisdictions.²⁰⁴ Low barriers to entry were likely a significant factor in states' willingness to negotiate and develop oceanic regulation, while the high barriers to outer space is an excuse for states to refrain from doing the same for space regulation. After all, owning a ship is considerably more feasible than a spaceship, and the costs related to required technology for the location, extraction and transportation of deep sea resources is much lower than the equivalent for space resources.

Furthermore, designating space jurisdictions equivalent to coastal waters alone could pose a difficult task. Discussions regarding what constitutes a space jurisdiction, as well as the actual creation of jurisdictions and the order in which states could choose space jurisdictions to extend their national jurisdiction would also prove difficult. Moreover, it would leave states without sophisticated space programs unable to possess or control the property allocated to them in their space jurisdiction.²⁰⁵ For those states, the law of adverse possession could pose a significant threat.²⁰⁶ Considering objects in space are prone to movement, the resources in a jurisdiction may change frequently. States would mostly likely treat these similarly to fugitive resources: wait until objects appeared in their jurisdiction before racing to extract as many resources as possible while the object remained under their control.

Lastly, while the IGA system for determining ownership rights is successful on the ISS, it would not translate well to the ownership and allocation of outer space or space resources generally. In contrast with outer space, the ISS is a very limited entity in terms of square footage and signatory "partner" countries, which affords them a great deal of control.²⁰⁷ While the ISS assigns the jurisdiction of its sections according to what entity "provided the elements" of that section, to date only a select few countries have attempted space excursions and therefore been

²⁰⁴ Law of the Sea, *supra* note 82, at arts. 56, 141.

²⁰⁵ See *The Tribunal*, *supra* note 201 (explaining that there currently are only thirty-one countries with national space programs; there are also three regional space programs registered with the United Nations Office of Outer Space Affairs).

²⁰⁶ See *Fulkerson v. Van Buren*, 961 S.W.2d 780 (Ark. Ct. App. 1998) (rationalizing that owners of real property should use and possess it—if they neglect their property and another individual puts the land to better use for long enough without repercussion from the true owner, then in the eyes of the law the true owner has rescinded their claim to title of the property).

²⁰⁷ See *Garcia*, *supra* note 116 (focusing specifically on the diagram of the ISS designating its sections).

afforded the opportunity to act in an equivalent manner regarding outer space.²⁰⁸ Another issue that would need to be settled before this method of allocation could be used is determining an equivalent to "providing the elements."²⁰⁹ In short: approximating any of the aforementioned systems to designate the ownership and allocation of outer space and space resources would likely create more problems than solutions. It would require an extensive technical understanding of the universe that humanity simply lacks at this time.

CONCLUSION

The exploitation of space resources is desirable due to the potential benefits it poses for science, industry, commerce, society, and Earth's environment.²¹⁰ For the first time in history, humanity has the ability to explore and utilize the resources outer space has to offer. There is no telling what the next several centuries will bring; yet, it is almost certain that without an internationally respected legal framework to regulate and enforce activities in space, conflicts on Earth or in space will ensue. A clear, equitable, and comprehensive legal framework would create certainty and predictability for future generations instead of allowing a few states to act as pioneers in space extraction and gain an unfair advantage in space.²¹¹

It is easy to assume that when space mining becomes a reality, entities will operate under the economic theory of cutthroat capitalism. However, this is a patent misunderstanding of what mining in space will look like; space is so vast and empty, compared to the few entities that will set up operations, that the Space Race will be silent, quiet, and calm rather than a confrontational territory war.²¹² If states find the methods of first discovery and conquest to be a more economical method of gaining ownership rights than searching for their own space resources, they might utilize the right of conquest to gain ownership and control over planets and other previously claimed celestial bodies, although it is unclear how this may affect international relations on Earth.

²⁰⁸ See generally *The Space Race*, HISTORY, <https://www.history.com/topics/cold-war/space-race> (last visited Jan. 10, 2020) (including an overview of countries involved in the Space Race during the twentieth century).

²⁰⁹ IGA, *supra* note 118, at art. 6 ('Ownership of Elements and Equipment').

²¹⁰ Meyer, *supra* note 3, at 15.

²¹¹ Peebles, *supra* note 1 ("If humanity is to progress and the natural environment is to survive, fundamental change in the way life is lived is essential, systemic change as well as an accelerated shift in attitudes and values.").

²¹² See *Barnatt*, *supra* note 163 (hypothesizing that the second Space Race will be "quiet").

States may instead choose to merely possess bodies containing natural resources in outer space and only assert ownership over the natural resources by applying the laws of discovery and capture exclusively to what they extract without claiming rights to the land itself. This could lead to states racing against one another to extract the most fugitive resources from the lands in their possession in the shortest amount of time possible. As participating states would be in mere possession of the land, it is unlikely they would take steps to preserve its integrity, especially if it were more cost-effective not to do so.

The major players in space have acknowledged their unwillingness to adhere to an international regulatory body dominated largely by developing nations.²¹³ Other states, such as China, are altogether unwilling to be regulated by an entity that will presumably be dominated by other countries.²¹⁴ Yet, Earth's natural resources have been greatly depleted despite their demand. As the consensus seems to grow in favor of commercial resource extraction among space-faring nations, space mining is no longer a question of "if" but "when";²¹⁵ and it becomes more likely that in the future space mining will simply be deemed an activity that is compliant with international law.²¹⁶ Therefore, bilateral and multilateral agreements will likely develop between like-minded nations or corporate entities who appreciate and recognize the benefits of utilizing space resources, while seeking methods favorable to themselves to fill in gaps surrounding space law.²¹⁷

For the time being, the U.S. Space Act and the Luxembourg Law are recognized as legitimate and remain in place. Both walk the line of adhering to established international space law while capitalizing on its ambiguity; the common heritage doctrine is not so much as mentioned in either the U.S. Space Act or the Luxembourg Law.²¹⁸ The International

²¹³ De Man, *supra* note 4.

²¹⁴ Frank McDonald, *Divide Between Developed and Developing Nations*, IRISH TIMES (Dec. 1, 2015, 1:00 PM), <https://www.irishtimes.com/news/environment/divide-between-developed-and-developing-nations-1.2449417> (stating that developed nations who benefitted from the industrial revolution expect more from developing nations who are just now trying to industrialize—this is a typical example of developed nations setting the rules and pressuring developing nations to follow suit. It is extremely unlikely that developed nations will be willing to give up power to developing nations in the way the Moon Agreement suggests—states are too focused on their own interests).

²¹⁵ Mallick & Rajagopalan., *supra* note 25, at 13.

²¹⁶ Scott W. Anderson et al., *The Development of Natural Resources in Outer Space*, 37 J. ENERGY & NAT. RES. L. 227, 232 (2018).

²¹⁷ Masson-Zwaan & Palkovitz, *supra* note 159.

²¹⁸ The Times Editorial Board, *Editorial: The Paradox of Rising Globalism Fueling Rising Nationalism*, LA TIMES, (Sep. 3, 2018, 4:10 AM), <https://www.latimes.com/opinion/editorials/la-ed-nationalism-globalism-liberal-democracy-20180903->

Institute of Space Law concluded that, without a clear condemnation in the Outer Space Treaty against space resource exploitation, the use of space resources is permitted.²¹⁹

The modern interpretation of the Outer Space Treaty, which allows for the utilization of space resources but prohibits ownership of celestial bodies, continues to require that all of mankind benefit from such use.²²⁰ The United States and Luxembourg claim their frameworks align completely with the Outer Space Treaty, which includes the common heritage provision.²²¹ When the day comes that space resources are extracted, hopefully they and other actors in space will remember and honor the common heritage doctrine.

story.html (asserting that the last decade has shown that states are unwilling to work together for the common heritage of mankind).

²¹⁹ Masson-Zwaan & Palkovitz, *supra* note 159; Scott Hatton, *Position Paper on Space Resource Mining*, INT'L INST. SPACE L., 2015 (interpreting the U.S. Space Resource Act); U.S. Space Act, *supra* note 6, at § 403.

²²⁰ Outer Space Treaty, *supra* note 9, at art. I, 4; *see also* Wasser & Jobes, *supra* note 203, at 67. It is hypothesized what a future in which property ownership in outer space would evolve into, a few hundred years in the future:

Even if that restrictive view of the Outer Space Treaty were to prevail, sooner or later, and probably as soon as possible, Lunar colonists would most certainly decide to scrap it and start claiming ownership of the land they occupy. Whether or not the settlement is recognized as a government, it will certainly acquire many of the attributes of a government, like deciding which of its citizens owns what.

Wasser & Jobes, *supra* note 203, at 67.

²²¹ Outer Space Treaty, *supra* note 9, at art. I, 4.

“WELCOME TO JURASSIC WORLD”: THE LEGAL RAMIFICATIONS OF DE-EXTINCTION EXPLORED THROUGH THE JURASSIC FRANCHISE

JESSICA D. HOLLAN*

INTRODUCTION

In a universe where Jurassic World exists, dinosaurs roam the earth once again.¹ When the first *Jurassic* novel was published in 1990, the idea of extinct animals being recreated in a lab was nothing but fantasy and pure science fiction.² At that time, the only realistic part of the franchise was the human greed that led to the park’s failure.³ However, thirty years later, the concept of previously extinct animals returning to life is no longer purely the work of science-fiction. Teams of scientists have dedicated their lives to bringing back animals that have gone extinct due to abuse by mankind. As the field of de-extinction has continued to progress, it is expected that previously extinct creatures will exist on this earth once more by the end of the 2020s.⁴

Even though it was purely science fiction in the 1990s, *Jurassic Park* got one thing right: de-extinction requires mutations.⁵ For scientists to succeed in recreating extinct animals, the animal’s DNA must be reconstructed using a copy-and-paste method to fill in the gaps from non-extinct animals.⁶ This process creates a hybrid animal

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¹ JURASSIC WORLD (Universal Studios 2015).

² See MICHAEL CRICHTON, *JURASSIC PARK* (1990).

³ See *id.*

⁴ *Passenger Pigeon Project*, REVIVE & RESTORE, <https://reviverestore.org/about-the-passenger-pigeon/> (last visited Apr. 13, 2022).

⁵ See generally Ben Novak, *De-Extinction*, 9(11) GENES 548 (2018).

⁶ Riley Black, *Can We Bring Back Mammoths From Extinction? Probably Not—Here’s Why*, DISCOVER MAG. (Mar. 9, 2020, 3:34 PM), <https://www.discovermagazine.com/planet-earth/can-we-bring-back-mammoths-from-extinction-probably-not-heres-why>.

that has never before existed, a mutant version of the original creature being brought back to life.⁷ Creating mutants to resurrect extinct species requires determining exactly which animals should be brought back and what to do with them once they are here. As one of the most infamous quotes from *Jurassic Park* so eloquently stated: “Your scientists were so preoccupied with whether they could, that they didn’t stop to think if they should.”⁸

While the *Jurassic* franchise (hereinafter ‘*Jurassic*’ or ‘*Jurassic* franchise’) revolves around the de-extinction of the dinosaurs, the true failures of the parks are depicted through human kind’s inability to care for animals they had brought back. In the original *Jurassic Park* novel, readers are first introduced to fictional geneticist Henry Wu, the scientist in charge of recreating the dinosaur.⁹ Wu proudly shows off the work he has accomplished, but mentions that sometimes the DNA inserted from other animals to supplement the dinosaurs’ DNA created imperfections that required creating new hybrids to fix the flaw.¹⁰ Later in the book, Wu suggests to the park’s creator and CEO of InGen, John Hammond, that the dinosaurs be modified to be slower and “more domesticated,” or as Wu calls it, version 4.4 of the dinosaurs.¹¹ Hammond dismisses the suggestion saying tourists will want to see the “real thing,” but Wu replies that people do not want reality, “they want to see their expectation,” and reminds Hammond that the dinosaurs Wu has created are not “real dinosaurs” since their genetic code has been filled in with that of other animals.¹²

This reminder is echoed in the *Jurassic World* film when a much older Wu is able to fulfill his desire to create his version of dinosaur with the Indominus Rex, a hybrid dinosaur created from a DNA combination of already established mutant dinosaurs and other living creatures: “Indominus wasn’t bred. She was designed. She will be fifty feet long when fully grown. Bigger than the [Tyrannosaurs Rex].”¹³ When the Indominus Rex breaks free and goes on a rampage within the park in *Jurassic World*, Henry Wu clearly lays out how de-extinction arrived at this point:

“You are acting like we are engaged in some kind of mad science. But we are doing what we have done from the beginning. Nothing in Jurassic World is natural. We have always filled gaps in the genome with the DNA

of other animals. And, if their genetic code was pure, many of them would look quite different. But you didn’t ask for reality. You asked for more teeth!”¹⁴

This Article seeks to demonstrate how unprepared the animal legal sphere is to protect de-extinct animals through the lens of the *Jurassic* franchise. The hypothetical universe of *Jurassic* can be an opportunity for animal law to learn its lesson in neglecting de-extinct animals before the failure to respect and protect these animals is ever committed. The real world does not need to follow in the footsteps of the fictional one. Part I discusses the parallels between the modern day work toward de-extinction and the genetic mutants created in *Jurassic World*. Part II establishes the trend of animal abuses that occur in private facilities in the real world that inspired the animal abuse that occurred in the fictional *Jurassic* world. Part III advocates for increased animal welfare laws that will widen protections for animals that already exist while also keeping de-extinct mutants in consideration, all through the *Jurassic* storylines of valuing of profit over living creatures. Part IV emphasizes the severity of choosing not to act to protect de-extinct animals. This Article concludes that the law is unprepared to protect de-extinct animals and without proper legal consideration the de-extinct animals will go the same way as the real dinosaurs.

I. DE-EXTINCTION: BACK FROM THE DEAD

There are ongoing efforts to bring animals back from extinction in the immediate form of the Passenger Pigeon and the long-term goal of a more prehistoric animal: the woolly mammoth.¹⁵ The process in which the dinosaurs in *Jurassic* were brought back to life in the fictional world has a significant amount of overlap in the real world. However, there will never be a mosquito perfectly preserved in amber and carrying dinosaur DNA in the form of blood in its tiny mosquito belly like in the *Jurassic* franchise.¹⁶ This theory has already been tried, tested, and determined to be unviable.¹⁷ Animals, however, can be recreated using different methods.¹⁸

¹⁴ *Id.*

¹⁵ See *Projects, REVIVE & RESTORE*, <https://reviverestore.org/projects/> (last visited Apr. 13, 2022).

¹⁶ See *JURASSIC PARK*, *supra* note 8.

¹⁷ See BETH SHAPIRO, *HOW TO CLONE A MAMMOTH: THE SCIENCE OF DE-EXTINCTION* 51-53 (2015). In 2013, a group of scientists examined a 17-million-year-old piece of amber with perfectly preserved prehistoric bees trapped inside. *Id.* Despite perfect preservation of the bees’ bodies, their DNA had broken down and nothing was left to be sequenced. *Id.*

¹⁸ See *The Genetic Rescue Toolkit*, *REVIVE & RESTORE*, <https://reviverestore.org/>

⁷ *Id.*

⁸ *JURASSIC PARK* (Universal Studios 1993).

⁹ CRICHTON, *supra* note 2, at 98.

¹⁰ *Id.* at 334.

¹¹ *Id.* at 136.

¹² *Id.*

¹³ *JURASSIC WORLD*, *supra* note 1.

Much like in *Jurassic*, in order for animals to be brought back from the dead, their DNA must be rebuilt.¹⁹ In the *Jurassic Park* film, a short instructional video explained to the Jurassic guests and the audience how dinosaurs have been brought back to life:

Since it's so old it's full of holes. Now, that's where our geneticists take over. Thinking machine supercomputers and gene sequencers break down the strand in minutes, and virtual reality displays show our geneticists the gaps in the DNA sequence. We used the complete DNA of a frog to fill in the cold and complete the code!²⁰

Later in the film, frog DNA is used to fill in the gaps in dinosaur DNA, which results in the dinosaurs having traits they otherwise would not have.²¹ Much like the mutant dinosaurs created in the first park, the mutated de-extinct creatures created in the real world could appear outwardly to be the same as the ones that had gone extinct, but the essence of the animal could be entirely different²²—“it wouldn't be a true revival, but a best-guess version that leaves quite a bit out.”²³

De-extinction is a process far more complex than the birth of a once-extinct animal. Even after the birth, the animal could eventually be released to the wild with no certainty of their survival.²⁴ Morally, the argument for reviving these long-lost creatures is embedded in the same reasons there is an endangered species list: “[t]o preserve biodiversity and genetic diversity, [t]o restore diminished ecosystems, [t]o undo harm that humans have caused in the past, [t]o advance the science of preventing extinctions.”²⁵

Since the process requires creating mutants, there is great debate on whether the animal that is brought to life will replicate the animal that went extinct. Scientists argue that the “answer will vary from species to species.”²⁶ Certain animals will likely never be able to be brought

org/what-we-do/genetic-rescue-toolkit/ (last visited Apr. 13, 2022).

¹⁹ Black, *supra* note 6.

²⁰ See JURASSIC PARK, *supra* note 8.

²¹ *Id.*

²² “Dinosaurs lived 65 million years ago. What's left of them is fossilized in stone the actual scientists spend years to uncover. What John Hammond and InGen created are theme park monsters. Nothing more, nothing less.” JURASSIC PARK III (Universal Studios 2001).

²³ Black, *supra* note 6.

²⁴ SHAPIRO, *supra* note 17, at 15.

²⁵ *Frequently Asked Questions*, REVIVE & RESTORE, <https://reviverestore.org/faq/> (last visited Apr. 13, 2022).

²⁶ *Id.*

back since parental training is critical for their young.²⁷ However, plenty of other animals receive “no significant parental training,” like the Passenger Pigeon that went extinct in the 1900s.²⁸ The question then becomes whether a de-extinct Passenger Pigeon can “function without a flock?”²⁹ Or, with a creature that relied on its herd like the woolly mammoth, whether “young mammoths [can] be reared successfully by a herd of close relatives...?”³⁰

Much like modern animals, dinosaurs spanned a wide range of the different levels of parental care that they gave to their offspring.³¹ While many dinosaurs received a lot of nurture from their parents, plenty of other dinosaurs were left on their own after birth to be raised by their instincts and environment.³² In *Jurassic World*, the Indominus Rex is a hybrid dinosaur that was raised in pure solitude.³³ The park's fictional animal behaviorist, Owen Grady, notes this when initially studying the dinosaur, stating, “the only positive relationship this animal has is with that crane. At least she knows that means food.”³⁴ The Indominus did not receive nature or nurture since she was deprived of a parent and raised in complete solitude.³⁵ As such, she imprinted on the crane that fed her every day, which later saved Grady's life when he hid under the one thing the dinosaur may have been hesitant to harm when fleeing from her rampage.³⁶

The failure to provide the necessary nature and nurture for survival to the de-extinct animals that will have no existing genetic parent is a critical part of the process to ensure that the animals will act appropriately for their species. De-extinct animals will be in uncharted territory each time a new species is brought to life, and the legal field must be prepared with plans and protections on how to care for these animals before they arrive. As science works toward reviving creatures from bird to mammoth, the legal field must consider what laws need to be put in place to ensure that a de-extinct animal will receive the care necessary of a living creature and not a commodity. The next sections

²⁷ *Id.*

²⁸ Barry Yeoman, *Why the Passenger Pigeon Went Extinct*, AUDUBON MAG. (May-June 2014), <https://www.audubon.org/magazine/may-june-2014/why-passenger-pigeon-went-extinct>.

²⁹ *Id.*

³⁰ *Id.*

³¹ Riley Black, *How Dinosaurs Raised Their Young*, SMITHSONIAN MAG. (July 24, 2020), <https://www.smithsonianmag.com/science-nature/dinosaurs-parents-new-egg-discovery-180975361/>.

³² *Id.*

³³ JURASSIC WORLD, *supra* note 1.

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.*

consider the consequences of the revival of the Passenger Pigeon and woolly mammoth, clarifying how soon de-extinct animals may exist on the planet and demonstrating the issues possibly encountered by the legal field if the Jurassic franchise comes to life.

a. The Passenger Pigeon

In the 1800s, the Passenger Pigeon was “the most numerous bird on the continent.”³⁷ In 1866, witnesses described a single flock that took more than fourteen hours to pass overhead.³⁸ However, the dense flocks were easy to hunt and by the early 1900s there were no flocks left.³⁹ The last known Passenger Pigeon, Martha, died in 1914 in the Cincinnati Zoo.⁴⁰

De-extinction expert and scientist, Dr. Ben Novak, is leading the force for bringing back the Passenger Pigeon.⁴¹ Novak works for Revive & Restore, an organization founded in 2012 with the sole purpose and mission “to enhance biodiversity through the genetic rescue of endangered and extinct species.”⁴² The effort to revive a bird that has not existed for over 100 years is a grueling process, and Novak has admitted that his team will not be able to recreate an exact replica of the Passenger Pigeon.⁴³

We can’t bring the Passenger Pigeon back as [an] exact clone from a historical genome, but we can bring back unique Passenger Pigeon genes in order to restore its unique ecological role. Through a process of precise hybridization, made possible with modern genome editing and reproductive technologies, we can produce a new hybrid generation of the Passenger Pigeon ecotype that carries a small but important genetic legacy of its extinct forebears.⁴⁴

³⁷ David Biello, *3 Billion to Zero: What Happened to the Passenger Pigeon?*, SCI. AM. (June 27, 2014), <https://www.scientificamerican.com/article/3-billion-to-zero-what-happened-to-the-passenger-pigeon/>.

³⁸ JERRY SULLIVAN, HUNTING FOR FROGS ON ELSTON, AND OTHER TALES FROM FIELD & STREET 210 (2004).

³⁹ Yeoman, *supra* note 28.

⁴⁰ *Id.*

⁴¹ *Revive & Restore Staff*, REVIVE & RESTORE, <https://reviverestore.org/about-us/> (last visited May 21, 2022).

⁴² *Id.*

⁴³ Ben Novak, *Citizen Science For The Passenger Pigeon—Join The Project!*, REVIVE & RESTORE (Feb. 4, 2020), <https://reviverestore.org/citizen-science-for-the-great-passenger-pigeon-comeback-join-the-project/>.

⁴⁴ *Id.*

Using Martha’s DNA, Novak and his team of scientists can “map the sequence of genes and gene regulating regions that are most important to creating Passenger Pigeon traits.”⁴⁵ The goal is to use the smallest amount of genetic mutation possible to “restore the ecology” by supplementing the DNA with a similar bird—in this case, the Passenger Pigeon’s distant cousin, the band tailed pigeon.⁴⁶

Even after recreating a complete sequence of DNA to revive the pigeon, Novak’s team will face the challenge of raising the pigeons. Many bird breeders use a puppet on new hatchlings to keep the newborns from imprinting confusion, but this method is not best practice for Passengers since they are especially dependent on their parents.⁴⁷ Instead, Revive and Restore will use Band-tailed Pigeons and Rock pigeons as the baby Passengers’ surrogate parent.⁴⁸ These surrogate parents will be dyed to resemble adult Passenger Pigeon so the hatchlings will truly believe they are being raised by fellow Passenger Pigeon.⁴⁹ According to Novak,

The goal [of phase 3.1] is to produce a community of surrogate parents that breed in similar societies to Passenger Pigeon, so that our new Passenger Pigeon develop with the proper behavioral culture. Band-tailed pigeons nest in trees like Passenger Pigeon did, but do not nest in tight communities. Rock pigeons will nest in dense communities, but not on tree branches. Rock pigeons may be trained and raised to use nest platforms on tree branches, or Band-tailed Pigeons may be able to be conditioned to tolerate close proximity. Likely, a combination of surrogate parents will be necessary to foster the first generation of Passenger Pigeon. These captive-bred birds will be housed in environments of natural trees and forest plant species, preventing them from becoming domesticated. Their food will not be supplied in dishes, but strewn about through undergrowth and foliage, stimulating natural foraging behavior.⁵⁰

⁴⁵ *Passenger Pigeon Project*, *supra* note 4.

⁴⁶ *Id.*

⁴⁷ Ben Novak, *How to Bring Passenger Pigeons All the Way Back*, TEDxDEXTINGTION (Mar. 2013), <https://reviverestore.org/events/tedxdeextinction/>.

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Passenger Pigeon Project*, *supra* note 4.

By using multiple surrogate parents for the first generation of Passenger Pigeon, Novak hopes to instill the traits and characteristics into the Passenger hatchlings that will help them to become self-sustaining for future generations.⁵¹

However, young Passenger hatchlings will not require their surrogate parent for very long.⁵² True Passenger Pigeon would abandon their young within two weeks of hatching, before they could even learn to fly.⁵³ This was critical to instilling the sense of flock to the baby Passenger, who would only be surrounded by other baby Passengers, and together they would form a cohort.⁵⁴ That juvenile flock would then learn to fly and feed together and later join the first adult flock to pass overhead, which is how they would learn their migration patterns.⁵⁵ This behavioral pattern makes the first flock released into the wild critical to the future of the de-extinction of the Passenger Pigeon.⁵⁶

Plans are to “release the first test flocks between 2030 and 2040, eventually reaching a target of self-sustaining population growth with 10,000 birds in the wild.”⁵⁷ This bird may look like the Passenger Pigeon and may even act like the Passenger Pigeon, but it is important to remember that Revive & Restore is not creating the Passenger Pigeon, rather, it is a hybrid that will require its own protections.⁵⁸ “Currently, hybrid species are not protected by the Endangered Species Act” and if Revive & Restore is successful in creating a Passenger Pigeon-Band-tailed Pigeon hybrid, “its legal status will not be clear.”⁵⁹

b. *The Woolly Mammoth*

While the dinosaurs are not on the radar for de-extinction, the woolly mammoth certainly is.⁶⁰ However, “[d]ue to the constraints of working with incomplete ancient DNA” it is impossible to recreate a 100% perfect replica of the animal that went extinct.⁶¹ In order to perfectly clone a mammoth, live DNA would be needed—“something

⁵¹ *Id.*

⁵² Novak, *supra* note 43.

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Passenger Pigeon Project*, *supra* note 4.

⁵⁷ *Id.*

⁵⁸ *See id.*

⁵⁹ Taylor Waters, *Passenger Pigeons: The De-Extinction and Reintroduction of a Bird*, 15 J. ANIMAL & NAT. RES. L. 19, 34 (2019).

⁶⁰ *See Woolly Mammoth Revival*, REVIVE & RESTORE, <https://reviverestore.org/projects/woolly-mammoth/> (last visited Apr. 13, 2022).

⁶¹ *Frequently Asked Questions*, *supra* note 25.

that, for mammoths, will never be found.”⁶² But with the gene splicing technology learned through the work completed on the Passenger Pigeon, it is the plan to revive the woolly mammoth. “It is expected that the revived species will be nearly identical genetically, and ‘functionally identical’ ecologically. They should be able to take up their old ecological role in their old habitat.”⁶³ In anticipation of the mammoth’s revival, Russian scientist Sergey Zimov has established Pleistocene Park, a park in Beringia that he is shaping into a mammoth steppe ecosystem so that the mammoths will have somewhere to go once they are back.⁶⁴

“[T]he genome of the mammoth shows it to share a most recent common ancestor with Asian elephants about six million years ago.”⁶⁵ Supplementing mammoth DNA with elephant DNA would create what would not be an exact copy, but a mutant that looks like the classic woolly mammoth.⁶⁶ Unlike the Passenger Pigeon, where Band-tailed Pigeon DNA will fill in gaps on a Passenger Pigeon base, scientists will be inserting mammoth DNA into an Asian elephant base to create the “physical and behavioral traits of the mammoth” like “its namesake coat and ability to withstand subzero temperatures.”⁶⁷ With the mammoth having been extinct much longer than the Passenger Pigeon, it will require more manipulation by the scientists.⁶⁸ As scientist Beth Shapiro, a board member and advisor for Revive & Restore questions:⁶⁹ “Is making an elephant whose genome contains a few parts mammoth the same thing as making a mammoth?”⁷⁰

The genetic cutting and pasting of mammoth DNA with Asian elephant DNA could result in issues not seen before in prior de-extinct animals. Unlike the Passenger Pigeon, mammoths would stay with their parents for far longer than just two weeks.⁷¹ In fact, baby mammoths would nurse for at least two to three years and then remain with their mothers until they were teenagers.⁷² While the Passenger Pigeon can

⁶² SHAPIRO, *supra* note 17, at 11.

⁶³ *Frequently Asked Questions*, *supra* note 25.

⁶⁴ Ross Anderson, *Welcome to Pleistocene Park*, THE ATLANTIC (Apr. 2017), <https://www.theatlantic.com/magazine/archive/2017/04/pleistocene-park/517779/>.

⁶⁵ Hendrik Poinar, *Bring Back the Woolly Mammoth!*, TED (Mar. 2013), https://www.ted.com/talks/hendrik_poinar_bring_back_the_woolly_mammoth.

⁶⁶ *Id.*

⁶⁷ Amy Dockser Marcus, *Meet the Scientists Bringing Extinct Species Back from the Dead*, WALL ST. J. (Oct. 11, 2018), <https://www.wsj.com/articles/meet-the-scientists-bringing-extinct-species-back-from-the-dead-1539093600>.

⁶⁸ *See Woolly Mammoth Revival*, *supra* note 60.

⁶⁹ *Beth Shapiro: The Young Science of Ancient DNA*, REVIVE & RESTORE (Jan. 24, 2020), <https://reviverestore.org/blog-the-young-science-of-ancient-dna/>.

⁷⁰ SHAPIRO, *supra* note 17, at 12.

⁷¹ *Id.*

⁷² *How Did Mother Mammoths Take Care of Their Young?*, CHILDREN’S DISCOVERY MUSEUM OF SAN JOSE, <https://www.cdm.org/mammothdiscovery/mothers>.

supplement their natural instincts by learning how to act as a Passenger Pigeon from its cousin, the rock pigeon, there is “no good reason to believe [the mammoth’s] diet, habits or environment will at all closely resemble that of modern day elephants.”⁷³

If mammoths are anything like their elephant relatives, they live in large social groups of mixed age and sex. However, in the early stages of de-extinction projects all we will have are numerous juveniles. These may get some of their required social contact with elephant surrogates, but elephants are unlikely to have the required behavioural repertoire and social ‘vocabulary’ to match their mammoth companions.⁷⁴

Both nature and nurture play a significant role in training young animals how to behave as they should, and inserting human assumptions into processes such as “captive rearing and re-introduction” could result in significant harm to the animal.⁷⁵ One way to help raise the young mammoths could be mimicking the caretakers at the Wolong National Nature Reserve in China’s Sichuan Province, where panda “caretakers wear full panda costumes when they interact with cubs who will grow up in protected wildlife, and not in captivity.”⁷⁶ Or perhaps mimic Novak’s idea and disguise the Asian elephants to appear more like mammoths by costuming the elephants instead. Through this costumed interactions, the wild mammoth juveniles would not acclimate to a foreign presence.⁷⁷

The use of a surrogate parent is also explored through the *Jurassic* franchise. *Jurassic World: Fallen Kingdom* depicts the relationship between animal behaviorist, Owen Grady, and the raptor, Blue, that he had raised by hand.⁷⁸ Due to Grady’s position as Blue’s surrogate parent Blue learned empathy and curiosity, which makes her a valuable

html#:~:text=Mother%20mammoth%20fed%20their%20babies,moms%20until%20they%20were%20teenagers (last visited Apr. 13, 2022).

⁷³ Heather Browning, *Won’t Somebody Please Think of the Mammoths? De-extinction and Animal Welfare*, 31 J. AGRIC. ENV’T ETHICS 785, 786 (2019).

⁷⁴ *Id.* at 792.

⁷⁵ *Id.* at 790-92.

⁷⁶ Marina Koren, *This Is One for the Panda Baby Book*, THE ATLANTIC (Oct. 7, 2015), <https://www.theatlantic.com/notes/2015/10/panda-cub-eyes/409219/#:~:text=At%20the%20Wolong%20National%20Nature,do%20it%20for%20two%20reasons>.

⁷⁷ See Karen De Seve, *Why Scientists Wear Animal Costumes—It’s Not Just for Halloween*, NAT’L GEOGRAPHIC (Oct. 31, 2014), <https://www.nationalgeographic.com/news/2014/10/141028-halloween-costumes-science-conservation-nation-animals/#close>.

⁷⁸ JURASSIC WORLD: FALLEN KINGDOM (Universal Studios 2018).

asset in the franchise’s fifth film.⁷⁹ Another hybrid dinosaur was created from raptor and Indominus DNA, and creatively named the Indoraptor, however the creature had no empathy which was a critical part of the animals ability to follow commands.⁸⁰ Dr. Wu stresses the importance and “complexity of creating an entirely new lifeform” by insisting the final versions of the Indoraptor have Blue as a surrogate parent: “[i]t needs a mother! Blue’s DNA will be part of the next Indoraptor’s make up. So it will be genetically coded to recognize her authority and assume her traits. Empathy. Obedience. Everything the prototype you have now is missing.”⁸¹ A surrogate parent can be the key to a de-extinct animal’s entire behavior.

Regardless, it is important to have plans and protections set in place for when the de-extinct animals have arrived and require unique parenting. Without the law as a guide to outline how to handle de-extinction it would be too easy for the de-extinct animals to be taken advantage of by any of the individuals or companies in control of their re-birth. As demonstrated in *Jurassic Park*, the mutations could have unintended consequences and require more personal care than initially anticipated. By thinking through these concepts in the hypothetical extremes of the Jurassic franchise it is blatantly clear that for all the science and wonder, de-extinct animals are still living creatures that we brought back from the dead and are now responsible for.

II. ANIMAL EXPLOITATION IN PRIVATE FACILITIES

Jurassic World director Colin Trevorrow pulled from real world studies of the dangers of animals being raised in solitude and captivity to determine the behavior of the Indominus Rex.⁸² In *Jurassic World*, the treatment of the Indominus Rex comes under fire when fictional animal behaviorist, Owen Grady, learns that the mutant dinosaur had been raised in solitude and fed only by a mechanical claw since it was young.⁸³ “You made a genetic hybrid, raised it in captivity. She is seeing all of this for the first time. She does not even know what she is. She will kill everything that moves.”⁸⁴

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² Emily Yahr, *Does ‘Jurassic World’ Remind You Of ‘Blackfish’? How a Dinosaur Movie Tackled Animal Rights*, WASHINGTON POST (June 15, 2015), <https://www.washingtonpost.com/news/arts-and-entertainment/wp/2015/06/15/does-jurassic-world-remind-you-of-blackfish-how-a-dinosaur-movie-tackled-animal-rights/>.

⁸³ JURASSIC WORLD, *supra* note 1.

⁸⁴ *Id.*

While the Indominus is fictional, the behavior she displays in the film draws from real world experience with animals that are raised in solitude and in cages, deprived of both nature and nurture. There is no federal law to protect against the inhumane treatment of animals that would prevent displays of overly aggressive behavior. The legal protections that exist for animals today are already incapable of preventing rampant abuse, so there is certainly no stopping the abuse to continue for de-extinct animals. This disregard of the animal’s instinct and ability to learn is what resulted in the failure of Jurassic World and can very well result in the failure of de-extinction altogether. It is up to the law to create necessary protections against animal abuse now, so that when the first de-extinct animal is born, they are already protected.

Private facilities that capitalize off animals are constantly making the news for rampant abuse. The *Jurassic* franchise purposefully demonstrates this real-world issue through themes of greed, corruption, and profitization embroiled within privatization.⁸⁵ De-extinct animals will be a novelty, and if powerful enough to draw attention, a commodity. Without the protection of the federal government, de-extinct animals will be at the mercy of private labs that do not receive public attention and could be subjected to extreme cruelty.

In the *Jurassic* franchise the dinosaurs were created in secret for the sole purpose of being a theme park attraction.⁸⁶ Every aspect of the franchise includes the idea of profit in the private sector by continuously having competing private labs infiltrate the theme park in an attempt to steal the genetic modifications.⁸⁷ After the failure of Jurassic World, private research and mercenary organizations immediately began planning to remove the dinosaurs from Isla Nublar for their own gain. *Jurassic World: Fallen Kingdom* opens on a mercenary group entering the island, abandoned after the Jurassic World incident, to gain a DNA sample from the Indominus Rex for a private lab to recreate her.⁸⁸ Later in the film another private group enters the island in order to kidnap the dinosaurs and take them to the United States to be used as genetic material for more dangerous mutants and trained as military weapons.⁸⁹

Privatization is clearly represented as the forefront of the next wave of mutant animal creation and treatment in *Jurassic*. Once de-extinct animals are in zoos, or even released into the wild, there will almost certainly be private corporations waiting to get their hands on a de-extinct animal in order to turn a profit and they will use the

⁸⁵ JURASSIC WORLD, *supra* note 1.

⁸⁶ JURASSIC PARK, *supra* note 8.

⁸⁷ See *Jurassic World Camp Cretaceous: Happy Birthday, Eddie!* (Netflix Sept. 18, 2020).

⁸⁸ JURASSIC WORLD: FALLEN KINGDOM, *supra* note 78.

⁸⁹ *Id.*

lack of animal law protections to conduct their work. “Multinational corporations, which own most of the world’s domesticated animals, are highly mobile and do not shy away from moving production to states with lower animal welfare standards if home states introduce or announce stricter animal protection standards.”⁹⁰ By mixing weak animal welfare law with weak scrutiny of the work done in private labs, there is nothing to stop private companies from taking the work of de-extinction to the extreme and harming the animals.

a. Profit Over People

The *Jurassic* franchise makes it clear that the private corporations involved in de-extinction are more interested in making a profit than the actual animals.⁹¹ After the failure of the first park—even before its grand opening—the general public did not believe the claims of the survivors since John Hammond, the aforementioned InGen CEO, had kept the existence of Jurassic Park a secret.⁹² Meanwhile different groups were attempting to go back and retrieve the lab samples left behind in Site B, the development island.

You know my initial yields had to be low, far less than one percent, that’s a thousand embryos for every single live birth. Genetic engineering on that scale implies a giant operation, not that spotless little laboratory I showed you.... Isla Nublar was just a showroom, something for the tourists, Site B was the factory floor. It was on Isla Sorna, eighty some miles from Nublar. We bred the animals there, nursed them until they were a few months old, then moved them to the park.⁹³

While an island full of dinosaurs would likely be well documented with today’s technology, the idea that a private lab could manufacture a de-extinct animal without any knowledge of the public is entirely plausible.⁹⁴

⁹⁰ Charlotte Blattner, *Can Extraterritorial Jurisdiction Help Overcome Regulatory Gaps Of Animal Law? Insights From Trophy Hunting*, 111 AM. J. INT’L L. 419, 423 (2017).

⁹¹ JURASSIC WORLD, *supra* note 1. “Let these corporations name the dinosaurs. They’ve got all the ballparks. Why stop there?...Pepsisaurus. Tostitodon.” *Id.* “Verizon Wireless Presents the Indominus Rex.” *Id.*

⁹² THE LOST WORLD: JURASSIC PARK (Universal Studios 1997).

⁹³ *Id.*

⁹⁴ It is not until the dinosaurs are brought to San Diego that knowledge of de-extinction and Isla Sorna is made public. See *id.* After the San Diego Incident, Site B is turned into a nature preserve and humans were not allowed to be on the island

This theme is continued throughout the franchise. By the theme park's second attempt, Jurassic World, the Indominus Rex's escape could have been contained with minimal casualties if the park's owner had been willing to take lethal force against her.⁹⁵ "We have \$26 million invested in that asset. We can't just kill it!"⁹⁶ The park owner decided to risk human life against not losing the amount of money that had gone into creating the Indominus and as a result multiple people died—including the owner himself.⁹⁷ This mindset of profit over people is not unheard of in private business.⁹⁸ In the cost-benefit analysis some companies decide that it is cheaper to do business unethically and make settlements than to conduct themselves safely.⁹⁹

Private sector corruption is less likely to gain the same notice as public services and government agencies, since the private individual in a position of power is not under scrutiny at the same level as a public entity.¹⁰⁰ This lack of scrutiny and research manifests in a legal blind spot that private facilities can then capitalize on.¹⁰¹ The United Nations'

(setting up the plot for the third Jurassic Park film). *See id.* Waiting until after a tragedy to take care of the animals is a perfect demonstration of the reactive nature of the legal field. *See id.*

⁹⁵ JURASSIC WORLD, *supra* note 1.

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *See generally* Sharra L. Vostral, *Rely and Toxic Shock Syndrome: A Technological Health Crisis*, 84 YALE J. BIOL. MED. 447 (2011); Cinzia Greco, *The Poly Implant Prothèse Breast Prosthesis Scandal: Embodied Risk and Social Suffering*, 147 SOC. SCI. MED. 150 (2015); Lisa Girion, *Johnson & Johnson Knew For Decades That Asbestos Lurked In Its Baby Powder*, REUTERS (Dec. 14, 2018, 2:00 PM), <https://www.reuters.com/investigates/special-report/johnsonandjohnson-cancer/>.

⁹⁹ *See* Liebeck v. McDonald's Restaurants, P.T.S., Inc., No. CV-93-02419 (N.M. Dist. Aug. 18, 1994); *The Lawsuit*, SWINDLED PODCAST (Sept. 23, 2018), <https://swindledpodcast.com/podcasts/season-2/17-the-lawsuit/> (focusing on how McDonald's settled multiple burn cases prior to the Liebeck case and was aware of the dangerousness of its coffee, but continued to settle burn cases because it was cheaper to settle than to lower coffee temperatures to a safe level).

¹⁰⁰ *See* Michael A. Sartor & Paul W. Beamish, *Private Sector Corruption, Public Sector Corruption and the Organizational Structure of Foreign Subsidiaries*, 167 J. BUS. ETHICS 725, 738 (2019) ("[C]orruption taxonomies have primarily focused on public corruption."); *see also* Jerg Gutmann & Viola Lucas, *Private-Sector Corruption: Measurement and Cultural Origins*, 138 SOC. INDIC. RES. 747, 762 (2017) ("Despite recent advances in research on corruption, there is still a need for more contributions dealing with private-sector corruption. Our study aims to take a step towards filling this gap by introducing a new indicator of private-sector corruption."); *Consequences of Private Sector Corruption*, UNITED NATIONS OFF. ON DRUGS & CRIME (Dec. 2019), <https://www.unodc.org/e4j/en/anti-corruption/module-5/key-issues/consequences-of-private-sector-corruption.html> ("A vast body of literature focuses on public sector corruption, but there is very little systematic analysis of private sector corruption.").

¹⁰¹ *Id.*

current solution for overall corruption in private facilities is "stricter and more nuanced regulation [that require and incentivize] companies to strengthen compliance with rules, but also to focus on their values and develop an ethical culture."¹⁰² However, it is difficult to regulate such a fragmented part of the legal field due to the "traditional assumption that private corruption only affects businesses and thus is less serious."¹⁰³

Stewart Brand, co-founder of Revive & Restore, says a major reason the work done in de-extinction will not fail like it did in the *Jurassic* franchise is because "real-world de-extinction is being conducted with total transparency. Eventual rewilding of revived species can be no more commercial than the current worldwide protection of endangered species and wildlands. Ecotourism, of course, is a commercial activity often used to help fund the management of protected areas."¹⁰⁴ However, just because this group of scientists is claiming to conduct their de-extinction process in a transparent and ethical fashion does not necessarily mean every group of scientists will.¹⁰⁵ Additionally, once one lab is successful in creating de-extinct animals, interest in the field could grow and result in multiple private labs attempting to produce mutant animals for profit, much like in the *Jurassic* franchise. When de-extinction is no longer science fiction, and the first animals are brought back from the dead, there is nothing to stop privatization and profit in a new and self-regulated field.¹⁰⁶

b. Private Exotic Animal Industry: An Analysis of the Worst Offenders

Our very own real-life de-extinct zoo, as a private entity, could easily become guilty of mistreating the creatures they create. Both *Lost World: Jurassic Park* and *Jurassic World: Fallen Kingdom* demonstrate how quickly de-extinct animals can go from marvels to victims of animal

¹⁰² *Preventing Private Sector Corruption*, UNITED NATIONS OFF. ON DRUGS & CRIME (Dec. 2019), <https://www.unodc.org/e4j/en/anti-corruption/module-5/key-issues/preventing-private-sector-corruption.html>.

¹⁰³ Ben O'Neil & Francesca Wool, *The Creep of Legislation Targeting Private Corruption*, LATIN LAW (Apr. 30, 2020), <https://latinlawyer.com/chapter/1226317/21-the-creep-of-legislation-targeting-private-corruption>.

¹⁰⁴ *Frequently Asked Questions*, *supra* note 25.

¹⁰⁵ "Some of the worst things imaginable have been done with the best intentions." JURASSIC PARK III, *supra* note 22.

¹⁰⁶ Max Hodak, millionaire and former business partner to Elon Musk, tweeted that he could create a real-life Jurassic Park if he wanted: "we could probably build jurassic park if we wanted to. wouldn't be genetically authentic dinosaurs but [shrug emoji]. maybe 15 years of breeding + engineering to get super exotic novel species." @max_hodak, TWITTER, (Apr. 4, 2021, 12:57 AM), https://twitter.com/max_hodak/status/1378572465610256385?lang=en.

abuse. “Animal traffickers. Look how they’re treating them. They’re not [going to] take them to a sanctuary.”¹⁰⁷ In both sequels, the themes of animal abuse, trafficking, experimentation, and weaponization are explored in the context of the de-extinct dinosaurs. The films use these moments to highlight the treatment of endangered animals that currently transpires, but is more gruesome in the tone of de-extinction. De-extinct creatures are animals that humankind took the time to bring back to life yet still do not value. Animal abuse is common enough when the animal is not easily replaced in a lab.

Animals that are easily created are inherently more expendable, an already glaring issue within the current private zoo industry. The American Bar Association acknowledges the current failures in private zoos throughout the big cat industry, noting that “[s]tronger laws and regulations at all levels of government, more stringent enforcement of existing laws, and effective lawsuits can help protect big cats from cruelty and curb the private big cat trade’s proliferation.”¹⁰⁸ Unfortunately, acknowledging there is a problem is not the same as fixing it.

i. Private Zoos and Amusement Parks

Jurassic World was the most profitable private zoo in the world, but private ownership of exotic animals for personal or commercial exploitation creates a risk to the animals.¹⁰⁹ In the franchise, people are always circling Isla Nublar looking to make a profit: “We’re sitting on a goldmine and [the CEO] is using it to stock a petting zoo.”¹¹⁰ Real world private zoos, like the ones seen on the 2020 docuseries *Tiger King*, operate breeding programs that create a surplus of exotic animals for the purposes of photo opportunities with the young, but once the animal grows large enough to be dangerous they are neglected.¹¹¹

¹⁰⁷ JURASSIC WORLD: FALLEN KINGDOM, *supra* note 78.

¹⁰⁸ Alicia Prygoski, *Solutions for Protecting Big Cats from Roadside Zoos and the Abusive “Pet” Trade*, AM. BAR ASS’N, https://www.americanbar.org/groups/young_lawyers/publications/tyl/topics/environmental-law/cruelty-captive-cats-solutions-protecting-big-cats-roadside-zoos-and-abusive-pet-trade/?fbclid=IwAR2HJqpqxQMMHicde4eJQ_kziRpqC2a_uVfH997tALGiMmAd71lsVm5qBCk (last visited Feb. 19, 2022).

¹⁰⁹ Press Release, Humane Society, What “Tiger King” Didn’t Reveal: Animal Abuse and an Extensive Network of Breeding and Selling Tigers Led by Joe Exotic and “Doc” Antle (Apr. 7, 2020), <https://www.humanesociety.org/news/what-tiger-king-didnt-reveal-animal-abuse-and-extensive-network-breeding-and-selling-tigers>.

¹¹⁰ JURASSIC WORLD, *supra* note 1.

¹¹¹ *Tiger King: Murder, Mayhem and Madness* (Netflix 2020).

The zoos seem to be less concerned with the welfare and fate of these animals as they are easily sold off at auctions or to dealers in shady, back door transactions. The exotic and wild animal trade is an extensive industry. A black market has emerged because sale and transport of both species and their products is so highly regulated. Many animals no longer wanted by zoos go to canned hunts, other zoos, or are sold for various uses of their bodies.¹¹²

In 2014 alone, one “roadside zoo in Arkansas documented a spider monkey that lost the tips of its fingers and several baboons that lost the ends of their tails” from frostbite.¹¹³ Another roadside zoo in Oklahoma took a white tiger cub away from its mother at three weeks old to be part of a cub petting photo excursion, and when the cub did not cooperate he “was dragged, choked, tossed, and suspended by his legs and tail.”¹¹⁴

Private zoos are discouraged by means of the accreditation system through the Association of Zoos & Aquariums (hereafter AZA).¹¹⁵ For a zoo to acquire accreditation, the zoo must submit to an examination of “the zoo or aquarium’s entire operation, including animal welfare, veterinary care, conservation, education, guest services, physical facilities, safety, staffing, finance, and governing body.”¹¹⁶ Along with “an intense multiple-day on-site inspection,” the zoo must submit to “an in-person hearing in front of the Accreditation Commission.”¹¹⁷

A stamp of approval from the AZA may not save a private facility from sharp criticism. Amusement park-aquarium SeaWorld has faced severe scrutiny from the public, especially in the last eight years, for mistreatment of the animals under their care.¹¹⁸ After a 2013 documentary emerged with details of an orca trainer who was killed

¹¹² Kali S. Grech, *Detailed Discussion of the Laws Affecting Zoos*, ANIMAL LEGAL & HIST. CTR. (2004) <https://www.animallaw.info/article/detailed-discussion-laws-affecting-zoos>.

¹¹³ Jennifer Jacquet, *America, Stop Visiting Roadside Zoos—They Make Money from the Inhumane Treatment of Animals*, THE GUARDIAN (Nov. 27, 2016, 9:29 AM), <https://www.theguardian.com/sustainable-business/2016/nov/27/roadside-zoos-america-animal-cruelty-welfare>.

¹¹⁴ Press Release, Humane Society, Undercover Investigations Reveal Abuse of Tiger Cubs at Roadside Zoos (Jan. 22, 2015), <https://www.humanesociety.org/news/undercover-investigations-reveal-abuse-tiger-cubs-roadside-zoos>.

¹¹⁵ *About AZA Accreditation*, ASS’N OF ZOOS & AQUARIUMS, <https://www.aza.org/what-is-accreditation?locale=en#:~:text=AZA%20has%20been%20the%20primary,aquariums%20for%20over%2040%20years.&text=AZA%20is%20continuously%20raising%20its,AZA%20standards%20are%20not%20maintained> (last visited Apr. 13, 2022).

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ *See BLACKFISH* (Netflix 2013).

by the orca she was performing with, discussions on the inappropriate sizes of the animals' tanks, being forced to perform, and overall care of the animals in Sea World fell under the public eye.¹¹⁹ One former orca trainer claimed that the whales' emotional and physical well-being "was incompatible with captivity. Confined to unnatural social groups for the convenience of their owners, bored and restless, forced to perform tricks for food that trainers withheld as punishment, they occasionally slipped, he writes, into the dark side."¹²⁰

Even within the *Jurassic* franchise, SeaWorld is a source of inspiration for both the plot of the *Jurassic Park* sequel and the design of Jurassic World.¹²¹ New CEO of InGen, Peter Ludlow, plans to bring some of the dinosaurs into the continental United States for a more accessible experience.¹²² "You don't send people halfway around the world to a zoo, you bring the zoo to them. And this city is the perfect setting. People already associate San Diego with animal attractions—Sea World, the San Diego Zoo."¹²³ Additionally, "[w]hen the [*Jurassic World*] trailer was released, some immediately pointed out that the set looked suspiciously like a SeaWorld show, as an enormous mosasaurus leaps out of the water and eats a shark dangling from a hook. There's even seating in the sought-after "splash zone." The tonal similarities between the film and SeaWorld were no accident, but a purposeful demonstration of animal exploitation by private business.¹²⁴

Large private corporations exist to make their investors happy, and proper treatment and conditions for animals do not always factor into that. Given the history of private exotic animal ownership in roadside zoos and amusement parks, it is possible that de-extinct animals that are brought back will go the same way as the *Jurassic* dinosaurs. The *Jurassic* franchise demonstrates the ease with which private companies could bring substantial risk to de-extinct animals based solely on the treatment from private companies today.

Ultimately, more than mere discouragement will be necessary to ensure that private companies are not only treating de-extinct animals humanely, but also offering the necessary protections for both animals and humans. As John Hammond said throughout the first film, he "spared no expense," but that did not stop the animals from going on a two hour

¹¹⁹ *Id.*

¹²⁰ Jerry Adler, *Why Killer Whales Belong in the Ocean, Not SeaWorld*, SMITHSONIAN MAG. (Mar. 2015), <https://www.smithsonianmag.com/arts-culture/why-killer-whales-belong-in-the-ocean-not-seaworld-180954333/>.

¹²¹ THE LOST WORLD: JURASSIC PARK, *supra* note 92.

¹²² *Id.*

¹²³ *Id.*

¹²⁴ Yahr, *supra* note 82.

long rampage that racked up quite the casualty list.¹²⁵ The law, as it stands, is insufficient and incapable of protecting the animals that already exist. With de-extinct animals requiring additional consideration in the realm of legal protection there is a clear need for both expansion of the laws that currently exist, plus new legislation for de-extinct mutant animals to ensure that a real life de-extinct zoo and amusement park does not result in equal tragedy as the *Jurassics*.

ii. Liability, Bankruptcy, and Insurance

Most animal law related tort claims revolve around negligence or intentional torts and private zoos and amusement parks are liable for the dangers occurring in their parks. However, there could be difficulty in determining how to insure private facilities creating or housing de-extinct animals. *Jurassic Park* uses the issue of needing park insurance as the basis of the plot for bringing the cast together; after a worker is killed by a dinosaur, the park is facing a 20-million-dollar lawsuit by the worker's family.¹²⁶ "The underwriters feel the accident has raised some very serious safety questions about the park. That makes the investors very, very anxious. I had to promise to conduct a very thorough, on-site inspection...[i]f two experts sign off on the island, the insurance guys will back off."¹²⁷ The *Jurassic Park* sequel expands upon the cost of keeping a de-extinct theme park running through tort damages when InGen's new CEO, Peter Ludlow, reads a partial list of multiple multimillion dollar wrongful death settlements.¹²⁸ "[We have] been on the verge of chapter 11 since that accident in the park."¹²⁹

Likewise, during the dinosaur rampage in *Jurassic World*, one character exclaims "the park's [going to] be chapter 11 by morning," implying that the settlements and damages from the incident would be more than the park could survive.¹³⁰ Chapter 11 bankruptcy allows the debtor to remain in business and propose a plan to repay their debt.¹³¹ After tragedies like the *Jurassic Park* and *Jurassic World* incidents, the corporation would expect to pay out a lot of money in damages and

¹²⁵ JURASSIC PARK, *supra* note 8.

¹²⁶ *Id.*

¹²⁷ *Id.*

¹²⁸ THE LOST WORLD: JURASSIC PARK, *supra* note 92; see also MICHAEL CRICHTON, THE LOST WORLD (1995) ("And InGen filed for Chapter 11 protection after Hammond died.") ("Hell, we even tried to buy the company when it was in Chapter 11, because you told us it would be available.").

¹²⁹ *Id.*

¹³⁰ JURASSIC WORLD, *supra* note 1.

¹³¹ See Abha Bhattarai, *What is Chapter 11 Bankruptcy?*, WASH. POST (July 23, 2020), <https://www.washingtonpost.com/business/2020/07/23/faq-chapter-11-bankruptcy/>.

wrongful death suits. The sequel to *Jurassic World* confirms this in a news broadcast that the corporation that owned the park paid out “more than \$800 million in damages to settle class action lawsuits brought by survivors.”¹³² However, it is certain that an amusement park and exotic zoo as vast as *Jurassic World* would need insurance.

Exotic pet ownership requires its own type of third-party liability insurance.¹³³ “Many exotic animals have unique requirements, like additional maintenance for their shelter, particular care needs and special personality characteristics to consider. Given these unique circumstances, even well-behaved exotic animals tend to pose a greater risk to the general public.”¹³⁴ An exotic pet that harms a visitor could result in significant hospital bills and lawsuits and many “[i]nsurance companies think this is too risky for them, and will not cover it.”¹³⁵ In *Tiger King*, one of the employees at Joe Exotic’s roadside zoo has his arm torn off by a tiger.¹³⁶ After Exotic gets the employee on a stretcher, he realizes the liability that his roadside facility is under and tells the cameras “I am never going to financially recover from this.”¹³⁷

While in the setting of a zoo or theme park, the tort is generally negligence on behalf of the private facility; but, it could be difficult to gauge the risk of harm from de-extinct animals, especially those that have not been alive in centuries. In *Jurassic Park*, after multiple people died, John Hammond explains away the park’s failures: “All major theme parks have delays. When they opened Disneyland in 1956, nothing worked!”¹³⁸ To which the fictional Chaotician Dr. Ian Malcolm responded, “[y]eah, but, John, if ‘The Pirates of the Caribbean’ breaks down, the pirates don’t eat the tourists.”¹³⁹ This verbalizes the core issue with insuring dangerous de-extinct animals that are mutants relying on a patchwork of genetically mutated natural instincts and the nurture of living animals dyed different colors—nobody will ever know what to expect from their behavior. The animals deserve to be treated with respect when they have returned, and animal law is unequipped to integrate quickly with different aspects of the law to ensure the necessary protections for de-extinct animals.

¹³² JURASSIC WORLD: FALLEN KINGDOM, *supra* note 78.

¹³³ *The Risks of Exotic Pet Ownership and Why You Need Insurance Coverage*, XINSURANCE (May 5, 2020), <https://www.xinsurance.com/blog/risks-of-exotic-pet-ownership/>.

¹³⁴ *Id.*

¹³⁵ John Purroy Jackson, *Why We Wouldn’t Insure the Tiger King (and Other No-No’s)*, ALL. INS. SERVS. (Apr. 24, 2020), <https://www.myallianceinsurance.com/why-we-wouldnt-insure-the-tiger-king-and-other-no-nos/>.

¹³⁶ *Tiger King: Murder, Mayhem and Madness*, *supra* note 111.

¹³⁷ *Id.*

¹³⁸ JURASSIC PARK, *supra* note 8.

¹³⁹ *Id.*

iii. Big Game Trophy Hunters

Big game trophy hunting—killing large, exotic, rare, and sometimes endangered animals for sport—is popular among certain groups.¹⁴⁰ Unsurprisingly, this particular theme has appeared in every one of the *Jurassic* films, since there would be no greater trophy than that of a de-extinct animal. One of the most realistic parts of the franchise is the big game hunters who covet the hides of rare and endangered animals, and de-extinct creatures would be a substantial prize. “What’s the matter with you? This animal exists on the planet for the first time in tens of millions of years, and the only way you can express yourself is to kill it?”¹⁴¹

The *Jurassic Park* sequel revolves around a battle of wills, with people and corporations all working toward their own conflicting goals on what to do with the de-extinct dinosaurs on Site B, Isla Sorna. One of the conflicting wills is that of a big game trophy hunter Roland Tembo, who leads an expedition onto Isla Sorna with the purpose of hunting a male Tyrannosaurus Rex.¹⁴² In a deleted scene from the film, Tembo is frustrated by how boring the hunt has become. “These days, it’s a more serious crime to shoot a tiger than to shoot your own parents. Tigers have advocates.”¹⁴³ When offered the ability to take on a new hunt, Tembo flippantly replies “[g]o on up to my ranch, take a look around the trophy room, and tell me what kind of quarry you think could possibly be of any interest to me.”¹⁴⁴ Tembo makes that interest clear later in the film when he refuses the cash offer and instead takes permission to hunt the male Tyrannosaurus Rex as payment for leading the expedition.¹⁴⁵

In *Jurassic World Camp Crustaceous*, a group of children is accidentally left on Isla Nebular after the events of *Jurassic World*.¹⁴⁶ The children work together to send a signal to the mainland that they are still on the island and believe they are saved when a small group appears on the island to document and photograph the dinosaurs.¹⁴⁷ It later turns

¹⁴⁰ Jeffrey Flocken, *Trophy Hunting: ‘Killing Animals To Save Them Is Not Conservation’*, CNN, <https://www.cnn.com/2015/05/19/opinions/trophy-hunting-not-conservation-flocken/index.html> (Jan. 4, 2018, 8:16 AM) (“And even though it is Americans who constitute a major percentage of the world’s trophy hunters, this small, wealthy club of big game sport hunters do not embrace the values of the vast majority of other Americans who appreciate the many non-exploitative values of wild animals.”).

¹⁴¹ THE LOST WORLD: JURASSIC PARK, *supra* note 92.

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ *Id.*

¹⁴⁵ *Id.*

¹⁴⁶ *Jurassic World Camp Cretaceous: Camp Cretaceous* (Netflix Sept. 18, 2020).

¹⁴⁷ *Jurassic World Camp Cretaceous: A Beacon of Hope* (Netflix Jan. 22, 2021).

out that this group was lying to the children and were trophy hunters who had illegally traveled to the island in order to hunt the dinosaurs for sport before they became re-extinct.¹⁴⁸

“Although the United States prohibits the importation of some trophies under the Endangered Species Act (ESA), trophy hunting remains legal in over twenty African countries and the illegal trade of trophies to the United States continues unabated.”¹⁴⁹ Over 1.26 million wildlife trophies were imported to the United States between 2005 and 2014, with a majority originating in Canada and South Africa.¹⁵⁰ “American trophy hunters pay big money to kill animals overseas and import over 126,000 wildlife trophies per year on average.”¹⁵¹ The more rare an animal, the larger the prize: to date there are only two northern white rhinoceroses left in the world and they both live in Kenya, protected 24 hours a day, seven days a week, by armed guards from poachers and trophy hunters who would kill them off in order to profit.¹⁵² While a Passenger Pigeon may not be big game, it is certainly exotic and, much like *Jurassic*, it could easily become the most desirable trophy in the world.

Without legal protection and enforcement for the animals that already exist, there is no way to protect de-extinct animals from being the number one trophy in the world.¹⁵³ Since trophy hunting focuses on the most impressive animals to serve as a trophy, species are losing strong genes in the mating pool and are at an increased risk of extinction due to climate change.¹⁵⁴ Another failure of animal law, trophy hunting must be taken into consideration before the first flock of Passenger Pigeon are released into the wilderness, just to go extinct once again before they can repopulate.

¹⁴⁸ *Jurassic World Camp Cretaceous: Brave* (Netflix Jan. 22, 2021).

¹⁴⁹ Blattner, *supra* note 90, at 420.

¹⁵⁰ *Id.*

¹⁵¹ *Banning Trophy Hunting*, HUMANE SOCIETY, <https://www.humanesociety.org/all-our-fights/banning-trophy-hunting> (last visited Apr. 13, 2022).

¹⁵² Kimani Chege, *Meet the Last Two Northern White Rhinos—and the Armed Guard Who Protects Them*, NEWSWEEK (Aug. 30, 2020, 8:00 AM), <https://www.newsweek.com/meet-last-two-northern-white-rhinos-armed-guard-who-protects-them-1528354>.

¹⁵³ Despite being considered “critically endangered,” an auction was held for the opportunity to hunt a black rhino, with the winning bid going for \$350,000. Jason Morris & Ed Lavandera, *Texas Hunter Says He Aims to Save Black Rhinos by Killing One in Namibia*, CNN, <https://www.cnn.com/2015/04/07/us/texas-namibia-black-rhino-hunt/> (Apr. 18, 2015, 7:11 AM).

¹⁵⁴ See Robert J. Knell & Carlos Martínez-Ruiz, *Selective Harvest Focused on Sexual Signal Traits Can Lead to Extinction Under Directional Environmental Change*, 284 PROC. R. SOC. B 1 (2017).

III. DO UNDEAD ANIMALS DESERVE PROTECTION?

No protections currently exist for de-extinct animals.¹⁵⁵ There has never been the need since the concept of needing to protect a living creature that has not walked the earth for centuries or millennia seems the work of pure science fiction and better kept in the hands of a multi-film franchise. The term “de-extinction” itself only first appeared due to a 1979 science fiction novel¹⁵⁶ and was not given credence as its own field in science until 2013.¹⁵⁷ The resurrection of extinct species, according to Revive & Restore, is an inevitability.¹⁵⁸ However, work in the field has quickly progressed—and with an estimation that the first de-extinct animal will fly in 2032—it is clear that protections will need to be put in place to protect these hybrids from going extinct once again.¹⁵⁹

The theme of the fifth film in the *Jurassic* franchise, *Jurassic World: Fallen Kingdom*, begins by demonstrating that, while there were Jurassic veterinarians and dinosaur behavioral specialists, there were still no de-extinct animal laws. The question posed when a volcano threatens to wipe out the de-extinct dinosaurs was if “dinosaurs deserve the same protections given to other endangered species, or should they be left to die?”¹⁶⁰

a. *The Animal Welfare Act*

When the Animal Welfare Act was signed in 1966 it was the first federal law to regulate the treatment of animals in research, experimentation, and the commercial pet trade.¹⁶¹ Despite numerous amendments¹⁶² to the Animal Welfare Act, the “regulations are weak and outdated, which means that licensees can, and often do, keep animals in inhumane and unsafe conditions. Agency audits confirm that the U.S. Department of Agriculture is unable to effectively enforce the law.”

“The Animal Welfare Act is the federal law that is supposed to protect these animals from poor living conditions, except that it is too weak and infrequently enforced, with inspectors usually visiting

¹⁵⁵ Waters, *supra* note 59.

¹⁵⁶ PIERS ANTHONY, *THE SOURCE OF MAGIC* (1979).

¹⁵⁷ SHAPIRO, *supra* note 17, at IX.

¹⁵⁸ See generally *Passenger Pigeon Project*, *supra* note 4.

¹⁵⁹ *Id.*

¹⁶⁰ *JURASSIC WORLD: FALLEN KINGDOM*, *supra* note 78.

¹⁶¹ Animal Welfare Act, Pub. L. No. 89-544, 80 Stat. 350 (1966).

¹⁶² There have been eight total amendments to the Animal Welfare Act: 1970, 1976, 1990, 2002, 2007, 2008, and 2013. *Animal Welfare Act Timeline*, U.S. DEP’T OF AGRIC. NAT’L AGRIC. LIBR., <https://awahistory.nal.usda.gov/timeline/list> (last visited May 7, 2022).

facilities once a year.”¹⁶³ Additionally, the law “does not extend to all animals” due to the specificity of what animals do and do not qualify under the Act.¹⁶⁴

The term “animal” means any live or dead dog, cat, monkey (nonhuman primate mammal), guinea pig, hamster, rabbit, or such other warm-blooded animal, as the Secretary may determine is being used, or intended for use, for research, testing, experimentation, or exhibition purposes, or as a pet; but such term excludes (1) birds, rats of the genus *Rattus*, and mice of the genus *Mus*, bred for use in research, (2) horses not used for research purposes, and (3) other farm animals, such as, but not limited to livestock or poultry used or intended for use as food or fiber, or livestock or poultry used or intended for use for improving animal nutrition, breeding, management, or production efficiency, or for improving the quality of food or fiber. With respect to a dog, the term means all dogs including those used for hunting, security, or breeding purposes.¹⁶⁵

If animals that exist right now are not protected by existing legislation, then mutated de-extinct creatures that fall under their own category entirely certainly will not apply. The *Jurassic* franchise offers a space to fully consider the growing needs and importance of animal law by demonstrating how undervalued animals are in the modern legal landscape. A clearly overlooked field in general, the Animal Welfare Act will do little to protect animals that were long extinct before animal rights were even considered a practice valid enough to garner federal attention. By interacting with a universe where dinosaurs have been made de-extinct, we can determine what de-extinction of any animal will mean for the legal framework of animal and conservation law.¹⁶⁶

b. Mutant Protections

“The development and use of genetically engineered animals for food and ornamental purposes has become a fast-growing industry in recent years.”¹⁶⁷ Genetically Modified Organisms (hereafter GMOs) is

¹⁶³ Jacquet, *supra* note 113.

¹⁶⁴ *Id.*

¹⁶⁵ 7 U.S.C. § 2132(g) (2021).

¹⁶⁶ See Dockser Marcus, *supra* note 67.

¹⁶⁷ *Int’l Ctr. for Tech. Assessment v. Leavitt*, 468 F. Supp. 2d 200, 202 (D.D.C. 2007).

a term most likely discussed in reference to food product.¹⁶⁸ However, laws and regulations that affect GMOs could perceivably be transferred to the regulation of de-extinct animals. Or they could have, if there were any comprehensive federal legislation specifically addressing GMOs, but there are none; instead, GMOs are regulated under the general statutory authority of environmental, health, and safety laws.¹⁶⁹

At the federal level, then, resurrected species that are GMOs may be subject to permit requirements as plant pests or pesticides, if they fall within the scope of regulations governing agricultural uses. Absent such uses, however, there is no general federal law or regulation that would automatically apply by virtue of the species’ recreation using genetic technology. By contrast, at the state and local levels, resurrected species may be subject to a range of laws and regulations that apply generally to “GMOs” without specifying particular uses (such as food, pesticides, etc.). Some of these regulations may apply to the process of recreating facsimiles of extinct species in the laboratory as well as to their release. In fact, under some local anti-GMO ordinances, laboratory experiments on de-extinction would seem to be flatly prohibited.¹⁷⁰

Even though the Jurassic World event takes place twenty-two years after Jurassic Park and de-extinct animals were already general knowledge and profited off of, they still were not considered worthy of protection.¹⁷¹ Verbalizing this was one of Jurassic World’s antagonists, Vic Hoskins, when he stated “extinct animals have no rights.”¹⁷² Animal law will have to rectify that before the first Passenger Pigeon is even hatched, but it is a realistic failure of the American legislature to allow a de-extinct animal that has existed again for a known 22 years to continue with no protections.

¹⁶⁸ This is not entirely inconceivable for de-extinct animals. “For example, if a GMO resurrected species were to be used for food, then the relevant GMO regulations regarding food would apply.” Norman F. Carlin et al., *How to Permit Your Mammoth: Some Legal Implications of De-Extinction*, 33 STAN. ENV’T L.J. 3, 44 (2013).

¹⁶⁹ *Restrictions on Genetically Modified Organisms: United States*, LIBR. OF CONG. (Dec. 30, 2020), <https://www.loc.gov/law/help/restrictions-on-gmos/usa.php#:~:text=There%20is%20no%20comprehensive%20federal,%2C%20health%2C%20and%20safety%20laws.>

¹⁷⁰ Carlin et al., *supra* note 168, at 46.

¹⁷¹ JURASSIC WORLD, *supra* note 1.

¹⁷² *Id.*

c. *Mutations and Intellectual Property Law*

In the second *Jurassic Park* film the CEO of the company that created the dinosaurs, Peter Ludlow, makes a similar comment: “An extinct animal that’s brought back to life has no rights. It exists because we made it. We patented it. We own it.”¹⁷³ Without any updated protections from the law, Ludlow would be completely right.¹⁷⁴ In 1987 the Patent Office issued a notice that they “now [consider] non-naturally occurring, non-human multicellular living organisms, including animals, to be patentable subject matter within the scope of 35 U.S.C. 101.”¹⁷⁵ As a result, animal rights groups feared a “future full of sad mutant animals twisted into unnatural forms by greedy and inconsiderate genetic engineers.”¹⁷⁶

In 1991 the Animal Legal Defense Fund challenged the Patent Office’s ruling, seeking a “declaration that animals are not patentable subject matter and an injunction against the issuance of animal patents.”¹⁷⁷ Unfortunately, the case was dismissed for lack of standing and the court never considered the issue if animal patents exceed the power of 35 U.S.C. 101.¹⁷⁸ As it stands today, per 35 U.S.C. 101 animals that are genetically altered can be patented.¹⁷⁹ The United States patent system does have a couple restrictions on animal patents: (1) that the mutant be useful or beneficial to society and, (2) a morality aspect disallowing the patent of human/animal hybrids.¹⁸⁰ Therefore, it is completely possible for de-extinct animals to be patented, as they are mutations that could not have formed in nature even if the animal was still alive.

IV. FANTASTICAL UNIVERSE WITH REAL WORLD CONSEQUENCES

Whether *Jurassic World* or the real world, neglecting to create a legal framework for de-extinct animals will have severe consequences. “[W]e need a framework to address ethical, moral, and legal problems

¹⁷³ THE LOST WORLD: JURASSIC PARK, *supra* note 92.

¹⁷⁴ See *Diamond v. Chakrabarty*, 447 U.S. 303 (1980).

¹⁷⁵ Animals—Patentability, 1077 Off. Gaz. Pat. & Trademark Office 24 (Apr. 21, 1987).

¹⁷⁶ Robert P. Merges, *Intellectual Property in Higher Life Forms: The Patent System and Controversial Technologies*, 47 MD. L. REV. 1051, 1052 (1988).

¹⁷⁷ *Animal Legal Def. Fund v. Quigg*, 932 F.2d 920, 931 (Fed. Cir. 1991).

¹⁷⁸ *Id.* at 939.

¹⁷⁹ See U.S. Patent No. 4,736,866 (filed June 22, 1984) (known as the first patent for a “Transgenic Non-Human Mammal”).

¹⁸⁰ Jerzy Koopman, *The Patentability of Transgenic Animals in the United States of America and the European Union: A Proposal for Harmonization*, 13 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 103, 140 (2002).

raised by the performance and publication of experiments that may endanger the public’s health and safety at their inception.”¹⁸¹ De-extinct animals fit their own definition that does not exist in the legal world as relating to living creatures. This will have to change in order to protect and preserve de-extinct animals before they arrive. The law is too conservative to act fast enough, and waiting until the animals already exist could result in re-extinction. If the law waits until this point to act then all the work to bring the animals back could be undone.

“No one’s impressed by a dinosaur anymore. Twenty years ago, de-extinction was right up there with magic. These days, kids look at a Stegosaurus like an elephant from the city zoo.”¹⁸² Once the novelty of something spectacular wears off the world turns to the next great something. De-extinction is a field that will always be progressing, there will always be another animal to bring back, another time period to construct DNA from. As John Hammond himself asked: “how can we stand in the light of discovery and not act?”¹⁸³ While the Passenger Pigeon may seem meager in comparison to an Indominous Rex, this small bird will be the first step in a great scientific feat. It is important that the animal legal field consider the harsh reality of the fictional failures in *Jurassic* to prepare the legal world to protect de-extinct animals.

One triage-type solution for protecting de-extinct animals in the United States could be classifying all de-extinct animals as endangered and letting them be protected by the Endangered Species Act.¹⁸⁴ This would help prevent de-extinct animals that are anticipated to be released in the United States, like the Passenger Pigeon, from being harmed and killed.¹⁸⁵ Additionally, due to the Convention on International Trade in Endangered Species of Wild Fauna and Flora de-extinct animals being classified endangered would further protect them in a majority of other countries as well.¹⁸⁶ However, this solution will not properly protect de-extinct animals long-term if they were to re-populate themselves to no longer be on the endangered species list. Once the de-extinct animal is plentiful enough to not be endangered, additional American legislation to protect them would not necessarily apply in other countries. In the long-term this could affect the de-extinct woolly mammoth, a creature

¹⁸¹ Vickie J. Williams, *The Jurassic Park Problem—Dual-Use Research of Concern, Privately Funded Research and Protecting Public Health*, 53 JURIMETRICS 361, 374 (2013).

¹⁸² JURASSIC WORLD, *supra* note 1.

¹⁸³ JURASSIC PARK, *supra* note 8.

¹⁸⁴ See 16 U.S.C. §§1531-1544. The Endangered Species Act exists to protect species that are under the threat of extinction, by placing de-extinct animals on this list it would protect the species from various harms by humankind.

¹⁸⁵ See *id.*

¹⁸⁶ See generally Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, 27 U.S.T. 1087 [hereinafter CITES].

anticipated to make its new home in the tundra of Russia by way of a private land owner.¹⁸⁷

Private business and actors will likely not be stopped, even by the law, should they want to create a de-extinct amusement park as money opens opportunities that otherwise does not exist. Like in *Jurassic*, where the infamous Park was opened in Costa Rica and not in the legal prevue of the United States, private business would be able to avoid some American legislation if they so wished.¹⁸⁸ This widens the need for other countries to enact legislation as well. It is unethical to bring these animals back and release them into the wild, unprotected, just to allow them to become extinct once more. However, it is equally unacceptable to create these animals in a lab just to keep them in a cage for their entire existence.

Creating de-extinct animals could have multiple unintended consequences that national and international legal systems should be discussing and preparing for. If a de-extinct animal does not behave as intended and could cause, or does cause, harm to other animals or the ecosystem there needs to be a system in place to safely remove that animal. There are already a multitude of pre-existing systems in place, from placing the animal in a zoo or other controlled area such as a rehabilitation center to allowing exotic trophy hunting ranches to purchase the sterilized animal to be hunted on their lands.¹⁸⁹ Regardless of the solution, the law needs to have a system for the life of unintended hybrid animals as well. The law should interact with the creation of these animals at creation, captivity, and release to best ensure the safety of both the de-extinct animal and the current ecosystems.¹⁹⁰

a. Creation

Legal definitions will play the greatest part in the creation stage of both a de-extinct animal and the laws to protect de-extinct animals. The law will have to consider how to classify a de-extinct animal. Classifications can be determined by the percentage original animal DNA

¹⁸⁷ Anderson, *supra* note 64.

¹⁸⁸ Certain United States laws regarding business can continue to apply even when that business is done in another country’s jurisdiction. *See, e.g.*, Americans with Disabilities Act of 1990 (ADA), 42 U.S.C. §§ 12101-12213 (2018); Age Discrimination in Employment Act of 1967 (ADEA), 29 U.S.C. § 621 (1967); Civil Rights Act of 1964, P.L. 88-353, 78 Stat. 241 (1964).

¹⁸⁹ *See* Ines Novacic, “Bred Simply To Be Shot”: Inside America’s Exotic Hunting Industry, CBS NEWS <https://www.cbsnews.com/news/exotic-hunting-business-trophy-hunting-cbsn-originals/> (June 9, 2019, 9:05 PM).

¹⁹⁰ *See* CITES, *supra* note 186; WILDLIFE SOCIETY, THE PUBLIC TRUST DOCTRINE: IMPLICATIONS FOR WILDLIFE MANAGEMENT AND CONSERVATION IN THE UNITED STATES AND CANADA 10 (2010).

in the de-extinct animal, if any hybrid creature as an animal, or some other method entirely. It is imperative that the scientific team working on these genetic combinations be involved in legally defining de-extinct animals—holding another field accountable will require knowledge and language of the work in order to create laws that are specific enough to make a difference. Otherwise, the legal field runs the risk of being too generic, resulting in laws that effectively do nothing.

Without proper contemplation and thorough drafting there could be unfair discrepancies in how de-extinct animals are protected. For example, one method of de-extinct classification could be based in what percentage of the de-extinct animal was the original extinct DNA and what percentage is made up from a still existing animal. If an animal has more than 50% original extinct animal DNA it is de-extinct and could receive all the further protections that will be drafted specifically for de-extinct animals. If an animal has more than 50% currently existing DNA and was tweaked to simply look like an extinct animal, then it could be considered a mere hybrid that will receive less protections. A characterization like this could place the Passenger Pigeon and the woolly mammoth into two different categories of legal protection: the passenger, having more original DNA, being classified as a true de-extinct animal with minimal hybridization, and the mammoth, with majority Asian Elephant DNA, considered a hybrid lab-grown elephant.

Through a definition of de-extinct categorization explored above, the passenger could gain the appropriate level of legal protection to keep it from going re-extinct due to its genetic makeup being made up primarily of the extinct Passenger Pigeon. However, the mammoth could be considered a hybrid elephant that is more expendable due to its genetics being made from an already existing animal. This opens the door for greater discrepancies in the protection of hybrid animals. For the mammoth, since the Asian Elephant is endangered, would the hybrid mammoth be endangered by proxy? Would the hybrid also be endangered due to the low population? Without thorough and thoughtful legal framework not all de-extinct animals will be protected. Offering half-hearted legal solutions and definitions could cause more chaos as the field of de-extinction grows, resulting in significant harm to these living creatures before anyone is able to step in and clarify.

b. Captivity

Through the captivity stage it is imperative for there to be legal framework that lays out what should happen when an unintended mutant, a common theme in *Jurassic*, is created. The risk factor of this animal in comparison with the wildlife it would be released into must be evaluated to determine if it would be able to exist outside of a lab

without being a hostile species that unintentionally eradicates natural plant and animal life.¹⁹¹ If it is determined that the animal could never be released into the wild then the project should cease and the hybrid allowed to humanely live out its natural life in a controlled environment, like those of accredited zoos and aquariums or a rehabilitation center, that gives the creature plenty of space and care without further breeding or creation.

c. Release

If a de-extinct animal is released into the wild then laws should already be in place to protect it from becoming the ultimate prize for trophy hunters and should receive, at the very least, endangered species status. By classifying de-extinct creatures as animals, and further, endangered animals, the law can expand already existing protections with ease. In *Jurassic World: Fallen Kingdom* the dinosaurs are in danger of an extinction level event when the volcano on Isla Nublar is about to erupt.¹⁹² In response “the US Senate...convened a special committee, to answer a grave moral question: Do dinosaurs deserve the same protections given to other endangered species, or should they be left to die?”¹⁹³

The fictional senators inevitably opt to not protect the dinosaurs from a second extinction.¹⁹⁴ “After thorough deliberations, the committee has resolved not to recommend any legislative action regarding the de-extinct creatures on Isla Nublar. This is an act of God, and while of course, we feel great sympathy for these...*animals*, we cannot condone government involvement, on what amounts to a privately-owned venture.”¹⁹⁵ Demonstrating the legal need for federal and international protections, as well as business regulation as it comes to living creatures. Understanding the failures of animal law through a hypothetical lens demonstrates the much-needed work that must be accomplished if there is any hope of protecting de-extinct animals once they arrive. The legal field must work in tandem with scientific advancement and be prepared to protect de-extinct animals before they are brought back, or risk resurrecting these creatures just for them to go extinct once again.

¹⁹¹ See generally National Invasive Species Information Center (NISIC), U.S. DEP’T OF AGRIC., <https://www.invasivespeciesinfo.gov/> (last visited Apr. 13, 2022).

¹⁹² JURASSIC WORLD: FALLEN KINGDOM, *supra* note 78.

¹⁹³ *Id.*

¹⁹⁴ *Id.*

¹⁹⁵ *Id.*

CONCLUSION

The *Jurassic* franchise serves as a tool for considering the future risks in failing to act before the de-extinct animals arrive. The law is already behind due to the relatively young age of animal law and the field’s natural inclination toward conservatism—waiting until after the issue has occurred to create laws regarding it would be devastating toward de-extinct animals. With the de-extinction field expanding at such a fast rate, there is not the luxury to sit back and wait to pass protections for de-extinct animals until after they are created. This would create a huge gap in protection that would result in abuse, trophy hunting, exploitation, and a legal gray area that allows lawmakers to avoid the issue altogether. These creatures are more than just scientific wonders or potential money makers, they will be living beings that require protection and consideration before the issues arise—“I mean, you do understand these are actual animals, right?”¹⁹⁶

¹⁹⁶ JURASSIC WORLD, *supra* note 1.

**A FAIR GO FOR FARMED ANIMALS:
HOW AUSTRALIAN LAW CAN BETTER
PROTECT NON-HUMAN ANIMALS USED IN THE
AGRICULTURAL INDUSTRY**

JESSICA TSELEPY*

*“The plains are all awave with grass,
The skies are deepest blue;
And leisurely the cattle pass
And feed the long day through;
But when we sight the station gate,
We make the stockwhips crack,
A welcome sound to those who wait
To greet the cattle back...”*

—WITH THE CATTLE, BANJO PATTERSON¹

INTRODUCTION

The Man from the Snowy River wove treasured ideals of an Australian outback, which continue to endure in new generations’ conceptions of Australian identity². Since colonial times, images of free-roaming cattle and the ‘bushman’ are cultural images that have helped

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¹ ANDREW BARTON PATERSON, *THE WORKS OF ‘BANJO’ PATERSON* 108 (Wordsworth ed., 1995).

² See, e.g., Nathan C. Crook, *Arcadia Down Under: ‘Banjo Paterson’s Poetic Creation of an Australian Past* (2003) (M.A. thesis, Utah State University) (on file with the Utah State University Library).

define our nation.³ This narrative is recalled in classrooms throughout the nation, bolstering the idea of a free land for the musterer and his cattle.⁴ If this is the story we have learned from childhood—on the natural conditions of our farmed animals—it is no wonder Australians shirk from news of the modern realities these non-human animals (NHAs) face.

In the first three months of 2021, 1.4 million cattle, 1.2 million sheep, 4.6 million lambs, 1.4 million pigs, and 170 million chickens were slaughtered for meat production in Australia.⁵ The Farm Transparency Project, a non-profit animal protection charity, estimates that 520-620 million NHAs are killed in abattoirs, mainly for meat, each year.⁶ According to Animals Australia, most of these animals are killed without effective independent oversight.⁷ Compared to fifty other nations that were classified by the World Animal Protection Animal Protection Index, Australia scored a D, alongside Brazil, Kenya, and Thailand.⁸ The modern lives of our farmed NHAs are ones of incredible stress, fear, and pain.

These realities appear contradictory: how can a nation so proud of its agricultural heritage allow the state of factory farming in Australia today? This Article seeks to answer that question and suggest improvements to Australian law to better protect farmed NHAs in three parts.

First, it will explore a brief overview of current legislation concerning farm animals in Australia; second, it will argue that Australian factory farming continues in its extensively harmful form due to a lack of political responsiveness to the growing public concern for animal welfare; and lastly, it will present three improvements to the existing law, including amending legislative definitions of unnecessary suffering, separating control of regulation and enforcement to a new National Animal Welfare Department, and increasing representation of and support for animals interests in Australian courts.

³ JOHN HIRST, *THE SENTIMENTAL NATION: THE MAKING OF THE AUSTRALIAN COMMONWEALTH XX* (Oxford Univ. Press 2000).

⁴ Louise Jones, *Classic Australian Literature: Australian Identity Unit*, LESSON PLAN (2013), <https://pdf4pro.com/amp/view/classic-australian-australian-identity-unit-2766e9.html>.

⁵ *Livestock Products, Australia*, AUSTL. BUREAU OF STAT., <https://www.abs.gov.au/statistics/industry/agriculture/livestock-products-australia/latest-release> (last visited May 8, 2022).

⁶ *Abattoirs/Slaughterhouses*, FARM TRANSPARENCY PROJECT, <https://www.farmtransparency.org/kb/food/abattoirs> (Nov. 30, 2021).

⁷ *How are Animals Slaughtered in Australia?*, ANIMALS AUSTL., <https://www.animalsaustralia.org/features/how-are-animals-slaughtered-australia.php> (Nov. 17, 2020).

⁸ WORLD ANIMAL PROTECTION, *ANIMAL PROTECTION INDEX (API) 2020: COMMONWEALTH OF AUSTRALIA: RANKING D* (2020).

I. A HISTORY OF FARMED NHAs IN AUSTRALIAN LAW

Early colonial settlers brought similar concerns for animal welfare that existed in UK society at the time. Demonstrated through newspaper articles from 1804 and 1805, animal cruelty was a matter of public concern over 200 years ago.⁹ The first colonial animal protection legislation, the Act for the Better Prevention of Cruelty to Animals, passed in Van Dieman's Land (Tasmania) in 1837.¹⁰ The Act emulated the scope of protection afforded by the seminal UK Martin's Act, which aimed to prevent the cruel and improper treatment of cattle.¹¹ Interest in extending legal protections to farmed NHAs is not a new phenomenon.

However, such interest was not as reflective of all public opinion at the time. According to Jamieson, attempts by the government at focusing on NHA protection were perceived particularly by rural Australians as “mere urban meddling.”¹² This led to an increasingly reinforced trend of providing a broad range of exemptions in favour of the rural community from being held responsible for the ill-treatment of farmed NHAs under their care.¹³

Now placed under State and Territory Codes of Practice, farmed NHAs are often excluded from anti-cruelty protection.¹⁴ The ongoing effect of this mentality has preserved a double standard in our laws, where farmed NHAs are given much less protection than other animals not needed for industrialised food production.¹⁵

In line with this attitude, there was limited political interest in including regulations concerning any NHAs in the Constitution at the time of the Australian Federation. The key responsibilities of the Commonwealth, as outlined in section 51, include no reference to non-human animals, outside of the fisheries (s 51(x)) provision.¹⁶ Suffice to say the concern of that provision is not the welfare of individual fishes.

Today, no Australian state or territory today has passed specific acts to regulate the treatment of farm animals.¹⁷ In general animal

⁹ See Philip Jamieson, *Duty and the Beast: The Movement of Reform in Animal Welfare Law*, 16 U. QUEENSL. L.J. 238, 239 (1991).

¹⁰ Act For The Better Prevention Of Cruelty To Animals, 8 Will IV No. 3 (1837).

¹¹ Act to Prevent the Cruel and Improper Treatment of Cattle, 3 George 4 c.71 (1822).

¹² Jamieson, *supra* note 9, at 250.

¹³ DEBORAH CAO, *ANIMAL LAW IN AUSTRALIA* 216 (Thomson Reuters, 2d ed., 2015).

¹⁴ *Primary Industries Report Series*, CSIRO, <https://www.publish.csiro.au/books/series/11> (last visited May 21, 2022).

¹⁵ CAO, *supra* note 13, at 216.

¹⁶ *Australian Constitution* s 51.

¹⁷ Katrina Sharman, *Farm Animals and Welfare Law: An Unhappy Union*, in *ANIMAL LAW IN AUSTRALASIA* 66-71 (Peter Sankoff et. al. eds., 2d ed. 2013).

welfare laws, farmed NHAs are disconnected from emotive labelling and, are thus, referred to as “stock.”¹⁸ Such commodification shines light on the sort of respect extended, which goes as far as appreciating their value in economic terms, and falls short of respecting their individual lives as suffering entities.¹⁹

The prime concern here is not in the apparent number of general legislative instruments that seem to address animal welfare, which appear on the surface adequate, and neither is the concern the early time they began to be developed, which suggests long term consideration. The concern is the efficacy of those instruments. From early colonial times to the present day, the scope and ‘bite’ of Australian law to actually protect farmed NHAs from extensive suffering has remained limited.

II. AUSTRALIAN VIEWS TODAY: A NEED FOR REFORM

This section will briefly address the views of the modern Australia public, the positions taken by politicians, and how the incongruity between these impacts the potential for reform of legislative standards.

a. *The Legal Gap*

There is a crucial gap between what most Australians believe current legislation should achieve for farmed NHAs and the actual protections afforded. According to Futureye, 95% of Australians view farm animal welfare as a concern, and 91% want some reform to address this.²⁰ In an increasing trend, 55% of respondents believed that cattle, sheep, goats, and pigs were sentient, and 57% believed that NHAs had awareness of their pain.²¹ While readers should note that respondents may be giving what they believe are more socially acceptable answers, it appears that the majority of Australians from this quantitative research accept the sentience and awareness of suffering in farmed NHAs.²² It follows that only 10% of respondents found current regulation adequate.²³

¹⁸ See *Animal Care and Protection Act 2001* (Queensl.) s 13(2) (Austl.).

¹⁹ See Sharman, *supra* note 17, at 61-83.

²⁰ FUTUREYE, AUSTRALIA’S SHIFTING MINDSET ON FARM ANIMAL WELFARE 4 (2018).

²¹ *Id.* at 6.

²² See PETER JOHN CHEN, ANIMAL WELFARE IN AUSTRALIA: POLITICS AND POLICY 59 (2016).

²³ FUTUREYE, *supra* note 20, at 7.

On the other hand, according to Meat & Livestock Australia, 95% of households across Australia still buy beef, and 76% buy lamb.²⁴ When asked about the specifics of the industry, reportedly, consumers said the Australian cattle and sheep farmers made positive contributions to society. This data is easy fodder for Australian politicians to justify ongoing support for the current standards of factory farms. As a private company with a purpose to “foster the long-term prosperity of the Australian red meat and livestock industry,” one should remain sceptical at least of the neutrality of this data.²⁵ Still, it raises questions of the potential disparity between different sectors of the Australian public and what they choose to focus on when it comes to Australian meat production. It also raises the possibility that while the average Australian may care about NHA welfare, they also care about consuming meat and can be unaware of the cognitive dissonance between these two points of view.

As it stands, farmed NHA cruelty intrinsic in modern meat production methods is currently legally sanctioned in Australia.²⁶ Recent protests by animal welfare activists on Australian factory farming were labelled as “un-Australian” by the Australian Prime Minister, signifying how high the institutional bias reaches against those who advocate for improved animal welfare.²⁷ Until there are leaders who are ready to listen to the full breadth of public opinion, it will be difficult to improve the legal protections for the sentient and suffering beings in Australian factory farms right now.

b. *Consumer Confusion on Food Origins*

A continuing issue for creating consensus on the need to improve standards is ignorance about the source of meat and other animal products. “Around 95 percent of meat chickens and pigs in [Australia] are factory farmed,” which as an industry employs efficient and cruel means of production.²⁸ Of the five freedoms endorsed by the

²⁴ Jon Condon, *Surveys Provide Ten-Years of Insight into Changing Consumer Attitudes About Red Meat*, BEEF CENT. (Nov. 18, 2020), <https://www.beefcentral.com/news/surveys-provide-ten-years-of-insight-into-changing-consumer-attitudes-about-red-meat/>.

²⁵ *MLA at a Glance*, Meat & Livestock Austl. (MLA), <https://www.mla.com.au/about-mla/mla-at-a-glance/> (last visited Nov. 14, 2021).

²⁶ *How Laws are Failing Animals*, ANIMALS AUSTRAL., <https://www.animalsaustralia.org/issues/codes-of-cruelty.php> (Dec. 7, 2021).

²⁷ Paul McGreevy et al., *Not Just Activists, 9 Out of 10 People Are Concerned About Animal Welfare in Australian Farming*, THE CONVERSATION (May 14, 2019, 12:00 PM), <https://theconversation.com/not-just-activists-9-out-of-10-people-are-concerned-about-animal-welfare-in-australian-farming-117077>.

²⁸ Michael Kirby, *Factory Farming Masks Meat’s True Costs*, ABC NEWS

World Organisation for Animal Health, Steven White points out that Australian factory farming may breach “four of these five freedoms.”²⁹ And yet, many young Australians remain unaware of the origins of their food. An online poll, led by the charity LEAF (Linking Environment and Farming), found that a third of 2000 surveyed people aged 16 to 23 “did not know bacon came from pigs.”³⁰ There is clearly a need to empower consumers to be more aware of the reality of where their food actually comes from by lifting the veil on factory farming practices.³¹

It is ironic then that politicians are now opposing the labels used by meat-free products using the argument that it will confuse consumers of what they are actually buying. Senators have recently announced an inquiry to investigate the labelling on non-animal proteins as misleading, mainly so that red meat “investments are protected.”³² As was pointed out in the U.S. case of *Turtle Island Foods, SPC v. Thompson*,³³ the packaging of plant-based meat alternatives is so obvious that no rational human would be misled into thinking they are actually meat.³⁴ Food Frontier found in 2019 that “91 per cent of Australians have never mistakenly bought a meat free product, or vice versa.”³⁵ The Food Frontier additionally found that “one in three Australians is limiting their red meat consumption,” and “six out of ten Australians are interested in trying meat free alternatives.”³⁶ The shift of consumers away from meat and toward meat-alternatives seems the more likely motivation behind the inquiry. If Australian leaders were truly concerned about confusing the public, they would put more time and energy into educating them about where their meat actually comes from rather than attacking the competitors of a protected industry.

(June 21, 2013, 7:00 PM), <https://www.abc.net.au/news/2013-06-21/kirby-modern-meat/4770226>.

²⁹ Steven White, *Regulation of Animal Welfare in Australia and the Emergent Commonwealth: Entrenching the Traditional Approach of the States and Territories or Laying the Ground for Reform?*, 14 *FED. L. REV.* 347, 362 (2007).

³⁰ Livia Gamble, *Kids Still Don't Know Where Their Food Comes From*, *THE SYDNEY MORNING HERALD* (May 27, 2014, 12:01 AM), <https://www.smh.com.au/lifestyle/kids-still-dont-know-where-their-food-comes-from-20140526-zrmk1.html>.

³¹ Brian Sherman, *Calling a Halt to Factory Farming*, *VOICELESS* (Jan. 2, 2013), <https://www.voiceless.org.au/content/calling-halt-factory-farming>.

³² Jess Davies, *Is a Sausage a Sausage Without the Meat? Senate to Investigate 'Fake Meat' Labelling Laws*, *ABC NEWS*, <https://www.abc.net.au/news/2021-06-16/senate-to-investigate-fake-meat-labelling-laws/100219140> (June 16, 2021, 2:26 AM).

³³ 992 F.3d 694 (8th Cir. 2021).

³⁴ *Id.* at 698.

³⁵ Campbell Cooney, *New Survey Shows Willingness to Try Meat Alternatives*, *FARM ONLINE NAT'L* (Oct. 28, 2019, 2:55 PM), <https://www.farmonline.com.au/story/6455457/new-survey-shows-willingness-to-try-meat-alternatives/>.

³⁶ *Id.*

c. *The Society Collapse Argument*

This leads to a consideration of the professed state of reliance of our economy on the agricultural industry. An Agricultural Competitiveness Green Paper, released by the Australian Government in late 2014, emphasised the need for profitability of agriculture, framing Australian families as the cornerstone of modern production.³⁷ The broad narrative painted in this policy document harks back to twentieth century ideals of small family farms as the backbone of our economy. In reality, the Productivity Commission has pointed to clear trends of increased concentration (larger farming companies) and intensification (more intensive production techniques).³⁸ As of 2014,³⁹ more than two-thirds of all pigs, 80% of chickens, and one-third of cattle are owned by large corporations who raise them in factory farm conditions.⁴⁰

An argument posed against the idea of industry reform is that it will be detrimental for the Australian culture and economy if the traditional ways of farming in Australia are upset. There are several points to raise against this belief. First, the claim that modern factory conditions, which limit the freedom and capacity to express normal behaviours of NHAs, are in any way reflective of the smaller family farms of the early twentieth century is a tenuous claim at best. Second, “as many as 75 per cent of Australian farm businesses do not generate sufficient returns to meet both personal needs and business growth.”⁴¹ These businesses are mostly small farms that cannot keep up with larger factory farm conglomerates. Third, trends suggest that Australia is moving towards becoming a net importer of farm management expertise and capital from foreign labour migrants, rather than employing Australians.⁴² This calls into question the perceived cultural value of farming in Australia when gradually more of those working on Australian farms are not, in fact, Australians.

On the other hand, a growing global population indicates trends for higher consumption of meat and dairy products.⁴³ As a major exporter

³⁷ Commonwealth of Australia, *Agricultural Competitiveness Green Paper*, AUSTRALIAN GOV'T (2014), <https://www.agriculture.gov.au/sites/default/files/documents/ag-competitiveness-green-paper.pdf>.

³⁸ Productivity Comm'n 2005, *Trends in Australian Agriculture*, Research Paper 32-41 (2005), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=883389.

³⁹ Due to the lack of transparency of the industry's practices, it is difficult to acquire more recent reliable data.

⁴⁰ Sharman, *supra* note 17, at 37-46.

⁴¹ Stewart Lockie, *Australia's Agricultural Future: The Social and Political Context*, AUSTRALIAN COUNCIL OF LEARNED ACAD. (2015), <https://acola.org.au/wp/PDF/SAF07/social%20and%20political%20context.pdf>.

⁴² *Id.*

⁴³ Food & Agric. Org. of the U.N., *The Future of Food and Agriculture*—

of meat, Australia produces 4% of the world's global beef production and about 16% of the world's trade in beef, which is reassuring news for the profitability of the Australian agricultural businesses.⁴⁴ The demonstrated reticence of Australian leaders to effectively legislate is not surprising then, considering the increased pressure for NHA industries to keep up with international competition and profitability.⁴⁵ However, with rising animal welfare and COVID-19 health concerns regarding the excessive use of antibiotics in factory farming, there is also indication of increasing growth opportunities for alternative protein sources in Australia. According to CSIRO Futures, alternative proteins are becoming more popular and could account for up to 18% of the CSIRO's \$25 billion Food and Agribusiness Roadmap by 2030.⁴⁶

If the meat industry is to continue in Australia, for economic or cultural reasons, it does not necessitate maintenance of cruel farming practices. While profits get far more attention than ethics in politics and mainstream media, it will become increasingly problematic for the industry to ignore growing sections of the public who care more about humane treatment than cheaper meat. The image of conservative attitudes towards such improvements should not necessarily be loped just against farmers, but politicians in charge of agricultural policy. There is a responsibility of any democratic representative to ensure that the need for profits of the agricultural industry does not outweigh the expectation for improved welfare standards expected by the growing number of those they represent.

III. LOOKING FORWARD

a. 'Unnecessary Suffering'

Animal Welfare Acts in all Australian states and territories employ "welfare words."⁴⁷ This exemption tool derives from terminology used in NSW legislation from 1850, which included a provision making

Alternative Pathways to 2050, FAO 12 (2018), <http://www.fao.org/3/I8429EN/i8429en.pdf>.

⁴⁴ *Spotlight on Australia's Red Meat Industry*, SAFE FOOD QUEENSL. (Mar. 16, 2021), <https://www.safefood.qld.gov.au/newsroom/spotlight-on-australias-red-meat-industry/>.

⁴⁵ *See id.*

⁴⁶ *Growth Opportunities for Australian Food and Agribusiness*, CSIRO, <https://research.csiro.au/foodag> (last visited May 21, 2022).

⁴⁷ *Animal Welfare Act 1992* (Austl. Cap. Terr.); *Prevention of Cruelty to Animals Act 1979* (N.S.W.); *Animal Protection Act 2018* (N. Terr.); *Animal Care and Protection Act 2001* (Queensl.); *Animal Welfare Act 1985* (S. Austl.); *Animal Welfare Act 1993* (Tas.); *Prevention of Cruelty to Animals Act 1986* (Vict.); *Animal Welfare Act 2002* (W. Austl.).

it an offense to subject a transported animal to "unnecessary pain or suffering."⁴⁸ Subsequent colonial legislation has adopted similar language. States and territories qualify their protections to the extent that the suffering is not 'unnecessary,' 'unjustifiable,' or 'unreasonable.'⁴⁹ Unfortunately, there is little case law concerning the interpretation of these words.⁵⁰ In a rare recent case, Magistrate Crawford, citing Lord Justice Hawkins, asserted that "the beneficial or useful ends sought to be attained must be reasonably proportionate to the extent of suffering caused...."⁵¹ Acts which may be perceived as overt cruelty are therefore excused if more value is placed on whatever is deemed useful enough to justify it.

Resting on the purported legitimacy of purpose makes NHA suffering permissible "[w]henver the purpose for which the act is done is to make the animal more serviceable for the use of man...."⁵² If one can justify a reasonable need to inflict suffering, it becomes necessary. The status quo remains that the legitimacy of means of production is permissible if it promotes economic efficiencies. NHA welfare becomes subjugated by the economic efficiency of cruel practices, and so cruelty can be legally sanctioned depending on the court's interpretation of what is necessary.

I suggest that definitions of what constitutes 'unnecessary suffering' be more in line with the 'Ten Capabilities' approach. Nussbaum and Sen (1993) proposed ten capabilities that should be used to measure the welfare of an individual, extending consideration beyond sentience alone.⁵³ These include: "1) Life, 2) Bodily health, 3) Bodily integrity, 4) Senses, imagination and thought, 5) Emotions, 6) Practical reason, 7) Affiliation, 8) Other species, 9) Play, [and] 10) Control over one's environment."⁵⁴ This expands the factors for courts to consider beyond an abstract concept of 'suffering,' which can be difficult for any human to fully empathise with. Reflecting on the true extent of pain experienced by other species does not come as readily as it does for fellow human animals. The 'Ten Capabilities' approach obliges a more

⁴⁸ *Cruelty to Animals Act 1850* (N.S.W.) s 4 (Austl.).

⁴⁹ *Animal Care and Protection Act 2001* (Queensl.) ss 3(c), 17, 18(2)(a), (f) (iii), 19 (Austl.).

⁵⁰ CAO, *supra* note 13, at 214.

⁵¹ *Dep't of Local Gov't and Reg'l Dev. v. Emanuel Exp. Party Ltd.* [2008] (Unreported, W. Austl. Magistrates Court, Crawford M, 8 Feb. 2008) 98 (quoting *Ford v. Wiley*, 23 QBD 203, 219 (1889)).

⁵² *Murphy v. Manning*, 2 Ex D 307, 314 (1877).

⁵³ *See generally* MARTHA NUSSBAUM & AMARTYA SEN, *THE QUALITY OF LIFE XX* (Oxford Univ. Press 1993); G. Tulloch & C.J.C. Phillips, *The Ethics of Farming Flightless Birds*, in *THE WELFARE OF FARMED RATTITES 1*, 5 (Phil Glatz et al. eds., 2011).

⁵⁴ Tulloch & Phillips, *supra* note 53, at 5.

specific contemplation, which is both observable and clearer to identify.⁵⁵ Both the legislature, through amending the definition of ‘unnecessary suffering,’ and advocates, through introducing the approach into the courtroom, can work to improve the current understanding of what suffering is, if ever, necessary.

i. National Animal Welfare Department

There is no national body in charge of enforcing laws relating to farmed NHAs. Animal welfare is regulated at state and territory levels, with most responsibility falling on a privately funded charity, the Royal Society for Prevention of Cruelty to Animals (RSPCA).⁵⁶ This unorthodox approach to law enforcement is not the result of careful consideration of what is best for NHAs in our country but is the product of a governance history that passes the responsibility of protecting NHAs to third parties.⁵⁷

Placing so much responsibility on State and Territory RSPCA branches to spearhead enforcement creates two major problems. First, no other criminal statute relies so heavily on a private charity to ensure enforcement, which is dependent almost entirely on donations to function. In 2019, of the \$53.5 million spent by RSPCA NSW on operational costs, only \$1 million was provided by the State government.⁵⁸ Enforcement of NHA welfare predictably becomes reliant on occasional political attention. In the 2019–20 financial year, of the 18,260 cruelty complaints investigated by RSPCA Queensland, 129 prosecutions were successful.⁵⁹ That amounts to 0.007% of complaints leading to successful prosecution. Sadly, this figure represents the highest number of investigations and prosecutions of any state or territory in Australia. Second, given that the RSPCA focuses on all areas of NHA welfare, the demarcation of time and resources to other matters has historically only left 9%, or 24 total, of RSPCA’s prosecutions for cruelty against farmed NHAs.⁶⁰ As the Animal Defenders Office, a national non-profit

⁵⁵ *Id.*

⁵⁶ See MALCOLM CAULFIELD, HANDBOOK OF AUSTRALIAN ANIMAL CRUELTY LAW 173 (2009).

⁵⁷ See generally RICHARD RYDER, ANIMAL REVOLUTION: CHANGING ATTITUDES TOWARDS SPECIESISM (1989) (discussing the history of the RSPCA).

⁵⁸ Royal Soc’y for the Prevention of Cruelty to Animals N.S.W., *Inquiry into Animal Cruelty Laws in New South Wales*, PARLIMENT N.S.W. 1 (Dec. 6, 2019), <https://www.parliament.nsw.gov.au/lcdocs/submissions/66928/0136%20-%20RSPCA%20NSW.pdf>.

⁵⁹ *RSPCA Australia National Statistics 2019-2020*, ROYAL SOC’Y PREVENTION CRUELTY ANIMALS AUSTR. 7 (2020), <https://www.rspca.org.au/sites/default/files/RSPCA%20Australia%20Annual%20Statistics%202019-2020.pdf>.

⁶⁰ *RSPCA Australia National Statistics 2011-2012*, ROYAL SOC’Y PREVENTION CRUELTY ANIMALS AUSTR. 9 (2012), <https://www.rspca.org.au/sites/default/files/>

community legal centre, has expressed, “it is unreasonable to expect a privately funded charity to be able to monitor compliance with our NHAs welfare laws adequately.”⁶¹

Creating a National Animal Welfare Department would take the pressure off an inadequately funded private organisation and improve the status quo in three key, additional ways. First, the conflict of interest inherent in the Department of Agriculture, Water and the Environment would be relieved by the creation of a separate body entirely dedicated to animal welfare protection law and enforcement. The Department is currently charged with both promoting NHA welfare and supporting the agricultural industry to be profitable.⁶² An independent department would better ensure animal welfare needs are protected to the level expected by the Australia community.⁶³

Second, an independent department can conduct a review of existing “Codes of Practice,” which currently provide extensive defences to those who commit cruel acts against farmed NHAs. Animal Welfare Acts in all states and territories rely heavily on referring to Codes of Practice as guides, which effectively excludes farmed NHAs from the protective reach of the legislation that claims to protect their welfare.⁶⁴ A department dedicated to NHA welfare could review these Codes without the profit interests of the agricultural industry looming over them.

Third, having a national body in charge of NHA welfare would help co-ordinate the different standards of Australian states and territories. Inconsistent implementation has resulted in the failure to achieve a nationally uniform approach to NHA welfare and the treatment of farmed NHA.⁶⁵ One example of the many troubles this leads to is the lack of nationally consistent definition of ‘free range’ or any requirements for the labelling of eggs in Australia.⁶⁶ With around

[website/The-facts/Statistics/RSPCA%20Australia%20National%20Statistics%202011-2012.pdf](https://www.pc.gov.au/inquiries/completed/agriculture/report/agriculture.pdf).

⁶¹ *Productivity Commission Inquiry Report*, AUSTR. GOV’T PRODUCTIVITY COMMISSION 5 (2016), <https://www.pc.gov.au/inquiries/completed/agriculture/report/agriculture.pdf>.

⁶² *Australian Animal Welfare Standards and Guidelines*, AUSTR. GOV’T DEP’T OF AGRIC., WATER & THE ENV’T, <https://www.agriculture.gov.au/animal/welfare/standards-guidelines> (last visited Apr. 24, 2022).

⁶³ *Animals Austl., Animals Australia Submission to the ‘Regulation of Australian Agriculture’ Issues Paper*, AUSTR. GOV’T PRODUCTIVITY COMM’N (Feb. 19, 2016), https://www.pc.gov.au/_data/assets/pdf_file/0009/196128/sub053-agriculture.pdf.

⁶⁴ *Animal Care and Protection Act 2001* (Queensl.) ss 38, 40 (Austl.).

⁶⁵ Arnja Dale, *Animal Welfare Codes and Regulations—The Devil in Disguise?*, in ANIMAL LAW IN AUSTRALASIA: A NEW DIALOGUE 174, 176-77 (Peter Sankoff & Steven White eds., 2009).

⁶⁶ See *Animal Care and Protection Amendment Regulation (No. 2) 2013*

65% of Australian consumers buying free range eggs in 2014, there is a clear interest in supporting practices which apparently better protect the welfare of chickens. A national body could help direct clear national standards of what ‘free range’ really constitutes to better inform consumers.

This initiative has been recommended by the Animal Defenders Office and has been previously proposed to Parliament in the Voice for Animals (Independent Office of Animal Welfare) Bill 2015.⁶⁷ With increasing public awareness and concern for Australia’s treatment of farmed NHAs, there will ideally be increasing political impetus to support the creation of a National Animal Welfare Department.

ii. Standing and Sentencing

NHA cruelty cases that do make it to court can face the hurdle of gaining standing, and if granted, the disappointment of weak sentencing. As legally proscribed personal property under Australian law, farmed NHAs do not enjoy standing in their own right.⁶⁸ Judge Gibbs in *Australian Conservation Foundation*, held that “an interest, for present purposes, does not mean a mere intellectual or emotional concern.”⁶⁹ Accordingly, in *Animal Liberation Ltd v. Department of Environment and Conservation*, the Court refused to grant an injunction sought by Animal Liberation to restrain aerial shooting of pigs and goats on New South Wales nature reserves.⁷⁰ The Court held that Animal Liberation did not have the necessary special interest.⁷¹ If an entity without statutory authorisation, including nearly all animal welfare organisations, cannot seek legal remedies to cruelties committed against farmed NHAs, what hope is there of effective and extensive advocacy of their interests in court? As these organisations represent living entities who cannot speak in ways easily comprehended by human animals, the traditional rules of standing need to be expanded in NHA welfare matters to allow for well-established NHA welfare organisations to adequately represent sentient beings who lack any other access to justice.

(Queensl.) § 6 (Austl.); *Eggs (Labelling and Sales) Act 2001* (Austl. Cap. Terr.) ss 5, 7 (Austl.).

⁶⁷ Voice for Animals (Independent Office of Animal Welfare) Bill 2015 (Austl.), https://parlinfo.aph.gov.au/parlInfo/download/legislation/bills/s1006_first-senate/toc_pdf/1511720.pdf;fileType=application%2Fpdf.

⁶⁸ Halbury’s Laws of Australia (LexisNexis, Sydney, 2007), [20]-[105].

⁶⁹ *Australian Conservation Found., Inc. v. Commonwealth*, [1980] 146 CLR 531 (Austl.).

⁷⁰ *Animal Liberation Ltd v. Dep’t of Env’t & Conservation* [2007] NSWSC 221 (Austl.).

⁷¹ *Id.*

If prosecution of NHA cruelty is successful, the penalties imposed in sentencing have typically been very lenient. While the penalties listed for NHA cruelty offenses in state and territory animal welfare acts are seemingly suitable, a judicial cycle of leniency has been the historical norm.⁷² For example, in *Joyce v. Visser*,⁷³ eight charges of animal cruelty, including aggravated cruelty, against a number of dogs where found against the accused who was sentenced to three months imprisonment. On appeal, the Court found the penalty to be manifestly excessive.⁷⁴ Cases prosecuting farmed NHA cruelty are rare, and given the higher regard that pets are still held in by the general populace and courts, it is presently unlikely that sentencing would be any harsher than this already low standard. There is a need for penalties to better reflect the severity of acting cruelly towards all NHAs under human care.

Despite a significant increase in community expectations for improved NHA welfare consideration, lenient sentencing and inadequate opportunities to defend farmed NHA remains the norm. As Salter concludes, “the protection of the animal was always legally invisible next to the primary issue of animal possession.”⁷⁵ Though courts are a slow-moving engine of change on issues of social justice, the evidence suggests that a 19th century conception of animal interests is more prevalent than one that belongs to the 21st century.

CONCLUSION

The Australian public wants change. Australians are increasingly and overwhelmingly in support of improving the treatment of farmed NHAs. Improved education on the methods of production used in the factory farming industry can result in further changes to consumer consumption of NHA products and a larger majority that wants protection standards improved. Better policy coordination through a National Animal Welfare Department, an updated conception of unnecessary suffering which applies consideration of the ‘Ten Capabilities,’ and more opportunities for animal organisations to defend NHAs in court with harsher penalties imposed would all work together to significantly improve the lives of farmed NHAs currently suffering in factory farms all around Australia. Only then will these sentient beings have the sort of freedom Banjo Patterson idealised in his poetry and that they truly deserve.

⁷² Annabel Markham, *Animal Cruelty Sentencing*, in *ANIMAL LAW IN AUSTRALASIA: A NEW DIALOGUE* 208, 292-95 (Peter Sankoff & Steven White eds., 2009).

⁷³ *Joyce v. Visser* [2001] TASSC 116 (Austl.).

⁷⁴ *Id.*

⁷⁵ Brett Salter, *Possess or Protect? Exploring the Legal Status of Animals in Australia’s First Colonial Courts: Part I, the “Unnatural” Theft and Murder*, 2 *AUSTL. ANIMAL PROTECTION L.J.* 35, 40 (2009).

SHUTTING THE BARN DOORS AFTER THE MEDIA HAS RUN AWAY: STUDYING THE RELATIONSHIP BETWEEN AG-GAG LAWS AND THE REPORTING OF ZOOONOTIC DISEASES

JAMIE K. VANDENOEVER*

INTRODUCTION

No one is prepared for the next pandemic. In the wake of SARS-CoV-2 (COVID-19), that statement carries the weight of the world. The world that saw the effect of being disconnected from the operations of everyday life. A world that quarantined and celebrated its essential workers for being on the frontline of a pandemic for the wellbeing of everyone around them. A world that is still dealing with the after effects of the countless deaths of loved ones, friends, and neighbors.

To be certain, the COVID-19 global pandemic is not yet over, but the growing fear of the inevitable becomes more daunting as the death toll continues to rise.¹ Even if we cannot be prepared for the next pandemic, what steps can be done to handle it better than this one? Better than the ones before it? One should look to the very operations that essential workers single-handedly kept afloat. The world relied on all the work of “essential workers,” such as food workers and farmers, to keep us healthy and fed.² How much does the public that categorizes this work as “essential” know about the work those individuals conduct?

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¹See generally *WHO Coronavirus (COVID-19) Dashboard*, WORLD HEALTH ORG., <https://covid19.who.int/> (last visited Mar. 22, 2022).

² *COVID-19: Essential Workers in the States*, NAT'L CONFERENCE OF STATE LEGISLATURES (Jan. 11, 2021), <https://www.ncsl.org/research/labor-and-employment/covid-19-essential-workers-in-the-states.aspx>.

COVID-19 is a zoonotic virus,³ meaning generally a disease that jumped from an animal to a human, thus posing a threat to individuals working with animals. How much is being done to protect food production? The answer, for most, is not much. However, after facing a devastating spread of COVID-19, the interest in demanding more oversight has never been higher.⁴ In December 2019, mere months away from the COVID-19 pandemic hitting the United States, approximately fifty percent of Americans polled by the Johns Hopkins Center for a Livable Future stated broad support for larger oversight and regulation of factory farms and other concentrated animal feeding operations (CAFOs).⁵ Less than a year later a new public poll was conducted by Lake Research Partners at the inquiry of the American Society for the Prevention of Cruelty to Animals (ASPCA). The results of the poll showed eighty-nine percent of Americans are concerned about industrial animal agriculture citing animal welfare, worker safety, or public health risks as a top concern.⁶ Significant percentages of the polled populations addressed earlier are demanding more information on the topic of agricultural practices in the interest of public health.⁷

Silence is deadly. This familiar idiom has an equally familiar solution. This command is given to everyone in other scenarios, such as riding public transit when the message plays over the speakers. In the field of agriculture, it is an action only taken up by a few individuals. These individuals, most often reporters, work under high-stress conditions to get the best information out to consumers as quickly as possible in the 24/7 news media that exists in the present day.⁸

³ *Importance of One Health for COVID-19 and Future Pandemics*, CTRS. FOR DISEASE CONTROL & PREVENTION (Nov. 03, 2021), <https://www.cdc.gov/media/releases/2021/s1103-one-health.html#:~:text=The%20virus%20that%20causes%20COVID,s%20spread%20between%20people%20and%20animals> (explaining the composition of COVID-19 as a zoonotic virus); see *infra* Part B for further explanation of zoonotic viruses.

⁴ See generally Amelia Cornish et al., *What We Know about the Public's Level of Concern for Farm Animal Welfare in Food Production in Developed Countries*, 6(11) *ANIMALS* 74 (2016).

⁵ John Bowden, *Survey: Majority of Voters Surveyed Support Greater Oversight of Industrial Animal Farms*, JOHN HOPKINS BLOOMBERG SCH. OF PUB. HEALTH (Dec. 10, 2019), <https://www.jhsph.edu/news/news-releases/2019/survey-majority-of-voters-surveyed-support-greater-oversight-of-industrial-animal-farms.html>. CAFOs are large industrial farm complexes; see generally Carrie Hribar, *Understanding Concentrated Animal Feeding Operations and Their Impact on Communities*, NAT'L ASS'N OF LOC. BD. OF HEALTH, https://www.cdc.gov/nceh/ehs/docs/understanding_cafos_nalboh.pdf (last visited Mar. 22, 2022).

⁶ The American Society for the Prevention of Cruelty to Animals & Lake Shore Partners, *COVID-19's Impact on Public Attitudes Toward Industrial Animal Agriculture*, ASPCA (Nov. 2020), https://www.aspc.org/sites/default/files/impact_on_public_attitudes_toward_industrial_animal_agriculture-final-111120.pdf.

⁷ See *id.*

⁸ See generally Rita-Marie Cain Reid & Amber L. Kingery, *Putting a Gag on*

When the reporters fail, or the media has a slow news day, it is the whistleblowers that continue to fight for food safety and an informed public on agricultural functions.⁹ Whistleblowers are individuals dedicating their time as investigative journalists to educate the public on the innermost operations of organizations, industries, leaders, etc., in the hopes for a more educated public.¹⁰ Whistleblowers take to independent means to acquire intel through gaining photographic or videographic opportunities, interviews, and other electronic or physical materials to bring light onto the dark secrets of whomever the whistleblower aims to expose.¹¹ The evidence whistleblower(s) collect then gets released to the public through various means, such as an anonymous leak.¹² The goal in mind: ending the silence surrounding factory farming.

Why does this silence exist? Because of the ever-growing interest of these industries to keep these poor practices under wraps from the public, the industry and politicians have pushed forward a category of legislation known as “Ag-Gag” laws, otherwise more formally known as “Agricultural Gag Laws.”¹³ Under First Amendment law terminology, a “gag” law is a means of keeping a conversation mum, preventing or criminalizing an individual’s actions for trying to use such speech in the face of the legal ban on it.¹⁴ How could this “silence” be harmful? This note looks to assert that Agricultural Gag (hereinafter referred to as “Ag-Gag”) laws prevent meaningful reporting of poor farming practices and chill speech that could contribute major public health benefits- such as reporting conditions that can breed zoonotic diseases before mass spread.

This Article will start with the history of Ag-Gag laws, as well as an overview of First Amendment limitations for such laws. Ag-Gag laws have a large amount of First Amendment implications, and as

Farm Whistleblowers: The Right to Lie and the Right to Remain Silent Confront State Agricultural Protectionism, 11 J. FOOD L. & POL'Y 31 (2015).

⁹ See *id.* at 32 (citing Brief for Reporters Committee for Freedom of the Press et al. as Amici Curiae Supporting Plaintiffs at 4, *Animal Legal Def. Fund v. Herbert*, No. 2:13-cv-00679-RJS (D. Utah Jan. 15, 2014) (No. 49)) (referencing Continuing Problems in USDA’s Enforcement of the Humane Methods of Slaughter Act: Hearing Before the Subcomm. on Domestic Policy of the H. Comm. on Oversight & Gov’t Reform, 111th Cong. (2010)).

¹⁰ See *id.* at 51.

¹¹ See *id.* at 37 (elaborating on the categories of speech from whistleblowers that are criminalized by various state laws to enumerate the different forms of speech).

¹² *What is a Whistleblower?*, NAT'L WHISTLEBLOWER CTR., <https://www.whistleblowers.org/what-is-a-whistleblower/> (last visited Mar. 21, 2022) (providing a broader scope of the term “whistleblowers,” as opposed to the common perception that only employees of the alleged wrongdoer can be identified as a “whistleblower”).

¹³ *Ag-Gag Laws*, ANIMAL LEGAL DEF. FUND, <https://aldf.org/issue/ag-gag/> (last visited Mar. 21, 2022).

¹⁴ Jessalee Landfried, *Bound & Gagged: Potential First Amendment Challenges to “Ag-Gag” Laws*, 23 DUKE ENV'T L. & POL'Y F. 377, 379 (2013).

such, require that historical background as well.¹⁵ For states that have Ag-Gag laws currently in place, an in-depth legislative history will be given, including the litigation surrounding the bills being introduced and constitutional challenges to existing laws. The next historical background looks at factory farming and the other reasons Ag-Gag laws are criticized. After the foundation for factory farming is explained, an explanation and study of zoonotic diseases will follow. This will include, but not be limited to, what is known about each disease's creation point, spread, and an examination of timeliness in reporting discovered diseases.

Historical information aside, the note will then progress into an analysis portion. This will address the concepts of the First Amendment challenging the rights to all Ag-Gag laws. There is federal preemption to the existence of such laws, and the property interests of farms should not outweigh such First Amendment implications.¹⁶ If the federal preemption still continues to fail the retraction of such laws, the effects on public health should be considered, as the reporting of poor farming practices contribute to the larger conversation of preventing future zoonotic diseases from spreading.¹⁷ This article will argue that, by a reasonable extension, the next zoonotic virus (a virus that can spread into the next epidemic, pandemic, etc.) could be corrected, if not prevented, with greater efficiency without Ag-Gag laws hindering free reporting.

Beyond the analysis portion, the recommendation portion of the note will suggest simply to remove Ag-Gag laws because public health is being affected adversely by their existence. Under the corrections by federal agencies and state regulations of food and agriculture, Ag-Gag laws could cease to exist. While such corrections have attempted to utilize methods of animal welfare (i.e., animals are being harmed and treated poorly with factory farming and need to be helped), these methods fall short given that the agricultural industry is rooted in ideals of property law that sides against trespassing committed by whistleblowers.¹⁸ Another appeal will be made to the First Amendment successes that have already occurred in eliminating Ag-Gag laws, but reinforcement of the public health legal theory should provide another venue of litigation success.¹⁹

¹⁵ See generally Kevin C. Adam, *Shooting the Messenger: A Common-Sense Analysis of State "Ag-Gag" Legislation Under the First Amendment*, 45 SUFFOLK UNIV. L. REV. 1129 (2012).

¹⁶ *Contra* Emily George, *The Importance of Property Rights in the Agricultural Industry and the Role of Farm Protection Laws with These Rights*, 13 IDAHO CRITICAL LEGAL STUD. J. 1, 34 (2020).

¹⁷ Philippe Grandcolas & Jean-Lou Justine, *Covid-19 or the Pandemic of Mistreated Biodiversity*, THE CONVERSATION (Apr. 29, 2020, 1:03 PM), <https://theconversation.com/covid-19-or-the-pandemic-of-mistreated-biodiversity-136447>.

¹⁸ George, *supra* note 16, at 36.

¹⁹ See generally *Animal Legal Def. Fund v. Herbert*, 263 F. Supp. 3d 1193

Lastly, this Article will highlight once more that Ag-Gag laws have many negative effects on society and the marketplace of free ideas. The consequence of the next zoonotic disease pandemic not being brought to light sooner is too high of a cost to hold the legislation in place.²⁰ In utilizing this lesser addressed legal theory to combat Ag-Gag laws, bans on Ag-Gag laws across the United States can continue with a new strength brought to arguments.²¹

I. HISTORY

a. *The First Amendment*

The First Amendment of the United States Constitution states "Congress shall make no law... abridging the freedom of speech, or of the press."²² Through the First Amendment's incorporation into state government, the constitutional guarantees of free speech are afforded and intend to survive government suppression.²³ Speech is largely defined as spoken words, expressive conduct, and other publications that communicate with the intent to convey a particularized message with a likelihood that those viewing it will understand that message.²⁴ This two-prong definition is widely used to determine whether the speech in question is considered legitimate speech within the scope of the First Amendment.²⁵

(D. Utah 2017) (holding that the "Ag-Gag" statute in question was a violation of the First Amendment and therefore unconstitutional).

²⁰ *IPBES Workshop on Biodiversity and Pandemics Workshop Report*, INTERGOVERNMENTAL SCIENCE-POLICY PLATFORM ON BIODIVERSITY & ECOSYSTEM SERVS. 1, 11 (2020), https://ipbes.net/sites/default/files/2020-12/IPBES%20Workshop%20on%20Biodiversity%20and%20Pandemics%20Report_0.pdf. As many as 1.7 million undiscovered zoonotic diseases exist in the world, with 631,000-827,000 variants that can infect humans. *Id.* The sheer number of diseases that could be detected through exposure of factory farm practices are surely immeasurable and vital. *Id.*

²¹ See American Society for the Prevention of Cruelty to Animals, *What is Ag-Gag Legislation?*, ASPCA, <https://www.aspc.org/animal-protection/public-policy/what-ag-gag-legislation> (contributing a list of recently overturned Ag-Gag laws by state).

²² U.S. CONST. amend. I.

²³ U.S. CONST. amend. XIV.

²⁴ *Spence v. Washington*, 418 U.S. 405, 409-10 (1974) ("But the nature of appellant's activity, combined with the factual context and environment in which it was undertaken, lead to the conclusion that he engaged in a form of protected expression."); see also *Texas v. Johnson*, 491 U.S. 397, 404 (1989); *Zaleska v. Cnty. of Sullivan*, 316 F.3d 314, 319-20 (2d Cir. 2003) (requiring both elements to determine sufficiently communicative conduct); see generally C. Edwin Baker, *Scope of the First Amendment Freedom of Speech*, 25 UCLA L. REV. 964 (1978); Melville B. Nimmer, *The Meaning of Symbolic Speech Under the First Amendment*, 21 UCLA L. REV. 29 (1973).

²⁵ Adam, *supra* note 15, at 1135.

In the case of Ag-Gag laws, whistleblower speech often contains photos or videos, which naturally raises the question if that type of speech warrants the same level of protection as verbal speech.²⁶ The Supreme Court of the United States grants that if the conduct possesses sufficient communicative elements, as determined by the aforementioned two-prong definition, the speech is protected regardless of which medium was selected to express that message.²⁷ A case in the Ninth Circuit, *Cuviello v. City of Oakland*, showed that an animal rights groups should have had access to the same area of property afforded to guests for the means of photography and videography, even if the animal rights group did not pay entry as the guests did to gain access to the area.²⁸ Special attention is given in matters of public concern, as seen with other cases as well.²⁹ As a growing amount of awareness surrounds the matters of animal welfare, it stands to reason that

Most instances with whistleblowers addressing factory farms and revealing the trade practices to the general public cannot get this far. Other boundaries that prohibit individuals from video recording or taking pictures include legislative boundaries with potential criminal or civil punishments if violated.³⁰ States pass regulations and laws to restrict speech before it comes to the masses.³¹ Such restrictions on speech are known as “prior restraints,” as it looks to punish speech before it has been “uttered,” or most likely, shared.³²

i. Prior Restraints

The First Amendment, even in its particularized study of Ag-Gag laws, faces many challenges through gag laws of many varieties.³³ These gag laws are also known by the name of prior restraints. The origins of prior restraints date back far into English common law under the monarchy, but took a foothold in United States common law through several First Amendment cases, such as in *Davis v.*

²⁶ *Id.*

²⁷ *Id.* at 1136.

²⁸ See *Cuviello v. City of Oakland*, 434 F. App'x. 615 (9th Cir. 2011); see also *Adam*, *supra* note 15, at 1137.

²⁹ See, e.g., *Lambert v. Polk Cnty.*, 723 F. Supp. 128 (S.D. Iowa 1989) (giving special consideration to matters of public concern).

³⁰ *Ag-Gag Across America: Corporate Backed Attacks on Activists and Whistleblowers*, CTR. FOR CONST. RTS., <https://ccrjustice.org/sites/default/files/attach/2017/09/Ag-GagAcrossAmerica.pdf> (last visited Mar. 22, 2022).

³¹ Landfried, *supra* note 14, at 388.

³² *Id.*

³³ Michael L. Utz, *Constitutional Law—First Amendment—Freedom of Speech—Prior Restraint—*, 36 DUQ. L. REV. 229, 238-39 (1997) (discussing *Davis v. Massachusetts*, 167 U.S. 43 (1897)).

Massachusetts.³⁴ This case followed a mayoral candidate whose speeches, campaign strategies, or any other verbal or written message had to be preapproved by a third party before it was released.³⁵ It concerned the matters of political speech, such as concerns of taxation, illustrious affairs, or other matters that the public could swing its vote to a different candidate rather than the incumbent trying to keep the press mum.³⁶

Throughout legal history, prior restraints on publication, or other forms of speech, have been quite lowly regarded.³⁷ In more modern terms, the court requires that restrictions on speech must be content-neutral, which most prior restraints cannot accomplish, given its foundation of silencing speech that is at odds with those acting to restrain it.³⁸ Unless a matter of national security, or grotesque obscenity, there are not often accepted prior restraint measures.³⁹ As a content-based restriction, the justification for such means would have to pass strict scrutiny, which is the downfall of the Ag-Gag legislative efforts that have come before state courts.⁴⁰ Enter content-neutral speech restrictions: where the government can restrict speech as long as three requirements are met.⁴¹ 1) the restriction must be justified without reference to the content of the speech, 2) the restriction must be narrowly tailored to serve a significant government interest, and 3) the restriction must permit alternative channels for the communication of the information.⁴² However, these restrictions must be the least-intrusive means of achieving the restriction.⁴³

The remaining option for the government to restrict speech amounts to the “time, place, and manner” regulation.⁴⁴ Simply put, this regulation, when used to achieve a content-neutral goal, can be used to deter and disperse speech that is occurring in a way that is inconvenient for the government and/or greater public.⁴⁵ This regulation presents itself in *Ward v. Rock Against Racism*, where there was a legitimate

³⁴ *Id.* at 239.

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Adam*, *supra* note 15, at 1138 (discussing the Supreme Court’s understanding that prior restraints are presumptively unconstitutional).

³⁸ *Id.*

³⁹ *Id.* at 1139.

⁴⁰ *Lambert v. Polk Cnty.*, 723 F. Supp. 128, 131 (S.D. Iowa 1989).

⁴¹ *Adam*, *supra* note 15, at 1142.

⁴² *Perry Educ. Ass’n v. Perry Loc. Educators’ Ass’n*, 460 U.S. 37, 45 (1983); see also *Carey v. Brown*, 447 U.S. 455, 461 (1980); *United States Postal Serv. v. Council of Greenburgh Civic Ass’ns*, 453 U.S. 114, 132 (1981).

⁴³ *Adam*, *supra* note 15, at 1142.

⁴⁴ *Ward v. Rock Against Racism*, 491 U.S. 781, 798 (1989).

⁴⁵ *Adam*, *supra* note 15, at 1142.

government interest in restricting the “sound amplification of otherwise protected expression” when positioned in a public park.⁴⁶ This regulation, unlike the other restrictions, does not have to be the least-restrictive alternative to achieving the governmental purpose.⁴⁷ The “time, place, and manner” regulation is subject only to intermediate scrutiny, which means that it can be intrusive only if the intrusion is outweighed by a narrowly tailored, significant government interest.⁴⁸ However, in the event that the “time, place, and manner” regulation was being applied in a way to suggest that the government was not acting neutrally, it would be investigated as to whether the regulation was being utilized in a facially-neutral way.⁴⁹ If it was found by the courts that it was not, strict scrutiny would apply once again.⁵⁰

ii. Free Press/Journalism Rights

Viewing the restrictions that the government can hold over free speech, one can wonder what affordances are offered to the media and how controversial stories can become published. To start, it is helpful to remember that most content-based restrictions fail before the courts.⁵¹ There is a serious and inalienable interest in free speech making it to the public. The interest is so strong that affordances have been offered to whistleblowers and the media alike when violating expectations of privacy to these factory farms.⁵² If a story is sufficient in its newsworthiness, the expectations of privacy held by factory farms can be reasonably intruded upon.⁵³

The Ninth Circuit Court of Appeals in *Animal Legal Defense Fund v. Wasden*, stated its attention to wanting to extend First Amendment protections because the “[m]atters related to food safety and animal cruelty are of significant public importance.”⁵⁴ However, the Ninth Circuit also went on to qualify the expansiveness of that protection, as there are legal bounds that newsgathering must take place

⁴⁶ Adam, *supra* note 15, at 1143 (quoting Robert H. Whorf, *The Dangerous Intersection at “Prior Restraint” and “Time, Place, Manner”*: A Comment on Thomas v. Chicago Park District, 3 BARRY L. REV. 1, 5 (2002)).

⁴⁷ *Id.* at 782.

⁴⁸ Adam, *supra* note 15, at 1142.

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ *Id.* at 1138.

⁵² See generally Lewis Bollard, *Ag-Gag: The Unconstitutionality of Laws Restricting Undercover Investigations on Farms*, 42 ENV’T L. REP. NEWS & ANALYSIS 10960 (2012).

⁵³ Landfried, *supra* note 14, at 383.

⁵⁴ *Animal Legal Def. Fund v. Wasden*, 878 F.3d 1184, 1190 (2018).

before becoming unprotected by laws of general applicability.⁵⁵ If it is a matter that the public deserves and must know about, some courts have allowed varying levels of privacy invasions to be committed so long as the scale is balanced in favor of the public deserving to know.⁵⁶ What happens when the public interest in that information is not as high as the drive of the individual trying to receive that information?

Examples of these occurrences come from past investigative journalist and whistleblower cases. One of the more infamous examples includes *Food Lion, Inc., v. Capital Cities, ABC Inc.*⁵⁷ In this case, undercover reporters attempted to “catch” a grocery store chain for selling meat that was past its expiration.⁵⁸ This was found to be an improper use of the First Amendment, as it was manipulative, violated the private property of the grocery store, received under false pretenses of employment, and otherwise garnered information that would not have been available to the store customers.⁵⁹ Continuing further, it also stated that journalists have a responsibility to use less invasive means of collecting information.⁶⁰

This case brought interest into this style of “guerilla” and “undercover” journalism by applying to jobs in order to expose the company of poor practices.⁶¹ After news stations desired to know what food they had been purchasing, individuals took matters into their own hands and began looking into the origins of their food.⁶² However, the larger movement was thrust upon the community that did not have such journalistic integrity to uphold: interest groups.⁶³ The focus of this

⁵⁵ *Id.*

⁵⁶ *Bartnicki v. Vopper*, 532 U.S. 514, 535 (2001) (“We think it clear that parallel reasoning requires the conclusion that a stranger’s illegal conduct does not suffice to remove the First Amendment shield from speech about a matter of public concern.”).

⁵⁷ 194 F.3d 505 (4th Cir. 1999).

⁵⁸ Larissa U. Liebmann, *Fraud and First Amendment Protections of False Speech: How United States v. Alvarez Impacts Constitutional Challenges to Ag-Gag Laws*, 31 PACE ENV’T L. REV. 566, 581 (2014) (analyzing *Food Lion*, 194 F.3d at 505).

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ See Matthew Shea, *Punishing Animal Rights Activists for Animal Abuse: Rapid Reporting and the New Wave of Ag-Gag Laws*, 48 COLUM. J.L. & SOC. PROBS. 337, 338 (2015).

⁶² Daniel L. Sternberg, *Why Can’t I Know How the Sausage is Made?: How Ag-Gag Statutes Threaten Animal Welfare Groups and the First Amendment*, 13 CARDOZO PUB. L. POL’Y & ETHICS J. 625, 628 (2015) (comparing the interest to that of the novel *The Jungle* by Upton Sinclair and the book’s coverage of the unsanitary conditions of slaughterhouses and meatpacking plants).

⁶³ See Shea, *supra* note 61, at 349 (stating that in 2013 there was a list of 78 organizations that signed onto the “Statement of Opposition to Proposed ‘Ag-Gag’ Laws from Broad Spectrum of Interests Groups,” many of which were major

Article will be placed upon animal rights and animal welfare groups that have taken to hidden journalism tactics, like those implemented in *Food Lion*, in order to expose farms if those conditions ended up being unfavorable to the animals.

iii. Ag-Gag Laws

Farmers associations saw the impending security concerns to their properties and appealed to their legislators to craft a defense.⁶⁴ Farmers wanted to protect their farms from false employment, security and property invasions, and most importantly, from bad publicity due to poor practices being exposed to the public.⁶⁵ Legislators proposing such legislation stated that laws were needed to be put into place to protect the well-being of farmers, their animals, and farms at large.⁶⁶ The laws in question forbade any individual from seeking employment under false pretenses, collecting secret photographs or videos of the farm, or otherwise taking any other trespassory actions against the property and its owner.⁶⁷ The laws often included a monetary fine, and some even consisted of jail time.⁶⁸ These laws quickly became known as “Agricultural Gag” laws, which is in reference to the gag effect it has on the speech. These gag laws, while they are all similar in their intent, have different approaches to how the speech was criminalized.

There are three categories of Ag-Gag laws: agricultural interference, agricultural fraud, and rapid reporting.⁶⁹ As mentioned above, the tactics these categories use are fairly explanatory from their names. Agricultural interference laws mandate that an individual cannot film or take pictures of the property without the farmer’s permission.⁷⁰ This interest creates a biosecurity method of ensuring the animals and crops are not disturbed, or rather interfered with, by whistleblowers.⁷¹

Agricultural fraud consists of an individual or group of individuals seeking employment or retaining employment with the

environmental and animal rights groups).

⁶⁴ Sarah Hanneken, *Principles Limiting Recovery Against Undercover Investigators in Ag-Gag States: Law, Policy, and Logic*, 50 J. MARSHALL L. REV. 649, 661 (2017).

⁶⁵ *Id.* at 662-63.

⁶⁶ *Ag-Gag Across America*, *supra* note 30, at 10.

⁶⁷ *See generally* Malorie Sneed & Jessica Brockway, *2015 Legislative Review*, 22 ANIMAL L. 437 (2016).

⁶⁸ *See generally* American Society for the Prevention of Cruelty to Animals, *supra* note 21.

⁶⁹ Alicia Prygoski, *Brief Summary of Ag-Gag Laws*, MICH. ST. ANIMAL LEGAL & HIST. CTR. (2015), <https://www.animallaw.info/article/brief-summary-ag-gag-laws>.

⁷⁰ *Id.*

⁷¹ *Id.*

farms under false pretenses.⁷² These false pretenses would include, but not be limited to, applying for the job in order to secure otherwise classified information.⁷³ If the individual decided to turn against the farm and start to collect information secretly during their employment, then that information could not be shared as it was secured under the false pretenses of true employment.⁷⁴ This category of Ag-Gag laws formed a sort of hybrid with agricultural interference, allowing both categories to use similar methods and have similar legislation and outcomes.⁷⁵

The last category of Ag-gag laws is a law that mandates rapid-reporting of the information collected on the premises.⁷⁶ “Rapid reporting” speaks less to how the information is obtained but more to how long that information can be held.⁷⁷ These laws provide too short of a timeline to turn over proper reporting on the information and/or documentation that is secured from a farm.⁷⁸ Some laws have the turn-around time as soon as twenty-four hours after the information (photos, video, etc.) is taken in order to be published.⁷⁹ This can pose a deterrent to reporters or whistleblowers who would require more time to see the full extent of the poor practices in question. This category of rapid-reporting is the newest form of agricultural reporting limitations, and has yet to see a significant amount of challenge as to the constitutional ramifications as the other two categories. It is not unreasonable to assume that these laws could have a negative impact as to help motivate whistleblowers to act rashly and post often- but there is enough to be said when there isn’t a full story that the knowledge would fall upon doubtful ears. In essence, too much news is not good news. This category of laws understands that principle and hopes to force too many reports too quickly, or better yet, no reports because they are unsubstantiated and hurt the chances of future actions by those same whistleblowers.

b. States that Hold Active Ag-Gag Laws and the Public Health Risks Posed

As of June 2020, six states still hold Ag-Gag laws that are in effect. These states include Montana, North Dakota, Iowa, Missouri, Arkansas, and Alabama.⁸⁰ Many state battles have taken to the

⁷² *See generally* Reid & Kingery, *supra* note 8, at 38-40.

⁷³ *See id.*

⁷⁴ *See* Prygoski, *supra* note 69.

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *See id.*

⁷⁸ *See, e.g., id.*

⁷⁹ *Id.*

⁸⁰ American Society for the Prevention of Cruelty to Animals, *supra* note 21; *see also* William Morris, *Iowa’s Second “Ag-Gag” Law Violates First Amendment*,

courts and have removed Ag-Gag laws from several states where they previously existed, such as Illinois, North Carolina, Idaho, and Kansas.⁸¹ In the states that Ag-Gag laws were removed, each instance was mandated by its respective court systems.⁸² Each court ruled that such laws were unconstitutional, as the speech was protected under the First Amendment.⁸³ So why, in the face of suits that challenge the constitutionality of these laws, do states still have them? Who are these laws protecting?

i. Factory Farms

The main beneficiaries of Ag-Gag laws are the farms themselves. Farming, however, has evolved a lot over time, making way for the rise of “factory farms.”⁸⁴ Factory farms are farming locations that carry a mass quantity of the product that is being farmed.⁸⁵ The widely commercialized farming practices have made it harder for the smaller family farms to compete, resulting in the exponential growth of factory farms in America.⁸⁶ It has become incredibly costly to try and compete with factory farms, especially because factory farms provide for over 98 percent of food in the United States.⁸⁷

Factory farms, as commercialized entities, operate a lot like the big name companies where the company owners look to cut costs at all times. Factory farms have been known to “innovate” the practice of farming by housing as many animals as possible in one location/farm.⁸⁸ This entails thousands upon thousands of animals held into tight spaces in order to most efficiently provide as much meat or animal products as possible.⁸⁹ If not the issue of space, farms have also tackled issues of animal health by supplementing animal feed with antibiotics and growth

Federal Court Rules, DES MOINES REG. (Mar. 14, 2022), <https://www.desmoinesregister.com/story/news/crime-and-courts/2022/03/14/iowa-animal-rights-videos-ag-gag-agriculture-law-violates-first-amendment/7041944001/> (highlighting that another of the four ag-gag laws passed in Iowa being overruled, but still to face more appeals).

⁸¹ See American Society for the Prevention of Cruelty to Animals, *supra* note 21.

⁸² See generally *Ag-Gag Across America*, *supra* note 30.

⁸³ Kelsey Piper, “Ag-Gag Laws” Hide the Cruelty of Factory Farms from the Public. Courts are Striking Them Down, VOX (Jan. 11, 2019), <https://www.vox.com/future-perfect/2019/1/11/18176551/ag-gag-laws-factory-farms-explained>.

⁸⁴ Adam, *supra* note 15, at 1147-48.

⁸⁵ *Why are CAFOs Bad?*, SIERRA CLUB MICH. CHAPTER, <https://www.sierraclub.org/michigan/why-are-cafos-bad> (last visited Mar. 23, 2022).

⁸⁶ Adam, *supra* note 15, at 1148.

⁸⁷ *Id.*

⁸⁸ David N. Cassuto & Tala DiBenedetto, *Suffering Matters: NEPA, Animals, and the Duty to Disclose*, 42 U. HAW. L. REV. 41, 52 (2020).

⁸⁹ *Id.*

hormones.⁹⁰ The antibiotics are given preemptively to the animals in order to prevent widespread disease in the farm, potentially wiping out a large majority of the product that is to be sold.⁹¹ The growth hormones are given so that the animals can reach their desired weight for selling purposes faster, meaning less time is spent on the farm and more time is spent on the shelves ready for consumers to buy.⁹²

The mistreatment of animals in factory farms is a talking point that unfortunately gains the most traction among animal rights groups or conscious consumers deciding on the price differences for more “ethical” grocery items. However, there are hundreds of news stories of farms being exposed for these practices, such as the case from 2004 where an undercover investigator worked at a Pilgrim’s Pride Chicken Plant, a major supplier of Kentucky Fried Chicken (KFC).⁹³ The undercover investigator, an actor of the People for the Ethical Treatment of Animals (PETA), caught on video workers twisting off chickens’ heads like a “twist-off beer bottle cap” and using the chicken blood to write graffiti all along the factory walls.⁹⁴ The video also included other workers spitting tobacco into the eyes and mouths of the chickens while they were still alive, and plucking their feathers fiercely to “make it snow” over the live chickens that sat in a pit below until it was their turn to be slaughtered, amongst other acts which showed a grotesque disregard for the welfare of the chickens.⁹⁵ The primary objectives for these factory farms to make money lends the industry right into the way of many common concerns that whistleblowers and other animal rights groups are worried about: the welfare of the animals involved.⁹⁶ Complaints against the condition that chickens are kept at factory farms is arguably the most successful whistleblowing movement in the agricultural sphere.

These movements brought about the now-common knowledge that chickens are pressed against each other in cages in order to collect their eggs at an expedited rate.⁹⁷ As the chickens are not moving

⁹⁰ Animal Legal Defense Fund, *The Dangers of Ag-Gag Laws*, YOUTUBE (Sep. 13, 2021), <https://www.youtube.com/watch?v=3S4r3KcoGis>.

⁹¹ *Id.*

⁹² Adam, *supra* note 15, at 1149-50.

⁹³ Lauren Stuy, *Standing as a Barrier for Constitutional Challenges to Civil Ag-Gag Statutes*, 69 CASE W. RESV. L. REV. 209, 210 (2018) (addressing the facts of the video from PETA that was released to the media, accessible at Donald G. McNeil Jr., *KFC Supplier Accused of Animal Cruelty*, N.Y. Times (July 20, 2004), <http://www.nytimes.com/2004/07/20/business/kfc-supplier-accused-of-animal-cruelty.html>).

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ Piper, *supra* note 83.

⁹⁷ Cassuto & DiBenedetto, *supra* note 88, at 52 (citing Nancy Perry & Peter Brandt, *A Case Study on Cruelty to Farm Animals: Lessons Learned from the Hallmark Meat Packing Case*, 106 MICH. L. REV. FIRST IMPRESSIONS 117, 118 (2008) (providing

around, the eggs cannot get lost or damaged.⁹⁸ However, as successful as a whistleblowing campaign that was, factory farmers then took the opportunity to market the “cage-free” eggs at a more expensive rate.⁹⁹ Eggs are still collected in the same manner, and are often sold as the cheapest option available at grocery stores, but there are concerns as to whether the marketing ploy of more expensive eggs meaning the chickens are actually cared for in a more humane condition is just that: a marketing ploy.¹⁰⁰ Whistleblowers would continue to act on these investigative efforts, but Ag-Gag laws can get in the way of that search for information.

Beyond space restrictions and the harmful food supplements given to animals, there are other animal welfare concerns that come from the practice of factory farming. These concerns include slaughter conditions in factory farms focused on: the production of meat products, physical abuse to the animals, and premature parent separation for the young animals that are either born on property or brought to the farms after being taken away from their parents at a different location.¹⁰¹ These animal welfare concerns also become health concerns for the workers at these locations. The workers are often under high-stress work environments, as there is an intense pressure to turn out as much product as possible from these locations.¹⁰² This can consist of poor protection equipment, insufficient training, or individuals getting hurt on the job from unanticipated animal behavior.¹⁰³

ii. Public Health Risks Posed by Factory Farms Benefitting from Ag-Gag Laws

Per the scope of this note, health effects from factory farming conditions are critical considerations. For example, food supplements given to the animals in factory farms, in the interest of keeping their

footage of chickens being kept in semi-darkness, living stacked on top of each other, in cages so tight that they cannot turn around in the cage and/or spread their wings)).

⁹⁸ *No More Ag-Gag Laws*, PITTSBURGH POST-GAZETTE (June 18, 2020), <https://www.post-gazette.com/opinion/editorials/2020/06/18/Ag-gag-laws-accountability-Constitution-agriculture-whistleblowing/stories/202006190006>.

⁹⁹ *Id.*

¹⁰⁰ Cassuto & DiBenedetto, *supra* note 88, at 52.

¹⁰¹ Piper, *supra* note 83.

¹⁰² *Id.*

¹⁰³ Shaakirrah R. Sanders, *Ag-Gag Free Nation*, 54 WAKE FOREST L. REV. 101, 133 (2019) (explaining the dangerous nature of animal and agricultural work on the workers as “[a]nually, an average of 113 persons under the age of twenty are the victims of farm-related fatalities. Fatalities for agricultural workers are ‘7 times higher than...for all other workers.’ The injury rate is over 40% higher than for all other workers”).

product (animals) healthy, preemptively give antibiotics to animals.¹⁰⁴ In theory, this plan sounds like a miracle that everyone should embrace. If an individual is always taking antibiotics, surely they cannot get sick. However, this is quite obviously not the case, as instead the constant flow of antibiotics simultaneously raises the capability of new mutant viruses to grow and spread and the incapability of compromised immune systems of the animals to fight off those new diseases and illnesses.¹⁰⁵ The same is to be said for the consumer of such antibiotic laden animal products.¹⁰⁶ A consumer that regularly ingests meat with a large concentration of antibiotics risks becoming unable to fight off diseases, or worse yet, creates a resistance to antibiotics themselves when they would otherwise be able to use them for treatment.¹⁰⁷

Such an immunity poses an even larger issue with animals harboring more volatile and lethal virus strains due to the exchange of more and more illness-ready bacteria.¹⁰⁸ Workers will interact with some animals infected with a virus that is not yet detectable, yet highly contagious. Those workers will then go home after punching out for the day. They will go about their lives, interacting with even more people as they do so, thus, exposing them as well. The infected animals will go to market and contaminate the product and the consumers. In both cases, people will continue to spread the illness.¹⁰⁹ What would these diseases look like? An exchange of animals giving humans diseases? These diseases are characterized as “zoonotic diseases,” and as of late, those viruses are all too familiar.

Zoonotic diseases, also known as “zoonoses,” are diseases that spread between humans and animals.¹¹⁰ Zoonotic disease can be caused by various disease agents such as viruses, bacteria, fungi, parasites, prions or other disease agents.¹¹¹ Some zoonotic diseases are incredibly common, just as some strains are highly contagious. Zoonotic diseases, according to best scientist estimates, account for 6 out of every 10 known

¹⁰⁴ Sigal Samuel, *The Meat We Eat is a Pandemic Risk, Too*, VOX (Aug. 20, 2020, 11:50 AM), <https://www.vox.com/future-perfect/2020/4/22/21228158/coronavirus-pandemic-risk-factory-farming-meat>.

¹⁰⁵ Kathryn Smith, *Incentivizing Transparency: Agricultural Benefit Corporations to Improve Consumer Trust*, 55 SAN DIEGO L. REV. 887 (2018).

¹⁰⁶ Samuel, *supra* note 104.

¹⁰⁷ *Id.*

¹⁰⁸ *IPBES Workshop*, *supra* note 20.

¹⁰⁹ See, e.g., *Last Week Tonight with John Oliver: The Next Pandemic* (HBO television broadcast Feb. 14, 2021).

¹¹⁰ Rebecca Lipman, *Zoonotic Diseases: Using Environmental Law to Reduce the Odds of a Future Epidemic*, 33 VA. ENV'T L.J. 153, 153 (2015).

¹¹¹ *Zoonotic Diseases*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/onehealth/basics/zoonotic-diseases.html> (July 1, 2021).

diseases, and 3 out of every 4 new or emerging diseases.¹¹² Such zoonotic diseases that occur or have already greatly impacted the world are H1N1, H5N1, SARS, and most recently, COVID-19, or Coronavirus.¹¹³ These familiar cases are caused by different disease agents, for example, H1N1 and H5N1 are swine influenza and avian influenza respectively.¹¹⁴ Both SARS and SARS-CoV-2 are zoonotic diseases caused by related coronaviruses.¹¹⁵ As this note is being written in the midst of the global pandemic of COVID-19, the question must be raised as to whether poor farming practices could be a mega-spreader of the next virus.¹¹⁶

After all, poor farming practices led to the mass spread of the Bird Flu (H5N1) and the Swine Flu (H1N1) around the United States.¹¹⁷ Zoonotic diseases cultivate in conditions that are promoted as solid business decisions in factory farming: many animals in close proximity to each other, poor cleanliness amongst the animals, antibiotic resistance through constant delivery of medicines through the animals' food, and so on.¹¹⁸ What if there had been communications among whistleblowers to alert the media, and through federal and global health agencies, about the possibility of such diseases spreading? Could that message already have been in the works, but instead agricultural gag laws got in the way?

c. Analysis

Agricultural gag laws have been found unconstitutional on the basis of not holding a legitimate state purpose in several states.¹¹⁹ General First Amendment appeals have garnered success in revoking Ag-Gag laws, but they still exist in at least six states.¹²⁰ These six

¹¹² *Id.*

¹¹³ *Id.*; Lipman, *supra* note 110, at 154 (citing the Spanish Flu of 1918-1919, H1N1, as claiming the lives of over fifty million people in just one year.)

¹¹⁴ E-mail from Dr. John Fischer, Dir. of the Southeastern Cooperative Wildlife Disease Study, Univ. of Georgia, to Carol Frampton, Chief Legal Officer, Nat'l Wild Turkey Fed'n (Apr. 13, 2021, 08:13 AM) (on file with author) [hereinafter Fischer E-mail].

¹¹⁵ *Id.*

¹¹⁶ VICE News, *The Next Pandemic Could Come From an American Factory Farm*, YOUTUBE (Dec. 11, 2020), <https://www.youtube.com/watch?v=8yPE0DuNvUg>.

¹¹⁷ *Id.*

¹¹⁸ *Id.*

¹¹⁹ Meredith Kaufman, *The Clash of Agricultural Exceptionalism and the First Amendment: A Discussion of Kansas's Ag-Gag Law*, 15 J. FOOD L. & POL'Y 49, 51 (2019) (providing as general evidence: *Animal Legal Def. Fund v. Wasden*, 878 F.3d 1184 (9th Cir. 2018) (upholding and striking aspects of Idaho's Ag-gag law); *Animal Legal Def. Fund v. Herbert*, 263 F. Supp. 3d 1193, 1198 (D. Utah 2017) (striking down Utah's Ag-Gag law in its entirety); *Animal Legal Def. Fund v. Reynolds*, No. 417CV00362JEGHCA, 2019 WL 140069 (S.D. Iowa Jan. 9, 2019) (striking Iowa Ag-Gag on summary judgment)).

¹²⁰ American Society for the Prevention of Cruelty to Animals, *supra* note 21.

states also happen to make up a large component of the United States' agricultural industry. As large actors are still not being held accountable, there are widespread First Amendment violations that are occurring.¹²¹ Newsworthiness should prevail against privacy claims in issues of public health. If there is a reasonable belief that reporting poor farming practices can alleviate the burden on health agencies, that reporting should outweigh the security or privacy interests of the factory farms.¹²² Timeliness in reporting these conditions can aid in preventing the spread of future zoonotic diseases and help those that could have been affected to reach help faster.¹²³ In measuring the potential assistance in public health consideration, one must first look to a selection of states and compare the applications and decisions of Ag-Gag legislation.

i. Kansas

The state of Kansas, in 1990, enacted the nation's first known Ag-Gag law.¹²⁴ This law is called "The Kansas Farm Animal and Field Crop and Research Facilities Protection Act."¹²⁵ This first-wave Ag-Gag law broadly criminalized four types of conduct: "(1) damaging or destroying an animal facility; (2) exercising control over an animal facility; (3) entering an animal facility to take pictures or recordings of the facility; and (4) remaining at an animal facility against the owner's wishes."¹²⁶ The areas that warranted protection are also broadly interpreted and written into the statutory language, stating that an "animal facility" is "any vehicle, building, structure, research facility, or premises where an animal is kept, handled, housed, exhibited, bred, or offered for sale."¹²⁷ An individual found to be in violation of the statute would, in relation to how much property damage was inflicted by that individual, be charged with a misdemeanor or a felony for severe damage caused.¹²⁸ There are two sections, Section (a) and Section (c) of the Kansas statute that are held suspect under the rights afforded by the First Amendment.

Both Sections (a) and (c) discuss the criminal penalties involved with violating Kansas's Ag-Gag law. Section (a) provides "[n]o person shall, without the effective consent of the owner and with the intent to damage the enterprise conducted at the animal facility, damage

¹²¹ *Id.*

¹²² Samuel, *supra* note 104.

¹²³ *Id.*

¹²⁴ KAN. STAT. ANN. §§ 47-1825, 47-1828 (2021).

¹²⁵ See, e.g., Kaufman, *supra* note 119, at 54 (citing KAN. STAT. ANN. § 47-1825 (2021)).

¹²⁶ See KAN. STAT. ANN. § 47-1826(b) (2021).

¹²⁷ KAN. STAT. ANN. § 47-1826 (2021).

¹²⁸ See KAN. STAT. ANN. § 47-1827(g) (2021).

or destroy an animal facility or any animal or property in or on an animal facility.”¹²⁹ Section (c), also mirroring the language of the First Amendment similar to Section (a), states “[n]o person shall, without the effective consent of the owner and with the intent to damage the enterprise conducted at the facility: . . . (4) enter an animal facility to take pictures by photograph, video camera or by any other means.”¹³⁰ These provisions were the subject of a complaint, alleging that the law was overly broad and contained impermissible prior restraint on viewpoint-based protected speech.¹³¹ As there is no definition for “damage” or “intent to damage” in the statute’s definition section, despite stating that this intent or damage is required in order to charge for the violation, the door is opened to overly broad interpretation.¹³² One of the moving parties behind the complaint, the Animal Legal Defense Fund, indicated that the “the criminal penalties are the same for a person who intends to take a picture in an animal facility without the consent of the owner as for a person who knowingly kills or injures an animal.”¹³³

Under the Kansas statute, an individual who took a picture, recording, or any other information at an enterprise and used it in a manner that had any negative impact on that facility, could be found as having “intent to damage.”¹³⁴ As presented by *Kaufman*, an example of the chilling effect that this statute has on speech is against the aims of the First Amendment.¹³⁵ If a child had taken a photo at a factory farm, showing the process of how the animals were slaughtered, and if that photo was then used to talk about the student’s switch to eating a vegetarian diet whilst using the name of the enterprise he took the picture from, that would be in violation of the Kansas statute.¹³⁶ If that photo were to successfully convert other individuals to the life of vegetarianism, there would also be a consideration of “damages” done to the enterprise that lost those students’ business.¹³⁷ This should not be the norm of speech surrounding factory farming. While Kansas states

¹²⁹ KAN. STAT. ANN. § 47-1827(a) (2021).

¹³⁰ KAN. STAT. ANN. § 47-1827(c) (2021).

¹³¹ Suit was filed by the Animal Legal Defense Fund, Center for Food Safety, Shy 38 Inc., and Hope Sanctuary against the Kansas Governor and State Attorney General for the alleged First Amendment violations the Act creates. See Complaint at 1, 6, ALDF v. Colyer, No. 2:18-cv-02657-KHV-JPO (D. Kan. Dec. 5, 2018), <https://www.courthousenews.com/wp-content/uploads/2018/12/KS-Ag-Gag.pdf>.

¹³² KAN. STAT. ANN. § 47-1801 (2021).

¹³³ Kaufman, *supra* note 119, at 57 (gathering support from the claim in *Id.* at 18 (comparing KAN. STAT. ANN. § 47-1827(g)(3) (2021) with KAN. STAT. ANN. § 21-6412(b)(2)(A) (2021))).

¹³⁴ See *id.* at 67.

¹³⁵ See *id.* at 68-69.

¹³⁶ See *id.*

¹³⁷ See *id.*

that its interest in creating the law was to protect the animals and the farmers, it appears as so Kansas farmers were really just looking to protect their profits from a news scandal about the worker mistreatment and other health violations.¹³⁸

If those farmers are harming the animals, what else is there as a safeguard to protect those animals and the consumers that would later receive that product? The treatment of these animals and the food products that consumers are to ingest have a significant importance to the public. The language found in the Kansas statute is unique, as it was the first one to be enacted and did not have a model to copy.¹³⁹ As the law has continued in its legislation, there have been amendments that included monetary amounts to property damage becoming the threshold of whether the individual was charged with a misdemeanor or a felony; however, damage still remains undefined.¹⁴⁰

This kind of law from Kansas, as enacted in 1990, posed three practical concerns in its application: “(1) they hide animal abuse from the public eye; (2) they pose a safety threat to the nation’s food supply; and (3) they raise safety concerns for the workers on factory farms.”¹⁴¹ These are the same expressed concerns of the note at hand, highlighting that public safety has been articulated before as reasons to ban Ag-Gag legislation; however, a lot of imitators have followed in Kansas’s shadow.¹⁴² However, that shadow has not remained untouched, as the action in *Animal Legal Defense Fund v. Schmidt* upheld that most of the Kansas statute was unconstitutional as it violated the First Amendment protections of Kansas citizens.¹⁴³

ii. Idaho and Utah

Idaho and Utah, similar to Kansas, have found that their Ag-Gag legislation has become unconstitutional. Idaho and Utah, unlike Kansas, are from what is known as the “Second Wave” of Ag-Gag laws.¹⁴⁴ “Second

¹³⁸ See *id.* at 69 (citing Livestock and Domestic Animals—Farm Animal and Research Facilities Protection Act—1990 Senate Bill No. 776, 90 Op. Kan. Att’y Gen. 72 (1990), <http://ksag.washburnlaw.edu/opinions/1990/1990-072.pdf> (last visited Mar. 10, 2019)).

¹³⁹ See KAN. ANN. STAT. §§ 47-1825, 47-1828.

¹⁴⁰ See Adam, *supra* note 15, at 1158.

¹⁴¹ See Stuy, *supra* note 93, at 224.

¹⁴² See Hanneken, *supra* note 64, at 664 (articulating that Montana and North Dakota also passed legislation similar to the Kansas Act the following year, in 1991); see also Shea, *supra* note 61, at 341-42 (providing additional information on the 1991 legislation from Montana and North Dakota).

¹⁴³ See *Animal Legal Def. Fund v. Schmidt*, 434 F. Supp. 3d 974 (D. Kan. 2020).

¹⁴⁴ See Kaufman, *supra* note 119, at 53.

Wave” laws differentiate from the “First Wave” laws (like Kansas) in the matter that First Wave laws were enacted with property interests in mind against property damage and theft.¹⁴⁵ Second Wave laws, on the other hand, were enacted in response to undercover investigations that had no additional physical conduct implicated in the statutory language.¹⁴⁶ The Idaho Interference with Agricultural Production law passed the Idaho legislature in direct response to an undercover video of animal abuse at an Idaho dairy farm being released.¹⁴⁷ In an immediate response suit from the Animal Legal Defense Fund, the case was eventually appealed to the Ninth circuit where the court held that two sections of the law were unconstitutional.¹⁴⁸ These sections directly pertained to the “Misrepresentation Clause,” Section (1)(a), and the “Recording Clause,” Section (1)(d) of the law.¹⁴⁹

The “Misrepresentation Clause” stated that: “a person commits the crime of interference with agricultural production if the person knowingly: (a) is not employed by an agricultural production facility and enters an agricultural facility by force, threat, misrepresentation or trespass.”¹⁵⁰ This portion of the statute was in direct response to cases like *Food Lion*, where the fear of individuals accessing the property under the misrepresentation of seeking employment had risen to the interest of farmers to embody in statutory provisions. The “Recording Clause,” is more similar to the law in Kansas, but with more emphasis on the security of the enterprise. This clause prohibits “enter[ing] an agricultural production facility that is not open to the public and, without the facility owner’s express consent...mak[ing] an audio or video recording of the conduct of an agricultural production facility’s operation.”¹⁵¹ The Ninth Circuit Court of Appeal’s decision in this case found that the clauses were tailored narrowly enough to ensure the protection of agricultural production facilities, holding similarly that the interests of the public are to be regarded higher than the interests of the animal facilities.¹⁵² The interests of the public were also upheld in the sister state of the Second Wave: Utah.

In 2012, Utah enacted the Agricultural Operation Interference Law, outlawing agricultural interference for several recording activities,

¹⁴⁵ *See id.*

¹⁴⁶ *See id.*

¹⁴⁷ *See id.* at 58 (addressing Arin Greenwood, *Court Says No to Gagging Those Who Reveal Farm Animal Abuse*, HUFFINGTON POST (Aug. 5, 2015), https://www.huffingtonpost.com/entry/idaho-ag-gag-law_us_55c0b399e4b06363d5a35543).

¹⁴⁸ *See* Animal Legal Def. Fund v. Wasden, 878 F. 3d 1184 (9th Cir. 2018).

¹⁴⁹ *See id.* (citing IDAHO CODE § 18-7042(c) (2018)).

¹⁵⁰ IDAHO CODE § 18-7042(a) (2018).

¹⁵¹ IDAHO CODE § 18-7042(c) (2018).

¹⁵² *See* Wasden, 878 F.3d at 1204.

seeking access to the enterprises under false pretenses and/or using false pretenses in order to seek employment and therefore obtaining access to the enterprise to record activities.¹⁵³ This statute, unlike Kansas, was struck down in its entirety as unconstitutional.¹⁵⁴ The statute was found unconstitutional as a violation of First Amendment rights, but also as a violation of the Equal Protection Clause of the Fourteenth Amendment.¹⁵⁵ The court further elaborated, denying that property interests of the agricultural industry should be held more valuable than the fundamental rights of the nation enshrined into the Constitution, the First Amendment rights of free speech.¹⁵⁶

Both of these states pose as great victories in abolishing Ag-Gag laws that have been passed under the Second Wave, however, eleven other states considered legislation similar to statutes found in Idaho and Utah.¹⁵⁷ Why did these eleven states not succeed in passing Ag-Gag legislation when the laws hadn’t been ruled unconstitutional until 2017? There are three suggested reasons as to why these laws did not pass:

First, a broad coalition of activist groups won the public opinion battle. Second, some state legislators and governors expressed concerns about the constitutionality of these laws. Finally, prosecutors dropped the charges in the first criminal case in the country brought under a traditional ag-gag statute, casting doubt on the efficacy of this form of ag-gag going forward.¹⁵⁸

If these reasons are to be believed, and the battle of public opinion has been won for a majority of states, one must capitalize on this gravity toward reform and target the remaining states with Ag-Gag laws.

¹⁵³ *See* Animal Legal Def. Fund v. Herbert, 263 F. Supp. 3d 1193, 1196-97 (D. Utah 2017).

¹⁵⁴ *See id.*

¹⁵⁵ *See id.*

¹⁵⁶ *See id.* at 1213 (holding “[t]here can be no doubt that today, over 200 years after Washington implored Congress to safeguard the agricultural industry, the industry remains crucially important to the continued viability of the nation. Similarly important to the nation’s continued viability, however, is the safeguarding of the fundamental rights Washington helped enshrine into the Constitution. Utah undoubtedly has an interest in addressing perceived threats to the state agricultural industry, and as history shows, it has a variety of constitutionally permissible tools at its disposal to do so. Suppressing broad swaths of protected speech without justification, however, is not one of them”).

¹⁵⁷ *See* Shea, *supra* note 61, at 343.

¹⁵⁸ *See id.* at 347.

iii. Risks Associated with Continued Ag-Gag Law Implementation

In the remaining few states that continue to enforce Ag-Gag laws, and to the states that are looking to implement similar measures once again after losing out in legal battles, many risks persist to threaten public health. The United States is not unfamiliar with zoonotic viruses such as salmonellosis (salmonella), however, many states are prepared to handle such viruses because proper reporting measures are in place.¹⁵⁹ The necessary procedure to handle a salmonellosis outbreak is to inform the public, contain the affected animals, recall products that came into contact with the facility, etc.¹⁶⁰ It has become so ingrained into common culture that many households are at the ready to check for production numbers when the next outbreak is announced, or even so far as imparting the ever-wise information to not eat raw cookie dough to young children and adults alike. One can be familiar with these policies in place only because of the careful reporting efforts supported by law.¹⁶¹

These procedures protect us from zoonotic diseases, but what happens when these laws are extremely narrow and rely on factory farms to make the call on whether this information is shared to the public? What if a factory farm is having a rough month in production, likely due to an outbreak, and they do not want to take the business hit of reporting a zoonotic virus that leads to destruction of their product and loss of trust in the company? Different factory farms operate at different levels of concern, holding that different farmed products can create varying levels of susceptibility to zoonotic viruses. In the large course of zoonotic viruses, meat processing facilities are the largest perpetrator of significant spreading events, if not mega-spreader events. These facilities likely enhance the spread of viruses among humans due to the close proximity of the work along the processing lines, the humidity and moisture in the air, and the cool temperatures that may facilitate viral survival, to list a few factors.¹⁶²

The spread is not limited to just inside the facilities, however, as the workers at these locations take the viruses back to families and others while outside their workplace.¹⁶³ A large majority of factory workers are

¹⁵⁹ See Adekunle Sanyaolu et al., *Epidemiology of Zoonotic Diseases in the United States: A Comprehensive Review*, 2 J. OF INFECTIOUS DISEASES & EPIDEMIOLOGY 3 (2016).

¹⁶⁰ See *Salmonella Homepage*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/salmonella/index.html>.

¹⁶¹ See *Salmonella Reports & Publications*, CTRS. FOR DISEASE CONTROL AND PREVENTION, <https://www.cdc.gov/salmonella/reportspubs/index.html>.

¹⁶² Fischer E-mail, *supra* note 114.

¹⁶³ *Id.*

made up of lower socioeconomic status individuals who have less access to medical care, and further, the inability to take off work for illnesses due to financial reasons.¹⁶⁴ Given the pre-existing vulnerable position of most factory farm workers in the spread of zoonotic viruses, as most recently seen throughout the COVID-19 pandemic,¹⁶⁵ it is crucial that more reporting be done to protect not only the population that the United States has deemed as essential workers, but also the public at large.

iv. Risk of Reverse Zoonotic Events and Secondary Zoonotic Events Through Continued Silence

If factory farmers, or even other animal care workers, are to keep reporting to work even when ill, what is being done to protect the animals that are kept in close proximity in large populations? Throughout the COVID-19 pandemic, there have been multiple strains and variants.¹⁶⁶ Perhaps the most concerning strains have been the recent Delta and Omicron variants that appeared in 2021 and have remained active until early 2022.¹⁶⁷ The origins of these variants has yet to be confirmed, but one of the working theories accepted by scientists is that these strains appeared from reverse zoonotic or secondary zoonotic events.¹⁶⁸ Reverse zoonosis occurs when a human with COVID-19 infects an animal. Secondary zoonotic events occur when an animal who contracted COVID-19 from a human infects or reinfects a human (most likely an immunocompromised individual) with the evolved virus.¹⁶⁹ The consequence of reverse zoonosis and secondary zoonosis, also known as “spillback,” is that the virus evolves after being in the new host, the animal, and when transmitted back to a human, and thus the viral genome of the COVID-19 gets altered.

For instance, the Omicron variant contains a new spike protein, N501K.¹⁷⁰ While a change in the viral genome alone does not guarantee a connection between the mutated strand from an event of secondary zoonosis, however, that same new protein spike was found in the Omicron

¹⁶⁴ See generally *Animal Agriculture Workers*, FOOD EMPOWERMENT PROJECT, <https://foodispower.org/human-labor-slavery/factory-farm-workers/> (Jan. 2022).

¹⁶⁵ J.A. Patel et al., *Poverty, Inequality and COVID-19: The Forgotten Vulnerable*, 183 PUB. HEALTH 110, 110-11 (2020).

¹⁶⁶ *Tracking SARS-CoV-2 Variants*, WORLD HEALTH ORG. (Feb. 3, 2022), <https://www.who.int/en/activities/tracking-SARS-CoV-2-variants/>.

¹⁶⁷ See *id.*

¹⁶⁸ William A. Haseltine, *Omicron Origins*, FORBES (Dec. 2, 2021), <https://www.forbes.com/sites/williamhaseltine/2021/12/02/omicron-origins/?sh=7851e7451bc1>.

¹⁶⁹ Sonia Shah, *Animals that Infect Humans are Scary. It's Worse When We Infect Them Back*, N.Y. TIMES (Jan. 19, 2022), <https://www.nytimes.com/2022/01/19/magazine/spillback-animal-disease.html>.

¹⁷⁰ Haseltine, *supra* note 168.

variant in an almost identical makeup from the viral strand found in animal populations carrying COVID-19, such as minks, mice, deer, and rats.¹⁷¹ Due to these similarities in the viral genome of the zoonotic virus from animals, but not a mutation found yet in humans, the spread of Omicron through reverse zoonosis is a plausible theory.¹⁷² Given the potential of infection and reinfection through animal carriers increasing through further investigation into breakthrough infections, more needs to be done in order to protect farm workers and the individuals around them. A comparative examination follows the varying responses to the threat of reverses and secondary zoonosis in Europe and Asia as compared to the United States.

a. Europe

A comparative look between European countries, those without as stringent Ag-Gag laws, and the United States shows an immediate concern in the lack of reporting on the spread of zoonotic viruses in factory farms. In the course of the SARS-CoV-2 pandemic, farms in Europe faced significant infection rates from farmed mink.¹⁷³ In 2020, Denmark was forced to slaughter all of its farmed mink after millions of animals contained a variant form of the novel coronavirus.¹⁷⁴ Among the 17 million minks, many proved to act as asymptomatic carriers of the COVID-19 virus, raising larger concern for farm workers who come into contact with seemingly healthy animals only to return home to infect dozens of people around them.¹⁷⁵ Denmark did not possess the only farms where minks tested positive for the SAR-CoV-2 virus, where it spanned into at least eight countries in the European Union.¹⁷⁶ The European Centre for Disease Prevention and Control (the ECDC) wrote a report following the situation, documenting new mutations of the SARS-CoV-2 virus and the heightened risk of COVID-19 spreading from fur farms to humans and wildlife, followed closely by an echoing statement from the World Health Organization.¹⁷⁷

¹⁷¹ See *id.*

¹⁷² See *id.*

¹⁷³ Dina Fine Maron, *What the Mink COVID-19 Outbreaks Taught Us About Pandemics*, NAT'L GEOGRAPHIC (Feb. 24, 2021), <https://www.nationalgeographic.com/animals/article/what-the-mink-coronavirus-pandemic-has-taught-us>.

¹⁷⁴ See *id.*

¹⁷⁵ Tom Levitt & Sophie Kevany, *Mink Farms a Continuing COVID Risk to Humans and Wildlife, Warn EU Experts*, THE GUARDIAN (Feb. 18, 2021, 5:00 PM), <https://www.theguardian.com/environment/2021/feb/18/mink-farms-a-continuing-covid-risk-to-humans-and-wildlife-warn-eu-experts>.

¹⁷⁶ See *id.* (noting that the number of mink farms affected in each country are as follows: 290 in Denmark, 69 in the Netherlands, 17 in Greece, 13 in Sweden, 3 in Spain, 2 in Lithuania, and 1 in each France and Italy).

¹⁷⁷ *New Assessment Shows High Risk of Introduction and Spread from*

Not only did the European Union quickly collaborate with the Danish fur farmers and other fur farmers from the affected countries, but they also implemented rigorous testing procedures for animals and humans alike—in addition to clearing out farms of the infected animals that would spread the novel coronavirus to more humans and wildlife.¹⁷⁸ The Netherlands had the first known patients actively infected with the SARS-CoV-2 virus from animal species back into the human population from farming ill minks.¹⁷⁹ Without the additional protections afforded to farm workers, and by extension the surrounding public, it stands to reason that another variant of the COVID-19 virus could have extended into the population and challenged the efforts of containment.

Beyond the actions of the government, citizens also took the initiative to become more informed on their safety during the time of the COVID-19 pandemic. In a poll conducted through several EU countries, EU citizens were in favor of abolishing fur farming and other farming practices deemed detrimental to the pandemic containment efforts in order to protect their health.¹⁸⁰ This pattern of civilian response follows the same trend explored earlier in this Note, where U.S. citizens are demanding transparency and better public health initiatives from factory farms.¹⁸¹ Similar to current zoonotic virus response for salmonellosis in the United States, given the emergence of zoonosis being linked to agricultural intensification (like the conditions found in factory farms),¹⁸² the process for protecting U.S. citizens needs to be open and thorough in order to get ahead of the next pandemic.

These calls for forward thinking and preparation for reverse and secondary zoonosis events are in a dire situation, as minks in the United States have also been carriers for COVID-19.¹⁸³ While Europe

Fur Farming of the Virus that Causes COVID-19, WORLD HEALTH ORG. (Feb. 17, 2021), <https://www.euro.who.int/en/health-topics/health-emergencies/pages/news/news/2021/02/new-assessment-shows-high-risk-of-introduction-and-spread-from-fur-farming-of-the-virus-that-causes-covid-19>.

¹⁷⁸ See Levitt & Kevany, *supra* note 175.

¹⁷⁹ Martin Enserink, *Coronavirus Rips Through Dutch Mink Farms, Triggering Culls to Prevent Human Infections*, SCIENCE (June 9, 2020), <https://www.science.org/content/article/coronavirus-rips-through-dutch-mink-farms-triggering-culls-prevent-human-infections>.

¹⁸⁰ See *Poll Results in COVID-19 First Detected in European Mink Farms a Year Ago- NGOS and the Public Urge the EU to Act*, FUR FREE ALL., <https://www.furfreealliance.com/covid-19-first-detected-in-european-mink-farms-a-year-ago-ngos-and-the-public-urge-the-eu-to-act/>.

¹⁸¹ The American Society for the Prevention of Cruelty to Animals & Lake Shore Partners, *supra* note 6.

¹⁸² See generally Bryony A. Jones et al., *Zoonosis Emergence Linked to Agricultural Intensification and Environmental Change*, 110(21) PROC. OF THE NAT'L ACAD. OF SCIENCES OF THE U.S. 8399 (2013).

¹⁸³ Alissa Greenberg, *What's the Deal with Mink Covid?*, PBS NATURE (Mar. 5, 2021), <https://www.pbs.org/wgbh/nova/article/mink-covid-virus-mutation/>.

immediately drove to cull the infected minks, the United States did not take those same precautions.¹⁸⁴ The United States mink farms still utilized the ill minks for their pelts.¹⁸⁵ The State of Wisconsin went as far as to add mink workers on the COVID-19 vaccine priority list immediately after other essential workers and people over 65.¹⁸⁶ The Immunization Program Manager of Wisconsin even confirmed that the state made the move to get mink farmers vaccinated as they found mink to be a serious biosecurity risk, not only killing many of the animals, but also spreading the virus to other animals and to humans.¹⁸⁷

The instances on European farms caused enough concern of a specific variant spreading from the minks to humans to give Wisconsin the desire to, in theory, protect their workers; however, Wisconsin farms still subjected its workers to unsafe work conditions.¹⁸⁸ The phenomenon of ill minks is not exclusive to the state of Wisconsin, as Utah also faced significant spillback from the COVID-19 pandemic, as hundreds of thousands of the minks present added to the risk.¹⁸⁹ Michigan fell victim to suspected mink-to-human COVID-19 cases as well, as individuals fell ill with SARS-CoV-2 that contained a unique mink-related mutation in the virus's genetic material.¹⁹⁰ Such investigations have found that Europe, in particular the farms in the Netherlands, Denmark, and Poland are not the only countries that should have concern with spillback infections.

Unlike the European nations, the most that was done in the United States was to mandate that certain farms with known COVID-19 cases be quarantined.¹⁹¹ That mandate fell flat when there were no testing requirements placed on farmers to regularly test the animals on the farms.¹⁹² There also were only loose recommendations for workers

¹⁸⁴ See *id.*

¹⁸⁵ See *id.*

¹⁸⁶ Madeline Heim, *Here's Why Wisconsin's Mink Farmers are Among the Next in Line for the COVID-19 Vaccine*, POST CRESCENT (Jan. 27, 2021), <https://www.postcrescent.com/story/news/2021/01/27/wisconsin-covid-19-vaccine-why-mink-farmers-next-phase-1-b/6701123002/>.

¹⁸⁷ See *id.* Biosecurity relates to practices that aim to reduce the introduction and spread of disease agents, in particular to these instances, on farms. *Id.*

¹⁸⁸ Greenberg, *supra* note 183.

¹⁸⁹ Smriti Mallapaty, *The Search for Animals Harboring Coronavirus—and Why It Matters*, NATURE (Mar. 2, 2021), <https://www.nature.com/articles/d41586-021-00531-z>.

¹⁹⁰ *Animals & COVID-19*, CNTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/animals.html> (Jan. 5, 2022).

¹⁹¹ Ben Kessler, *Here's Why Denmark Culled 17 Million Minks and Now Plans to Dig Up Their Buried Bodies. The Covid Mink Crisis, Explained*, NBC NEWS (Dec. 1, 2020), <https://www.nbcnews.com/news/animal-news/here-s-why-denmark-culled-17-million-minks-now-plans-n1249610>.

¹⁹² See, e.g., *Confirmed Cases of SARS-CoV-2 in Animals in the United States*,

to engage with the infected mink as if it were an infected human with COVID-19: wearing PPE and trying to social distance.¹⁹³ All of these recommendations, formulated by the CDC and overseen by the USDA, were optional and listed in the matters of what is “minimally” required of each farm.¹⁹⁴ By not taking more mandatory precautionary measures than allowing mink farmers the option to get vaccinated, such as providing free Personal Protective Equipment (PPE), requiring frequent testing of animals and workers, and forcing the farmers to handle the infected minks; the United States remained apathetic in the face of a biosecurity threat.

b. Asia

Other cases of biosecurity threats came even closer to home—even as close as inside the classroom, home, and bedroom with a beloved pet. Similar to the beliefs that reverse zoonosis is the cause of the Omicron variant, and other variants of COVID-19, an event of secondary infection is thought to have taken place in Hong Kong.¹⁹⁵ Household pets are frequently exposed to COVID-19 by their owners, especially owners that sleep with their pets.¹⁹⁶ The pet in question though, posed

U.S. DEP'T OF AGRIC., <https://www.aphis.usda.gov/aphis/dashboards/tableau/sars-dash-board> (last visited Apr. 8, 2022). By not requiring regular testing, many farmers can choose to not test their animals and have COVID-19 infections go unreported. The USDA records confirmed cases of COVID-19 among animals in the United States, but the number are assumed to be incredibly low given the relaxed policies on testing.

¹⁹³ See generally *Interim SARS-CoV-2 Guidance and Recommendation for Farmed Mink and Other Mustelids*, U.S. DEP'T OF AGRIC., https://www.aphis.usda.gov/animal_health/one_health/downloads/sars-cov-2-guidance-for-farmed-mink.pdf (last visited Apr. 8, 2022).

¹⁹⁴ See *Response & Containment Guidelines: Interim Guidance for Animal Health and Public Health Officials Managing Farmed Mink and other Farmed Mustelids with SARS-CoV-2*, U.S. DEP'T OF AGRIC. (Sept. 11, 2020), https://www.aphis.usda.gov/publications/animal_health/sars-cov-2-mink-guidance.pdf.

¹⁹⁵ See generally Helen Davidson, *Hong Kong Warns Residents to Not Kiss Pets After Dog Contracts Coronavirus*, THE GUARDIAN (Mar. 4, 2020), <https://www.theguardian.com/world/2020/mar/05/hong-kong-warns-residents-not-to-kiss-pets-after-dog-contracts-coronavirus>. While the majority of the section highlighting the spillback infections follow hamsters, there is also a known case of a Pomeranian dog that was ill with COVID-19 and forced to quarantine under close watch from the government of Hong Kong. See generally David Grimm, *Major Coronavirus Variant Found in Pets for First Time*, SCIENCE (Mar. 19, 2021), <https://www.science.org/content/article/major-coronavirus-variant-found-pets-first-time>. Cases of infected pets are not limited to Hong Kong either, as the United Kingdom, the United States, and Brazil have also gone on record to disclose house pets that became ill with COVID-19.

¹⁹⁶ Kevin Kavanagh, *Animal Farms: COVID-19 Doesn't Need Humans to Survive*, INFECTION CONTROL TODAY (Jan. 20, 2022), <https://www.infectioncontroltoday.com/view/animal-farm-covid-19-doesn-t-need-humans-to-grow>.

a risk all the way from the pet store. The latest outbreak of COVID-19 in animals occurred where a pet store employee is suspected to have fallen ill with SARS-CoV-2 after allegedly contracting it from a store hamster.¹⁹⁷ The hamster was one of a large shipment of the small rodents from the Netherlands for the holiday sale season, with one shipment on December 22, 2021 and the other on January 7, 2022.¹⁹⁸

After the pet shop worker tested positive for the Delta variant of SARS-CoV-2, a variant that had not been detected for months in the strict “COVID-19 Zero” region, the government called to euthanizing for thousands of hamsters, including other small animals and rodents (i.e., rabbits, guinea pigs, and chinchillas).¹⁹⁹ Not only have government officials backed the practice, citing the overall desire to keep the interests of public health to be of the utmost importance, hamster and small rodent pet owners were strongly encouraged to surrender their hamsters to be “humanely slaughtered.”²⁰⁰ This has led to some positive test results from the pets,²⁰¹ but also a large panic and some false attributions to pets across Hong Kong.²⁰² Keeping true to the tight-grip approach Hong Kong has to its SARS-CoV-2 protocols, the hamsters were called to be euthanized regardless of test results for the virus, as officials believe that it would be largely inconclusive as the incubation period for hamsters is unknown at this time.²⁰³ The incubation time is still unknown, but what is known is that the spread of the Omicron variant in hamsters is to be expected as well.²⁰⁴ This is largely believed to be accurate given that at least seven known genes that are responsible for coronavirus transmission in rodents are found within the particular variant.²⁰⁵

The call for over 2,000 deaths of small rodents created a robust public debate, with anyone from animal rights activists groups to NFT (Non-fungible Token) creators holding platforms and calling the

¹⁹⁷ Jessie Yeung, *Hong Kong Plans to Cull 2,000 Hamsters Over Covid Fears. Pet Owners are Outraged*, CNN, <https://www.cnn.com/2022/01/18/asia/hong-kong-covid-cull-hamsters-intl-hnk/index.html> (Jan. 21, 2022, 12:15 AM).

¹⁹⁸ *See id.*

¹⁹⁹ Grady McGregor, *Hong Kong Will Kill 2,000 Pets Due to Fears that Hamster Spread COVID to Human*, FORTUNE (Jan. 18, 2022, 6:19 AM), https://fortune.com/2022/01/18/china-covid-zero-cases-mail-beijing-hong-kong-hamsters/?queryly=related_article.

²⁰⁰ Chris Morris, *Hamster Accused of Spreading COVID in Hong Kong Never Had It*, FORTUNE (Jan. 28, 2022, 10:54 AM), https://fortune.com/2022/01/28/omicron-hong-kong-hamster-covid-spread/?queryly=related_article.

²⁰¹ *Surrendered Hong Kong Hamster Tests Positive for Covid as Cull Continues*, THE GUARDIAN (Jan. 23, 2022, 8:41 AM), <https://www.theguardian.com/world/2022/jan/23/hong-kong-hamster-covid-cull>.

²⁰² *See id.*

²⁰³ *See id.*

²⁰⁴ Kavanagh, *supra* note 196.

²⁰⁵ *See id.*

slaughter into question.²⁰⁶ The mass culling of hamsters is reminiscent of the slaughter of minks from 2020, and as the burial sites of the millions of minks have been suspected of contaminating the surrounding soil and water, its impacts are still relevant to consider the impact that animal-to-human transmission poses.²⁰⁷ Based on the current information that is available to research, there is simply not enough known to dictate the threat levels of how the cross host species mutations will interact.²⁰⁸ Given the level of uncertainty that surrounds scientists, legal professionals, and animal caretakers, there needs to be targeted and proactive protocols required when facing infected animals.²⁰⁹

Hong Kong has one of the most stringent COVID-19 protocols, demanding complete disclosure of such events, mandatory quarantining for 21 days in government provided “Quarantine Bays,” and also holds the government responsible for upholding these practices and investigating the safety of returning to locations.²¹⁰ After almost a month of sanitization of the initial pet shop of the confirmed Delta variant transmission, soon pet shops will be able to resume business as long as all pets undergo vigorous testing before being sold, along with a continued regulation of the pet trade.²¹¹ While such severity of practice is not prevalent among many countries, this example of immediate and complete response to the threat of reverse and secondary zoonotic events highlights the lack of attention the United States is providing in these instances.

The United States may not have an instance as large as a specific hamster infection with COVID-19, but with domestic animals carrying COVID-19, more attention must be turned to the efforts of limiting

²⁰⁶ Yvonne Lau, *Hong Kong’s Mass Hamster Cull Prompts an NFT Protest as Animals are ‘Resurrected’ Online*, FORTUNE (Jan. 21, 2022, 2:32 PM), <https://fortune.com/2022/01/21/hong-kong-hamster-cull-covid-nft-resurrect-pets-online/>.

²⁰⁷ Greenberg, *supra* note 183. The Netherlands also exhumed many of the bodies of the deceased minks that were buried for further research on the virus and the surrounding land. *See, e.g., Denmark to Dig Up Millions of Minks Culled Over Virus*, BBC NEWS (Dec. 21, 2020), <https://www.bbc.com/news/world-europe-55391272>.

²⁰⁸ Khalid Munir et al., *Zoonotic and Reverse Zoonotic Events of SARS-CoV-2 and Their Impact on Global Health*, 9 EMERGING MICROBES & INFECTIONS 2222, 2231 (2020).

²⁰⁹ Tessa Prince et al., *SARS-CoV-2 Infections in Animals: Reservoirs for Reverse Zoonosis and Models for Study*, 13 VIRUSES 3, 10 (2021).

²¹⁰ *See generally* Iain Marlow, *Hong Kong has Some of the World’s Toughest COVID Policies, Including 21-Day Quarantines. Then Its Own Officials had to Go Through Them*, FORTUNE (Jan. 11, 2022, 12:30 AM), <https://fortune.com/2022/01/11/hong-kong-covid-omicron-quarantine-cases-restrictions-birthday-party/>.

²¹¹ *Hong Kong Allows Hamster Pet Stores to Resume Business After Covid Cull*, NBC NEWS (Jan. 30, 2022, 8:17 AM), <https://www.nbcnews.com/news/world/hong-kong-allows-hamster-pet-stores-resume-business-covid-cull-rcna14111>.

both reverse zoonosis and secondary zoonosis.²¹² There is also a trend of animals in captivity becoming ill with the virus, leading zoo animals to fall ill with some succumbing to their illnesses.²¹³ There is also an alarming number of wild animals that are contracting SARS-CoV-2, mutating new strands of the virus, and running the risk of spreading that mutation to other animals, if not humans.²¹⁴ With the prevalence of wild animals that gather around farms for loose feed and shelter, it remains warranted to place concerns on factory farms not only for the animals inside closed facilities and its farmers as well as farms that could remain more open in its layout (i.e., not entailing only closed door facilities and instead letting animals roam in fields).

With the continued existence of Ag-Gag laws, we cannot guarantee transparent solutions, or even reporting of such zoonotic viruses in a timely fashion at all. This would not be the first time that terrible zoonotic outbreaks have made the country consider whether factory farming should be abolished,²¹⁵ and this will not be the last. Even if Ag-Gag laws only remain in a small subsection of states, agricultural food products cross states lines, as do the workers at such facilities, quickly escalating the virus spread into an immediate interstate problem. The safety of the minority of these states extends and carries over into the safety of all 50 states, and even other countries. These new strains can continue to cause turmoil for public health efforts, including but certainly not limited to, inducing vaccine failure for individuals exposed to strands that have evolved too far from the original viral genome that is treated by the COVID-19 vaccine.²¹⁶ This note has a few suggestions on how such reform can take place successfully to continue the work in abolishing Ag-Gag laws for the advancement of public safety and public health for all.

²¹² Mallapaty, *supra* note 189; see also Smriti Mallapaty, *How Sneezing Hamsters Sparked a COVID Outbreak in Hong Kong*, NATURE (Feb. 4, 2022), <https://www.nature.com/articles/d41586-022-00322-0>.

²¹³ Natasha Daly, *Hippos, Hyenas, and Other Animals are Contracting COVID-19*, NAT'L GEOGRAPHIC (Dec. 10, 2021), <https://www.nationalgeographic.com/animals/article/more-animal-species-are-getting-covid-19-for-the-first-time#:~:text=Hippos%2C%20hyenas%2C%20and%20other%20animals,tested%20positive%20in%20the%20U.S.>

²¹⁴ Brian Resnick, *There's a Covid-19 Epidemic in Deer. It Could Come Back to Haunt Us.*, VOX (Feb. 3, 2022, 9:00 AM), <https://www.vox.com/science-and-health/22904422/covid-pandemic-deer-animals-spillover-spillback>.

²¹⁵ See Laura Entis, *Will the Worst Bird Flu Outbreak in US History Finally Make Us Reconsider Factory Farming Chicken?*, THE GUARDIAN (July 14, 2015 03:30 PM), <https://www.theguardian.com/vital-signs/2015/jul/14/bird-flu-devastation-highlights-unsustainability-of-commercial-chicken-farming>.

²¹⁶ Shanshan He et al., *Backward Transmission of COVID-19 from Humans to Animals May Propagate Reinfections and Induce Vaccine Failure*, 19 ENV'T CHEMISTRY LETTERS 763, 766 (2021).

d. Suggestions

Lack of timeliness in reporting leads to serious health complications. This information is something that many are witnessing and living through the COVID-19 pandemic and thus understand quite well. While the cause of COVID-19 has allegedly been linked to wet markets that sold bats in China, it is not far removed under the eyes of scientific experts that factory farming is a major risk in forming the next upcoming pandemic.²¹⁷ While the First Amendment legal theory has had success, it is crucial for the continued success of removing Ag-Gag laws in the remaining six states, and the prevention of new laws surfacing for similar purposes, that the issue of public health be raised as well in the analysis of harm that Ag-Gag laws inflicts. The public health and well-being of all demand that Agricultural Gag laws be removed due to the common battle that humans face with zoonotic diseases.²¹⁸ As more zoonoses present themselves, the more dangerous they become.²¹⁹ Each disease creates within itself mutations that can result in a stronger, and more lethal, illness that can rapidly spread through contact with animals.²²⁰ Continued secrecy around human contact and interaction with animals in the most widespread involvement (food preparation and consumption) leaves the public in the dark about its health.²²¹

A lack of timeliness did not only create a situation for stronger concentrations of infections and serious health complications by not catching the disease early alone, it also led to a lack of public preparation for the disease.²²² At the beginning of the COVID-19 pandemic, a mass public panic broke out in response to the little information known about the virus.²²³ Without consistent support of information from reputable sources, misinformation can pose a large obstacle. This can be rectified

²¹⁷ *Surges in Diseases of Animal Origin Necessitates New Approach to Health-Report*, FOOD & AGRIC. ORG. OF THE U.N. (Dec. 16, 2013), <http://www.fao.org/news/story/en/item/210621/icode/>.

²¹⁸ *Zoonotic disease: Emerging Public Health Threats in the Region*, WORLD HEALTH ORG., <http://www.emro.who.int/about-who/rc61/zoonotic-diseases.html> (“It is estimated that, globally, about one billion cases of illness and millions of death occur every year from zoonoses. Some 60% of emerging infectious diseases that are reported globally are zoonoses.”) (last visited Apr. 8, 2022).

²¹⁹ Lipman, *supra* note 110, at 154.

²²⁰ *Id.* at 155.

²²¹ See Stuy, *supra* note 93, at 224 (“Prohibiting videos documenting such abuse keeps the public—whose sensitivity to the negative effects of a meat-based diet has grown substantially in the last few years—in the dark.”).

²²² See Samuel, *supra* note 104.

²²³ See generally Christian Jasper C. Nicomedes & Ronn Mikhael A. Avila, *An Analysis on the Panic During COVID-19 Pandemic Through an Online Form*, 276 J. OF AFFECTIVE DISORDERS 14 (2020) (citing one of the reasons for mass public panic was the process that information was disseminated).

by sending reporters en masse to farms, like what was done with pig farms when covering the sweeping Swine Flu Pandemic of 2009-2010, creating a significant awareness of the H1N1 virus, leading to an overall approval rating of the press coverage, with six-in-ten Americans saying that the press was doing either an “excellent” or “good job” of reporting the outbreak.²²⁴

By prioritizing the need for more complete journalism as it pertains to our food and agricultural sources, the better off the economy will remain in the long run. The total cost of the COVID-19 pandemic is best estimated to be more than \$16 trillion.²²⁵ In the event that there was no further change in the journalistic rights that whistleblowers and reporters hold, catching the COVID-19 virus at the time it was caught in the United States, the cost of preventing the pandemic is projected to have cost anywhere from \$22-31.2 billion.²²⁶ The strategy of not incentivizing the public health standard first in reporting the COVID-19 pandemic was not cost-efficient enough to warrant the \$16 trillion price tag. It additionally was not worth the over 469 million cases of COVID-19 worldwide (at the time of writing this note) and most certainly not worth the 6.1 million deaths worldwide.²²⁷

It is especially pressing to ensure that this public health consideration be added into the conversation of Ag-Gag law specifically, because zoonotic diseases pose more inherent risks in their genetic make-up.²²⁸ Organizations like the CDC are responsible for closely monitoring diseases that are infectious and highly lethal but have not yet become significantly contagious, like avian flu.²²⁹ The lethal strain of avian flu, known as H5N1, presents a very limited ability to be transmitted between humans.²³⁰ However, influenza viruses have the capability of mutating

²²⁴ See *Local TV A Top Source For Swine Flu News*, PEW RSCH. CTR. (May 06, 2009), <https://www.pewresearch.org/politics/2009/05/06/local-tv-a-top-source-for-swine-flu-news/>. *Contra* Mark Jurkowitz & Amy Mitchell, *Cable TV and COVID-19: How Americans Perceive the Outbreak and View Media Coverage Differ by Main News Source*, PEW RSCH. CTR. (Apr. 01, 2020), <https://www.pewresearch.org/journalism/2020/04/01/cable-tv-and-covid-19-how-americans-perceive-the-outbreak-and-view-media-coverage-differ-by-main-news-source/> (stating that the political affiliations associated with differing news sources greatly impacted how Americans received and/or felt confident in their knowledge of the pandemic).

²²⁵ David M. Cutler & Lawrence H. Summers, *The COVID-19 Pandemic and the \$16 Trillion Virus*, 324(15) J. OF THE AM. MED. ASS'N 1495 (2020).

²²⁶ See *IPBES Workshop*, *supra* note 20.

²²⁷ WHO *Coronavirus (COVID-19) Dashboard*, WORLD HEALTH ORG., <https://covid19.who.int/> (last visited Mar. 22, 2022).

²²⁸ See Lipman, *supra* note 110, at 155 (referencing *Public Health Threat of Highly Pathogenic Avian Influenza A (H5N1) Virus*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/flu/avianflu/h5n1-threat.htm>).

²²⁹ See *id.*

²³⁰ See *id.* (explaining the position from DAVID QUAMMEN, SPILLOVER 98, 506-11 (2012)).

frequently, thus “increasing the odds of the virus hitting upon a genetic combination that is highly lethal, infectious, and contagious.”²³¹ Even further, zoonotic diseases are harder to eliminate than non-zoonoses.²³² This is in part because of the randomness to zoonotic diseases, such as a “will it or won’t it” relationship before taking hold and creating a global pandemic or retaining its host as an animal species.²³³

Non-zoonotic diseases, like polio, can be eradicated entirely if vaccinations are made available to an entire population at a given time.²³⁴ In the case of zoonotic diseases, even if an entire human population is vaccinated, the disease would persist in animal populations.²³⁵ This leaves open the possibility of future infections through spillovers.²³⁶

Animals that consistently carry zoonotic diseases are called “reservoir hosts.”²³⁷ “Reservoir hosts may or may not become sick from the disease they carry, and it can often be difficult to determine which species is the reservoir host for a given disease.”²³⁸ A reservoir host may infect humans directly, or the disease may need to go through an “amplifier host” to effectively reach humans.²³⁹

Simply put, history will be doomed to repeat itself without further considerations given to the way the general public, not just the CDC or the World Health Organization (WHO), can monitor the conception and spread of zoonotic diseases. With the over 1.7 million speculated undiscovered zoonotic diseases, a practical approach of holding many people reasonable for the public health must prevail for reasons of common sense practice.²⁴⁰

²³¹ See *id.* (“H5N1 has been found in over sixty countries and persists in bird populations despite its lethality. Whether or not it can start a pandemic depends in large part on its ability to mutate into a form that is more infectious and transmissible between humans.” Donald G. McNeil, Jr., *A Pandemic That Wasn’t but Might Be*, N.Y. TIMES (Jan. 22, 2008), http://www.nytimes.com/2008/01/22/science/22flu.html?pagewanted=all&_r=0).

²³² See *id.*

²³³ See *id.*

²³⁴ See *id.* at 156; *Updates on CDC’s Polio Eradication Efforts*, CTRS. FOR DISEASE CONTROL & PREVENTION (Jan. 23, 2015), <http://www.cdc.gov/polio/updates/>.

²³⁵ See *id.*

²³⁶ See *id.* (QUAMMEN, *supra* note 230, at 518).

²³⁷ See *id.*; Peter Daszak et al., *Emerging Infectious Diseases of Wildlife—Threats to Biodiversity and Human Health*, 287 SCIENCE 443, 446 (2000).

²³⁸ See *id.*

²³⁹ See *id.* (citing QUAMMEN, *supra* note 230, at 36).

²⁴⁰ See *IPBES Workshop*, *supra* note 20.

Without the undue burdens of entering the marketplace of ideas with the ban of Ag-Gag laws, more individuals can feel empowered and available to monitor the safety of their own foods and not be left in the dark until one undercover investigator can successfully navigate the numerous categories of prohibited actions under these laws. It is sound public policy that the work of many belong to the many—that those who have the ability to go out and find the answer to the questions of where his/her food is from or what the conditions of the people who work on his/her food are. If the Ag-Gag laws are found unconstitutional *in toto*, that would remove the chilling effect that has lingered over the heads of the almost 90 percent of Americans who answered wanting more oversight and knowledge into the agricultural processes of factory farms.²⁴¹

In combination with the aims of the First Amendment, to have a wide-open, robust debate, the addition of the public health consideration should incentivize judges that sit before an Ag-Gag law case to side with the allowance of more speech to enter the marketplace of ideas. The interest in property rights can still be upheld through the proper claims of tort law, simply put, if the individual doing the recording had exceeded the scope necessary to obtain the recording, then there are viable suits to be filed upon those individuals and the damage to property that individual caused to the farm owner.²⁴² However, given the extensive history of the evolution of Ag-Gag laws, it is not beyond the expectation of this author that the implementation of a bright-light ban on the prior restraints, as it pertains to Ag-Gag laws, would be a weighty task on the farmer owners, alone, to instill. In order to assist the process of removing the legislative efforts of these bans, while still meeting the concerns held by the farmers and farmer associations that favor this kind of legislation, third party intervention must be utilized.

Third party intervention would be an easy extension of the operations of farmers as the operations currently exist. Farmers undergo rigorous inspections on a regular basis to ensure that the work product being produced at the property is of proper quality. If the general public were included on what the definition of “proper quality,” it wanted its food and other agricultural products manufactured, those consumers would have more knowledge and hold-up less of farmer’s work by ensuring both farmers and the consumers were aware of the processes and procedures. The information sharing would contribute in a two-way street fashion, both parties can benefit.

²⁴¹ See The American Society for the Prevention of Cruelty to Animals & Lake Shore Partners, *supra* note 6.

²⁴² See generally George, *supra* note 16.

In the current age of the Third Wave of Ag-Gag laws, many states still remain able to silence whistleblowers under the threat of criminal punishments.²⁴³ As whistleblowers still face reporting obstacles in several states, those individuals should be on the ground floor with collaborative efforts. Federal and state agencies, as well as interest groups, can act under opt-in regulation or self-regulation that is reported to such third parties. Obvious choices for such parties would be local farm bureaus, moving all the way up to the USDA. These additional regulations would boost public trust in the agriculture industry, thus increasing consumer loyalty and a positive public opinion.²⁴⁴ As seen in the wake of the COVID-19 global pandemic, the confidence in the agricultural industry by consumers is at a record low.²⁴⁵ Beyond the necessary protections that are mandated under the First Amendment, the duty to public safety must and always will be one of the crucial interests the industry must hold. This duty can be actualized by adopting some, or all, of the aforementioned proposals, as well as continuing the conversation between the people and the farmers.

CONCLUSION

The aim of Ag-Gag legislation began in the roots of protecting farmers and their property. Just as the agricultural industry has grown from its root as one of the oldest professions known to mankind, so as the aims of Ag-Gag laws. This category of legislation has fallen into breaking the trust of the public, and worse, placing the public in danger. This danger takes the form of zoonotic diseases, diseases that could be detected early if reported upon and brought to the timely attention of the correct agencies. The industry of farming has had to shift into a model of factory farming in order to accommodate the masses that require food to survive. This model is efficient, saving money and helping farmers turn a quick profit. However, the costs of these practices are quite catastrophic, as exemplified from the countless zoonotic outbreaks, epidemics, and pandemics that the public has had to face due to these harmful practices.

These outbreaks, epidemics, and pandemics have the ability to be tracked, caught before they get to uncontrollable spreads, and contained with the proper reporting system in place. This exact reporting, the reporting done by whistleblowers, however, is banned through the Ag-Gag laws in several states in the United States. These laws should no longer exist, if not solely for their violation of First Amendment rights, but also for the danger this legislation poses to the general population.

²⁴³ See Stuy, *supra* note 93, at 219.

²⁴⁴ See generally Smith, *supra* note 105.

²⁴⁵ See The American Society for the Prevention of Cruelty to Animals & Lake Shore Partners, *supra* note 6.

The additional legal justification for removing Ag-Gag laws, that is the interest of public health and possibly preventing the next global pandemic, creates too high of an incentive to ignore. Factory farmers have too long believed that they can shut the barnyard doors after the media has run out, but those doors demand to stay open for the health and safety of us all.

CONFUSING THE “BARK” SIDE WITH THE DARK SIDE: THE LEGAL PRACTICE OF DEVOCALIZING DOMESTICATED ANIMALS

SOPHIE POHL*

INTRODUCTION

Devocalization is medically known as “ventriculocordectomy [or] vocal cordectomy” and more commonly known as “debarking, devoicing, silencing, ... bark reduction[,] or bark softening.”¹ Devocalization is frequently performed to remedy an animal’s excessive barking or meowing and is “an invasive surgical procedure that involves removing a large amount of laryngeal tissue” from the animal.² The aftermath of a devocalization procedure consists of painful consequences and subjects the animal to lifelong “pain and stress ... [and] many risks, some life-threatening.”³ This voluntary and unnecessary procedure is continually “performed for convenience and profit” while providing no guarantee that the animal will receive any benefit.⁴ The animal must endure the rest of their life struggling to breathe, gagging on food or water, chronically coughing, facing the risk of anesthesia resulting from corrective surgeries, as well as facing additional stress, pain, and risks that can lead to their ultimate death.⁵

An unquantifiable number of domesticated animals have been subjected to devocalization, a procedure that is rarely disclosed and easily hidden from the general public.⁶ There are endless reasons and rationales explaining why this practice has been and continues to carry on throughout the United States; nevertheless, these explanations cannot justify the suffering that these animals endure in carrying out what should be a painless task—breathing. Today, there are *only six*

* For my fiancé, Jake, and the Pohl family. For Harvard, who has been by my side throughout my greatest accomplishments over the last 11 years. For Scarlet, Hobart, and Bismark—may the bark side be with you as you Rest In Peace.

¹ *An Act Prohibiting Devocalization of Dogs and Cats*, COAL. TO PROTECT & RESCUE PETS, <http://stopdevocalizing.weebly.com/model-legislation.html> (last visited June 11, 2022).

² *Debarking*, PETA, <https://www.peta.org/issues/animal-companion-issues/cruel-practices/debarking/> (last visited June 11, 2022).

³ *What Animal Lovers Need to Know About Devocalization*, COAL. TO PROTECT & RESCUE PETS, <http://www.pets4luv.org/infoflyers/Devocalization1.pdf>.

⁴ *Id.*

⁵ *See id.*

⁶ *Id.*

states that *partially* prohibit devocalization of dogs and only under certain circumstances.⁷ Massachusetts, Maryland, and New Jersey ban devocalization except “where it is medically necessary as determined by a licensed veterinarian.”⁸ Pennsylvania bans “devocalization of any dog for any reason unless the procedure is performed by a licensed veterinarian using anesthesia.”⁹ The remaining two states, California and Rhode Island, outlaw real estate conditions that require devocalization or declawing of animals as a condition for occupancy.¹⁰ This leaves other companion animals within the remaining majority at the mercy of their state law; most allowing for this cruel procedure to proceed under minimal exception.

Despite guiding standards of professional veterinary care and other measures of awareness, such as Massachusetts’s Logan’s law, to protect animals against these unnecessary procedures, the cruel practice of debarking continues to be a legal procedure in a vast majority of United States jurisdictions with minimal exception. This Article shines a light into the dark side, where animals are suffering the loss of their voices resulting from legislation riddled with loopholes due to the inconsistencies between the veterinarian community, state veterinary medical boards, and associations that ultimately perpetuate state devocalization laws. This Article proposes model legislation to be implemented, which consists of specific language to protect *all* domesticated animals and to eliminate these exceptions and loopholes allowing for the continuation of this cruel and unnecessary practice.

I. BACKGROUND

a. *What is Devocalization*

Devocalization strips animals, most commonly dogs and cats, of their natural and primary means of communicating themselves through vocalization.¹¹ This surgery is a non-therapeutic procedure

⁷ *State Laws Governing Elective Surgical Procedures*, AM. VETERINARY MED. ASS’N, <https://www.avma.org/advocacy/state-local-issues/state-laws-governing-elective-surgical-procedures> (Sept. 2019); *see also* Neil Shouse, *Is Devocalization of Dogs and Cats Legal in California?*, SHOUSE CAL. L. GRP. (Feb. 15, 2019), <https://www.shouselaw.com/ca/blog/animal-laws/is-devocalization-of-dogs-and-cats-legal-in-california/>.

⁸ *State Laws Governing Elective Surgical Procedures*, *supra* note 7; *see also* Shouse, *supra* note 7.

⁹ *State Laws Governing Elective Surgical Procedures*, *supra* note 7; *see also* Shouse, *supra* note 7.

¹⁰ *State Laws Governing Elective Surgical Procedures*, *supra* note 7; *see also* Shouse, *supra* note 7.

¹¹ *See Debarking*, *supra* note 2.

often performed to satisfy someone’s goal to decrease the “volume, pitch and intensity” of the animal’s vocalization by muffling, or eliminating altogether, the barking or meowing of a dog or cat.¹² Ventriculocordectomy is “the surgical removal of the vocal cords” performed through one of two invasive approaches.¹³ The oral approach is less expensive and less invasive than the second approach, however, it is not as successful. The second approach, laryngotomy, is an *additional* surgical procedure that fully bypasses the oral cavity in place of a direct incision into the larynx.¹⁴

These procedural approaches respectively result in either a partial or total devocalized animal, where either a part or a major portion of the vocal cords are stripped away.¹⁵ As most elective devocalization procedures are non-therapeutic, “[s]ometimes dogs and cats must undergo vocal cord surgery to treat disease, like cancer, or to correct a birth defect.”¹⁶ Still, the animals are left with disturbing consequences. Their new realities of vocal communication can be shrill or screechy, and are often diminished to rasping, hoarse wheezing, or sometimes down to no voice at all, as the surgery and complications render some completely mute.¹⁷

b. *Voluntary Procedures*

Devocalization is an elective surgical procedure, performed at the request of animal breeders, animal testing labs, or animal owners.¹⁸ “[E]lective surgery pertains to those requested by pet owners for the benefit of their cat or dog”¹⁹ A non-elective surgical procedure is recommended by a licensed veterinarian resulting from the findings from either a physical exam or diagnostic test.²⁰ Common elective surgical procedures performed on domesticated animals usually include

¹² *Welfare Implications of Canine Devocalization*, AM. VETERINARY MED. ASS’N (June 2018), <https://www.avma.org/resources-tools/literature-reviews/welfare-implications-canine-devocalization>; *see also Devocalization Fact Sheet*, HUMANE SOC’Y VETERINARY ASS’N, <http://www.humanesociety.org/sites/default/files/archive/assets/pdfs/hsvma/devocalization-fact-sheet-1.pdf> (last visited June 11, 2022).

¹³ *Devocalization Fact Sheet*, *supra* note 12.

¹⁴ *Id.*

¹⁵ *See id.*

¹⁶ *What Animal Lovers Need to Know About Devocalization*, *supra* note 3.

¹⁷ *Id.*

¹⁸ *See State Laws Governing Elective Procedures*, *supra* note 7; *see also* Shouse, *supra* note 7.

¹⁹ *Elective and Non-Elective Pet Surgery—Including Spays and Neuters*, LOCKERBY ANIMAL HOSP., <https://www.lockerbyanimalhospital.com/services/surgery/> (last visited June 11, 2022).

²⁰ *Id.*

the spaying or neutering of animals.²¹ Common non-elective surgical procedures performed on domesticated animals usually include: the removal of lumps, tumors, treating abscesses or other wound or laceration repairs, abdominal obstruction surgery, or dental surgery.²² Moreover, elective surgeries are not limitless to an owner's alteration desires they may have for their animal. There are state laws governing elective surgical procedures on animals including the cosmetic surgeries of tail docking, ear cropping, devocalization, declawing, as well as the piercing and tattooing of animals.²³

i. Tail Docking

Tail docking consists of the "amputation of all, or part of an animal's tail, using a cutting or crushing instrument."²⁴ Dogs, as well as a variety of farm animals, are subjected to this procedure.²⁵ In 2003, there was a recorded seventy breeds of dog subjected to tail docking procedures.²⁶ More recent data from 2011 and 2019 demonstrates a decline from 70 to 62 breeds of dog subjected to tail docking.²⁷ The docking of a dog's tail generally occurs between two and five days old, where anesthesia is not usually nor consistently administered.²⁸ There are two docking methods—one, where the tail is clamped close to the body where the tail on the other end is "cut or torn away[,]” and two, where a tail can be removed by a small rubber band being placed at the desired length, which prevents blood flow to the remainder of the tail, and falls off after three days.²⁹ Health effects and risks resulting from tail docking may include compromised "muscles, tendons, nerves, cartilage, and bone—all of which are severed during a docking procedure."³⁰

²¹ *Id.*

²² *Id.*

²³ *State Laws Governing Elective Surgical Procedures*, *supra* note 7; Shouse, *supra* note 7.

²⁴ Amy L. Broughton, *Cropping and Docking: A Discussion of the Controversy and the Role of Law in Preventing Unnecessary Cosmetic Surgery on Dogs*, ANIMAL LEGAL & HIST. CTR. (2003), <https://www.animallaw.info/article/cropping-and-docking-discussion-controversy-and-role-law-preventing-unnecessary-cosmetic>.

²⁵ *See id.*

²⁶ *Id.*

²⁷ *Id.*; *see also* Kimberly Alt, *Dog Ear Cropping And Tail Docking: Necessary Or Inhumane?*, CANINE J. (Mar. 16, 2022), <https://www.caninejournal.com/dog-ear-cropping/> (last updated Aug. 19, 2019); AKC Staff, *Issue Analysis: Dispelling the Myths of Cropped Ears, Docked Tails, Dewclaws, and Debarking*, AM. KENNEL CLUB, https://images.akc.org/pdf/canine_legislation/Crop-Dock-Debark-Article.pdf (last visited June 11, 2022).

²⁸ Broughton, *supra* note 24.

²⁹ *Id.*

³⁰ *Id.*

Tail docking dates back to the early Romans, where it was believed that it prevented rabies.³¹ Other reasons include concern for an animal's greater risk or injury associated with hunting, fighting, or watching flocks.³² Moreover, docking the tail of a dog was believed to reduce the number of places where another animal could grab onto, to discourage the chasing of game by reducing a dog's maneuverability, to strengthen the back of the dog, and to increase their speed.³³ In modern times, the tail docking controversy is a debate between pro-cosmetic procedures and anti-cosmetic procedures.³⁴ Pro-cosmetic advocates claim that tail docking is for safety, as hunting dogs face a very high risk of injury to their tails, or more generally, some breeds that are in confined spaces are subject to risk of tail injury.³⁵ Conversely, anti-cosmetic advocates find the hunting defense inconsistent because there is a disparity between the popularity of certain breeds that actually hunt and those that do not. They also question whether the tail docking is serving actual hunting purposes. "The majority of dogs in docked breeds are kept only as pets" and not used for hunting or working purposes; therefore, they are not subject to risk for tail injuries.³⁶

To date, twenty-one States regulate tail docking.³⁷ Texas law bans cosmetic tail docking if done for appearance only.³⁸ Pennsylvania bans the docking of a dog's tail after five days old unless a veterinarian performs the procedure at a minimum of twelve weeks of age using anesthesia or performed as medically necessary.³⁹ Maryland and Pennsylvania are the sole states restricting the docking of a dog's tail, with the exception of Maryland where only veterinarians may perform the surgery with the use of anesthesia and under appropriate conditions.⁴⁰ Three States (Alaska, Louisiana, and West Virginia) allow tail docking so long as the surgery is conducted under sanitary conditions, and the animal's pain is minimized and handled in a timely manner.⁴¹

ii. Ear Cropping

Ear cropping is the unnatural alteration, reshaping, and removal of roughly one-half to two-thirds of a dog's ears by surgically "removing

³¹ *See generally id.*

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.*

³⁷ *State Laws Governing Elective Procedures*, *supra* note 7.

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.*

the pinna, or ‘floppy part’ of the ear.”⁴² The procedure is effective when a puppy is between nine and twelve weeks old.⁴³ There are roughly twenty breeds regularly altered to have cropped ears.⁴⁴ Ear cropping is considered a surgery, where general anesthesia *should* be required and performed by a licensed veterinarian.⁴⁵ Often, an unfortunate reality is that breeders and dog owners attempt amateur performances of the procedure themselves.⁴⁶ “Once the pinna is removed, the ears are tapped to a splint or bracket that keeps the ears in an erect position.”⁴⁷ Though the ears are comprised of cartilage, nerves, and blood flow, post-operative pain medication is rarely provided, despite the multiple follow-up visits often necessary so that the ears can be stretched along the edges and re-taped.⁴⁸

Ear cropping procedures provide limited to no data proving that a dog’s health is improved as a result.⁴⁹ Pro-cosmetic advocates argue that ear infections are minimized, and hearing is improved, by removing the pinna and reshaping the ear; however, aside from the breed’s standards and their aesthetic requirements, this procedure has not proved to be necessary or beneficial to the animal.⁵⁰ Health risks associated with post-cropping may reach as far as infection or even amputation.⁵¹

Nine states regulate the ear cropping of dogs.⁵² Unless performed by a licensed veterinarian using anesthesia, Connecticut, Maryland, New Hampshire, New York, and Pennsylvania prohibit ear cropping without the use of anesthesia.⁵³ Illinois “prohibits animal torture but makes an exception for alteration of an animal done under the direction of a licensed veterinarian.”⁵⁴ Maine “prohibits mutilating an animal by irreparably damaging body parts but makes an exception” if performed by a licensed veterinarian.⁵⁵ Except as performed by a licensed veterinarian, Massachusetts bans ear cropping, and Washington bans ear cropping as well unless it is believed to be “customary husbandry practice.”⁵⁶

⁴² Broughton, *supra* note 24.

⁴³ *Id.*

⁴⁴ Alt, *supra* note 27.

⁴⁵ Broughton, *supra* note 24.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ Alt, *supra* note 27.

⁵⁰ *See id.*; *see also* Broughton, *supra* note 24.

⁵¹ Alt, *supra* note 27; *see also* Broughton, *supra* note 24.

⁵² *State Laws Governing Elective Procedures, supra* note 7.

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.*; *see generally* *Animal Husbandry*, NAT’L ANIMAL INT. ALL., <https://www.naiaonline.org/about-us/position-statements/animal-husbandry/> (last visited June 11,

iii. Declawing, Piercing, and Tattooing

Declawing is similar to devocalization in that it is equally invasive and is not a simple, painless surgery.⁵⁷ The harsh reality is much worse. Declawing traditionally involves “the amputation of the last bone of each toe. If performed on a human being, it would be like cutting off each finger at the last knuckle.”⁵⁸ Declawing exposes the feline to undue risks including, “pain in the paw, infection, tissue necrosis, lameness, and back pain.”⁵⁹

Between 2012 and 2013, California and Rhode Island adopted laws prohibiting, “a landlord from advertising or establishing rental policies in a manner that requires a tenant or potential tenant with an animal to have that animal declawed or devocalized as a condition of occupancy.”⁶⁰ As of 2019, performance of declawing for any other reason than medical need could lead to a fine of up to \$1,000 in “New York[.]. . . the first state in the country to ban cat declawing.”⁶¹ Additionally, in 2014 New York prohibited the piercing and tattooing of companion animals unless performed by a licensed veterinarian in conjunction with a medical surgery for the benefit of the animal.⁶² New York further allows tattooing for identification of a companion animal, as well as ear tags on rabbits and caviies.⁶³

c. *The Veterinarian Code*

Attending veterinary school is a choice of emotion, not economics, where students strive to help people and their pets by caring for these animals.⁶⁴ This choice of becoming a veterinarian, though

2022) (discussing the devocalizing husbandry practice as under assault, and defining animal husbandry as the combining of art and science in raising animals through blending time-honored practices and modern scientific knowledge, which creates a system that provides for the animal well-being, safe and efficient management, and overall handling of the animal).

⁵⁷ *Declawing Cats: Far Worse than a Manicure*, HUMANE SOC’Y OF THE U.S., <https://www.humanesociety.org/resources/declawing-cats-far-worse-manicure#:~:text=Declawing%20traditionally%20involves%20the%20amputation,medical%20benefit%20to%20the%20cat> (last visited June 11, 2022).

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ *State Laws Governing Elective Surgical Procedures, supra* note 7; *see also* Shouse, *supra* note 7.

⁶¹ *State Laws Governing Elective Surgical Procedures, supra* note 7.

⁶² *Id.*

⁶³ *Id.*

⁶⁴ Steve Barghusen, *Noneconomic Damage Awards in Veterinary Malpractice: Using the Human Medical Experience as a Model to Predict the Effect of Noneconomic Damage Awards on the Practice of Companion Animal Veterinary*

one of emotion, cannot hide the economic wealth of benefits received as a result of society's increased valuation of companion animals.⁶⁵ Veterinarians "make their living from the relationship between human guardians and their companion animals[,] and is a profession that has spent decades actively developing this bond as a means for professional survival.⁶⁶ However, along with this emotional and arguably economic choice in becoming a veterinarian, veterinarians also have the discretion with whom they care for or serve. "A veterinarian may choose whom they will serve" with the exception of keeping with applicable law and addressing emergencies.⁶⁷ Commonly addressed and guiding ethical standards found throughout the veterinarian principles of ethics involve protecting the patient, the animal, and the overall public health and safety.⁶⁸ Pursuant to the principles of veterinary medical ethics of the American Veterinary Medical Association (AVMA), "[a] veterinarian shall be influenced only by the welfare of the patient, the needs of the client, the safety of the public, and the need to uphold the public trust vested in the veterinary profession, and shall avoid conflicts of interest or the appearance thereof."⁶⁹ Veterinarians are charged with upholding a veterinarian-client-patient relationship, which requires compassionate and competent medical care where respect for animal welfare and human health are upheld.⁷⁰

i. First, Do No Harm

Veterinary medicine is primarily governed by state law.⁷¹ However, veterinarians have great discretion when it comes to the power they have in choosing what is in the best interest of the patient, client, and public health in accordance with their state law. "A veterinarian shall respect the law and also recognize a responsibility to seek changes to laws and regulations which are contrary to the best interests of the patient and public health."⁷² Therefore, a veterinarian has the power to seek legislative change in cruel practices such as non-therapeutic elective surgeries contrary to the best interest of the patient, public health,

Medicine, 17 ANIMAL L. REV. 13, 50-51 (2010).

⁶⁵ *Id.* at 53.

⁶⁶ *Id.*

⁶⁷ *Principles of Veterinary Medical Ethics of the AVMA*, AM. VETERINARY MED. ASS'N (Aug. 2019), <https://www.avma.org/resources-tools/avma-policies/principles-veterinary-medical-ethics-avma>.

⁶⁸ *See generally id.*

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ Rebecca J. Huss, *Valuation in Veterinary Malpractice*, 35 LOY. U. CHI. L.J. 479, 488 (2004).

⁷² *Principles of Veterinary Medical Ethics of the AVMA*, *supra* note 67.

or animal. Similarly, "[a] veterinarian should first consider the needs of the patient to prevent and relieve disease, suffering, or disability while minimizing pain or fear."⁷³ Veterinarians are charged with a duty and "obligation to 'first do no harm,' [which is] an ethical guideline always worth remembering."⁷⁴

ii. Veterinary Malpractice and Remedies

Clients of veterinary treatments and procedures for their companion animals maintain expectations of care that are higher than ever before in a time where dogs and cats are viewed as family members, or even child substitutes.⁷⁵ With this growing movement toward animals being considered as part of the family, clients are more willing to spend the money necessary on sophisticated procedures to save a companion animal's life.⁷⁶ Beyond paying for life-saving procedures, pet owners will pursue litigation for harm done to their animals. This type of litigation finds its historical rooting in the United States court system. Since the 1800s, state courts have recognized punitive or emotional damages for animal harm.⁷⁷ Purported to be as old as the written law itself, civil litigation and compensation for veterinary malpractice has been a remedy in state courts for well over 200 years addressing the emotional impact of pet loss.⁷⁸ In the 1960s, Louisiana, Texas, and Florida became the first states to award punitive or emotional damages for companion animal harm.⁷⁹ Despite this recognizance by state courts, today, such litigation on behalf of the client against the veterinarian for a harm done to their companion animal is not a common nor easy pursuit.

Citing to the American Animal Hospital Association, a 2004 animal law review comment shed light onto the difficulties of suing a veterinarian for malpractice. The comment showed that emotional damages had only been awarded on a mere ten occasions from 1999 to 2004.⁸⁰ Since many claims of veterinary malpractice are grounded in theories of negligence, it makes it ever more difficult to find cases that have facts supporting claims of intentional infliction of emotional distress, and when they do, the facts do not seem to be enough to

⁷³ *Id.*

⁷⁴ *Expert Perspectives*, COAL. TO PROTECT & RESCUE PETS, <http://stopdevocalizing.weebly.com/expert-perspectives.html> (last visited Apr. 22, 2022) (quoting Ilana Reisner, DVM, PhD).

⁷⁵ Huss, *supra* note 71, at 481 n.8; Barghusen, *supra* note 64, at 15.

⁷⁶ Huss, *supra* note 71, at 494.

⁷⁷ Christopher Green, Comment, *The Future of Veterinary Malpractice Liability in the Care of Companion Animals*, 10 ANIMAL L. 163, 174 (2004).

⁷⁸ *Id.*

⁷⁹ *Id.* at 176-77.

⁸⁰ *Id.* at 176.

win in litigation.⁸¹ For example, the unfortunate outcome of the 1993 case, *Miller v. Peraino*, illustrates one court's view of the relationship between a client and a veterinarian, and whether damages or another remedy are readily available.⁸² The Peraino couple (Perainos) left their pet Doberman in the care of veterinarian Dr. Jordan Miller to conduct a non-elective surgical tooth extraction, only to later discover that their dog had been killed by the licensed professional.⁸³ Two veterinary assistants witnessed the vicious beating of the Doberman by Dr. Miller. The pair reported that Dr. Miller, aggravated over the size of the dog and accompanying difficulty of transporting it up from the downstairs recovery room to the waiting room, battered the Peraino's pet with a pole and left her for dead in a cage.⁸⁴ Dr. Miller then lied to the Perainos, disclosing that their pet Doberman had died from a heart attack, and it was not until the veterinary assistants quit their jobs and told the Perainos the truth that the suit subsequently ensued.⁸⁵

The end result of this malpractice suit against Dr. Miller was discouraging for future litigation. Among other claims, intentional infliction of emotional distress was asserted by the Perainos.⁸⁶ The court held that the conduct directed toward the Doberman did not support a cause of action, and that recovery for conduct directed at third parties is limited to a person's immediate family present at the time or other persons if the distress resulted in bodily harm.⁸⁷ Since dogs were considered by the court as personal property, they could not be considered persons or family members for which remedy would have been appropriate.⁸⁸ As a result, Dr. Miller continued to practice veterinary medicine with no official reprimand, and the Perainos were left without a remedy, paying thousands of dollars in legal fees generated from this suit.⁸⁹

iii. Difficulties Surrounding Veterinary Accountability

In the disappointing case of the Peraino couple, Dr. Miller was not held accountable for the death of their companion animal.⁹⁰ At the time of this case, Dr. Miller could not be prosecuted, no matter how heinous his alleged attack may have been, because of the criminal

⁸¹ *Id.* at 188; Huss, *supra* note 71, at 521-22.

⁸² Huss, *supra* note 71, at 521; *see generally* Miller v. Peraino, 626 A.2d 637, 638 (Pa. Super. Ct. 1993).

⁸³ Huss, *supra* note 71, at 521; *see generally* Miller, 626 A.2d at 638.

⁸⁴ Green, *supra* note 77, at 179; *see generally* Miller, 626 A.2d at 638.

⁸⁵ Green, *supra* note 77, at 179; *see generally* Miller, 626 A.2d at 638.

⁸⁶ Huss, *supra* note 71, at 521; *see generally* Miller, 626 A.2d at 639-40.

⁸⁷ Huss, *supra* note 71, at 521; *see generally* Miller, 626 A.2d at 640.

⁸⁸ Huss, *supra* note 71, at 521; *see generally* Miller, 626 A.2d at 640.

⁸⁹ Green, *supra* note 77, at 180.

⁹⁰ Miller, 626 A.2d at 640.

animal protection statutes in the state of Pennsylvania.⁹¹ During the time of this litigation, Pennsylvania was one of twenty-six states "that flatly exempted all veterinarians from the purview of its animal anti-cruelty laws."⁹² Due to this categorical removal of veterinarians from penalty and criminal sanctions, an important legal remedy and safeguard was unjustifiably nullified, which contributed to how such removals have "historically... allowed other incidents of egregious veterinary behavior to go both undeterred and unpunished."⁹³

This case demonstrates how veterinary medicine is primarily governed by state law, and how influential it can be in finding justice for harms done to someone's companion animal.⁹⁴ An additional barrier in seeking remedy is the requirement of expert testimony, which is necessary in determining whether a veterinarian has complied with professional standards of care.⁹⁵ Professional standards of care can be established by "state veterinary medical associations or veterinary medical practice acts."⁹⁶ The AVMA is one of the associations that influences state laws in veterinary professional standards, as well as in addressing accountability for violations committed on behalf of licensed veterinarians.⁹⁷

Additionally, it is critical that medical records are properly logged and maintained in order to lessen the barriers in place when pursuing litigation for a harm done to a companion animal.⁹⁸ The AVMA policy statements express that an integral part of veterinary care is in the medical records and in the necessary recordings that are both in compliance with state and federal laws.⁹⁹ Regarding these medical records, state veterinary medical boards promulgate the standards.¹⁰⁰ Therefore, not only do professional ethics demand sufficiently thorough medical records, but it is mandated by law and good patient care.¹⁰¹ However, the cost of maintaining adequate medical records is high, which unfortunately has deterred good record keeping.¹⁰² Although state

⁹¹ Green, *supra* note 77, at 181.

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *See* Huss, *supra* note 71; *see* Green, *supra* note 77, at 188.

⁹⁵ *See* Huss, *supra* note 71, at 505.

⁹⁶ *Id.* at 506.

⁹⁷ *See generally* State and Local Advocacy, AM. VETERINARY MED. ASS'N, <https://www.avma.org/advocacy/state-and-local-advocacy> (last visited June 11, 2022).

⁹⁸ Barghusen, *supra* note 64, at 27-28, 45-46.

⁹⁹ *Id.* at 45.

¹⁰⁰ *See id.*

¹⁰¹ *Id.* at 46.

¹⁰² *Id.* ("[K]eeping good records requires time on the part of the veterinarian, and that time translates into cost. As discussed above, facilities such as those accredited by AAHA mandate 'that medical records be thorough and complete...[allowing for a]

practice acts and rules mandate the production of veterinary medical records that thoroughly demonstrate the performance of a proper standard of care, the reality is that enforcement of these acts and rules are hit or miss or even lacking entirely.¹⁰³

Moreover, in states that do allow for veterinary accountability by prosecuting for animal cruelty, litigation does not prove to be enough to serve as a punitive deterrent, even with associations like the AVMA and state veterinary boards guiding their professional standard of care.¹⁰⁴ In 1999, a Michigan case highlighted this insufficiency, where a veterinarian was charged with seven counts of animal abuse for the treatment of his clients' companion animals.¹⁰⁵ Dr. Ginsburg divulged his horrible and unnecessary acts of violence onto his clients' animals, but instead of criminally prosecuting Dr. Ginsburg, the state board of veterinary medicine was allowed to take over and handle the case.¹⁰⁶ Five former employees testified to numerous incidents of malpractice carried out by Dr. Ginsburg.¹⁰⁷ However, the penalties did not amount to be enough for the state board to find a cause to hold Dr. Ginsburg accountable, and their ultimate leniency precluded a meaningful message and demonstration of reprimand to hold veterinarians who cause intentional or negligent harm to animals accountable.¹⁰⁸ "[W]hile these state and professional veterinary licensing boards do provide avenues for individual citizens to file complaints alleging negligence or malpractice, they *do not* allow individual parties to personally recover *any* damages or economic relief from the process." (emphasis added).¹⁰⁹ Since the courts have been unwilling to allow damages to economically justify litigation against veterinarians, commenters have suggested that an appeal to a state board "may be the only realistic option which an aggrieved individual may possess."¹¹⁰ Yet, years of statistics and cases like the one observed in Michigan have proven this option otherwise, as these regulatory bodies are rarely taking the necessary action against

better understand[ing of the] pet's medical history and how past health issues might be impacting the...current medical status,' a process that may be more expensive. Thus, once again, the client who seeks low-cost care and the veterinarian who provides that care will bear the financial brunt of the increased record keeping dictated by a fear of litigation. There is no question that raising the quality of veterinary record keeping in general is the ethical thing to do. However, the public must bear the increased costs of that record keeping." (footnotes omitted)).

¹⁰³ *Id.*

¹⁰⁴ Green, *supra* note 77, at 182.

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.* at 182-83.

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

instances of negligence and professional incompetence.¹¹¹ Essentially, this inaction and failure to recognize remedy has tainted any meaningful enforcement and subsequent accountability stemming from the veterinary standard of care guidelines and ethics.

II. WHY DEVOCALIZE

a. Benefits

As medical needs may require that devocalization occur for the benefit of the animals' overall health, such as removal of tumors or cancer, the overall animal and human benefits prove to be lackluster. The AVMA lay out animal and human benefits, one being the prevention of relinquishment or euthanasia when other behavioral measures have been exhausted in the attempt to mend excessive vocalization.¹¹² Human benefits include "[r]educed noise pollution and damage to human hearing in large kennel facilities, less annoyance from dogs that bark excessively, fewer complaints..., and increased compliance with stringent noise ordinances in some communities."¹¹³ Quite clearly, the human benefits resulting from this convenience procedure outweighs all benefit the animal receives, because even if there is prevention of relinquishment or euthanasia resulting from devocalization, "limited data...suggests that the number of dogs for which resolution is accomplished by ventriculocordectomy is small."¹¹⁴ In other words, the procedure has variable success.

Nevertheless, despite the unsteady success resulting from this procedure in alleviating the needs of both the animal and client, this cruel practice continues to be performed due to its support and demand. Dr. Sharon L. Vanderlip models herself as an advocate for debarking procedures and has performed a number of them for more than 30 years.¹¹⁵ A "big, big, big proponent[.]" Dr. Vanderlip claims that devocalization, provided the procedure is performed in the right way, does not affect the animals; their behavior and health remain "totally the same afterwards," and the procedure continues to save these animals from euthanasia.¹¹⁶

Other proponents of the surgery include breeders, show dog exhibitors, sled dog racers, and dog fighters, whom find this procedure

¹¹¹ *Id.*

¹¹² See generally *Welfare Implications of Canine Devocalization*, *supra* note 12; see also *Devocalization Fact Sheet*, *supra* note 12.

¹¹³ *Welfare Implications of Canine Devocalization*, *supra* note 12.

¹¹⁴ *Id.*

¹¹⁵ Sam Dolnick, *Heel. Sit. Whisper. Good Dog.*, THE N.Y. TIMES (Feb. 2, 2010), <https://www.nytimes.com/2010/02/03/nyregion/03debark.html>.

¹¹⁶ *Id.*

as a beneficial and harmless convenience for their profession, sport, or illicit hobbies (e.g. drug dealing proponents proclaiming that they “prefer their attack dogs silent”).¹¹⁷ Breeders devocalize a dog or cat as a means of compromise with local authorities and with policies that do not tolerate the sound of multiple animals.¹¹⁸ Show dog exhibitors devocalize in order to maintain their dog’s silence in the ring or in transit between showcases.¹¹⁹ Sled dog racers devocalize due to the effect of increased vocalization when the dogs are in a pack together.¹²⁰ Dog fighters devocalize to maintain and keep their collection of animals hidden.¹²¹ Additionally, as there are pet owners who selfishly seek debarking procedures in place of providing responsible training, some pet owners feel as though this procedure is a selfless compromise between keeping or giving up their animal.¹²² Further, it has been observed that other owners have viewed debarking procedures as a “compromise between children who want a pet, and parents who don’t want animal vocalization.”¹²³

b. Deterrents

Devocalization procedures result in varying success for the desired and overall outcome of animal behavior.¹²⁴ The risks during surgery, as well as the complications that arise resulting from this surgery, and their lasting effect on the animal, are unavoidable. Anesthesia poses a complication with this specific surgery, as the delivery of the anesthetic is different than normal anesthetic procedures.¹²⁵ “Anesthesia must be delivered either using injectable anesthetic agents only, or by first performing yet another surgical procedure.”¹²⁶ Post-surgery complication risks are almost entirely unavoidable due to where the devocalization procedure takes place, as the larynx and trachea are areas subject to a higher risk of infection due to their normal bacterial residents in conjunction with the lack of ability to make these surgical

¹¹⁷ *Id.*; see also *What Animal Lovers Need to Know About Devocalization*, *supra* note 3.

¹¹⁸ See *What Animal Lovers Need to Know About Devocalization*, *supra* note 3.

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² See *Welfare Implications of Canine Devocalization*, *supra* note 12; see also *Expert Perspectives*, *supra* note 74.

¹²³ *Silencing the Already Silenced: De-Barking/De-Meowing/De-Purring Dogs and Cats*, ISA ONLINE (Mar. 8, 2010), <https://isaronline.blogspot.com/2010/03/silencing-already-silenced-de-barkingde.html>.

¹²⁴ See generally *Welfare Implications of Canine Devocalization*, *supra* note 12; see also *Devocalization Fact Sheet*, *supra* note 12.

¹²⁵ *Devocalization Fact Sheet*, *supra* note 12.

¹²⁶ *Id.*

areas completely sterile.¹²⁷ Another complication resulting from post-devocalization is the scarring or regrowth (webbing) of vocal cord tissue, which leads to trouble breathing, frequent gagging, and additional “[c]orrective surger[ies] to remove scar tissue obstructing the airway[, which] is very expensive.”¹²⁸

Moreover, the alleged psychological and behavioral results are not guaranteed to be fixed as a result of devocalizing the animal.¹²⁹ Rather, devocalization can lead to “[d]eased ability to communicate intentions to other animals and people, leading to possible misinterpretation and harm by others or danger to self and/or others.”¹³⁰ This can elevate the stress of both the human and animal, which could further lead to destructive behavior or aggression toward property, animals, or people.¹³¹ Evidently, the animal and human benefits resulting from devocalization are not guaranteed nor outweigh the negative lasting complications suffered primarily and solely by the animal.

c. Post-Devocalization Results

According to shelter executives, devocalization procedures do not keep animals out of the shelters, and these animals are still given up for similar reasons for why most animals are relieved to shelters.¹³² Instead, both the risks of relinquishment and euthanasia are increased after the animal’s devocalization, as owners are found unable to pay or unwilling to pay for the necessary, non-elective corrective surgeries.¹³³ As a result, owners are enabled to continue to ignore the underlying reasons why excessive barking persists, such as loneliness, boredom, or distress that the animal is facing.¹³⁴ Ignoring to address these emotional and behavioral needs and in choosing to devocalize the animal, heightened and inappropriate attention-seeking behaviors are likely to continue or arise as a result, including biting or soiling in the house.¹³⁵ Nonetheless, it is these same proponents of devocalization that are the ones continuing to give up their animals to shelters and rescue groups, or euthanize them when their purpose for breeding, sport, or exhibition has expired.¹³⁶ It is clear that instead of ignoring the underlying reasons, behaviors and

¹²⁷ *Id.*

¹²⁸ *What Animal Lovers Need to Know About Devocalization*, *supra* note 3; see also Dolnick, *supra* note 115.

¹²⁹ See *Devocalization Fact Sheet*, *supra* note 12.

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² See *What Animal Lovers Need to Know About Devocalization*, *supra* note 3.

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ *Id.*; see also *Devocalization Fact Sheet*, *supra* note 12.

¹³⁶ See *What Animal Lovers Need to Know About Devocalization*, *supra* note 3.

excessive vocalization need to be addressed non-surgically for there to be genuine change. Devocalization is therefore an inappropriate and ultimately ineffective solution because when the problem is not fixed by this procedure, which is known to have variable success in doing so, the animals still continue to be relinquished or euthanized for the same underlying and unaddressed behaviors.

d. The Paradox

Although devocalization and most voluntary elective procedures are legal, pursuant to limited exceptions, it is important to note that many veterinarians have testified that devocalization is frowned upon by the veterinary community, and these cases where it does occur are rare to come by within today's society. Dr. Gary W. Ellison of the University of Florida's College of Veterinary Medicine cautioned the public on the adverse effects resulting from devocalization.¹³⁷ Not only does the doctor attest to the animal's resulting difficulty to breathe, Dr. Ellison further asserts that the procedure is carried out by fewer and fewer licensed veterinarians and will continue this way into the coming years.¹³⁸ The modern reality of current veterinary curriculum is that professors do not teach this surgery to their students. Dr. Ellison defends this notion from his personal account, where he "has not come across recent veterinarian school graduates who have studied the procedure."¹³⁹ The United States has legalized devocalization in a majority of states, yet the procedure is not taught within the modern veterinary curriculum nor supported by today's veterinary community. Solidifying their position regarding this procedure, Banfield Pet Hospital, which holds more than 750 established practices nationwide, has banned devocalization outright.¹⁴⁰ Dr. Jeffery S. Klausner, the senior vice president and chief medical officer of Banfield Pet Hospital, confirmed that although Banfield's hospitals ban the surgery, "it was rarely, if ever, practiced before that."¹⁴¹ Dr. Klausner further establishes devocalization as "not . . . medically necessary[.]" and subjects the animal to inhumane and unnecessary pain.¹⁴²

A great deal of hypocrisy is maintained not only among the veterinarian community, state veterinary medicine boards, and the ultimate resulting state legislation, but also can further be found when it comes to what voluntary procedure is being performed on what animal. PETA shed light on this paradox through sharing a poll released by

¹³⁷ Dolnick, *supra* note 115.

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² *Id.*

Associated Press, which compared the public's view of acceptability concerning declawing and devocalizing procedures. "55 percent of cat guardians are in favor of declawing, while only 8 percent of dog fanciers agree with debarking, or surgically removing dogs' vocals cords."¹⁴³ Not only does this speak to the public discouragement of devocalizing procedures, but it also speaks to the hypocrisy of an equally invasive, painful, and voluntary procedure—declawing. In fact, declawing and debarking victims share similar lasting physical problems as a result of these procedures, and the solution to either procedure does not necessarily fix the underlying behavioral issue. Similar to devocalizing, declawing is an "unnecessary procedure that provides no medical benefit."¹⁴⁴ Again, declawing shares similar invasiveness, resulting pain, and no guaranteed fixes to behavior. Yet, we are faced with a paradox in the way society views the two very similar, non-therapeutic, and voluntary procedures—one is acceptable, and one is not.

III. CURRENT DEVOCALIZATION POLICY, LAWS, AND EXCEPTIONS

a. Foreign Policy

The European Convention for the Protection of Pet Animals and Canada have made an affirmative stance on where they stand regarding the surgical procedure of devocalization. Under the United Kingdom's Animal Welfare Act of 2006, it is an offense to carry out a procedure "which involves interference with the sensitive tissues or bone structure of the animal, otherwise than for the purpose of its medical treatment."¹⁴⁵ Additionally, The European Convention for the Protection of Pet Animals prohibits devocalization and lists this procedure under "surgical operations that 'for the purpose of modifying the appearance of a pet animal or for other non-curative purposes shall be prohibited.'"¹⁴⁶ In Canada, the Veterinary Medical Association "oppose[s] non-therapeutic devocalization of dogs except after behavioral modifications and management methods have failed and as a final alternative to relinquishment euthanasia."¹⁴⁷

Despite some foreign countries making their stance clear on prohibiting procedures similar to devocalization, cruel and inhumane

¹⁴³ *Debarking, No, Declawing, Yes...?*, PETA, <https://www.peta.org/living/animal-companions/debarking-declawing-yes/> (June 24, 2019).

¹⁴⁴ *Declawing Cats: Far Worse than a Manicure*, *supra* note 57.

¹⁴⁵ See generally *Animal Welfare Act 2006*, U.K. PUB. GEN. ACTS, <https://www.legislation.gov.uk/ukpga/2006/45/contents> (last visited June 11, 2022).

¹⁴⁶ *Welfare Implications of Canine Devocalization*, *supra* note 12.

¹⁴⁷ *Id.*

procedures performed on animals persist to slip through the cracks, where prohibition of these procedures is merely a stance held by the country, and not necessarily a law with legal effect and/or consequence to the actor performing the procedure. In 2017, in the southwest region of China, horrific footage was captured that shared a glimpse with the world of one of the many inhumane procedures performed on animals on a daily basis without the actor facing any known repercussion or legal consequence.¹⁴⁸ This recording “showed terrified dogs with their mouths being held open as they[were] subjected to crude debarking procedures in the middle of a crowded market.”¹⁴⁹ The Chinese, self-proclaimed veterinarian captured in this video “was reportedly performing as many as 10 of these procedures per hour—leaving the discarded tissue from dogs’ throats lying in the street around him and failing to sterilize his equipment.”¹⁵⁰ In carrying out these vile and inhumane procedures, the man revealed to an undercover reporter that he was unlicensed and presumably had no official authority to be performing such procedures.¹⁵¹ This video sent a shock wave, as well as worldwide awareness, of one cruel reality devocalization can depict, and while it is easy to criticize China for allowing such practices to go on in their streets without penalty, China is not the only country where debarking is performed.¹⁵²

b. United States Policy and State Law

The United States has effectively legalized devocalization as *only* six states *partially* restrict the procedure.¹⁵³ Although the United States can claim that America is humane in its application and limitations pursuant to the procedure, it is nonetheless a cruel, voluntary, elective, non-therapeutic, and legal surgery in a majority of state jurisdictions. Ohio is an example of a jurisdiction that *partially* restricts debarking a dog subject to certain circumstances. Ohio’s prohibition on the surgical silencing of a dog is limited to a vicious or dangerous dog.¹⁵⁴ “No person may debark or surgically silence a dog that the person knows or has reason to believe is a dangerous dog.”¹⁵⁵ Before a licensed veterinarian performs a debarking procedure, the veterinarian may declare, through written

¹⁴⁸ See Danny Prater, *Dogs’ Vocal Cords Cut in Crude Chinese Street Debarking Procedures*, PETA (Sept. 22, 2017), <https://www.peta.org/blog/chinese-vet-debarking-dogs-busy-market/>.

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

¹⁵² *See id.*

¹⁵³ *State Laws Governing Elective Surgical Procedures*, *supra* note 7.

¹⁵⁴ *See generally* 3 Oh. Jur. Animals § 64.

¹⁵⁵ *Id.*

notice to the owner, that the dog is not dangerous.¹⁵⁶ This written waiver requires information regarding the veterinarian’s and dog’s respective license numbers, a reasonable description of the dog, and “a statement about the prohibitions in the governing statute pertaining to the debarking of dangerous dogs.”¹⁵⁷ The written waiver serves as an affirmative defense for a veterinarian in Ohio to a charge in violation of the debarking statute.¹⁵⁸ Violations of the debarking statute in Ohio constitute a criminal offense, and the violator is charged with a felony of the fourth degree.¹⁵⁹ Not only is a violator guilty of a criminal offense, but the dog will be sentenced, by court order, to be “humanely destroyed.”¹⁶⁰ Ohio’s *partially* restricted debarking statute reflects a couple of aforementioned concerns. For example, the written waiver creates an affirmative defense and protects a veterinarian from being held criminally liable for a charge under Ohio’s debarking statute; therefore, this creates a challenge in seeking malpractice litigation against a veterinarian. Additionally, although Ohio penalizes violators who devocalize an allegedly dangerous dog, the dog continues to be the one facing the ultimate consequence, in this case mandatory termination by Ohio law if deemed dangerous, because of their owner’s choice and ability to seek an elective, unnecessary, and marginally beneficial procedure.

c. Legislative Loopholes

Hiding in obscure parts of their ordinances and statutes, similar to Ohio’s dangerous dog exception, more than just a few states have laws on their books that actually *require* devocalization.¹⁶¹ The International Society for Animal Rights points out just some of the constitutional deficiencies in these ordinances and statutes that result in the continuance of this cruel and medically immoral procedure, as well as pointing out how devocalizing dogs can be a danger to general public safety and, more specifically, to law enforcement.¹⁶² The city of Riverside, California demonstrates the requirement in place where the animal is to be devocalized at the expense of the responsible party pursuant to Section 8.10.080 administrative abatement measures subsection (E).¹⁶³ An administrative hearing officer may assess, and

¹⁵⁶ *See id.*

¹⁵⁷ *Id.*

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *See ISAR’s Model Statute Prohibiting Devocalization*, INT’L SOC’Y FOR ANIMAL RTS., <http://isaronline.blogspot.com/2014/04/understand-that-marylands-recently.html> (Apr. 30, 2014).

¹⁶² *See generally id.*

¹⁶³ *See id.*; *see also* RIVERSIDE, CAL., CODE OF ORDINANCES § 8.10.080 (1995).

consider as part of their determination, the animal's noisiness and whether it creates a public nuisance that needs remedied.¹⁶⁴ Additionally, Jefferson County, Colorado, has a regulation similarly relating to public nuisance determinations pursuant to a dog's noise levels amounting to disturbing the peace.¹⁶⁵ Not only does a violation for failing to mend the dog's noise disturbance result in potential fees ranging from \$50 to \$1,000 and/or court appearances, Jefferson County further offers mechanical and surgical solutions as an option for mending the dog's noise.¹⁶⁶ But, in directing dog owners to anti-bark mechanical measures such as collars and fences with electronic, sonic, or other device controls, and substantial financial penalty if failing to mend the issue, Jefferson County still encourages speaking with a licensed veterinarian to debark the dog in their last resort policies.¹⁶⁷

Current "humane" laws allowing for devocalization are clearly in conflict with banning the practice, and the loopholes found within the provisions are manipulative and serve primarily to keep an inhumane convenience surgery legal and legitimate.¹⁶⁸ Loopholes in the provisions include phrasing such as "[a]llowable as a [l]ast [r]esort/[f]inal [a]lternative to [e]uthanasia[.]"¹⁶⁹ encourages continued use of devocalization procedures by legitimizing it as an acceptable practice under law. Similar to Jefferson County's loophole, allowing devocalization as a last resort or final alternative, as opposed to putting down the animal, not only enables this procedure to be legally performed, but it further encourages irresponsible pet ownership.¹⁷⁰ Additionally, excluding definitions for vocal cord surgery, devocalization, and medically necessary creates loopholes, because in order to preclude vagueness and ambiguity, these terms need to be explicitly defined.¹⁷¹ For example, phrasing like "[a]llowable for [m]edical [n]ecessity" creates a loophole in its ambiguity because it does not define medical necessity as treating physical illness, disease, injury, or to correct a birth defect which causes the animal physical harm or pain.¹⁷²

Allowing the term medical necessity to be undefined leaves open room for interpretation by licensed veterinarians, which enables the performance of devocalization for non-therapeutic and voice-altering

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

¹⁶⁶ *ISAR's Model Statute Prohibiting Devocalization*, *supra* note 161.

¹⁶⁷ *Id.*

¹⁶⁸ See *Ten Loopholes That Destroy Good Devocalization Bans*, UNITED AGAINST DEVOCALIZATION, <http://stopdevocalizing.weebly.com/legislative-loopholes.html> (last visited June 11, 2022).

¹⁶⁹ *Id.*

¹⁷⁰ *Id.*

¹⁷¹ See *id.*

¹⁷² *Id.*

surgery for any reason without being subject to a restriction.¹⁷³ Moreover, when legislation or guidelines define animals in terms of dogs and cats instead of using terms like pet or companion animal, or vice versa, they create a loophole for animals used for other purposes, specifically ones that would not be a dog or a cat, pet, or companion animal.¹⁷⁴ A devocalization prohibition law that defines the prohibited animals subjected to the procedure as purely dogs and cats instead of defining as a pet or companion animal, or vice versa, maintains a significant form of exclusivity and leaves all animals that are not explicitly defined as one or the other without any protection, because they simply fall outside of the scope.¹⁷⁵

Further, euphemisms that describe devocalization as bark softening, bark quieting, or voice reduction allow for a claim, defense, or justification of a lesser non-invasive procedure, even though there is no difference in any way it is defined, as the same cruelty is inflicted.¹⁷⁶ Through either the oral approach or laryngotomy, an incision must be made through the vocal apparatus in order to alter the voice of an animal.¹⁷⁷ Additionally, applying the law only to a specific class of people or owners, similar to that of targeting only certain animals, can create the same legislative loopholes, such as applying the law solely to breeders, puppy mills, or landlords.¹⁷⁸ In selectively targeting the law to apply only to certain persons or animals allows for others to fall outside of the scope for being subjected to these restrictions, limitations, and penalties, and therefore passively permits the continuance of the practice of devocalization.¹⁷⁹

IV. REMEDIES

a. Model Legislation

The State of Massachusetts has propelled the movement toward effective legislation in order to put an end to the viewing of animals as property and inanimate objects. Logan's law, codified as House Bill No. 344, prohibits canine and feline devocalization in Massachusetts.¹⁸⁰ Logan was the victim of a show dog breeder's decision to have him

¹⁷³ See *id.*

¹⁷⁴ *Id.*

¹⁷⁵ *Ten Loopholes That Destroy Good Devocalization Bans*, *supra* note 168.

¹⁷⁶ *Id.*

¹⁷⁷ See *Welfare Implications of Canine Devocalization*, *supra* notes 12; see also *Devocalization Fact Sheet*, *supra* note 12.

¹⁷⁸ See *Ten Loopholes That Destroy Good Devocalization Bans*, *supra* note 168.

¹⁷⁹ *Id.*

¹⁸⁰ *Silencing the Already Silenced: De-Barking/De-Meowing/De-Purring Dogs and Cats*, *supra* note 123.

devocalized, and the breeder subsequently abandoned Logan when he no longer brought home winning marks.¹⁸¹ Logan could only “rasp and wheeze, cough and retch until the day he died.”¹⁸² In March of 2010, Logan’s Law was approved by the House in support by at least 60 legislatures.¹⁸³ Section 80 ½ (a) of the Bill provides in part that:

No person shall surgically debark or silence a dog or cat, or cause the surgical debarking or silencing of a dog or cat, unless a veterinarian licensed in this state has filed a written certification with the town clerk or in Boston, the police commissioner, stating that the surgical debarking or silencing is medically necessary to treat or relieve an illness, disease, or injury, or correct a congenital abnormality that is causing or will cause the dog or cat medical harm or pain.¹⁸⁴

Section (b) of the bill requires written certification of Section (a) in conjunction with dates, descriptions, supporting diagnosis and findings, as well as the signatures, addresses, and information of both the owner and the veterinarian.¹⁸⁵ Section (c) provides that only veterinarians are authorized to perform this procedure using anesthesia.¹⁸⁶ Section (d) criminalizes violations of the Bill by imprisonment in a state prison for not more than five years, imprisonment for up to two and a half years, a fine of not more than \$2,500, or by both fine and imprisonment.¹⁸⁷ Additionally, a court maintains discretion to order the convicted to a mental health evaluation, as well as recommending counseling or treatment.¹⁸⁸ Massachusetts goes further, allowing for a person convicted under this section to be “barred from owning or possessing any animals, or living on the same property with someone who owns or possesses animals” for a period of time the court deems fit.¹⁸⁹ The court can require the person to take classes related to the “humane treatment of animals.”¹⁹⁰ The Bill demands disclosure of any person or business selling the animal for profit, the disclosure of the debarked status of the animal, as well as providing a veterinary certification.¹⁹¹

¹⁸¹ See *What Animal Lovers Need to Know About Devocalization*, *supra* note 3.

¹⁸² *Id.*

¹⁸³ *Id.*; MASS. GEN. LAWS ch. 272, § 80½ (2010).

¹⁸⁴ MASS. GEN. LAWS ch. 272, § 80½ (2010).

¹⁸⁵ *Id.*

¹⁸⁶ *Id.*

¹⁸⁷ *Id.*

¹⁸⁸ *Id.*

¹⁸⁹ *Id.*

¹⁹⁰ *Id.*

¹⁹¹ *Id.*

Although Massachusetts’s model legislation has received great support, the Massachusetts Veterinary Medical Association (MVMA) opposes the Bill, even though they proclaim themselves to be strong advocates discouraging canine and feline devocalization, and generally hold important weight influencing and prompting the state’s resulting legislation on this matter. The MVMA believes that the decision to devocalize an animal should be made by the pet owner after consultation with a licensed veterinarian.¹⁹² The MVMA finds issue with the public disclosure of confidential information, including the animal’s identification number and the location of the animal and its owner.¹⁹³ Except when public health is at issue, the MVMA finds no precedent for such disclosure.¹⁹⁴ The MVMA finds “medically necessary” to be too narrow because it precludes other legitimate reasons for carrying out the procedure.¹⁹⁵ Moreover, when euthanasia is the last alternative, devocalizing may be necessary to preserve the animal from being destroyed.¹⁹⁶ Lastly, the Bill is said to infringe too much upon the veterinarian’s professional judgment and discretion within their profession.¹⁹⁷

Logan’s Law no more encroaches on the judgment of a veterinarian than do other laws and professional constraints governing the practice of veterinary medicine.¹⁹⁸ Overall, Massachusetts’s Logan’s Law provides the necessary step in the right direction that States need to take in order to propose their model legislation, rather than taking routes which create loopholes, exceptions, and restrictions.¹⁹⁹ Logan’s Law is not perfect. Its focus on “dogs” and “cats” presumably excludes other animals from protection, and the procedures and terms for vocal cord surgery, devocalization, and medically necessary need to be complimented with their respective definitions. However, Massachusetts is commendably the first state to even argue for such notable protection and accountability pertaining to the use and legality of this procedure.²⁰⁰

¹⁹² *Massachusetts Bill Would Ban Devocalization Surgery in Canines*, DVM360 (July 17, 2009), <https://www.dvm360.com/view/massachusetts-bill-would-ban-devocalization-surgery-canines>.

¹⁹³ *Id.*

¹⁹⁴ *Id.*

¹⁹⁵ *Id.*

¹⁹⁶ *Id.*

¹⁹⁷ *Id.*

¹⁹⁸ See generally *Principles of Veterinary Medical Ethics of the AVMA*, AM. VETERINARY MED. ASS’N, <https://www.avma.org/resources-tools/avma-policies/principles-veterinary-medical-ethics-avma> (last visited Apr. 22, 2022).

¹⁹⁹ See *State Initiatives: Massachusetts* [A Campaign of Coalition to Protect and Rescue Pets], UNITED AGAINST DEVOCALIZATION, <http://stopdevocalizing.weebly.com/state-initiatives.html> (last visited Apr. 22, 2022); see also *Ten Loopholes That Destroy Good Devocalization Bans*, *supra* note 168.

²⁰⁰ *State Initiatives: Massachusetts*, *supra* note 199.

It is imperative that specific and proper wording are included because it precludes any more loopholes getting around the “acceptable” performance, routes, and conditions of this procedure.

Exceptions display themselves through many guises. Specifically, pursuant to carrying out devocalization, exceptions hide themselves throughout policies, state legislation, and bill proposals. Within the veterinarian community, this procedure is camouflaged by the following screened verbiage: if performed by a licensed veterinarian, allowed if recognized as husbandry practice, and allowed if performed by a licensed veterinarian and if anesthesia is used. Another guise that is not written, but inferred through the lack of its mention, is that all of these guidelines and regulations permitting these loopholes do not talk about the actual health benefit devocalization provides for the animal. Additionally, as seen between the contradicting views of the MVMA (an association that is known to influence state legislation) and the ultimate Massachusetts legislation, there is great difficulty in making positive moves toward better legislation due to the numerous inconsistencies in stances between state veterinary medical boards and associations and the veterinarian community, where resulting legislation is then created with loopholes because there is no clear agreement or position between these authorities to create an effective and protective legislation.²⁰¹

b. The Bigger Problem: Accountability

i. Veterinary Responsibility

It is important that model guidelines and principles of ethics in the veterinary community are followed, and that they provide an adequate standard of care for the protection of our companion animals so that voluntary and unnecessary procedures like devocalization cannot continue to go on without consequence. This can be done by strengthening the procedures and guidelines created by state veterinary medical boards. The AVMA has promulgated a “Model Veterinary Practice Act” that has been intended to serve and guide state legislatures in their enactment of state law pursuant to veterinary practice acts.²⁰² If utilized and followed, the Model Act states that “the Board... may...revoke, suspend, or limit for a certain time the license of, or otherwise discipline, any licensed veterinarian for...incompetence, gross negligence, or other malpractice in the practice of veterinary medicine.”²⁰³ State veterinary medical boards therefore hold substantial power in how they handle veterinarians committing, or who have

²⁰¹ *Ten Loopholes That Destroy Good Devocalization Bans*, *supra* note 168.

²⁰² Barghusen, *supra* note 64, at 52.

²⁰³ *Id.*

committed, malpractice. The threat of a professional license being revoked is noted by commenters to likely be a powerful incentive for veterinarians to abide by the professional standards and practice within the necessary standard of care.²⁰⁴ Ultimately, an effective state board of veterinary medicine can maintain much power, even over the threat of litigation, in holding veterinarians responsible and accountable.²⁰⁵

Moreover, although an increased threat of litigation has been proposed as a means of deterring veterinarian malpractice and/or increased quality in the procedures and guidelines created by state veterinary medical boards, it has been argued that this may have adverse effects. “An increasingly adversarial relationship with... clients will erode the very reason that [veterinary] students wanted to be veterinarians in the first place. This will lead to a decrease in the quality of veterinary school applicants... ”²⁰⁶ Additionally, commenters argue that an award of damages will make veterinary care more expensive, without deterring malpractice issues; therefore, “individuals will pay more for veterinary care or companion animals will receive less care if high noneconomic damage awards become the norm in veterinary malpractice cases.”²⁰⁷

Despite these arguments, cases similar to that of the Peraino couple cannot continue to be the examples that allow for today’s negligent malpractice and cruel and inhuman procedures like devocalization to be performed.²⁰⁸ Too many cases fall through the cracks in this system of veterinary oversight. Even if such extreme examples, like what the Peraino couple faced, are not wholly representative of the behaviors that occur within the veterinary profession, valid answers need to be provided to explain why veterinarians remain “the only category of health care professionals that is financially and professionally immune from the consequences of their negligent or intentional behavior.”²⁰⁹

It is important that the cruel, voluntary, and elective procedure of devocalization, as well as negligent and intentional harms, see disapproving state legislation and recognizance in American civil court decisions. This, in turn, would allow for equity and fairness, where human and animal victims are compensated both emotionally and financially for the investments made in their companion animals due to the negligent care provided by a licensed veterinarian. As noted, our

²⁰⁴ *Id.*

²⁰⁵ *Id.*

²⁰⁶ *Id.* at 51.

²⁰⁷ *Id.* at 13.

²⁰⁸ Green, *supra* note 77, at 192 (“[I]f such outrageous occurrences as [evidenced by the case of the Peraino couple] are allowed to go unpunished, then they and many lesser actions will likely continue undeterred.”).

²⁰⁹ *Id.*

society values its significant bonds with companion animals. In fact, that bond can be so strong as to transpire in similar forms of grief that is experienced on behalf of animal owners equivalent to the death of a human family member.²¹⁰ This is important to recognize because in cases of devocalization or other claims of negligence or malpractice alleged by pet owners against a veterinary professional, the claims typically surround the emotional grief sustained from the death of their animal.²¹¹ Therefore, their grief should be a consideration in determining a just compensation and remedy.

ii. Irresponsible and Miseducated Pet Owners

What this all comes down to at the end of the day is miseducation. To deprive an animal of the ability to perform a routine behavior on a permanent basis is inhumane. Nevertheless, a pet owner or breeder may simply not understand or be educated on the fact that the decreased ability to communicate through devocalization procedures leads to many more problems than the procedure is worth. This procedure not only results in significant irreversible harm done to the animal, but it further produces additional misinterpretations, harms by others to the animal, harms by the animal to others, or increased danger to oneself.²¹² For example, increased levels of frustration and redirected or destructive behaviors have been seen in both the animal or person resulting from devocalizing an animal.²¹³ Dr. Nicholas Dodman, Director of the Tufts Cummings School of Veterinary Medicine Behavior Clinic, states what society, pet owners, and veterinarians should be considering before pursuing this voluntary procedure, “[d]ogs bark; that’s what they do. There is always a reason why they bark that should be understood and addressed. A surgical solution is not the answer and furthermore, it’s inhumane.”²¹⁴

Additionally, allowing for the availability of this procedure with so many observed, adverse consequences continue to disincentivize responsible pet ownership. As there are arguments that go both ways, training and some quality time and care spent with the animal to address their excessive vocalization behavior is always the most favorable solution.²¹⁵ In allowing devocalization as an ostensible justification to provide a mere “quick fix” to the real underlying problem, a pet owner may still end up abandoning their animal, surrendering the animal to a

²¹⁰ Huss, *supra* note 71, at 494.

²¹¹ *Id.*

²¹² *Devocalization Fact Sheet, supra* note 12.

²¹³ *Id.*

²¹⁴ *Id.*

²¹⁵ Green, *supra* note 77, at 192.

shelter, or seeking convenient euthanasia.²¹⁶ In the eyes of the general public, a devocalized animal in a shelter is considered to be less adoptable than other shelter animals.²¹⁷ Due to a lack of responsibility and education on behalf of the ultimate decision-makers, yet another shelter system, and ultimately society, is burdened with both the deplorable mutilation of an animal by an irresponsible owner and the inevitable outcome of euthanizing the animal.

Excessive barking, meowing, or vocalization of an animal is a symptom, not a diagnosis, because there are addressable measures to mend physical and/or behavioral causes and underlying reasons for excessive vocalization.²¹⁸ Again, education is key. Yes, it can be that excessive vocalization is a breed characteristic or commonality consistent with the personality type of the animal; therefore, it is imperative that animal owners educate themselves thoroughly. Before purchasing an animal, one should responsibly research the potential pre-exposure of the animal to excessive vocalization behaviors, as well as addressing one’s own home environment and lifestyle, and what kind of animal and personality will compliment and suit their needs.²¹⁹

Consideration into the personality and history of the pet is crucial, as excessive vocalization can tend to escalate over time if not addressed from a young age.²²⁰ But, “[t]he historical duration of the behavior will likely be a factor in the length of time required to reduce and eventually extinguish it.”²²¹ This again confirms that this is a curable symptom, and not a surgical solution diagnosis. Education is a substantial factor in preventing devocalization, as well as reducing the amount of irresponsible pet owners. The decision to devocalize is permanent and irreversible. Before making such a life-altering decision for an animal at an owner’s believed convenience, benefit, or solution to a problem, they need to responsibly educate themselves as the solution instead.

CONCLUSION

Through holding accountable the professional veterinary community and their state veterinary medical boards, as well as through state legislation and the ultimate care given to the decision-making on behalf of the animal owner, devocalization procedures can be written out

²¹⁶ See *Devocalization Fact Sheet, supra* note 12.

²¹⁷ *Id.*

²¹⁸ *Id.*

²¹⁹ *Id.*

²²⁰ *Id.*

²²¹ *Id.*

of legislation and hopefully eradicated altogether. Aside from the non-elective medical needs that demand the care and service of a licensed veterinarian, this voluntary and highly invasive procedure neither has a mere benefit for the animal nor any worthwhile benefit for the human that should decidedly outweigh the ultimate harm to the animal. Convenience procedures are cruel, especially ones that take away a routine and normal behavior and affect the respiratory functioning of the animal in the hope of a quieter home, concealing illicit activities, or to make the animal behave to one's liking. The current stance erroneously preserves these loopholes, hypocrisy, and lack of clear guidelines that are necessary in order for effective changes to be implemented. This note has attempted to provide a clarifying light to reconcile confusing the "bark" side with the dark side through the legal practice of devocalizing domesticated animals, and though in a dark place we may find ourselves, a little more knowledge lights our way; welcome to the "bark" side.

SIN OR SCIENCE: THE LEGAL AND ETHICAL IMPLICATIONS OF GROWING HUMAN ORGANS INSIDE OF PIGS

ARNULFO CABALLERO*

*"You can stop splitting the atom;
you can stop visiting the moon;
you can stop using aerosols;
you may even decide not to kill entire populations
by the use of a few bombs.
But you cannot recall a new form of life."¹*

INTRODUCTION

In today's world, science seems to evolve at a breakneck speed. However, the legal world has not been able to keep up with this phenomenon. Genetics is one area of law that epitomizes this gap. More specifically, animal experimentation and regenerative medicine. Technologies like CRISPR have ushered in a new age of animal experimentation, an age where "society takes stock of alternative imaginable futures, and decides which ones are worth pursuing and which ones should be regulated, or even prevented."² Science is now at the doorstep of using pigs to grow human organs, and the law is far from catching up with the science. On top of this, the conversation surrounding organs grown inside of pigs tends to focus on the science, and not the actual welfare of the pig or pigs that will be used to grow these organs.

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¹ ERWIN CHARGAFF, *HERACLITEAN FIRE: SKETCHES FROM A LIFE BEFORE NATURE* 189 (1978).

² Irus Braverman, *Editing the Environment*, in *GENE EDITING, LAW, AND THE ENVIRONMENT* 1 (Irus Braverman ed., 2018).

This article will begin by defining and analyzing several scientific terms necessary to understand the basics of genetic engineering as well as providing a general background of the history. Second, this article will address some of the broader scientific and legal issues around gene-editing animals and how these lead into the growing of human organs inside of animals. Third, this article will address the different ways that genetic engineering has been used in the past to solve the organ crisis. Fourth, this article will address the current regulatory framework surrounding genetic engineering and transgenic animals. Fifth, this article will address current issues regarding the patenting of transgenic animals. Sixth, this article will address different theories in animal ethics and animal rights and apply these principles to animals used in genetic experimentation. Finally, this article will attempt to curtail a solution that allows for human advancement in regenerative medicine while limiting animal suffering.

I. GENETIC ENGINEERING

a. Background

The concept of genetic engineering is something that has only been around for the past hundred years or so, but to an extent, humans have been researching genes long before that.³ For example, ancient Hebrew law stated not to “circumcise a male who’s maternal uncle was a ‘bleeder,’ for he could bleed, too.”⁴ Today we would know a “bleeder” to be a hemophiliac.⁵ This shows that ancient humans understood the concept of hereditary genes, even if they did not know the science behind it.⁶ To the same token, the concept of animal and human mixing is something that has been an “enduring fascination” of humanity.⁷ In ancient mythology, it is very common to see creatures that are a mix of human and animal such as sphinxes and minotaurs.⁸ In fact, legends of a “cynocephalic (dog-headed) race” persisted from Herodotus in ancient Greek times, to Marco Polo, and even showed up in Eastern Orthodox iconography.⁹ Science fiction has also been a popular avenue to explore

³ MARK Y. HERRING, *GENETIC ENGINEERING* 15 (2006).

⁴ *Id.*

⁵ *Id.*

⁶ *Id.*

⁷ DAVID ALBERT JONES, *CHIMERA’S CHILDREN: ETHICAL, PHILOSOPHICAL AND RELIGIOUS PERSPECTIVES ON HUMAN-NONHUMAN EXPERIMENTATION* 4 (David Albert Jones & Calum MacKellar eds., 2012).

⁸ *Id.* (“The idea of crossing the human species barrier has always fascinated humanity.”).

⁹ *Id.* at 3-4.

this human-animal mix.¹⁰ For example, in the movie *Splice*, genetic engineers were able to create a living hybrid that had the characteristics and tendencies of a human and animals.¹¹ While the events of this movie are fictional, the applications are feasible.¹²

Although it was not until the discovery of DNA in the 1950s that allowed genetic engineering to become more mainstream, there were earlier attempts to create animal-human mixes.¹³ In the mid-1920s, the Soviet Union began conducting research to create an “ultimate soldier by crossing human beings with apes.”¹⁴ The Soviet Union, besides wanting to use this “ultimate soldier” for military reasons, also viewed this research as useful for scientific study.¹⁵ This research—which by modern standards would be highly unethical—involved the artificial insemination of “female chimpanzees with human sperm and to obtain, if possible, a viable hybrid of the two species.”¹⁶ These experiments ended up being failures, with the lead scientist of the project jailed for failing to produce any results.¹⁷ However, with the discovery of DNA, the entire game of genetic engineering changed. By the 1970s, scientists were targeting and manipulating “the genetic code of organisms.”¹⁸

However, early gene editing gave the scientists little control over the process, and generally, success rates went from 1 in 100 to 1 in 1,000,000.¹⁹ By the 2000s, two new approaches to gene editing appeared.²⁰ These were known as Zinc-finger nucleases (ZFNs) and Transcription activator-like effectors nucleases (TALENs).²¹ However, while these two approaches to gene editing were much more sophisticated than earlier ways, the effort and cost associated with them was still high.²²

¹⁰ *Id.* at 5.

¹¹ *SPLICE* (Entertainment One 2010).

¹² JONES, *supra* note 7 (“Human-nonhuman combinations are no longer confined to the domain of mythology but have become a possible object of scientific research.”).

¹³ HERRING, *supra* note 3, at 20-21, 29; *see id.* at 14.

¹⁴ JONES, *supra* note 7, at 14.

¹⁵ *Id.* at 14-15 (“Prof Ivanov argued that the experiments ‘may provide extraordinarily interesting evidence for a better understanding of the problem of the origin of man and of a number of other problems from such fields of study as heredity, embryology, pathology, and comparative psychology.’”).

¹⁶ *Id.* at 15.

¹⁷ *Id.* at 16-17.

¹⁸ HERRING, *supra* note 3, at 29; Bret D. Asbury, *Counseling after CRISPR*, 21 *STAN. TECH. L. REV.* 1, 7 (2018).

¹⁹ Asbury, *supra* note 18, at 7.

²⁰ *Id.*

²¹ *Id.* (“The first of such approaches to gene editing, Zinc-finger nucleases (ZFNs), emerged in 2005 and the second, Transcription activator-like effector nucleases (TALENs), emerged five years later.”).

²² *Id.* at 7-8.

In the early days of genetic engineering, scientists would take the DNA from a different species then insert that DNA into another species.²³ This process is known as transgenic.²⁴ Transgenic animals are created when there is a microinjection of DNA into a fertilized egg of a surrogate mother.²⁵ Once this DNA has been injected, the mother gives birth to the transgenic animal.²⁶ This process allows scientists to circumvent the process of crossbreeding or hybridization, since they are directly injecting the DNA into the organism.²⁷ The first transgenic animal was created in 1974 by virologist Rudolph Jaenisch.²⁸ Four years later, scientists were able to birth a mouse that had foreign DNA placed into it.²⁹ Since these discoveries, mice have been bred with certain forms of cancer for laboratory study.³⁰ However, that is not the only use for these transgenic animals; transgenic animals have been used in everything from producing pharmaceuticals to producing more food.³¹

II. CRISPR AND ITS USES TODAY

More recently, a new technology called CRISPR has allowed for standardization of this process, with transgenic engineering expanding to other species.³² For example, CRISPR allowed the creation of the AquAdvantage salmon, the first transgenic animal to be approved for consumption.³³ CRISPR has also been used in goats, where scientists were able to remove “two genes that suppress the growth of hair and muscles in goats.”³⁴ However, the invention of CRISPR goes beyond simple transgenic engineering.

CRISPR, which stands for “clustered regularly interspaced short palindromic repeats” was first seen by Japanese researchers in 1987.³⁵

²³ Aaron M. Shew et al., *CRISPR versus GMOs: Public Acceptance and Valuation*, 19 GLOB. FOOD SEC. 71 (2018).

²⁴ *Id.*

²⁵ *Transgenic Animals*, WHAT IS BIOTECHNOLOGY? (Feb. 21, 2021, 10:04 PM), <https://www.whatisbiotechnology.org/index.php/science/summary/transgenic/transgenic-animals-have-genes-from-other-species-inserted>.

²⁶ *Id.*

²⁷ Heath R. Ingram, *Got Bacon?: The Use of a Bioethics Advisory Board in Assessing the Future of Transgenic Animal Technology*, 14 N.W. J. TECH. & INTELL. PROP. 393, 397 (2017).

²⁸ *Transgenic Animals*, *supra* note 25.

²⁹ *Id.*

³⁰ *Id.*

³¹ Ingram, *supra* note 27, at 397-98.

³² Meenakshi Prabhune, *CRISPR Has Expanded Transgenic Animal Research*, SYNTHOGO (Feb. 21, 2021, 9:46 PM), <https://www.synthego.com/blog/crispr-transgenic-animals>.

³³ *Id.*

³⁴ *Id.*

³⁵ Asbury, *supra* note 18, at 8.

However, once scientists found out that they could use CRISPR to alter genes, a “CRISPR Revolution” occurred.³⁶ CRISPR is naturally occurring, and scientists have modified it to genetically edit animals and plants.³⁷ It is a “revolutionary new class of molecular tool that scientists can use to precisely target and cut any kind of genetic material.”³⁸ What makes CRISPR so unique is how affordable and accessible it is.³⁹ This technology has been compared to the Model T Ford of the genetic engineering world, due to how CRISPR gives geneticists “simplicity of production, dependability, and affordability.”⁴⁰ Since its discovery in 2012, CRISPR has spawned a “billion-dollar boom,” with companies creating “climate-change-fighting crops, biofuel-oozing algae, self-terminating mosquitoes—and...potential Covid-19 treatments.”⁴¹ CRISPR also allows for the gene editing of organisms.⁴² Gene editing differs from the creation of transgenic animals because gene-editing tweaks the existing DNA of the organism whereas the creation of transgenic animals involves bringing in foreign DNA.⁴³ However, there is not only one way to do this process.

a. Somatic and Germline Editing

There are two main possible uses for CRISPR, through somatic cell editing and germline editing.⁴⁴ A somatic cell is any cell that “is not involved in any way with sexual reproduction.”⁴⁵ When a somatic cell is edited, only the individual is affected by alterations to the cell.⁴⁶ This means that any alteration will not be transferred to any potential offspring.⁴⁷ Somatic cell editing could be used to help treat diseases, as most diseases occur in somatic cells.⁴⁸ The best example where

³⁶ Megan Molteni, *The WIRED Guide to Crispr*, WIRED (Jan 3, 2021, 3:04 PM), <https://www.wired.com/story/wired-guide-to-crispr/>; Braverman, *supra* note 2, at 3.

³⁷ Braverman, *supra* note 2, at 3.

³⁸ Molteni, *supra* note 36.

³⁹ Braverman, *supra* note 2, at 3.

⁴⁰ *Id.*

⁴¹ Molteni, *supra* note 36.

⁴² Courtney Schmidt & Lon Swanson, *Genetically Modified vs. Gene Editing*, WELLS FARGO (Feb. 22, 2021, 8:36 PM), https://global.wf.com/hub_article/genetically-modified-vs-gene-editing/.

⁴³ *Id.*

⁴⁴ CONG. RSCH. SERV., R44824, ADVANCED GENE EDITING: CRISPR-CAS9 14 (2017).

⁴⁵ Heather Scoville, *Somatic Cells vs. Gametes*, THOUGHT CO. (July 10, 2019), <https://www.thoughtco.com/somatic-cells-vs-gametes-1224514>.

⁴⁶ CONG. RSCH. SERV., *supra* note 44, at 14.

⁴⁷ *Id.*

⁴⁸ Kevin Lee, *CRISPR for Somatic Therapy*, GRACE SCI. (Feb. 23, 2021 9:34

somatic cell editing, also known as gene therapy, could be used in the treatment of sickle cell disease (SCD).⁴⁹ SCD is a genetic red blood cell condition that is inherited when two parents pass on a sickle cell gene to their offspring.⁵⁰ While a normal person will have healthy blood cells, a person with SCD will have C-shaped cells that look like a sickle.⁵¹ These cells are hard, sticky, and tend to die early, causing a shortage of red blood cells that also have a chance of getting stuck in small blood vessels.⁵² About 300,000 to 400,000 children are born each year with SCD, with some 100,000 people in the United States alone living with the disease.⁵³ Using gene therapy, the possibility of curing someone who has SCD has become a very real possibility.⁵⁴ In March 2017, a scientist named Jean-Antoine Ribeil successfully used gene therapy to replace an abnormal gene with a normal one on a human patient.⁵⁵

More recently, CRISPR has also been used with germline editing, also known as gene drives.⁵⁶ Gene drives, in essence, allow a gene to circumvent Mendel's law of inheritance.⁵⁷ Normally, an offspring will receive half their traits from one parent, and half from the other.⁵⁸ However with a gene drive, this is circumvented.⁵⁹ Scientists are now able to take a certain gene and have it copy itself into every successive generation, until eventually, the entire species has this specific gene.⁶⁰ For example "a mutation that blocked the parasite responsible for malaria, could be engineered into a mosquito and passed down every time the mosquito reproduces. Each future generation would have more offspring with the trait until, at some point, the entire species would have it."⁶¹ The advantage of using a gene drive, as opposed to a gene therapy, is that offspring will not have the sickle cell gene passed down to them.⁶² Gene therapy only affects the individual for their lifetime, while a gene drive will affect the heritable traits of that individual.⁶³

AM), <https://gracescience.org/crispr-for-somatic-therapies/>.

⁴⁹ See Vence L. Bonham & Lisa E. Smilan, *Somatic Genome Editing in Sickle Cell Disease: Rewriting a More Just Future*, 97 N.C. L. REV. 1093 (2019).

⁵⁰ *What is Sickle Cell Disease?*, CDC, <https://www.cdc.gov/ncbddd/sicklecell/facts.html> (last visited Feb. 23, 2021).

⁵¹ *Id.*

⁵² *Id.*

⁵³ Bonham & Smilan, *supra* note 49, at 1100.

⁵⁴ *Id.* at 1105.

⁵⁵ *Id.* at 1104.

⁵⁶ Braverman, *supra* note 2, at 4; CONG. RSCH. SERV., *supra* note 44, at 14.

⁵⁷ Braverman, *supra* note 2, at 4.

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² Akshay Sharma et al., *Germline Gene Editing for Sickle Cell Disease*, 20 AM. J. BIOETHICS 46, 47-48 (2020).

⁶³ *Id.*

b. *Chimera vs. Hybrid*

More importantly for this article, CRISPR allows animal-human chimeras and hybrids to be made with relative ease.⁶⁴ It must be noted, the terms "chimera" and "hybrid" tend to be used interchangeably, however, there are noticeable distinctions between the two and their applications in the science world.⁶⁵ A hybrid, generally, is a "product of blending the genome of two different species."⁶⁶ This is not a strange phenomenon in nature, for example, when a male donkey and a female horse mate, a mule is produced.⁶⁷ This is possible because the donkey and horse are genetically similar species, thus allowing the blending of the two genomes.⁶⁸ With today's technology, scientists can now create hybrids from "genetically dissimilar species."⁶⁹ Several examples of this can be seen in modern science. In 2014, human glial cells were injected into mice, causing the entire brain of the mice, minus the neurons, to be completely human.⁷⁰ By the end, each mouse had twelve million human cells in their brain.⁷¹ Generally, these processes are used in order to understand human diseases more without having to use humans.⁷² Hybrids have the potential to produce human stem cells, potentially providing a renewable resource of cells that can be used in regenerative medicine.⁷³

Chimeras, while also requiring the cells of two different organisms, do not have blended cells like hybrids do.⁷⁴ Instead, a sort of patchwork forms where the cells of each organism still retain their unique traits.⁷⁵ A great example of this is the "Geep," a sheep-goat chimera.⁷⁶

⁶⁴ See Michael Le Page, *What is a Chimera*, NEWSIDENTIST, <https://www.newscientist.com/question/what-is-a-chimera> (last visited Jan. 4, 2021); Manuel Ansele, *Spanish Scientists Create Human-Monkey Chimera in China*, EL PAIS (Jul. 31, 2019, 6:34 PM), https://english.elpais.com/elpais/2019/07/31/inenglish/1564561365_256842.html.

⁶⁵ Rebecca A. Ballard, *Animal/Human Hybrids and Chimeras: What Are They? Why Are They Being Created? And What Attempts Have Been Made to Regulate Them?*, 12 MICH. ST. U.J. MED. & L. 297, 299 (2008).

⁶⁶ *Id.*

⁶⁷ *Id.*; Mule, DICTIONARY.COM, <https://www.dictionary.com/browse/mule> (last visited Jan. 4, 2021).

⁶⁸ Ballard, *supra* note 65, at 299-300.

⁶⁹ *Id.* at 300.

⁷⁰ Andy Coghlan, *The Smart Mouse with the Half-Human Brain*, NEWSIDENTIST (Dec. 1, 2014), <https://www.newscientist.com/article/dn26639-the-smart-mouse-with-the-half-human-brain/>.

⁷¹ *Id.*

⁷² *Id.*

⁷³ Ballard, *supra* note 65, at 300.

⁷⁴ *Id.* at 302; Le Page, *supra* note 64.

⁷⁵ Ballard, *supra* note 65, at 302 ("In contrast, a chimera is a product of grafting cells from one entity to another, rather than the blending one genome with another, which creates a mosaic of mis-matched parts because each population of cells retains its own distinct characteristics.")

⁷⁶ *Id.* at 303.

The Geep has patches of hair and wool from the goat and sheep skin cells, respectively. If instead the Geep were a hybrid then the result would be a uniformed coat that would be some sort of blend between hair and wool, because skin cells would contain both goat and sheep genes coding for the coat phenotype.⁷⁷

Chimerism is very rare in the natural world, and if it does happen, it only occurs within species, not between.⁷⁸ An example of a naturally occurring chimera in the natural world, would be when two fraternal cows, while they were fetuses, had their “circulatory systems...joined, [and] blood was exchanged.”⁷⁹ A similar process can also occur in humans, with fraternal twins.⁸⁰ In both the cow and human instances, they would be known as “blood” chimeras, “because the tissue exchange is minimal and affects only the blood cells.”⁸¹ Of course, science has advanced enough that interspecies chimera have become possible through genetic engineering.⁸² There are two ways this can be done, depending on which direction of chimera the researcher wishes to achieve:

Interspecies chimeras of interest here are those in which one of the species providing or receiving ES cells or their derivatives is human. If it is in the human-nonhuman direction, this involves transferring human ES cells or their derivatives to animals at different levels of development (embryo, fetal, neonate). Alternatively, adult stem cells may be transferred to a fetal or adult animal, which would produce a trace chimera with limited numbers of human cells in its body.⁸³

The ability for scientists to create a chimera with a limited number of human cells means that the ability to grow and construct human organs inside of animals, especially pigs, is wholly possible.⁸⁴

⁷⁷ *Id.*

⁷⁸ ANDREA L. BONNICKSEN, CHIMERAS, HYBRIDS, AND INTERSPECIES RESEARCH: POLITICS AND POLICYMAKING 29 (2009).

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *See id.* at 38-40.

⁸³ *Id.* at 40.

⁸⁴ *Id.* (“Constructing an organ from human stem cells and then transferring it to an animal to test for safety and efficacy would be such a case.”); Schmidt & Swanson, *supra* note 42 (“This distinction between a hybrid and a chimera is an important characteristic that makes a chimera particularly useful as a source of transplant organs, as well as a novel research model.”).

III. PROCESSES USED TO SOLVE THE ORGAN CRISIS

a. Xenotransplantation

The practice of transferring organs and tissue from animals to humans, also called xenotransplantation, is not new. A little over 100 years ago, doctors attempted, and failed, to transplant organs from animals into humans.⁸⁵ As the decades progressed, the success of animal to human xenotransplants were still low.⁸⁶ Probably the most famous xenotransplant case is the case of Baby Fae. Baby Fae was born on October 14th, 1984, and suffered from hypoplastic left-heart syndrome, an “almost always fatal deformity.”⁸⁷ Dr. Leonard L. Bailey convinced the mother to allow him to transplant a baboon heart into her young infant.⁸⁸ On October 26th, with Baby Fae being just 14 days old, the doctor performed the procedure.⁸⁹ Baby Fae survived the procedure, however, her body rejected the heart, and she passed away on November 15th of that year, holding on for 20 days after the procedure.⁹⁰

While xenotransplantation has been shown to be dangerous, it is still seriously considered today to help the ailing organ donation industry.⁹¹ Demand for organs exceeds supply, for example, there are 45,000 Americans under the age of 65 that could benefit from a new heart, however, only about 2,000 are available.⁹² Thus, it has been proposed to use pig organs such as the heart, kidney, and pancreas.⁹³

⁸⁵ *History of Xenotransplantation*, SCI. LEARNING HUB, <https://www.sciencelearn.org.nz/resources/1214-history-of-xenotransplantation> (last visited Jan. 5, 2021) (“In the early 1900s, doctors attempted to replace failing human organs with organs from animals such as pigs, goats, lambs or monkeys. All of these xenotransplants failed, and any further attempts were abandoned until scientists had discovered why the transplants were failing.”).

⁸⁶ *Id.* (“In 1963, Dr Thomas Starzl transplanted kidneys from baboons into six human recipients in Denver, US. The patients survived between 19–98 days.”).

⁸⁷ Larry Kiddler, *Stephanie’s Heart: The Story of Baby Fae*, LOMA LINDA UNIV. HEALTH (SEPT. 8, 2016), <https://news.llu.edu/patient-care/stephanie-s-heart-story-of-baby-fae>; *Baby Fae, Infant Who Received Baboon Heart Transplant, Dies*, HISTORY, <https://www.history.com/this-day-in-history/baby-fae-dies> (last visited Jan. 5, 2021).

⁸⁸ *Baby Fae*, *supra* note 87.

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ Ian Wilmut, *Xenotransplantation: Organ Transplants from Genetically Modified Pigs*, in *ENGINEERING GENESIS THE ETHICS OF GENETIC ENGINEERING IN NON-HUMAN SPECIES* 63 (Donald Bruce & Ann Bruce eds., 1998).

⁹² *Pigs: Source of Replacement Organs for Humans?*, CASE STUD. IN AGRIC. BIOSECURITY, <https://biosecurity.fas.org/education/dualuse-agriculture/2.-agricultural-biotechnology/pigs-source-of-replacement-organs-for-humans.html> (last visited Jan. 5, 2021).

⁹³ Wilmut, *supra* note 91.

But why pigs? Pigs are known as a translational research model, which in essence, “means that if something works in a pig, it has a higher possibility of working in a human.”⁹⁴ For example, pigs have similar organ placement to humans.⁹⁵ For these reasons, Wilmut has proposed that the organs of genetically modified pigs be used to help curb this organ problem.⁹⁶ As aforementioned, under normal circumstances, an animal to human xenotransplantation is very likely to fail; a failure of xenotransplantation is mainly due to tissue rejection.⁹⁷ With genetic manipulation, it is possible to make the human complement regulator mechanism present in pigs.⁹⁸ This means that when a pig organ is transplanted into a human, the human body will think it is a human organ, not a foreign animal organ.⁹⁹

In September of 2021, a team of scientists at NYU Langone Health hospital successfully attached a genetically modified pig kidney to a human.¹⁰⁰ The transplant was done to a deceased person who was being kept alive on a ventilator.¹⁰¹ The scientists were able to put the genetically modified pig kidney in this body and observed if this body would reject the kidney.¹⁰² For two days, the pig kidney functioned as a normal human kidney would.¹⁰³ The pig that this genetically modified kidney came from was not the only one.¹⁰⁴ Revivacor, the company that genetically engineered this pig, also raised 100 other similarly modified pigs.¹⁰⁵ However, at this time, the FDA had not given authorization to transplant genetically modified pig organs into living humans.¹⁰⁶ This would quickly change.

Only months later, on January 7, 2022, the FDA gave emergency authorization that allowed for a man to receive a genetically modified pig heart.¹⁰⁷ Revivacor, the same company that produced the genetically

⁹⁴ *The Similarities Between Humans and Pigs*, AUSTL. ACAD. OF SCI., <https://www.science.org.au/curious/people-medicine/similarities-between-humans-and-pigs> (last visited Jan. 5, 2021).

⁹⁵ *Id.*

⁹⁶ Wilmut, *supra* note 91.

⁹⁷ *Id.* at 63-64.

⁹⁸ *Id.* at 64.

⁹⁹ *Id.*

¹⁰⁰ *In a Major Scientific Advance, a Pig Kidney is Successfully Transplanted into a Human*, NPR (Oct. 21, 2021), <https://www.npr.org/2021/10/20/1047560631/in-a-major-scientific-advance-a-pig-kidney-is-successfully-transplanted-into-a-h>.

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ Roni Caryn Rabi, *In a First, Man Receives a Heart From a Genetically Altered Pig*, N.Y. TIMES (Jan. 10, 2022), <https://www.nytimes.com/2022/01/10/health/>

modified pig kidney, also produced the genetically modified pig heart used in this procedure.¹⁰⁸ The genetically modified pig heart used had ten genetic modifications.¹⁰⁹ These modifications are removing four pig genes, such as genes that cause “an aggressive human rejection response” and a growth gene to stop the pig heart from continuing to grow.¹¹⁰ The other modifications included the insertion of six human genes that will allow compatibility with the human body.¹¹¹

This transplant is the first of its kind, taking the team of surgeons eight hours to implant the genetically modified pig heart into the patient, David Bennett.¹¹² In the days immediately preceding the procedure, the heart was functioning well and doing most of the work.¹¹³ As of January 18, 2022, Mr. Bennett has continued to remain healthy and recovering.¹¹⁴

While this is a massive breakthrough, this does not mean genetically modified pig hearts will be transplanted into humans anytime soon.¹¹⁵ However, this is not the only way in which the organ crisis is being solved.

b. Growing Human Organs Inside of Pigs

Another way the organ crisis is being solved is to create chimeric pigs and growing human organs instead of normal pig organs.¹¹⁶ The advantage of doing this, over say xenotransplantation, is that the host body will likely not reject the organ from the chimeric organism.¹¹⁷ In

[heart-transplant-pig-bennett.html](https://www.nytimes.com/2022/01/10/health/heart-transplant-pig-bennett.html).

¹⁰⁸ *Id.*; *In a Major Scientific Advance, a Pig Kidney is Successfully Transplanted into a Human*, *supra* note 100.

¹⁰⁹ Rabi, *supra* note 107.

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ Talha Burki, *Pig-Heart Transplantation Surgeons Look to the Next Steps*, 399 THE LANCET 347 (Jan. 22, 2022), [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(22\)00097-6/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)00097-6/fulltext).

¹¹⁵ *Id.* (“The FDA authorisation for Bennett’s transplant came under a regulatory pathway for patients in emergency situations. ‘There are no ongoing clinical trials for xenotransplantation’, points out Karen Maschke, a bioethics expert at the Hastings Center (Garrison, NY, USA). ‘The experience of a single patient is not going to provide anywhere near enough safety and effectiveness data for translating the procedure into everyday clinical practice; it is really a proof-of-concept experiment.’ Griffith and Mohiuddin intend to examine xenotransplantation as an investigational new drug, but the requirements for regulatory approval are stringent. ‘We have some work to do before we are in a position to do a formal study,’ said Mohiuddin.”)

¹¹⁶ David Shaw et al., *Creating Human Organs in Chimaera Pigs: an Ethical Source of Immunocompatible Organs?*, 41 J. OF MED. ETHICS 970 (2015).

¹¹⁷ See Ballard, *supra* note 65, at 304.

2007, Esmail Zanjani “created a full-term human-to-sheep chimera with the hope of creating a human liver that could serve as a source of transplantable human organs in the future.”¹¹⁸ In 2010, a group of scientists injected rat stem cells into mice who could not generate a pancreas by themselves.¹¹⁹ The result was that the rat-mouse chimeras were able to generate “a functional pancreas almost entirely composed of rat cells within the body of a rat-mouse chimera.”¹²⁰ More interestingly though:

In 2017, researchers from the Salk Institute for Biological Studies announced that they had created chimeric human pig fetuses. These chimeric fetuses were created by injecting human induced pluripotent stem (iPS) cells into pig embryos, which were then implanted into a sow and allowed to develop for 28 days. By the end of this process, human cells could be found throughout multiple tissues of the human-pig chimeric fetuses (albeit at a low rate), suggesting that interspecies blastocyst complementation could potentially be used to generate human organs inside of part-human chimeric animals.

Growing human organs inside of pigs would seemingly solve the organ scarcity problem that exists today.¹²¹ This is because this process would offer “a new source of organs, and these organs would be unlikely to be rejected by the recipient’s immune system.”¹²² However, the legislation has not moved as fast as the technology has. “[T]he creation of part-human chimeras by introducing human cells to animal embryos falls between the gaps of existing legislation.”¹²³ On top of this, other questions will arise, such as the rights of the animals and the ethics of such a practice.

IV. REGULATORY FRAMEWORK FOR ANIMALS USED IN GENETIC ENGINEERING

a. *Animal Welfare Act*

The Animal Welfare Act of 1985 (AWA) is a United States statute that is used to “promulgate standards to govern the humane handling,

¹¹⁸ *Id.*

¹¹⁹ Julian J. Koplin & Julian Savulescu, *Time to Rethink the Law on Part-Human Chimeras*,

6 *STUD. J.L. & BIOSCIENCES* 37, 38 (2019).

¹²⁰ *Id.*

¹²¹ Shaw et al., *supra* note 116, at 970.

¹²² *Id.*

¹²³ Koplin & Savulescu, *supra* note 119, at 39.

care, treatment, and transportation of animals by dealers, research facilities, and exhibitors.”¹²⁴ The AWA “protects animals that are sold or transported in commerce” by “requiring standards to govern the treatment of animals by dealers, exhibitors, and research facilities.”¹²⁵ The AWA requires that research facilities establish Institutional Animal Care and Use Committees (IACUC) to ensure minimal animal harm.¹²⁶ However, this is a flawed piece of legislation.¹²⁷ For example, under the AWA, only about five or ten percent of animals used in research are defined as animals.¹²⁸ This means that between 90-95 percent of animals do not qualify for protections under the AWA.¹²⁹ The AWA fails to take into consideration animals that are used in genetic research, and thus, remains a weak component of legislation.¹³⁰

b. *Regulation of CRISPR*

While CRISPR is still a relatively new technology, its effect on our world is not small by any means.¹³¹ CRISPR has advanced at breakneck speeds, the same cannot be said about the law. To date, there is no international regulatory framework that regulates the use of CRISPR and gene editing.¹³² The closest international regulation (regulation here being a very loose word) would be the Declaration of Helsinki.¹³³ However, this document is not legally binding and only “has power when it’s cited in national regulations.”¹³⁴ Regulatory agencies

¹²⁴ 7 U.S.C. § 2143(a)(1) (2015).

¹²⁵ Henry Cohen, *The Animal Welfare Act*, 2 *J. ANIMAL L.* 13, 13 (2006).

¹²⁶ 7 U.S.C. § 2143(b)(1)(B) (2015).

¹²⁷ Andrew B. Perzigian, *Detailed Discussion of Genetic Engineering and Animal Rights: The Legal Terrain and Ethical Underpinnings*, *ANIMAL LEGAL & HIST. CTR.* (2003).

¹²⁸ Cohen, *supra* note 125, at 13.

¹²⁹ *Id.*

¹³⁰ Perzigian, *supra* note 127.

¹³¹ Braverman, *supra* note 2, at 7 (“Although still relatively new, CRISPR has already engendered important social questions that are at the heart of our relationship with nature, with the world, with our foods, and of course, with ourselves.”).

¹³² Kevin Curran, *How on Earth are we Currently Regulating Human Genetic Modification?*, *RISEING TIDE BIOLOGY*, <https://www.risingtidebio.com/human-gene-therapy-regulations-laws/> (Aug. 24, 2021) (“As of 2019, there are NO cohesive, legally binding or universally recognized set of rules in the international arena of gene therapy or genome editing.”); Kathleen M. Vogel, *Crispr goes Global: A Snapshot of Rules, Policies, and Attitudes*, *BULL. OF THE ATOMIC SCIENTISTS* (June 5, 2018), <https://thebulletin.org/2018/06/crispr-goes-global-a-snapshot-of-rules-policies-and-attitudes/> (“To date, no internationally agreed-upon regulatory framework for gene editing exists.”).

¹³³ Curran, *supra* note 132.

¹³⁴ *Id.*

like the FDA have even stopped referencing the document, which shows how weak it is.¹³⁵ The World Health Organization wishes to develop a public registry that will provide a skeleton for regulation surrounding human genome editing.¹³⁶ Beyond these broad strokes, there is ground broken on a smaller scale. After He Jiankui announced his controversial gene edited babies using CRISPR, “an international group of ethicists and researchers . . . [called] for a moratorium on clinical use of human germline editing.”¹³⁷

In the United States, regulatory framework around chimeras and CRISPR is sparse at best. While no specific federal legislation exists, in 2017 the FDA stated:

FDA considers any use of CRISPR/Cas9 gene editing in humans to be gene therapy. Gene therapy products are regulated by the FDA’s Center for Biologics Evaluation and Research (CBER). Clinical studies of gene therapy in humans require the submission of an investigational new drug application (IND) prior to their initiation in the United States, and marketing of a gene therapy product requires submission and approval of a biologics license application (BLA).¹³⁸

In 2005, Mr. Brownback, a Republican Senator from Kansas, introduced the Human Chimera Prohibition Act of 2005.¹³⁹ In 2007, the same Senator, along with Democratic Senator, Mary Landrieu, introduced the Human-Animal Hybrid Prohibition Act of 2007.¹⁴⁰ However, both bills failed.¹⁴¹ Two more bills were introduced, however, neither gained traction, and by 2009, the last of such bills were introduced without any becoming law.¹⁴² In 2020, the new United States-Mexico-Canada Agreement (USMCA) created new guidelines that specifically addressed agricultural biotechnology and practices, such as gene editing.¹⁴³ This

¹³⁵ *Id.*

¹³⁶ *Id.* (“This registry may be the first step by the WHO to develop a global governance framework for human genome editing.”).

¹³⁷ *Germline Gene-Editing Research Needs Rules*, NATURE (Mar. 13, 2019), <https://www.nature.com/articles/d41586-019-00788-5>.

¹³⁸ Curran, *supra* note 132.

¹³⁹ JONES, *supra* note 7, at 44.

¹⁴⁰ *Id.* at 45.

¹⁴¹ *Id.* at 44-45.

¹⁴² *Id.* at 45-46.

¹⁴³ *United States-Mexico-Canada Trade Fact Sheet Strengthening North American Trade in Agriculture*, OFF. OF THE U.S. TRADE REPRESENTATIVE, <https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement/fact-sheets/strengthening> (last visited Feb. 24, 2021).

agreement is not necessarily regulation in the strictest sense, but it does streamline how a country should regulate biotechnology.¹⁴⁴ The USMCA is also more forward looking, meaning that as technology progresses, the USMCA is able to theoretically handle any changes in the fast paced biotechnology field.¹⁴⁵

c. FDA Regulation of the Genetic Engineering of Animals

Originally, the FDA did not regulate animals, and instead “focused on [genetically modified] crops and their food products.”¹⁴⁶ It wasn’t until 1993, a couple of years after scientists started modifying animals in the 1980s, that the FDA began governing genetically modified animals.¹⁴⁷ The FDA derives this power from the federal Food, Drug, and Cosmetic Act (FDCA), which allows the FDA to regulate genetically engineered animals as a “new animal drug.”¹⁴⁸ In 2009, the FDA officially came out and said that they were ready to regulate transgenic animals.¹⁴⁹ In 2017, the FDA expanded their regulatory authority by revising their Guidance for Industry #187, “Regulation of Intentionally Altered Genomic DNA in Animals.”¹⁵⁰

This is not to say that the FDA is a perfect regulatory mechanism. Two examples encapsulate this well—the GloFish and the AquaAdvantage Salmon. The GloFish, in 2004, was “an aquarium zebra danio [...] that was genetically engineered to glow in the dark.”¹⁵¹ This was the first ever transgenic animal to be marketed and sold across the United States.¹⁵² However, the GloFish escaped regulation from the FDA, with the FDA citing that:

[b]ecause tropical aquarium fish are not used for food purposes, they pose no threat to the food supply. There is

¹⁴⁴ Bill Tomson, *USMCA sets foundation for biotech in future trade pacts*, AGRI-PULSE (Oct. 10, 2018, 6:41 AM), <https://www.agri-pulse.com/articles/11522-usmc-sets-the-foundation-for-biotech-in-future-trade-pacts>.

¹⁴⁵ *Id.*

¹⁴⁶ Margaret Rosso Grossman, *Genetically Engineered Animals in the United States: The AquaAdvantage Salmon*, 11 EUR. FOOD & FEED L. REV. 190, 191 (2016).

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

¹⁴⁹ Heidi Ledford, *FDA Ready to Regulate Transgenic Animals*, NATURE (Jan. 16, 2009), <https://www.nature.com/news/2009/090116/full/news.2009.36.html>.

¹⁵⁰ *Animals with Intentional Genomic Alterations*, U.S. FOOD & DRUG ADMIN. (JAN. 19, 2017), <https://www.fda.gov/animal-veterinary/biotechnology-products-cvm-animals-and-animal-food/animals-intentional-genomic-alterations>.

¹⁵¹ Rebecca M. Bratspies, *Glowing in the Dark: How America’s First Transgenic Animal Escaped Regulation*, 6 MINN. J.L. SCI. & TECH. 457, 457-58 (2005).

¹⁵² *Id.* at 457.

no evidence that these genetically engineered zebra danio fish pose any more threat to the environment than their unmodified counterparts which have long been widely sold in the United States. In the absence of a clear risk to the public health, the FDA finds no reason to regulate these particular fish.¹⁵³

This was not usual by any means, as the standard is that if a new technology enters into the market, it will usually get “regulatory scrutiny.”¹⁵⁴ That way, any products afterwards are either treated the same, or the regulatory burden is shifted downwards.¹⁵⁵ However, with GloFish, there was zero regulation.¹⁵⁶ This is problematic because a new product, commercial transgenic animals, completely escaped FDA regulation, creating a bad precedent.¹⁵⁷ This decision went completely against their statutory requirements under the FDCA.¹⁵⁸ Under the FDCA, the FDA must approve a New Animal Drug Application before a product may be sold into interstate commerce.¹⁵⁹ The FDA believed that this did not apply to the GloFish, as they determined that this product did not apply a risk to public health.¹⁶⁰ However, the FDCA has no “clear risk to public health” requirement to trigger regulation, so it was erroneous for the FDA to ignore their statutory duties like this.¹⁶¹

Even more recent is the FDA’s approval of the AquaAdvantage Salmon in 2015.¹⁶² The approval of the Salmon was the first time the FDA approved a genetically engineered animal that would be used as food under the New Animal Drug Application.¹⁶³ This Salmon is engineered to “reach market weight (1-3 kg) in 16-18 months, rather than three years.”¹⁶⁴ Almost immediately, the FDA’s decision to authorize the Salmon was met with backlash. By March 2016, the FDA was sued by the Center for Food Safety, fishing associations, and other

¹⁵³ *Id.* at 459.

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

¹⁵⁷ *Id.* at 460 (“Getting regulatory policy right is critical. Only appropriate and consistent regulatory structures will ensure that this new technology is explored in a fashion that protects human health and the environment, while still encouraging innovation.”).

¹⁵⁸ *Id.* at 475.

¹⁵⁹ *Id.* at 472.

¹⁶⁰ *Id.* at 476.

¹⁶¹ *Id.* at 477.

¹⁶² Grossman, *supra* note 146, at 190.

¹⁶³ *Id.* at 193.

¹⁶⁴ *Id.*

environmental organizations.¹⁶⁵ The plaintiffs in the suit alleged that the FDCA does not give the FDA authorization to “regulate [genetically engineered] animals as new animal drugs, nor was the [New Animal Drug Application] intended to govern [genetically engineered] animals.”¹⁶⁶ The plaintiffs also stated that the FDA failed to consult with environmental agencies such as U.S. fish and wildlife agencies, the National Marine Fisheries Service and the U.S. Fish and Wildlife Service.¹⁶⁷ In November 2020, Judge Vincent Chhabria of the U.S. District Court for the Northern District of California found that the FDA erred in approving the salmon.¹⁶⁸ The judge found that the FDA approving the salmon and stated that there would be no environmental impact was a violation of the Endangered Species Act.¹⁶⁹ The court also concluded that the FDA ignored the environmental consequences that came from approving the Salmon.¹⁷⁰

Congress has, however, limited funding to research that involves gene editing.¹⁷¹ A few months after the Subcommittee on Research and Technology of the U.S. House of Representatives Committee on Science, Space, and Technology held a hearing on *The Science and Ethics of Genetically Engineered Human DNA*, Congress passed a 1.1 trillion-dollar Omnibus Spending Bill.¹⁷² Part of this bill included a two billion dollar increase to the budget of the National Institute of Health, possibly in response to the hearing held by the subcommittee on CRISPR.¹⁷³ However, this bill included a strict prohibition of genetic engineering that used human embryos.¹⁷⁴ The language specifically states:

- a) None of the funds made available in this Act may be used for—
 1. the creation of a human embryo or embryos for research purposes; or
 2. research in which a human embryo or embryos are destroyed, discarded, or knowingly subjected to

¹⁶⁵ *Id.* at 197.

¹⁶⁶ *Id.* at 198.

¹⁶⁷ *Id.*

¹⁶⁸ News Desk, *Judge Orders FDA to Analyze Risks of Escape by Genetically Engineered Salmon*, FOOD SAFETY NEWS (Feb. 10, 2021, 6:00 PM), <https://www.foodsafetynews.com/2020/11/judge-orders-fda-to-analyze-risks-of-escape-by-genetically-engineered-salmon/>.

¹⁶⁹ *Id.*

¹⁷⁰ *Id.*

¹⁷¹ Evita V. Grant, *FDA Regulation of Clinical Applications of CRISPR-CAS Gene-Editing Technology*, 71 FOOD & DRUG L.J. 608, 615 (2016).

¹⁷² *Id.*

¹⁷³ *Id.*

¹⁷⁴ *Id.*

risk of injury or death greater than that allowed for research on fetuses in utero under 45 CFR 46.204(b) and section 498(b) of the Public 5 Health Service Act (42 U.S.C. 289g(b))¹⁷⁵

V. PATENTING OF ANIMAL-HUMAN CHIMERAS

Patent law in the United States is governed under the Patent Act, “which allowed for the patenting of ‘any useful art, manufacture, engine, machine, or device, or improvement therein not before known or used.’”¹⁷⁶ The biggest issue was the word “useful,” an ambiguous term that courts often had to grapple with.¹⁷⁷ Eventually, in *Lowell v. Lewis*, it was found that an invention is “‘useful’ so long as it is not frivolous or immoral.”¹⁷⁸ This birthed the moral utility doctrine, which allowed courts to strike down patents which were not considered of good moral standing and gave some societal benefit.¹⁷⁹ The issue in *Chakrabarty* addresses this, where the Supreme Court had to grapple the question of whether genetically engineered bacteria was patentable.¹⁸⁰ The Court found that “while naturally occurring organisms are not patentable, genetically engineered organisms not found in nature are not inherently reprehensible under the moral utility doctrine and can be patented.”¹⁸¹

Biotechnology in and of itself is patent heavy, and it is an issue that has not gained much certainty since *Chakrabarty*.¹⁸² After *Chakrabarty*, Jeremy Rifkin and Dr. Stuart Newman introduced a patent regarding human-nonhuman chimeras.¹⁸³ While they themselves were not proponents of this sort of science, they wanted to force the United States Patent Office (USPO) to more clearly define *Chakrabarty*, win the patent and simply not use it, and if they didn’t win, then block any similar, future patents.¹⁸⁴ The patent was filed in December 1997, and the USPO rejected the patent in October 1999.¹⁸⁵ The USPO rejected the patent on the grounds that “Congress did not intend to allow patents

¹⁷⁵ *Id.*

¹⁷⁶ Elizabeth K. Yoder, *Embrace Your Wild Side: A Case for the Patentability of Human-Nonhuman Chimeras*, 28 FED. CIR. B.J. 145, 147 (2019).

¹⁷⁷ *Id.* at 148.

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

¹⁸⁰ *Id.* at 151-52.

¹⁸¹ *Id.* at 152.

¹⁸² See *id.*; Bratislav Stankovic, *Patenting the Minotaur*, 12 RICH. J.L. & TECH. 1, 2 (2005).

¹⁸³ Yoder, *supra* note 176, at 152.

¹⁸⁴ *Id.* at 152-53.

¹⁸⁵ *Id.* at 157.

for inventions encompassing human beings.”¹⁸⁶ However, on appeal the Supreme Court reversed, and the patent was allowed to be reconsidered again.¹⁸⁷ After refile in 2002, the patent was given a final rejection by the USPO in 2004, with almost identical reasoning as the first rejection.¹⁸⁸ Besides these actions by the USPO, there is no statute or regulatory framework that explicitly excludes human-animal chimeras from being patentable.¹⁸⁹ There is also no clear definition as to what constitutes a human or an animal in the patent world.¹⁹⁰

This, however, is not to say that chimeras have never been patented.¹⁹¹ Molecular chimeras were patented in the 1980s, and as technology advanced, the sophistication of the patents did so as well.¹⁹² Some of these patents also had human and animal cells, thus showing that the idea of human and animal cells engineered together is not completely foreign to the patent office.¹⁹³ But what happens if, as Bratislav Stankovic pointed out, a Minotaur (a man with a bull’s head) is created?¹⁹⁴ As he puts it:

If a Minotaur is successfully created, a legal void will be opened. Patent claims could be filed both for the product (Minotaur), and for the process of producing a chimaeric creature. The Minotaur could be deemed a person with full legal rights akin to a naturally born individual. Alternatively, the Minotaur could be viewed as fully proprietary in that its existence would be subject to its creator’s wishes along the same lines as transgenic animals. Finally, the creator could possess a proprietary interest in the process of creation itself, but would not possess a right in the Minotaur. These options are not mutually exclusive, and the result would be influenced by a statutory regime dealing with the Minotaur’s offspring.¹⁹⁵

The reason such a legal void would exist is because there is simply no real statute or case law that has dealt with the issue of a Minotaur

¹⁸⁶ *Id.*

¹⁸⁷ *Id.*

¹⁸⁸ *Id.* at 157-58.

¹⁸⁹ Stankovic, *supra* note 182, at 3.

¹⁹⁰ *Id.* at 4.

¹⁹¹ *Id.* at 10.

¹⁹² *Id.*

¹⁹³ *Id.*

¹⁹⁴ See *id.*

¹⁹⁵ *Id.* at 14-15.

existing.¹⁹⁶ Before Congress or the USPO can address this issue, they need to determine if there is a “justification for excluding human or part human inventions.”¹⁹⁷

If there is no justification, then chimeras should be patentable. If there is, then where is the line drawn to satisfy the patentability requirements, to avoid the patent application being stricken on the ground of the organism being too human? To maintain a legitimate and efficient system of patents on life forms, a new analytical paradigm must replace the current amorphous regime. This new system should be flexible and adaptable to technological innovations; it could utilize a set of quantifiable scientific standards to establish a limit on the extent to which researchers could harness the power of biotechnology, while still allowing for patentability of transgenic organisms that contain human DNA.¹⁹⁸

This justification is not simply a legal one but a moral and ethical one.¹⁹⁹ If a human-animal chimera is considered human then it would be considered nonpatentable.²⁰⁰ If this organism is not a human, then it would justify the patenting.²⁰¹ However, some would argue that it is not up to the patent system to regulate human-nonhuman chimeras.²⁰² Others would argue that government agencies should take control of this area, while others argue to repeal legislation preventing the patenting of human-nonhuman chimeras.²⁰³ However, these arguments fail to look at one key component: the rights of the animals themselves.

VI. ANIMAL WELFARE VS. ANIMAL RIGHTS

Currently, there is not an established “ethical framework” regarding the creation of human-nonhuman chimeras.²⁰⁴ However, a concern that has been raised, and needs to be addressed further, is animal welfare. Most of the conversation regarding this new technology has focused on the moral status of these chimeras, instead of the concerns

¹⁹⁶ See *id.* at 17 (“Congress, PTO, and the federal courts probably did not anticipate the creation of human-animal chimeras.”).

¹⁹⁷ *Id.*

¹⁹⁸ *Id.* at 17-18.

¹⁹⁹ See *id.* at 24.

²⁰⁰ *Id.*

²⁰¹ *Id.*

²⁰² Yoder, *supra* note 176, at 171.

²⁰³ *Id.*

²⁰⁴ Koplín & Savulescu, *supra* note 119, at 40.

of the actual animals used.²⁰⁵ Generally, animal welfare was the main approach from which we treated animals for the past century.²⁰⁶ People concerned with animal welfare simply wished that animals “were treated ‘humanely’ and that they were not subjected to ‘unnecessary’ suffering.”²⁰⁷ On the other hand, there is the animal rights theory, which argues against animal exploitation and using animals as property.²⁰⁸ These two theories tend to clash, especially when it comes to animal research.²⁰⁹ Animal rights activists believe that animals cannot be used as pets, much less for research purposes.²¹⁰ They believe that animal use is exploitative and should not be done by humans and also argue that animals have the same moral status as humans.²¹¹ Animal welfare activists on the other hand, part of the most dominant animal advocacy system in the United States, believe animals should be treated humanely.²¹² They believe that animals can be used in research so long as they are treated properly.²¹³ But which of these approaches, if any, would be best for the pig that would be experimented on?

a. Animal Welfare

In theory, when scientists are conducting research, they don’t merely try to get the best research possible, they also try to be ethical to the animals.²¹⁴ The scientists, when conducting research, would be ethical agents.²¹⁵ Ethical agents are those who should know right from wrong, they would be “responsible for others and expected to be able to shoulder this responsibility-or understand that they have failed.”²¹⁶ Then

²⁰⁵ *Id.* at 44 (“It could certainly be argued that we *should* radically rethink our treatment of nonhuman animals and reject the full range of these practices, but the implications of such an argument would extend far beyond part-human chimera research.”).

²⁰⁶ See Gary L. Francione, *Animal Rights and Animal Welfare*, 48 RUTGERS L. REV. 397 (1996).

²⁰⁷ *Id.* at 397.

²⁰⁸ *Id.* at 397-98; Darian M. Ibrahim, *Reduce, Refine, Replace: The Failure of the Three R’s and the Future of Animal Experimentation*, 2006 U. CHI. LEGAL F. 195 (2006).

²⁰⁹ Walter Jessen, *Animal Research: Animal Welfare vs. Animal Rights*, HIGHLIGHT HEALTH (Sept. 22, 2010), <https://www.highlighthealth.com/resources/animal-research-animal-welfare-vs-animal-rights/>.

²¹⁰ *Id.*

²¹¹ *Id.*

²¹² *Id.*; Ibrahim, *supra* note 208, at 195.

²¹³ Jessen, *supra* note 209.

²¹⁴ HELENA ROCKLINSBERG ET AL., ANIMAL ETHICS IN ANIMAL RESEARCH 5 (2017).

²¹⁵ *Id.*

²¹⁶ *Id.* at 19.

comes the question of what an animal should ethically be considered.²¹⁷ Should the animal be considered an ethical subject, or an ethical object?²¹⁸ An ethical subject would have their interests conveyed by the ethical agent, instead of having the agent push their own values unto the subject.²¹⁹ An example of this would be a small child, or a mentally disabled person.²²⁰ An ethical object on the other hand, is one which the agent has no responsibility for, but their interaction with the object may affect their relationship with other agents or subjects.²²¹ For example, let's say person A borrows Person Bs' phone, and person A loses Bs' phone.²²² Person A has done no wrong to the phone, aka the ethical object, but has done harm to his friend.²²³

So how does an animal welfare activist fit into this paradigm? An animal welfare activist might argue that animals should be considered ethical subjects, as scientists behave on behalf of the animal.²²⁴ This is not a new idea, as Jeremy Bentham, one of the founders of utilitarianism, argued for the inclusion of animals into the ethical framework.²²⁵ The goal of utilitarianism is to achieve the best outcome for all, not just the individual.²²⁶ Utilitarianism argues that the welfare of some, namely ethical subjects, may be sacrificed as long as the common good is met.²²⁷ Thus, animals can be used in research, so long as their use is justified and serves the common good.²²⁸

There is no question that animals are harmed during research.²²⁹ To minimize this harm, the Three R's were adopted.²³⁰ The Three R's are reduce, refine, and replace, and their purpose is to reduce the infliction of wanton and unnecessary pain onto the animals.²³¹ Reduce means to simply reduce the number of animals used in research.²³² To refine means to use the most efficient methods possible to reduce the pain an animal will face during an experimental procedure.²³³ To replace is simply to replace the amount of animals used in research with potential

²¹⁷ *Id.* at 20.

²¹⁸ *Id.*

²¹⁹ *Id.* at 19.

²²⁰ *Id.*

²²¹ *Id.* at 20.

²²² *Id.*

²²³ *Id.* at 20.

²²⁴ *Id.* at 19; Jessen, *supra* note 209.

²²⁵ ROCKLINSBERG ET AL., *supra* note 214.

²²⁶ *Id.* at 24.

²²⁷ *Id.* at 25.

²²⁸ *Id.* at 27.

²²⁹ *Id.* at 41.

²³⁰ Ibrahim, *supra* note 208, at 195-96.

²³¹ *Id.* at 196.

²³² Jessen, *supra* note 209.

²³³ *Id.* at 56.

non-animal alternatives.²³⁴ Researchers and animal activists consider these guidelines to be the best way of reducing harm to animals and have been adopted into the AWA.²³⁵

However, even though these principles are codified in legislation, they are inherently flawed and are easily circumvented.²³⁶ For example, the AWA requires that researchers reduce the amount of animals used, but in practice, researchers tend not to do so.²³⁷ As for refinement, the AWA requires that pain relief be used, but an exception for "scientific necessity" exists.²³⁸ This exception is frequently invoked, the number of animals that were subjected to painful experiments was about 86,748 in 2004 alone.²³⁹ The AWA also fails to properly enforce the replacement aspect of the Three R's.²⁴⁰ While researchers are required to confirm that they used non-animal alternatives, the IACUC's cannot challenge their assertion.²⁴¹ In summary, if there was a potential non-animal alternative, and the research team reported that there was none, there is nothing an IACUC can do to challenge the researchers.²⁴²

Even more relevant however, is how the Three R's become redundant when it comes to new technologies, such as genetic modification.²⁴³ Due to the ethical nature of using humans as experiments, animals must be used.²⁴⁴ Xenotransplantation, as mentioned earlier, also presents a problem in the use of the Three R's.²⁴⁵ The process of transferring animal organs, or even growing organs, causes suffering for the animal.²⁴⁶ In one example, a piglet heart was transplanted onto a baboons neck, and the researchers watched as this baboon held onto the heart that was "'swollen and seeping blood and puss.'"²⁴⁷ Because of this, the three R's fundamentally fail when it comes to new technologies, because it is seemingly impossible to reduce the number of animals used, refine the new techniques used, and replace the animals.

²³⁴ Ibrahim, *supra* note 208, at 198.

²³⁵ *Id.* at 195; 7 U.S.C. § 2143 (2015).

²³⁶ Ibrahim, *supra* note 208, at 196.

²³⁷ *See id.* at 195.

²³⁸ *Id.* at 214.

²³⁹ *Id.*

²⁴⁰ *Id.* at 215-17.

²⁴¹ *Id.* at 211.

²⁴² *Id.*

²⁴³ *Id.* at 221.

²⁴⁴ *Id.* at 224.

²⁴⁵ *Id.* at 224.

²⁴⁶ *Id.* at 227.

²⁴⁷ *Id.* at 226.

b. Animal Rights

Animal Rights activists believe that animals are ethical subjects.²⁴⁸ They take it even one step further, and also believe that animals deserve equal footing with humans.²⁴⁹ Animal rights activists want animals to be free from suffering and exploitation because animals have a capacity to feel and reason.²⁵⁰ This means that animal rights activists call for the abolishment of any type of animal exploitation, such as animals being considered property.²⁵¹

In the realm of animal research, there is a negative stigma imposed on animal rights activists.²⁵² In a poll done by *Nature* magazine, it found that of the animal researchers polled, nearly a quarter of them “reported being affected by or knowing someone affected by animal rights activists.”²⁵³ Additionally, “15 percent [of researchers] had changed practices or direction as a result.”²⁵⁴ These fears are not completely unfounded. Daniel Andreas San Diego is an animal rights extremist who is currently on the FBI most wanted list²⁵⁵ for being linked to two explosives found outside of Chiron and Shaklee.²⁵⁶ Chiron is a biotechnology firm, while Shaklee is a “homecare-product manufacturer.”²⁵⁷ The FBI currently has a 250,000-dollar bounty for his arrest. Daniel is by no means alone—the FBI believes that between 1979 to 2008, animal rights extremist groups have caused more than 110 million dollars in damages.²⁵⁸ In a Senate Judiciary Committee, then deputy assistant director of the FBI, John E. Lewis, testified that animal rights extremists were a serious domestic terrorist threat.²⁵⁹ However, this does not mean that every Animal Rights group is extreme—People for the Ethical Treatment of Animals (PETA) is at the forefront of helping

²⁴⁸ Jessen, *supra* note 209.

²⁴⁹ *Id.*

²⁵⁰ *Why Animal Rights?*, PETA (Feb 10, 2021), <https://www.peta.org/about-peta/why-peta/why-animal-rights/>.

²⁵¹ Francione, *supra* note 206, at 397-400.

²⁵² Vasanth R. Shenai, *If Animal Rights Activists Could Write Federal Research Policy*, 4 ANIMAL L. 211, 223 (1998) (“[M]ost animal activists are ‘portrayed as anti-science and anti-intellectual terrorists.’”).

²⁵³ Sue Russell, *When Extreme Animal Rights Activists Attack*, PAC. STANDARD (MAR. 16, 2012), <https://psmag.com/news/when-extreme-animal-rights-activists-attack-40430>.

²⁵⁴ *Id.*

²⁵⁵ *Id.*

²⁵⁶ *Id.*

²⁵⁷ *Id.*

²⁵⁸ John E. Lewis, *Testimony*, FBI (May 18, 2004), <https://archives.fbi.gov/archives/news/testimony/animal-rights-extremism-and-ecoterrorism> (last visited Feb. 12, 2021).

²⁵⁹ *Id.*

stop animal abuse in research.²⁶⁰ PETA advocates for advanced non-animal testing to curtail the use of animals in research and has attempted to introduce legislation that would end the testing of animals.²⁶¹

It is obvious that those who believe in animal welfare and those who believe in animal rights hold very different world views as to how an animal should be treated. Those who believe in Animal Welfare wish to use animals in research so long as it is justified, while Animal Rights Activists wish to see animals have the same autonomy as humans.²⁶² But in this realm, where pigs are experimented on to provide a vital and necessary source of human organs, is there a way to reconcile these two theories while also protecting the rights of animals?

VII. 3D PRINTING OF HUMAN ORGANS

The best solution this article proposes that would please both groups is the 3D printing of organs. 3D printing allows for the conversion of a digital model on your computer converted into a physical, 3D model in the real world.²⁶³ 3D printing is not a new technology, in fact, it dates to the 1980s.²⁶⁴ Today, 3D printing has revolutionized how we think of printing, with 3D printed cars and houses, and President Obama himself mentioning the technology in a state of the union address in 2013.²⁶⁵ This technology is not reserved for simple objects, with the medical community wishing to use this technology to make human organs.²⁶⁶ This is known as “bio-printing,” and it is not as simple as inputting data into a computer and getting a new organ.²⁶⁷ 3D organs would be made with the recipient’s own cells so that the organ would not be rejected, meaning every organ would have to be unique.²⁶⁸ Depending on the

²⁶⁰ *Animals Used for Experimentation*, PETA (Feb. 12, 2021), <https://www.peta.org/issues/animals-used-for-experimentation/>.

²⁶¹ *Id.*

²⁶² ROCKLINSBERG ET AL., *supra* note 214, at 26-27; *Why Animal Rights?*, *supra* note 250.

²⁶³ *Ultimate Guide: What is 3D Printing?*, SCULPTEO, <https://www.sculptheo.com/en/3d-learning-hub/basics-of-3d-printing/what-is-3d-printing/> (last visited Feb. 13, 2021).

²⁶⁴ *The History of 3D Printing: 3D Printing Technologies from the 80s to Today*, SCULPTEO, <https://www.sculptheo.com/en/3d-learning-hub/basics-of-3d-printing/the-history-of-3d-printing/> (last visited Feb. 13, 2021).

²⁶⁵ *Id.*

²⁶⁶ Michael H. Park, *For a New Heart, Just Click Print: The Effect on Medical and Products Liability from 3-D Printed Organs*, 2015 UNIV. ILL. J.L. TECH. & POL’Y 187, 191 (2015).

²⁶⁷ *Id.* at 192.

²⁶⁸ Emma Yasinki, *On the Road to 3-D Printed Organs*, THE SCIENTIST (Feb. 26, 2020), <https://www.the-scientist.com/news-opinion/on-the-road-to-3-d-printed-organs-67187>.

type of organ or body type you are printing, there is varying levels of complexity.²⁶⁹ As best explained by Michael Park:

With bio-printing, there are four levels of complexity based on the type of object to be printed. The first and simplest level is flat structures such as human skin. The second level of complexity consists of tubular structures such as blood vessels. The third level of complexity involves hollow organs such as the stomach, bladder, or intestines. The most complex organs to print are heart, liver, and kidneys because these perform multiple biological functions such as filtering toxins, pumping blood, and regulating the chemical content of blood.²⁷⁰

When printing things such as hearts and other complex organs, the 3D printer will have to take multiple, complex aspects into account if the organ is to be viable.²⁷¹ A 3D printer will have to print at the cellular level, and the reality is that current 3D printers have difficulty doing such a task.²⁷² Currently, researchers have been able to create “patches of tissue that mimic portions of certain organs but haven’t managed to replicate the complexity or cell density of a full organ.”²⁷³

Science aside, the legal realm of 3D printed organs is equally shaky. Anna Marie Whitacre brought up an excellent analogy about the potential legal problems with 3D printed organs via *Repo Men*, a movie in which the main character repossesses an artificial organ from a man who was behind on payments.²⁷⁴ While seemingly dystopian, this article by Whitacre brings up a valid question: would this reality arise with the artificial creation of organs?²⁷⁵ The article concludes that 3D printed organs will more than likely be patent-eligible, with regulation classifying artificial organs as medical devices, not human organs.²⁷⁶

This means that, barring any legislation or regulation, a dystopian scenario like *Repo Men* is wholly possible.²⁷⁷ It is clear that the technology and law surrounding 3D printed organs is far and away from making this option viable. However, as Anna Marie Whitacre pointed out, artificial organs were a pipe dream when *Repo Men* came out, and it is unknown what will happen with true artificial organs.²⁷⁸

CONCLUSION

In conclusion, science has been moving quickly, and it is clear that the law has not been able to catch up. With the supply of organs low and the demand high, a solution is absolutely needed. But we as a species need to ask ourselves, at what cost? While it is scientifically possible to eventually create human organ factories out of pigs, is this the right trajectory? These animals will be changed at the biological level, then slaughtered to harvest their organs. The question around chimeric pigs does not focus nearly enough on how these pigs are going to be treated, almost as if the lives of the pigs are a second thought. This is not a simple case of using animals as food, and we must not treat the chimerization of pigs as such. 3D printing so far presents the best alternative that allows for the creation of new organs without intruding upon animal rights. While the technology is years, if not decades from being readily available, so was the technology of growing a human organ inside a pig. And with the introduction of the first genetically modified pig heart into a human body, the line between science fiction and reality further blurs. The most ethical course of action is to increase research and funding into bio-printing, so that we may respect the lives of the animals we share the earth with.

²⁶⁹ Park, *supra* note 266, at 192.

²⁷⁰ *Id.* at 192-93.

²⁷¹ *Id.* at 193.

²⁷² *Id.*

²⁷³ Yasinki, *supra* note 268.

²⁷⁴ See Anna Marie Whitacre, *Don't Go Breakin' My (3D Bioprinted) Heart: Dissecting Patentability and Regulation of 3D Bioprinted Organs*, 27 J. INTELL. PROP. L. 359 (2020).

²⁷⁵ *Id.* at 360.

²⁷⁶ *Id.* at 382.

²⁷⁷ *Id.* at 383.

²⁷⁸ *Id.*

ANIMALS ARE NOT OBJECTS BUT ARE NOT YET SUBJECTS: DEVELOPMENTS IN THE PROPRIETARY STATUS OF ANIMALS

PABLO LERNER*

INTRODUCTION

Animals have traditionally been viewed as subordinate to human beings, relegating them to positions of property. This human-centric worldview hinders attempts to improve the living conditions of animals and minimize their suffering when they are used for human-based purposes, such as agriculture and science. There is currently a movement toward the de-objectification of animals, defined herein as the idea by which animals are removed from the category of assets (objects) and given a special legal status as creatures possessing sensations and emotions, albeit without completely removing their property status. This approach has been manifested in the legislation of numerous countries, primarily within Europe.

Animal de-objectification is a complex perceptual shift that challenges traditional property definitions. This Article seeks to rationalize this ideology within the historical continuum of animal protection, analyzing the various realizations of de-objectification and comparing it to newer trends, including animal personification, presumed to constitute more advanced stages of animal protection. De-objectification is not an isolated event, nor an end in itself, but it must be understood as part of the process of redefining the legal status of non-human animals. Therefore, this article considers a variety of aspects defining the legal relationship between human and non-human animals.

The analysis presented here was inspired by, and primarily predicated on, a draft of a law proposal prepared by the Israeli Bar Association Committee for Animal Rights. As of early 2022, several

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members of Knesset (MK) of the Israeli parliament had adopted the bill and it is currently waiting for the parliamentary discussion.¹ The proposal defines animals as creatures that are not objects and have sensations. Furthermore, although this paper presents the position of Israeli animal law, the purview of this paper can be extended to other legal systems.

The first section of this work outlines historical approaches to animal protection: from animal welfare (welfarism) theory to the modern, more radical, approach of animal rights recognition (also known as abolitionism). Section two discusses de-objectification in light of the changing proprietary status of animals. Although the discussion is theoretical, it has a basis in legislative actions, including the Israeli de-objectification proposal. The third section initially argues that de-objectification is a natural stage in the evolution of the legal status of non-human animals. This is evidenced through current trends and decisions present in animal law across different countries. A discussion of the special treatment of animals must include pets, which are unique in being considered members of the family and are therefore not considered objects. The de-objectification of pets is thus a particular case which includes questions concerning a pet's best interests during divorce trials and banning attachment by an owner's creditors during enforcement proceedings.

Section three also attempts to refute the position that the de-objectification of animals is simply symbolic. The ownership and consequential objectification of animals has sometimes been used as rationalization for permitting their harm. As de-objectification does not abolish animal ownership, its value can be questioned. The proprietary paradigm of animals has shifted from a welfarism of rules and prohibitions to one of principles. In other words, animal protection is focusing not on what can and cannot be done to them, but on their existence as sentient creatures. Examples displaying the potential benefits of de-objectification are provided.

Section four investigates the theoretical idea of recognizing animals as legal persons. If we can accept that animals are not objects, why should they not also be recognized as subjects (i.e., persons)? The provision of legal person status to animals is discussed in relation to other legal entities, including corporations, natural sites, or artificial intelligence (AI). Present day examples indicative of animals being recognized as legitimate legal personalities are highlighted, specifically, their right of standing and questions surrounding their release from captivity.

¹ Draft Bill for Animal Protection (Legal Status of Animals Amendment), 5722-2022, HH (Knesset) (Isr.).

While this work supports de-objectification, it is skeptical regarding animal personification. Previous attempts at animal personification have been to their disadvantage. Moreover, cases in Israel and abroad cast doubt on the utility of giving animals the status of an autonomous legal personality. This article clarifies questions surrounding the issues of animal rights and serves as a basis for further discussions of these critical topics.

I. FROM COMPASSION TO ABOLITIONISM: CONCEPTUAL DEVELOPMENTS

Judicial animal protection has evolved over various stages, including estrangement, compassion, and welfare.² The next step, although currently theoretical, is abolitionism—this stage would sever human beings' control over animals.

a. Indifference Toward Suffering

Apart from exceptional cases, there was no clear attention to animal suffering until the 19th century.³ A prominent, albeit extreme, example of lack of empathy to animals' pain was promoted by the French philosopher Descartes, who compared animals to machines.⁴ Although different countries imposed customary penalties for harming animals, these were generally intended to protect the property of the animal's owner rather than the animals themselves.⁵ However, care should be taken to avoid generalizations. While indifference to the suffering of animals was standard practice, the entirety of human civilization was not indifferent. For example, the philosopher Kant espoused compassion toward animals, albeit without recognizing they have rights.⁶ Although it

² See Mike Radford, *Animal Welfare Law in Britain 15* (Oxford University Press 2001) (providing a historical overview of development).

³ See, e.g., *id.* at 20 n.35 (in England, the first statute against cruelty to animals was enacted at the beginning of the nineteenth century); Sabine Brels, *Le Droit du Bien-être Animal dans le Monde: Évolution et Universalization* [Animal Welfare Law Around the World: Evolution and Universalization] 52 (2016) (Thesis, U. Laval), <https://corpus.ulaval.ca/jspui/bitstream/20.500.11794/32964/1/32265.pdf> (discussing the strengths and weaknesses of anti-cruelty laws around the world); Francesca Rescigno, *I Diritti deli Animali: Da res a Soggetti* [The Rights of the Animals: The Rise of a Subject] 28 (2005) (arguing that Judeo Christian tradition oscillated between indifference and disdain towards animals).

⁴ Peter Singer, *Animal Liberation* 238 (S. Donner trans., 1st ed. Harper Collins, 1975) (1988); Rescigno, *supra* note 3, at 19; Tom Regan, *The Case for Animal Rights* 6 (1983).

⁵ See, e.g., Radford, *supra* note 2, at 20 n.35; Brels, *supra* note 3, at 52.

⁶ Immanuel Kant, *Lectures on Ethics* 412 (Louis Infield trans., Harper & Row 1963).

of experiments, refine them to minimize suffering, and replace them if possible.¹⁹ This approach attempts to balance animals' well-being and other interests, which is not always easy or practical.

Welfarism is dominant throughout much of the world. Animal welfare laws punish animal abuse but permit killing animals for food,²⁰ using animals for scientific experiments, and even hunting under specific conditions.²¹ Causing animal suffering is not prohibited in and of itself,²² but the degree of suffering must be considered with its purpose and the means used.²³

d. End of Human Dominion over Animals (Abolitionism)

In the 1980s,²⁴ a new stream of thought called abolitionism,²⁵ or zoocentrism,²⁶ began to crystallize. This concept criticized welfarism as regulating the exploitation of animals, particularly farm animals, rather than protecting them. Abolitionism²⁷ covers a wide range of ideas. For example, Peter Singer promotes egalitarian utilitarianism, claiming that both human and non-human animals are equally deserving of happiness²⁸

¹⁹ See, e.g., *The 3Rs*, Nat'l Ctr. for Replacement Refinement & Reduction Animals Rsch., <https://www.nc3rs.org.uk/who-we-are/3rs> (last visited Mar. 19, 2022); *Qu'est-ce que la règle des 3 R? [What is the 3Rs Rule?]*, Inserm (Nov. 8, 2017), <https://www.inserm.fr/modeles-animaux/qu-est-regle-3-r/>.

²⁰ See § 22, Cruelty to Animals Law (Animal Protection) Law, 5754-1994 (Isr.).

²¹ All states in the United States regulate hunting. See, e.g., Me. Stat. tit. 12 §§ 10951-12161; Fla. Stat. § 379.104 (2008); 520 Ill. Comp. Stat. § 5/1.8.; Ohio Rev. Code § 1531.02 (2007); see also The Hunting Act 2004, c. 37 (UK); Law No. 4601 Establishing the Provisions Governing Hunting in the Territory of the Republic, Junio 18, 1929 (Chile); Wildlife Protection Law, 5715-1955 (Isr.).

²² See HCJ 9232/01 Noah v. The Attorney General, 57(6) PD 212, 224-26 (2003) (Isr.).

²³ HCJ 6446/96 The Cat Welfare Society in Israel v. Municipality of Arad, 55(1) PD 769, 801 (2001) (Isr.).

²⁴ See Kapon & Rositzki, *supra* note 17, at 75.

²⁵ The term "abolitionism" implies similarity between the derogatory treatment of animals and slavery. Interestingly, Thomas Buxton, who cofounded the Royal Society for the Prevention of Cruelty to Animals, was one of the members of Parliament to initiate the abolition of slavery in England.

²⁶ See Gouabault & Burton-Jeangors, *supra* note 10, at 302.

²⁷ The author acknowledges that this is a somewhat unorthodox use of the term.

²⁸ See Singer, *supra* note 4 at n.38; see also Peter Singer, "All Animals are Equal," *Animal Rights and Human Obligations* 73, 75 (T. Regan, P. Singer, eds 2.ed 1989). Regarding the question whether Singer opposed vivisection or not. See Scott Jaschick, *Did Peter Singer Back Animal Research?*, Inside Higher Ed. (Apr. 12, 2006), <https://www.insidehighered.com/news/2006/12/04/did-peter-singer-back-animal-research>. Some view Peter Singer's approach as more moderate because it allows

and should not be discriminated against based on species, which Singer terms "speciesism".²⁹ The term "Speciesism" refers to accepting a different and discriminating treatment to non-human animals on the grounds that they belong to a different species than human animals. Singer strived for an equal moral consideration to both of them without encapsulating the solution to animal suffering within the framework of animal rights. In contrast, Tom Regan espouses giving rights to animals as they have inherent value, similar to humans, which is worth protecting.³⁰

Abolitionism³¹ is neither satisfied with simply reducing animal suffering, nor is it interested in discerning between unnecessary and necessary suffering. Abolitionism espouses stopping all animal exploitation. While this approach is expressed in academic writings³²

for exceptions. For example, it is claimed Singer accepts animal experimentation in specific cases. *Id.* However, this is debated. *Id.*

²⁹ Singer, *supra* note 4 (Singer's Animal Liberation was first published in 1975 and has been released in over ten new editions and translations. Although Singer once complained about its lack of influence, as well as overabundant McDonald's branches. See Michael Specter, *The Dangerous Philosopher*, The New Yorker (June 9, 1999), <http://www.michaelspecter.com/1999/09/the-dangerous-philosopher/> (acting as a landmark text about animal status and the necessity to stop harming them); see also David Nibert, *Animal Rights/Human Rights: Entanglements of Oppression and Liberation* 7 (Rowman & Littlefield 2002); Rubén Campero, *Entre Humanos, Animales y Animalizados. Identidad, Diferencia y Antropocentrismo Especista [Between Humans, Animals and Animalized. Identity, Difference and Speciesist Anthropocentrism]*, 13 *Calidad de Vida y Salud* 277, 283 (2020); Renato Cruz Meneses & Tagore Almeida Siva, *O Especismo como Argumento Filosófico da não Aceitação do Animal como Sujeito de Direitos*, 2 *Revista de Biodireito e Direito dos Animais* 218 (2016); Joan Dunayer, *Speciesism* (Ryce Publ'g 2004); Noah v. The Attorney General, HCJ 9232/01, ISrSC 57 (6) 212, 224-263 (2003). There are those who argue that differentiating between a robot and human being could be considered speciesism. See Simon Chesterman, *Artificial Intelligence and the Limits of Legal Personality*, 69 *Int. Comp. L.Q.* 819, 831 (2020). However, the author finds this argument unfounded. Concerning personalities in robots and artificial intelligence, see forward, chapter IV.

³⁰ See generally Regan, *supra* note 4. Unlike Singer, who adopts a utilitarian position, Regan based his thesis on the recognition of animal rights. The discussion of whether animals have inherent rights is increasingly accepted, although one can still find important thinkers opposed to broadening the discourse on animal rights and do not agree that the idea of giving rights to animals is correct, even if humans have obligations toward them. See also Mark Coeckelbergh, *Robot Rights? Towards a Social-Relational Justification of Moral Consideration*, 12 *Ethics in Consideration* 209, 211 (2010).

³¹ This seeks to make an analogy to the movement for the abolition of slavery.

³² See, e.g., Corey Wrenn, *Abolitionist Animal Rights: Critical Comparisons and Challenges within the Animal Rights Movement*, 4 *Interface: A J. for & About Soc. Movements* 438 (2012); Walter Stepanenko, *Two Forms of Abolitionism and the Political Rights of Animals: A Case Study*, 8 *J. of Animal Ethics* 26 (2018); Luis Chiesa, *Animal Rights Unraveled: Why Abolitionism Collapses into Welfarism and*

and the activities of various organizations worldwide, it is not widely accepted by the public and has little influence over legislation and case law.³³ The abolition of animal exploitation clashes with culinary preferences, economic considerations, and medical research. Nevertheless, the Abolitionist approach cannot be discounted as an influence on the discourse about the societal status of animals. The Abolitionist struggle has affected legislation, such as the change in the proprietary definition of animals, which is central to this paper.

In the author's view de-objectification should be understood to be a midpoint between abolitionism and welfarism. While within the purview of welfarism, de-objectification is stronger, and is based on a clear principle ("animals are not things") rather than specific rules. This distinction requires an understanding of the changes in the relationship between animals and property.

II. THE PROPRIETARY STATUS OF ANIMALS

a. *A Preliminary Note*

Animal defenders have found the concept of animals as property to be an insurmountable obstacle to the recognition of animal rights. Abolitionism believes that the ownership of animals is the root cause of animal rights problems, as property has no rights, and thus the concept itself should be abolished.³⁴ While this may be a reasonable conclusion, it requires clarification.

Throughout history, non-human animals have been seen as objects and human beings as subjects.³⁵ There are two aspects to consider when defining animals as property: 1) Man's dominion over animals and 2) how dominion over animals is legally defined. While it is difficult to identify changes to the former, the latter has evolved over time.

De-objectification of animals may be compared to the abolition of slavery. This idea has been widely addressed in literature dealing with

What it Means for Animal Ethics, 28 Geo. Env't L. Rev. 557, 562 (2016).

³³ Legislation around the world protecting animals is "welfarist." The author does not know any country where eating meat is banned or where there is no permission for any use of animals in scientific experimentation. An absolute abolitionist approach might find the welfarism approach—which does not impose veganism or ban vivisection—as contraproductive. *See generally* Chiesa, *supra* note 32.

³⁴ *See* Gary Francione, *Animals Property and the Law* 256-61 (1995); Geeta Shyam, *How Community Attitudes can Strengthen Arguments for Changing the Legal Status of Animals*, 3 Soc'y Reg. 67 (2019).

³⁵ *See generally* Yossi Wolfson, *Ma'amad Ba'aley Chayim Bamussar u Vamishpat [Animal Status is Ethics and Law]*, 5 Mishpat Ve Memshal 561 (1999); Gal Yochananof, *Animal Laws* 72 (2009); Ze'ev Levy & Nidbar Levy, *Etika Regashot U'valey Chayim [Ethics, Feelings, and Animals]* 191 (2002).

animal rights, and it is unnecessary to repeat this here.³⁶ Nevertheless there are essential differences between the abolition of slavery and the de-objectification of animals, which minimizes this comparison. Freed slaves were human beings and no longer considered as objects, meaning that no other person could have ownership over them. In contrast, animal de-objectification, as is currently occurring in various countries, does not claim that animals are human but seeks to change their legal definition.

b. *Understanding Animal De-objectification*

Ownership is based on unmediated relations between a person (or persons in the case of joint ownership) and property,³⁷ in which the owner can use the property however he or she wishes, including destroying it.³⁸ This characteristic of ownership is not relevant to animals.

There is a tendency to abandon binary social classifications. For example, the terms male and female had previously been understood as an exclusive division, but now are seen as a continuum, with individuals not being limited to a strict gender identity.³⁹ Similar thinking can also be applied to animals as they are neither humans nor objects. This more fluid ideology underlies de-objectification.⁴⁰

Owing to distinct property classifications, de-objectification does not equally impact the status of all animals. For example, wild animals are considered *res nullius* (a thing with no owner) and can, in principle, be captured or hunted by any person. This is primarily theoretical as most countries regulate what is permitted concerning wild animals, including the prevention of uncontrolled hunting, which would lead to a species' extinction.⁴¹ In contrast, wild animals that do not

³⁶ *See, e.g.*, Visa Kurki, *Animals, Slaves, and Corporations: Analyzing Legal Thinghood*, 18 German L.J. 1069 (2017).

³⁷ *See* Joshua Weisman, *Diney Kinyan [Property Law] II 21 (Ba'alut ve Shituf [ownership and sharing])* (5757 [1996-97]).

³⁸ While this approach is valid in many cases, a concept distinct from ownership exists that imposes limitations based on public interests. For example, some property is forbidden to be destroyed, such as houses designated as historical sites or mansions located on nature reserves.

³⁹ *See* Campero, *supra* note 29, at 282.

⁴⁰ *See* Martine LaChance, *Le Nouveau Statute Juridique de l'Animal au Quebec [The New Legal Status of Animals in Quebec]*, 120 Revue du Notariat 333, 345 (2018); Amelia Crozes, *Du Droit De L'Animal Au Droit Animalier Université de Strasbourg [From Animal Rights To Animal Law University of Strasbourg]* 55 (2016).

⁴¹ Generally, wildlife is an issue of public law (and even international law as international conventions regulate various issues related to wildlife) rather than private law. *See, e.g.*, The Convention on Int'l Trade in Endangered Species of Wild Fauna & Flora, <https://www.cites.org/eng> (last visited Jan. 9, 2022).

live in nature, such as laboratory monkeys or zoo animals⁴², are objects of ownership⁴³. Domesticated animals, including farm animals, are under man's ownership and treated as personal property⁴⁴. De-objectification creates a more moderate approach to human-animal relations by limiting human control over animals without abolishing proprietary discourse. Historically animals were seen as objects. A somewhat radical reaction to this categorization has been trying to define animals in terms of subjects affording them legal personality. The article will also refer to this approach but already at this juncture, it should be distinguished from de-objectification. As it will be explained further on, de-objectification does not imply recognizing animals as subjects but defining them as sentient beings, which deserve a treatment different from any other type of movable property. The American scholar, David Favre, developed a useful academic analysis for understanding de-objectification by referring to a new legal category, termed "living property."⁴⁵ The difference between living property and de-objectification is largely rhetorical in this author's view. Favre believes that animals should be viewed as living property possessing unique characteristics, and therefore, should be treated accordingly. As living property, the owner is obligated to protect the interests and rights of the animal, including the right to be unharmed, to enjoy a proper living space, and to not be designated for unfair use.⁴⁶ Favre stressed the animal's right "to be properly owned,"⁴⁷ seeing no contradiction between ownership relations and the proper treatment of animals.

A number of legal systems refer to farm animals in terms of "moving personal property,"⁴⁸ with labor animals (e.g., horses, cows, and

⁴² See Goubault & Burton-Jeangors, *supra* note 10, at 305; see also forward of *Habeas Corpus*, ch. IV.

⁴³ See David Favre, *Living Property: A New Status for Animals Within the Legal System*, 93 Marq. L. Rev. 1021, 1026 (2010). At the time, Favre argued that being sensitive to animals required adopting the idea that animals have equitable self-ownership. See *id.* He bases this on the common law discernment between legal and equitable ownership. See *id.* Favre argues that Man would only have legal ownership over animals, while animals would have a sort of self-ownership. See *id.*

⁴⁴ See Erica R. Tatioian, *Animals in the Law: Occupying a Space Between Legal Personhood and Personal Property*, 31 J. Env't L. & Litig. 147, 149 (2015). Nevertheless, it is true that we can certainly think of factual exceptions such as farm animals (cows, pigs, horses) which live in a prairie without being under ownership, or even stray cats. On the other hand, zoos (and also private persons) have ownership of wild animals. See *id.*

⁴⁵ See Favre, *supra* note 43.

⁴⁶ See Favre, *supra* note 43, at 1058; David Favre, *Equitable Self Ownership for Animals* 50 Duke L.J. 473 (2000).

⁴⁷ Favre, *supra* note 43, at 1066.

⁴⁸ Thanks to Dr. Marcelo Canzonieri for addressing my attention to this question.

donkeys) being sometimes considered even as real estate, depending on the use of the animal.⁴⁹ This raises questions concerning the distinction between defining animals as living property and other currently accepted terms, such as moving personal property. The difference lies in the definition's purpose. Legally defining an animal as *moving personal property* simply acknowledges a *biological reality*—that animals *move from place to place*. In contrast, de-objectification is an *ideological goal* seeking to alleviate animal suffering based on the idea that a new legal status will reduce exploitation and misuse of animals.

Various countries are now legally recognizing animals as non-objects, either by negating former definitions (i.e., directly declaring that animals *are not things*) or affirming new positions (i.e., declaring animals to be living creatures capable of sensations).⁵⁰ This article will examine both perspectives.

c. German Approach vis-a-vis French Approach

Article 90a of the 1990 amended German Codex (BGB) proclaims "tiere sind keine sachen"—*animals are not things*.⁵¹ The Civil Codes of Switzerland,⁵² Austria,⁵³ and the Czech Republic⁵⁴ have adopted similar definitions. However, not defining animals as things does not abolish ownership over them.⁵⁵ Notably, both the Czech Republic's law and the proposed Israeli amendment have prescribed rules of property law that apply to animals as long as they do not contravene the Animal Welfare Law.⁵⁶

The definition of animals as sentient creatures, harking back to Bentham's concept from the 19th century, is also used to legally recognize

⁴⁹ See, e.g., Code Civil [C. Civ.] [Civil Code], art. 524 (Fr.).

⁵⁰ See Diana Cerini, *Lo Strano Caso Dei Soggetto-Oggetti; Gli Animali Nel Sistema Italiano E L'Esigenza di una Riforma* [*The Strange Case of the Subject-Objects; Animals in the Italian System and the Need for Reform*], 10 *Derecho Animal* 27, 30 (2019).

⁵¹ See Eva Inés Oberfell, *Tiere als Mitgeschöpf im Zivilrecht—Zwischen Rechtobjektivität und Scadenregullierung* [*Animals as Fellow Creatures in Civil Law—Between Legal Objectivity and Damage Regulation*], 7 *Rechtswissenschaft* 388, 394 (2016); see also Hansjoachim Hackbarth & Annkatrin Lückert, *Tierschutzrecht* 10 (2d ed. 2002).

⁵² See Schweizerisches Zivilgesetzbuch [ZGB] [Civil Code], art. 641a (Switz.).

⁵³ Allgemeines Bürgerliches Gesetzbuch [ABGB] [Civil Code] §285A (Austria).

⁵⁴ Občanský zákoník [Civil Code], Zákon č. 89/2012 § 494 Sb. (Czech).

⁵⁵ Bürgerliches Gesetzbuch [BGB] [Civil Code], art. 90a (Ger.) ("Auf sie sind die für Sachen geltenden Vorschriften entsprechend anzuwenden, soweit nicht etwas anderes bestimmt ist." ["The regulations applicable to things are to be applied accordingly to them, unless otherwise stipulated."]).

⁵⁶ See Eva Bernet Kempers, *Neither Persons Nor Things: The Changing Status of Animals in Private Law*, 29 *Eur. Rev. of Priv. L.* 39 (2021).

that animals are not things. This approach is used by France, Colombia, Quebec,⁵⁷ Lithuania, Moldova, and Portugal.⁵⁸ The 2015 amended French Civil Code states, “Les animaux sont des êtres vivants doués de sensibilité,” which translates to, “animals are sentient living creatures.” A reform to Belgium’s Civil Code, intended to be enacted in 2021, states that animals are creatures that have the capacity to sense and possess biological needs.⁵⁹ The 2007 Lisbon Convention, which, in principle, was meant to serve as a constitution for the European Union, recognized animals as sentient.⁶⁰ Similar to the German law, systems that define animals as sentient creatures retain applicable rules of property law.⁶¹

d. *The Israeli Proposal*

The Israeli proposal, while not original in its content, refines the previous two processes and offers a more comprehensive approach to de-objectification.

The Animal Welfare (Protection) Law, 1994⁶² and Animal Welfare (Experiments on animals) Law⁶³ serve as a basis for animal

⁵⁷ See Regarding Quebec: Loi visant l’amélioration de la situation juridique de l’animal [An Act to improve the legal situation of animals], B. 54, Ch. 35, Part 1, § 898.1 (2015); see also Muriel Falaise, *Le Statut Juridique de l’Animal: Perspectives Comparatives [Animal Legal Status: Comparative Perspectives]*, 120 *Revue de Notariat* 357, 360 (2018).

⁵⁸ See *Diario da Republica* 1a Serie, n°45, de 3 de Março [Republic Diary no. 8/2017 Series 1 of 3 March], <https://dre.pt/web/guest/home/-/dre/106549655/details/maximized> (Port.); see also Marita Giménez-Candela, *The De-Objectification of Animals in the Spanish Civil Code*, 15 *Animal & Nat. Res. L. Rev.* 145, 154 (2019).

⁵⁹ See Bernet Kempers, *supra* note 56, at 48.

⁶⁰ See Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community, art. 5c, ¶ 21, Dec. 13, 2007.

⁶¹ Code Civil [C. Civ.] [Civil Code] art. 515-14 (Fr.); see also Claude Pacheteau, *Statut Juridique de L’animal et Code Civil: C’est Official*, *Santé Vet* (Sept. 23, 2015), <https://www.santevet.com/articles/statut-juridique-de-l-animal-et-code-civil-c-est-officiel> (explaining that the statute was published on February 17th, 2015, after it had passed review by the Constitutional Council, which found it consistent with the French Constitution. Its content is not new in France as a similar rule was introduced into the French Code on Agriculture in 1976. The amendment was received with mixed feelings in France due to support for the recognition of the special status of animals, but disappointment by advocates of broad protection of animals that it did not address the attitude of ownership).

⁶² L.S.I. 1447 (1994) (Isr.); see The Animal Welfare (Animal Protection) Law, Ministry of Env’t Prot. (April 4, 2020), https://www.gov.il/en/departments/legallInfo/animal_protection_law_1994 [hereinafter the Animal Welfare Law]. On cruelty to animals in Israel, see Yochananof, *supra* note 35, at 109; Vered Deshe’, *The Agricultural Law in Israel* 412 (2014); Assaf Harduf, *Hita’alelut r’ui’a: bein tza’ar ba’lei chaim lehoneg ha’adam* [Appropriate abuse: Between the Suffering of Animals and the Pleasure of Man] 10 *Din uD’varim* 141, 147 (2016).

⁶³ Animal Welfare (Experiments on Animals) Law (1994), L.S.I. 1479 (1994) (Isr.).

protection in Israel. Section 2(a) of the Animal Welfare Law prescribes that “no person shall torture, treat cruelly, or in any way abuse an animal.” “Torture” refers to the causing of suffering, pain, and torment. To “treat cruelly” means to harm, to treat with malice, to act mercilessly, or to act in a hard-hearted manner. “Abuse” involves harsh and cruel behavior, humiliation, or wrong-doing.⁶⁴

The Israeli Bar Association Committee for Animal Rights considers it pertinent that the Animal Welfare Law include a clear characterization of the legal status of animals and an amendment removing animals from the category of personal property. They proposed the addition of section 1a as follows:

An animal is a living creature with sensations and feelings; its status is not as an inanimate object; however, an animal can be the object of ownership subject to the animal protection laws.⁶⁵

This proposal was recently adopted as a formal law proposal by a number of Israeli MK and now is ready for what it is known as “preliminary reading”—the first step in the legislative process. The updated text keeps the essence of the Israeli bar proposal and reads as follows:

- 1.a. The purpose of this law [Animal welfare law—P.L.] is to improve the protection of animals and prevent harm to them, to recognize that animals are living beings and have feelings and emotions and to establish that their status is as living creature and not movables
- 1.b. Notwithstanding the provisions of section 1 (a), an animal may be the object of ownership, subject to the laws of animal protection.⁶⁶

Although the proposal resembles those already enacted in other countries, it has several unique characteristics. First, the Israeli proposal aims to have the new section included within the Animal Welfare Law and not within the Movable Property Law⁶⁷ (the Israeli legal framework

⁶⁴ CivA 1684/96 *Let the Animals Live Ass’n v. Hamat Gader Recreation Ctr.*, 51(3) PD 832, 845 (Isr.) [Hereinafter the Hamat Gader Matter].

⁶⁵ While it is currently unknown whether the Amendment will pass all the phases required to become a law, the discussion of the Proposal is valid because it includes central ideas that deserve attention.

⁶⁶ Animal Cruelty (Animal Protection) Bill (Amendment—Legal Status of Animals), 5722-2022 (Isr.). The proposal is signed by nine MK. P. 24/2961 (10/1/2022) [on file with the author].

⁶⁷ Moveable Property Law, 636-1971 (Isr.).

corresponding to the Movable Property chapter of the civil code of the continental systems). Second, the Israeli proposal provides both a proprietary and physiological facet by combining the German and French approaches: animals are defined as creatures that are not inanimate objects and possess *sensations and feelings*.⁶⁸ This combination ensures a more comprehensive rule. While combining the definitions of animals as non-objects and sentient beings does not inherently increase animal protections, it aids in directly determining what actions are permitted with respect to animal-human relations. Overall, the inclusion of these two aspects in the Israeli proposal is beneficial for preventing certain misgivings when the time comes to apply the rule to concrete cases.

Including both *sensations* and *feelings* in the Israeli proposal also addresses problems arising from linguistic gaps in other systems. For example, there is a controversy in France concerning whether “être doué de sensibilité” ([creatures] that have a sensitivity) also means “être sensible” (sentient beings).⁶⁹ One can argue that the former emphasizes feelings and sentiments, while the latter reflects perception and awareness of situations.⁷⁰ This question is further complicated by translation; for example, the French word “sensibilité” translates to “sentient” in English. Does “sentient” reflect a different meaning than “être sensible”? This example appears in the Treaty of Lisbon in which the English and French versions use the terms “sentient” and “être sensible,” respectively. Nevertheless, arguing about differences that are linguistic or physiological in nature is outside the scope of this work. Understanding how an animal feels and thinks provides insight into their world.⁷¹ Yet, whether a difference exists between “having feelings” and “having awareness” should not affect the interpretation of the law.

⁶⁸ Agnieszka Bielska-Brodziak et al., *Symbolic Protection of Animals*, Soc’y Reg. 103, 109 (2019) (discussing the same idea in Article 1 of the Polish Animal Protection Law from 1997, viewing the animal as a living creature deserving respect, protection, and care).

⁶⁹ See Daniel Le Bars et al., *L’Usage en Français du Mot Anglais Sentience est-il Pertinent?*, 171 *Bulletin de l’Académie Vétérinaire de France* 30, 32-35 (2018).

⁷⁰ Philip Law, *The Cambridge Declaration on Consciousness* (July 7, 2012), <http://fcmconference.org/img/CambridgeDeclarationOnConsciousness.pdf> (unpublished declaration) (“The absence of a neocortex does not appear to preclude an organism from experiencing affective states. Convergent evidence indicates that non-human animals have the neuroanatomical, neurochemical, and neurophysiological substrates of conscious states along with the capacity to exhibit intentional behaviors. Consequently, the weight of evidence indicates that humans are not unique in possessing the neurological substrates that generate consciousness. Non-human animals, including all mammals and birds, and many other creatures, including octopuses, also possess these neurological substrates.”).

⁷¹ Richard L. Cupp, Jr., *Animals as More than Mere Things, but Still Property: A Call for Continuing Evolution of the Animal Welfare Paradigm*, 84 *U. Cin. L. Rev.* 1023, 1026 (2016).

e. Preventing Mental Suffering

An important topic stemming from de-objectification is the definition of mental abuse. Mental suffering has been recognized across various legal systems.⁷² The Israeli Animal Welfare Law did not originally define abuse or torture, specifically whether this constituted only physical harm or included other forms of suffering.⁷³ The Committee for Animal Rights sought to clarify the term “suffering” by specifying in the law that harm is mental as well as physical.

In the matter of Hamat Gader, Justice Cheshin explicitly mentioned that abuse includes mental suffering:

*“Animal abuse could be physical abuse—this is the abuse we usually encounter—and it could be mental abuse. It seems we would all agree that abuse, torture, and cruelty can occur without physical contact. Indeed, there are cases where mental abuse may be more severe than physical abuse.”*⁷⁴

The assessment of mental harm reflects scientific, as well as legal and ethical, advancements. It is currently understood that a person’s actions, or lack thereof, can cause an animal stress and mental difficulties that are just as harmful as physical abuse.⁷⁵ Unfortunately, recognizing mental suffering is difficult. The identifying features of mental injury in people do not directly translate into animals, which experience a different inner world. Recognizing stress and mental suffering in an animal requires scientific knowledge of animal behavior and an understanding of the animal’s specific circumstances and conditions, including its nature. For example, a dog left alone in an apartment all day mentally suffers much more than a cat or a turtle. The principle of “unnecessary suffering” applies to both mental and physical harm, making it important to determine whether the distress being experienced is unnecessary.

⁷² See, e.g., *Animal Welfare Act 2006*, § 62(1) (UK), <https://www.legislation.gov.uk/ukpga/2006/45/section/62>.

⁷³ The law includes certain specific cases banning suffering to animals. For example, a cut in living tissue should not be done (§ 2(d)), an animal should not be killed using strychnine or other poison (§ 4), and it is banned to cut or amputate the knuckles, tendons or live part of a cat’s claws (§ 2b(a)). However, there is no clear-cut rule establishing that pain or suffering includes mental anguish.

⁷⁴ Hamat Gader Matter, *supra* note 64, at 850.

⁷⁵ See, e.g., Gary Molberg, *The Biology of Animal Stress: Basic Principles and Implications For Animal Welfare*, *Biological Responses to Stress: implications for Animal Welfare 1* (G.P. Moberg & J.A. Mench eds. 2000).

III. DE-OBJECTIFICATION: EVOLUTION, NOT REVOLUTION

De-objectification recognizes a new category between objects and persons that could serve to promote animal protection. However, as de-objectification does not absolutely change the legal status of the proprietary and ownership-based relationship between Man and animal, it can appear to establish an irrelevant division between movable and immovable property that has no actual influence on animal welfare. This begs the question of whether de-objectification without removing the proprietary chains is devoid of practical meaning.⁷⁶ Four different aspects of de-objectification must be considered in answering this question: as a symbolic formula, a pragmatic compromise, a formal recognition of a process under construction, and a basis for future developments.

One could argue that de-objectification is simply rhetoric,⁷⁷ or that the legislation is merely symbolic.⁷⁸ Even if it is only symbolic, it can influence education and the construction of reality without altering the present legal framework. However, de-objectification is best understood from a broader perspective.

One could claim that, in some instances, ownership over an animal does not necessarily act against its best interests. For example, people are not absolutely prevented from killing stray animals, although case law restricts the manner in which this occurs,⁷⁹ but owned animals are protected. Additionally, wild animals are nurtured and protected to a greater extent in zoos than in the jungle.⁸⁰ According to the scholar Judge

⁷⁶ See, e.g., Lucille Boisseau-Sowinsky, *Les Limites à l'Évolution de la Considération Juridique de l'Animal: la Difficile Conciliation des Intérêts de l'Homme et des Ceux des Animaux*, 15 *Traces Revue Des Sciences Humaines* 199 (2015); Claire Cahin, *Que Fait le Juge de la Sensibilité de l'Animal dans le Code Civil?*, 104 *Droit Animal Éthique et Science* 4 (2020).

⁷⁷ See Will Kymlicka, *Social Membership: Animal Law beyond the Property/Personhood Impasse*, 40 *Dalhousie L.J.* 123, 128 (2017).

⁷⁸ See Bielska-Brodziak et al., *supra* 68, at 14 (presenting a critique on the approach and an understanding that legislative changes such as those in Germany or France do not change the essence of the attitude toward animals); see also Cupp Jr., *supra* note 71, at 1049-1050; Alexia Staker, *Should Chimpanzees Have Standing? The Case for Pursuing Legal Personhood for Non-Human Animals*, 6 *Transnat'l Env't L.* 485, 490 (2017).

⁷⁹ See H CJ 4884/00, *The Org. for the Cat in Israel v. The Manager of Field Veterinary Serv's.*, 58(5) PD 502, f.n. 30 (2004) (Isr.); H CJ 6446/96 *The Cat Welfare Society in Israel v. Municipality of Arad et al.*, 58(1) PD 769, 784 (2001) (Isr.) (explaining if the killing of stray cats is done by a private firm, they should be under the veterinary supervision of the town that ordered the killing and only if there were no alternatives to control the stray cat population).

⁸⁰ These are quite complex "paternalistic" arguments. In the past, some have claimed that some slaves experienced a better fate than if they had remained in Africa. There are strong ecological arguments in favor of preserving specific species

Richard Posner, a known utilitarian, the proprietary attitude toward animals is not as negative as one might think. People protect things they own; therefore, owned animals are protected.⁸¹ However, in the author's opinion this view does not hold for livestock, as millions of cows and hens under the ownership of human beings are destined for killing and are, in most cases, maintained under poor conditions. Ownership does not protect them. European legislation maintains a proprietary attitude not because of the influence of utilitarian philosophy "à la Posner" but due to a pragmatic understanding of reality.

Unlike Abolitionism, animal de-objectification considers various interests (consumerist, agricultural, scientific, etc.) regarding animals. While abolishing ownership over animals and restricting their exploitation more radically is desirable in some circles, it is unlikely to pass various legislative phases. Pragmatism is often necessary.

Overall, de-objectification should not be considered as a revolution. According to the American scholar Thomas Kuhn, a [scientific] revolution occurs when there is a paradigm shift that changes the way we relate to a research question or object.⁸² Applying this criterion to the legal status of animals, de-objectification would be considered a revolution if it materially changed the proprietary status of animals, removing them from the status of ownership.⁸³ As de-objectification does not abolish the proprietary relationship, there is no paradigm shift.⁸⁴ De-objectification could be better described as an evolution that both consolidates existing advances in the treatment of animals and serves as a platform for future developments.

a. *An Existing "De-objectification De Facto"?: Limitations to Property on Animals*

The law and case law in various countries already appear to accept, at least to some extent, that animals are not inanimate objects.

inside zoos to prevent their extinction, but we should remember that Man plays a role in extinction. Perhaps, instead of balancing extinction and preservation, simply preventing extinction would be more efficient?

⁸¹ Richard Posner, *Animals Rights: Legal, Philosophical, and Pragmatic Perspectives*, in *Animal Rights: Current Debates and New Directions* 51, 59 (Cass R. Sunstein & Martha C. Nussbaum eds., Oxford U. Press 2004).

⁸² Thomas Kuhn, *La Estructura de las Revoluciones Científicas* (C. Solis trans., 4th ed. 2013); see also Richard Huber, *Revolution in Private Law*, 6 *S.C. L. Rev.* 8 (1953); Daniel Ho & Larry Kramer, *The Empirical Revolution in Law*, 65 *Stan. L. Rev.* 1195 (2013).

⁸³ See Kuhn, *supra* note 82.; see also Huber, *supra* note 82; Ho & Kramer, *supra* note 82.

⁸⁴ See Yossi Wolfson, *Shnot Hachazir [Years of the Pig]*, 7 *Ma'asei Mishpat J. for L. & Soc. Change* 149, 161 (2015).

It could, therefore, be argued that a *de facto* de-objectification already exists, as animals are treated differently than movable property.⁸⁵ For example, there are currently laws that forbid using an animal for work if it is physically unfit for labor,⁸⁶ cutting or amputating a cat's finger joints, tendons, or live part of its nails,⁸⁷ removing any or all of a dog's tail,⁸⁸ and feeding animals any food that would cause pain or suffering.⁸⁹ Legislation also exists that requires working animals to be provided with sufficient rest,⁹⁰ and forbids cosmetic alterations of an animal's body, including cutting into, tattooing, or coloring live tissue.⁹¹ Laws also impose duties on an animal owner stemming from the very act of keeping it like dog ownership.⁹² A person may keep an inanimate object in any condition as long as it does not cause public annoyance; however, there are defined rules concerning the conditions in which animals may be kept, including the provision of ventilation, containment size, and cleanliness. This applies both to farm animals⁹³ and animals that do not serve agricultural purposes.⁹⁴

Unlike inanimate objects, abusing an animal can result in the termination of ownership and transfer of the animal to another person or responsible body.⁹⁵ This does not only apply to abuse but can result from health or sanitary issues relating to their living conditions.⁹⁶ An additional distinction between animals and inanimate objects lies in

⁸⁵ See Cass Sunstein, *Standing for Animals (with Notes on Animal Rights)*, 47 UCLA L. Rev. 1333, 1364 (2000).

⁸⁶ Cruelty to Animals Law (Animal Protection), 5754-1994, § 3(a) (Isr.).

⁸⁷ Cruelty to Animals Law (Animal Protection) 5772-2011, § 2 b(a) (Isr.).

⁸⁸ See Animal Welfare Act 2006, c. 45, § 6(1) (Eng.).

⁸⁹ Bundesgesetz über den Schutz der Tiere [Federal Act on the Protection of Animals] (2004) Bundesgesetzblatt I [BGBL I] No. 118/2004, § 5(2)11, <https://www.ris.bka.gv.at/eli/bgbl/I/2004/118> (Austria).

⁹⁰ See 2011 de Protección de Animales Domésticos, C.Z. Code tit. § 4 (2011).

⁹¹ See Cruelty to Animals Law (Animal Protection), 5754-1994, § 2(d) (Isr.).

⁹² See Law Regulating the Supervision of Dogs, 5763-2002 (Isr.), https://www.nevo.co.il/law_html/Law01/999_008.htm (discussing the duties imposed as a product of animal ownership).

⁹³ See Council Directive Concerning the Protection of Animals Kept for Farming Purposes (EC) 98/58 of 20 July 1998, 1998 O.J. (L 221) (regarding farm animals in European law); see also Eur. Consult. Ass., European Convention for the Protection of Animals kept for Farming Purposes, ETS No. 87 (October 9, 1978), <https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treaty-num=087>.

⁹⁴ Regulations Against Cruelty to Animals (Animal Protection) (Keeping for Non Agricultural Purposes) (Jan. 1, 2009), <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC204541/>.

⁹⁵ See §§ 10, 12, Israeli Animal Welfare Law (Protection), 1994, https://www.gov.il/en/departments/legalInfo/animal_protection_law_1994. This is also the case in countries such as Germany, Belgium, or Holland. See Kempers, *supra* note 56, at 50.

⁹⁶ See Civ. Ap 35403-08-17, *Rugensko v. Ministry of Agriculture / Veterinary Services* (2018).

the ability to abandon property (dereliction), which is the essence of proprietorship and does not exist for animals. On the contrary, and unlike assets' possession, the person who has or thinks about adopting an animal should be aware of the responsibility involved in the very relation between the human and the non-human animal.⁹⁷ Accordingly, the Israeli Animal Welfare Law prescribes that "[t]he owner or keeper of an animal shall not abandon the animal."⁹⁸

An animals' legal status is unique for property in that they can be considered part of the family, particularly pets, and, therefore, have special interests. A "pet" is a cultural definition rather than a biological category; i.e., different places consider different species of animals as pets.⁹⁹ The Israeli Execution Law of 1967¹⁰⁰ defines "[a] pet is that which is located in a person's house or yard and is not intended for commercial use."¹⁰¹ Wild animals are typically geographically distant and are primarily encountered in zoos, on trips or safaris, or seen in movies.¹⁰² While people are familiar with and have affinity for farm animals, most do not have a special sentimental relationship with them. In contrast, people love their pets and form emotional attachments to these companion animals.¹⁰³ These distinctions lead to claims of ethical schizophrenia, in which there is one way of treating pets and another way of treating, or even ignoring, other animals.¹⁰⁴ Many people who

⁹⁷ See Eva Voslárva & Annamaria Passantino, *Stray Dog and Cat Laws and Enforcement in Czech Republic and in Italy*, 48 Ann Ist Super Sanità 97, 102 (2012).

⁹⁸ § 2b(a), Cruelty to Animals Law (Animal Protection), 5772-2011, LSI 8 (Isr.); see also Ley 18471, 4 July 2016, Ley de Protección de los Animales de Compañía de la Comunidad de Madrid, §§ 7, 9(b) (Uru.), <https://www.boe.es/buscar/pdf/2016/BOE-A-2016-11097-consolidado.pdf>; Ley 747, 26 May 2011, Ley Para la Protección y el Bienestar de los Animales Domésticos y Animales Silvestres Domesticados, §§ 13, 14 (Nicar.), <http://legislacion.asamblea.gob.ni/normaweb.nsf/b92aaea87dac762406257265005d21f7/cf820e2a63b1b690062578b00074ec1b>.

⁹⁹ Various U.S. presidents owned pets, including piglets and goats. Ana Marie Cox, *Top 10 Presidential Pets in US History*, The Guardian (Aug. 20, 2013), <https://www.theguardian.com/commentisfree/2013/aug/20/top-ten-presidential-pets>; see also *Spring 1999: Presidential Pets*, Inside the White House, <https://clintonwhitehouse4.archives.gov/WH/kids/inside/html/Spring99-2.html> (last visited Mar. 21, 2022).

¹⁰⁰ The original law was published in Laws of the State of Israel v. 507 at 116 (1967) (Isr.). Section 22a(6), reforming the law as explained above, appeared in Laws of the State of Israel v. 1708 at 423 (1999).

¹⁰¹ Compare The Execution Office Law §22a(6) with German Code of Civil Procedure § 811.

¹⁰² Most people are familiar with a small number of species. For example, until the COVID-19 pandemic, the majority of people were unaware of the existence of the pangolin (scaly anteater) or that some cultures had viewed the animal as a food source.

¹⁰³ Harduf, *supra* note 62, at 201; see also David Favre, *The Growing Reality of Legal Rights for Companion Animals*, 3 Soc'y Reg. 142, 143 (2019).

¹⁰⁴ See Gary Francione, *Animals—Property or Persons*, in *Animal Rights*:

raise a dog or a cat at home would certainly not consider them “objects.” The scholar Kymlicka espouses social recognition for pets, viewing them as part of the family.¹⁰⁵ In some ways, Israeli law provides “social recognition” for pets.¹⁰⁶ This is exemplified below in two cases: a divorce case and prohibition of pet foreclosure.

A pet animal’s particular place in the family is evident in the prohibition against foreclosure of pets established in section 22(a)6 of the Israeli Execution Law.¹⁰⁷ This protection is not unique to the Israeli legal systems, although it is still comparatively rare.¹⁰⁸ To be protected by the Israeli law the animal should meet the two provisions, residing in the house or yard and not intended for commercial use—otherwise, it can be confiscated.¹⁰⁹ However, this protection afforded by the Execution law does not amount to denying the fact that the debtor is the “owner” of the pet and therefore the law does not prevent him from selling his or her pet to pay a debt. Notwithstanding the importance of this rule regarding pets, The Israeli law continues to reflect the existence of a proprietary attitude towards animals.

In Israel, the Family Affairs Courts may consider an *animal’s best interests* in cases of divorce or separation, in particular, deciding where and with whom it is most suitable for the animal to reside.¹¹⁰ Notably, this is not unique to the Israeli legal system.¹¹¹ Animals’ best

Current Debates and New Directions 108, 108-09 (Cass R. Sunstein & Martha C. Nussbaum eds., 2004); *see also* Posner, *supra* note 81, at 72.

¹⁰⁵ Kymlicka, *supra* note 77, at 150.

¹⁰⁶ *See, e.g.*, The Execution Office Law, § 22a(6), *supra* note 101.

¹⁰⁷ The prohibition also exists today in the Law of Insolvency and Economic Recovery. *See* § 217 (2d edition).

¹⁰⁸ An example could be found in German law. *See* Zivilprozessordnung [ZPO] [Code of Civil Procedure], § 811, https://www.gesetze-im-internet.de/englisch_zpo/englisch_zpo.html#p2872 (Ger.) (concerned with assets that cannot be foreclosed, including pets (haustiere)); *see also* Obergfell, *supra* note 51, at 408.

¹⁰⁹ The Execution Office Law, § 22a(6). Additionally, the section gives a foreclosure exemption for animals intended for labor and animals that serve a disabled person (§ 22a(5)). In this case, the prohibition is unrelated to the animal’s familial status but rather to a utilitarian approach; i.e., the animals assist a disabled person in functioning. *See* Pablo Lerner, *Al Chayavim ‘U Ba’aley Chayim. Chayat Hamachmad Keneches She’eyno Bar- Ikul [On Debtors and Animals. The Pet as Non-Foreclosureable Property]*, 4 Aley Mishpat 205 (2005).

¹¹⁰ *See* FamC (Ramat Gan Family Court) 32405-01 Ploni v. Plonit, (Mar. 18, 2004) (Isr.); *see also* Pablo Lerner, *With Whom will the Dog Remain—On the Meaning of the “Good of the Animal” in Israeli Family Custodial Disputes*, 6 J. Animal L. 105, 107 (2010).

¹¹¹ Referring to the trend in the U.S. and to some extent in several European countries *see* Kymlicka, *supra* note 77, at 128; Bernet Kempers, *supra* note 56, at 54. In January 2022, the law was reformed in Spain establishing that in case of divorce the welfare of the animal will be considered in order to decide who will have the companion’s animal custody. *See* C.C., § 90 b (bis) (Spain). *Spain: New Law Providing*

interests are used by courts to minimize their suffering, prevent them from being moved unnecessarily, and prevent them from being forced to live in a place or conditions that are sub-optimal.¹¹² Although adopting the principle of the animal’s best interests is similar to the measure used with children during divorce, caution should be exercised in making this comparison.¹¹³

Throughout history, children have also suffered negative treatment, similar to animals.¹¹⁴ For example, children under twelve-years-old were forced to work and unethical experiments have been performed on children.¹¹⁵ While an animal’s best interests are based on their emotional bond with their owner, the time and resources devoted to them, and the physical space at their disposal,¹¹⁶ a child’s best interests are more complex. A child’s best interests are associated with: education; social and emotional development; a secular, religious, or observant lifestyle; and even future relationships or marriages. Moreover, there are practices considered acceptable, or even desirable, for animals, such as neutering, which would be unacceptable for children.¹¹⁷ No one would think of castrating or sterilizing a child except in cases of medical necessity.

for Increased Protection of Animals Adopted, Glob. Legal Monitor Libr. of the Cong. (2022), <https://www.loc.gov/item/global-legal-monitor/2022-01-17/spain-new-law-providing-for-increased-protection-of-animals-adopted/>. It is noteworthy that section 90 of the Civil Code of Spain deals with children’s custody and therefore it could be understood that the Spaniard lawmaker was at least implicitly ready to accept that the relation of a human to his or her pet might be quite similar to the relation of parents towards their children. This approach is certainly open to discussion and not everyone will easily accept that.

¹¹² *See, e.g.*, 88/2019, Court of Valladolid (27.5.2019) [<https://www.derechoanimal.info/sites/default/files/doc-law/Jdo%201%C2%AA%20Inst.%209%20Valladolid%20-%2027%20mayo%202019%20-%20tenencia%20compartida%20-%20cendoj.pdf>]; 69/2021 Court of Vigo [<https://diariolaley.laleynext.es/content/Documento.aspx?params=H4sIAAAAAAAAEAMtMSbHNKjUwMDA3tDQ3NjJRK0stKs7Mz7Mty0xPzStJBfEz0ypd8pNDKgtSbdMSc4pTIRKTivNzSktS Q4sybUOKSIMBrISpmEUAAAA=WKE>]. In the USA some states authorize courts to take into consideration the wellbeing of an animal in the context of marriage dissolution. *See, e.g.*, Alaska Stat. § 25.24.160(a)(5); *see also* Illinois Marriage and Dissolution of Marriage Act, 1989 Ill. HB 2409, § 501 (f).

¹¹³ *See* Radford, *supra* note 2, at 49; Kurki, *supra* note 36, at 1080.

¹¹⁴ *See, e.g.*, Paul McLaughlin, *If Animals are Like Our Children Let Us Treat Them Alike: Creating Tests of an Animal’s Intelligence for Determination of Legal Personhood*, 10 J. Animal & Env’t L. 17, 17 (2019).

¹¹⁵ *See, e.g.*, Elise van Nederveen Meerkerk & Ariadne Schmidt, *Between Wage Labor and Vocation: Child Labor in Dutch Urban Industry, 1600-1800*, 51 J. of Soc. Hist. 717 (2018).

¹¹⁶ *See* Lerner, *supra* note 110, at 371.

¹¹⁷ *See* David Chauvet, *Four Kinds of Non-Human Animal Legal Personification*, 8 Glob. J. Animal L. 1, 17 (2020).

To sum up: Even today, animals are not simply considered objects. The examples above show that animals, particularly pets, enjoy a certain level of protection. The question remains as to what extent de-objectification improves their situation?

b. Justifying De-objectification as a Basis for Improving Animal Welfare

De-objectification grants the object of the proprietary relationship (i.e., the animal) a different legal status that influences the interpretation of Welfarism. This is a *refinement* rather than a radical paradigm shift. Currently, society seeks to establish a general principle rather than a specific prohibition. Some have considered Welfarism to provide weak protection to animals.¹¹⁸ De-objectification can be understood as midway between Welfarism and Abolitionism and could be considered a *Welfarism of Principles*, protecting animals based on recognition of their special classification. Rather than having specific legislation and judgments limiting animal ownership, establishing an explicit overarching legal principle would further contribute to animal welfare.

There is a dialogue between legislation and case law regarding the prevention of animal cruelty. De-objectification could create a different synergy between statutes and case law, allowing for daring judicial developments. One example of this trend is the awarding of sentimental damages to the owners of animals harmed by third parties. If animals are not chattel, the compensation for hurting or killing them should take sentimental value into account.¹¹⁹ Moreover, de-objectification could help refine the idea of unnecessary suffering, which will be limited when animal interests, distinct from those of chattel and objects, are considered. To illustrate the possible beneficial effects, we shall examine two examples where Israeli legislation deemed Animal Welfare Laws not applicable: the killing of animals for human consumption and animal experimentation.¹²⁰

¹¹⁸ See Saskia Stucki, *Towards a Theory of Legal Animal Rights: Simple and Fundamental Rights*, 40 *Oxford J. of Legal Stud.* 533, 548 (2020).

¹¹⁹ See Cal. Civ. Code (West 2022). Section 3341.5(a) of the California Civil Code admitting non-pecuniary damages up to \$4000 for unlawful or negligent death of a pet animal. Although the California law does not use the term de-objectification, this rule could be understood as an application of that principle.

¹²⁰ See Animal Welfare (Animal Protection) Law, 1994, § 22, 56 (Isr.), https://www.gov.il/BlobFolder/legalinfo/animal_protection_law_1994/en/animals_13_lsr_210735_animal_protection_law.PDF.

All countries permit the killing of animals for food,¹²¹ and de-objectification is not expected to change this situation. In order to kill them for food, animals are transported in long journeys via sea.¹²² These journeys occur over long periods with the animals maintained in unsuitable and unacceptable conditions, which leads to a great deal of distress. Even so, this de-objectification of animals will not ban killing animals for food, but the recognition of animals as sentient beings and not as goods, may certainly create a broader basis for banning this way of transportation, or at least lead to more favorable conditions aimed to reduce animals' suffering during the journey. De-objectification is not intended to induce veganism, but it could reduce the suffering involved in the process of killings animals.

Saving all the differences, the same could be said about vivisection. While de-objectification does not seek to prevent animal experimentation, it could affect animal handling and maintenance in laboratories. One could expect that de-objectification would minimize mental as well as physical suffering, both during the experiment and throughout their life in laboratories.

c. Constitutionalizing Animal Protection

Some may argue that recognizing animal rights in a constitution would be better than simply legislating their legal status. Several countries have already established animal protections in their constitutions.¹²³ Laying down such basic rights would provide a minimum basis for animal protection. Establishing basic rights for animals, similar to human beings, would better promote their interests and status.¹²⁴ However, in practice, this approach has not always prevented animal

¹²¹ There are countries, such as India, where killing certain species is banned, but this falls short of being a comprehensive prohibition. See India Const. art. 48 (allows for prohibitions on the slaughtering of cattle). In some European countries, certain methods of killing animals (e.g., slaughtering without stunning) are forbidden. See, e.g., Council Regulation (EU) 1099/2009, 2009 O.J. (L 301) 12.

¹²² See Osnat Mizrahi, *Live Shipments of Animals Destined for Slaughter: A Comparative Look*, KNESSET Rsch. & Knowledge Comm. (2020), https://fs.knesset.gov.il/globaldocs/MMM/d0d575ef-ad83-ea11-8113-00155d0af32a/2_d0d575ef-ad83-ea11-8113-00155d0af32a_11_16339.pdf; see also Ashenafi Damtew et al., *The Effect of Long-Distance Transportation Stress on Cattle*, 3 *Biomed.* 1 (2018).

¹²³ See Grundgesetz [GG] [Basic Law], May 23, 1949, art. 20a (Ger.); Bundesverfassung [BV] [Constitution] Apr. 18, 1999, SR 101, art. 120 (Switz.); Constituição Federal [C.F.] [Constitution] Oct. 5, 1988, art. 225(1) (Braz.); Constitution of the Arab Republic of Egypt, 18 Jan. 2014, art. 45; see also Kristen Stilt, *Constitutional Innovation and Animal Protection in Egypt*, 43 *L. & Soc. Enquiry* 1364 (2018) (explaining the work of the animal rights activists in Egypt in addition to the legal aspects).

¹²⁴ See Stucki, *supra* note 118, at 555.

exploitation. With all due respect to constitutional values, it should be noted that even human constitutional rights are not realized without the power and funding of the government. For example, the right to housing or education is only made possible through a government budgetary response¹²⁵. Moreover, constitutional discourse relies on a system of balances between the rights of the various parties. Courts rely on constitutional principles, such as reasonableness and proportionality,¹²⁶ to measure harm to animals and determine whether it is proportional.¹²⁷ These judgments are not always in the animal's favor.

The current problem facing animals is not from a lack of "basic rights" but the absence of legislation, enforcement, and inspection.¹²⁸ Whether animals have constitutional or only statutory protection, it must be provided through practical and enforceable rules. Regardless, constitutional law is not a panacea for animal protection and is not incompatible with de-objectification.

IV. LEGAL PERSONHOOD FOR ANIMALS: THE NEXT STEP?

Throughout history, private law has been predicated on the distinction between subjects and objects, with only human beings recognized as subjects.¹²⁹ An increasingly favored concept is being promoted, which claims that the best way to solve the animal rights problem is to grant them the legal status of a person, thus preventing reference to animals as property. The issue is complex and warrants serious discourse, if only to serve as a basis for future, broader discussions.

¹²⁵ See, e.g., Constitución Española, B.O.E. n. 27, Dec. 29, 1978 (Spain).

¹²⁶ See HCJ 6446/96, *The Cat Welfare Society of Israel v. Municipality of Arad*, IsrSC 55(1) PD 769, 794 (2001) (case not available in English); HCJ 9232/01 "Noah", *Israeli Federation of Animal Protection v. Attorney General*, IsrLR PD 215, 234, 248-49 (finding proportionality between the means of force-feeding geese and the ends of producing food, even if the food is a delicacy) (An English version of the case can be found at: <https://versa.cardozo.yu.edu/opinions/%E2%80%9Cnoah%E2%80%9D-israeli-federation-animal-protection-organizations-v-attorney-general>).

¹²⁷ See, e.g., *The Hamat Gader Matter supra* note 64, at 856, 862; see also Ariel L. Bendor & Hadar Dancig-Rosenberg, *Animal Rights in the Shadow of the Constitution*, 24 *Animal L.* 99, 107 (2019).

¹²⁸ See *25 years to the Animal Welfare Law*, The Animals Org. Rep. (2019), <https://rb.gy/tbugp7>; see also Zafir Rinat, *Israel's Animal Protection Law is a Failure, Says Report*, Haaretz (Feb. 10, 2020), <https://www.haaretz.com/israel-news/premium-israel-s-animal-protection-law-is-a-failure-says-report-1.8510037>.

¹²⁹ See Kurki, *supra* note 36, at 1069 (comparative historical discussion).

a. *From Personification to Personhood*

In the past, animals were anthropomorphized for unjustified purposes. Animals were tried in criminal trials and executed for committing a criminal or tort-related act as if they were human beings.¹³⁰ This phenomenon, known as *animal personification*, was commonly recognized throughout Europe in the Middle Ages. Hebrew law also recognized the culpability of animals.¹³¹ Today, personifying animals for the purpose of imposing punishment would be considered suffering.¹³² Legal personhood should not be understood as tantamount to anthropomorphism or even to the idea of being a person. Being a person can be understood in a metaphysical or moral sense, regardless of the rights or duties associated with legal personhood.¹³³

Those arguing for the legal personhood of animals are not simply seeking a conceptual change, but better protection for animals.¹³⁴ No one is arguing that animals and humans are equivalent,¹³⁵ nor do they occupy the same world in terms of feelings, needs, or expression of suffering.¹³⁶ The question here is not one of *ontology* but rather *deontology*; in other words, one should focus on how animals should be treated rather than what they are, which is better suited for other disciplines (e.g., zoology and philosophy).

Defining animals as similar to people for their protection is not a novel concept, having been suggested by the French jurist Demogue at the beginning of the 20th Century, when it was perceived as peculiar and theoretical.¹³⁷ This idea is becoming more accepted, both because of Abolitionist influences in animal discourses and the expansion of the boundaries of legal personhood.

¹³⁰ On the criminal trials of animals in the Middle Ages against cows, mice, or pigs for harming human beings. In 1917, in Tennessee, USA, a female elephant was executed for "killing" her trainer (although it is unclear whether she had been put to death as punishment or because she was perceived to be dangerous). See Fiorella Maglione, *El Animal Como Sujeto de Derechos* (2020) (LLB thesis, Univ. Rio Negro Argentina), <https://rid.unrn.edu.ar/bitstream/20.500.12049/4761/1/Maglione%20-%202020.pdf>.

¹³¹ See HCJ 466/05 *Reiss v. National Planning and Building Council* [2005] (1) TakSC 233.

¹³² Despite the fact that dangerous animals that have killed human beings have sometimes been executed.

¹³³ Visa Kurki, *Legal Personhood and Animal Rights*, 11 *J. of Animal Ethics* 47, 56 (2021).

¹³⁴ See Kymlicka, *supra* note 77, at 130.

¹³⁵ *Id.* at 131.

¹³⁶ See Wolfson, *supra* note 84, at 155.

¹³⁷ See Jean-Pierre Margènaud, *Actualité et Actualisation des propositions de René Demogue sur la personnalité juridique des animaux*, 40 *Revue Juridique de l'Environnement* 73, 75 (2015) (citing R. Demogue, *La notion de sujet de Droit* 611, 632 (RTD Civ 1909)); Chauvet, *supra* note 117, at 2.

b. Expanding the Idea of Legal Personality

The concept of a legal personality is becoming increasingly more inclusive. At present, corporations are recognized as possessing duties and rights that were previously unassigned to them. Robots and natural sites have also been awarded legal personhood status. Comparing these situations to the legal status of animals is thus pertinent.

i. Corporations

The Romans did not recognize a corporation as a legal personality or limited company. All corporate members were personally responsible without the corporation having its own legal personality.¹³⁸ However, the idea of a corporation as a legal or ethical personality (“*personne morale*”) is not new, with its roots found in Medieval commercial law.¹³⁹ Despite some disagreement, the legal personality of corporations is upheld by the courts.¹⁴⁰

Along with the general acceptance of increased corporate responsibility,¹⁴¹ there is a trend to confer rights to corporations that are typically associated with human beings, including constitutional protections such as speech,¹⁴² dignity, and privacy.¹⁴³ The question then arises, if corporations have a right to dignity, why not animals?¹⁴⁴

¹³⁸ See Eugène Petit, *Tratado elemental de derecho Romano* 377 (J. González trans., 23rd ed. 2007).

¹³⁹ In Hebrew law, aside from a few exceptional cases, a corporation is considered a separate legal personality. See Rafi Rechess, *Al Ha’Ishiyoot Hamishpatit Hanifredet shel Ha’ta’agid Skirot Bamishpat Ha’Ivri* [On the Separate Legal Personality of the Corporation], 344 Parshat Shemini 5769, <https://daat.ac.il/mishpat-ivri/skirot/344-2.htm>.

¹⁴⁰ Steven Wise, *Im le ta’agidim yesh ma’amad mishpati gam le chayot magi’a* [If Corporations Have Legal Status, Animals Deserve it Too], *Calcalist* (Dec. 11, 2019), <https://www.calcalist.co.il/local/articles/0,7340,L-3775531,00.html>.

¹⁴¹ See generally Ofer Sitbon, *Al Bney Adam, Ta’agidim u ma she Beynehem—Ha’im Chok Yessod: Kvod Ha’adam ve Cheruto Tzarich Lachool al Ta’agidim?* [On Persons, Corporations, and What Lies Between Them—Should Basic Law: Human Dignity and Freedom Apply to Corporations?], 8 *Kiryat Hamishpat* 107 (2009).

¹⁴² A corporation enjoys liberties: freedom of occupation, right to property, defendant’s rights, etc. These are rights for which the existence of a physical (“flesh and blood”) entity is not essential (such as the right to a family) and belong to every legal personality. Therefore, a corporation enjoys freedom of speech like any flesh and blood being. President Barak in the matter of CA 105/92, *Re’em Engineering Ltd. v. Municipality of Upper Nazereth* (1993) PD 47 (v) 189.

¹⁴³ See generally Tanya Aplin, *A Right of Privacy for Corporations?*, *Intell. Prop. & Hum. Rts.* (2008); Susan McCorquodale, *Corporations’ Right to Privacy in Canada and Australia: A Comparative Analysis*, 15 *Bond L. Rev.* 102 (2003).

¹⁴⁴ The trend of expanding the recognition of legal personality to non-humans is more apparent in common law as opposed to continental law. See Bernet Kempers,

However, animals are not corporations. Corporations are created to address economic problems or resolve corporate responsibility toward a third party. Unlike animals, corporations do not experience suffering or require compassion. Corporations do not have a real life. Not only do corporations not have a body of flesh and blood, and even if the right to life is understood in a metaphorical sense to apply to corporations, its owners can nevertheless dissolve it, tantamount to “killing” it at will, and therefore its metaphorically inapplicable. In contrast, those seeking the recognition of animals as “legal persons” strive to prevent their suffering and killing.

ii. Natural Sites with Historic or Religious Value

Throughout time, nations have placed religious and cultural meaning on natural sites. For example, rivers and mountains have been ritualized as both geographical locations and cultural historical places. Man’s relationship with nature has diminished significantly over the centuries; however, due to modern ecology and multiculturalism, this relationship is being revitalized.¹⁴⁵ From an ecological standpoint, there is a greater understanding of the importance of nature’s treasures and the necessity to preserve them. Multiculturalism requires the understanding that different nations or ethnicities ascribe various meanings to nature, and these cultures should be respected.¹⁴⁶ Nature has been granted rights in some constitutions.¹⁴⁷ In New Zealand, an agreement was signed between the government and the Whanganui tribe recognizing the Whanganui River as a legal entity.¹⁴⁸ Similarly, in India, legal personhood has been granted to the Ganges River.¹⁴⁹ The Constitutional Court of Colombia has even awarded legal person status to the Atrato River.¹⁵⁰ Beyond symbolism and respect for ancient traditions, it is unclear whether granting personhood

supra note 56, at 69.

¹⁴⁵ This refers to tribes or aboriginals who, in the past and present, do not hold typical Western ideals. These cultures are based on customary rather than written law, in which ancient traditions constitute a basis for their legal identities. See H. Patrick Glenn, *Legal Traditions of the World* 60 (5th ed. 2014).

¹⁴⁶ See generally Eugenio Raul Zaffaroni, *La Pachamama y El Humano* (2011); see also Gellers, *supra* note 11, at 75.

¹⁴⁷ Constitution of Ecuador, section 71; see also Chesterman, *supra* note 29, at 824.

¹⁴⁸ *The Whanganui River as a Legal Entity*, Whanganui River Rts. in N.Z., <https://sites.google.com/site/whanganuiriverrights/home/whanganui-river-iwi> (last visited Mar. 19, 2022).

¹⁴⁹ This decision is not accepted by everyone. See Sayanangshu Modak, *Should Rivers Have Legal Rights?*, *Observer Rsch. Found.* (June 16, 2020), <https://www.orfonline.org/expert-speak/should-rivers-have-legal-rights-like-you-me-67967/>.

¹⁵⁰ Ashish Kothari & Shrishtee Bajpai, *¿Somos el río o en el río somos?*, *Ecología Pol.* (June 28, 2018), <https://www.ecologiapolitica.info/?p=10746>.

status to rivers or national parks has a substantial effect, apart from their symbolic recognition as protected property. It should be remembered that throughout the world there are a multitude of national resources that are legally protected without granting “legal personality.”

In practice, awarding personhood to a natural site is akin to creating a nature reserve. Similarly, international treaties and legislation in multiple countries have protected various animal species through hunting prohibitions, improving living conditions, etc., without considering them in terms of legal personality. The problem that remains is effectively enforcing these protections. While the ecological approach is consistent with the preservation of a species facing extinction, it is impractical for addressing general animal issues, such as the shameful exploitation and maintenance of farm animals.

iii. Artificial Intelligence

Artificial Intelligence (“AI”) is a complex concept¹⁵¹ involving numerous subdivisions, even within different classes of technological constructs such as robots.¹⁵² Even animals and robots are observed to have a “functional resemblance.” Both animals and robots can accompany and assist human beings (e.g., animals and robots that help sick people) and undertake duties of protection. The law requires the payment of a toll for animal-keeping duties and some suggest that robots should even pay taxes.¹⁵³ However, this comparison can become exceedingly complex and circular.¹⁵⁴ Those proposing legal personhood for robots base their argument on the analogy of granting legal personhood to animals, while those who favor personhood for animals refer to the analogy of recognizing AI as a personality.

AI is capable of activities that are not possible for animals, such as complex calculations¹⁵⁵. Robots also have a degree of autonomy, which varies according to the type of AI implanted in them,¹⁵⁶ but their autonomy

¹⁵¹ See Filippo Raso et al., *Artificial Intelligence & Human Rights: Opportunities & Risks*, Berkman Klein Ctr. (Sept. 25, 2018), <https://cyber.harvard.edu/publication/2018/artificial-intelligence-human-rights>.

¹⁵² See Coeckelbergh, *supra* note 30, at 217.

¹⁵³ This is the opinion of Bill Gates. See Chesterman, *supra* note 29, at 826.

¹⁵⁴ See, e.g., Michelle A. Pirella, *Protección Jurídica de los Productos de la Inteligencia Artificial en el Sistema de Propiedad Intelectual*, 1 Rev. Jurídica Austral 319 (2020).

¹⁵⁵ It is commonly accepted that animals, particularly the most evolved ones such as apes and dolphins, have intelligence. The idea of how to evaluate intelligence and gauge different levels of intelligence among animals is beyond the scope of this work. See, e.g., Gerhard Roth & Ursula Dicke, *Evolution of the Brain and Intelligence*, 9 Trend In Cognitive Sciences 250 (2005). It is clear that no one will expect an ape or a dolphin to do the same work as a robot or a computer.

¹⁵⁶ See, e.g., Carlos A. Paz, *Desafíos Legales de la Inteligencia Artificial en*

is fundamentally different from that experienced by animals. For example, robots and other forms of AI may fulfill contracts,¹⁵⁷ which is irrelevant to animals. To date, most discussions involving the recognition of AI as a legal personality have stemmed from the necessity of establishing circles of tort-related responsibility for their actions.¹⁵⁸ Tort-related responsibilities have never necessitated defining animal personhood.

Robots are man-made devices,¹⁵⁹ making it difficult to imagine people developing strong emotional bonds with, or empathy towards, them, like people do with cats and dogs. Is there an obligation to behave morally towards robots, as there is becoming a similar obligation towards animals? Tom Regan posited that human beings are entitled to receive ethical treatment from, and obligated to give ethical treatment to, their fellow humans.¹⁶⁰ Animals, on the other hand, do not treat humans ethically but deserve ethical treatment nevertheless.¹⁶¹ The obligation to behave ethically toward robots is unclear, as harming a robot would be like harming any other machine, assuming the robot has no awareness or sensation. While sentiment toward robots may currently be incomprehensible, as the field of robotics advances, people may develop affectionate relations toward “human” robots.¹⁶² Unlike animals, a robot *can* be expected to be “ethical;” for example, a robot can be programmed in such a way that its behavior and actions will not offend people.

Regardless of their design, devices, unlike animals, are not living creatures.¹⁶³ While the primary concern fueling recognizing animals as possessing personality is for the prevention of their suffering, the reasoning behind recognizing AI as a legal personality is different. Until it can be shown that robots suffer, minimizing their suffering cannot be a central concern.

Chile, 9 Revista Chilena de Derecho y Tecnología 257, 269 (2020).

¹⁵⁷ See Woodrow Barfield, *Liability for Autonomous and Artificially Intelligent Robots*, 9 Paladyn- Journal of Behavioral Robotics 193 (2018); Miguel Lacruz Mantecón, *Cibernética y Derecho Europeo: Una Inteligencia Robótica?*, Diario La Ley No. 9376 (2019), https://zaguan.unizar.es/record/86461/files/texto_completo.pdf.

¹⁵⁸ See, e.g., Thomas Leemans, *Le Responsabilité Extracontractuelle de l'Intelligence Artificielle*, UNIVERSITÉ CATHOLIQUE DU LOUVAIN 1, 10–11 (2017).

¹⁵⁹ The question of whether animals are “man-made devices” could also be asked about animals that have been created by genetic cloning.

¹⁶⁰ Humans are both moral agents and moral patients. See Regan, *supra* note 4, at 151.

¹⁶¹ See *id.* at 279, 295; see also Deborah Johnson & Mario Verdicchio, *Why Robots Should Not be Treated Like Animals*, 20 Ethics & Info. Tech. 291, 295 (2018).

¹⁶² See María Santos Gonzalez, *Regulación Legal de la Robótica y la Inteligencia Artificial: Retos del Futuro*, 4 Legal J. Univ. León 25, 28 (2017).

¹⁶³ See Johnson & Verdicchio, *supra* note 161, at 293.

iv. Summation

In the author's view animal protection could be based on the existence of a fictitious legal personality, so far this fiction is clearly defined.¹⁶⁴ Recognizing legal personality for animals should be rather irrelevant if it is supported by unambiguous regulations concerning permissible and prohibited treatment.¹⁶⁵ It's doubtful that the concept of personality alone would suffice to improve animal conditions considerably in the near future.¹⁶⁶ What will have an immediate effect against animal cruelty is the legislation and enforcement of effective laws.¹⁶⁷

c. "Peripheral" Recognition of Animals as Legal Personalities

While animals may never enjoy the status of full legal personhood, several developments indicate a trend toward what, in the author's view, could be defined as peripheral or indirect recognition of personhood. Peripheral recognition can be discussed here as changes that are only accepted in very particular cases and not throughout the world. The author is rather skeptical regarding the actual effects of this trend. However, these developments could usher in more significant changes in animal status in the future.

i. Granting the Right of Standing to Non-Human Animals

Since Professor Stone's groundbreaking paper regarding giving trees the right of standing,¹⁶⁸ there have been numerous discussions concerning the rights of animals to stand before the court.¹⁶⁹ The connection between the right of standing before the court and animal protection is debated. In principle, a person can have a representative in court if they are unable to appear (e.g., due to health or legal issues).

¹⁶⁴ The law is full of fiction. See Lon Fuller, *Legal Fictions* (1967) (suggesting that the comparison between robots and animals is metaphorical more than realistic); see also Johnson & Verdicchio, *supra* note 161, at 297.

¹⁶⁵ See, for example, the referendum in Basel, Switzerland whereby the petition of recognizing animals' rights in the city's constitution was rejected. See *Voters Decline to Give Limited Rights to Non-Human Primates*, Swissinfo.ch (Feb. 13, 2022), <https://www.swissinfo.ch/eng/voters-decline-to-give-limited-rights-to-non-human-primates/47343656> (according to the report, the Swiss government is preparing a constitutional reform to boost animal welfare).

¹⁶⁶ Sunstein, *supra* note 85, at 1365.

¹⁶⁷ See Chauvet, *supra* note 117, at 14.

¹⁶⁸ See generally Christopher D. Stone, *Should Trees Have Standing?—Toward Legal Rights for Natural Objects*, 45 S. Cal. L. Rev. 450, 450-501 (1972).

¹⁶⁹ See, e.g., David Cassuto et al., *Legal Standing for Animals and Advocates*, 13 Animal L. 61 (2006); Francione, *supra* note 34, at 65; Sunstein, *supra* note 85, at 1359.

Why is this option not given to animals? Steven Wise has described a pyramid with legal personhood at the base and the right of standing at the top,¹⁷⁰ representing a central basis for promoting animals' status. Others are more skeptical about the influence and practical meaning of the right of standing.¹⁷¹

Not all legal systems adopt a similar approach to the right of standing. For example, in the U.S., a claim regarding harm to animals can be seen before the court,¹⁷² but, in general, harming animals does not grant a right of standing to anyone interested in defending them. The lack of standing for animals observed in the U.S. likely results from the relationship between the courts and the legislative authority, with the courts willingly restraining their authority. In contrast, in the UK, the granting of right of standing is understood to be under the purview of Parliament rather than the courts.¹⁷³ The situation is slightly different in Israel where the right of standing is broader than in the U.S.; there it is necessary to show a direct interest in the appeal or complaint.¹⁷⁴ The courts are willing to grant right of standing to bodies or people who act on behalf of various interests (e.g., environmental protection, protecting democracy, protecting debtors),¹⁷⁵ regardless of a relationship to those directly harmed. Nevertheless, standing is not recognized for animals.

For example, in the matter of the Gazelle Valley in Jerusalem, Justice Rubinstein prohibited the Israeli gazelle as an appellant¹⁷⁶ but did not deny the right of the other appellants to make arguments concerning the gazelles.¹⁷⁷ Evidently, there is little distinction between the explicit recognition of the right of standing and the practical outcomes of filing an appeal "on behalf" of an animal. This is particularly true when the Animal Welfare Law is concerned, as it gives various animal organizations legal status for filing a complaint or applying to the court in cases of animal abuse.¹⁷⁸ Israel's Animal Welfare Law only grants

¹⁷⁰ See Steven Wise, *Legal Personhood and the Non-Human Rights Project*, 17 Animal L. 1, 2 (2010); see also Kurki, *supra* note 133, at 50.

¹⁷¹ See generally Cassuto et al., *supra* note 169.

¹⁷² See *Animal Legal Def. Fund v. Glickman*, 154 F.3d 426 (D.C. Cir. 1988).

¹⁷³ Radford, *supra* note 2, at 104.

¹⁷⁴ See Davidson Anestal, *Chimpanzees in Court: Limited Legal Personhood Recognition for Standing to Challenge Captivity and Abuse*, 15 Dartmouth L. J. 75, 88 (2017).

¹⁷⁵ See Joshua Hoyt, *Standing, Still? The Evolution of the Doctrine of Standing in the American and Israeli Judiciaries: A Comparative Perspective*, 53 Vand. J. Transnat'l L. 645 (2020).

¹⁷⁶ See HCJ 466/05 Reiss v. National Planning and Building Council (1) TakSC 2333 (2005) (Isr.).

¹⁷⁷ *Id.*

¹⁷⁸ See Animal Welfare (Protection) Law, § 17A (1994) (Isr.); Kapon & Rositzki, *supra* note 17, at 77, 86; see also HCJ 9232/01 "Noah"—The Israeli Federation of Animal Protection Organizations v. The Attorney-General IsrLR 215

a right of standing to recognized and registered bodies,¹⁷⁹ but it may be appropriate to allow representation by non-registered individuals or bodies interested in representing harmed animals.

The right of standing is a procedural instrument that can help support the main focus of protection.¹⁸⁰ However, the right of standing, even when broad, is insufficient to alleviate animal suffering without a broad basis in the law. Nevertheless, the more seriously courts take animal de-objectification, the more responsive they will be to appellants' demands to raise complaints on behalf of suffering animals. While the argument that granting the right of standing to animals would cause an increase in the number of claims and strengthen animals' legal status¹⁸¹ is currently theoretical, it deserves serious consideration.

ii. (Actual) Liberation of Animals

In Peter Singer's revolutionary book, *Animal Liberation*,¹⁸² he espoused the abolition of industrial agriculture. The expression "Liberation of Animals" can be given a more reduced and focused meaning in using a writ of *habeas corpus*¹⁸³ to release animals from captivity in shameful conditions. *Habeas corpus* originated in medieval England as the right of men to be judged by their peers but has broadened in meaning over time¹⁸⁴ being finally understood as the right of an arrested person to stand before a judge to decide the legality of imprisonment and eventually recover his or her freedom¹⁸⁵. As with other concepts of the human rights lexicon, also the idea of *habeas corpus* appears as an instrument which could perhaps reduce animal suffering.

The idea of liberation from captivity developed primarily around the status of Hominidae apes. Peter Singer together with Paola Cavalieri,¹⁸⁶ and Steven Wise developed projects for protecting Hominidae apes due to

(2003) (Isr.); compare Wolfson, *supra* note 35, at 561, with Favre, *supra* note 43, at 1061.

¹⁷⁹ See Animal Welfare (Protection) Law, § 17A (1994) (Isr.).

¹⁸⁰ See Stucki, *supra* note 118, at 553.

¹⁸¹ See Staker, *supra* note 78, at 490.

¹⁸² Singer, *supra* note 4.

¹⁸³ See *id.* at 494; see also Cara Feinberg, *Are Animals Things? The Law Evolves*, Harv. Mag. (Mar.–Apr. 2016), <https://www.harvardmagazine.com/2016/03/are-animals-things>.

¹⁸⁴ See Theodore Plucknett, *A Concise History of the Common Law* 57 (2010 ed.).

¹⁸⁵ See generally Amanda Tyler, *Habeas corpus A very short Introduction* (2021).

¹⁸⁶ See Paola Cavalieri, *The Meaning of the Great Ape Project* 1, Pol. & Animals 16 (2015); Sonia Desmoulin-Canselier, *Les intelligences non humaines et le droit Observations à partir de l'intelligence animale et de l'intelligence artificielle*, 55 Archives de philosophie du droit, Dalloz, Le droit et les sciences de l'esprit 65 (2012).

their physiological and genetic similarity to human beings.¹⁸⁷ Applications for release have not been limited to apes, as described below.¹⁸⁸

A petition was filed in Connecticut, USA, for the release of three elephants from a circus. The petition was declined by the court, disconfirming the elephants' very right of standing.¹⁸⁹ In contrast, a petition to transfer an elephant from a zoo in New York, USA to a reserve in Tennessee, USA was accepted.¹⁹⁰ An additional petition for releasing several apes was filed in the New York City Court¹⁹¹ but was rejected.¹⁹² The female ape Suiça was granted standing in Brazil for a petition against the zoo where she was kept but died before the procedure was completed, and a case-specific decision was not given.¹⁹³ In Colombia, an application for releasing Chucho the bear from the zoo where it was kept was rejected by the Constitutional Court.¹⁹⁴ In

¹⁸⁷ Chimpanzees are unique in the world of non-human animals. They are prime candidates for an extension of limited personhood status because of their "human-like" qualities. Specifically, chimpanzees are self-conscious, have elements of the theory of mind, can understand symbols, and have the capacity to use complex communication systems. See Anestal, *supra* note 174, at 108.

¹⁸⁸ See Cerini, *supra* note 50, at 31.

¹⁸⁹ NonHuman Rights Project, Inc. v. R.W. Commerford Sons, Inc., 231 A.3d 1171, 1172, 77 (Conn. App. Ct. 2020).

¹⁹⁰ See Marian Conway, *Happy the Elephant and the Personhood of Animals*, NonProfit Q. (Oct. 24, 2019), <https://nonprofitquarterly.org/happy-the-elephant-and-the-personhood-of-animals/>.

¹⁹¹ The question of the right of standing does not appear in the matter of *habeas corpus* only. For example, a petition against someone who had photographed a monkey claimed copyrights on its image, but was declined. See *Naruto v. Slater*, 888 F.3d 418 (9th Cir. 2018). The judgment discerns between a constitutional right of standing and a right of standing by virtue of the law, which is key to standing before the court. *Id.* at 420. Similarly, AI copyrights have been questioned. At present, AI does not have copyright claims but this cannot be discounted for the future. See Chesterman, *supra* note 29, at 835.

¹⁹² Nonhuman Rights Project, Inc. v. Lavery, 100 N.E.2d 846, 846 (N.Y. 2018); see also Anestal, *supra* note, 174, at 93; Gellers, *supra* note 11, at 82.

¹⁹³ Petition for a Writ of Habeas Corpus, Santana v. Gov't Secretariat for Biodiversity, Env't, and Water Res. (9th Cir. filed Sept. 19, 2005) (no case-specific decision) No. 833085-3, animallaw.info/sites/default/files/Habeas%20Corpus%20on%20Behalf%20of%20a%20Chimp%20Rev2.pdf. The Salvador District Court in Brazil determined that, in principle, the ape has a right to file the petition. See *id.* In the matter of the female ape Suiça, an application for habeas corpus was filed to release her from the conditions under which she had been encaged and transfer her to a nature reserve. *Id.*

¹⁹⁴ See *Corte Constitucional concluye que los animales no tienen derecho a la libertad* [Constitutional Court Concludes that Animals Have No Right to Freedom], El Espectador (Jan. 23, 2020, 1:12 PM), <https://www.elespectador.com/noticias/judicial/corte-constitucional-concluye-que-los-animales-no-tienen-derecho-la-libertad-articulo-901209/>; *Corte Constitucional dice que animales no son sujetos de derecho en caso del oso Chucho*, LaPatria (Jan. 23, 2020), <https://www.lapatria.com>.

Austria, there was an attempt to appoint a guardian for a chimpanzee endangered by the financial difficulties of the animal shelter where he was living. However, the petition was denied, and thus declined to grant personhood status to an ape.¹⁹⁵ In Argentina, *habeas corpus* has been applied to animals more successfully. Sandra and Cecilia were captive female apes in zoos without minimal conditions to avoid suffering and consequently they were granted release warrants by the courts, recognizing them as non-human personalities.¹⁹⁶ The apes were transferred to a nature reserve with better conditions.¹⁹⁷ A decision given in March 2020 at the Court of Pakistan ordered the release of an elephant to a nature reserve in Cambodia¹⁹⁸ and found proper places for other animals, due to problematic conditions at the zoo in Islamabad.¹⁹⁹

com/nacional/corte-constitucional-dice-que-animales-no-son-sujetos-de-derecho-en-caso-del-oso-chucho.

¹⁹⁵ See Philipp Prem, Tierwürde und Tierrechte: Bedeutung, Chancen und Grenzen zweier kontroverser Begriffe aus Sicht einer theologischen Tierethik [Animal Dignity and Animal Rights: Meaning, Opportunities and Limits of Two Controversial Terms From the Perspective of a Theological Animal Ethics] 54 (2020) (Thesis to obtain the Magister Theologiae degree, Karl-Franzens-Universität Graz), <https://unipub.uni-graz.at/obvugrhs/content/titleinfo/4795345/full.pdf>; William Kole, *Court Will Not Declare Chimp a Person*, *Livescience* (Sept. 27, 2007), <https://www.livescience.com/4645-court-won-declare-chimp-person.html>.

¹⁹⁶ See Juzgado de Primera Instancia [1a Inst.] [Court of First Instance], *Asociación de Abogados por los derechos de los Animales c. GCBA / amparo*, *MicroJuris* (Oct. 21, 2015), <https://aldiaargentina.microjuris.com/2015/11/26/se-reconoce-a-la-orangutana-como-un-sujeto-de-derecho-toda-vez-que-es-una-persona-no-humana> (noting that the Buenos Aires Administrative Court, where the orangutan Sandra was recognized as a subject of rights, instructed the zoo in Buenos Aires to improve the conditions under which the ape was being kept). A year later, a similar decision was given in the matter of the chimpanzee Cecilia, where the court recognized the ape as a non-human personality (*persona de derecho no humano*). The ape was transferred to a nature reserve in Brazil. *Juzgado Federal [Juzg. Fed.] 3/11/2016, A.F.A.D.A. c. Mendoza / habeas corpus action* (Arg.), <https://www.nonhumanrights.org/content/uploads/Sentencia-de-Habeas-Corpus-de-Cecilia.pdf>. Interestingly, in the case of Sandra, the court addressed not only an animal's right to liberty, but also *protection of its privacy*, since being enclosed in a cage exposed her to visitors' gazes. Jonas-Sébastien Beaudry, *From Autonomy to Habeas Corpus: Animal Rights Activists Take the Parameters of Legal Personhood to Court*, 1 *Glob. J. Animal L.* (2016).

¹⁹⁷ *Id.*

¹⁹⁸ See “ايديوبمك ىل انا تسك اب نم رفا س يس و رّح ”نون حمل“ لى فل ا. رى خ ا”; [Finally the Crazy Elephant is Free and Will Travel From Pakistan to Cambodia], *Al Bayan* (Aug. 13, 2020), <https://www.albayan.ae/five-senses/east-and-west/2020-08-13-1.3935652>.

¹⁹⁹ See *Islamabad Wildlife Management Board v. Islamabad*, (2019) W.P. No.1155 (Pak.), (Inter alia, the court based its verdict on passages from the Koran), <https://www.nonhumanrights.org/content/uploads/Islamabad-High-Court-decision-in-Kaavan-case.pdf>; see also Nicolle Pallota, *Islamabad High Court Holds that Animals Have Legal Rights*, *Animal Legal Def. Fund* (Oct. 3, 2020), <https://aldf.org/>

No one disputes that applying habeas corpus to animals evokes challenging questions. The author doubts whether habeas corpus is the best way to establish animal status.²⁰⁰ As it was pointed out before,²⁰¹ the goal of habeas corpus is to warrant the freedom of a person particularly in case he or she had been unlawfully arrested protecting his or her right to due process.²⁰² However, in practice, the apes were not liberated but transferred to a more spacious reserve (sanctuary) where they enjoyed better conditions. Although beneficial, it has nothing to do with habeas corpus. Using animals in circuses should be prohibited and zoos that maintain wild animals in poor conditions should be closed down, but is habeas corpus the right way to implement this?

Even if liberating monkeys is correct, a question remains concerning the “rating” of Hominidae apes compared to other animals. Giving specific animals an autonomous personality based on their cognitive level raises concerns for the status of other animals. If we accept that developed and other wild animals deserve liberation from captivity, how will this apply to farm animals? Can habeas corpus be used for their protection, e.g., to transfer hens to more suitable living conditions? Should apes confined in laboratories also be liberated and, if so, what about the mice?²⁰³

Identifying with the liberation of an ape or bear from a zoo is easy because these animals are associated with nature. The idea of liberation becomes increasingly complex when it involves animals used for food, medical experiments, or military activity. Every step intended to improve animals' living conditions is praiseworthy and, in this sense, the ideas of *habeas corpus* and right of standing should be considered. However, it is appropriate to question how meaningful these concepts are to bringing about a general solution to animal welfare. In the author's view, de-objectification, while humble, may be a better tool for protecting animals' lives and welfare than the more ambitious application of *habeas corpus*.

[article/islamabad-high-court-holds-that-animals-have-legal-rights/](https://www.nonhumanrights.org/article/islamabad-high-court-holds-that-animals-have-legal-rights/).

²⁰⁰ See Staker, *supra* note 78, at 501.

²⁰¹ See *supra* text accompanying note 183.

²⁰² Regarding habeas corpus and its use and limitations, see, e.g., Diane P Wood, *The Enduring Challenges for Habeas Corpus*, 95 *Notre Dame L. Rev.* 1809 (2020); David Shapiro, *Habeas Corpus: Suspension and Detention: Another View*, 81 *Notre Dame L. Rev.* 59 (2006).

²⁰³ See Favre, *supra* note 43, at 1057.

CONCLUSION

Removing animals from the realm of movable property and inanimate objects improves their status and can reduce cruelty cases even if there is no immediate, significant change in their condition. Antiquated legal definitions should be abandoned and new categories should be created based on current scientific, legal, and ethical principles. While the law cannot alter Man's indifference toward animal suffering, it can create tools for those who are not indifferent to help protect animals.

Animal de-objectification is another step in the long road to improving animals' lives. Its practical influence on the development of laws or on Man's attitude toward animals remains in question. This author believes that considering animals not to be things is a satisfactory step forward, and the internalization of this idea by the public could enable future steps toward animal rights. As such, it is not the end but another brick in the complex structure of human/non-human animal relationships. De-objectification may represent the bridge between a non-ideal reality and normative ideals regarding animals as proposed by Stucki.²⁰⁴ While there are obstacles to preventing animal suffering, a good start would be to agree that every animal, human and non-human, deserves to suffer as little as possible and to live a happy life.

²⁰⁴ Stucki, *supra* note 118, at 557.

