

TOWARD RECONCILING ENVIRONMENTAL AND ANIMAL ETHICS: NORTHEAST WOLF REINTRODUCTION

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I. INTRODUCTION

a. An Imaginary Dialogue

It is lunchtime at a conference on conservation biology focused on managing wildlife that overpopulates a region. The open-seated event follows a session on hunting delisted wolves in the Western states where they have recovered since being successfully introduced into the greater Yellowstone Park region and Central Idaho. At the table is Alice Advocate, who volunteers for an animal welfare organization, Carrie Conservationist, a state wildlife biologist, and Peter Pluralist, an academic philosopher in the field of environmental ethics.

Alice breaks the ice: “It’s just wrong to kill these animals. We brought them back only to kill them later. They simply want to live and raise young. Hunters will wound them and leave them to suffer. We should just leave them alone, especially after what we put their ancestors through. Now even seven descendants of the original Yellowstone research wolves are dead!”¹

Carrie looks indulgently at Alice. “No one *wants* to hurt wolves. If humans hadn’t messed up the environment to begin with, we wouldn’t have had to restore them. They have long exceeded recovery goals—the main purpose of protecting species. The government can’t break its promise to the ranchers and farmers who opposed bringing wolves back. That would make future restorations politically impossible. Besides, everyone knew from the start that they’d have to be carefully managed, even forever. Wolf control was in the cards right from the beginning.”

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¹ Nate Schweber, *Research Animals Lost in Wolf Hunts Near Yellowstone*, N.Y. TIMES (Nov. 26, 2012), available at <http://green.blogs.nytimes.com/2012/11/28/research-animals-lost-in-wolf-hunts-near-yellowstone/>.

“You mean wolf killing,” Alice interrupts.

Slightly peevisly, Carrie finishes, “This is good for the species, humans, and the entire ecosystem. Letting them overpopulate will eventually result in their own demise. Because of wolves, elk are stronger and vegetation has improved for birds. This has been a great victory. The need to hunt some animals is a worthwhile cost and the best way to preserve ecological health.”

Alice responds, “You would never say that about overpopulated humans. People think they are so superior that they should control everything in nature.”

“Humans are part of nature, too. They’re also animals,” Carrie responds with a trace of condescension.

Sensing rising tension, Peter offers, “We don’t have to kill the wolves *or* leave them to overpopulate. We can control populations through birth control. There are ways to do this through food and pharmaceutical dart guns. There’s really no conflict here that can’t be fixed. We could even remove some excess wolves from the West and relocate them to the Northeast where wolves are gone and people want them back.”

In unison, Alice and Carrie glance skeptically at Peter. Carrie said, “That wouldn’t work. They’re not even the right species.”

Peter retorted, “That remains to be seen.”

b. Perspectives in Tension

Many conservation issues replicate the dialogue on wolf reintroduction and its aftermath. Particular examples of resistant tension include: developing land for ridgeline wind power that results in bat and avian mortality or interferes with animal migration corridors and seasonal food sources,² expending resources to cleanse soiled birds in the Gulf of Mexico of oil or other contaminants where effectiveness and long term avian survival are weak,³ capturing the last of extremely endangered animals like red wolves or frogs for captive breeding despite slim prospects of successful reintegration into the wild,⁴ or culling prey

² Reed Elizabeth Loder, *Breath of Life: Ethical Wind Power and Wildlife*, 10 VT. J. ENV'T L. L. 507, 509-10 (2009).

³ Clare Sestanovich, *Oiled Birds: To Clean or Euthanize*, FOREIGNPOLICY.COM (June 11, 2010, 12:55 PM) http://blog.foreignpolicy.com/posts/2010/06/11/some_experts_recommend_euthanizing_oil_damaged_birds_in_gulf.

⁴ When red wolves in the Southeast numbered only fourteen known animals, the remaining wolves became subject to captive breeding, with the intention of releasing bred animals into the wild. *Red Wolf Recovery Program*, U.S. FISH AND WILDLIFE SERV., <http://www.fws.gov/redwolf/> (last updated Mar. 25, 2014). Some species of threatened or endangered frogs are also the subjects of captive breeding programs. Richard A. Griffiths & Lissette Pavajeau, *Captive Breeding, Reintroduction, and the Conservation*

animals to maintain viable relationships between predator and prey.⁵ All of these questions reflect tensions between animal and environmental ethics that have not dissolved despite attempts to “marry” the “fields.”⁶ Environmentalists tend to adopt a holistic perspective that sometimes supports deliberate or foreseeable harms to individual animals to promote species, populations, and ecosystems, whereas animal ethicists place individuals first.

Although the two perspectives can often be “complementary,”⁷ and intractable conflicts of perspective can be reduced, dissonance persists in hard cases. Like gestalt shifts in perception, conservation biologists focus on wholes and animal ethicists on individuals, but each can adopt the perspective of the other to mutual benefit even in cases where the values on one side must give. Deliberate attention to the contrasting perspective allows consideration, and sometimes accommodation, of the other point of view. This can open a window to broader consensus and better policy, but not always, despite the claims of pluralists who believe that reconciliation is almost always possible.

Because of the highly contextual nature of these tensions, a “case study” examining a particular factual context is most useful. I shall focus here on the proposal, now suspended, to restore wolves to the role of top predator in the Northeastern region of the United States.⁸ For comparative guidance, I draw on the historical reintroduction of gray wolves to the West that began in 1995 in Yellowstone National Park and Northern Idaho (“Yellowstone project”), widely believed to be a remarkable ecological success story.⁹

of Amphibians, 22 CONSERVATION BIOLOGY 852, 852-61 (2008). Such programs are controversial because of habitat loss, genetic depression, high costs, the need for long term monitoring, and sometimes needed cooperation of local people. *Id.* at 853.

⁵ See GARY VARNER, IN NATURE’S INTERESTS? INTERESTS, ANIMAL RIGHTS, AND ENVIRONMENTAL ETHICS 109-10 (1998) (justifying hunting of overpopulated animals).

⁶ Mary Anne Warren, *The Rights of the Non-Human World*, in THE ANIMAL RIGHTS/ENVIRONMENTAL ETHICS DEBATE: THE ENVIRONMENTAL PERSPECTIVE 185, 186 (Eugene C. Hargrove ed., 1992).

⁷ *Id.* at 205.

⁸ In 1992 the Fish and Wildlife Service issued a Northeast Timber Wolf Recovery Plan identifying portions of New England and New York as potential restoration areas: the Adirondack Forest Preserve; areas of Eastern Maine, and Western Maine and adjacent New Hampshire. U.S. FISH AND WILDLIFE SERV., RECOVERY PLAN FOR THE EASTERN TIMBER WOLF 1, 56-57 (1992), available at http://www.fws.gov/midwest/wolf/aboutwolves/pdf/grwo_recovplan.pdf (last visited Apr. 9, 2014) [hereinafter RECOVERY PLAN].

⁹ See *Service Proposes to Return Management and Protection of Gray Wolves to State Wildlife Professionals Following Successful Recovery Efforts*, U.S. FISH AND WILDLIFE SERV. (June 7, 2013), <http://www.fws.gov/home/newsroom/serviceproposesgraywolvesNR06072013.html>; Cf. Jim Dutcher, Jamie Dutcher & Garrick Dutcher, *Don’t Forsake the Gray Wolf*, N.Y. TIMES (June 7, 2013), available at http://www.nytimes.com/2013/06/08/opinion/dont-forsake-the-gray-wolf.html?_r=0.

Species restorations appropriately take a holistic perspective, with populations, species, habitats, and ecosystems the primary units of concern. Restoration proponents accept predictable and significant harms to the individual animals trapped, collared, transported and acclimated to the new environment, as well as to some animals left behind in the source location and those encountered in the new place. Although such risks, including significant mortality, sometimes support fragile holistic values, the conservationist perspective disregards individual animal ethics in the name of ecological improvements. In contemplating restorations, conservation biologists, government agency representatives, and policy analysts should consider directly the interests of individual animals, holding open the possibility that animal welfare might outweigh holistic goals.¹⁰ After ethically examining the rationales for wolf restoration in the Northeast, I conclude that animal welfare concerns should stop the project.

Despite the contextual nature of this examination, I offer some ethical guidelines for other predator restorations where group and individual perspectives chafe. I identify relevant ethical criteria to guide decisions on when promoting species, population, and systems justify invasive reintroductions. I hope to promote dialogue between environmental and animal ethicists that might affect conservation thinking and policies.

II. THEORETICAL BACKGROUND TENSIONS

Environmental Ethics as a “field” of Anglo-American professional philosophy emerged roughly the time of the first Earth Day (1970), as the public became conscious of environmental damage.¹¹ Initial debate centered on the adequacy of conventional “Western” ethics, with its emphasis on individual humans, to address environmental problems.¹² Was environmental ethics a new application and extension of ethics generally, or was it something new because of the importance of collective ideas like species and systems? By the time this question sparked debate, philosophers and activists had already begun to re-examine the human relationship to non-human animals domesticated for

¹⁰ See Ben A. Minteer & James P. Collins, *Ecological Ethics: Building a New Tool Kit for Ecologists and Biodiversity Managers*, in *THE ANIMAL ETHICS READER*, 353, 354, 357 (2d ed.) (Susan J. Armstrong & Richard G. Botzler eds., 2008).

¹¹ See *A Very Brief History of the Origins of Environmental Ethics for the Novice*, THE CTR. FOR ENVTL. PHILOSOPHY, <http://www.cep.unt.edu/novice.html>.

¹² See Richard Routley (Sylvan), *Is there a Need for a New, an Environmental, Ethic?* in *ENVIRONMENTAL PHILOSOPHY FROM ANIMAL RIGHTS TO RADICAL ECOLOGY* 12, 12, 14 (Michael E. Zimmerman et al. eds., 1993) (arguing for new ethic dealing with human relationship to nature).

human purposes.¹³ In this, traditional ethical individualism was intact, with emphasis on the rights of creatures who were “experiencing subjects of a life,” originating “animal rights,”¹⁴ or the interests of non-human animals who were “sentient” and could experience pain and pleasure, generating “animal welfare.”¹⁵

The new cadre of environmental ethicists eschewed the individualism of animal ethics, reviving Aldo Leopold’s “land ethic” from the 1940s.¹⁶ Leopold had boldly insisted that ethics must expand to the entire community of life in which living things are inter-related and depend on each other for survival: “The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land.”¹⁷ Leopold’s extension of Western ethics to the environment gave him a “prophet” label, although he was an outsider to academic philosophy. His ethic shifted both the scope and subjects of ethical concern to ecological communities and the non-human world.¹⁸ Leopold emphasized holistic concepts like ecological health,¹⁹ the “energy circuit,”²⁰ and the “land” itself.²¹ Leopold’s professions of forester and wildlife manager probably explain this emphasis on ecology,²² and Leopold became a vanguard of holism in the new environmental ethics.

Thus diverged animal and environmental ethics. Some of the split was explicit. J. Baird Callicott, probably the recent environmental ethicist most aligned with Leopold’s holism, proclaimed division of the two fields.²³ Like trains passing in the night, animal and environmental movements followed parallel tracks, with separate advocacy in politics

¹³ See Eugene C. Hargrove, *Foundations of Wildlife Protection Attitudes*, in THE ANIMAL RIGHTS/ENVIRONMENTAL ETHICS DEBATE (Eugene C. Hargrove ed., 1992) (describing changing attitudes toward animal treatment in the nineteenth century).

¹⁴ Tom Regan, *The Radical Egalitarian Case for Animal Rights*, in ENVIRONMENTAL ETHICS: READINGS IN THEORY AND APPLICATION, 81, 87–88 (Louis P. Pojman & Paul Pojman eds., 6th ed. 2012) [hereinafter *Radical Egalitarian*].

¹⁵ Peter Singer, *A Utilitarian Defense of Animal Liberation*, in ENVIRONMENTAL ETHICS READINGS IN THEORY AND APPLICATION 71, 75 (Louis P. Pojman & Paul Pojman eds., 6th ed. 2012).

¹⁶ See THE CTR. FOR ENVTL. PHILOSOPHY, *supra* note 11 (mentioning Sierra Club republication of Leopold’s *Land Ethic*).

¹⁷ ALDO LEOPOLD, A SAND COUNTY ALMANAC 239 (1970).

¹⁸ *Id.* at 258 (noting the human “responsibility for the health of the land”).

¹⁹ *Id.*

²⁰ *Id.* at 255.

²¹ See *id.* at 253 (describing land as a “fountain of energy flowing through a circuit of soils, plants, and animals”).

²² See, e.g., J. BAIRD CALLICOTT, IN DEFENSE OF THE LAND ETHIC: ESSAYS IN ENVIRONMENTAL PHILOSOPHY 5 (1989) [hereinafter IN DEFENSE].

²³ J. Baird Callicott, *Animal Liberation: A Triangular Affair*, in CALLICOTT, IN DEFENSE, *supra* note 22, at 15, 18, 36 (distinguishing animal and environmental ethics in vision and application).

and policy. Seeing practical advantages of reunion, some philosophers, including Callicott himself, tried to heal the rift. Callicott softened his position by recognizing shared foundations of the two “fields.”²⁴

In this, Callicott acknowledged a debt to Mary Midgley, who had tackled the split at a theoretical level. Midgley argued that common evolutionary processes, shared biological materials of all life, and long-standing association of humans and animals in “mixed communities” across history and cultures, invited integration of ecological and animal perspectives.²⁵ Others have also made claims that the theoretical differences do not matter practically to results,²⁶ that plural ethics address different questions and thus do not conflict,²⁷ and that no single approach is sufficient.²⁸ While moves toward cohesion are helpful, they have not offered much guidance for resolving tensions in particular cases. Attempts at reconciliation have tended to adopt controversial theoretical assumptions that suppress the tensions. I consider resistant conflicts between animal and environmental ethics and suggest factors for deciding which values should predominate in particular contexts.

III. REINTRODUCTION OF WOLVES INTO THEIR HISTORICAL RANGE

a. Northeastern Wolf Reintroduction: Background

Following fanfare yet lingering adversity over restoring gray wolves into the Yellowstone National Park region and Central Idaho near the turn of the millennium,²⁹ attention turned to the Northeastern United States.³⁰ Not unlike the Yellowstone region before reintroduction, the

²⁴ J. Baird Callicott, *Animal Liberation and Environmental Ethics: Back Together Again*, in CALLICOTT, IN DEFENSE, *supra* note 22, at 49, 55 (seeking “common cause,” recognizing value of compromise, and finding shared “bio-social” foundations).

²⁵ MARY MIDGLEY, ANIMALS AND WHY THEY MATTER 112 (1983); *see also* Mary Midgley, *The Mixed Community*, in THE ANIMAL RIGHTS/ENVIRONMENTAL ETHICS DEBATE: THE ENVIRONMENTAL PERSPECTIVE 211, 213, 220 (Eugene C. Hargrove ed., 1992) (describing long history of human and animal associations and human capacity to extend sympathy beyond one’s group).

²⁶ *See, e.g.*, BRYAN G. NORTON, TOWARD UNITY AMONG ENVIRONMENTALISTS 197-199 (1991) (proposing “convergence hypothesis” that views on ecological policy converge despite differences on underlying values).

²⁷ *See, e.g.*, LAWRENCE M. HINMAN, A PLURALIST APPROACH TO MORAL THEORY, (2d ed. 1998) (answering different, not competing, questions).

²⁸ *See, e.g.*, Anthony Weston, *Before Environmental Ethics*, in ENVIRONMENTAL PRAGMATISM 139, 150-51 (Light & Eric Katz eds., 1996) (arguing that environmental ethics is in “originary stage” that should resist univocal explanations).

²⁹ *Supra* note 9.

³⁰ *See* RECOVERY PLAN, *supra* note 8 (Northeast identified as one region).

Northeast had not harbored wolves since the mid-twentieth century.³¹ The Endangered Species Act of 1973 (ESA) required the Department of the Interior, through the Fish and Wildlife Service (FWS), to formulate Restoration Plans that would address feasibility of restoring species listed as “endangered” to their former range.³² Experts believed that a subspecies of gray wolf had roamed the Northeast in pre-colonial times.³³ Studies of the region covered many factors, including ecological suitability of habitat and prey, public opinion, receptivity of State governments, economic and cultural impacts on people of the area, and costs.

Research determined that the New England states of Maine and New Hampshire had enough prey and space for pack territories to support viable wolf populations.³⁴ Large areas of Maine had ample moose, white-tailed deer, and beaver to sustain wolves, and contiguous habitat connected Maine with portions of New Hampshire.³⁵ Researchers also identified the Northeast Kingdom of Vermont and parts of the Adirondacks in New York as able to support smaller numbers of wolves.³⁶ Studies also concluded that wolves were not likely to travel on their own from Canada to the Northeast because of various natural and human “barriers,” such as long travel distances, patches of human development, highways, unfrozen waterways, railroad tracks, and Canadian hunters.³⁷ Large swaths of farmland and towns in Southern Ontario would bring wolves moving southward into conflicts with humans, several large highway systems would cause wolf mortality from automobiles, and the Saint Lawrence Seaway would not provide a winter corridor because ice was broken to accommodate commercial navigation.³⁸

Professionals also conducted polls and surveys of public opinion, with the funding and assistance of Defenders of Wildlife, an environ-

³¹ Bill McKibben, *Human Restoration*, in *THE RETURN OF THE WOLF: REFLECTIONS ON THE FUTURE OF WOLVES IN THE NORTHEAST* (John Elder, ed., 2000).

³² Endangered Species Act of 1973 [hereinafter ESA], 16 USC § 1531 *et seq.*; *id.* at § 1533(f) (wolf first species listed as “endangered”).

³³ RECOVERY PLAN, *supra* note 8, at 58 (mapping the former territory of the Timber Wolf in the Northeast).

³⁴ Maine turned out to be the most promising candidate in terms of available habitat, with about half the state identified as potential habitat, but parts of New Hampshire and Vermont also were suitable for smaller populations. *See, e.g.*, David J. Mladenoff and Theodore A. Sickley, *Assessing Potential Gray Wolf Restoration in the Northeastern United States: A Spatial Prediction of Favorable Habitat and Potential Population Levels*, 62 J. WILDLIFE MGMT. 1, 4–5 (1998).

³⁵ *Id.*

³⁶ *Id.* at 5. Harsh Adirondack winters and dense forestation raised doubts about the availability of white-tailed deer as prey.

³⁷ *See, e.g.*, Adrian F. Wydeven et al., *The Potential for Wolf Recovery in the Northeastern United States via Dispersal from Southeastern Canada*, 26 WILDLIFE SOC’Y BULLETIN 776, 779–80 (1998).

³⁸ *Id.*

mental advocacy group devoted to endangered species, with wolf restoration a signature issue.³⁹ Although some Adirondack residents opposed reintroduction,⁴⁰ overall sentiment solidly favored bringing wolves back to the area.⁴¹ Upon study of the above factors, the FWS Restoration Plan for reintroducing wolves to the Northeast seemed closer to fruition.⁴²

Subsequently these plans unraveled and are now at least temporarily suspended. Taxonomic controversy has blurred the species identity of the wolf that once inhabited the Northeast.⁴³ Some wildlife biologists who studied the genetics of wolves recently concluded that the historical wolf of the region was not, after all, a subspecies of gray wolf, but instead a separate species in its own right that evolved genetically through red wolf and coyote hybridization.⁴⁴ Following the recommendation of its agency experts, FWS issued a Proposal for change in Northeastern wolf status in May of 2011.⁴⁵ The Proposal declared the historical Northeastern wolf to be the separate species *Canis lycaon*, not a subspecies of gray wolf, *Canis lupus*, as the Recovery Plan had stated.⁴⁶ The implication of this new designation was that wolves in the Northeast would not be protected under the ESA unless biological

³⁹ Rodger Schlickeisen, *Overcoming Cultural Barriers to Wolf Reintroduction*, in *WOLVES AND HUMAN COMMUNITIES: BIOLOGY, POLITICS, AND ETHICS* 61, 63 (Virginia A. Sharpe, Byron Norton, and Strachan Donnelly eds., 2001) [hereinafter *WOLVES AND HUMAN*] (reporting increasing public support for wolf reintroduction).

⁴⁰ See, e.g., Richard W. Sage, Jr., *Wolves in the Adirondacks? Perspectives from the Heart of the Adirondack Park*, in *WOLVES AND HUMAN*, *supra* note 39, at 42-44 (describing local mistrust, economic hardship, and apprehensions about lost autonomy).

⁴¹ See, e.g., Nina Fascione and Stephen R. Kendrot, *Facilitating Citizen Participation in Adirondack Wolf Recovery*, in *WOLVES AND HUMAN*, *supra* note 39, at 51, 53 (describing positive results of 1996 survey nationally, in New England, and in the Adirondacks).

⁴² RECOVERY PLAN, *supra* note 8.

⁴³ See, e.g., Letter from Christopher A. Amato, Assistant Comm'r, N.Y. State Dept. of Env'l Conservation, Office of Natural Res., to the Div. of Policy and Directives Mgmt., U.S. Fish and Wildlife Serv. (June 30, 2011), available at <http://prfamerica.org/images/pdfs/GrayWolfLetter.pdf> (arguing that the FWS view that *Canis lupus* never inhabited the Northeast is erroneous).

⁴⁴ See, e.g., Christopher J. Kyle et al., *Genetic Nature of Eastern Wolves: Past, Present, and Future*, 7 *CONSERVATION GENETICS* 273, 278 (2006) (arguing for separate species as historical inhabitant); Dan Vergano, *Eastern Wolves Howl for Recognition*, USA TODAY, Nov. 17, 2012, <http://www.usatoday.com/story/tech/columnist/vergano/2012/11/17/eastern-wolf-species/1709453/>.

⁴⁵ See Endangered and Threatened Wildlife and Plants; Proposed Rule to Revise the List of Endangered and Threatened Wildlife for the Gray Wolf (*Canis lupus*) in the Eastern United States, Initiation of Status Reviews for the Gray Wolf and for the Eastern Wolf (*Canis lycaon*), 76 Fed. Reg. 26,086 (proposed May 5, 2011) (to be codified at 50 C.F.R. pt. 17) [hereinafter 76 Fed. Reg. 26,086].

⁴⁶ *Id.*

assessment eventually determined that the separate species warranted listing.⁴⁷ As required, FWS initiated a public comment period following its Proposal, which had to be extended to accommodate the flurry of opposing views from wildlife experts and officials, including the New York Department of Natural Resources.⁴⁸ Despite considerable scientific opinion dispelling the separate species hypothesis in favor of the longstanding gray wolf subspecies identity,⁴⁹ FWS reiterated the *Canis lycaon* designation in its even more controversial June 2013 Proposal to delist all gray wolves throughout the lower forty-eight United States, except for the Southwestern subspecies of *Canis lupus baileyi*.⁵⁰ Thus Northeastern wolf reintroduction languishes pending further airing of the taxonomic issue, more opportunity to assess the ecological status of the possibly separate species, and comments and probable litigation on the overall delisting Proposal.⁵¹

*b. Yellowstone Region Wolf Reintroduction:
A Comparative Model*

i. Learning from the past

Although the ethics of relocating wolves to the Northeast is the case study of focus, it is necessary to consider the historical reintroduction of gray wolves (*Canis lupus*) into Yellowstone National Park and the greater Yellowstone ecosystem extending into Central Idaho (“Yellowstone project”). Besides ecological accomplishments, that endeavor has provided extensive information relevant to predator reintroductions generally, and especially of wolves. I shall remind readers of the history of Yellowstone restoration and compare conditions in the West to the Northeast. Despite variations, the history of the Western wolf project affects the ethics of any future restoration.

⁴⁷ See *id.*

⁴⁸ See Letter from Christopher A. Amato, *supra* note 43 (commenting on FWS’ view that *Canis lupus* never inhabited the Northeast).

⁴⁹ *Id.* at 3-4.

⁵⁰ Endangered and Threatened Wildlife and Plants; Removing the Gray Wolf (*Canis lupus*) from the List of Endangered and Threatened Wildlife and Maintaining Protections for the Mexican Wolf (*Canis lupus baileyi*) by Listing It as Endangered, 78 Fed. Reg. 35,664, 35,667 (proposed June 13, 2013) (to be codified at 50 C.F.R. pt. 17) [hereinafter 78 Fed. Reg. 35,664].

⁵¹ See *id.* Despite ongoing scientific debate raising doubts about the FWS conclusion, the Northeastern Wolf would fare better as a separate species *Canis lycaon* than under the 1978 classification of it as a subspecies of gray wolf if the FWS Proposal to delist gray wolves stands. This is because the status of *Canis lycaon* is still uncertain, and FWS could extend protection and prepare a Recovery Plan should it determine that the separate species needs protection. *Id.* at 35, 759-60.

After years of information gathering, careful planning, and legal and political wrangling, in 1995 the Department of Interior reintroduced gray wolves into Western ecosystems that had previously included these “top predators” before humans extirpated them in the new twentieth century.⁵² Except for part of Minnesota where gray wolves were listed as “threatened,” gray wolves were “endangered” in all areas of their former range in the lower forty-eight states.⁵³ The Yellowstone project generated intense political and legal controversy,⁵⁴ large economic cost,⁵⁵ and surprising time to launch (about twenty years).⁵⁶ Yet the project met the biological goal of establishing viable packs sooner than anyone anticipated,⁵⁷ and the longer-term ecological results of the endeavor on biodiversity, soils, and vegetation, are heartening.⁵⁸

In evaluating the Yellowstone project from its conception, to inception, to aftermath, I found no discussion of the effect on individual animals as a *factor for decisional consideration*. Although writers sensitively described actual impacts on the relocated wolves, such considerations were never seriously weighed against the undertaking in the first place, although the Environmental Impact Statement briefly mentioned guidelines for “humane” removal.⁵⁹ Actors seemed to assume that harms to individual animals were a necessary cost of reintroduction, begging the question *whether* harmful side effects presented ethical obstacles to going forward. The literature on Yellowstone does convey the team members’ conscientiousness, admiration, and respect for the relocated wolves, gentleness in the animals’ treatment, concern for animal suffering, and self-reflection on the decision once made.⁶⁰ Yet animal suffering was an epiphenomena of decisions made almost exclusively on ecological grounds.

⁵² See, e.g., Schlickeisen, *supra* note 39, at 62-63.

⁵³ THE US DEPT. OF THE INTERIOR, FISH AND WILDLIFE SERV., THE REINTRODUCTION OF GRAY WOLVES TO YELLOWSTONE NATIONAL PARK AND CENTRAL IDAHO: FINAL ENVIRONMENTAL IMPACT STATEMENT xxvii (1994) [hereinafter FINAL EIS], available at http://www.fws.gov/mountain-prairie/species/mammals/wolf/eis_1994.pdf.

⁵⁴ See, e.g., Timothy Clark & Anne-Marie Gillesberg, *Lessons from Wolf Restoration in Greater Yellowstone*, in WOLVES AND HUMAN, *supra* note 39, 135, 137.

⁵⁵ See FINAL EIS, *supra* note 53, at Appendix 5 (projecting total expense of reintroduction in 1992 dollars at \$6,757,750).

⁵⁶ HANK FISCHER, WOLF WARS: THE REMARKABLE INSIDE STORY OF THE RESTORATION OF WOLVES TO YELLOWSTONE 161 (1995).

⁵⁷ See, e.g., Schlickeisen, *supra* note 39, at 62.

⁵⁸ See, e.g., *Ten Years of Yellowstone Wolves*, 13 YELLOWSTONE SCI. 1, 29-33 (Winter 1995), available at [http://www.nps.gov/yell/planyourvisit/upload/YS13\(1\).pdf](http://www.nps.gov/yell/planyourvisit/upload/YS13(1).pdf) (describing effects of wolves on wildlife like, elk, coyotes, beaver, and songbirds and on vegetation including willows) [hereinafter TEN YEARS OF YELLOWSTONE].

⁵⁹ FINAL EIS, *supra* note 53, at 41-43.

⁶⁰ See, e.g., THOMAS MCNAMEE, THE RETURN OF THE WOLF TO YELLOWSTONE 65, 66, 76 (1997); see also FISCHER, *supra* note 56, at 166 (“first-class treatment”).

Bypassing ethical questions as a constraint on restoration reflects conceptual bias. Although ecology is the center of conservation biology, managers should enlist ethologists and ethicists in the decision process as a counterweight. Conservation biology is normative,⁶¹ and frames issues selectively,⁶² making it important to invite multidisciplinary dialogue. Even some wildlife experts question the ethics of ecologically well-intentioned restorations.⁶³ Because restorations subject wild animals to intensive human control and predictable harms, they raise foundational moral questions about the relationship of humans to the non-human world. The cognitive bias of conservation biology is holistic, attending to species, populations, and systems.⁶⁴ Of course, the survival of individuals in the aggregate seals the fate of species, and in that sense every animal matters. Yet holistic concern with individuals is indirect and derivative. Applying diverse ethical perspectives to conservation decisions can help to reconcile environmentalism with animal protection by mitigating harms to animals even when the species and ecosystem perspectives prevail.

The human side of restoration also raises ethical concerns about policy choices that consume large sums of money that could be applied to other social ends.⁶⁵ Those planning for wolves in Yellowstone did recognize the importance of public acceptability. They conducted surveys,⁶⁶ hearings,⁶⁷ and made concessions to local ranchers and farmers.⁶⁸ Yet resting policy decisions on public consensus is itself an ethical position, which philosophers call “conventionalism.”⁶⁹ History demonstrates that majority sentiment sometimes permits egregious misconduct (most starkly, in discrimination, slavery, and genocide). The point here is not to taint wolf reintroduction by association with extreme evil, but merely to illustrate that social and disciplinary support for a conservation project does not settle the ethics.

⁶¹ Camilla H. Fox & Marc Bekoff, *Integrating Values and Ethics into Wildlife Policy and Management—Lessons from North America*, 1 ANIMALS 126, 129-30, 135 (2011), available at www.mdpi.com/journal/animals.

⁶² *Id.* at 129-30; see also MICHAEL L. MORRISON, RESTORING WILDLIFE: ECOLOGICAL CONCEPTS AND PRACTICAL APPLICATIONS 15 (2009) (ecologist describing the “scientific and management, social, cultural, legal, and also ethical and aesthetic dimensions” of management).

⁶³ Fox & Bekoff, *supra* note 61, at 129-31, 132.

⁶⁴ *Id.* at 132.

⁶⁵ MCNAMEE, *supra* note 60, at 260. See also FISCHER, *supra* note 56, at 170.

⁶⁶ See, e.g., FISCHER, *supra* note 56, at 69-70.

⁶⁷ MCNAMEE, *supra* note 60, at 35-36 (extensive public participation under leadership of Ed Bangs, Project head).

⁶⁸ *Id.* at 102-03, 114 (pragmatic creation of Defenders of Wildlife Compensation Fund to compensate ranchers for livestock losses from wolves).

⁶⁹ See, e.g., John Kekes, *Moral Conventionalism*, 22 AM. PHILOSOPHICAL Q. 37, 37 (1985) (conventional morality serves social welfare).

Ethical analysis of public policy identifies factors relevant to possible courses of action. These include the types and intensity of harms, risks to all individuals and groups likely to be affected, goals and benefits sought and for whom, the likelihood of realizing those goals, how to approach uncertainties, unintended side effects, public acceptability, legal issues and their impacts, economic and personnel costs and foregone opportunities, educational and cultural impacts, and character effects on the main actors and the public. The applied ethicist can identify conflicts and reveal potential for common ground, or the need to choose among values in tension. Ethics is a deliberative inquiry that penetrates unexamined assumptions and expands the parameters of comfortable thinking.

ii. The Yellowstone Deal: “No Return”

The “Yellowstone” wolves came from Alberta, Canada,⁷⁰ where wolves were plentiful and mostly unprotected.⁷¹ The Canadian wolves were living in stability, if not security. The Canadian provincial government agreed to United States removal as a “final deal.”⁷² Because relocated animals could not be returned to Canada, retrenching meant killing since no backup plan addressed rejected creatures.⁷³ This was one risk to the animals that project participants knowingly accepted in advance.

If the government brought wolves to the Northeast, source animals would also come from Canada.⁷⁴ There is no reason to believe that wolves would be returnable this time around, so wolves would face killing should biological and legal disputes necessitate removal. The uncertainties of removal would be enhanced in the Northeast because of the disputed identity of the animals who once inhabited the region and the delisting controversy.

⁷⁰ FISCHER, *supra* note 56, at 111.

⁷¹ See McNAMEE, *supra* note 60, at 47-48.

⁷² *Id.* at 86.

⁷³ *Id.*

⁷⁴ If the FWS maintains its proposed designation of the historical Eastern Wolf as the full species *Canis lycaon*, the source of any wolves to be reintroduced would likely be Algonquin Park in Ontario, Canada because those animals are closest genetically. See RICHARD P. THIEL & ADRIAN P. WYDEVEN, EASTERN WOLF (*CANIS LYCAON*) STATUS ASSESSMENT REPORT 23–24 (Nov. 2011), available at <http://www.fws.gov/midwest/wolf/aboutwolves/pdf/ThielWydevenEasternWolfStatusReview8August12.pdf>.

iii. Animal selection

Managers of the Yellowstone project intended to bring relatively intact packs to Yellowstone in a “soft release,” in which pack members would be captive for six weeks to allow acclimation to their new environment and maximize chances of survival and breeding.⁷⁵ “Soft release” is safer for the animals than the “hard release” technique used in Central Idaho, where individual animals were deposited in the wilderness and left to their own devices.⁷⁶ Because wolves are highly social animals, “soft release” is also more conducive to fairly stable pack relationships that are hierarchical but social and affectionate.⁷⁷ In packs, the Alpha wolf pair is typically the only pack members to reproduce, and other pack members, often relatives, are responsible for other tasks like guarding young, defending territory, and hunting large prey in groups.⁷⁸ Thus it is important to remove the alpha pair and as many pack members as possible. Managers located alpha pairs in Canada by first trapping a random wolf in a wire snare or leg-hold trap, tranquilizing the trapped animal, fitting that animal with a radio collar, and then tracking that animal to the pack itself.⁷⁹ They called the individual animals who unwittingly betrayed the pack “Judas wolves.”⁸⁰ These animals became coerced “informants” of sorts. The traps and snares used for capture pose serious harms to animals. The wire snare encircles the neck and can cause strangulation.⁸¹ Leg-hold traps, on the other hand, have steel jaws and inflict great pain on a captured animal.⁸² In winter, the trap cuts off the blood supply to the trapped leg and freezes it.⁸³ These methods are still used and would cause predictable injuries to captured animals destined for the Northeast.

Despite the ecological goal of removing full packs, it was clear at the outset of Yellowstone removal that some members would be left behind.⁸⁴ Because of pack structure, biologists knew that separation would disrupt the social order of the group,⁸⁵ despite the relative fluidity

⁷⁵ MCNAMEE, *supra* note 60, at 72.

⁷⁶ *See id.* at 69-70.

⁷⁷ *Id.* at 69, 71.

⁷⁸ *Id.* at 71.

⁷⁹ *Id.* at 19.

⁸⁰ *Id.*

⁸¹ *See id.* at 74 (describing death of three ensnared wolves).

⁸² *Id.* at 291-92.

⁸³ *Id.* at 62

⁸⁴ *See id.* at 71-72 (describing ideal of capturing pack members, the selection of only the “fittest” wolves from among those captured, and the plan to capture more than three packs to ensure a sufficient number).

⁸⁵ *See id.* at 71.

of pack composition.⁸⁶ Wolves left behind would be deprived of security and the social bonds of pack membership.⁸⁷ The stranded individuals might find opportunities to join new packs, or become lone wolves,⁸⁸ but even temporary isolation would cause stress and threats.⁸⁹

Wolves being removed to the Northeast would face similar tracking, trapping and collaring, so the Western animals' responses to these methods are ethically relevant. Although biologists did predict stress of the Yellowstone immigrants, it is now clear that standard methods of translocation produced extreme disruption. This revives questions about the methods and whether some effects can be mitigated.

iv. Medical evaluation and transport

Helicopters were the vehicles for removing wolves from a densely forested region in Alberta, Canada, and these would be used again. Such aircraft are extremely noisy and are known to frighten wolves, which the Alberta wolves clearly demonstrated.⁹⁰ Captured individuals suffered "inconceivable stress,"⁹¹ from handling by "their one great source of terror – humanity."⁹²

From the helicopter, biologists tranquilized each trapped wolf.⁹³ A tranquilizer dart can cause injury or death if not well aimed.⁹⁴ When an animal revives, it is disoriented and less able to function.⁹⁵ Once tranquillized, veterinarians examined the Alberta animals, determined their approximate age and condition, and immunized them.⁹⁶ Project personnel then airlifted the wolves into the helicopter and placed them in crates for the flight and remaining twenty-three hour journey by large truck.⁹⁷ During the road trip, the wolves awakened from the drug-induced state to find themselves in a dark space, in motion, and isolated from the pack.⁹⁸

⁸⁶ See, e.g., John B. Theberge, *An Ecologist's Perspective on Wolf Recovery in the Northeastern United States*, in *THE RETURN OF THE WOLF: REFLECTIONS ON THE FUTURE OF WOLVES IN THE NORTHEAST* (John Elder ed., 2000).

⁸⁷ McNAMEE, *supra* note 60, at 69.

⁸⁸ See *id.* at 71 (describing periodic disintegration of packs).

⁸⁹ See MARK BEKOFF & JESSICA PIERCE, *WILD JUSTICE: THE MORAL LIVES OF ANIMALS* 69-70 (2009) (discussing benefits to animal groups of cooperation, such as hunting, territory defense, and grooming) [hereinafter *WILD JUSTICE*].

⁹⁰ McNAMEE, *supra* note 60, at 64-65.

⁹¹ *Id.* at 77.

⁹² *Id.* at 76.

⁹³ *Id.* at 68, 73.

⁹⁴ *Id.* at 72 (describing a wolf's death from a dart that entered the chest).

⁹⁵ *Id.* at 82 (describing captured wolves' condition after long journey).

⁹⁶ *Id.* at 66 (veterinarians "measure every possible body dimension").

⁹⁷ *Id.* at 66, 76-77, 82.

⁹⁸ *Id.*

A Northeastern reintroduction would most likely remove wolves from Algonquin Provincial Park in Ontario, Canada, now that FWS has re-designated the historical wolf as *Canis lycaon*, because that wolf is genetically closest and lives under the most similar conditions.⁹⁹ Because such removal would use similar transport and veterinary assessment, the significant trauma of the Yellowstone animals would likely recur. Inflicting harm would be more deliberate this time, with greater ethical responsibility attached.

v. Acclimation to the new environment

Upon arrival in the Yellowstone target region, managers placed members of each pack in one-acre pens designed to acclimate them and restore their stamina and health, before releasing the wolves into their new home.¹⁰⁰ The traumatized wolves refused to leave their open pens after ten weeks in captivity.¹⁰¹ Biologists worried about the intensity of trauma,¹⁰² especially since at least one female wolf appeared to be in heat or even pregnant.¹⁰³ They were surprised enough by the level of stress that they wondered about possible permanent effects.¹⁰⁴ That the Yellowstone wolves ultimately acclimated does reduce ethical concerns, but deliberately causing acute suffering of animals, even temporarily, must be justified. Although no conservation manager intends to cause harm, such impacts are now highly foreseeable. An actor is ethically responsible for foreseeable consequences of his conduct, even though he perceives himself responsible only for his conscious intent.¹⁰⁵

vi. Feeding and release

Yellowstone biologists carefully selected regions for relocation in part based on plentiful ungulate and other wolf prey.¹⁰⁶ This would maximize hunting success, which would support individual and pack survival and reproduction. Ample prey would also promote the health of

⁹⁹ THIEL & WYDEVEN, *supra* note 74, at 23.

¹⁰⁰ BRUCE HAMPTON, *THE GREAT AMERICAN WOLF* 219 (1997).

¹⁰¹ MCNAMEE, *supra* note 60, at 108-10.

¹⁰² *Id.* at 110.

¹⁰³ *Id.* at 112-13.

¹⁰⁴ *Id.* at 65.

¹⁰⁵ John P. Sabini & Maury Silver, *On Destroying the Innocent with a Clear Conscience: A Sociopsychology of the Holocaust*, in *SURVIVORS, VICTIMS, AND PERPETRATORS, ESSAYS ON THE NAZI HOLOCAUST* 55, 338-39 (Joel E. Dimsdale ed., 1980) (discussing relationship between intent and responsibility).

¹⁰⁶ HAMPTON, *supra* note 100, at 203.

the relocated individuals. A Northeastern restoration should minimally commit the time, costs, and expertise to evaluating all regional factors, including the costs and expertise of management.¹⁰⁷

In the ten weeks preceding release, the captive Yellowstone wolves received strategically placed road kill and other meat for sustenance.¹⁰⁸ After elongated captivity and before release, managers withheld food to encourage the wolves to leave their cages.¹⁰⁹ Despite doing without food for four days, the captives would not exit the pens despite attempts to entice them from confinement, including fresh meat placed just outside.¹¹⁰ This sign of extreme trauma is worrisome for future projects.¹¹¹

Despite unanticipated stress, the animals were resilient enough to overcome these effects.¹¹² The ultimate success of the Yellowstone wolves is ethically relevant to a potential Northeastern project. Although the ethics of a decision must be assessed at the time the decision is made instead of retrospectively,¹¹³ Northeastern decision-makers would now be entitled to consider that wolves are resilient enough to recover from intense trauma. They could reason that harms would be temporary and justified within the temporal, species, and systems frameworks within which conservation programs measure success. Yet, this conclusion would assume the priority of a species perspective, and the individuals who suffered would be serving that larger interest.

vii. Legal risks and ethical implications

It is fair to say that the creaturely newcomers to Yellowstone were, and still are, as much threatened by legal machinations as anything else. Wolves crossing the border from Canada into the Western States were “endangered” under the ESA.¹¹⁴ “Taking” listed animals violates the ESA and subjects the offender to criminal and financial penalties.¹¹⁵ The ESA defines “taking” broadly “to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in such conduct.”¹¹⁶ Before

¹⁰⁷ See MORRISON, *supra* note 62, at 188, 298 (highlighting the importance of “adaptive management” over time).

¹⁰⁸ MCNAMEE, *supra* note 60, at 87, 106.

¹⁰⁹ *Id.* at 108-10.

¹¹⁰ *Id.* at 106, 112, 118.

¹¹¹ *Id.* at 110.

¹¹² See TEN YEARS OF YELLOWSTONE, *supra* note 58, at 4.

¹¹³ See, e.g., Am. Bar Assoc., MODEL RULES OF PROFESSIONAL CONDUCT, Scope, sec. 19 (2002) (professional conduct of lawyers assessed based on lawyer’s knowledge of facts at the time of action).

¹¹⁴ See, e.g., Schlickeisen, *supra* note 39, at 62-63 (listing them as “endangered” everywhere in U.S. except part of Minnesota where listed as “threatened”).

¹¹⁵ 16 U.S.C. § 1538 (a) (1) (B).

¹¹⁶ *Id.*

western wildlife agents relocated wolves, many wolf sightings had occurred in Montana,¹¹⁷ and people had also reported sightings in the actual target areas of the project.¹¹⁸ One huge controversy surrounding the project was whether wolves would eventually return on their own, eliciting greater public acceptance and rendering unnecessary the expense of reintroduction.¹¹⁹ An ethical question for the Northeast also is whether subjecting wolves to risks is justified, given the possibility that animals might return on their own initiative. Given known harms, ethics requires exploration of less intrusive alternatives, which would include facilitating return of animals on their own. Of course, those naturally returning animals also would face risks, but humans would not be as directly responsible.

Yellowstone proponents, and even some opponents, relied on the special designation under the ESA of relocated animals as “experimental” to urge quicker action before naturally occurring animals could be verified,¹²⁰ and the Final EIS recommended this legal alternative.¹²¹ “Experimental” animals receive relaxed protection under Section 10(j) of the ESA, as amended in 1988 to facilitate species restorations.¹²² Ranchers and farmers could shoot any “experimental” wolf seen depredating on domesticated animals.¹²³ This status, along a Defenders of Wildlife program to provide compensation for killed livestock,¹²⁴ provided project proponents with political capital to convince some more tractable local business people that they would be better off with reintroduced wolves now than “natural” (and fully protected) wolves returning later on their own.¹²⁵

¹¹⁷ FISCHER, *supra* note 56, at 96 (packs and breeding pairs in Montana documented as early as 1986).

¹¹⁸ *Id.* at 43, 96 (despite sightings in Yellowstone and Central Idaho, extensive study revealed no wolf populations in Yellowstone).

¹¹⁹ *Id.* at 85-86.

¹²⁰ *Id.* at 87, 93 (describing even opposing Idaho Senator, James McClure’s references to the benefits of relaxed ‘experimental’ status of reintroduced wolves over full protection accorded to those who returned on their own); *see also* HAMPTON, *supra* note 100, at 209 (FWS asking, “Do you want to get out ahead of it?”)

¹²¹ FINAL EIS, *supra* note 53, at 62-63 (describing “preferred alternative” of “nonessential, experimental” populations); *see also* HAMPTON, *supra* note 100, at 207.

¹²² 16 U.S.C. § 1539(j) (amendment allowing such designation only if reintroduced animals are fully separate from those naturally occurring).

¹²³ FINAL EIS, *supra* note 53, at 296 (acknowledging public concern about private killings by ranchers and encouraging but not requiring agency control of wolves depredating on livestock); *see also* FISCHER, *supra* note 58, at 139 (describing environmental groups’ controversy over “private take”).

¹²⁴ *See* FISCHER, *supra* note 56, at 101-03, 114 (describing genesis and success of Defenders compensation fund).

¹²⁵ *Id.* at 93, 102-03, 114 (describing combined persuasion based on advantages of “experimental” status and availability of compensation).

Was this political persuasion justified, given the lower protection? Was it ethical to urge quick action under 10(j) as an inducement, knowing that wolves might eventually re-inhabit the area? These questions shadowed the Yellowstone endeavor. Here again, ecological and animal welfare perspectives differ. Proponents could reason that the ecological goal of re-establishing top predator justified jeopardy to individual wolves, and that killing nuisance wolves was worth a flourishing ecosystem in the long run. Applying popularized utilitarian reasoning as the greatest good of the largest number of individuals,¹²⁶ proponents could defend their decision even treating animals as subjects of concern. Information supports the view that wolves satiated with wild prey avoid domesticated animals.¹²⁷ Thus managers could conclude that 10(j) status would not eliminate many wolves and would benefit a larger number over time.

From the animal perspective, relaxed protection is the ethical opposite of what should happen when government expels animals from their habitat and places them under at least temporary control. A basic principle of moral (and legal) responsibility is that some special relationships create vulnerability and enhance duties to the weaker party.¹²⁸ Thus parents have extra duties to protect dependent children.¹²⁹ Professionals have extra (fiduciary) duties to clients and patients who must depend on professional expertise in situations of vital importance.¹³⁰ Special responsibility also applies to animals wrenched from their lives and deposited in alien places.

The ESA relaxes the legal protection of animals captured for reintroduction just when ethical responsibility is heightened. Law and ethics are incongruent at this point. The “experimental” classification treats animals exclusively as a means to achieve holistic conservation goals of humans. The Kantian tradition deeply embedded in Western

¹²⁶ See John Stuart Mill, *Utilitarianism*, in JOHN STUART MILL, ‘ON LIBERTY’ AND OTHER ESSAYS 127, 142-143 (John Gray ed., Oxford, 2008) (1861) (Mill’s “Greatest Happiness Principle” as philosophical origin of popular “utilitarian” principle).

¹²⁷ See FISCHER, *supra* note 56, at 63-64 (foremost wolf expert, David Mech, stating that wolves generally prefer wild prey to livestock and predicting low depredations of cows in prey-dense Yellowstone).

¹²⁸ See, e.g., *Tarasoff v. Regents of Univ. of Cal.*, 551 P.2d 334, 342-44 (Cal. 1976) (defendant psychotherapist duty to third party based on special relationship to client who threatened third party).

¹²⁹ See, e.g., Vincent R. Johnson & Claire G. Hargrove, *The Tort Duty of Parents to Protect Minor Children*, 51 VILL. L. REV. 311, 320-25 (2006) (discussing legal, moral, and common understandings about parental duties to child).

¹³⁰ See, e.g., Gary A. Munneke & Theresa E. Loscalzo, *The Lawyer’s Duty to Keep Clients Informed: Establishing a Standard of Care in Professional Liability Actions*, 9 PACE L. REV. 391, 397-98 (1989) (discussing fiduciary’s special duties to protect welfare of clients based on the professional’s superior knowledge).

ethics rejects treatment of living individuals exclusively as means.¹³¹ Predator restoration should be reserved for rare situations where legal flexibility is a last resort to save a species on the brink.¹³² This dire condition does not apply to wolves that thrive in many environments around the globe.¹³³

From a purely human perspective, Section 10(j) does have ethical merit. In reintroducing predators, the government intentionally exposes people to risks, which it thus has an ethical duty to mitigate. Section 10(j) justly protects human rights of defense. Even a strong bio-centrist philosopher, Paul Taylor, accepts the principle of self-defense as one justification for lethally harming other living beings.¹³⁴ Taylor cautions, however, that people have responsibilities to avoid conditions that make self-defense necessary.¹³⁵ Government agents responsible for restoration cannot ethically invoke the conditions they create to excuse harms later inflicted on reintroduced animals. Later management steps, such as culling reintroduced populations to manage predator and prey equilibrium, must be defended in original project design. Government actors know that large predators conflict with ranchers and other humans, so they are partly responsible for the resulting demise of “experimental” animals.

Even the more favorable legal status of reintroduced wolves did not prevent ranchers from aggressively pursuing litigation over the Yellowstone project. The waves of legal challenges were highly predictable. The “experimental” status of the reintroduced wolves raised questions about lone wolf dispersers already sighted in the area. Would

¹³¹ One version of Kant’s “Categorical Imperative,” or practical moral requirement, is: “So act as to treat humanity, whether in thine own person or in that of any other, in every case as an end-withal, never as a means only.” IMMANUEL KANT, *FOUNDATIONS OF THE METAPHYSICS OF MORALS* (T.K. Abbott trans.) (1873). Kant intended this maxim to apply only to rational beings, namely humans. If the world of beings with intrinsic value (as ends in themselves) is extended to include animals besides humans, however, it is unethical to view any such beings exclusively as means to achieve results humans may desire.

¹³² The red wolf captive breeding and release in the Southwest probably fits this description because of the very small numbers of animals left in the wild. *See, e.g.,* Christine L. Schadler, *Reintroduction: Inspired Policy or Poor Conservation? in WOLVES AND HUMAN COMMUNITIES: BIOLOGY, POLITICS, AND ETHICS* 161, 170 (describing “last wild population” of red wolf and captive breeding and release program).

¹³³ Wolves are generally not considered to threaten global biodiversity and have expanded in many areas of the world. *See, e.g.,* Kristin DeBoer, *Dreams of Wolves, in THE RETURN OF THE WOLF: REFLECTIONS ON THE FUTURE OF WOLVES IN THE NORTHEAST, supra* note 31, at 64, 81 (discussing expansion of wolves into various “domesticated” countries like Spain and Italy); *see also* McNAMEE, *supra* note 60, at 200 (North American wolves not vital to worldwide biodiversity).

¹³⁴ TAYLOR, *infra* note 154, at 263-67 (self-defense as one of five “priority principles” for resolving conflicts).

¹³⁵ *Id.* at 268-69 (duty to modify situations to avoid necessity of self-defense).

the relaxed “experimental” status of reintroduced wolves violate the Endangered Species Act because observers would have no way to distinguish an “endangered” from an “experimental” animal? Both wolf opponents and some who generally approved wolf return shared this concern. The Wyoming Farm Bureau Federation, one of the plaintiffs who challenged the legality of the project under section 10(j) of the ESA, worried that a rancher who shot a depredating wolf could be punished if the wolf turned out to have returned on its own and thus count as “endangered.”¹³⁶ The Sierra Club Legal Defense Fund, ironically made plaintiffs in the same action as a result of judicial consolidation of the overlapping challenges,¹³⁷ were concerned that naturally returning wolves would receive reduced protection, in violation of the ESA, because of the same inability of observers to detect the difference between an “endangered” and “experimental” animal.¹³⁸ It is not my intention to recount details of legal history that others have addressed.¹³⁹ Suffice it to say that the courts eventually sided with the government in interpreting ESA protection to apply to breeding populations instead of the solitary individuals that were the only wolves in Yellowstone.¹⁴⁰ They upheld the “experimental” status of the wolves under section 10(j) of the ESA.¹⁴¹

From an ethical perspective, the outcome of Yellowstone litigation involved too much sheer luck. The ultimate judicial interpretation of ‘population’ and section 10(j) might have been otherwise.¹⁴² It is ethically relevant that reintroduced wolves are at the mercy of an unpredictable legal system. With critical legal questions unresolved, and animal lives potentially in the balance, government agencies might try to resolve legal issues in advance, for example, by seeking a declara-

¹³⁶ See *Wyo. Farm Bureau Fed. v. Babbitt*, 987 F. Supp. 1349, 1355 (1997).

¹³⁷ See FISCHER, *supra* note 56, at 169-170 (consolidation of “enemies” as plaintiffs in lawsuit).

¹³⁸ See *Wyo. Farm Bureau*, 987 F. Supp. at 1372-73 (less protection for naturally occurring, “endangered” wolves if populations overlap geographically).

¹³⁹ See, e.g., Elizabeth Cowan Brown, *The “Wholly Separate” Truth: Did the Yellowstone Wolf Reintroduction Violate Section 10(j) of the Endangered Species Act?* 27 B.C. ENVTL. AFF. L. REV. 425, 441-52 (2000); Inga Haagenson Causey, *The Reintroduction of the Wolf in Yellowstone: Has the Program Fatally Wounded the Very Species it Sought to Protect?* 11 TUL. ENVTL. L. J. 461, 468-73 (1998); Nicole R. Matthews, *Who is the Predator and Who is the Prey? The Endangered Species Act and the Reintroduction of Predator Species into the Wild*, 66 ENVTL. L. 183, 194-99 (1999); Anna Remet, *The Return of the Noble Predator: Making the Case for Wolf Reintroduction in New York*, ALB. L. ENVTL. OUTLOOK J. 89, 105-08 (2004).

¹⁴⁰ *Wyo. Farm Fed. v. Babbitt*, 199 F.3d 1224, 1228 (10th Cir. 2000) (reversing lower court and finding no violation of ESA section 10(j)).

¹⁴¹ *Id.* at 1236-37.

¹⁴² See *Wyo. Farm Bureau*, 987 F. Supp. at 1355, 1376 (temporarily finding an ESA violation despite Judge Downes’ acknowledgement of the lengthy and expensive removal program).

tory judgment before capturing and transporting any wolves.¹⁴³ More boldly, they might have foregone 10(j) and explored other means of political persuasion. They also might have developed concrete backup plans in the event that legal actions blocked the project in progress, or tried to negotiate against Canada's no return condition. Perhaps existing wolf sanctuaries, or government facilities, should be ready to accept wolves that do not survive legal challenges. Judge Downes' removal order was effectively a death sentence had it withstood appeal because the wolves had no alternative home. The judge invoked the adage, "Be careful what you wish for, you just might get it."¹⁴⁴ Also luckily, the judge stayed his own removal order pending the appellate review that ultimately sided with the government,¹⁴⁵ but the wolves were the dice, and not for the first time. Yellowstone wolf opponents earlier sought a last minute preliminary injunction, and that judge suspended helicopter removal in-progress while the captured animals literally dangled in the air.¹⁴⁶ After forty-eight additional hours in transit and warnings from a Yellowstone veterinarian about the wolves' "perhaps fatal" condition,¹⁴⁷ the judge denied the motion, and the distressed animals rejoined their partial packs in confinement areas on the ground.¹⁴⁸

A longer-range legal-ethical implication of reintroduction under the Endangered Species Act is what happens once reintroduced animals recover in the region. A goal of the legislation, after all, is exactly such recovery and removal from listing and protection.¹⁴⁹ Once recovered and delisted, the management of formerly listed animals reverts to state law, although the FWS has discretion to stall delisting until satisfied that state plans are adequate to protect delisted animals and populations.¹⁵⁰

Reintroduced wolves are thus vulnerable to abstract, human-generated risks beyond traps, tranquilizers, and aircraft. Living beings become haplessly caught up in human institutions. Northeastern wolves would face at least the legal vulnerabilities of their Western counterparts. Not only is their taxonomic status subject to dispute, but also the specter of delisting may deny them protection in the first place.

¹⁴³ It is doubtful that this would present legal standing problems given the extensive studies and planning the government had already invested.

¹⁴⁴ Wyo. Farm Bureau, 987 F. Supp. at 1376 n. 43.

¹⁴⁵ *Id.* at 1376.

¹⁴⁶ HAMPTON, *supra* note 100, at 221.

¹⁴⁷ MCNAMEE, *supra* note 60, at 85.

¹⁴⁸ *Id.* at 86.

¹⁴⁹ 16 USC § 1533(f)(1) (recovery plans required for "conservation and survival of endangered species and threatened species listed"). *See also*, 78 Fed. Reg. 35, 664, *supra* note 50 at 35, 685 (discussing requirement to recover listed species).

¹⁵⁰ *See* News Release, U.S. Fish & Wildlife Serv., Service Declares Wyoming Gray Wolf Recovered Under the Endangered Species Act and Returns Management Authority to the State (Aug. 30, 2012) (http://www.fws.gov/mountain-prairie/pressrel/2012/08312012_Wyoming_Wolf.html)

Of course, the legal vagaries of conservation programs are not dispositive. Otherwise the law could not advance, and potentially also the species, ecosystems, and derivatively, some individual animals. Such legal conservatism would not be justified. Although anticipated litigation should not curtail a project, the legal unknowns of a given case ethically magnify surrounding scientific, political, and other uncertainties.

viii. Wolf restoration and the ethics of risk and uncertainty

Should *Canis lycaon* receive future protection and become a candidate for restoration, the wolves removed to the Northeast would be particularly vulnerable. In the region, land weaves between public and private, and even the largest expanse of protected land in Adirondack State Park is interspersed with private plots.¹⁵¹ Unlike the large tracts of uninterrupted public land within Yellowstone National Park where wolves were fully protected, the checkerboard pattern in the Northeast would ensure interactions between wolves, humans, and domesticated farm animals and pets.¹⁵² Inevitable contacts would compound the wolf identity issue that already ensures contentious litigation.

Moral responsibility requires actors to handle uncertainties, including legal, in a manner that respects the implications of unknowns for all affected. Planning should resolve issues that potentially produce the greatest harms.¹⁵³ Rarely is all information available at the time of a complex environmental decision. Sometimes the unknowns are factual, and controversy persists because information is incomplete or subject to different interpretations. Many times, however, policy decisions rest on differently weighted values. When controversy rages, the level of uncertainty and the nature of attendant risks become ethically crucial.

The animal interests involved are fundamental, or “basic,” in bio-centrist philosopher, Paul Taylor’s terms.¹⁵⁴ Suffering from trapping, transport, and acclimation is significant for intelligent social car-

¹⁵¹ See, e.g., Wydeven et al, *supra* note 37 at 776, 781 (“mosaic of private lands” in Northeast).

¹⁵² See *id.*; see also *Vermont as Montana*, in REFLECTIONS, *supra* note 31, at 108 (large areas of corporate land ownership in northern New England).

¹⁵³ See, e.g., Bryan G. Norton, *What Do We Owe the Future? How Should We Decide?* [hereinafter *Future*], in WOLVES AND HUMAN, *supra* note 39, 213, 220 (discussing precautionary principle favoring lowest risk option in situations of high risk and great uncertainty and recommending protection of vulnerable species if costs are “bearable”).

¹⁵⁴ PAUL TAYLOR, RESPECT FOR NATURE: A THEORY OF ENVIRONMENTAL ETHICS 269-70 (1986) (describing “basic” interests as those that promote a being in realizing good for its kind).

nivores.¹⁵⁵ Death is the ultimate risk. Some biologists and philosophers argue that loss of life does not matter to an animal that does not contemplate the future.¹⁵⁶ They have debated animals' interest in continuing life, independent of avoiding pain and suffering.¹⁵⁷ Those who reject an animal interest in life assume at least tacitly that the desire to live requires conscious capacity to anticipate a future, something most humans have.¹⁵⁸ Others claim that interest in living does not imply consciously valuing, and that animal behavior demonstrates distinct future orientation. Many animals, including social carnivores like wolves, vigorously defend their lives in attacks and expend energy on defending territory and young.¹⁵⁹ Physiological responses are similar in all mammals under threat.¹⁶⁰ Behavior and biochemistry invite the inference of common interests in continuing life even though one cannot presume identical experiences in humans and nonhumans.¹⁶¹

The weight of evidence makes it ethical to assume that animals do care about living in its own right, whether or not death causes pain. Since we can never know for sure what they think and feel, but have much inferential evidence of behavioral and physiological commonalities between them and humans, the burden of proof should fall squarely on those dismissing death as an animal harm.¹⁶² Interest in living does not entail reflective consciousness or abstract understanding of life and death in non-humans any more than in infants or brain damaged

¹⁵⁵ See McNAMEE, *supra* note 60, at 64-67, 72, 76-77, 84-86, 108-10. See also Fox & Bekoff, *supra* note 61, at 130-31 (considering research on wolf cognition and emotions to better understand the wolf's perspective).

¹⁵⁶ See, e.g., GARY E. VARNER, IN NATURE'S INTERESTS? INTERESTS, ANIMAL RIGHTS, AND ENVIRONMENTAL ETHICS 107, at 105-06 (1998) (desire to live implying self-consciousness and "concepts of life, death, and self"); see also DAVID DEGRAZIA, ANIMAL RIGHTS: A VERY SHORT INTRODUCTION 61 (2002) (animals unable to see themselves as continuing beings).

¹⁵⁷ See, e.g., Aaron Simmons, *Do Animals Have an Interest in Continued Life? In Defense of a Desire-Based Approach*, 31 ENVTL. ETHICS 375, 376 (2009) (explaining animals' enjoyment of life as "dispositional desires"); CLARE PALMER, ANIMAL ETHICS IN CONTEXT 129-31 (2010).

¹⁵⁸ Simmons, *supra* note 157, at 378-80.

¹⁵⁹ See, e.g., McNAMEE, *supra* note 60, at 157-59 (describing wolf pack coordination and functioning); MARC BEKOFF, MINDING ANIMALS: AWARENESS, EMOTIONS, AND HEART 94 (2002) (need to consider "sociological, economic, political, and biological aspects") [hereinafter MINDING ANIMALS] (discussing self-awareness, coordination, and communication in pack carnivores).

¹⁶⁰ MARC BEKOFF, THE EMOTIONAL LIVES OF ANIMALS, at xix, 7-8, 10 (2007) (similar "reflex-like ... fear and fight-or-flight responses" danger, similar brain structure across species, and similar chemistry and neurobiology) [hereinafter EMOTIONAL LIVES].

¹⁶¹ See *id.* at 12 (absence of emotions not legitimate conclusion from observed differences in species).

¹⁶² See BEKOFF, MINDING ANIMALS, *supra* note 160, at ix, 92, 119.

adults.¹⁶³ Requiring conscious awareness of interests would exclude humans who live in the moment because of impairment or infancy, as well as most living non-humans. This unduly restricted notion of interest offends common sense. Even if one is agnostic on animal interests in life, however, imposing a known risk of death on another being is ethically significant in its own right. The ethically relevant actor is the human decision-maker, not the animal subject.

The benefit of doubt should belong to the vulnerable, and the risk of death should be treated as an independent and grievous harm without clear evidence to the contrary.¹⁶⁴ Moving animals to achieve ecological purposes should be reserved for rare situations where the threat to a species, population, or system is dire rather than plausible. Restorations are not justified as means to increase knowledge: “But this is an experiment! And a glorious one—a superlative symbol of the young science of restoration ecology.”¹⁶⁵

Interestingly, Yellowstone project proponents did not publicly question whether wolves had an interest in avoiding death. Their argument was far less abstract. Some argued that the wolves’ prospects of harm and mortality in their new place would be less than in their Canadian home, where they could be trapped and killed without legal protection once straying outside the provincial park.¹⁶⁶ Some proponents noted Alberta’s hostile history with wolves.¹⁶⁷ This comparison was intuitive, although conclusions about relative risks lacked empirical support. Even supposing that a wolf’s new life would be less threatened than the old would not bypass ethical concerns.

An analogy to relocating human refugees helps to explain this point. Refugees or displaced persons typically flee because of human oppression, although they sometimes vacate under extreme environmental stresses like tsunamis, floods, or coastal erosion related to climate change.¹⁶⁸ Those in flight are either experiencing extreme harms already, or such harms are imminent and unavoidable. Canadian wolves, in contrast, do not face nearly inevitable injury or demise; regional pop-

¹⁶³ *Id.* at 55.

¹⁶⁴ *See id.* at 171 (giving animals benefit of doubt when unsure about effects of human actions).

¹⁶⁵ McNAMEE, *supra* note 60, at 70.

¹⁶⁶ *See* FISCHER, *supra* note 56, at 35-36, 111 (long history of hostility in Canada toward wolves); McNAMEE, *supra* note 60, at 47-48, 62, 109, 128 (trapping and hunting culture in Alberta).

¹⁶⁷ McNAMEE, *supra* note 60, at 47-48, 62, 109, 128.

¹⁶⁸ The legal meaning of the term “refugee” excludes people fleeing natural disasters, although some commentators argue for recognizing “climate change refugees.” *See, e.g.,* Kelsey Kofford, *Note, An Examination of the Law, Or Lack Thereof, In Refugee and Displacement Camps*, 35 HASTINGS INT’L & COMP. L. REV. 173, 182-83 (2012).

ulations are stable despite lethal human depredations.¹⁶⁹ Some refugees also exit their threatened worlds knowing of terrible conditions in overcrowded refugee camps where food, water and shelter often are scarce and criminal activities abound.¹⁷⁰ They decide, however reluctantly, that their present situation is intolerable, and that new hardships are preferable. If government made this decision for them, even for their own benefit, forced emigration would not be ethically justified. In contrast, relocated wolves do not voluntarily accept the risks of restoration. Relocation is not justified on paternalistic grounds of providing the dislocated wolves with better lives, since the conceded subject of primary conservation concern is the species. Project managers try to limit harmful impacts on particular wolves, but they do this for the sake of establishing packs and breeding pairs: “Number Nine and her eight pups constitute over 40 percent of the Yellowstone wolf population. This early in the game, every individual animal is precious.”¹⁷¹ A holistic perspective does not cancel compassion and respect for dislocated wolves, but it is important also to extend empathy to the creatures before subjecting them to foreseeable harm.

Another ethical concern is whether human relations with predators have improved or possibly even deteriorated as a result of the Western reintroduction. Are future animal persecutions now less likely? The epilogue reminds us just how fragile public acceptance really was and how resentments can devolve into vindictiveness. Some Western states that hosted wolves proclaimed autonomy from federal control and vigorously sought delisting at the earliest possible time.¹⁷² Some state actors arranged in advance for wolf hunts the moment assessments revealed target numbers.¹⁷³ Some hunters and landowners were itching

¹⁶⁹ See, e.g., *Alberta Sustainable Resource Development/ Government of Alberta, Canada, Wolves in Alberta*, http://wolfsongalaska.org/wolves_canada_alberta.htm (cyclical historical variations in wolf numbers with policy goal of stable numbers notwithstanding predator controls).

¹⁷⁰ See Kofford, *supra* note 168, at 175–76 (describing “lawless” facilities); see also *Syrian Refugee Camps Slammed by Rain, Cold Making Miserable Conditions Unbearable*, CBS News (Jan. 9, 2013, 7:19 AM), http://www.cbsnews.com/8301-202_162-57562949/syrian-refugee-camps-slammed-by-rain-cold-making-miserable-conditions-unbearable/ (describing serious problems with inadequate infrastructure).

¹⁷¹ McNAMEE, *supra* note 60, at 294.

¹⁷² See, e.g., J. William Gibson, *The New War on Wolves*, L.A. TIMES, (Dec. 8, 2011), <http://articles.latimes.com/2011/dec/08/opinion/la-oe-gibson-the-war-on-wolves-20111208> (describing mixture of hatred toward federal government and wolves); William Yardley, *Wolves Aren't Making it Easy for Idaho Hunters*, N.Y. TIMES, (Sept. 11, 2009), <http://www.nytimes.com/2009/09/11/us/11wolves.html> (discussing resentment toward federal government for taking away state control).

¹⁷³ William Yardley, *Wolves are Set to Become Fair Game in the West*, N.Y. TIMES, (Aug. 31, 2009), <http://www.nytimes.com/2009/08/31/science/earth/31wolves.html> (Idaho hunts arranged in advance of legal resolution with 6,000 licensed hunters ready).

to resume wolf killing even illegally, as indicated by expressions like “shoot, shovel, and shut up.”¹⁷⁴ Wyoming state actors even behaved against their avowed interest by refusing to amend the State “Plan” that amounted to open season on wolves, even though FWS initially refused to delist wolves because of that flimsy law.¹⁷⁵

Wolves are now hunted in many Western areas.¹⁷⁶ Recently humans killed seven collared descendants of the original Yellowstone packs, cutting short opportunities for monitoring and study.¹⁷⁷ If increasing human tolerance ever was a goal of restoration,¹⁷⁸ favorable national opinion toward wolves overall is encouraging. If eradicating hatred of wolves was a goal, cultural venom still haunts these creatures despite their iconic and almost mystical stature in other quarters.

It is stingy not to bask in the magic of western wolf return. At the same time, the question looms whether it was all worth the costs and adversity, and especially the ongoing animal suffering: “Have we brought wolves back for the sole purpose of hunting them down?”¹⁷⁹ From the perspective of enhanced knowledge and hindsight, should we try to replicate this tale in the Northeast with different narrative twists, including the would-be star of the story?

IV. ETHICAL ANALYSIS OF WOLF RESTORATION RATIONALES

a. Common Rationales and their Critique

Having compared the ethical particulars of two wolf restoration cases, one historical and one prospective, it is time to tackle overall justifications for wolf reintroduction. The Yellowstone and potential Northeastern restorations share important ethical rationales. In this sec-

¹⁷⁴ Kim Murphy, *Taking Aim at the Endangered Species Act*, WASH. POST, Nov. 14, 2010, at Main A Section.

¹⁷⁵ See Ken Cole, *Peer Review Concludes Gray Wolf Management Plan is Deficient*, The Wildlife News, (Jan. 12, 2012,) <http://www.thewildlifeneews.com/2012/01/12/peer-review-concludes-that-wyoming-gray-wolf-management-plan-is-deficient/> (Wyoming Plan designates most of state as “predator zone” allowing unregulated killing).

¹⁷⁶ See Dutcher et al., *supra* note 9 (federal control lifted in six Western states of Michigan, Minnesota, Wisconsin, Idaho, Wyoming, and Montana with sport killing underway in all but Michigan).

¹⁷⁷ Virginia Morell, *Yellowstone Park Research Wolves Killed by Hunters*, SCI. INSIDER, (Nov. 26, 2012,) <http://news.sciencemag.org/scienceinsider/2012/11/yellowstone-park-research-wolves.html> (seven radio collared wolves killed outside park, impairing future research and raising questions about whether killings were intentional).

¹⁷⁸ See 76 Fed. Reg. 26086, *supra* note 45 (discussing importance of public tolerance for wolves).

¹⁷⁹ Dutcher et al., *supra* note 9, at 2.

tion I shall describe these and assess their merits. I begin with ecological rationales because these are the essence of conservation programs. Ecological arguments have ethical underpinnings in privileging holistic values. The Yellowstone Northeastern wolf restorations share ecological rationales. I will not repeat these but highlight additional points that raise ethical questions.

b. Ethics of the Arguments from Ecology

i. What's wrong with coyotes?

Supplying the “top predator” missing from a largely wild environment is the key ecological rationale for both Yellowstone and Northeast restoration, and indeed predator reintroductions generally.¹⁸⁰ Coyotes and bears had assumed this apex role somewhat in the pre-restoration West, hunting very large ungulates like elk.¹⁸¹ Although coyotes have evolved as thriving top predators in the Northeast, wolves would be more effective in bringing down very large moose and caribou that constituted their historical prey.¹⁸² By interbreeding with wolves, northeastern coyotes have acquired larger size and other wolf-like characteristics such as cooperative hunting in packs.¹⁸³ Yet biologists think that the coyote has not fully filled the wolf's niche because coyote predations on moose, the largest available prey, are rare and only sporadically successful.¹⁸⁴ Some commentators also claim that wolves have greater capacity than coyotes to keep beaver numbers in check.¹⁸⁵ Whether differences in coyote and wolf predation are significant enough to justify wolf reintroduction in the Northeast is an ethical question, given the evolved ecology of the region. Given remarkable resourcefulness and rapid adaptation, coyotes could fill the top predator role and accomplish

¹⁸⁰ See, e.g., McKibben, *supra* note 31, at 11 (discussing question whether a system has something biologically missing); see also Nina Fascione and Stephen R. Kendrot, *Facilitating Citizen Participation in Adirondack Wolf Recovery*, in *WOLVES AND HUMAN*, *supra* note 39 (wolf as missing top predator from Adirondacks).

¹⁸¹ See, e.g., *Reintroduction Changes Ecosystem*, YELLOWSTONEPARK.COM (June 21, 2011), <http://www.yellowstonepark.com/2011/06/yellowstone-national-park-wolf-reintroduction-is-changing-the-face-of-the-greater-yellowstone-ecosystem/>.

¹⁸² See Nina Fascione, *Canis soupus: Eastern Wolf Genetics and Its Implications for Wolf Recovery in the Northeastern United States* [hereinafter *Canis soupus*], 18 *ENDANGERED SPECIES UPDATE* 4, at 5-6 (2001) (larger ungulates as wolf prey before European arrival suggesting historical presence of larger gray wolf).

¹⁸³ *Id.* at 6.

¹⁸⁴ See, e.g., Theberge, *supra* note 86, at 58 (discussing lower success of coyotes in depredating on moose and beavers); Fascione, *Canis soupus*, *supra* note 182, at 6.

¹⁸⁵ Fascione, *Canis soupus*, *supra* note 182, at 6.

ecological objectives more effectively and swiftly than anticipated. Moreover, moose populations are now markedly declining in Vermont and New Hampshire, in part because of debilitating winter tick infestations, so predator control could result in further decline.¹⁸⁶ It is not possible to predict accurately the synergistic effects of predator competition and restoration more generally,¹⁸⁷ so restraint in tampering with established systems is sound when the problem is not that a predator is missing altogether.

Introducing wolves into a coyote-dominated environment would precipitate predator competition that would result in mortality and other suffering.¹⁸⁸ It is likely that the larger wolves would eliminate many coyotes, as they have done in Yellowstone,¹⁸⁹ with less than predictable results for the Northeastern ecosystem overall. Is it ethical to bring animals into the region knowing that this struggle will occur, and even stimulating it? The ecological reasons for preferring wolves over coyotes must be very strong to justify deliberately inflicting harm on an established creature, and the Eastern coyote's progress as predator, as well as moose decline, cast doubt on the ecological advantages.

From a genetic viewpoint, another ethical issue is whether new wolves and coyotes would interbreed and produce animals even more hybridized and genetically mixed.¹⁹⁰ Already biologists are concerned about "gene swamping" as a result of coyote and wolf interbreeding, which is problematic in reducing genetic diversity.¹⁹¹ Arranging greater contact among the animals might accelerate that dilution and defeat biodiversity reasons for wolf reintroduction. The value to biodiversity of maintaining relatively "pure" genetic species is understandable,¹⁹² although some possible adaptive advantages of hybridism should be examined more thoroughly.

Those charged with decisions on Northeastern wildlife should consider the ethics of lauding the wolf while denigrating the coyote. Coyotes tend to be maligned creatures closer to pests than the majestic

¹⁸⁶ See, e.g., *Vermont Steps up Moose Monitoring*, VERMONT PUBLIC RADIO, <http://digital.vpr.net/post/vermont-steps-moose-monitoring> (Oct. 18, 2013); *Moose Die-Off Alarms Scientists*, N.Y. TIMES, <http://nytimes.com/2013/10/15/science/earth/something-is-killing-off-the-moose> (Oct. 14, 2013).

¹⁸⁷ See generally, Rolf O. Peterson, *Wolves as Top Carnivores, in WOLVES AND HUMAN COMMUNITIES: BIOLOGY, POLITICS, AND ETHICS*, 151,-53 (Washington D.C. Island Press 2001) (describing how contextual complexities preclude predictability).

¹⁸⁸ See MINDING ANIMALS: AWARENESS, EMOTIONS, AND HEART, 187, 191 (Ox. Univ. Press 2002) (discussing disruptions of many animals in restoration).

¹⁸⁹ *Id.* at 191 (describing wolves killing many coyotes in Yellowstone).

¹⁹⁰ See Theberge, *supra* note 86, at 50-51.

¹⁹¹ *Id.* at 501.

¹⁹² See DAYTON O. HYDE, *DON COYOTE*, 211-213 (Johnson Books 2004) 1986) (acknowledging loss of wolf with greater systemic value).

predators they resemble.¹⁹³ The states freely allow coyote killing, sometimes even at night.¹⁹⁴ Conduct and attitudes toward coyotes harken the human historical relationship to wolves that resulted in their national demise. While “speciesism” typically applies to judgments of human superiority over other animals, the idea can also apply to evaluations of nonhuman animals relative to each other.¹⁹⁵ American attitudes about wolves were once overwhelmingly negative, to the point that humans eradicated the creature from their midst. Then wolves became heroes of the wild environment to some. Dramatic swings in perspectives suggest cultural capriciousness. This volatility should cause people to reevaluate their attitudes toward maligned animals like coyotes to avoid repeating moral mistakes.

ii. Whom to bring back: An ethical interlude

The current controversy over historical wolf identity may be ethically serendipitous, especially now that FWS appears intent on delisting gray wolves nationally.¹⁹⁶ It provides time to revisit the 1992 FWS Restoration Plan and opportunity to reevaluate how to make restoration decisions. The Restoration Plan that identified parts of New York State and Northern New England as suitable habitat for Canadian wolves, the Plan concerned a subspecies of gray wolves (*Canis lupus*) that would be listed as “endangered” in the region.¹⁹⁷ Not all biologists accept the newer, separate-species view of FWS, and some still believe that the animal of the Northeastern past was actually a hybrid of gray wolves and coyote.¹⁹⁸ The boundaries of a species are elastic and dynamic.¹⁹⁹ Government agents need to recognize the ethical risks of settling on new classifications without stronger expert consensus.

¹⁹³ *Id.* at 2, 10, 14, 21 (discussing common and reflexive hatred of coyotes as worthless varmints).

¹⁹⁴ See CATHERINE REID, *COYOTE: SEEKING THE HUNTER IN OUR MIDST*, 107-108 (Mariner Books 2005) (2004) (describing liberal hunting of coyotes in Northeast and night hunting with lights in New Hampshire during part of year).

¹⁹⁵ See WILD JUSTICE, *supra* note 89, at 80-81 (discussing “speciesist” judgments about animals as higher and lower).

¹⁹⁶ See 78 Fed. Reg. 35,664, *supra* note 50, at 35,665.

¹⁹⁷ See RECOVERY PLAN, *supra* note 8, at 35-36, 56-57.

¹⁹⁸ See Bridgett M. von Holdt, *A Genome-Wide Perspective on the Evolutionary History of Enigmatic Wolf-Like Canids*, 21 *GENOME RESEARCH* 1294, 1294 (2011) available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3149496/>.

¹⁹⁹ See Francis H. Herrick, *The Individual vs. the Species in Behavior Studies*, 356 *THE AUK*. 244,-45 (1939) (detailing the longstanding acknowledgement of species as “abstractions” and difficulties of identifying varieties); see also 78 Fed. Reg. 35,664, *supra* note 50, at 1435,677 (conceding lack of scientific consensus on Eastern wolf and general difficulties of species identifications).

Preliminary biological assessment suggests favorable status of *Canis lycaon*,²⁰⁰ the separate species FWS now claims historically occupied the northeastern region, but FWS concedes that complete biological assessment might justify future protection.²⁰¹ If FWS persists in its taxonomic re-designation, it has an ethical obligation to protect any wolves migrating south on their own, at least until biological assessments are more conclusive. If the agency maintains the separate-species designation, and no new information justifies listing *Canis lycaon* under the ESA, the Northeastern wolf reintroduction project will die. To go forward, State wildlife officials would need to proceed without financial and other assistance from the federal government, a highly unlikely prospect given other State priorities and the huge cost of reintroduction. While protection rather than restoration might be the most ethical resolution, that conclusion should follow thorough assessment.

Another questionable position that makes Northeastern wolf reintroduction look unpromising is the FWS interpretation of “range” under the ESA. Since the President George W. Bush administration, FWS restricts the concept to “current range.”²⁰² This interpretation precludes protection of absent species, such as populations of either *Canis lupus* or *Canis lycaon* in the Northeast since no wolf populations inhabit the area. This notion of “range” as “current” begs in advance the central question whether a missing animal should be restored. It effectively ensures that an eradicated species will not return by human hands. If “current range” had been the historical standard, gray wolves would never have been returned to Yellowstone, from which they were missing.

On the other hand, the ESA idea of restoring animals to a former range also raises ethical questions because it does not account for the dynamic character of any species.²⁰³ It might be impossible to prove which animal inhabited an area in the past because the species has changed

²⁰⁰ See Thiel & Wydeven, *supra* note 74, at 2 (emphasizing that authors’ assessment does not imply FWS acceptance).

²⁰¹ 78 Fed. Reg. 35,664, *supra* note 50, at 35,717.

²⁰² See Draft Policy on Interpretation of the Phrase “Significant Portion of Its Range” in the Endangered Species Act’s Definitions of “Endangered Species” and “Threatened Species,” 76 Fed. Reg. 76,987, 76,996–97 (Dec. 9, 2011) (using present tense in ESA to restrict “range” to area *currently* occupied by species being evaluated for listing); see also Letter from Leda Huta, Exec. Dir., Endangered Species Coalition, to Kenneth Salazar, Sec’y, Dep’t of Int., Rebecca M. Blank, Acting Sec’y, Dept. of Commerce (Feb. 19, 2013), *available at* http://www.biologicaldiversity.org/programs/biodiversity/endangered_species_act/pdfs/2013_ESA_Group_letter_to_Admin_2_19_13.pdf (requesting modification of Draft Policy on ESA term, “significant portion of its range” to disqualify species for listing based solely on “lost historic range”).

²⁰³ See MORRISON, *supra* note 62, at 8–11 (describing problems with historical measures); see also 76 Fed. Reg. at 76,993 (defending agency interpretation of “significant” range as biologically based and consistent with ESA purposes).

significantly over time.²⁰⁴ Witness the wolf-like coyote. The threshold time from which to identify historical range is inevitably arbitrary. More importantly, the animal that currently would most complement a region ecologically might be very different from the historical species because biotic and abiotic conditions have changed.²⁰⁵ Selecting the best candidate for relocation might not best be grounded in history. For example, one commentator has suggested that the Laurentides Canadian wolf might be better for the Northeast than the most probable historical wolf because of its larger size and adeptness at large ungulate depredation.²⁰⁶

Meanwhile, further coyote adaptations might enhance the predatory effectiveness of that animal, which would render reintroduction of a competitor predator unnecessary. Moose numbers might continue to decline. Resourceful wolves might also travel south on their own in sufficient numbers. Lessons from the West might solidify as well. Liberally resumed hunting suggests that some wolf prejudices might be less tractable than the animal's newer iconic stature hinted. Whether Western wolves will endure in viable populations remains to be seen. For all of these reasons, a cautious interlude is not a bad development for wolves in the Northeast.

c. The Ethics of Recovery as a Rationale

The overarching conservation goal of restoring an animal is species recovery in the target region and ESA delisting because that species no longer requires protection.²⁰⁷ These goals invite ethical examination because of predictable real world consequences of achievement. A central question is what counts as recovery and species stability.²⁰⁸

Warranted delisting of the gray wolf would be a triumph but may be premature for western wolves, as many argue. Speculative counting and generous kill quotients in some states politicize the notion of "recovery," raising consternation about the efficacy of future federal

²⁰⁴ See MORRISON, *supra* note 62, at 21–23.

²⁰⁵ See Fascione, *supra* note 182, at 5; see also MORRISON, *supra* note 62, at 15, 22, 85.

²⁰⁶ Fascione, *supra* note 182, at 5.

²⁰⁷ See 78 Fed. Reg. 35,664, *supra* note 50, at 2035673 (describing regulations implementing ESA defining delisting criteria as extinction, recovery, or error in classification).

²⁰⁸ See *Center for Biological Diversity, Comments*, 76 Fed. Reg. 26,086 (proposed May 5, 2011) (questioning FWS policy of limiting protection to small areas of historical range as not conserving ecosystems); see also *Defenders of Wildlife, Comments*, 76 Fed. Reg. 26086 (proposed May 5, 2011) (questioning effectiveness of FWS Proposal in restoring ecological role of wolf as keystone species). available at <https://www.defenders.org/sites/default/files/publications/revising-taxonomic-status-of-gray-wolves.pdf>.

oversight under the ESA. Without successful species restoration in the West, no animals would exist to hunt, so the existential status of western wolves has improved. Squeamishness about the ethics of a legal regime that brings animals back only to kill them later is nevertheless hard to shake, especially when the imperiled animals are “experimental” and subject to killing even before recovery is debatable.

One might argue that the hunting and culling that follow predator reintroduction is not unethical even from the individual animal’s standpoint. The culled individuals could not ethically complain, so the argument would go, since those animals (the descendants of reintroduced ancestors) would not even exist to be hunted without successful species restoration. One could reason that a life cut short is preferable to no existence at all, unless that life is completely intolerable.²⁰⁹ Yet animal interest in an opportunity to live is different from the interests in length and quality of life. A wolf hunted down loses chances for future wolf experiences.

d. Preserving the Wildness of Places

Another rationale for returning wolves to their historical homelands is that wolves keep or make a place wild.²¹⁰ Restoration success depends on close monitoring, and occasional active re-intervention in the animals’ lives,²¹¹ limiting animal autonomy. With intervention comes greater responsibility for welfare than humans would have for the same animals left in the wild to their own pursuits, even animals exposed to dangerous Canadian trapping and hunting cultures. Strict polarity between wild and “domesticated” animals that depend on humans for eating, breeding, and shelter is artificial.²¹² The duality assumes obligations to care only for “domesticated” beings under full human control.

²⁰⁹ This is analogous to an argument of philosopher, Derek Parfit, regarding conditions left for future generations. Parfit claimed that a future person could not reasonably complain about the legacy of the past unless her life was of such poor quality to be not worth living. See DEREK PARFIT, *REASONS AND PERSONS*, 357-59 (1986 Clarendon Press 4) (employing analogous reasoning called the “non-identity problem” to humans).

²¹⁰ See, e.g., McKibben, *supra* note 31, at 1920-21 (explaining how contact with natural environment has the potential to change human centeredness before it is too late).

²¹¹ See L. David Mech, *Wolf Restoration in the Adirondacks: The Advantages and Disadvantages of Public Participation in the Decision*, in *WOLVES AND HUMAN*, *supra* note 39, at 13, 20 (arguing that wolf restoration demands ongoing management of populations); see also MORRISON, *supra* note 62, at 186, 188, 298 (describing the importance of long term study and adaptive management).

²¹² See PALMER, *supra* note 157, at 64-65 (explaining how wild and domesticated is best viewed as “spectrum” of human relationships with non-human animals).

Control is certainly a condition that creates and enhances ethical obligations.²¹³ On a continuum, reintroduced wolves move closer to domesticated creatures that depend entirely on humans for their survival, at least during initial phases of reestablishment when the animals are identified, captured, tranquilized, collared, examined, transported, fed, released, and monitored. Once animals are released to pursue daily needs in the wild, enhanced human responsibility for the animals' welfare wanes somewhat but rises again with ongoing surveillance and resumed intervention. In Yellowstone, for example, a pregnant wolf hastily prepared an exposed den, and project managers moved her and the pups back into confinement for temporary protection.²¹⁴ After months of monitoring, trapping, moving, penning, and killings of wolves who killed livestock, Mike Phillips, wildlife biologist and leader of the Canadian removal process,²¹⁵ reflected: "What are we doing? ... I'm starting to feel like a damned zookeeper."²¹⁶

Intense oversight might also damage the wildness dimension of wolf integrity. Something "wild" is largely free of human control and able to carry out the activities suited to its nature relatively unimpeded.²¹⁷ Restorations eventually release relocated animals to hunt, mate, and breed on their own in territories they newly and autonomously establish. Thus the ideal of wildness paradoxically infuses the activist intrusions that belie it. A central ethical question is whether the prospect of future autonomy justifies means of acute human control, or whether such meddling destroys the very wildness it purports to promote. The wolves removed from Canada were already wild, so Yellowstone project organizers were not offering them a new way of realizing their biological nature. Instead their wildness waned, at least temporarily.

Many who oppose wolf reintroduction into the Northeast do not seem to mind the return of wolves on their own, and some say they would welcome that event.²¹⁸ To them, the genesis of the animals' presence matters. This may not seem rational since the inconvenience of predators in proximity to humans would be similar regardless of whether the wolves arrived unassisted or as human deposits. Indeed, wolves

213 See *id.* at 67 (using examples of typically "wild" animals in captivity who depend on humans for care).

214 See McNAMEE, *supra* note 60, at 279-81 (debating whether to move female alpha wolf from den back into captivity).

215 *Id.* at 82-83.

216 *Id.* at 320.

217 See Holly Doremus, *Restoring Endangered Species: The Importance of Being Wild*, 23 HARV. ENVTL. L. REV. 1, 13 (1999) (discussing wild beings largely outside of human contact and control).

218 See, e.g., Timothy Clark & Anne-Marie Gillesberg, *supra* note 54, at 135, 143 (Virginia A. Sharpe *et al.*, EDS. 2001) (discussing preference even among some environmentalists for natural return).

returning naturally to the Northeast might represent a greater threat to human interests if it turns out that they are a separate species that must be protected as endangered or threatened.

Some environmental philosophers defend attention to origin as ethically relevant to valuation and treatment. In a well-known book, *Faking Nature: The Ethics of Environmental Restoration*, Robert Elliot analogized restored nature to art copies, noting that the creative history of a painting matters to its value.²¹⁹ He argued that the wildness and naturalness of a place are among the multiple factors that *add* to its value.²²⁰ He maintained that a restored environment, no matter how beautiful or ecologically sound, lacks some value of the place on its own, in part because of the interruption in continuity with the past, which is never regained once lost.²²¹ Elliot conceded that not all “natural” things are superior to artifacts, acknowledging that natural forces like volcanoes, hurricanes and fires often harm landscapes.²²² Nor did he claim that all restoration is wrong, or that human tampering with nature always worsens conditions. He admitted that, “A natural state of affairs may, although not often, have negative intrinsic value overall, and indeed less intrinsic value than an artificial state of affairs, because the former exemplifies some massively value-subtracting property, such as widespread misery.”²²³ He also conceded that the line between “natural” and “non-natural” is not stark, and that humans have influenced every place on earth.²²⁴ Nor did he separate humans from the natural world, although he insisted on the common sense idea that humans “have partially transcended the natural” through rational decision-making, culture, and technology.²²⁵

Contemporary environmental writing has criticized artificial distinctions between the human and natural, perhaps none more provocative than William Cronon’s essay, “The Trouble with Wilderness.”²²⁶ Cronon considers wilderness a dynamic cultural construct that, in America, has roots in largely masculine frontier mythologies about individual renewal and liberation from constraints of civilization.²²⁷ While affirming the importance of wild experiences in “learning to remember and acknowl-

²¹⁹ ROBERT ELLIOT, *THE ETHICS OF ENVIRONMENTAL RESTORATION* 83-84 (1997) (arguing that copies reduce value based on their origin even if they are not valueless).

²²⁰ *See id.* at 81 (evolving naturally as a “value-multiplier or intensifier”).

²²¹ *Id.* at 88, 91, 93.

²²² *Id.* at 82, 133.

²²³ *Id.* at 142.

²²⁴ *Id.* at 116-17.

²²⁵ *Id.* at 128.

²²⁶ William Cronon, *The Trouble with Wilderness; or, Getting Back to the Wrong Nature*, in *UNCOMMON GROUND: RETHINKING THE HUMAN PLACE IN NATURE* 69-90 (William Cronon ed. 1996).

²²⁷ *Id.* at 76-79.

edge the autonomy of the other,”²²⁸ Cronon criticizes “dangerous dualism that sets human beings outside of nature.”²²⁹ He expresses ethical concern about distancing that permits people to evade responsibilities toward the everyday natural world.²³⁰ In honoring pristine wilderness set apart, Cronon urges us not to forget that the middle nature we use and inhabit also “depends on our management and care.”²³¹

At first sight Cronon’s separation critique shakes Robert Elliot’s thesis about the inferiority of places infected by human interventions. Despite Elliot’s recognition that human-natural distinctions are not stark, but matters of degree,²³² he insists that human restorations are meaningfully outside of nature and usually defective relative to natural change.²³³ The tension between the two sets of ideas may offer guidance on Northeastern wolf restoration. Elliot’s thoughts incline toward restraint, while Cronon’s could support more interventionist policy. Like most important words, for example, “love,” “family,” or “beauty,” the words “nature” and “natural” do not have singular meanings. Their richness reveals values both shared and diverse. On one level, everything that happens is natural, including human inventions and uses of technology to remake the environment, because humans have evolved with rational capacities and a transformative approach to their world perhaps to a greater degree than other living beings.²³⁴

Recognizing continuity does not obliterate a meaningful distinction between the natural and human on other levels of understanding, however. Many people understand that human manipulations of the environment have been unprecedented, and that this intrusiveness has altered ecosystem services, biodiversity,²³⁵ and even abiotic forces like climate, threatening humans and their progeny as well as other living things. To reflect morally on this condition, it is necessary to isolate human conduct even as we perceive ourselves as belonging to a contin-

²²⁸ *Id.* at 89.

²²⁹ *Id.* at 81.

²³⁰ *Id.* at 87.

²³¹ *Id.* at 89.

²³² ELLIOT, *supra* note 219, at 105, 130-32.

²³³ *See id.* at 128 (culture, technology, and rational thinking transcending nature).

²³⁴ *See id.* at 117, 119.

²³⁵ *See, e.g.,* LEOPOLD, *supra* note 16, at 255 (human changes different from evolutionary with complex and unanticipated effects); *see also* Bryan Norton, Robert Costanza & Richard C. Bishop, *The Evolution of Preferences: Why “Sovereign” Preferences May Not Lead to Sustainable Policies and What to Do about It*, in *SEARCHING FOR SUSTAINABILITY: INTERDISCIPLINARY ESSAYS IN THE PHILOSOPHY OF CONSERVATION BIOLOGY* 249, 249 (Bryan G. Norton ed., 2003) (increasing impacts on environment through economic activity); *see also* J. BAIRD CALLICOTT, IN *DEFENSE*, *supra* note 22, at 4 (world changing at “dizzying pace”); *see also* TAYLOR, *supra* note 154, at 4-5 (humans causing massive changes to environment).

uous stream of natural processes. We need antagonistic senses of “natural” both encompassing humans and opposed to humans. Both ideas are ethically necessary if we are to judge ourselves and amend our relationship to the world.

Many people lean toward Elliot-like restraint on the question of Northeastern wolf restoration, reflected in the preference that wolves return on their own initiative. For them, a “managed” wolf would be a mere replica and artifact, and a place with relocated wolves somewhat like a museum. Valuing natural predator return is to value wildness. As Elliot points out, understanding something of evolution, ecology, and natural history enhances aesthetic valuation of nature.²³⁶ For many, one environmental virtue is restraint, not ambitious recreation of conditions we have eradicated. Activist management may be a contemporary twist on the arrogant perspective that led to the environmental exploitation that people now hope to undo. According to philosopher, Eric Katz, many restorations share the moral defects of arrogance, dominance, and the pursuit of anthropocentric aims, a flawed human relationship to the non-human world.²³⁷

Objectors could reply that intervention is necessary because of damage that should be mitigated, and that we are now condemned to active stewardship. This point is consistent with constraint, however. An ethical dimension of stewardship is wisdom about when and how much to intervene. We are forced to make relative and somewhat arbitrary judgments about such boundary questions, but this does not render every decision ethically equivalent. Through the haze, we should be able to draw lines we should not cross.

A related objection might be that restoring ecological health removes artificiality and adds to wildness. “Wildness” is a feature of place that includes animals but also abiotic and biological features of the ecosystem. On this view, predator restoration unleashes natural forces that improve compromised systems and places.²³⁸ Despite initial intrusions, time injects greater wildness once wolves become indifferent to human presence in their new place. As packs change in composition and wolves disperse to fulfill their predator capacities in less hospitable places, the struggle to survive and live out species potential belies human control. The effects even begin to replicate earlier, more “natural” conditions, such as renewal of vegetation and bird life in Yellowstone when wolves

²³⁶ ELLIOT, *supra* note 219 at 95 (aesthetic appreciation beyond prettiness or novelty).

²³⁷ Eric Katz, *The Big Lie: Human Restoration of Nature*, in ENVIRONMENTAL ETHICS: AN ANTHOLOGY 392, 396 (Andrew Light & Holmes Rolston III eds., 2003) (“arrogance” and “domination”) [hereinafter ANTHOLOGY].

²³⁸ See, e.g., Ernest Partridge, *The Tonic of Wildness*, in WOLVES AND HUMAN, *supra* note 39, at 199 (introducing wolves into Adirondacks enhancing wildness).

drove away ungulate browsers.²³⁹ Wildness means permeable boundaries, an objector would conclude. The porous and dynamic nature of the wolves' new existence recreates them as 'wild.' Elliot's points are partly consistent with these insights. He is not denying that restorations can be positive, or even that we might sometimes be morally wise to intervene.²⁴⁰ Rather, his point is that something is lost notwithstanding positive gains.²⁴¹ Even if one accepts that humans are part of nature, recognizes that no place on earth is free of human influence, and decides that management is needed in a given context, it is hard to deny some shared sense of loss when humans engineer environments.

All of these points miss perhaps the most serious loss of autonomy and wildness in wolves themselves, who are unwilling guests at human celebrations of environmental triumph. That they are only guests is evident in the prospect of death to a reintroduced wolf daring to prey on livestock, and from the resumption of hunting in the West as a measure of species health. Of course, we have no evidence that loss of wildness matters to the wolves, so perhaps the idea of wolf integrity makes no biological sense. As far as we know, wolves do not conceive themselves as wild or reflect on wildness as a thing of value. Yet wolves' observable exuberance in play, feeding, and affiliation suggests profound immersion and frequent joy in living out their nature.²⁴² Lest the reader be wary about the anthropomorphizing, L. David Mech's classic, *The Wolf: The Ecology and Behavior of an Endangered Species*, describes the extraordinary variety of wolf postures, odors, facial expressions, and sounds that express wolf "feelings."²⁴³ To illustrate, Mech, a foremost wolf ecologist, documents and diagrams no less than eight facial expressions and eleven tail positions that communicate information about an animal's varied moods.²⁴⁴ He describes five sounds from whimpering, growling, barking, and howling, besides a little-heard "social squeak" that wolves use to "talk" emotionally and intimately to companions.²⁴⁵ To disregard such richness in communicative behavior is less "scientific" than inferring that the creature is an emotional and complex being with attachments and cares.

²³⁹ TEN YEARS OF YELLOWSTONE, *supra* note 58, at 31-33 (describing "trophic cascade" of indirect effects on entire ecosystem).

²⁴⁰ ELLIOT, *supra* note 219, at 95, 132-35.

²⁴¹ *Id.* at 110-111 (natural continuity permanently lost despite improvements).

²⁴² See MINDING ANIMALS, *supra* note 159, at 112 (describing the observable enjoyment of social carnivore paly and associated neurochemical changes in regions of the brain).

²⁴³ L. DAVID MECH, *THE WOLF: THE ECOLOGY AND BEHAVIOR OF AN ENDANGERED SPECIES* 80-103 (Natural History Press 1970) (1988).

²⁴⁴ *Id.* at 82-83.

²⁴⁵ *Id.* at 95.

Captured and released wolves probably do not consciously reflect on their impaired autonomy and do not lament that humans might intervene once again in their lives to protect or manage them. Yet they may be aware of the extent of human scrutiny once they hunt, roam their territory, and reproduce. Experience with wolves suggests that these intelligent creatures are very sensitive to human presence and adapt to it to some degree. When Lewis and Clark followed the Missouri River in the early 1800s, Lewis recorded “vast assemblages” of howling wolves close by, who showed no fear of humans.²⁴⁶ Wolves later learned to avoid firearms,²⁴⁷ and still later traps.²⁴⁸ We do not know how sensitive the animals are to human disturbances, although the American history of human and wolf interactions suggests that the animals change their behavior in response to contacts. Those making restoration decisions should assume that interventions into the lives of wolves will affect them, and deliberations should include empathetic attention to the wolf’s perspective as indicated in behavior and studies of brain responses.

A skeptic might pause at the idea of adopting animals’ perspectives, or empathizing with animals to understand their point of view. Empathy is a way of knowing.²⁴⁹ It involves placing oneself imaginatively in the position of the other to understand the other’s point of view.²⁵⁰ Empathy is an important moral capacity because it enables appreciation of varying perspectives and penetrates perceptual boundaries. People can improve skills of empathy through patient efforts to listen, attend, imagine, and reason by analogy.²⁵¹ Yet we can never know whether we are projecting our own emotions and attitudes upon others and deluding ourselves about true understanding.²⁵²

If error can infect empathy toward other humans, it surely can constrain empathy for non-humans who inhabit less accessible perceptual domains. Although people empathize with strangers, they are more likely to empathize with persons they perceive as similar.²⁵³ Is the bridge between species simply too large and prone to error? Ethologists who study the behavior, neurobiology, and genetics of non-human animals in the laboratory or field, observe many commonalities between human and especially mammalian behavior.²⁵⁴ Once off limits, ethol-

²⁴⁶ HAMPTON, *supra* note 100, at 83.

²⁴⁷ *Id.* at 85.

²⁴⁸ *Id.* at 14, 120-21.

²⁴⁹ *See, e.g.*, Lynne N. Henderson, *Legality and Empathy*, 85 MICH. L. REV. 1574, 1579 (1987).

²⁵⁰ *Id.* at 1579-80.

²⁵¹ *See id.* at 1580, 1584, 1586 (discussing ways to guide empathy).

²⁵² *See id.* at 1580, 1586 (empathetic understanding can be wrong and incomplete).

²⁵³ *Id.* at 1584.

²⁵⁴ *See, e.g.*, Jane Goodall, *Forward*, in MINDING ANIMALS, *supra* note 159,

ogists no longer shun the view that non-humans have rich emotional and cognitive lives, and that they take joy, love, and pain in moments similar to humans.²⁵⁵ Neurobiology corroborates this conclusion in the similar brain structure and chemistry of humans and non-human animals.²⁵⁶ Researchers can develop empathy for their non-human subjects, although dissimilarities between species concededly risk greater error than human strangers. Fascinating research now suggests that non-humans empathize with members of their own species,²⁵⁷ and even across species,²⁵⁸ laying groundwork for the fledgling thesis that animals have moral lives.²⁵⁹ These discoveries make empathy important to understanding animals, provided one remains open to revising conclusions. Ethical empathy is a skill acquired through disciplined exercise of moral imagination and reasoning. If we were sure about the mental lives of others empathy would not even be necessary.

So what does empathy for reintroduced wolves (not to mention all living things affected by restoration) prescribe? It first demands that conservation planners consider the impacts of relocation on the animals reintroduced, but also on those left behind who formerly affiliated with the captured animals,²⁶⁰ and animals who encounter the newcomers in their new place.²⁶¹ This means imagining oneself as the subject of forcible change and adjusting to foreign conditions to glimpse the animals' experiences.

In his book, *The Return of the Wolf To Yellowstone*, Thomas McNamee places the reader in the emotional situation of the Alberta wolves in the capture through release stages of reintroduction. He does

at ix-xi. MARC BEKOFF, *ANIMAL PASSIONS* 2-6 (2006). BEKOFF, *ANIMAL PASSIONS* at 23, 40 (defining and explaining cognitive ethology); *see also* DALE JAMIESON, *MORALITY'S PROGRESS: ESSAYS ON HUMANS, OTHER ANIMALS, AND THE REST OF NATURE* 90 (2002) (cognitive ethology as explaining animal behavior through cognition and emotions).

²⁵⁵ *See* Goodall, *supra* note 254, at ix-x (describing growing acceptance of animals as having emotional lives). JAMIESON, *supra* note 254, at 71, 90 (describing development of ethology and contrasting behaviorist view); *see also* WILD JUSTICE, *supra* note 89, at 25-30 (describing progress in ethology).

²⁵⁶ *See* BEKOFF, *ANIMAL PASSIONS*, *supra* note 254, at 36-37, 42, 140, 163-64 (discussing aspects of neuroscience and emotional links).

²⁵⁷ *See, e.g.*, BEKOFF, *ANIMAL PASSIONS*, *supra* note 254, at 140-41, 154 (rats and monkeys refusing to take food that would result in shock to another).

²⁵⁸ *Id.* at 154 (bonobo assisting captive starling to fly).

²⁵⁹ WILD JUSTICE, *supra* note 89, at xiv, 7-9, 19-20, 87-92 (providing reasons to infer that some animals have moral capacities).

²⁶⁰ *See* Fox & Bekoff, *supra* note 61, at 130-32 (importance of examining restoration from all perspectives); *see also* MINDING ANIMALS, *supra* note 159, at 187 (under-emphasizing effects on animals in former habitat).

²⁶¹ MINDING ANIMALS, *supra* note 159, at 187 (examining effects on smaller animals like coyotes, foxes, birds, and others).

not shun emotional descriptions like “terror,”²⁶² “dread,”²⁶³ and “despair,”²⁶⁴ that enhance understanding of the animals’ perspectives. He draws on wolf biology and behavior and describes the physical reactions of the animals in such detail that the reader imagines herself present. Such imaginative stimulation of empathy serves ethical purposes and should be a deliberate part of assessing the merits of restorations from planning through monitoring. This engagement should not supplant the holistic dimensions of reintroduction or the ecological values of conservation. It is rather a reminder not to overlook a less evident ethical perspective, that of animals themselves.

McNamee anthropomorphizes animals, probably to enlist interest and understanding, but this is not merely a device to engage readers. According to ethologist Marc Bekoff, humans must use the language and concepts they have to understand the non-human denizens of the world.²⁶⁵ Anecdotes of animal behavior have scientific importance in directing future observation and research.²⁶⁶ According to Bekoff, “the plural of anecdote is data.”²⁶⁷ Bekoff criticizes researchers who distance themselves from animal suffering by refusing to name study animals,²⁶⁸ and he specifically mentions the Yellowstone practice of numbering reintroduced wolves.²⁶⁹ Bekoff advocates naming to remind researchers that individuals, with hearts, minds, and feelings, will suffer the consequences of the human enterprise at stake.²⁷⁰ He notes the association in areas of Africa between naming and accepting responsibility for someone.²⁷¹ This route to enhance ethical sensibilities makes sense for animals used in laboratory experiments and captives in zoos or other facilities. If naming restrains scientists and handlers from treating individuals as insensible commodities, then it is better for the creatures.

Project operators named the packs reintroduced into Yellowstone by the target location of release, and they numbered individuals within each pack.²⁷² This did not prevent them from individualizing the wolves, however, noting idiosyncratic behavior and roles, or grieving harmed and dead individuals.²⁷³ Much to the credit of the Yellowstone humans,

²⁶² McNAMEE, *supra* note 20, at 65, 76, 269, 291.

²⁶³ *Id.* at 269.

²⁶⁴ *Id.* at 291.

²⁶⁵ MINDING ANIMALS, *supra* note 159, at 48.

²⁶⁶ *Id.* at 47.

²⁶⁷ *Id.*

²⁶⁸ BEKOFF, ANIMAL PASSIONS, *supra* note 254, at 248.

²⁶⁹ MARC BEKOFF, THE ANIMAL MANIFESTO 110 (2010).

²⁷⁰ *Id.* at 109.

²⁷¹ *Id.*

²⁷² See McNAMEE, *supra* note 60, at 84, 110, 122-23 (for example, Crystal Creek, Rose Creek, Soda Butte packs).

²⁷³ See *id.* at 65-67, 119 (describing dedication, sacrifices, and gentle care of wolves by project managers).

such responses demonstrated respect for wolves as individuals as well as members of species. Managers were right to avoid naming the wild animals since an ethical issue in this context is diminishing wildness. Since project actors showed compassion toward creatures with numbers but without names, I conclude that naming is not ethically important to wildlife restorations. Naming wild beings might relegate animals to actors in a human drama.

*e. Ethical Pluralism: Reconciling Conservation
and Animal Welfare Goals*

Some have defended wolf restoration as demonstrating that conservation interests are compatible with animal welfare with a pluralistic approach. To appreciate this claim, it is important to understand how traditional ethical theories diverge and how they might apply in this context. Conservation justifications often invoke utilitarian reasoning in the norms of overall good and long-range consequences. Goods are variously taken to be units of pleasure and pain, preferences, and interests or welfare,²⁷⁴ rather than the subjects of those experiences.²⁷⁵ An individual's "rights" are derivative concerns, and most utilitarian philosophers avoid rights language.²⁷⁶ If the total configuration of total pleasures, interests, or preferences taken together conflicts with the good of an individual, that individual's interests must yield.²⁷⁷ Philosophers have applied utilitarian thinking to animal individuals as well as human and justified animal welfare ethics on that basis.²⁷⁸

Conservation biologists, ecologists, and environmentalists generally consider the interests of non-humans, but unlike classical utilitarian thought that considers the aggregated interests of individuals, the units of concern are defined as wholes like populations, species,

²⁷⁴ See John Stuart Mill, *Utilitarianism*, in *ESSENTIAL WORKS OF JOHN STUART MILL* 190, 194-95 (1961) (pleasure and pain as components of happiness). PETER SINGER, *ANIMAL LIBERATION* 5-6, 8, 251 (interests as conditions benefiting or harming welfare of beings with good of their own who can suffer).

²⁷⁵ See, e.g., Tom Regan, *The Case for Animal Rights*, in *THE ANIMAL ETHICS READER*, 19, 20-21 (2d ed., 2008) (describing utilitarian "receptacle view" that experiences count more than the subject having the experiences).

²⁷⁶ But see PETER SINGER, *A Response*, in *SINGER AND HIS CRITICS* (Dale Jamieson ed., 1999) 269, 292 (discussing rhetorical use of rights language in *Animal Liberation* as consistent with political discourse and appealing to wide audience).

²⁷⁷ See Mill, *supra* note 274, at 199, 204 (counting general happiness more than individual).

²⁷⁸ See SINGER, *supra* note 276, at 8-9 (capacity to suffer only basis for equal moral consideration, not membership in a particular species).

and systems.²⁷⁹ Thus, environmentalist reasoning can be utilitarian in measuring morality in terms of results or consequences, but differs from traditional utilitarianism in promoting the aggregate interests of wholes over the accumulated interests of individuals.²⁸⁰ Thus, conservation ethics could justify killing a population of animals if pressures on the system, including vegetation, soils, species, and water, are too great.²⁸¹ Animal welfare and rights proponents have criticized this holistic orientation, encapsulated in Tom Regan's phrase "environmental fascism."²⁸² Hyperbole aside, holistic conservation goals predominate over individual interests in the wolf restoration context. The interests of animals removed, left behind in the source location, and in those in the relocation site, like coyotes, who must compete for survival, are secondary to more abstract wholes like ecosystems.

Philosophers in the deontological tradition like Tom Regan might argue that holistic goals violate the rights, interests, or dignity of individual animals that possess inherent value.²⁸³ One could extend a formulation of Immanuel Kant's Categorical Imperative to individual animals: "[s]o act as to treat humanity, whether in thine own person or in that of any other, in every case as an end-withal, never as a means only."²⁸⁴ Although Kant applied the Imperative only to humans with rational capacities who can follow moral laws out of duty,²⁸⁵ one might extend Kantian-like imperatives to non-human animals on the basis of growing ethological information on the rich intellectual, emotional, and even moral lives of non-human animals.²⁸⁶ On that foundation, one might argue presumptively against environmental programs that favor species or ecosystems and significantly harm individual dignity.²⁸⁷

²⁷⁹ See, e.g., CALLICOTT, IN DEFENSE, *supra* note 22, at 22-26 (advocating independent ethical concern for ecological systems and relations); see also VARNER, *supra* note 5, at 10-11 (discussing holistic attribution of value to communities and systems but rejecting independent value of wholes as subjects of direct moral consideration); see also MORRISON, *supra* note 62, at 17 (conservation biologist describing "ultimate goal" of "long-term persistence" of habitat, populations, and species).

²⁸⁰ *Id.*

²⁸¹ See, e.g., CALLICOTT, IN DEFENSE, *supra* note 22, at 43-44 (discussing killing of animals to preserve vegetation); see also VARNER, *supra* note 5, at 105-06, 109-10 (defending some "therapeutic hunting" of over-populated animals).

²⁸² TOM REGAN, THE CASE FOR ANIMAL RIGHTS 362 (1983).

²⁸³ *Id.* at 20-1.

²⁸⁴ See KANT, *supra* note 131, at 46.

²⁸⁵ *Id.* at 12, 14-15.

²⁸⁶ See, e.g., MINDING ANIMALS, *supra* note 159, at 54-55, 86-87.

²⁸⁷ Whether or not one applies the language of rights to those animals is not as important as the deontological principle that holistic benefits cannot justify taking the interests of individuals as secondary.

Restoration proponents would have difficulty with a deontological position. Although one could speak of ‘rights’ of species or ecosystems, as Aldo Leopold did when he considered the land’s “right to continued existence” and the attitude of “respect for community as such,”²⁸⁸ trying to define the rights of groups or collectives is challenging, let alone abstractions like systems or species.²⁸⁹ Scientists have long recognized that groups like species or subspecies have fuzzy boundaries.²⁹⁰ Harder it still is to identify parameters of biotic systems because of dynamic, overlapping, and interacting ecological conditions.²⁹¹ Even if one could define conceptual borders satisfactorily, a stable and coherent idea of group welfare is challenging given the diverse needs and conditions of group members or components.²⁹² Discussing the rights and interests of collectives inevitably involves abstractions and may have more metaphorical and rhetorical than literal significance.

A conservationist could claim that overall goods are the essence of environmental thinking, and inherent value and rights are beside the point in this context.²⁹³ This move would not mean rejecting deontological approaches in other ethical contexts, such as human rights and domestic animal welfare. The conservationist perspective simply addresses different contextual concerns. The conservationist might accept individual rights or utilitarian interests of sentient individuals who experience pain and pleasure, as Tom Regan and Peter Singer have argued respectively,²⁹⁴ illuminating ethical issues in using animals in scientific research or farming.²⁹⁵ About such concerns, Alice Advocate, would

²⁸⁸ LEOPOLD, *supra* note 16, at 240.

²⁸⁹ *See, e.g.*, Herrick, *supra* note 199, at 244-45 (1939) (discussing species as “abstractions” and difficulties of identifying varieties); *see also* 78 Fed. Reg. 36, 664, at 36, 677-78 (discussing scientific controversies in species identifications).

²⁹⁰ *Id.*

²⁹¹ *See* MORRISON, *supra* note 62, at 87, 294-95 (difficulties of defining an ecological ‘community’).

²⁹² *Id.* at 295-96 (diverse interests of system components and importance of defining particular goals of restoration).

²⁹³ *See, e.g.*, CALLICOTT, IN DEFENSE, *supra* note 22, at 18 (environmental and animal welfare ethics may not be “companionable, complementary, or mutually consistent”).

²⁹⁴ *See* REGAN, *supra* note 275, at 20, 22 (rights-based argument for equal consideration of all sentient individual “subjects-of-a-life” who are conscious and have beliefs, desires, perceptions, memories, emotions, and sense of a future as well as the experiences of pleasure and pain); *see also* SINGER, *supra* note 277, at 8-9 (utilitarian argument for equal consideration of interests based on sentience).

²⁹⁵ *See* Tom Regan, *The Radical Egalitarian Case for Animal Rights*, in READINGS IN THEORY, *supra* note 14, at 87-88 (rights view requiring “abolition” of practices like using animals in scientific research and factory farming); SINGER, *supra* note 277, at 30-31, 92-95 (“speciesism” exploitation of animals in research and farming).

have much to say at the conservation conference. Those perspectives apply less well, if at all, to wild animals and issues like restoration, the environmentalist might counter. Although high functioning wild carnivores like wolves are sentient beings, an individualist perspective is not apt in conservation matters, Carol Conservationist would conclude. This would be a meta-ethical conclusion that no single theory or perspective can address all types of ethical questions.

Ethicists like Peter Pluralist would endorse this position. A theoretical ethical pluralist rejects the idea that morality is reducible to one approach or set of principles.²⁹⁶ Critical of environmental ethics as a field of philosophy, at least in its early decades, some pluralists lament energy squandered on theorizing about what entities have value.²⁹⁷ They contend that extensive debate among anthropocentric and non-anthropocentric commentators has left practical resolutions to non-philosophers, to the detriment of environmental policy.²⁹⁸

Many environmental ethicists of late have adopted a pragmatic as well as pluralistic view. Some see a consensus emerging on environmental policy informed by science.²⁹⁹ They contend that it is not necessary to resolve foundational differences because much of the time environmentalists can agree on worthy ends and simply bypass deeper theoretical questions.³⁰⁰ Practical pluralism is attractive when it allows people of varied persuasions to converse and accomplish objectives under conditions of urgency. The view seductively promises more effective activism.

Has practical pluralism worked in wildlife restoration decision-making? One might say with some plausibility that Western wolf re-introduction is a triumph of practical pluralism in policy. Divergent coalitions ultimately compromised to move the experiment forward,³⁰¹ which

²⁹⁶ See Kelly A. Parker, *Pragmatism and Environmental Thought*, in ENVIRONMENTAL PRAGMATISM, at 21, 31-32 (1996) (moral pluralism as view that no single theory applies across all situations). See also NORTON, *supra* note 26, at 198-99 (no single set of principles resolving all moral problems).

²⁹⁷ See Christopher Stone, *Do Morals Matter? The Influence on ethics on Courts and Congress in Shaping U.S. Environmental Policies*, 37 U.C. DAVIS L. REV. 13, 20-21 (2003) (reporting preliminary empirical results of computer searches that suggest low influence of environmental ethics on policy, even in comparison to other fields of ethics); see also NORTON, *supra* note 26, at 9-11 (discussing polarization of environmentalists on issue of non-anthropocentric value and recommending focus on shared policy goals despite foundational disagreements).

²⁹⁸ *Id.*

²⁹⁹ See NORTON, *supra* note 26, at 203-04.

³⁰⁰ *Id.*

³⁰¹ For example, the compensation fund that Defenders of Wildlife raised helped to assure ranchers that they would be somewhat protected from livestock losses. See, e.g., McNAMEE, *supra* note 60, at 50. On the other hand, many environmentalists reluctantly accepted 'experimental' status of reintroduced wolves under section 10(j) of the ESA, which would allow ranchers and others to kill wolves in the event of depredations, as a compromise to move the reintroduction forward. See, e.g., *id.* at 45.

worked from an ecological perspective. They accommodated legitimate interests of ranchers with the assistance of Defenders of Wildlife, the organization that raised a compensation fund for depredated livestock.³⁰² Yellowstone representatives extensively consulted diverse constituents about many facets of the restoration program.³⁰³ When States and federal officials were investigating possibilities of bringing wolves back to the Northeast, various “stakeholders” also collaborated.³⁰⁴ In New York, people of different persuasions formed a Citizens’ Advisory Council (CAC) composed of divergent representatives to discuss the risks and strengths of regional wolf reintroduction and oversee feasibility studies.³⁰⁵ These techniques, along with extensive ecological studies of the region, are examples of pragmatic pluralism on the front lines.

Despite commendable aspirations, however, restoration proponents did not apply a genuinely pluralistic perspective in either Yellowstone or the Northeast so far. To be comprehensively pluralistic, they would need to consider *all* interests, including those of individual animals being removed, left behind, and exposed to new predators. A promise of practical pluralism is to bypass such issues as better suited to a different ethical framework, typically animal welfare or rights. Yet this diminishes even the pragmatic appeal of pluralism. The problem with the “different context, different perspective view” is that proponents select manageable ethical issues in advance, which skews the result. This commits the logical fallacy of “begging the question,” or assuming in circular fashion what one is trying to prove.

An important method of practical ethics is to identify all ethically relevant factors of a case. Imagining an example from applied professional ethics, one could not determine whether a physician should report a colleague for substance abuse without considering the hospital and professional “culture” within which the professionals operate. If one relegated collective influences to another sphere of ethics, it would be reasonable to view the resulting analysis insufficient. Although technical and scientific matters compound the complexities of applied environmental ethics, bracketing relevant issues at the outset distorts the conclusions. Selectively ignoring foundational issues might facilitate a decision, but the resulting policy would not be ethically sound.

Pluralists who reserve Kantian-like considerations to another field or another day, or relegate sentience to different norms, are insulating the holistic biases of conservation biology from the very ethical

³⁰² *Id.* See McNAMEE, *supra* note 60, at 50.

³⁰³ *Id.* at 35-36, 38 (describing extensive campaign of Recovery Team head, Ed Bangs, to educate the public and solicit input).

³⁰⁴ See Fascione & Kendrot, *supra* note 41, at 54-57 (describing process facilitating meaningful community participation).

³⁰⁵ *Id.* at 55.

critique needed to counteract bias in the discipline.³⁰⁶ They would not contend directly with biocentric capacities of individuals whose interests attach to unique forms of flourishing.³⁰⁷ Ethicists, ethologists, cultural anthropologists, and others could facilitate discussions that would improve wildlife conservation.

Pluralistic optimism encourages people to work together despite foundational differences in perspectives and motivations. Some Christian fundamentalists have joined secular environmental activists of markedly different political persuasions to honor natural Creation.³⁰⁸ Religious believers have achieved some ecumenical consensus about the value of creation and the importance of human humility.³⁰⁹ Pluralism is a helpful reminder that philosophy has been overly preoccupied with dilemmas and conflicts of principle and values, as illustrated in “life-boat” thought experiments, where someone or something always loses.³¹⁰ Yet pluralists are overly glib about the softness of theory. Genuine conflicts of holistic and individual perspectives mar many conservation programs. Pluralists cannot make clashes disappear as much as they yearn for harmony.

Some pragmatic pluralists do recognize residual conflicts of holistic and individualistic perspectives. Bryan Norton, one strong proponent of pragmatism, has tried to balance these tensions. In his essay, “Caring for Nature,” Norton resorts to the idea of “animal altruism” to justify the conservationist subordination of animals to holistic species preservation programs.³¹¹ Norton justifies animal altruism “as a conceptual extension of the striving to live and perpetuate one’s species,”³¹² “a

³⁰⁶ See, e.g., MORRISON, *supra* note 62, at 15 (need to consider ethical issues in wildlife management); see also Fox & Bekoff, *supra* note 61, at 129-30 (ethics under-emphasized in conservation fields).

³⁰⁷ See TAYLOR, *supra* note 154, at 74-75 (respecting inherent value of living individuals, including plants, that have a good of their own); see also MARTHA C. NUSSBAUM, FRONTIERS OF JUSTICE: DISABILITY, NATIONALITY, SPECIES MEMBERSHIP 326-27, 346-47 (justice requiring opportunities to flourish according to the varying capabilities of species).

³⁰⁸ See, e.g., *Roger Gottlieb Interview at American Prospect* OXFORD UNIV. PRESS BLOG (Apr. 20, 2006, 5:05 PM), http://blog.oup.com/2006/04/roger_gottlieb (Christian fundamentalist arguing for theological grounding of environmental protection).

³⁰⁹ See SPIRIT AND NATURE: WHY THE ENVIRONMENT IS A RELIGIOUS ISSUE (Steven C. Rockefeller & John C. Elder eds. 1992) (ecumenical contributions showing diverse approaches to finding common ground on environmental protection).

³¹⁰ See MARILYN FRIEDMAN, WHAT ARE FRIENDS FOR? FEMINIST PERSPECTIVES ON PERSONAL RELATIONSHIPS AND MORAL THEORY, 71 (1993) (modern ethics as “nightmare of plane crashes, train wrecks, and sinking ships”).

³¹¹ Bryan G. Norton, *Caring for Nature: A Broader Look at Animal Stewardship*, in BRYAN G. NORTON, SEARCHING FOR SUSTAINABILITY 375, 385 (2003).

³¹² *Id.* at 390.

goal that is implicit in the life struggle of the animal.”³¹³ He invokes field studies of animals, noting that animal behavior sometimes resembles human altruism.³¹⁴ He gives examples of a dominant gorilla male who allows his band to escape by staying behind and succumbing to death by poachers, and army ants that drown themselves to form a bridge allowing their cohorts to cross a stream.³¹⁵ Norton recognizes that an animal cannot choose to act altruistically to perpetuate its group or species because this is an abstraction beyond the grasp and valuation of animals.³¹⁶ Still, Norton contends that making voluntariness a requirement for altruism renders the trait impossible for animals.³¹⁷

This argument is puzzling first because Norton has described examples of gorilla and ant self-sacrifice that do appear voluntary although perhaps non-deliberative. When it comes to forcible capture, transport, and management of wild animals in new settings, however, voluntariness is certainly not apt. Norton admits the “awkward truth” that humans would be justifying such detriment to individuals to ratify conservation decisions favoring wholes like populations or species.³¹⁸ Peter Singer once posed a relevant test to science experimenters who justify harming animals for the sake of larger benefits;³¹⁹ they would never expect humans to relinquish survival or well-being for the sake of *homo sapiens*. It is disingenuous to claim that animals should do the same for their species. Animal and human altruism surely would vary, and diverse species could express altruism differently.³²⁰ Yet altruism divested of all self-direction makes no sense.

It is rationalization to justify harm on the basis that the animal would approve if only it could understand the long-term value of preserving its kind. It is preferable to admit that humans are imposing sacrifices on animals in service of holistic aims, and then try to justify that position. Acknowledging the collision of interests helps to ensure that sacrificial decisions are rare.

Albert Schweitzer adopted the guiding principle of reverence for life.³²¹ Yet he wrestled with the paradox that this ideal is impossible

³¹³ *Id.*

³¹⁴ *Id.* at 386.

³¹⁵ *Id.*

³¹⁶ *Id.* NORTON, *supra* note 314, at 386.

³¹⁷ *Id.* at 387, 392.

³¹⁸ *Id.* at 389.

³¹⁹ See SINGER, *supra* note 274, at 17-18 (asking whether researchers would use mentally deficient humans in experiments to demonstrate the inappropriate use of animals).

³²⁰ See MINDING ANIMALS, *supra* note 159, at 48 (observing emotional responses in animals does not mean their emotions are the same as humans).

³²¹ See generally ALBERT SCHWEITZER, *THE PHILOSOPHY OF CIVILIZATION* 307, 309 (1960).

to meet, given the ubiquitous biological fact that survival comes at the expense of other living things.³²² Conservation decisions that harm individuals exemplify Schweitzer's unrealizable ideal of reverence. Species restoration involves tradeoffs to individual beings, and the ethical challenge is to confront, not evade, the conflicts to ascertain when compromise is justified.

f. For the Good of the Wolves

Bryan Norton's argument that animal "altruism" justifies some individual harm is paternalistic reasoning that reintroducing wolves is the best thing for *them* even though they could not recognize or consent to such good. Reintroduction promotes wolf best interests as ascertained by the human actors. Others have made similar points about animal best interests. For example, Gary Varner claims that overpopulated animals benefit from hunting to cull numbers,³²³ and that intervention in animal lives through removal and relocation is sometimes justified.³²⁴ He notes that overcrowded ungulate populations suffer more from disease, lowered reproduction, and other weaknesses.³²⁵ Top predators reduce prey density and improve the health of survivors and area ecology, and these functions justify their reintroduction, according to Varner.³²⁶

These points do not relieve the conflict between individual animals and larger entities like species and systems, as Varner seems to think.³²⁷ The arguments do bolster the conservation case for sometimes favoring group interests over individual, but this simply restates the conflict. Improvement of environmental conditions boosts the stamina of some individuals, but only at others' expense. The ethical question is whether overall benefits justify deliberately imposing these risks. That question remains although some individuals may benefit from a species or system-oriented program.

Both Varner and Norton make important points about future animals and animals on the average, but they accept holistic priorities over particular well being of animals directly affected. When Varner refers to future animals, he is really talking about the overall future health of populations, species, or systems. Norton does the same when he specu-

³²² *Id.* at 312, 316-17 (necessity of destroying life struggles with reverence).

³²³ See VARNER, *supra* note 5, at 116.

³²⁴ See, e.g., *id.* at 119, 126, 135, 140 (arguing that restorations eventually can become "autogenic," requiring no further management).

³²⁵ *Id.* at 116-17 (deer beyond carrying capacity bearing fewer young and suffering from diseases and starvation, justifying culling for animal welfare).

³²⁶ *Id.* at 118-19.

³²⁷ *Id.* See VARNER, *supra* note 5, at 117-19 (applying idea of animal rightist, Tom Regan, to ungulate culling and concluding that Regan would approve limited killing).

lates that animals have an interest in survival of their kind. They do not consider whether any individuals, and if so which ones, should accept direct burdens now to secure a better future. They bypass, once again, the central ethical issue this Article urges them to address. It would be more honest and constructive for conservation planning to explain why restoration rationales outweigh individual animal interests in particular situations, specifying criteria of justification.

g. The Cultural Progress Rationale

i. A culturally freighted creature

Returning wolves to the Northeast would reflect cultural maturity, according to some proponents. People have always perceived the wolf with profound ambivalence. Americans from colonial times held virulently negative attitudes toward the animal until they exterminated the species in waves of collective violence.³²⁸ Wolves have had both positive and negative valence throughout human history. People have imagined wolves as malevolent figures in fairy tales (Little Red Riding Hood, Three Little Pigs),³²⁹ myths, and popular language (e.g., wolf as sexual or financial predator). Yet ancient agricultural societies associated wolves with fertility and special wisdom.³³⁰ Many pre-European Americans respected wolves they believed possessed magical powers to share with human kin.³³¹

Dislike of wolves persists in America despite some remarkable cultural transformation. Negative views infected the Yellowstone project initially and still. Some western ranchers strongly resent the federal government for reintroducing wolves, with one describing that decision as forced “down our throat with a plunger.”³³² They resent national interference with the free spirited West and threats to livestock culture and heritage.³³³ With many more applications than available permits,

³²⁸ See generally, HAMPTON, *supra* note 100, at 1-7 (introducing concerted efforts over time to eradicate wolves); see also MCNAMEE, *supra* note 60, at 29-31 (describing history of shrinking wolf numbers in America from plentiful to gone).

³²⁹ See Remet, *supra* note 139, at 89.

³³⁰ See EVA-LENA REHNMARK, NEITHER GOD NOR DEVIL: RETHINKING OUR PERCEPTIONS OF WOLVES 60-61 (2000) (discussing rituals and ceremonies enlisting wolves in agricultural fertility in Japan, Europe, and ancient Rome and Greece).

³³¹ See, e.g., *id.* at 62-63 (describing varied cultural beliefs about wolves as guides and teachers with special spiritual insights and powers).

³³² Leslie Kaufman, *After Years of Conflict, a New Dynamic in Wolf Country* N.Y. TIMES, (Nov. 4, 2011) <http://www.nytimes.com/2011/11/05/science/earth/conflict-over-wolves-yields-new-dynamic-between-ranchers-and-conservationists.html>.

³³³ See *id.*

eager Minnesota hunters sought permission to hunt recovered wolves.³³⁴ Antipathy infects proposed Northeastern reintroduction as well. Some residents of the Adirondacks, for example, worry over increased land use restrictions related to wolf protection,³³⁵ and others are skeptical that tourism will benefit a region that lacks motel and restaurant infrastructure.³³⁶

Simultaneously the wolf has evolved into national “star” of the wild. People travel from afar to Yellowstone for the chance to hear wolf howls or glimpse the animals.³³⁷ Wolf memorabilia is part of tourism. An iconic tee shirt sold vigorously on Amazon.com as male customers touted sexual prowess from sporting the wolves’ image.³³⁸ The polar depictions of wolves are both mythical. While one person warns, “[s]ooner or later, those wolves are going to kill a person, or a kid waiting for a school bus,”³³⁹ another claims that wolves kill only sick and weak prey. Neither claim is accurate. No records document wolves in the wild killing humans,³⁴⁰ and wolves sometimes do kill healthy animals.³⁴¹

³³⁴ *Minnesota Wolf Hunt: More than 23,000 Apply for 6,000 Permits*, ASSOCIATED PRESS (Sept. 7, 2012) http://www.twincities.com/ci_21491725/minnesota-wolf-hunt-more-than23-000-apply.

³³⁵ See, e.g., Schlickeisen, *supra* note 39, at 65 (discussing local concerns about Adirondack Park expansion to protect wolves).

³³⁶ See, e.g., Sage, *supra* note 40, at 42, 44 (questioning promise of tourism as economic incentive for locals).

³³⁷ See, e.g., Nate Schweber, *Research Animals Lost in Wolf Hunts Near Yellowstone*, N. Y. TIMES (Nov. 28, 2012, 11:12 AM), <http://green.blogs.nytimes.com/2012/11/28/research-animals-lost-in-wolf-hunts-near-yellowstone> (describing “thriving tourist industry” in Yellowstone related to wolves); see also, McKibben, *supra* note 31, at 14-15 (criticizing wolf consumerism as turning the wild into commodities).

³³⁸ A July 23, 2013 visit to Amazon.com website and a search under “Three Moon Wolf T Shirt” turned up 2,565 reviews. The Amazon review labeled “most favorable review” claimed, “This shirt has changed my life!” The “most helpful critical review” is worth the web search: “The effect that this t-shirt has on women is pretty impressive. Unfortunately its natural healing powers reversed my vasectomy and I impregnated nine women in two weeks before I realized. They all had twin boys. Now I have 18 sons and spend most of my money on child support and condoms.” (Although parody may be the sincerest form of flattery, The Three Wolf Moon Shirt Parody – Three Sloth Moon Shirt to date has generated only two reviews.) http://www.amazon.com/product-reviews/BOOCXWBK2K/ref=dp_top_cm_cr_acr_txt.

³³⁹ Keith Matheny, *Upper Michigan Residents Say Wolf Hunt Will Control a Killer*, DETROIT FREE PRESS (May 20, 2013), <http://www.greenbaypressgazette.com/viewart/20130520/WOF07/130520015/Upper-Mich-residents-say-wolf-hunt-will-control-killer>.

³⁴⁰ *Id.* (no records in Michigan); see also FISCHER, *supra* note 56, at 56 (wolves avoid and do not attack humans).

³⁴¹ See MCNAMEE, *supra* note 60, at 136 (debunking sentimental views about “wolf scruple”).

ii. An environmental symbol

Wolves herald environmental success to some. If people accept a creature they once maligned, this shows movement away from a human-centric view of the world.³⁴² Reestablishing wolves is a victory for the environmental movement, possibly motivating other bold endeavors.³⁴³ Wolf success hints at an environmental agenda even more sweeping, and perhaps values broadened beyond economics.³⁴⁴ The Yellowstone project promised to restore nothing short of national faith along with wolf populations.

Changes of heart are welcome signs of cultural progress. Few would recreate the days of poison, torture, and cruel violence against wolves, and many view that history with collective shame.³⁴⁵ Still, an ethical question is whether policy should track attitudinal currents or challenge culture to evolve. Does any cultural ideal justify converting creatures into icons? The fate of wild beings should not turn on even the best-intentioned aspirations to expunge the historical record and achieve better relations with the nonhuman world.

While sentiment should not dictate policy, environmentalism does depend on cultural acceptance. Even wolf skeptics are willing to tolerate animals that return on their own, and environmentalists recognize that mode of reestablishment as preferable.³⁴⁶ If expensive and coercive restorations arouse venom toward hapless predators, perhaps the symbolism is not worth the backlash. Human maturity is fragile, as polar attitudes toward wolves and coyotes demonstrate. It is difficult to proclaim that animal culture has moved enduringly beyond fad and caprice.

h. The Reparations-Restitutions Rationale: Redemption or Vanity?

A related justification is that wolf restoration is reparation for historically egregious behavior toward wolves and the environment as a whole. Proponents are eager to atone for the conduct of past humans in

³⁴² See, e.g., McKibben, *supra* note 31, at 18-20 (discussing challenge of living with inconvenient predator as opportunity to rethink self-importance).

³⁴³ See, e.g., Clark & Gillesberg, *supra* note 54, at 139 (confidence of environmentalists in advocacy); see also DeBoer, *supra* note 133, at 100 (wolf restoration as “catalyst for wilderness restoration”).

³⁴⁴ See *id.* at 141 (discussing strains of politics and economics).

³⁴⁵ See, e.g., HAMPTON, *supra* note 100 (discussing “collective remorse” at close of nineteenth century)

³⁴⁶ See, e.g., DeBoer, *supra* note 133 (preferring such return over intrusive relocation); see also Peterson, *supra* note 187, at 151 (Michigan survey reporting public preference for natural wolf return); see also Schadler, *supra* note 132, at 167 (discussing hopes for natural recovery).

extirpating a magnificent creature from their midst. This collective remorse is refreshing. Acknowledging wrongdoing is necessary for moral development, and it is sometimes important for current people to apologize for the acts of their predecessors.

Compensating holocaust survivors who were slave laborers in the Nazi war effort illustrates this.³⁴⁷ Volkswagen Corporation compensated victims even though the victimizers were no longer part of the entity and only 1,000 to 2,000 of the laborers were still alive.³⁴⁸ Although financial reparations could never redress such grievous trauma and loss, they were a gesture designed to ease survivors' waning lives a bit and a collective admission of corporate wrongdoing.

In some reparations, both actors and recipients differ from the historical perpetrators and victims. In such cases restorative justice is indirect. Reparations to the descendants of African American slaves would be an example of indirect reparation, because neither perpetrators nor victims live. One rationale for holding current people accountable for past acts of others is that the contemporaries who pay have indirectly benefited from the sins of their predecessors, and those who receive payment still suffer the ripple harms of historical events that damaged their ancestors.³⁴⁹ Slave descendants experience lingering harm, while the descendants of slave owners, or those who thrived on the slave economy, enjoy benefits of their ancestors' power.³⁵⁰ Although such claims dilute over time, the legacy justifies some redress. Opponents respond that such reparation is unjust in compensating some who are thriving, while unfairly punishing those who pay for the wrongful acts of third parties, a principle long shunned in morality and law.³⁵¹

Wolf reparations would resemble slavery reparations because compensation (wolf restoration to a formerly inhabited region) would redress the acts of nineteenth and early twentieth century Americans and assist remote descendants and future generations of eradicated wolves. The benefits of wolf destruction to earlier Americans were freedom from livestock depredations, more prey for food and subsistence, and suppressed fears of mythical creatures of the night. When wolves vanished, American settlers faced one less obstacle to domesticating the land, and current Americans continue to benefit from accelerated development and industrialization on which the economy and culture depend.

³⁴⁷ See, e.g., Marilyn Henry, *\$12 Million VW Fund Set for Slave Laborers*, JEWISH WEEKLY (Sept. 18, 1998), <http://www.jweekly.com/article/full/9121/-12-million-vw-fund-set-for-slave-laborers/> (fund established to acknowledge company's moral responsibilities).

³⁴⁸ *Id.*

³⁴⁹ See, e.g., *Reparations for Slavery Reading*, CONSTITUTIONAL RIGHTS FOUND., <http://www.crf-usa.org/brown-v-board-50th-anniversary/reparations-for-slavery-reading.html> (last visited July 27, 2013).

³⁵⁰ *See id.*

³⁵¹ *See id.*

It is hard to appreciate advantages to contemporary wolves and wolf species. As Bill McKibben put it, “wolves roam outside beyond the culture of victimhood.”³⁵² Wolf species, subspecies, and populations flourish in many regions of North America.³⁵³ One might even argue that threats from humans have made wolves more adaptable through natural selection, so that their ordeal was more positive than harmful.³⁵⁴ Although some ecosystems have suffered from the historical absence of wolves in the lower forty-eight states, wolf reparations are supposed to compensate wolves themselves. Introducing wolves into prey-rich territory of the Northeast to reestablish their historical predator role might be the compensation particular animals would receive for their ancestors’ mistreatment. Yet studies of Canadian wolves do not reveal more than cyclical shortages of prey, often related to phenomena like harsh winters.³⁵⁵ From the perspective of the animals themselves, no wolves would recognize the value of reparations or care about such human expressions of regret as they carry on their lives in Canada.

If restoration is the form of reparation, wolves might actually suffer. It is our national self-image that would get a boost from so-called reparations. We should rethink the idea that restoration is a collective gesture of “apology” and good will. High-profile restoration programs might even lull people into thinking the slate is clean for wolves and other persecuted animals.³⁵⁶ Restorations might allow people to forget the past and be complacent about toward future environmental challenges.³⁵⁷ When restoration redresses ecological effects of past wrongs it can signify commitment to better environmental policies. When reparations serve to redeem human guilt they are less justified. Animals do not exist to service the human psyche. Our sense of redemption and vanity about righteous ethical progress should not become entangled with the destinies of nonhumans. If humans genuine corrective justice, we should not confuse these animal-centered purposes with our own.

³⁵² McKibben, *supra* note 31, at 17.

³⁵³ *See id.* at 13 (wolves “safe as a species”).

³⁵⁴ *See, e.g.,* Theberge, *supra* note 86, at 30 (wolf as “ecological generalist” and able to fill diverse regions and adapt to varied conditions).

³⁵⁵ *See id.* at 42-46 (discussing abiotic and biotic factors affecting wolf populations).

³⁵⁶ *See* Schadler, *supra* note 132, at 162 (danger of complacency about reversing past wrongs following reintroduction).

³⁵⁷ *See id.*

i. The Human Virtue Rationale

Another important ethical rationale for wolf restoration is the argument from human virtue. Engaging in predator reintroduction will improve personal and national character because of lifestyle adjustments humans will need to make to accommodate new wild neighbors.³⁵⁸ Environmental virtue ethics is a strand of virtue ethics more generally. Briefly, virtue ethics emphasizes the importance of character traits over principles to guide action, reasoning that people of excellent character reliably behave well.³⁵⁹ Virtues dispose people to behave ethically,³⁶⁰ and environmental virtues dispose people to behave well toward the environment.³⁶¹ As a sub-field of environmental ethics, virtue ethics has only fairly recently emerged,³⁶² but environmentalists have long emphasized the importance of human character and attitudes to lasting environmental change.³⁶³

Modern environmental law relies heavily on external sanctions, and contemporary environmental policy favors economic incentives to motivate environmental improvement. External sources of motivation might not be sustainable because of limited resources, but also psychologically. Social psychologists document a phenomenon called the “over justification effect,” which shows that tangible rewards (or sanctions) for behavior lead recipients to perceive their actions as extrinsically

³⁵⁸ See McKibben, *supra* note 31, at 17-18 (bringing back wolves “because it is hard” and might change humans sense of self-importance).

³⁵⁹ See, e.g., ROSALIND HURSTHOUSE, ON VIRTUE ETHICS 1-3, 108 (1999) (need for moral philosophy to address emotions, motives, and character); see also Christine Swanton, *A Virtue Ethical Account of Right Action*, 112 ETHICS 32, 32 (2001) (arguing for virtue account of right action).

³⁶⁰ See, e.g., John McDowell, *Virtue and Reason*, in VIRTUE ETHICS 140, 140-141 (Roger Crisp & Michael Slote eds., 2006) (virtue as disposition “to behave rightly”).

³⁶¹ See generally ENVIRONMENTAL VIRTUE ETHICS (Ronald Sandler & Philip Cafaro eds. 2005); and RONALD L. SANDLER, CHARACTER AND ENVIRONMENT (2007); and LOUIE VAN WENSVEEN, DIRTY VIRTUES: THE EMERGENCY OF ECOLOGICAL VIRTUE ETHICS (2000).

³⁶² See generally ENVIRONMENTAL VIRTUE ETHICS (Ronald Sandler & Philip Cafaro eds. 2005); and RONALD L. SANDLER, CHARACTER AND ENVIRONMENT (2007); and LOUIE VAN WENSVEEN, DIRTY VIRTUES: THE EMERGENCY OF ECOLOGICAL VIRTUE ETHICS (2000).

³⁶³ See Philip Cafaro, *Thoreau, Leopold, and Carson: Toward an Environmental Virtue Ethics*, in ENVIRONMENTAL VIRTUE ETHICS, *supra* note 364, at 31-44 (famous environmental writings as implicitly virtue oriented); see also Bill Shaw, *A Virtue Ethics Approach to Aldo Leopold’s Land Ethic*, in ENVIRONMENTAL VIRTUE ETHICS, *supra* note 364, at 93-106 (virtue dimensions of land ethic).

motivated.³⁶⁴ If a person is already motivated from within, the external incentive is surplus, or over-justified.³⁶⁵ According to psychologists, the phenomenon dampens altruism over time.³⁶⁶ Because virtues motivate a person internally, they are more reliable than outside inducements.

What, then, are some specific virtues relevant to wolf restoration? Humility is probably the most oft-cited environmental virtue.³⁶⁷ A predator who causes inconvenience, or possibly worse, may teach humans to see themselves as just one species among others.³⁶⁸ Restoration also demonstrates courage to admit past wrongs and take bold steps, even if repercussions are hard to predict and contain. Moral courage, in turn, depends on the integrity to follow principles despite temptations to pursue short-term egoistic goals. Because of the considerable financial, political, and lost opportunity costs of predator reintroduction, restoration projects might reflect national generosity toward the nonhuman world. Other virtues are also at stake, for example, gratitude toward the environment.³⁶⁹

Few could deny that cultivating such character traits, at least in moderation, would be a positive development for both humans and the environment. Would wolf reintroduction into the Northeast actually serve the aforementioned virtues, if that project surmounts legal and scientific barriers? The argument for humility is doubtful in the restoration context. Removing animals from their habitat and depositing them in a new setting requires active interference. Conservation biologists emphasize that any reintroduction requires ongoing monitoring and “adaptive management” over time to correct undesirable conditions.³⁷⁰ This level of intervention might not be humble at all, but the flip side of hubris

³⁶⁴ See, e.g., Mark R. Lepper et al, *Undermining Children's Interest with Extrinsic Reward: A Test of the "Overjustification" Hypothesis*, 28 PERSONALITY & SOCIAL PSYCHOLOGY 129-37, 130 (1973); see also William D. Crano & John Sivacek, *The Influence of Incentive-Aroused Ambivalence on Overjustification Effects in Attitude Change*, 20 J. EXPERIENTIAL SOCIAL PSYCHOLOGY 137, 137 (1984).

³⁶⁵ See *id.*

³⁶⁶ See Lepper et al, *supra* note 364, at 129-31.

³⁶⁷ See, e.g., Thomas E. Hill, Jr., *Ideals of Human Excellence and Preserving Natural Environments*, 5 ENVTL. ETHICS 211-24 (1984) (seeing oneself as center). ; and LEOPOLD, *supra* note 17, at 240 (from “conqueror” to “plain member”); see also Sallie McFague, *A Square in the Quilt: One Theologian's Contribution to the Planetary Agenda*, in SPIRIT AND NATURE: WHY THE ENVIRONMENT IS A RELIGIOUS ISSUE 42, 43 (Steven C. Rockefeller & John C. Elder eds., 1992) (sin as seeing others existing for oneself).

³⁶⁸ See, e.g., McKibben, *supra* note 31, at 21 (“intoxication, with ourselves” and losses of species).

³⁶⁹ See generally Reed Elizabeth Loder, *Gratitude and the Environment: Toward Individual and Collective Ecological Virtue*, 10 J. JURISPRUDENCE 383-435 (2011).

³⁷⁰ MORRISON, *supra* note 62, at 93, 112-13.

that caused so much damage to the non-human environment in the first place. The role of “steward” implies overall responsibility for caretaking. We may be forced to assume this role because passivity compounds environmental maladies. Reintroducing wolves into the Northeast is far from ecologically necessary, however, and might not even be beneficial. Assuming intensive duties of ecological oversight, and inevitable litigation over wolf identity and other matters, reintroduction any time soon would be more reckless than virtuous.

Aldo Leopold long ago cautioned that humans rarely know enough about complex ecological relationships to intervene correctly and in the right places because, “the biotic mechanism is so complex that its workings may never be understood.”³⁷¹ Those most knowledgeable understand the limits of ecological understanding, Leopold asserted.³⁷² Ecologists are unable to predict the subtle effects of tampering with the elements of complex ecosystems.³⁷³ Effects of the Yellowstone wolf reintroduction surprised project managers.³⁷⁴ Despite extensive preparation and study, they waited to see how each step would unfold, and they still anticipate surprises.³⁷⁵ Reintroduction into the Northeast might be significantly harder to manage, given the patchwork of public and private lands, close proximity of wolves to humans, extensive roads and highways, and predictable clashes with coyotes. Expensive and controversial wildlife restorations should have strong prospects of realizing the highest ambitions of conservationists.

The red wolf captive breeding and release program was ethically justified despite controversy and novelty as the first recovery under the ESA. Red wolf captures began in 1973, with the goal of removing all animals from the wild to save them from extinction. This goal was ethically justified in principle if not design because of the stakes. Red wolves had dwindled to appallingly small numbers in the wild, so the species truly was on the brink of extinction.³⁷⁶ The wolves had hybrid-

³⁷¹ LEOPOLD, *supra* note 16, at 241.

³⁷² *Id.*

³⁷³ MORRISON, *supra* note 62, at 145 (complexity making predictions difficult, especially with human intervention); *see also* Douglas W. Smith, Rolf O. Peterson, & Douglas B. Houston, INT’L WOLF CTR. *Yellowstone After Wolves* 8 (Apr., 2003), *available at* http://www.wolf.org/wolves/learn/wow/regions/United_States/Wyoming_Subpages/Habitat2.asp. (expecting surprises from wolf restoration because of complex interactions, weather, fires, and other unpredictable events).

³⁷⁴ Smith et al., *supra* note 373, at 11 (cause of willow growth and sizes of willow stands in Yellowstone since wolves debated but probably reason for increases in beaver); *see also* TEN YEARS OF YELLOWSTONE, *supra* note 58, at 31 (“trophic cascade” of indirect effects from wolves, including taller willows and changes in elk behavior).

³⁷⁵ *See* Smith et al, *supra* note 373, at 8.

³⁷⁶ *See* HAMPTON, *supra* note 100, at 178-79.

ized so extensively with coyotes that losses of genetic diversity were at stake.³⁷⁷ Initial success of the plan was limited because only fourteen animals reproduced in captivity.³⁷⁸ Fish and Wildlife also did not prepare the public and build support for its daring and invasive program, which particularly irked residents of North Carolina where wolves were released.³⁷⁹ It took a new federal wildlife refuge to protect the wolves and allow some shaky recovery.³⁸⁰ Although the agency blundered in public relations, and curtailed the wildness of the wolves, this was a last ditch existential effort. The most important lesson from that example is to prevent future crises of the magnitude that demand radical measures.

The Yellowstone project probably was ethically justified overall despite its failure to take individual animals seriously enough at the threshold stages of decision-making. While the species was not on the brink, no predator had approximated the historical gray wolf. Area ecology was suffering, and the region was well suited in prey and terrain on large swaths of protected public land.³⁸¹ If the predators would be restored anywhere, “Yellowstone Park really is a perfect home for wolves.”³⁸² In retrospect, wolf successes in acclimation and breeding and effects on regional biodiversity were remarkable, and only a persnickety environmentalist could begrudge such regeneration. The achievements make it hard to separate the decision when made from its subsequent benefits. Taking a long view of the project, including the aftermath of delisting and hunting, ethical as well as ecological cautions should inform all new wolf restoration attempts. Whether we should do it again is a separate ethical question from whether the historical project had merit.

Unlike the Yellowstone project, a Northeastern wolf reintroduction program does not survive ethical analysis. This is aside from the historical identity of the pre-European wolf as a gray wolf subspecies or separate species, although that issue creates immense legal obstacles to reintroducing wolves under the ESA. On balance, the preceding examination of comparative contextual factors and ethical rationales compels negative conclusions about eastern wolf restoration.

³⁷⁷ *Id.* at 179.

³⁷⁸ *Id.*

³⁷⁹ *Id.*

³⁸⁰ *Id.* at 180 (Alligator River National Wildlife Refuge).

³⁸¹ See Clark & Gillesberg, *supra* note 54, at 142-43 (study of regional suitability over 15 years). Schlickeisen, *supra* note 39, at 62-63 (prey adequate and restoration growing in popularity).

³⁸² FISCHER, *supra* note 56, at 167.

V. SUPEROGATORY OR PERMISSIVE PROGRAMS

A longstanding distinction in moral philosophy relevant to restorations is between ethical duties necessary in every case and moral decisions that that apply some of the time on a discretionary basis. Kant called mandatory duties “Perfect” and asserted that they apply universally according to the dictates of reason.³⁸³ “Imperfect Duties” are not enforceable in law and have exceptions.³⁸⁴ In related philosophical language, the latter are called “superogatory” because they involve good actions that exceed demands.³⁸⁵ Taking actions beyond what is required is a choice often thought to involve heroism, saintliness, or at least altruism worthy of praise.³⁸⁶

Employing this framework within the conservation context, some restorations are necessary, or close to necessary, to rescue an ecological system or component. Red wolf restoration would be in this category, given the basic conservation value of biodiversity and correlated goal of avoiding extinctions. The red wolf captive breeding program in the Southwest would exemplify a “perfect duty” within the conservation context only because it addressed an ecological emergency with imminent extinction at stake.³⁸⁷ Projects designed to save species on the brink generally permit greater risks to individual animals. Making red wolves captive risked more harms to those animals than the Yellowstone wolves, if only because breeding manipulations and lengthier captivity alters habits and behavior.³⁸⁸ Recovery was far less predictable, and no one knew in advance whether the animals would breed in captivity or how any young would fare.³⁸⁹ Moreover, releasing captive animals into the wild certainly exposed them to greater mortality and other risks because they were less equipped to hunt and carry on wild activities.³⁹⁰ Young wolves born in captivity were especially at risk because it was not clear that the parents and other wolves had transmitted skills necessary for effective wild existence.³⁹¹ Despite actual and predictable harms

³⁸³ KANT, *supra* note 131, at 39 n 9.

³⁸⁴ *Id.*

³⁸⁵ See, e.g., David Heyd, *Supererogation*, in STANFORD ENCYCLOPEDIA OF PHILOSOPHY 1 (2011), <http://www.stanford.edu/entries/supererogation>.

³⁸⁶ See *id.* at 8-9.

³⁸⁷ See, e.g., DeBoer, *supra* note 133, at 82 (wild *Canis rufus* considered extinct in 1980).

³⁸⁸ See generally MINDING ANIMALS, *supra* note 159 at 168-69 (discussing effects on animals from human presence and trapping).

³⁸⁹ See HAMPTON, *supra* note 100, at 179 (breeding of only fourteen captive animals).

³⁹⁰ See *id.*

³⁹¹ See, e.g., Richard A. Griffiths & Lissette Pavajeau, *Captive Breeding, Reintroduction, and the Conservation of Amphibians*, 22 CONSERVATION BIOLOGY 852, 853 (2008) (comparing “hard-wired” amphibians to “higher vertebrates” who rely on learned behaviors to function in the wild).

to the wolves, the dire condition of the red wolf as a species made some form of restoration obligatory as a last resort.

In contrast, the Yellowstone wolf reintroduction was largely “superogatory” despite claims of necessity. Applying Kant’s terminology, wildlife managers had at most an “imperfect duty” to restore wolves. Wolves were returning slowly, although they were stragglers except in Montana,³⁹² and there was no compelling argument for speed beyond the political enticement of relaxed 10(j) protection. Yet, area ecology did suffer from large ungulates that had harmed vegetation and soil through browsing and trampling.³⁹³ Smaller animals, such as beaver, had not proliferated in the region because of unsuitable vegetation.³⁹⁴ Careful study indicated that the region could support multiple breeding packs, further justifying the reintroduction.

A conservation project that is ethically permissible but not necessary justifies less harm to individuals. Whether wildlife managers considered where their project stood on an ethical sliding scale between discretion and necessity is not obvious from records, although they clearly lamented each wolf death and expressed compassion and respect for the animals. The project did not follow a fully ethical process despite years of planning and valiant, some would say excessive, efforts to assuage rancher and other concerns. Explicit attention to individual animal risks and honest acknowledgement of the discretionary nature of the project would have improved the process. This might have led to a backup plan if removal became legally necessary (as it almost did), for example, sanctuaries that could shelter wolves, or a return arrangement with Canada. As an early try at wolf restoration, however, the project was worthy even though retrospective assessment shows much room for improvement.

The Northeast wolf reintroduction project, at least currently, does not pass either obligatory or superogatory tests. It is far from ecologically necessary, given fairly rapid coyote adaption to the role of top predator. Although the coyote does not perfectly fill this niche because of modest success with moose predation,³⁹⁵ the animal is notoriously resourceful and has already acquired many wolf genes and characteristics through interbreeding.³⁹⁶ Wolves have fairly stable populations in Canada, which would be the source area for reintroduced wolves, so they are not in dire species jeopardy analogous to red wolves. For

³⁹² See McNAMEE, *supra* note 60 at 33 (wolves returning to Montana); see also FISCHER, *supra* note 56, at 96 (wolf pack established in Montana).

³⁹³ See TEN YEARS OF YELLOWSTONE, *supra* note 58, at 32 (overgrazing by elk long thought to harm vegetation like willows).

³⁹⁴ See *id.* at 32-33 (smaller animals move in as willow improved).

³⁹⁵ See Theberge, *supra* note 86, at 58, 61 (coyotes not successful moose predators).

³⁹⁶ *Id.* at 56-58.

all of these reasons, it is fair to conclude that the project would not be morally required. It is also not morally permissible, at least any time soon. The disputed species identity of the historical Eastern wolf would guarantee a legal fiasco beyond any contemplation of Yellowstone litigation. Although the prospect of litigation should not by itself stop a worthy project, the novel identity issues and the FWS Proposal to delist gray wolves nationally makes ambitious reintroduction far too risky in this case. Even if FWS persists in its designation of a separate historical species, and complete biological assessment of that species merits protected status, the special circumstances of coyote presence and the mixture of private and public land pose lingering ethical problems for reintroduction.

VI. ALTERNATIVES TO WOLF REINTRODUCTION

a. Identifying and Facilitating Alternatives

When a decision will both promote and damage important values, examining less harmful alternatives is ethically required. I do not claim to understand the biological nuances of bringing wild animals back to a region from which they have long been absent. Yet, the “barriers” to wolves’ repopulation of the Northeast do prompt common sense suggestions short of airlifting captured animals. While these ideas present challenges, and none is viable alone, methods of promoting wolf expansion should be explored, at least while the identity puzzle and proposed delisting have put reintroduction on hold. The current direction and tone of FWS suggest that even restoration proponents might have to settle on this mode of bringing back wolves. The overall alternative I shall explore is facilitating wolves in recolonizing the Northeast. Specific interventions and active implementation are necessary because formidable “barriers” prevent this from happening unassisted.³⁹⁷ The ideas I present are not original but are included to show that specific mechanisms, especially in combination, might encourage “natural” but facilitated return.

b. Necessity of Legal Protection as Background Assumption

Any suggestions for reducing obstacles depend on one overarching condition—that wolves have protection of law. Without this, animals in viable numbers will never escape the hunters, trappers, and

³⁹⁷ See, e.g., Mech, *supra* note 211, at 13. Fascione & Kendrot, *supra* note 41, at 52-53. DeBoer, *supra* note 133, at 90; see also McKibben, *supra* note 31, at 9.

others who would harm them. The June 13, 2013 FWS Proposal to delist gray wolves in the lower forty-eight states, and the accompanying proposal to designate historical eastern wolves as the separate species *Canis lycaon*, is now in an extended Comment period.³⁹⁸ Currently *Canis lycaon* has no legal protection as endangered or threatened in the Northeast, but FWS acknowledges that biological assessment of that species is not complete and could result in protection.³⁹⁹ If the new designation stands, any wolves entering the Northeast from Canada should receive at least provisional protection until assessments show definitively that this is unwarranted. A precautionary approach is ethically wise given considerable uncertainty and very high stakes for any animals that manage to enter alien United States territory.

Until the time for input on the FWS Proposal expires, gray wolves are still listed as endangered in the Northeast as in all lower forty-eight states except six in the West.⁴⁰⁰ The Fish and Wildlife Proposal to delist *Canis lupus* nationally should not stand. It depends on a novel legal interpretation of “range” under the ESA that is inconsistent with statutory language and precedent. The Act defines as “endangered,” “any species which is in danger of extinction throughout all or a significant portion of its range.”⁴⁰¹ “Threatened” species are those “likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.”⁴⁰² FWS now interprets “range” to include only areas “in which a species currently exists,” a marked change from previous agency interpretations.⁴⁰³ That reading would have resulted in delisting gray wolves in the Yellowstone region before reintroduction because no wolves occupied those areas. The interpretation of FWS should be litigated if the agency does not alter its recent understanding.

If gray wolves survive taxonomy and delisting contests, they should retain protection in the Northeast to assist them in recolonizing. Occasional dispersers southward that escape human hands, road mortality, and other dangers in Canada will not be enough. Even if small populations developed, these would be vulnerable to weather and other catastrophic events as well as genetic homogeneity and would not be viable over time.⁴⁰⁴

³⁹⁸ 78 Fed. Reg. 35,664, *supra* note 50, at 35665.

³⁹⁹ *Id.* at 35717-18.

⁴⁰⁰ See Dutcher et al, *supra* note 9, at 1 (Michigan, Minnesota, Wisconsin, Idaho, Wyoming, and Montana).

⁴⁰¹ 16 U.S.C. § 1532 (6).

⁴⁰² *Id.* § 1532(20).

⁴⁰³ 78 Fed. Reg. 35,664, *supra* note 50, at 35,673.

⁴⁰⁴ See MORRISON, *supra* note 62, at 21-23.

c. Specific Obstacles to Migration and Suggested Mitigation Measures

Habitat fragmentation deters wild animals from migrating to new territory, finding food on a seasonal basis, reproducing, and maintaining genetic diversity. In the Northeast, highways, roads, waterways, areas of human occupation, and agriculture are features that break up habitat and movement corridors.⁴⁰⁵ Road mortality is a large threat to wildlife,⁴⁰⁶ and wolves traveling from Canada to the Northeast would risk collisions with vehicles. Some states are experimenting with modifying highway infrastructure such as overpasses and underpasses planted with vegetation that facilitate wildlife crossings.⁴⁰⁷ Although most modifications are expensive, in some cases small changes help.⁴⁰⁸ Initial data shows that such measures significantly reduce road mortality and are cost effective.⁴⁰⁹ The infrastructure modifications also protect humans from dangers of collisions with large animals like deer and moose, so some expenditure might be appealing even in hard economic times.

Another way to encourage wolf return is to protect both wolves and coyotes, at least during parts of the year when animals are on the move. Ontario established protected buffer zones surrounding Algonquin Park because wolves left the protected land in winter to hunt deer.⁴¹⁰ The Ontario provincial government also protected coyotes in the Park and buffer region because the species had interbred with wolves and the animals were difficult to distinguish.⁴¹¹ The large coyote that has emerged as “top predator” in the Northeast has features of both wolves and coyotes and is adapting to be functionally similar to whatever historical species once roamed the region.⁴¹² The Ontario model of mutual

⁴⁰⁵ See Steward T.A. Pickett & Ricardo Rozzi, *The Ecological Implications of Wolf Restoration: Contemporary Ecological Principles and Linkages with Social Processes*, in *WOLVES AND HUMAN*, *supra*, note 39, at 261, 271-72; see also Theberge, *supra* note 86, at 31; DeBoer, *supra* note 133, at 78-79; Wydeven et al, *supra* note 37, at 781.

⁴⁰⁶ See FED. HIGHWAY ADMIN., *Wildlife and Highways: An Overview*, http://www.fhwa.dot.gov/environment/critter_crossings/overview.cfm (last visited July 31, 2013).

⁴⁰⁷ See Mike Stuckey, *More Wildlife Getting Helped Across Highway*, NBC NEWS (July 6, 2005, 11:48 am), http://www.nbcnews.com/id/8409303/ns/us_news-environment/t/more-wildlife-getting-helped-across-highway/#.UfgGvb97Tdk.

⁴⁰⁸ *Id.*

⁴⁰⁹ *Id.*

⁴¹⁰ See THE FRIENDS OF ALGONQUIN PARK, *Factors Limiting Population Growth of Wolves in Algonquin Park*, <http://www.sbaa.ca/projects.asp?cn=314> (last visited Aug. 14, 2013).

⁴¹¹ *Id.*

⁴¹² See, e.g., Theberge, *supra* note 86, at 55-57 (discussing wolf-like features of eastern coyote).

species protection would be desirable in the Northeast, although this would require education and changes in public attitudes about coyotes. Protecting wolves but killing coyotes with abandon may press coyotes toward the fate of wolves of the late 1900s.

Natural migration corridors identified between Maine and New Hampshire should also be protected.⁴¹³ In especially suitable areas, the States should consider purchasing land that has strong potential as wolf habitat or negotiating easements with landowners interested in protecting wild animals.⁴¹⁴ The success of conservation easements in America generally, particularly in exchange for tax benefits,⁴¹⁵ suggests that this avenue is worth treading not just for wolves but also for other animals impeded by land fragmentation. Such arrangements should be concentrated in areas where private and corporate property intersects public lands, as in the Adirondacks and parts of Maine. Corporations could publicize their efforts to garner the good will of environmentalists. Willing individual landowners might be paid to tolerate wolf crossings. Private participation in a conservation program might elicit greater public acceptance of predator presence, thus facilitating cultural changes compatible with coexistence longer term. As Aldo Leopold claimed long ago, government cannot save the environment single-handedly through coercion.⁴¹⁶ Leopold was optimistic that individual landowners would take pride in preserving the environment for themselves and the future.⁴¹⁷

All land possessors and owners could also receive government education and assistance in fortifying their farm and other property from wolf depredations, for example, through trained guard dogs, fencing,

⁴¹³ See, e.g., David J. Mladenoff & Theodore A. Sickley, *Assessing Potential Gray Wolf Restoration in the Northeastern United States: A Spatial Prediction of Favorable Habitat and Potential Population Levels*, 62 J. WILDLIFE MGMT. 1, 4-5 (1998) (Maine as best habitat and dispersal corridor between Maine and New Hampshire).

⁴¹⁴ See, e.g., DeBoer, *supra* note 219, at 87 (discussing easements and “smart wood” certifications as ways to protect wolves).

⁴¹⁵ See, e.g., U.S. FISH & WILDLIFE SERV., PARTNERS FOR FISH & WILDLIFE, *Conservation Easements...Private Rights and Public Benefits*, <http://www.fws.gov/mountain-prairie/pfw/r6p8b.htm> (discussing variety and benefits of conservation easements owned and administered by FWS) (last visited July 31, 2013); see also THE NATURE CONSERVANCY, *Private Lands Conservation*, <http://www.nature.org/about-us/private-lands-conservation/index.htm> (discussing effectiveness of easements in protecting wildlife habitat and open space and tax incentives for landowners) (last visited July 31, 2013).

⁴¹⁶ LEOPOLD, *supra* note 17, at 250 (prophesizing “government handicapped by its own dimensions”).

⁴¹⁷ *Id.* at 249 (“ecologically minded” owner pride in caring for land).

and human shepherds,⁴¹⁸ as well as devices like alarms.⁴¹⁹ Small material incentives and education might enlist the cooperation of the landowners in the Northeast who do not reject, and may even welcome, wolves as neighbors, as surveys and polls suggest many do.⁴²⁰ The current forced waiting period is an opportunity to examine creative means to wolf re-establishment that most people prefer. Inviting the public to contribute could generate interest and locally viable ideas.

Collaborating with Canadian provincial and federal governments is another important endeavor. In Canada wildlife management belongs largely to the provinces.⁴²¹ Although wolves are hunted and trapped at least seasonally in Canada, and populations are stable,⁴²² the eastern wolf is designated under the federal Species At Risk Act (SARA) as a “species at risk.”⁴²³ This affects the provinces of Ontario and Quebec and requires them to work with Canadian federal authorities on wolf management.⁴²⁴ Ontario’s buffer zone around Algonquin Park, and protection of both wolves and coyotes within that zone, suggests public and governmental interest in predator protection. Changing attitudes might provide openings for fruitful discussions with United States officials and wildlife groups. Ontario also should be included in dialogue because its heavily agricultural southern region would be a dispersal route for wolves and an area susceptible to human and wolf conflicts.⁴²⁵ The St. Lawrence River is another possible topic for consideration, given that commercial shipping requires ice to be broken, making it difficult for wolves to cross even in winter.⁴²⁶ Given signals from the Department of the Interior that wolves are no longer wildlife priorities, these alternative methodologies rise in importance.

⁴¹⁸ See, e.g., Fox & Bekoff, *supra* note 61, at 136-37 (discussing tangible aids used around the world); see also Tony Malmberg, *Predators—Friend or Foe?* LAND & LIVESTOCK, Jan./Feb. 2009, at 8, 10-11 (Jan./Feb. 2009) (rancher publication discussing ways to enhance cattle responses to wolves as well as particular non-lethal controls).

⁴¹⁹ Malmberg, *supra* note 418, at 10.

⁴²⁰ See, e.g., Schlickeisen, *supra* note 39, at 63 (polls showing large majority support for reintroduction and celebration of Yellowstone wolf arrival); see also Fascione & Kendrot, *supra* note 41, at 53 (Defenders of Wildlife commissioned survey showing wide support for restoration in Adirondacks).

⁴²¹ See *Canada’s Environment Minister Responds*, MAINE WOLF COALITION (July 10, 2012), <http://mainewolfcoalition.org/letters/canadas-environment-minister-responds/> (synopsizing a letter from Peter Kent in response to letter from Maine Wolf Coalition letter of April 29, 2012 and describing management of wildlife by provinces and territories).

⁴²² See, e.g., Madeline Bodin, *Waiting for Wolves*, NORTHERN WOODLANDS MAGAZINE (Nov. 11, 2007), available at http://northernwoodlands.org/outside_story/article/waiting_for_wolves.

⁴²³ MAINE WOLF COALITION, *supra* note 421.

⁴²⁴ *Id.*

⁴²⁵ See Schadler, *supra* note 132, at 168; see also Fascione & Kendrot, *supra* note 41, at 52-53.

⁴²⁶ See Fascione & Kendrot, *supra* note 41, at 52-53.

VII. FACTORS AND PRINCIPLES FOR FUTURE CASES

a. Goals and Expectations

After a highly contextual and comparative analysis of two restoration projects, it is time to summarize ethical factors that may assist future decisions about wolves in the Northeast and inform similar projects. Wildlife biologists accept the value of case studies, recognizing the difficulties of generalizations.⁴²⁷ Although each case is different ecologically, economically, and politically, practice in sorting and assessing particulars promotes practical judgment. Ethical analysis is a process that sharpens analytical skills: identifying factually and ethically relevant features of various circumstances, exposing the moral assumptions hidden in diverse perspectives and subjecting those to critique and potential revision, considering the consistency of various positions on the levels of logic and values, discovering “cultural” or institutional factors influencing receptivity to dialogue and collaboration, acquiring techniques and habits of listening and openness to perspectives foreign and antagonistic, applying resources like empathy to consider full information and guard against incorrect conclusions, and more. Attending to more cases over time improves the speed and reliability of judgments, tempered by awareness of all ideas as open to revision.

I have emphasized tensions between the interests of individual animals and collectives like species, populations or systems. My aim is to distinguish intractable from penetrable conflicts, and to identify possibilities for reconciling interests when the conflict is real. I have assumed that some projects jeopardizing animals might be justified, but that the interests and welfare of individuals should always be considered. Guidance should identify relevant factors and standards that wildlife experts, governmental policy-makers and the public can apply to particular cases.

No one should expect foolproof formulae or resoundingly clear results in most cases. Besides distinctive contextual features, the weight of various factors would vary in configuration. This does not mean that decisions are entirely situational or subjective, however. The process instills habits of critical reflection. Conclusions about a particular conservation plan can change the course of future plans. If people from various disciplinary perspectives are invited to participate, including cognitive ethologists who can best represent the interests of animal individuals, any consensus would be more ethically reliable having considered a complex array of factors.

⁴²⁷ See MORRISON, *supra* note 62, at 217 (introducing case studies as valuable tools for integrating and applying concepts in restoration biology to varying circumstances).

Holistic environmental and individualized animal ethics cannot always be reconciled without tragic losses of important values. The clash between individual and collective ethics can often be softened, as pluralists contend, to sacrifice as few values as possible. Persistent collision of perspectives is why the fields of animal and environmental ethics became estranged. The potential to reconcile and often mitigate conflict is why the divergent ethics need cross-fertilization.

b. Commonly Relevant Contextual Factors

Common factors relevant to ethical assessments include identifying specific ecological benefits of a program and the target recipients of those benefits. These would include benefits to the species and populations selected for reintroduction as well as species of animals and plants that might receive collateral boosts in numbers or ranges. Benefits essential to continuing existence would have priority. If a project would preserve a highly endangered predator, such as the red wolf, the conservation interest is essential to prevent the irreversible harm of extinction. If, on the other hand, a program has more modest and less pressing ecological goals, such as bringing in wolves to hasten more effective moose predation than coyotes can achieve in the Northeast, a decision must attend more closely to animal harms, allowing fewer and less severe. The goals of Northeastern wolf reintroduction are neither existential nor ecologically compelling, especially given rapid adaptations of coyotes and declining moose populations. Risking harms to animals removed and in place is thus less tolerable.

Besides the species targeted for benefits, byproduct benefits and harms also must be considered. Harms to competitors (coyotes in the Northeast) and other creatures (perhaps bears) are important. Effects on small animal prey of coyotes are also relevant. Harms and benefits to different subjects can be compared in type and intensity if they touch similar interests, for example, the physical integrity of various animals. Significantly diverse harms and benefits are more difficult to compare. Effects on vegetation, soils, and watersheds are important to any conservation program, so the entire ecology of an affected area must be taken into account. Particular goals of predator restoration should be identified explicitly and assessed for prospects of achievement. The complex balancing of harms and benefits resembles tort analysis and shares the imprecision of a sliding framework. This is not purely a cost and benefit appraisal, however. The point of forcing consideration of intrinsic value and rights perspectives is to remind decision-makers that ecologically

beneficial results are not the only concerns.⁴²⁸ American environmental policy is result-driven, and it behooves those steeped in prevailing governmental and scientific cultures to question those inclinations.

Legal factors are also ethically relevant in appraising the merits of conservation projects beyond the obvious constraint that a program must comply with pertinent law. If standing or other procedural obstacles can be tested, litigation should resolve as many issues as possible before any animals are moved. Animals' fates are suspended during litigation and death may result if a program fails legal tests. Social and political acceptability should follow highly participatory processes of deliberation. The views of locals are most important, because those people experience the greatest impact from predator introduction, and the lives and wellbeing of the introduced animals are in their hands. Because translocations are highly intrusive, alternatives less invasive must be considered and favored if they have a reasonable chance of achieving ecological goals, even if the time frame for success is longer. Arguments that the reintroduced animals will benefit from translocation should be scrutinized carefully because of the tendency of such paternalistic reasoning to rationalize desired results. Exactly who will benefit is also important because interests of animal species and regional populations differ. Similarly, invoking restitution or reparations for past ecological misconduct should be suspect if the means of making amends impose predictable harms on the supposed beneficiaries.

A significant ethical issue is how much uncertainty surrounds a project and the nature of the unknowns. Legal uncertainty is one component of this analysis, and only strong legal prospects support governmental action as interventionist as translocations of predators. Scientific uncertainties are equally important. For example, a Northeastern wolf restoration that risked increased interbreeding of wolves and coyotes may disserve the biodiversity goals of the project. Unknown effects of tampering with the ecology of an area will always be a factor, so careful study and predictive work must precede a restoration. Although "adaptive management" can revise a project and address unanticipated byproducts, planners should not undertake highly invasive restorations relying on future remediation. Environmentalists often favor "precautionary" approaches in situations of significant uncertainty, requiring proponents to meet the burden of demonstrating that a risky endeavor will not create significant harm, and some have applied this approach

⁴²⁸ See, e.g., MINDING ANIMALS, *supra* note 159, at 189 (ability to do something does not mean it should be done); see also *Radical Egalitarian*, *supra* note 14, at 85-87 (benefits to humans not justification for violating rights).

to animal issues.⁴²⁹ Many criticize the cost and benefit approach widely adopted in American law for translating incommensurable values into economic commodities and missing ecological values not measurable in dollars.⁴³⁰ Predator restorations implicate many values, not all of which are easy to compare. For all of these reasons, the default approach should be precautionary.

In summary, some concrete factors that decision-makers can apply to assess the ethics of predator restoration projects include the type and intensity of harms and benefits, the animals and natural components likely to be recipients of benefits or harms, the degree of project necessity based on the types of interests at stake, the availability of suitable and less invasive alternatives, social and economic considerations regionally and nationally, the legal and scientific uncertainties surrounding a project, synergistic and indirect effects, likely effectiveness, and the time frames for predictions. Many of these factors would apply as well to other programs that juxtapose the interest of collectives and individuals, for example, culling prey species in a region, breeding highly endangered animals in captivity, or cleansing oil contaminated birds or animals.

c. Broader Principles for Future Cases

The reader might also seek guidance at a higher level of generality. The philosopher, Paul Taylor, identifies two “rules” that are relevant to wildlife cases. The first Taylor calls “The Rule of Nonmaleficence,” which imposes a “duty not to do harm to any entity in the natural environment that has a good of its own.”⁴³¹ For Taylor, any living individual that pursues the goods of its kind or species, including a plant, is in that category.⁴³² This principle imposes an overarching ethical commitment to avoid harming living individuals.

⁴²⁹ See, e.g., MINDING ANIMALS, *supra* note 159, at 171 (erring “on the side of the animals” when we are not certain about effects on them); *but see* Norton, *supra* note 153, at 220 (precautionary principle overly protective, preferring approach protecting against irreversible harms when costs not unbearable).

⁴³⁰ See, e.g., Norton, *supra* note 153, at 217 (economic analysis treating “environmental value as a collection of commodities” and missing contributions to functioning of systems).

⁴³¹ TAYLOR, *supra* note 154, at 172.

⁴³² *Id.* at 68, 122.

Taylor's second "Rule of Noninterference" is also relevant.⁴³³ This standard binds people to a "general 'hands off' policy," according to Taylor.⁴³⁴ It prohibits actions that impair "the normal activity and healthy development of an animal or plant,"⁴³⁵ and it also forbids capturing and removing animals from "their natural habitats, *no matter how well we might treat them.*"⁴³⁶ Taylor's principles would rule out removals and reintroduction of animals in most cases because of the disruption and risks to living individuals in the place of removal, the target location, and the place left behind.

Taylor also adopts a rule of relevance that I would not recommend. It is "The Rule of Restitutive Justice" that Taylor claims imposes a duty to redress past transgressions toward the environment.⁴³⁷ I have previously expressed skepticism about interventionist projects as suitable reparations or amends.⁴³⁸ Although past human treatment of wolves could not be more horrific, invasive restoration risks victimizing them again, along with other beings, and does not quell the human bent toward pathological control of the environment. Reparation rationales too easily become rationalizations.

Of course, statements of principle at as high levels of generality as Taylor's are often not very useful in resolving particular conflicts on the ground or establishing implementation-ready policies. Despite this pragmatic deficit, however, highly general statements at the level of value and principle can prompt thinking about priorities that can infuse concrete discussions and plans. They can also counteract default positions reflecting conceptual biases. If one accepted Taylor's "no harm" and "hands off" principles literally and absolutely, it would be impossible to justify any conservation measure that favored wholes like species or ecosystems, even when dire environmental conditions favor a systemic approach. Although this would be unfortunate, Taylor's ideals inject appropriate restraint.

⁴³³ *Id.* at 173.

⁴³⁴ *Id.*

⁴³⁵ *Id.*

⁴³⁶ *Id.* at 174 (emphasis in original).

⁴³⁷ *Id.* at 186.

⁴³⁸ *See infra.*

VIII. CLOSING THOUGHTS

I have not described universal formulae for distinguishing justified risks to individual animals from those unwarranted. No neat checklist, but rather a pliable framework and process for ethical consideration, can improve conservation policy. Despite room for progress, holistic values and individual animal welfare do not always coalesce.

The fields of animal and environmental ethics diverged despite the strength they could muster working in unison. This was not primarily because of a political rift or stubborn refusal to communicate, although such foibles surely were involved. We should face the tragic possibility that something could be lost in collaboration, even though dialogue and joint action are vital. No doubt, those committed to animal welfare and rights can learn to appreciate the importance, sometimes paramount, of systems and groups. Certainly, the conservation biologists and environmentalists who care most about species and ecosystems can absorb some rich information rapidly emerging about individual animal emotions, cognition, and altruism. In pursuing their respective paths ethically, each must deliberately don the perspective of the other, as well as the animals' point of view. This paper has urged conservation biologists and government policy-makers to include the individual animal perspective in programs they develop. The animals that compose the populations, species, and systems matter ethically, even to those who pursue vital collective concerns of species and systems.

Individual creatures, with interests, capacities, and rich emotional and social lives should not suffer unnecessarily from even the worthiest and inspiring human endeavors. Predator reintroduction should be ethically compelling, and thus rare. A Northeast wolf reintroduction project does not meet this high ethical standard.