

WALKING SEARCH WARRANTS: CANINE FORENSICS AND POLICE CULTURE AFTER *FLORIDA V. HARRIS*

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An Ohio deputy sheriff recently described his narcotics detection dog as “somewhat of a walking search warrant.”³ This is a practical, if rather presumptuous, distillation of prior Supreme Court rulings on the use of narcotics detection dogs at airports and traffic stops.⁴ *Florida v. Harris*, one of the Court’s two police canine opinions issued in 2013, will reinforce such attitudes in law enforcement as to the use of such dogs in public places.⁵

The use of narcotics detection dogs is usually dated from 1969 when the Los Angeles Police Department began to train its first narcotics detection dog, or from 1970 when a narcotics detection training program was instituted at Lackland Air Force Base in San Antonio.⁶ In 1983, in *U.S. v. Place*, the Supreme Court, in what is still the most important police canine case ever decided by a U.S. court, held that “the particular course of investigation that the agents intended to pursue here—exposure of respondent’s luggage, which was located in a public place, to a trained canine—did not constitute a ‘search’ within the meaning of the Fourth Amendment.”⁷ However, in the particular circumstances of the case, Justice O’Connor found that the “length of the detention of respondent’s luggage alone precludes the conclusion that the seizure

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³ Jessica Heffner, *Champaign Sheriff Adds Drug Dog*, SPRINGFIELD NEWS-SUN, Aug. 21, 2013, available at <http://www.springfieldnews-sun.com/news/news/local/champaign-sheriff-adds-drug-dog/nZYbK/>. The officer was not being particularly clever. In a Georgia case from 1953, a woman asked to see the warrant by which officers were searching her home, to which they replied, “We are walking warrants.” *Goodwin v. Allen*, 89 Ga. App. 188, 191 (1953).

⁴ *United States v. Place*, 462 U.S. 696, 707 (1983) (canine sniff as “sui generis”); *Illinois v. Caballes*, 543 U.S. 405, 406 (2005).

⁵ 133 S. Ct. 1050 (2013). Although the Supreme Court cases analyzed here concern narcotics detection dogs, there is no reason to doubt their relevance to operations involving other types of detection dogs, such as explosives detection dogs that are now common at transportation and other locations where crowds can be found.

⁶ See U.S. ARMY LAND WARFARE LABORATORY, REPORT NO. LWL-CR-60DJ71, TRAINING DOGS FOR NARCOTIC DETECTION—FINAL REPORT (1972), available at <https://www.ncjrs.gov/App/publications/abstract.aspx?ID=41753>; JOHN J. ENSMINGER, POLICE AND MILITARY DOGS, 5, n. 18 (2012).

⁷ *Place*, 462 U.S. at 707.

was reasonable in the absence of probable cause.”⁸ Nevertheless, the case set parameters that told police how and when dogs could be used at airports, and by easy extension, in a number of other environments.

In 2000, the Supreme Court, in another opinion by Justice O’Connor, *Indianapolis v. Edmond*, held that a vehicle checkpoint set up by the City of Indianapolis, Indiana, contravened the Fourth Amendment because its primary purpose was “to uncover evidence of ordinary criminal wrongdoing”⁹ Nevertheless, she stated that “[j]ust as in *Place*, an exterior sniff of an automobile does not require entry into the car and is not designed to disclose any information other than the presence or absence of narcotics.”¹⁰ The Court’s language allowed law enforcement agencies to structure checkpoint programs so as not to contravene the Fourth Amendment.¹¹

In 2005, in *Illinois v. Caballes*, an opinion of Justice Stevens, the Court said that “the use of a well-trained narcotics-detection dog . . . during a lawful traffic stop generally does not implicate privacy interests.”¹² The sniff in question “was performed on the exterior of respondent’s car while he was lawfully seized for a traffic violation. Any intrusion on respondent’s privacy expectations does not rise to the level of a constitutionally cognizable infringement.”¹³ Drug dog sniffs during routine traffic stops became increasingly common and a considerable body of case law centering on vehicle sniffs began to define the grey areas that remained.¹⁴

These cases have encouraged the use of detection dogs, defined procedures of law enforcement agencies across the country, and contained costs associated with producing canine evidence in court.¹⁵ The 2013 Supreme Court cases, *Florida v. Harris* and *Florida v. Jardines*,¹⁶ will also affect law enforcement practices on the use of narcotics detection dogs, though *Harris* will have the broadest effect on police practices because it grounds the inquiry into a dog’s reliability to the training and certification the dog (and, hopefully, handler) has received, while

⁸ *Id.* at 709.

⁹ 531 U.S. 32, 42 (2000).

¹⁰ *Id.* at 40. As will be pointed out at several places in this discussion, courts have not consistently realized that dogs are actually designed to detect the odor of narcotics, not necessarily their presence.

¹¹ ENSMINGER, *supra* note 6, at 162-63 (describing subsequent case law on checkpoint sniffs).

¹² 543 U.S. 405, 409 (2005).

¹³ *Id.*

¹⁴ ENSMINGER, *supra* note 6, at 153-171.

¹⁵ For a good review of the earlier Supreme Court cases, see Ali Mirsaidi, *The Prying Nose: Florida v. Jardines and Warrantless Dog-Sniff Tests on Private Property*, 8 DUKE J. CONST. L. & PUB. POLICY 105 (2013).

¹⁶ 133 S. Ct. 1050 (2013); 133 S. Ct. 1409 (2013).

sidelining the significance of field performance. *Jardines* may limit the use of dogs for front door sniffs, but presumably the same emphasis on training and certification will apply to a judge's decision to issue a warrant for a canine sniff at a home as applies in verifying the reliability of a dog for a vehicle sniff. The discussion here will, therefore, focus largely on *Harris*.

I. TRAFFIC STOP IN LIBERTY COUNTY, FLORIDA

Justice Kagan summarizes the traffic stop in *Harris* as follows:

William Wheatley is a K–9 Officer in the Liberty County, Florida Sheriff's Office. On June 24, 2006, he was on a routine patrol with Aldo, a German shepherd trained to detect certain narcotics (methamphetamine, marijuana, cocaine, heroin, and ecstasy). Wheatley pulled over respondent Clayton Harris's truck because it had an expired license plate. On approaching the driver's-side door, Wheatley saw that Harris was "visibly nervous," unable to sit still, shaking, and breathing rapidly. Wheatley also noticed an open can of beer in the truck's cup holder Wheatley asked Harris for consent to search the truck, but Harris refused. At that point, Wheatley retrieved Aldo from the patrol car and walked him around Harris's truck for a "free air sniff." . . . Aldo alerted at the driver's-side door handle—signaling, through a distinctive set of behaviors, that he smelled drugs there.¹⁷

Wheatley concluded he had probable cause for a search, but the search did not turn up any of the drugs Aldo was trained to detect, though it did reveal "200 loose pseudoephedrine pills, 8,000 matches, a bottle of hydrochloric acid, two containers of anti-freeze, and a coffee filter full of iodine crystals—all ingredients for making methamphetamine."¹⁸ Wheatley arrested Harris who, after a *Miranda* warning, admitted that he routinely cooked methamphetamine and regularly used the drug. Florida charged Harris with possession of pseudoephedrine for use in manufacturing methamphetamine.

¹⁷ 133 S. Ct. at 1053-54.

¹⁸ *Id.* at 1054.

This was not the only encounter between Wheatley and Harris:

While out on bail, Harris had another run-in with Wheatley and Aldo. This time, Wheatley pulled Harris over for a broken brake light. Aldo again sniffed the truck's exterior, and again alerted at the driver's-side door handle. Wheatley once more searched the truck, but on this occasion discovered nothing of interest.¹⁹

Harris moved to suppress on the ground that Aldo's alert had not provided probable cause for the vehicle search.

II. TRAINING OF THE DOG IN *HARRIS*

Justice Kagan describes the training Wheatley and Aldo had received as follows:

In 2004, Wheatley (and a different dog) completed a 160-hour course in narcotics detection offered by the Dothan, Alabama Police Department, while Aldo (and a different handler) completed a similar, 120-hour course given by the Apopka, Florida Police Department. That same year, Aldo received a one-year certification from Drug Beat, a private company that specializes in testing and certifying K-9 dogs. Wheatley and Aldo teamed up in 2005 and went through another 40-hour refresher course in Dothan together. They also did four hours of training exercises each week to maintain their skills. Wheatley would hide drugs in certain vehicles or buildings while leaving others "blank" to determine whether Aldo alerted at the right places According to Wheatley, Aldo's performance in those exercises was "really good." ... The State introduced "Monthly Canine Detection Training Logs" consistent with that testimony: They showed that Aldo always found hidden drugs and that he performed "satisfactorily" (the higher of two possible assessments) on each day of training²⁰

¹⁹ *Id.*

²⁰ *Id.*

On cross-examination, Wheatley conceded that Aldo's certification had expired the year before the traffic stop, but he noted that certification was not required under Florida law.²¹ He also acknowledged that he only maintained field records of alerts resulting in arrests.²² In explaining why Aldo had alerted when no drugs he had been trained to detect were present, Wheatley said that Harris had probably transferred the odor of methamphetamine to the car door handle.

III. PROBABLE CAUSE FINDINGS OF FLORIDA COURTS IN *HARRIS*

The trial court concluded that Wheatley had probable cause to search Harris's truck and denied the motion to suppress. A Florida appellate court affirmed, but the Florida Supreme Court reversed, holding that Wheatley lacked probable cause for the search. The Florida Supreme Court stated that "when a dog alerts, the fact that the dog has been trained and certified is simply not enough to establish probable cause to search the interior of the vehicle and the person."²³ That court stated:

To demonstrate that an officer has a reasonable basis for believing that an alert by a drug-detection dog is sufficiently reliable to provide probable cause to search, the State must present evidence of the dog's training and certification records, an explanation of the meaning of the particular training and certification, field performance records (including any unverified alerts), and evidence concerning the experience and training of the officer handling the dog, as well as any other objective evidence known to the officer about the dog's reliability. The trial court must then assess the reliability of the dog's alert as a basis for probable cause to search the vehicle based on a totality of the circumstances.²⁴

²¹ Single-purpose narcotics detection dogs are not required to hold a certification in Florida, though dual purpose dogs, such as those trained both in suspect apprehension and drug detection, are required to have a current Florida Department of Law Enforcement Certification, as noted by the Florida Supreme Court in its decision in *Harris v. State*, 71 So. 3d 756, 760 (Fla. 2011).

²² *Id.* at 761. As will be discussed below, only recording productive alerts is sometimes a matter of policy.

²³ *Id.* at 767. Search of the person was not discussed by the Supreme Court in either *Harris* or *Jardines*, other than in quotations of the Fourth Amendment.

²⁴ *Id.* at 775.

The Florida Supreme Court also found that “[i]f an officer fails to keep records of his or her dog’s performance in the field, the officer is lacking knowledge important to his or her belief that the dog is a reliable indicator of drugs.”²⁵ Justice Kagan believes, to the contrary, that “[e]rrors may abound in such records,” and she finds them of little use.²⁶ Even in the opening paragraph of her opinion, she states that, in determining whether the alert of a drug-detection dog during a traffic stop provided probable cause to search the vehicle, the Florida Supreme Court had effectively held that “the State must in every case present an exhaustive set of records, including a log of the dog’s performance in the field, to establish the dog’s reliability.”²⁷ Writing for a unanimous Supreme Court, the Justice describes the Florida Supreme Court’s approach as “inconsistent with the ‘flexible, common-sense standard’ of probable cause,” quoting *Illinois v. Gates*.²⁸

IV. PROBABLE CAUSE DISCUSSION IN SUPREME COURT OPINION IN *HARRIS*

Justice Kagan reviews Supreme Court case law regarding probable cause, quoting *Maryland v. Pringle*, for clarifying that “[t]he test for probable cause is not reducible to ‘precise definition or quantification.’”²⁹ Under *Illinois v. Gates*, “[f]inely tuned standards such as proof beyond a reasonable doubt or by a preponderance of the evidence ... have no place in the [probable-cause] decision.”³⁰ All that the Supreme Court has required, according to Justice Kagan, quoting *Gates*, “is the kind of ‘fair probability’ on which ‘reasonable and prudent [people], not legal technicians, act.’”³¹ This can be determined by a “common-sensical” review of “the totality of the circumstances.”³² The Justice criticizes the Florida Supreme Court for failing to apply the U.S. Supreme Court’s “fluid concept” of probable cause, which, as stated in *Gates*, could not be “readily, or even usefully, reduced to a neat set of legal rules.”³³

²⁵ *Id.* at 772-73.

²⁶ *Harris*, 133 S. Ct. at 1056.

²⁷ *Id.* at 1053.

²⁸ *Id.* at 1053 (quoting *Illinois v. Gates*, 462 U.S. 213, 239 (1983)).

²⁹ *Id.* at 1055 (quoting *Maryland v. Pringle*, 540 U.S. 366, 371 (2003)).

³⁰ 462 U.S. 213, 235 (1983).

³¹ *Harris*, 133 S. Ct. at 1055 (quoting *Illinois v. Gates*, 462 U.S. 213, 235 (1983)).

³² *Id.* It is to be noted that “the totality of the circumstances” is not as total as might be possible, given that field records are being sidelined in any inquiry. Kinsports correctly notes that the either-training-or-certification approach taken by the Court in *Harris* “resembles the bright-line rules the Court’s probable cause jurisprudence has recently avoided.” Kit Kinsports, *The Dogs Days of Fourth Amendment Jurisprudence*, 108 Nw. U. L. REV. 64, 65 (2013).

³³ *Id.* at 1056-57 (quoting *Illinois v. Gates*, 462 U.S. 213, 232 (1983)).

To assess the reliability of a drug-detection dog, the court created a strict evidentiary checklist, whose every item the State must tick off. Most prominently, an alert cannot establish probable cause under the Florida court's decision unless the State introduces comprehensive documentation of the dog's prior "hits" and "misses" in the field. (One wonders how the court would apply its test to a rookie dog.) No matter how much other proof the State offers of the dog's reliability, the absent field performance records will preclude a finding of probable cause. That is the antithesis of a totality-of-the-circumstances analysis.³⁴

Of course the parenthetical question about rookie dogs raises a practical issue,³⁵ but presumably the absence of field records because there has been no field activity is not the same as an absence of field records because none are being kept or retained. Justice Kagan continues:

Making matters worse, the decision below treats records of a dog's field performance as the gold standard in evidence, when in most cases they have relatively limited import. Errors may abound in such records. If a dog on patrol fails to alert to a car containing drugs, the mistake usually will go undetected because the officer will not initiate a search. Field data thus may not capture a dog's false negatives. Conversely (and more relevant here), if the dog alerts to a car in which the officer finds no narcotics, the dog may not have made a mistake at all. The dog may have detected substances that were too well hidden or present in quantities too small for the officer to locate. Or the dog may have smelled the residual odor of drugs previously in the vehicle or on the driver's person. Field data thus may markedly overstate a dog's real false positives.³⁶

Thus, defense counsel wanting to show that field records have anything more than "relatively limited import" will have overcome this bias against their value.

³⁴ *Id.* at 1056 (footnote omitted).

³⁵ A trainer appearing as a defense expert in an Iowa case, *U.S. v. Poole*, No. CR13-3003-MWB, 2013 WL 1694776, at *5 (N.D. Iowa April 18, 2013), according to the opinion, testified that he did "not believe experienced dogs are necessarily better at detecting than 'rookie' dogs, so long as the dogs are given regular maintenance training." The federal district court noted that this expert's certification had expired in 1996.

³⁶ *Harris*, 133 S. Ct. at 1056-57 (footnote omitted).

V. FIELD RECORDS AFTER *HARRIS*

Justice Kagan accepts that “evidence of the dog’s (or handler’s) history in the field, although susceptible to the kind of misinterpretation we have discussed, may sometimes be relevant”³⁷ Apparently not all prior case law assigning value to field records need be discarded. Thus, the Supreme Court opinion should not be seen by law enforcement as an excuse not to maintain complete records of a dog’s field performance.³⁸ There are many uses of such records. For instance, field records, as well as videos of stops and arrests, may indicate differences in the way a handler deploys a dog from those methods that have been taught or recommended during training.³⁹ Collected over a period, such records can show how often and in what circumstances an officer deploys his dog, how frequently the deployment produces narcotics and how frequently the deployment is fruitless, which can be important as a benchmark against overall department success and failure rates.⁴⁰ A relative change in success rates can indicate that a dog’s performance is falling off. This can sometimes be due to age, physiological problems, medications, changes in work locations and assignments,⁴¹ reduced

³⁷ *Id.* at 1057.

³⁸ Retired Supreme Court Justice Souter, sitting by designation in the First Circuit in a 2012 case, noted that police can attach “a readily available resumé of general certification standards and particular performance statistics, dog by dog, . . . to a warrant application on a moment’s notice.” *U.S. v. Grupee*, 682 F.3d 143 (1st Cir. 2012). Justice Souter’s remark in his dissent in *Caballes* should be kept in mind: “The infallible dog . . . is a creature of legal fiction.” 543 U.S. 405, 411 (2005).

³⁹ See *U.S. v. Poole*, No. CR13-3003-MWB, 2013 WL 1694776, at *8 (N.D. Iowa April 18, 2013) (expert noted there is no uniform deployment method or search pattern, but considered that multiple passes around a car were inappropriate).

⁴⁰ Taslitz appropriately notes: “Any concept of reasonable suspicion or probable cause that tolerates massive false negative rates—frequent invasions of privacy, property, and locomotive rights that ensnare the apparently innocent—is a flawed conception.” Andrew Taslitz, *Police Are People Too: Cognitive Obstacles to, and Opportunities for, Police Getting the Individualized Suspicion Judgment Right*, 8 OHIO ST. J. OF CRIM. L. 7, 10 (2010).

⁴¹ See David L. Sinn, et al., *Personality and Performance in Military Working Dogs: Reliability and Predictive Validity of Behavioral Tests*, 127 APPLIED ANIMAL BEHAV. SCI. 51, 62-65 (2010), noting:

Most, if not all, behavioral traits are at least somewhat sensitive to environmental changes, and understanding environmental conditions that influence behavioral change is essential for designing housing and training conditions that maximize and reinforce appropriate working dog behavior.

Id. at 62.

practice and training times, improper rewarding, or other reasons that can be investigated and resolved. Success rates are also important for departments to determine whether drug dog programs are cost-effective, though a one-time forfeiture of a large amount of currency can skew such calculations.

Behavior of a dog in the field that is unrelated to its primary function can also be recorded in field records. A highly decorated police dog in a canine unit was recently the source of significant liability (about \$1.5 million) for the City of Hayward. The dog had three prior instances of attacking bystanders before it attacked an 89-year-old man in his back yard during a search for the robber of a restaurant several blocks away. The man died from complications from the wounds. Even though a police dog trainer was handling the dog, the dog's record of attacking bystanders seems to have been ignored by the handler as well as officers with supervisory authority over the canine unit.⁴² The dog was used for suspect apprehension, tracking, and narcotics detection, a range of responsibilities that some trainers would regard as too broad for a police canine team and likely to introduce poor performance in at least some of the responsibilities.⁴³

Field records may also uncover biases of officers.⁴⁴ Justice Hobbs, dissenting in a case before the Colorado Supreme Court, quoted from an analysis by the *Chicago Tribune* of alerts by drug sniffing dogs and racial profiling. The analysis of police department data in Illinois found that only 44% of alerts by drug-sniffing dogs led to the discovery of drugs or paraphernalia, but for Hispanic drivers, the success rate was 27%.⁴⁵ Quoting from the newspaper analysis, the Justice stated:

⁴² McKay v. Hayward, 949 F. Supp. 2d 971, 975-78 (N.D. Cal. 2013).

⁴³ References to Nicky's awards can be found on the facebook.com page of Friends of the Hayward PD K-9 Unit. . A posting for October 23, 2012 states that Nicky received an award as "the topic narcotic dog for 2012" from the Western States Police Canine Association. FRIENDS OF THE HAYWARD PD K-9 UNIT, (Oct. 23, 2013), <https://www.facebook.com/photo.php?fbid=487436434620148&set=a.223802084316919.61731.202599003103894&type=1&theater>.

⁴⁴ The supervisor of a canine unit or a person in a canine unit should also be concerned with how an officer working with a dog explains the dog's failures or misbehavior. See Clinton R. Sanders, "The Dog You Deserve:" *Ambivalence in the K-9 Officer/Patrol Dog Relationship*, 35(2) J. CONTEMP. ETHNOGRAPHY 148-172 (2006).

⁴⁵ D. Hinkel & J. Mahr, *Tribune Analysis: Drug-Sniffing Dogs in Traffic Stops often Wrong*, CHI. TRIB, Jan. 6, 2011, available at http://articles.chicagotribune.com/2011-01-06/news/ct-met-canine-officers-20110105_1_drug-sniffing-dogs-alex-rothacker-drug-dog. The analysis did not discuss whether this disparity might have been due to a high use of "dragnet-style sweeps" involving Hispanic areas. See *Florida v. Bostick*, 501 U.S. 429, 450 (1991).

This [excessive alert percentage] may be because “[l]eading a dog around a car too many times or spending too long examining a vehicle, for example, can cause a dog to give a signal for drugs where there are none.” False positives may also arise because “police agencies are inconsistent about the level of training they require and few states mandate training or certification.” So when police use a dog to sniff-search a vehicle, they introduce a likelihood that they will conduct a full search of the vehicle and its occupants without knowing that drugs are present, and without having reasonable suspicion in the first place.⁴⁶

Of course the argument could be made that residual odor is substantially more common with Hispanic drivers, but a more rational explanation would be simple racism.⁴⁷

Field records are important in developing future training plans for a dog. A dog’s alert to one part of a vehicle, say a front wheel, when drugs are actually found in the trunk, may raise questions about whether the dog is only alerting within certain thresholds of target odor. A dog trained to alert to a specific set of drugs that nevertheless seems to alert to other drugs may be picking up residual odors, but may have also begun to detect odors of component chemicals or drugs frequently associated with those on which it is trained. Knowing this can be useful in developing specific training for the dog and handler.

A recent case from the Seventh Circuit, *U.S. v. Funds in the amount of \$100,120*,⁴⁸ concerned a forfeiture action involving currency found in a briefcase at a train station in Chicago. The circuit court reviewed training and certification issues regarding the dog in the light of *Harris*, which will be discussed below. In addition, the court reviewed the scientific debate as to whether a dog’s alert to currency, generally assumed to be to a methyl benzoate, a byproduct of cocaine contacting moisture, actually establishes a connection to the drug trade. The currency involved had been deposited in an account and was no longer available for testing, but recent research has included statistics

⁴⁶ State v. Esparza, 272 P.3d 367, 372 (Colo. 2012) (en banc) (Hobbs, J., dissenting).

⁴⁷ Kenneth J. Novak, *Disparity and Racial Profiling in Traffic Enforcement*, 7 POLICE Q. 65 (2004) (finding that Hispanic residents composed 20.2% of residential population but 28.5% of vehicle stops). In *Florida v. Jardines*, 133 S. Ct. 1409, 1416 (2013) the Court said that “the defendant will not be heard to complain that although he was speeding the officer’s real reason for the stop was racial harassment.” This should not, however, preclude an inquiry into whether statistics regarding alerts might indicate the presence of cueing.

⁴⁸ U.S. v. Funds in the amount of \$100,120, 730 F.3d 711, 713 (7th Cir. 2013).

on cocaine residues that suggest that probabilities of connection to the drug trade can be determined from drug residues on the currency itself.⁴⁹ Thus, a dog's alert to currency found to have higher-than-usual residue levels can indicate that the high residue levels come from recent handling. The two pieces of evidence could be crucial in convicting someone who held the currency within the previous two days.

VI. A PROSECUTOR DISCOURAGES MAINTAINING CERTAIN DETAILS IN FIELD RECORDS

An Ohio prosecutor recently included a discussion of field records in a training seminar for police canine handlers, noting that there is disagreement as to what type of information should be included in these records. The prosecutor stated that though they might be useful to a law enforcement agency or the canine handler, they could also become ammunition for "an overzealous defense bar." The prosecutor's advice was:

Real-world performance records, *if created at all*, should be maintained according to their lasting value. Those records, which document that the team correctly detected target odors, *should be maintained until the next date of formal certification and accreditation* because they are probative of the team's ability to reliably detect target odors. Those records that serve merely to document "unknown responses" should be *kept only until such time that ongoing training is conducted to identify or dispel any perceived problems*, and if identified, to correct them accordingly.⁵⁰

The authors believe that complete field records, including "unknown responses," should be maintained for the working life of the dog, and probably the handler if he or she is assigned to another dog upon the death or retirement of the dog concerned. All alerts declared by a handler should be recorded, since the dog may not be at fault for certain types of errors. If the handler was briefed prior to the use of the dog, this should also be indicated as the information given might have been inaccurate or may have created a bias, whether intentional or not.

⁴⁹ Thomas H. Jourdan et al., *The Quantification of Cocaine on U.S. Currency: Survey and Significance of the Levels of Contamination*, 58(3) J. OF FORENSIC SCI. 616-624 (2013).

⁵⁰ Thomas A. Matuszak, Ohio Canine-Handler Seminar: Courtroom Prep 21 (April 16, 2013) (unpublished comment) (on file with the Michigan State University College of Law Journal of Animal and Natural Resources Law) (emphasis added).

A defendant should still be able to obtain field records in discovery because, as Justice Kagan says, they “may sometimes be relevant” The defense should have the opportunity to challenge “the reliability of the dog overall or of a particular alert.”⁵¹ The problem may be that while the Florida Supreme Court’s approach forced police to keep records that they should have in any case, the U.S. Supreme Court’s holding puts a premium on minimalizing the recordkeeping function of a canine unit, as the Ohio prosecutor was quick to realize.

It is to be noted that an increasing number of departments have systems allowing officers to input canine-specific records electronically. These systems may allow officers to log in various canine-related activities and information, including care and veterinarian records, inventories of target odors, training sessions, deployments, field notes, certifications, etc. These records may be added to or corrected after the fact,⁵² and could be a means of sanitizing records after questions arise concerning a particular deployment. Computer forensics might be necessary to identify input criteria and when (and where) a handler, perhaps using a smartphone app, has modified records.

VII. COURTS DECLINING TO REQUIRE PRODUCTION OF FIELD RECORDS

Several courts have already stated that field records do not have to be produced in discovery. In a vehicle sniff in Maine, the federal district court for the state ruled on a motion for discovery where the defendant sought production of records concerning the handler’s previous drug dog and “all records, reports, and videos generated in other criminal investigations in which Aros [the drug dog in the case

⁵¹ *Harris*, 133 S. Ct. at 1058; THE SCIENTIFIC WORKING GROUP ON DOG AND ORTHOGONAL DETECTOR GUIDELINES (SWGDOG), SWGDOG SC 6: PRESENTATION OF EVIDENCE IN COURT, ¶ 2.1.2, *available at* http://swgdog.fiu.edu/approved-guidelines/sc6_presentation_of_evidence.pdf (reliability is to be in part established by presentation of a “canine team’s relevant deployment results (affidavit or testimony protocols).”); SWGDOG, SWGDOG SC 8: SUBSTANCE DETECTOR DOGS, ¶¶ 6.4-6.5, *available at* <http://swgdog.fiu.edu/approved-guidelines/> (stating that “[c]onfirmed operational outcomes may be used to determine capability,” though “[u]nconfirmed operational outcomes shall not be used to determine capability in that they do not correctly evaluate a canine team’s proficiency.”)

⁵² One product, KANINE 5.0, states: “With just a couple of clicks, you can mark the current date and time, the current weather, username, K-9 name and record type. . . Later, when you have time, simply finish the record that KANINE has started for you.” *KANINE 5.0 Screen Shots*, CODE BLUE DESIGNS, <http://www.codebluedesigns.com/K9ScreenShots.htm> (last visited Feb. 4, 2014). This product specifies, however, that supervisor accounts can view data but “cannot actually enter records or modify data.” *Id.*

before the court] had been involved.”⁵³ The court noted that a defense witness had previously been able to argue that a dog was inadequately trained “based on information no more extensive than that which has already been made available in this case.”⁵⁴ Thus, the training and certification records already produced were all that was needed to establish reliability. The court also cited *U.S. v. Salgado*,⁵⁵ as “applying *Harris* to deny defendant access to ‘real-world-records’ of a drug detection dog.”⁵⁶

In *Salgado*, the federal district court for South Dakota noted that the Supreme Court had, in *Harris*, suggested several ways of contesting a drug-dog search, including “contesting the adequacy of the training program, questioning the dog’s performance during the relevant stop, and cross-examining the handler about the history of the dog.”⁵⁷ The district court said that notably absent “is any requirement, or suggestion, that a defendant have access to the real-world records of a drug-detection dog.”⁵⁸ The court also said that under “the totality of the circumstances test set forth in *Harris*, ... defense counsel is not necessarily entitled to such records.”⁵⁹

Apparently in some courts defense counsel will have to make a specific argument with regard to the need for field records to obtain access to them. Although it could be important for defense counsel to find information about a dog whose alerts are particularly unproductive relative to other dogs in a department, it appears that making much from such an argument will be difficult after *Harris*.⁶⁰

⁵³ *United States v. White*, No. 2:13-cr-48-DBH, 2013 WL 5754948, at *1 (D. Me. Oct. 22, 2013).

⁵⁴ *Id.* at *3.

⁵⁵ *United States v. Salgado*, No. CR 12-30088-OL-02-RAL, 2013 U.S. Dist. LEXIS 48696 (D.S.D. Apr. 1, 2013).

⁵⁶ *White*, 2013 WL 5754948, at *3.

⁵⁷ *Salgado*, 2013 U.S. Dist. LEXIS 48696, at *22.

⁵⁸ *Id.* at *22-23.

⁵⁹ *Id.* at *24.

⁶⁰ Even before *Harris*, reliability could be found despite fairly low success rates. In *United States v. Ludwig*, 641 F.3d 1243, 1252 (10th Cir. 2011), a 58% success rate was enough to establish a drug dog’s reliability for purposes of probable cause. The Tenth Circuit said that the dog’s records, introduced by the defendant did not mean that the court had to “mount a full-scale statistical inquisition into each dog’s history. Instead, courts typically rely on the dog’s certification as proof of its reliability.” *Id.* at 1251.

VIII. TRAINING AND CERTIFICATION PROGRAMS AFTER *HARRIS*

Justice Kagan finds a dog's performance in training and certification settings more useful than records from the field:

There, the designers of an assessment know where drugs are hidden and where they are not—and so where a dog should alert and where he should not. The better measure of a dog's reliability thus comes away from the field, in *controlled* testing environments.⁶¹

Although in the best of all possible worlds this may be true, it assumes that these “environments” are being administered in scientifically neutral ways where all participants are on equal footing and all variables are identical for all participants. It should be noted that there are actually separate types of testing environments for training and certification, and the distinction is important to understand what is “controlled.”

Training is not designed primarily to pass the team, but rather to improve the team. The goal of training in the earlier stages is to establish repetitive positive scenarios that build a solid proficiency, with the dog being provided frequent success. For the experienced team, however, training introduces scenarios with a high probability of failure. The dog and the handler are presented with ever more complex scenarios, requiring an ever-higher degree of proficiency, in the end producing a high operational capability. The need to produce a positive outcome means that training, by its nature, does not generate information contradictory to the team's ultimate purpose, leaving little information that defense counsel can use to question the dog's reliability. In the training scenario, officers either know of hide locations or may be advised of hide locations so that the handler may handle the dog to achieve the positive end result needed for the dog to learn.⁶²

Hide placements are made at the beginning of a program, after which some period of “soak time” is allowed for odor to disperse. After soak time of an hour, dogs are run consecutively, meaning there is additional soak time for each team in the sequence. Additionally, each successive dog may leave behind scents by stopping, alerting, and even licking the area. Other advantages to some teams may come from certain officers being aware of the location of odor placements, or being allowed additional physical distance between a dog's alert and the odor

⁶¹ Florida v. Harris, 133 S. Ct. 1050, 1057 (2013) (emphasis added).

⁶² SWGDOG, SWGDOG SC8: SUBSTANCE DETECTOR DOGS, NARCOTICS SECTION, ¶ 6.2, *available at* http://swgdog.fiu.edu/approved-guidelines/sc8_narcotics.pdf (Justice Kagan cites that “[t]raining records do not necessarily reflect reliability of the team.”).

location. In a typical training day of eight hours, each dog is likely to only run four or five trials for a few minutes of “nose time” on each run. Training is often supposed to end with a positive outcome to encourage the dog. Once the dog misses, the handler will redirect it to the odor, who has been instructed where the “hide” is, in order to achieve a positive outcome. It is only on rare occasion that the handler is actually tested and scored with unknown placements.

Events involving *certification* often come at the end of a week of training seminars and other activities, and may involve a cumulative accounting where scores from essentially positive training days are added to a cumulative score that results in the award of a certification. More common are single-day events where certification depends on a score achieved in a series of scenarios presented to each team. The actual time involved may be as short as 20 minutes or as long as several hours. Some certifiers will see deficiencies but will accept promises from handlers to address necessary issues, as to which there may be little follow-up.

In sum, Justice Kagan’s statement concerning “the better measure of reliability” rather ignores the “thin blue line” and “good ole boy” aspects of training, testing, and certification events. The opinion states that “evidence of a dog’s satisfactory performance in a certification or training program can itself provide sufficient reason to trust his alert.”⁶³ Justice Kagan appears to accept that either training *or* certification is adequate for probable-cause purposes:

If a bona fide organization has certified a dog after testing his reliability in a controlled setting, a court can presume (subject to any conflicting evidence offered) that the dog’s alert provides probable cause to search. The same is true, even in the absence of formal certification, if the dog has recently and successfully completed a training program that evaluated his proficiency in locating drugs.⁶⁴

The Supreme Court of Arkansas, considering the reliability of a dog in light of *Harris*, paraphrased Justice Kagan’s ruling as follows:

⁶³ *Harris*, 133 S. Ct. at 1057. Training records may be more important than the testimony of the handler or even a trainer regarding a dog’s training and defense counsel should review such records critically. In *U.S. v. Poole*, No. CR13-3003-MWB, 2013 WL 1694776, at *7 (N.D. Iowa Apr. 18, 2013), a trainer testified that the handler and dog’s success rate as a team during testing was one hundred percent, but also said that Bandit had always found hidden narcotics with the exception of one instance when he missed a heroin hide. Did this mean that Bandit was not with his usual handler at the time, which would explain why this failure did not lower the one hundred percent?

⁶⁴ *Harris*, 133 S. Ct. at 1057.

[T]he State's threshold burden is to establish *either* that a bona fide organization certified the K-9 after testing the dog in a controlled setting or that the dog recently and successfully completed a training program that evaluated his proficiency in locating drugs. If the State fails on both of these inquiries, then no probable cause based on the canine sniff can normally exist because the officer could not have reasonably relied on the dog's alert.⁶⁵

A concurrence in this Arkansas case said that the defense could argue that the handler "was not properly trained to correctly interpret the dog's actions."⁶⁶ The concurrence noted that the handler's account may be "belied by video, audio, internal inconsistency, or other credible testimony." The significance of dash cam videos at traffic stops will be discussed below. The mention of "audio" is important. Ideally, technology will create both a visual and auditory record. The conversation that takes place can explain a great deal about what is going on in an encounter.

The Eleventh Circuit, in an opinion issued in February 2014, rejected a defense argument that *Harris* requires that a trial court verify that a dog's training and certification organizations are bona fide and that the training program "utilized double-blind precautions to prevent the certification of canines that respond to a handler's cues as opposed to the odor of narcotics alone."⁶⁷ The circuit court held that this read too much into *Harris*, saying that imposing a categorical requirement on a certified organization "would contradict the flexible and commonsense totality-of-the-circumstances inquiry *Harris* demands." The fact that the dog in question had "recently and successfully completed a training program" was sufficient to obviate any need to establish that the training program was offered by a bona fide organization.

Justice Kagan seems to believe that good training and certification programs are almost inevitable:

[L]aw enforcement units have their own strong incentive to use effective training and certification programs, because only accurate drug-detection dogs enable officers to locate contraband without incurring unnecessary risks or wasting limited time and resources.⁶⁸

⁶⁵ Jackson v. State, No. CR 12-859, 2013 WL 2112172, at *31 (Ark. 2013) (Jones, J., concurring) (emphasis added).

⁶⁶ *Id.*; See also Robert A. Bird, *An Examination of the Training and Reliability of the Narcotics Detection Dog*, 85 Ky. L. J. 405, 422 (1997) (noting that "courts frequently neglect examination of the dog's handler.") For additional discussion, see ENSMINGER, *supra* note 6, at 28-30.

⁶⁷ United States v. Trejo, 2014 WL 572341 (11th Cir. 2014).

⁶⁸ *Harris*, 133 S. Ct. at 1057.

What this overlooks is that there are also reasons why training and certification programs can be deficient. The Scientific Working Group on Dog and Orthogonal Detector Guidelines (SWGDOG), cited by Justice Kagan in a footnote, recommends a 90% positive alert rate, yet some programs certify with lower scores.⁶⁹ Many units are created because officers in a department want to use a dog and work to help the department acquire one. Once the canine unit is created, the department may not know how to supervise it, and may not make the effort to find the best way to do so. Where a canine unit already exists, working in it is often a prized assignment. Officers in such units are generally allowed time for training, which can be a significant part of the workweek. Although highly desirable, training work is generally not dangerous and, for anyone who likes dogs, rather fun. Dogs provide additional security to those with whom they work, making their presence in the field a safety factor. Members of training groups and certifying organizations become very friendly and know that reporting poor test results may cause an officer to lose a position in a canine unit or, where success has been marginal, disbanding the unit altogether. Although many testers and trainers will not be influenced by such considerations, the authors respectfully argue that many are.

SWGDOG has recognized the lack of uniformity in certification programs:

The reliability of detector dog teams often comes into question in courts of law and in the mass media. This is due to limited peer reviewed research on error rates and a lack of common best practices for the certification and maintenance of detection teams [T]he unique operational complexities of the dog handler team and the limited amount of reliable scientific information makes the implementation of highly reliable and efficient detection teams less straightforward than with analytical instruments. The overall evaluation of detector dog teams includes behavioral factors such as type and duration of searches, alertness of the team, responsiveness of the dog to the handler and the handler's ability to interpret the dog's behavior.⁷⁰

⁶⁹ SWGDOG, SWGDOG SC 2: GENERAL GUIDELINES, ¶ 3.1.3, *available at* http://swgdog.fiu.edu/approved-guidelines/sc2_general_guidelines.pdf.

⁷⁰ KENNETH FURTON, ET AL., DOCUMENT No. 231952, SWGDOG 7 (2010) *available at* <https://www.ncjrs.gov/pdffiles1/nij/grants/231952.pdf>.

In 2011, the Tenth Circuit said that a court could assess “the reliability of the credentialing organization,” and should be able to demonstrate that the credentialing organization is a sham.⁷¹ This means that the defense should investigate the practices of credentialing organizations, such as handlers receiving multiple certifications from different organizations based on a test given by only one examiner on one day. Also, some dogs may be certified over and over again by the same tester. The relationships of the officer being tested to the testers, either professional or otherwise, should be explored.

To an extent, Justice Kagan recognizes such risks:

The defendant... may contest the adequacy of a certification or training program, perhaps asserting that its standards are too lax or its methods faulty. So too, the defendant may examine how the dog (or handler) performed in the assessments made in those settings.⁷²

This assumes training and certification programs have intelligible and comprehensive recordkeeping practices and that the actual operation will be transparent underneath the operations manuals and descriptive literature, which may be most of what is available in discovery.⁷³ There may even be resistance to the use of videotapes at training and certification events. Justice Kagan’s opinion has more to say about this in a concluding paragraph:

Harris ... declined to challenge in the trial court any aspect of Aldo’s training To be sure, Harris’s briefs in this Court raise questions about that training’s adequacy—for example, whether the programs simulated sufficiently diverse environments and whether they used enough blind testing (in which the handler does not know the location of drugs and so cannot cue the dog) Similarly, Harris here queries just how well Aldo performed in controlled testing .. But Harris never voiced those doubts in the trial court, and cannot do so for the first time here.⁷⁴

⁷¹ *United States v. Kitchell*, 653 F.3d 1206, 1224 (10th Cir. 2011) (quoting *U.S. v. Ludwig*, 641 F.3d 1243, 1252 (10th Cir. 2011)).

⁷² *Harris*, 133 S. Ct. at 1057.

⁷³ In *U.S. v. Poole*, No. CR13-3003-MWB, 2013 WL 1694776, at *14 & n.9 (N.D. Iowa, Apr. 18, 2013), both defense and prosecution canine experts “indicated there are no uniform standards or tests a dog and its handler must complete to become ‘certified’ in narcotics detection.”

⁷⁴ *Harris*, 133 S. Ct. at 1058. . In *United States v. Ludwig*, 641 F.3d 1243, 1253 (10th Cir. 2011), an expert testified that the California Narcotic Canine Association, which certified the handler and dog in that case, “uses tests specifically designed to reveal whether a dog unconsciously cues to his handler rather than drugs.”

This certainly means that the defense must attempt to investigate the quality of the training and certification systems being used, even if that was not done in *Harris*.⁷⁵ The problem will be for defense counsel to get past the façade of a system that has many reasons to help officers keep their jobs and salaries.

IX. WHAT QUALIFIES AS PROOF FROM CONTROLLED SETTINGS?

Justice Kagan states that if “the State has produced *proof from controlled settings* that a dog performs reliably in detecting drugs, and the defendant has not contested that showing, then the court should find probable cause.”⁷⁶ Training records are not the sort of “proof from controlled settings” that would ever satisfy a forensics or scientific inquiry into a dog’s abilities. Thus, the Justice’s language accepts that many training and certification programs are controlled settings, regardless of the absence of national or even generally accepted standards for either, and regardless of the frequent lack of transparency. Indeed, such environments often involve practices that scientific and forensic researchers regard as woefully lacking in adequate controls, and often the only control involved is that outside observers are prohibited from attending, much less filming, training or certification events.

Trainers may permit practices, such as pointing, intended to get a dog to sniff in a certain area, despite research indicating that gestures and verbal encouragement may become commands for the dog to alert.⁷⁷

⁷⁵ With regard to a sniff of a line of packages at a hotel, a Florida appellate court stated:

Although [the Supreme Court’s opinion in *Harris*] allows for evidence of a dog’s certification or training to presumptively establish probable cause, we believe that it is preferable to provide additional information as to the identity of the organization that certified the K-9, the dates of that certification, and additional subsequent training.

Florida v. Grue, No. 5D12-4812, 2013 WL 6331582, at *2 (Fla. Dist. Ct. App. Oct. 11, 2013). An indigent defendant may have problems getting a court to provide the necessary assistance to obtain an expert to challenge a dog’s reliability. Rivers v. Texas, No. 03-11-00536-CR, 2013 WL 1787179, at *3 (Tex.App. Apr. 19, 2013).

⁷⁶ *Harris*, 133 S. Ct. at 1058 (emphasis added).

⁷⁷ See Bird, *supra* note 66, at n. 134 (“voice or physical signals can compromise a dog’s objectivity and impermissibly lead the dog to alert at the suspected item or person”). For a scientific perspective see V. Szetei et al., *When Dogs Seem to Lose Their Nose: An Investigation on the Use of Visual and Olfactory Cues in Communicative Context Between Dog and Owner*. 83(2) APPLIED ANIMAL BEHAV. SCI. 141-152 (2003).

If the same individual placed the drugs at a number of locations on a training day, the dog may soon be tracking the scent of the person who placed the drugs, or dogs that have previously covered the course.⁷⁸ In a 2010 case from the federal district of Kansas, a handler testifying as a defense expert criticized the records of the dog in the case “for not indicating when the handler knew the location of the target odor and when he did not, so as to evaluate when ‘cues’ may have been given”⁷⁹ The district court nevertheless concluded that the dog had given valid alerts both outside and inside the vehicle.⁸⁰

Although “a very low percentage of false positives is not necessarily fatal to a finding that a drug detection dog is properly trained and certified,”⁸¹ it has been noted that “[t]his analysis would change, it would seem, if the challenged drug dog made several false positive alerts during the training and certification process, that is, where a *controlled setting* obviates the residual odor argument.”⁸² In fact, the authors would note that training environments have a considerable amount of target odor due to material being placed for training purposes.

A Seventh Circuit case previously cited regarding field records, *U.S. v. Funds in the amount of \$100,120*,⁸³ involved a dog’s alerting to currency and the government’s institution of a forfeiture action. A defense expert who had formerly been a trainer interpreted the training records in question as indicating that a dog had once alerted to uncontaminated currency. The circuit court said that in *Harris*, the “Supreme Court specifically envisioned attacks on the drug dog’s training,” and noted that “[i]f Deny did alert to untainted currency during one of the three times he was tested, then that fact . . . could cause a trier of fact to doubt Deny’s reliability.”⁸⁴ Another defense expert, a forensic scientist, said that the failure to train under double-blind testing conditions could result in the dog in question being cued. The circuit court also observed:

⁷⁸ *State v. Foster*, 225 P.3d 830, 835 (Or. 2010).

⁷⁹ *United States v. Beltran-Palafox*, 731 F. Supp. 2d 1126, 1156 (D. Kan. 2010). The defense also argued that putting the dog’s nose against a source so as to direct its attention was cueing, but the prosecution argued that this was only a way of directing the dog’s attention. *Id.* at 1144-45.

⁸⁰ *Id.* at 1160.

⁸¹ *United States v. Diaz*, 25 F.3d 392, 386 (6th Cir. 1994) (*citing* *United States v. Spetz*, 721 F.2d 1457, 1464 (9th Cir. 1983)). In *Spetz*, one of the searching dogs, Randy, “had been correct in only 2 of 6 instances.” 721 F.2d 1457, 1464 (1983). However, the court held “[e]ven though ‘Randy’ was neither experienced nor habitually accurate, his alert could still properly be recognized as evidence corroborating the independent alert of a dog with a more reliable record.” *Id.*

⁸² *Ohio v. Nguyen*, 811 N.E.2d 1180, 1190 (Ohio Ct. App. 2004) (emphasis added).

⁸³ *United States v. Funds in the amount of \$100,120*, 730 F.3d 711 (7th Cir. 2013).

⁸⁴ *Id.* at 724.

Similarly, Kroyer [the defense expert who had been a trainer] avers that a drug dog trained on illicit street cocaine rather than pure pseudo-cocaine must be proofed off of the odors of the agents used in creating or ‘cutting’ cocaine (for example, baking soda or vitamin B-12) to ensure that the dog can distinguish cocaine from these other odors. King states that Deny was trained with currency tainted by illegal drugs. And the training log indicates that Deny was not proofed off of the odors of the agents commonly used in ‘cutting’ cocaine (but which are common household products) because the log contains all of Deny’s pre-certification training searches and none of the entries involve testing Deny against any of the agents used in ‘cutting’ the cocaine. Thus, Kroyer’s averments on this issue provide an additional reason to think that Deny’s training was inadequate.⁸⁵

As to certification, both defense experts noted that the canine team had been certified in-house by the Chicago Police Department, which the circuit court said might not be sufficient by itself to dispute reliability, but could have some significance when combined with other reliability issues raised.

The failure of training to deal with possible problems, cueing and otherwise, has resulted in suppression of canine evidence. In a 2009 Arizona case, an officer testified that his dog had alerted to a scent at the driver’s door. The defense expert had testified to inadequacies in the dog’s training, and the trial court stated:

The certification records of this dog suggest a possible problem—the dog was being cued or had a tendency to alert on blank vehicles. The real world records substantiate this concern unless it is accepted that actual drugs or residual odor was present in virtually all of the vehicles searched. Even if residual odor accounted for almost all of the false alerts in the field, however, what caused the false alert during the certification process if not cueing or some improper procedure that had to be corrected?⁸⁶

⁸⁵ *Id.* at 725.

⁸⁶ *Arizona v. Wright*, No. 1 CA-CR 08-0984, 2009 WL 2411298, at *2-3, *7 (Ariz. Ct. App. 2009).

The trial court, reflecting the expert's opinions, concluded that the certification process had not eliminated inadvertent or unconscious cueing by the dog's handler. The expert had testified that training could have corrected the cueing problem. The Arizona appellate court affirmed a motion to suppress.⁸⁷ It is not clear if a high tendency to alert in the field, substantially more than found with other dogs in similar locations, would qualify under Justice Kagan's acknowledgement that field records "may sometimes be relevant"⁸⁸

X. REDACTION OF TRAINING AND CERTIFICATION RECORDS

The possibility that *Harris* will result in keeping minimal field records has already been mentioned. The same may be true of training and certification records. The Ninth Circuit considered a border checkpoint case that required the court "to explore emerging parameters for the constitutional use of drug-detection dogs."⁸⁹ What is emerging for the circuit court is how lower courts will be interpreting *Harris* and *Jardines*. On February 28, 2010, Jonathan Thomas approached a Customs and Border Patrol checkpoint in southern Arizona. A Border Patrol Agent was on duty with his drug-detection dog, Beny-A. After an alert by the dog, drugs were found in Thomas's truck. Thomas objected to receiving heavily redacted training and performance evaluation records concerning Beny-A and his handler. The district court judge ruled that the government's limited disclosures satisfied its discovery obligations and denied the motion to suppress. Thomas was found guilty of conspiracy with intent to distribute marijuana. On appeal, Thomas advanced several arguments including that the dog's reliability had not been established because only heavily redacted records concerning the dog's, and the handler's, training and experience in narcotics detection had been supplied to the defense. The Ninth Circuit summarized the records that were produced as follows:

Such records show that LeBlanc and Beny-A had attended yearly certification programs from the Border Patrol and were up-to-date at the time of the search. Biweekly logs, called green sheets, were also produced. The team's performance during eight-hour-controlled evaluations was scored on a scale of one to six—the higher the score, the worse the performance. At least one record analyzed at the suppression hearing revealed

⁸⁷ *Id.* at *5.

⁸⁸ *Harris*, 133 S. Ct. at 1057.

⁸⁹ *United States v. Thomas*, 726 F.3d 1086, 1087 (9th Cir. 2013).

marginal performance in “search skills.” The team received a 3.50. Had it been one-tenth of a point higher it would have been “a failing score.” The redactions obscure comments on nearly every page of the records. As to what is beneath the blacked-out paragraphs, the defendant, district judge, this court, and even the Border Patrol’s custodian of records are entirely in the dark.⁹⁰

The circuit court noted that it had dealt with discovery of police canine records ten years earlier. In *U.S. v. Cedano-Arellano* it had held, in response to a discovery request in a motion to suppress, that the government had to supply the defendant with the handler’s log, training records and score sheets, certification records, and training standards and manuals pertaining to the dog. This, according to the 2003 decision, was important for the defendant to prepare “effective cross-examination of the dog’s handler.”⁹¹ Further, in *U.S. v. Cortez-Rocha*, the circuit court had held that these disclosures are mandatory if the government seeks to rely on a dog alert as the evidentiary basis for a search.⁹²

In *U.S. v. Thomas*, The Ninth Circuit saw the Supreme Court’s decision in *Harris* as echoing its own perspective in that Justice Kagan states that a defendant must be afforded the opportunity to challenge “evidence of a dog’s reliability, whether by cross-examining the testifying officer or by introducing his own fact or expert witnesses.”⁹³ The court quoted Justice Kagan’s language about how a defendant “may contest the adequacy of a certification or training program”⁹⁴ Even if there was some sensitivity that justified redacting the records, the Ninth Circuit noted that this could have been dealt with by an in-camera review. There may in fact be good reasons for some redaction of records, though mostly field records, such as the need to protect the privacy of individuals involved in an investigation or to keep specific deployment protocols confidential, but these reasons can be described and discussed in chambers.

The government also argued that even if there was a violation of *Thomas*’s rights, the error was harmless. Because no court had access to the complete records, the Ninth Circuit concluded that it could not be said that the records would not have changed the ultimate determination

⁹⁰ *Id.* at 1096.

⁹¹ *United States v. Cedano-Arellano*, 332 F.3d 568, 571 (9th Cir. 2003).

⁹² *United States v. Cortez-Rocha*, 394 F.3d 1115 (9th Cir. 2005).

⁹³ 133 S. Ct. at 1057. Professor Taslitz has argued that this statement must mean that the defense should be able to introduce scientific evidence concerning a dog’s behavior. Andrew E. Taslitz, *The Cold Nose Might Actually Know? Science and Scent Lineups*, 28(2) CRIM. JUST. 4 56 (Summer 2013).

⁹⁴ *Harris*, 133 S. Ct. at 1057.

that the agents had probable cause to support the search. The Ninth Circuit reversed, holding that “the government’s failure to turn over a full complement of dog-history discovery was an error that was not harmless”⁹⁵ What the case does not say, however, is what records must be maintained, only that those that are maintained cannot be hidden from the defense.

XI. RESIDUAL ODOR

Justice Kagan’s opinion mentions residual odor twice. She states that a dog might alert to a residual odor of “drugs previously in the vehicle or on the driver’s person,” and in a footnote cites *Pamphlet 190-12 of the Army Military Working Dog Program* and Sandy Bryson’s book, *Police Dog Tactics*, both of which refer to specific cases of residual odor. She also notes that the Florida Supreme Court referred to Aldo’s false alert on the second stop involving Wheatley and Harris as an error and said that the Florida court’s “statement reflects a misunderstanding. A detection dog recognizes an odor, not a drug, and should alert whenever the scent is present”⁹⁶ Courts have indeed accepted evidence regarding dogs alerting to residual odors.⁹⁷

Dogs used in wildlife detection may also detect residual odor, e.g., the place where an animal—a tortoise, a toad, a prairie dog—has been but is no longer. Research on dogs that detect desert tortoises found that dogs used in this work, when rewarded only for finding burrows where tortoises were actually present, became more accurate with time, and generally did not alert even to burrows that tortoises had left recently. The authors of the research stated:

⁹⁵ *Thomas*, 726 F.3d 1086.

⁹⁶ *Id.* at 1059.

⁹⁷ See *Maryland v. Cabral*, 859 A.2d 285 (Md. Ct. Spec. App. 2004) (trained dog perhaps able to alert to drugs as long as 72 hours after their removal from vehicle or container); *Idaho v. Braendle*, 997 P.2d 634 (Idaho Ct. App. 2000) (Idaho appellate court noted that “the handling detective testified that, in his opinion, when Clancy alerted on a location where no drugs were found, that location had the residual odor of a drug that had previously been there and, with respect to the school lockers, clothing or other items in the lockers might have had a lingering odor of drugs”); *United States v. Johnson*, 660 F.2d 21, 22-23 (2d Cir. 1981) (federal appellate court noted that an “argument with respect to the problem of a dog detecting only the residual odors as opposed to the drugs themselves misconstrues the probable cause argument”); *United States v. Unrue*, No. 26,552, 1973 WL 14783 (testimony described a dog as having two alerts, one for residual odor and one where drugs were actually present).

The reduction in error of commission over the course of the burrow trials is probably a function of learning, because the dogs improved their ability to differentiate between burrows without tortoises and burrows with tortoises. Over the course of the two phases of burrow trials, the dogs refined their scent picture of what constitutes “tortoise,” essentially unlearning tortoise residual scent. The dogs were not rewarded on false alerts (they were not corrected for false alerts, they were given neither positive nor negative reinforcement) and without reinforcement, the behavior of alerting on residual scent was extinguished.⁹⁸

There is incentive to eliminate alerts to burrows with residual odor because “[f]ocusing effort to clear a burrow which contains scat and not a live tortoise can be environmentally destructive and counterproductive for the survey goals.”⁹⁹ Unfortunately, as a result of *Harris*, there will be little incentive to pursue training approaches that take into account such scientific research in canine law enforcement.

XII. CUEING

Justice Kagan states: “And even assuming a dog is generally reliable, circumstances surrounding a particular alert may undermine the case for probable cause—if, say, the officer *cued the dog* (consciously or not), or if the team was working under unfamiliar conditions.”¹⁰⁰ Cueing can, for present purposes, be defined as the phenomenon of a handler, or another person or item in a dog’s presence,¹⁰¹ providing a conscious or unconscious signal that induces the dog to perform a trained behavior

⁹⁸ Mary E. Cablk & Jill S. Heaton, *Accuracy and Reliability of Dogs in Surveying for Desert Tortoise (Gopherus Agassizii)*, 16(5) *ECOLOGICAL APPLICATIONS* 1926, 1934-1936 (2006).

⁹⁹ MARY E. CABLK & RUSSELL HARMON, FINAL REPORT: VALIDATION AND DEVELOPMENT OF A CERTIFICATION PROGRAM FOR USING K9S TO SURVEY DESERT TORTOISES, RC-200609, ESTCP PROJECT (2011), *available at* <http://www.serdp.org/Program-Areas/Resource-Conservation-and-Climate-Change/Natural-Resources/Arid-Lands-Ecology-and-Management/RC-200609/RC-200609>.

¹⁰⁰ *Harris*, 133 S. Ct. at 1057-58 (emphasis added). Justice Kagan also refers to the Florida Supreme Court’s argument that field records could help expose such problems as a handler’s tendency to cue. *Id.* at 1055.

¹⁰¹ In a 2009 California case, cueing was mentioned as possibly coming from persons watching the lineup other than the handler. *California v. White*, 2009 WL 3111677 (Cal. Ct. App. 2009) (diminished likelihood of third-party cueing where observers were distant from actual test). Cueing could also come from the suspect’s behavior. See F.J.J. BUYTENDIJK, *THE MIND OF THE DOG*, 100 (1936).

pattern that mimics a trained final alert.¹⁰² Specifically with regard to drug detection dogs: “Handler cues are conscious or unconscious signals given from the handler that can lead a detection dog to where the handler thinks drugs are located.”¹⁰³ Research on explosives and narcotics detection dogs has established that detection dogs can indeed be cued. In a study conducted by three researchers at the University of California at Davis, 17 of 18 dogs alerted in a controlled environment where there were no drugs and the likelihood of residual odor was almost nonexistent but the handlers had been told that drugs were present. The researchers concluded that the handlers had cued their dogs.¹⁰⁴

Hand gestures have been found to affect a dog’s choice of food bowls,¹⁰⁵ and have been discussed as possible cues in court cases. One study, however, found that dogs interpret pointing gestures flexibly, sometimes as providing information but not necessarily as a command.¹⁰⁶ There is scientific evidence that dogs may ignore their own sense of smell as a result of receiving a pointing gesture from an adult.¹⁰⁷

In a South Dakota case, the handler argued that hand signals he used with his dog were to indicate a search pattern intended to get the dog to sniff high and low on a vehicle, not to cue the dog. The handler testified that the signals were approved under ICPSD (International Congress of Police Service Dogs) standards. A defense witness, a U.S. Army canine handler and trainer, disagreed, saying that hand signals and the body position of the handler in the case may have caused the dog to alert, even if the handler did not intend to make the dog alert. The court declined

¹⁰² United States v. \$80,760 in U.S. Currency, 781 F. Supp. 462, 478, n.36 (N.D. Tex. 1991) (*citing* United States v. Trayer, 898 F.2d 805 (D.C. Cir. 1990)), where a retired Baltimore police dog trainer had testified that it is possible for a handler through voice or physical cues to compromise a dog’s objectivity.

¹⁰³ Ohio v. Nguyen, 811 N.E.2d 1180, 1195, n. 109 (Ohio Ct. App. 2004).

¹⁰⁴ Lisa Lit et al., *Handler Beliefs Affect Scent Detection Dog Outcomes*, 14 ANIMAL COGNITION, 387–394 (2011). The authors of the present article acknowledge that they incorrectly expected that the U.S. Supreme Court would refer to this study, mentioned in a number of briefs, in deciding *Harris*. John J. Ensminger & L.E. Papet, *U.S. Supreme Court to Hear Two Police Canine Cases in Fall Term*, 248 N.Y.L.J. 4, 28 (2012).

¹⁰⁵ Handling of a food bowl with little food in it apparently caused a dog in an experimental setting to choose the bowl handled over one with much more food. See Sarah Marshall-Pescini et al., *Do Dogs (Canis lupus familiaris) Make Counterproductive Choices Because They Are Sensitive to Human Ostensive Clues?*, 7(4) PLOS ONE, e35437 (2012). The same researchers found that a combination of gazing back and forth at a dog, while speaking to it, was more likely to influence a dog’s choice of food bowls than gazing or speaking alone.

¹⁰⁶ See Linda Scheider et al., *Do Domestic Dogs Interpret Pointing as a Command?*, 16(3) ANIMAL COGNITION 361-372 (2013).

¹⁰⁷ *Id.* at 371 (explaining why their results might be inconsistent with the earlier results of V. Szetei et al., *supra* note 77 at 141-152).

to reverse merely because there was conflicting expert testimony.¹⁰⁸ In a 2008 federal district court case, a defense witness, a professional dog trainer, took issue with the use of a “detail pass” in a sweep “because he contends that dogs are improperly cued during detail passes.”¹⁰⁹

Although in the future police are not likely to feel obligated to maintain comprehensive field records,¹¹⁰ and the prosecution is not required to automatically produce them, the defendant may still be able to introduce evidence of cueing. This may come from field records, but it is more often detected in dashboard video camera records of traffic stops, discussed below.¹¹¹

The final reference to cueing in the *Harris* opinion involves training:

To be sure, Harris’s briefs in this Court raise questions about that training’s adequacy—for example, whether the programs simulated sufficiently diverse environments and whether they used enough blind testing (in which the handler does not know the location of drugs and so *cannot cue the dog*). Similarly, Harris here queries just how well Aldo performed in controlled testing But Harris never voiced those doubts in the trial court, and cannot do so for the first time here.¹¹²

This leaves open the possibility that the absence of blind testing could indicate that training was inadequate, though the issue did not have to be addressed by the Supreme Court because it had not been properly

¹⁰⁸ See *South Dakota v. Guerra*, 772 N.W.2d 907 (2009). See INTERNATIONAL PATROL DOG COMPETITION REGULATIONS (Wendell Nope, trans.) (Feb. 25, 2008) available at <https://www.gsdca-wda.org/documents/pdf/wpo/wpo.pdf> (stating that commands may be given by voice or hand signal, but limits commands to two to perform a task).

¹⁰⁹ *United States v. Brooks*, 589 F.Supp.2d 618, 625 (E.D. Va. 2008) (court concluded, based on totality of the circumstances, that “the training and certification of Debo and Trooper Homiak was sufficient to provide probable cause to search after an alert”).

¹¹⁰ Law enforcement officers all keep deployment records to some degree. They will certainly record any evidence gathered and any citations or arrests made during a shift. What they should but may not often do is record each deployment and the outcome of that deployment, and each alert and the outcome of the alert. At traffic stops, where a dog fails to alert while the license and registration are being processed, the only record may be the stop itself, not the deployment of the dog. Officers that take dogs to school parking lots will often have multiple alerts, resulting in multiple searches of cars in the lot by school administrators, yet police records will often show those searches that produced drugs, while school records may indicate many more cars were searched.

¹¹¹ *Felders v. Bairett*, 885 F.Supp.2d 1191 (D. Utah 2012).

¹¹² *Florida v. Harris*, 133 S. Ct. 1050, 1058 (2013) (emphasis added).

raised. This is a reprimand of defense counsel. Because lawyers often underestimate the importance of canine evidence, they fail to make even a cursory analysis of certain aspects of the dog's background. An inquiry should involve learning about the dog's breed, acquisition, training, testing, certification, deployment history, recordkeeping, and results.¹¹³

Cueing arguments generally refer to actions of the handler inducing the dog to indicate or alert, but one case involved testimony that the dog looked at the handler instead of at the car the dog was supposed to be sniffing, meaning, according to a witness that the dog was seeking "guidance or input" from the handler. Another witness, however, testified that the dog had not looked at the handler as constantly as would be required to establish cueing.¹¹⁴ A dog's seeking of information or direction from a handler is something that defense counsel, or a defense expert, should look for in a video of an incident.

XIII. VIDEOTAPES PROVIDE EVIDENCE OF CUEING

Most successful challenges based on cueing arguments result from videotapes of the sniff. In a case arising in Nebraska, a federal district court described an alert at a traffic stop as follows:

Trooper Duis testified that in this case Robbie "alerted" to the presence of drugs by sniffing more intensely around certain areas of the car, but he acknowledged that such "alert" behavior was subtle and might only be recognized by himself or another person who was familiar with Robbie's tendencies. Although Robbie was trained to "indicate" (by scratching) when he located the strongest source of the drug odor, he did not do so in this case. Defendants' experts testified that the "alert" behavior described by Trooper Duis could easily be attributed to his "cueing" of the animal, either intentionally or unintentionally, by changing the leash from one hand to the other, by stopping, by blocking the way, or by other actions. They saw nothing on the videotape to indicate that Robbie had detected the presence of drugs.¹¹⁵

¹¹³ That breed can be relevant in the effectiveness of a drug detection dog is indicated in a forensic study in which the authors of this paper participated. The study involved 1,219 searching tests performed by German shepherds, Labrador retrievers, English Cocker spaniels, and a variety of terriers. The German shepherds performed statistically better than other breeds. Tadeusz Jezierski et al. *Efficacy of drug detection by fully-trained police dogs varies by breed, training level, type of drug and search environment*, 237 *FORENSIC SCIENCE INTERNATIONAL* 112 (2014).

¹¹⁴ *U.S. v. Gastelo-Armenta*, No. 8:09CR92, 2010 WL 1440418 (D. Neb. Apr. 8, 2010) (detailing magistrate's recommendations).

¹¹⁵ *U.S. v. Heir*, 107 F. Supp. 2d 1088, 1091 (D. Neb. 2000).

The court said that “there must be an objectively observable ‘indication’ by the dog of the presence of drugs,” and concluded, granting a motion to suppress evidence, that the “dog’s actions did not positively signal the presence of drugs inside the vehicle.”¹¹⁶

A decision of the South Dakota Supreme Court involved a defense expert’s conclusion that a dog’s “indication at the trunk was cued.”¹¹⁷ The handler insisted he had not cued or caused the dog’s aggressive indication.¹¹⁸ The court affirmed, stating that “we are not left with a definite and firm conviction that the circuit court erred in finding that the drug dog indicated the odor of an illegal substance.”¹¹⁹ Justice Meierhenry, concurring in part and dissenting in part, noted that “we require an accurate calibration of technical devices in detecting alcohol or illegal substances,” and that “we should also require the necessity of a clear indication from a drug dog before finding probable cause to search.”¹²⁰

In another decision of the South Dakota Supreme Court, a drug detection dog was found to be reliable based on certification and training. The court said the evidence was sufficient to support the trial court’s finding that the dog gave an indication to the presence of drugs.¹²¹ Justice Meierhenry, again dissenting, said that when a well-trained narcotics detection dog smells drugs, “its trained response should be obvious not only to its handler but also to a reasonable and prudent person.”¹²² His dissent described the videotape of the dog in the case:

A review of the trooper’s videotape shows nothing close to aggressive scratching or biting or barking by Kaz. The sniffing dog circles the vehicle, pauses in spots but never scratches. It pauses briefly at the trunk of the vehicle and only after the officer says “gift” to the dog does it show an interest in the trunk and then only by very briefly nipping at the bumper part of the vehicle under the trunk¹²³

¹¹⁶ *Id.*

¹¹⁷ *State v. Lockstedt*, 695 N.W.2d 718, 728 (S.D. 2005).

¹¹⁸ *Id.* at 727 (quoting transcript of the trial).

¹¹⁹ *Id.* at 730.

¹²⁰ *Id.*

¹²¹ *State v. Nguyen*, 726 N.W.2d 871 (S.D. 2007).

¹²² *Id.* at 887.

¹²³ *Id.* at 886. “Gift” is a German word meaning poison, toxin, contraband, i.e., items the dog is trained to detect. Dogs acquired from Germany, such as certain shepherd breeds, often get their initial training from German-speaking trainers whose commands have to be learned by English-speaking handlers.

In a case arising in Nebraska, the defense expert, a dog handler, testified that a review of the videotape of a traffic stop indicated that the handler in the case had “consciously or unconsciously sent clues suggesting a response to the dog.”¹²⁴ The witness noted that the handler used gestures towards the sides and rear of the car with a stick, which the expert regarded as unnecessary. The handler raised his hand immediately before the dog sat, another possible indication of cueing. The court provided its own summary of the sniff:

Deputy Wintle walks the dog around the car once and the dog jumps on and sniffs the vehicle. At the conclusion of one complete pass around the minivan, the dog attempts to return to the squad car, but is pulled back to the rear bumper by Deputy Wintle. At the 36-minute mark, the dog sits briefly on the ground and Deputy Wintle and the dog return to the squad car.¹²⁵

The court found that the prosecution had not rebutted the defendant’s showing that the dog’s alert to drugs in the case was not reliable, and the testimony concerning cueing was “borne out by the court’s review of the handler’s conduct in the videotape.”¹²⁶

In a case arising in Iowa, a defense expert went so far as to argue that “with 99% certainty” a dog did not detect drugs but was cued, a statement the court described as “ludicrous.”¹²⁷

Nicely [the expert witness] presented videos of two different searches by drug dogs. In both instances, there was very little contact between the handler and the dog, and the handler remained behind the dog, allowing the dog to move around the vehicle. In this case, throughout the time Bauerly was taking Bosco around the vehicle, Bauerly repeatedly tapped the vehicle and said, “Drugs, check!” and “Drugs!” In addition, he walked backwards in front of the dog as they went around the vehicle. According to Nicely, these actions all cued Bosco to give a false indication on those areas.¹²⁸

¹²⁴ *United States v. Christy*, No. 8:07CR238, 2008 WL 753888, at *2 (D. Neb. Mar. 19, 2008).

¹²⁵ *Id.* at *4.

¹²⁶ *Id.* at *11. The expert had testified that the cueing came from the handler’s slowing of his pace. *See also United States v. Clarkson*, No. 2:06CR734, 2009 WL 1651043, at *4 (D. Utah June 10, 2009) (defense expert suggested cueing but also argued dog was not well trained, a position the court accepted).

¹²⁷ *United States v. Olivares-Rodriguez*, 729 F. Supp. 2d 1030, 1035, 1037 (N.D. Iowa 2010).

¹²⁸ *Id.* at 1035.

The prosecution's expert, on the other hand, argued that patting a vehicle and saying words like, "Drugs! Drugs!" was a way of directing the dog to sniff a particular area. He reviewed the video of the sniff in the case and testified that he saw no evidence of cueing. The court concluded that to cue the dog to indicate on the boot where the drugs were eventually found, the handler would have had to know that there were drugs there in the first place. The study by the scientists at the University of California at Davis on handler beliefs and cueing established, however, that cueing can occur without handlers knowing where, or even if, drugs or drug odors are present.¹²⁹ That study involved unconscious cueing, but it must also be stated that if a handler has determined to search a vehicle or other area, it is relatively easily to induce an alert.¹³⁰

XIV. FRONT-DOOR SNIFFS

On the same day that the Supreme Court heard arguments in *Harris*, it also heard arguments in *Florida v. Jardines* in which Justice Scalia's majority opinion held that the "government's use of trained police dogs to investigate the home and its immediate surroundings is a 'search' within the meaning of the Fourth Amendment."¹³¹ Courts may have to consider, or in some jurisdictions reconsider, what qualifies as a home for future residential sniff cases,¹³² and what additional

¹²⁹ Lit et al., *supra* note 104, at 388.

¹³⁰ Jeffrey Weiner, *Police K-9's and the Constitution: What Every Lawyer and Judge Should Know*, THE CHAMPION, Apr. 2012, at 22-27. See also Terrance Huff, *Lodging in Collinsville (with Michael Reichart)*, YOUTUBE.COM (Dec. 4, 2012) <http://www.youtube.com/watch?v=D3vfqUkZ8xg> (deposition of an officer in a civil suit). The officer describes regularly ("at least 100 probably safely") wiping marijuana on car doors in motel parking lots in order to test his dog's ability to detect the drug. Sometimes the owners of the vehicles know this is happening, but he acknowledges in the testimony that often they do not.

¹³¹ *Florida v. Jardines*, 133 S. Ct. 1409, 1417-18 (2013). Although neither *Harris* nor *Jardines* discuss the right of the "right of the people to be secure in their persons . . .," it is worth noting that the *Jardines* is likely to be relevant in any case where the Fourth Amendment is implicated in the use of explosives detection dogs in public places such as transportation facilities and schools. Although sometimes these dogs are deployed at security checkpoints, certain dogs, such as vapor wake detection dogs, are specifically trained to follow scent in the air of a public place to a source. The Government Accountability Office has reported that in evaluations of such programs, dogs sometimes miss the individual carrying explosives scent and identify innocent bystanders. U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-13-239, TSA EXPLOSIVES DETECTION CANINE PROGRAM: ACTIONS NEEDED TO ANALYZE DATA AND ENSURE CANINE TEAMS ARE EFFECTIVELY UTILIZED 21 (2013) (see notations on part 2 video stills).

¹³² *United States v. McGuire*, No. 13-40058, 2013 U.S. Dist. LEXIS 145175, at *28-29 (D.S.D. Oct. 1, 2013) (*Jardines* required determination of whether trash that was searched was within the curtilage); *Minnesota v. St. John*, No. A12-1303, 2013 WL 2371768, at *4 (Minn. Ct. App. June 3, 2013) (noting that a motel room affords

evidence supports probable cause when the use of a dog in the curtilage is unconstitutional.¹³³ Arguments may also be advanced as to constitutionally protected areas that are not residences.¹³⁴ A case arising in a federal district court in Iowa, *U.S. v. Davis*,¹³⁵ decided after but with facts occurring before *Jardines*, concerned the sniff of an apartment door. The district court noted that an Eighth Circuit case, *U.S. v. Scott*,¹³⁶ had previously held that a dog sniff of an apartment doorframe in a common hallway did not constitute a search under the Fourth Amendment. The federal district court said that *Jardines* may call into question the validity of *Scott*, but held the officers had reasonably relied on appellate precedent, making the use of the dog not subject to exclusion.¹³⁷ A case from an Illinois federal district court involved an officer taking a dog to the door of the third-floor apartment of an individual that an informant

guests “privileges of privacy” under *State v. Perkins*, 582 N.W.2d 876 (Minn. 1998), and citing *Jardines* with regard to curtilage, but not finding *Jardines* dispositive of a sniff in a common corridor of a motel). *Powell v. Florida*, 120 So. 3d 577, 580 (Fla. Dist. Ct. App. 2013) (stating, in a case involving peering into the windows of a mobile home: “Our state and federal constitutions declare that homes—whether castles or cabins, mansions or mobile homes—are protected spaces that require a warrant or other lawful basis to justify a governmental intrusion.”); *United States v. Jackson*, 728 F.3d 367 (4th Cir. 2013) (stating, in a case that did not involve use of a dog: “For surely if bringing a drug-sniffing dog onto a home’s front porch is beyond the scope of the implied license that invites a visitor to the front door, so too is rummaging through a trash can located within the home’s curtilage.”). See Joseph Magrisso, *Protecting Apartment Dwellers from Warrantless Sniffs*, 66 U. MIAMI L. REV. 1133, 1151 (2012) (arguing that “[w]hen *Jardines* comes before it, the United States Supreme Court should extend to apartments the protection that *Jardines* established for houses. As homes, apartments generate expectations of privacy similar to those of homes.”); see also Michael Mayer, *Keep Your Nose Out of My Business: A Look at Dog Sniffs in Public Places versus the Home*, 66 U. MIAMI L. REV. 1031 (2012).

¹³³ *Wright v. Texas*, 401 S.W.3d 813, 821 (Tex. App. 2013) (police knowledge of electrical usage and heavier pre-search surveillance distinguished case from *Jardines*); *United States v. Nagy*, No. 12-50289, 2013 WL 1896296 (5th Cir. May 7, 2013); *United States v. Evans*, No. 6:11-61, 2013 U.S. Dist. LEXIS 146330, at *6-7 (S.D. Tex. Oct. 9, 2013) (surveillance at another location, information from woman who purchased drugs from defendant on four occasions, scent of marijuana in defendant’s car and subsequent seizure from car, distinguished case from *Jardines*).

¹³⁴ In *United States v. Thomas*, 726 F.3d 1086, 1092 (9th Cir. 2013), discussed above concerning redaction of training and field records, the court opined that *Jardines* and *United States v. Jones*, 132 S.Ct. 945 (2012) might have to be considered together in determining whether a part of a vehicle could be a constitutionally protected area. *Jones* concerned applying a GPS-tracking device to the exterior of a car.

¹³⁵ *United States v. Davis*, No. 12-CR-95-LRR, 2013 WL 1635867 (N.D. Iowa Apr. 16, 2013).

¹³⁶ 610 F.3d 1009 (8th Cir. 2010).

¹³⁷ *Davis*, 2013 WL 1635867, at *3. A case that did not involve a drug-sniffing dog but where the defendant had posted a no-trespassing sign held that *Jardines* did not to alter the ability of the police to come to the front door for a knock and talk. *United States v. Denim*, No. 2:13-CR-63, 2013 WL 4591469 (E. D. Tenn. Aug. 28, 2013).

arrested in a parolee roundup said was dealing drugs. The dog alerted outside the door and the officer sought and obtained a search warrant.¹³⁸ Although here also the events occurred before *Jardines* was decided, the federal district court concluded that “*Jardines* is directly applicable to the facts of this case.”¹³⁹ The defendant was allowed to file a motion to suppress based upon *Jardines*.¹⁴⁰

If the police are in a situation where they obtain a warrant to bring a drug dog to the front porch of a house, what is their recourse if the dog alerts? Arguably, by analogy to the vehicle cases, an alert on the outside justifies an immediate interior search. Also, exigent circumstances may permit immediate entry into the house.¹⁴¹ In any case, police will be rightly concerned that the execution of a warrant allowing them to bring a drug-sniffing dog to the front porch of a house will serve as an announcement that they are going to search the house itself in short order. Taking time to obtain a second warrant may allow for the destruction of contraband or other evidence. It can therefore be expected that police will seek flexibility in the warrant that allows them to bring the dog to the front porch by adding what amounts to an anticipatory warrant, a warrant specifying that if the dog alerts on the front porch, indicating a detection of the odor of drugs, they should be permitted to enter and search the house itself.¹⁴²

¹³⁸ United States v. Herman, No. 10-CR-20003, 2013 WL 4041830 (C. D. Ill. Aug. 7, 2013). See also United States v. Peter, No. 3:11-CR-132 JD, 2012 WL 1900133 (N. D. Ind. May 24, 2012) (holding *Jardines* controlled on substantially identical facts in front-door sniff).

¹³⁹ United States v. Herman, No. 10-CR-20003, 2013 WL 4041830 at *6 (C. D. Ill. Aug. 7, 2013).

¹⁴⁰ Probation status can result in “significantly diminished privacy interests,” as noted in a recent magistrate’s argument where *Jardines* was found essentially irrelevant in determining the constitutionality of using a police dog. United States v. Barker, No. 1:13CR18, 2013 WL 3246085 (N. D. W. Va. Jun. 26, 2013). On June 26, 2013, the district court adopted the report and recommendation of the magistrate.

¹⁴¹ Justice Kagan, concurring in *Jardines*, states that police cannot use a drug dog “to examine a home without a warrant or exigent circumstances.” 133 S. Ct. 1409, 1420 (2013) (Kagan, J., concurring).

¹⁴² Arguably, a dog’s alert would be an ideal triggering event. A Note in the Harvard Law Review observed:

Anticipatory search warrants, however, necessarily transform a magistrate’s balancing test into a binary decision made by the officer on the scene. With a traditional warrant, the magistrate can apply the test of probable cause to specific facts, all of which are known. With an anticipatory warrant, constitutional validity is a function of the yes-or-no triggering condition. Although the triggering condition is correlated with a precise ex post probable cause determination, that correlation may be imperfect, and the anticipatory warrant cannot dynamically account for the quality of the supporting evidence.

Although not likely to happen at a grow house, where windows are usually sealed very tightly, another means of entry into a house might occur when a drug dog jumps through a window. Courts have accepted this entry into vehicles when this is not induced by a handler's cue, though often citing a mistaken belief that dogs jump through windows instinctively.¹⁴³ *Jardines* may provide additional support to Fourth Amendment challenges previously described as “standing” arguments.¹⁴⁴

Harvard Law Review Ass'n, *Fourth Amendment—Anticipatory Warrants*, 120 HARV. L. REV. 154, 162 (2006). With a canine alert, arguably the police can “dynamically account for the quality of the supporting evidence.”

¹⁴³ Brian R. Dempsey, *Canine Constables and the Fourth Amendment*, 40 THE FEDERAL LAWYER 40-44 (June 2013); Jessica Alfano, *Interior-Vehicle Sniffs: Reining in the Leash on Drug-Dog Sniffs and Searching for the “Search” that Courts Have Yet to Find*, 46 NEW ENG. L. REV., 518, 518-550 (2012) (discussing cueing possibility).

¹⁴⁴ Judge Browning of the federal district court of New Mexico included a detailed analysis of *Jardines* in a case that involved law enforcement officers digitally scanning magnetic strips on credit and debit cards found in the defendant's possession to read information electronically stored on the cards. The defendant argued that this violated his Fourth Amendment rights. As to *Jardines*, the court stated:

The Supreme Court's decisions in *United States v. Jones* and *Florida v. Jardines*, however, suggest that this test [being able to show that the defendant had a subjective expectation of privacy in the premises and that society is prepared to recognize that expectation as reasonable referred to as a test of standing in *U.S. v. Harmon*, 785 F. Supp. 2d 1157 (D.N.M. 2011)] has now expressly been designated a substantive Fourth Amendment analysis alongside the trespass-based Fourth Amendment analysis, rather than a distinct analysis under the rubric entitled standing.

This court also noted that *Jardines* may “hint” that “a physical-world invasion is required,” as opposed to a virtual intrusion with digital data. *United States v. Alabi*, 943 F. Supp. 2d 1201, 1239-40 (D.N.M. 2013).

XV. POLICE CULTURE AFTER *HARRIS* AND *JARDINES*

Justice Kagan summarizes the holding in *Harris* as follows:

If the State has produced proof from controlled settings that a dog performs reliably in detecting drugs, and the defendant has not contested that showing, then the court should find probable cause. If, in contrast, the defendant has challenged the State's case (by disputing the reliability of the dog overall or of a particular alert), then the court should weigh the competing evidence. In all events, the court should not prescribe, as the Florida Supreme Court did, an inflexible set of evidentiary requirements. The question—similar to every inquiry into probable cause—is whether all the facts surrounding a dog's alert, viewed through the lens of common sense, would make a reasonably prudent person think that a search would reveal contraband or evidence of a crime. A sniff is up to snuff when it meets that test.¹⁴⁵

Police will want sniffs to be “up to snuff,” and the better-run departments should improve training and certification, if necessary, to make sure that canine teams can demonstrate substantial “proof from controlled settings” to justify probable cause. Organizations that have not done so already should consider adopting training regimens that meet the standards recommended by such organizations as SWGDOG, which specifies that canine team training should amount to at least four hours per week and should regularly involve double-blind testing. The Florida Department of Law Enforcement's *Canine Team & Evaluators Certification Procedures Manual* requires 400 hours for certification for a patrol dog.¹⁴⁶

¹⁴⁵ *Florida v. Harris*, 133 S. Ct. 1050, 1058 (2013) (emphasis added). Courts have already seen the flexibility approach of the Supreme Court's opinion in *Harris* as meaning that a great many issues can be taken into consideration in determining whether a dog is reliable. The Supreme Court of Arkansas, in *Jackson v. Arkansas*, No. CR-859, 2013 WL 2112172, at *11 (Ark. 2013), after reviewing *Harris* in a case involving a dog “with a no-find at a rate of fourteen percent,” said that “we cannot say that there are any specific evidentiary items that will demonstrate, or necessarily refute, a drug dog's reliability.” A Texas appellate court referred to a dog's sniff outside of a motel room as “just one piece of a big jigsaw puzzle.” *Crowley v. Texas*, Nos. 02-12-00064-CR, 02-12-00065-CR, 2013 WL 3771340, at *4 (Tex.App. Jul. 18, 2013).

¹⁴⁶ FLORIDA DEPARTMENT OF LAW ENFORCEMENT, CANINE TEAM AND EVALUATORS CERTIFICATION PROCEDURES MANUAL, 1, 3, available at <http://www.fdle.state.fl.us/Content/getdoc/d345804a-93b4-4ce2-8468-6c2f1b40ff2d/K-9-Manual.aspx> (last visited Oct. 7, 2013). The amount of training for a single-purpose detection dog is not specifically stated.

Training should involve blank trials, as well as “hides” with various levels and concentrations of target substances. Although training may often involve dog and handler working on their own, the handler should document all training procedures and results. This is more for the handler’s own benefit than for any future supervisory or court review of those records. Other individuals involved in a training day or half-day should be recorded. Training locations should be changed as frequently as practical. Training should include review of relevant scientific developments.

Evaluations, whether during training or in certification, should ideally be performed by independent individuals—if possible by individuals who do not know the teams being evaluated—and the number of times an evaluator tests a particular team should be recorded over the working life of the team. Evaluators from outside the law enforcement community should be used when available. Certification systems should be as independent of training and should incorporate double-blind procedures where possible. Practices such as using the same location for a hide over and over, or permitting some handlers to run a course a second time, should not be permitted. In-house certifications that are little more than special days of the same training group should be discontinued. Supervisors have an obligation to evaluate training and certification records and should investigate any deficiencies in recordkeeping. Certification events should be open to the public.

Even inside of training and certification requirements, with the Supreme Court’s minimalist approach to inquiries regarding a dog’s qualifications for purposes of establishing probable cause, it can be expected that recordkeeping in many departments will be required only to satisfy departmental purposes, leaving out information that might be used by “an overzealous defense bar.” Those making such decisions must realize, however, that there are instances where keeping poor field records will create openings for defense counsel to argue for weaknesses in training and certification. Also, minimalist approaches to recordkeeping regarding field deployments may backfire when more complete records would be more likely to secure a conviction, as for instance may occur in currency sniffs.¹⁴⁷

American law has a long tradition of *not* holding canine evidence to evidentiary standards that are typically applied to scientific and

¹⁴⁷ Also, in some cases, probable cause is not the standard that must be met, but rather more “[f]inely tuned standards such as proof beyond a reasonable doubt or by a preponderance of the evidence” may be required. *Illinois v. Gates*, 462 U.S. 213, 235 (1983). Preponderance often applies to currency forfeitures.

forensic tests.¹⁴⁸ Justice Kagan’s direction that “all the facts surrounding a dog’s alert” are to be “viewed through the lens of common sense” likely belongs in that tradition. Nevertheless, canine forensics and canine research significantly inform the use of dogs in police work, and there have been important studies that should affect how handlers work with dogs, and how courts should analyze the evidence supplied by dogs. In the quest of the last decade to determine whether dogs can be clinical tools for the early detection of cancer, no researcher, and no one looking to apply this research to real-world cancer detection, would argue that the alerts of the cancer sniffers need only be viewed through the lens of common sense. Similarly, in the police dog community, research indicating that dogs can be trained (and can help train themselves) not to alert to residual odor should be adopted and reinforced by training and certification groups, and by the police themselves. Testing in training and in certification programs should occasionally replicate the massive zero trial of the Davis research team that found that 17 of 18 experienced drug dogs entering a church alerted to drugs that were not there and certainly had not been there for a considerable time, if ever. Testing should record the purity of drugs used, which should vary in order to determine if dogs are detecting street-level products but not pure drugs.

Unfortunately, *Harris* may be seen by the police dog community as validation of attitudes that decline to incorporate research into police canine operations. While deficiencies in training and certification systems may have to be brought up to some concept of industry standard, few departments will make the effort, and many do not have the resources, to create environments that could duplicate forensics research settings. Although this can be justified to a degree because of the costs of achieving scientifically controlled environments, it should also be realized that dogs will remain a rougher tool than is necessary unless this is done.

Prior to arguments in *Harris* and *Jardines*, Professor Leslie A. Shoebottom of Loyola University New Orleans College of Law asked the provocative question of whether “incentives exist for law enforcement to use unreliable drug-detection dogs (or dogs with only marginal reliability) in the field,” and concluded that such incentives exist.¹⁴⁹ She argued that the existence of such incentives meant that “trial

¹⁴⁸ See *California v. Sommer*, 16 Cal.Rptr.2d 165, 173 (Ct. App. 1993), finding that “[t]he average juror has had sufficient experience with the subject matter to be able to evaluate the evidence concerning a dog’s training, performance, and behavior that the application of the *Kelly/Frye* test to such evidence is unnecessary.” See also ENSMINGER, *supra* note 6, at 62-63, 95-96, 151, 237-43.

¹⁴⁹ Leslie A. Shoebottom, *Off the Fourth Amendment Leash?: Law Enforcement Incentives to Use Unreliable Drug-Detection Dogs*, 14 LOY.J. PUB. INT. L. 251 (2012).

court consideration of detection-dog field performance records as part of the court's canine-reliability determination is an essential firewall to preventing police use of marginal, or even unreliable, drug-detection dogs."¹⁵⁰

Among incentives that can be taken from Shoebottom's discussion of the issue are the following:

1. Financial incentives for private vendors to certify dogs that they sell to law enforcement agencies.
2. To reduce contractor costs, some law enforcement agencies prefer to have certification handled in-house.
3. Pressure on officer handlers to limit training time so that they can be in the field as much as possible.¹⁵¹
4. Field performance recordkeeping is an added burden on handlers and supervisors, so there is incentive to keep performance records minimal.
5. Civil forfeiture of currency that can be connected with a contraband operation.
6. Dogs that under-alert are considered unproductive, but dogs that over-alert are not criticized because it is assumed they are detecting residual scents.¹⁵²

It is the opinion of the authors that these incentives will only be strengthened by *Harris*, though they might be mildly deterred by *Jardines* if judges become concerned that police in a particular department are regarding their dogs as walking search warrants.

¹⁵⁰ *Id.*

¹⁵¹ It should perhaps be noted that a trend towards training dogs to use passive alerts has a financial component. Difficulties resulting from an aggressive alert by a dog that tears up a person's car seat or scratches the outside of a new car may result in costs to a department as a result of litigation or to avoid litigation. Nevertheless, a passive alert can require additional training and some departments would rather keep the occasional risk of an aggressive alert resulting in damage.

¹⁵² Shoebottom, *supra* note 149.

IV. CONCLUSION

Courts are likely to see *Harris* as a clarification of evidentiary requirements in *Place* and *Caballes*.¹⁵³ The Supreme Court may have been concerned that hearings on probable cause, with the admission of field records and expert testimony concerning the interpretation of those records, could become full-blown trials of police dogs and their handlers, taking up court and law enforcement time and resources. The Court correctly noted that, in general, it is very difficult to determine why a dog alerted but no drugs were found, or no clear evidence of residual odor could be established. Justice Kagan emphasizes that the inquiry is one of “fair probability,” which is not one of the “finely tuned standards such as proof beyond a reasonable doubt or by a preponderance of the evidence”¹⁵⁴ Lower courts will have to determine when and where evidence about a drug dog’s field performance may be relevant. They will also have to determine what kind of recordkeeping is required for training and certification, and whether some weakness in those records will make field records an acceptable source of information to fill in any gaps.

Instead of insuring a higher standard of reliability by documenting actual training and deployment experiences as they occur, police in many locations are now likely to become more guarded about what information is recorded and maintained. Prosecutors may discourage recordkeeping that will make canine evidence vulnerable to attacks on a canine team’s reliability. Defense counsel will have to pay more attention to training and certification programs and will have to break through the veneer that reduces the transparency of such programs. Failure to do so will assure that the Ohio deputy sheriff really does indeed have a walking search warrant in his dog.

¹⁵³ See, e.g., *United States v. Figueredo-Diaz*, 718 F.3d 568, 575 (6th Cir. 2013) (citing *Harris* for the statement that “an alert by a properly trained dog can establish probable cause for a search;” the search here involved a tractor-trailer).

¹⁵⁴ *Florida v. Harris*, 133 S. Ct. 1050, 1055 (2013) (quoting *Illinois v. Gates*, 462 U.S. 213, 235 (1983)).

GOOD BADGER, BAD BADGER: THE IMPACT OF PERSPECTIVE ON WILDLIFE LAW AND POLICY

PETER L. FITZGERALD*

I. INTRODUCTION

The United Kingdom is considering embarking on an unprecedented revision of its wildlife laws. The Law Commission of England and Wales¹ is examining how it might update the pastiche of governmental policies, statutory measures, and caselaw governing wildlife which dates to pre-Victorian times. The wildlife consultation provides an extraordinary opportunity not only to rationalize and update the existing patchwork of measures affecting wildlife in England and Wales, but also to establish a more coherent and transparent framework with which to address wildlife issues for many years to come and to also serve as a model to other common law jurisdictions.

The Law Commission's Consultation Paper on Wildlife² describes a project that is simultaneously very ambitious, and at the same time quite circumscribed by the practicalities of the task. Thus, there is an inherent tension between whether the project is aimed at merely codifying the existing status quo, or whether it could more broadly provide the basis for a new approach to dealing with wildlife related issues that reflects the most recent developments in the field and those that might reasonably be anticipated to occur in the near future. That is not to suggest that the focus of this wildlife reform effort should necessarily be aimed at changing existing policies and practices (except where that might already be required by deficiencies in existing law), and indeed the Law Commission's remit for this project is that

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¹ The Law Commission of England and Wales is an independent governmental body, established (along with a similar separate Law Commission for Scotland) by the Law Commissions Act 1965. Its function is to make recommendations to Parliament regarding the systematic development, reform, and codification of the law; the elimination of anomalies; the repeal of obsolete and unnecessary enactments; and to generally promote the simplification and modernization of the law. See Law Commissions Act, 1965, c. 22 (Eng.).

² *Consultation Paper No. 206: Wildlife Law*, Law Commission of England and Wales (2012), available at http://lawcommission.justice.gov.uk/docs/LCCP206_Wildlife_law_consultation_paper_for_web.pdf [hereinafter "CP No. 206"].

it should not do so. However, that does not preclude giving thought to providing policy makers with the appropriate tools to deal with modern issues which may also be useful when circumstances make policy changes appropriate. In other words, at the outset, the question occurs as to whether this reform effort is primarily a backward-looking purely technical codification exercise, or one that also endeavors to anticipate the future needs of policy makers and regulators?

Further complicating this effort is the wide range of perspectives regarding how we should relate to wildlife and the natural environment in the 21st century. While there have always been divergent views on how humans relate to the natural world, especially among those advocating particular interests, continued urbanization over the last half century means that the vast majority of the population has lost much of its connection to the wild. As a result, the public perspective on what policies and legal measures are appropriate and deserving of support also changed, and the debates over wildlife issues are now increasingly framed by popular stereotypes and images rather than by direct sustained experience with wildlife and the natural world.

As New York Governor Mario Cuomo noted in a speech to wildlife officials meeting in the Adirondack Mountains, this shift affects advocates as well as the public.

From the beginning, hunters, fishers, and trappers have played a key role in preserving [wild places such as] the Adirondack Park, and they have been leaders in . . . efforts to clean up our air and water, to protect wetlands, and to restore and maintain healthy populations of fish and wildlife. Long before ecology and environment became part of our daily vocabulary, sportsmen and women were in touch with the workings of nature. They realize that if wildlife and the landscapes that support it were not properly managed and protected, not only would wildlife population suffer, the larger systems that are the foundation for all life would be irreparably damaged.

Wildlife conservation groups and environmental groups have been our natural allies in efforts to protect our environment We have had a productive coalition, but recently we have seen an expanding fault line between traditional conservation groups and newer environmental organizations, particularly at the grassroots level.

This rift has many causes. The conservation community has roots in rural, agricultural America. The environmental community—born in the late 60s and early 70s—is largely an urban movement. The conservation community learned about the out-of-doors out in the woods. In many cases, learning for the environmentalists has come from more abstract sources usually found indoors—books and other media.

Separate languages have developed. Hunters talk about habitat; environmentalists, ecosystems.

Here ... and elsewhere ... that rift has been aggravated by the willingness of some people to push to extremes, to demonize the views of others until the gulf between them seems too great to cross. These differences are worsening, I believe, in part from the separation of a growing segment of our citizens from the land. As we become an increasingly urban and suburban society, we've lost our sense of nature and our ties to it. Television and video games, suburban lawns and swimming pools, foster in youth an understanding of the world that is different from those who are checking out what [is] under rocks in streams.

This misunderstanding shows itself in the annual cacophony over legislative proposals that once brought sportsmen and women together with environmentalists. It shows itself in the lack of understanding that game sports are not only important pastimes, but that they are also appropriate tools for managing wildlife populations. And it shows itself in the breakup of the constituency for wildlife habitat protection.³

The highly contentious debate over whether badgers need to be culled in order to help control bovine tuberculosis in the United Kingdom further illustrates both the clash of perspectives addressed in Governor Cuomo's comments, and the added importance of the newest player in these debates, the animal welfare movement. However, the portrayal of the badger as "good" or "bad" in connection with the spread of bovine tuberculosis is by no means unique—and has been seen time and time

³ *Proceedings of the 83rd Convention, 1993 INT'L ASS'N OF FISH AND WILDLIFE AGENCIES* 8-9.

again with many different species—as various wildlife policies, issues, and measures are debated. What is perhaps new, in today’s world, is the degree to which popular support for one or another position advanced by interested parties depends not upon actual experience with nature and wildlife but rather with the popular public image of the wildlife at issue.

Moreover, addressing the increasingly complex range of human interactions with wildlife in today’s world, where very little remains that is still truly untouched and “wild,” also means that new ways of thinking about wildlife issues would be useful. The traditional emphasis upon the beneficial or detrimental aspects of particular species, and the proper way for humans to interact with that species, tends to minimize interconnections with similar issues associated with other species. Rather than perpetuating this somewhat vertical, species specific, approach—as seen in the current debate over badgers in the U.K.—the wildlife law reform project provides the Law Commission with an opportunity to reframe the law with a more horizontal, cross-cutting, approach that reflects the various human interests at issue when dealing with all types of wildlife. Doing so would not only achieve the objective of making the current legal framework more coherent, but provide a significant model for the future.

II. GOOD BADGER—BAD BADGER

Badgers enjoy a prominent and privileged position in the U.K., where they are now regarded as something of a charismatic animal, although this has not always been the case. Until relatively recently badgers were regarded much more ambivalently, albeit with an enduring mixture of fondness and respect that is perhaps unique.

While for many today their first encounter with the badger is likely to be in Kenneth Graham’s children’s novel *The Wind in the Willows*, historically, badger-baiting, digging, and hunting were popular activities dating back hundreds of years. Under the Vermin Acts in the 16th century badgers were among the nuisance animals which fetched the highest possible bounty.⁴ In former times, badgers were also used for food, in magical charms, and their pelts contributed to a variety of useful common items such as shaving brushes.

⁴ The Vermin Acts consisted of the Destruction of crows, etc. Act (An Act made and ordained to destroy Choughs, Crows and Rooks). 1532, 24 Hen. 8, c.10, and the Preservation of grain Act 1566, Eliz., c.15. Together these measures established a legal framework for the destruction of animals and birds which were deemed a threat to food supplies.

In folklore and literature, badgers are found as far back as 11th century Anglo-Saxon riddle poems, where the animal is depicted as nobly protecting his family from diggers.⁵ They appear in more recent poetry, notably in examples such as John Clare's 19th century work "The Badger," which graphically deals with the practice of badger baiting,⁶ and Philip Edward Thomas' early 20th century poem "The Combe," which declares that badgers are "[t]hat most ancient Briton of English beasts."⁷ Indeed, fossils show badgers inhabited the British Isles 25,000 years ago, and the famous Domesday Book from 1086 documents badger setts (i.e. burrows) that are still occupied today.⁸ Badgers appear in countless other works of all types, and the appearance of the animal across a wide range of types of literature goes well beyond the kindly Mr. Badger of *The Wind and the Willows* or the nefarious Tommy Brock from Beatrix Potter's *The Tale of Mr. Tod*, who steals baby rabbits to keep in his oven for dinner. Lists of badgers in literature can run into hundreds of entries.⁹ Merlin turns the young Arthur into a badger in *The Sword and the Stone*;¹⁰ in C.S. Lewis's *Prince Caspian: The Return to Narnia* the badger Trufflehunter saves Caspian's life, fights alongside him, and becomes a Knight in the Order of the Lion;¹¹ and in the twenty-one volumes of James Brian Jacques' *Redwall* series of children's books badgers help (along with other anthropomorphic animals) with the struggle for good over evil.¹² They also appear in numerous television, video and internet productions, such as in the "Badger, Badger, Badger" flash animation.¹³

⁵ Marie Nelson, "Badger": *An Early Example Of Mock Heroic*, 59 NEOPHILOLOGUS 447-50 (1975).

⁶ See Robert Pinsky, "The Self-Consumer of My Woes" *The enigmatic and enduring art of John Clare, a mad pauper and brilliant poet*, SLATE, August 17, 2010, available at http://www.slate.com/articles/arts/poem/2010/08/the_selfconsumer_of_my_woes.html.

⁷ PHILIP EDWARD THOMAS, COLLECTED POEMS 18 (1921).

⁸ *Why Protect Badgers?*, THE BADGER TRUST 1 (2008), available at http://www.badger.org.uk/_Attachments/Resources/51_S4.pdf.

⁹ See, e.g., *List of Fictional Badgers*, available at http://en.wikipedia.org/wiki/List_of_fictional_badgers.

¹⁰ T.H. WHITE, THE SWORD IN THE STONE (1938).

¹¹ C.S. LEWIS, PRINCE CASPIAN: THE RETURN TO NARNIA (1951).

¹² See, REDWALL ABBEY: THE OFFICIAL BRIAN JACQUES WEBSITE, available at <http://www.redwallabbey.com/>. (last visited Dec. 1, 2013).

¹³ Badgers (animation), [http://en.wikipedia.org/wiki/Badgers_\(animation\)](http://en.wikipedia.org/wiki/Badgers_(animation)). Badger Badger Badger was listed as one of the "top five internet fads of all time" by PC World. See, <http://knowyourmeme.com/memes/badger-badger-badger>.

The badger's distinctive black and white striped face appears in ancient heraldry (even including that of the fictional House of Hufflepuff in the Harry Potter series of books);¹⁴ forms the basis of the highly recognizable logo for The Wildlife Trusts;¹⁵ and is also used in commercial images such as on the emblem for the Hall and Woodhouse brewery, which has produced Badger Beer since the 18th century.¹⁶ Additionally, the badgers' strong attachment to place is also reflected in the common use of their old English and Celtic name "broc" (or variants such as "brock" or "brox") in numerous place names throughout the U.K.¹⁷

Badgers commonly appear in British folklore, literature, poetry, and the visual arts, and are variously portrayed as either good or bad. "Good badgers" were useful because they ate small rodents, rabbits, wasps, and other bugs. They were also regarded as brave, strong, and family oriented, with an ancient connection to the land that reflected British character and embodied a fierce moral independence romantically associated with the rural English character. The "bad badger" was a nuisance; digging in the fields, destroying crops, taking ground nesting birds, and interfering with foxes and foxhunting.¹⁸

By the early 20th century, the anthropomorphic positive popular image of a gruff but wise, gentle, and civilized "Mr. Badger," as in *The Wind and the Willows*, came to predominate over the perception of badgers as a predatory nuisance animal—a shift which also accompanied increased urbanization in the U.K. and a marked growth in the development of animal welfare movements. This imagery has greatly colored the debate over the need to cull badgers in order to control bovine tuberculosis (bTB) in the U.K. While the positive image of Mr. Badger arguably still prevails, the need to address bTB has led to a resurgence of the negative portrayal of badgers as diseased vermin.¹⁹

¹⁴ J.K. Rowling initially considered using a bear, rather than a badger, as the Hufflepuff mascot. She later wrote "[p]erhaps Hufflepuff house would have the respect it deserves from the fans if I'd stayed with my original idea of a bear to represent it?" *J.K. Rowling, Harry Potter and the Philosopher's Stone - with annotations*, THE GUARDIAN, May 18, 2013 available at <http://www.guardian.co.uk/books/interactive/2013/may/18/jk-rowling-harry-potter-philosophers-stone-annotations>.

¹⁵ The Wildlife Trusts form the largest U.K. voluntary organization dedicated to protecting wildlife and wild places. THE WILDLIFE TRUSTS, *Who We Are*, available at <http://www.wildlifetrusts.org/who-we-are>.

¹⁶ See, HALL AND WOODHOUSE, *The Range*, available at <http://www.hall-woodhouse.co.uk/the-range>.

¹⁷ Angela Cassidy, *Vermin, Victims and Disease: UK Framings of Badgers in and Beyond the Bovine TB Controversy*, 52 *SOCIOLOGIA RURALIS* 192, 196 (April 2012).

¹⁸ *Id.* at 202.

¹⁹ *Id.* at 208-09.

a. Bovine TB and Badgers

Tuberculosis was a serious problem in the crowded industrial centers of Victorian England. Additionally, the close proximity of large numbers of people in cities with nearby dairy herds facilitated the spread of tuberculosis in cattle, and contaminated milk prior to the development of pasteurization. The disease also spread among other livestock and wildlife.

A voluntary nationwide cattle testing program was instituted to deal with widespread infection in the 1930s, and testing and slaughtering of infected animals became mandatory in the 1950s. As a result, the incidence of bTB declined from over 60% of the nation's cattle herds to less than 1% by 1960. In the 1970s, however, the disease was again seen in a few parts of the southwest of England, and in 1971 a badger was identified on a Gloucestershire farm, which had died of advanced bovine TB. Despite the success managing the disease in the early part of the 20th century, the number of infections started to rise again in the 1980s, and now bTB is once again widespread throughout the West and Southwest of England and Wales.²⁰ Roughly 28,000 cattle were slaughtered 2012 because of bTB, and the disease is estimated to cost taxpayers around £100 million each year.²¹

The disease is spread primarily through the exchange of a bacterium in the respiratory secretions from an infected animal. While a number of mammalian species can harbor the bacteria, with the discovery of the link to badgers they gradually came to be seen by the Government as the most significant reservoir of the disease.²² As the cattle controls were no longer containing the disease, in 1975 the Ministry of Agriculture, Fisheries, and Food (the predecessor of the current Department for Environment, Food and Rural Affairs) began licensing a series of badger control methods. These methods included gassing, which was used until 1980 when it was deemed to be

²⁰ *History of Bovine TB*, TB FREE ENG. available at <http://www.tbfreeengland.co.uk/assets/4148>.

²¹ *Bovine TB (bTB)*, FARMERS GUARDIAN, (May 31, 2013), available at [http://www.farmersguardian.com/home/hot-topics/bovine-tb-\(btb\)/32043.article](http://www.farmersguardian.com/home/hot-topics/bovine-tb-(btb)/32043.article) (last visited Dec. 1, 2013); *Bovine TB (tuberculosis): Key Facts and Figures*, DEPARTMENT FOR ENVIRONMENT, FOOD & RURAL AFFAIRS available at <http://www.defra.gov.uk/animal-diseases/a-z/bovine-tb/>.

²² *Bovine TB Eradication Programme for England*, DEPARTMENT FOR ENVIRONMENT, FOOD & RURAL AFFAIRS (July 19, 2011) available at <https://www.gov.uk/government/publications/bovine-tb-eradication-programme-for-england>.

inhumane.²³ Trapping, caging, and shooting then became the primary methods for killing badgers. Reactive culling, which involves killing badgers on infected farms, and the “clean ring” strategy, where badgers are killed in concentric circles out from an infected farm until no infected badgers are found, were used until 1985.²⁴ A more limited “interim strategy” was instituted in 1986, which focused on removing and culling badgers only from infected farms where they were determined to be the likely cause of the infection in the cattle.²⁵ As the disease continued to spread, these efforts were replaced in 1998 with a “Randomized Badger Culling Trial” (RBCT) in areas with the highest rates of bTB to test the effectiveness of proactive culling versus reactive culling.²⁶ This eight-year trial, overseen by the Independent Scientific Group on cattle TB, ended in 2006, cost more than £53 million, and resulted in the death of over 11,000 badgers. The RBCT concluded that while some reduction in bTB was observed, badger culling “played no meaningful part in the control bovine TB in cattle” and that the cattle themselves contributed significantly to the persistence and spread of the disease.²⁷

Nevertheless, the scientific link between badger control and the spread of bTB continues to be vigorously debated, with advocates on all sides pointing to language found in various parts of the RBCT and the earlier Reports. Indeed, part of the Conservative Party’s 2010 election

²³ The gassing of badgers was terminated, and culling suspended, as Lord Zuckerman began his review of the bTB control efforts which occurred during 1980-1982. Lord Zuckerman also recommended that the issue be reviewed again three years later, in 1985., *History of Badger Control*, DEPARTMENT FOR ENVIRONMENT, FOOD & RURAL AFFAIRS available at <http://www.defra.gov.uk/animal-diseases/a-z/bovine-tb/badgers/history-controls/> (last visited Dec. 1, 2013).

²⁴ Professor Dunnet conducted a follow-up to the Zuckerman Review, and issued his own report in 1986. *Id.*; *History of Bovine TB*, *supra* note 20; *Bovine TB (bTB)*, *supra* note 21.

²⁵ *History of Badger Control*, *supra* note 23.

²⁶ *Id.* The RBCT was instituted following another review and report, issued by Professor John Krebs. Tuberculin testing was suspended, however, during the 2001 outbreak of foot and mouth disease. The RBCT covered 30,100 km² of England in total, divided into 10 sets consisting of 3 areas called “triplets”. Within each triplet, in one area badgers were repeatedly culled (proactive culling); in the second area badgers were culled in response to bTB outbreaks in cattle (reactive culling); and no culling was employed in the third area, which was only surveyed and tested for bTB.

²⁷ FINAL REPORT OF THE INDEPENDENT SCIENTIFIC GROUP ON CATTLE TB (June 2007) at 172, 181, available at http://archive.defra.gov.uk/foodfarm/faranimal/diseases/atoz/tb/isg/report/final_report.pdf. See also, *Brief history of Bovine TB*, THE BADGER PROTECTION LEAGUE available at <http://www.badgerprotectionleague.com/uploads/history.doc> and Lewis Clarke, *A brief history of Bovine TB and badger culling in the United Kingdom*, TIVERTONPEOPLE March 14, 2011, available at <http://www.tivertonpeople.co.uk/news/brief-history-Bovine-TB-badger-culling-United/story-10825818-detail/story.html>.

manifesto was to tackle what it saw as “the most pressing animal health problem in the U.K.” through “a carefully-managed and science-led policy of badger control.”²⁸ Accordingly, following the election, the Department for Environment, Food & Rural Affairs issued its “Bovine TB Eradication Plan” for England in July 2011,²⁹ and subsequently explained that:

[f]ollowing a public consultation in 2010 and a consultation of key stakeholders on draft Guidance to Natural England between July-September 2011, the Government has now decided to proceed with a policy of enabling farmers and landowners to cull and/or vaccinate badgers, under licence, in areas of high incidence of TB in cattle.³⁰

Although vaccination is mentioned as an option in the Bovine TB Eradication Plan, culling is the Government’s preferred approach for the pilot program. DEFRA notes that it is difficult to distinguish vaccinated cattle from infected cattle, although work is underway to develop new vaccines that don’t generate “false positives” to standard TB diagnostic tests and which would make it possible to differentiate between infected and vaccinated animals. Moreover, the European Commission has instructed DEFRA that currently, “[v]accination against bTB is explicitly forbidden in the EU legislation on disease control (Council Directive 78/52/EEC³¹) and implicitly also in intra-Union trade legislation, as vaccination is not compatible with provisions

²⁸ William Surman, *Conservative manifesto tackles badgers and foxes*, FARMERS GUARDIAN, April 13, 2010, available at <http://www.farmersguardian.com/home/latest-news/conservative-manifesto-tackles-badgers-and-foxes/31372.article>.

²⁹ *Bovine TB Eradication Programme for England*, *supra* note 22.

³⁰ *The Government’s policy on Bovine TB and badger control in England*, DEPARTMENT FOR ENVIRONMENT, FOOD & RURAL AFFAIRS (December 14, 2011) available at <https://www.gov.uk/government/publications/the-government-s-policy-on-bovine-tb-and-badger-control-in-england>. Natural England is the Government’s statutory advisor on environmental matters, and the licensing body for wildlife management—including the responsibility for licensing for badger culling. See, *Our Work* NATURAL ENGLAND, <http://www.naturalengland.org.uk/ourwork/default.aspx> and *Wildlife Management and Licensing: Badgers*, NATURAL ENGLAND available at <http://www.naturalengland.org.uk/ourwork/regulation/wildlife/species/badgers.aspx>.

³¹ See Directive 78/52, of the Council of the European Communities of 13 December 1977 on the Community criteria for national plans for the accelerated eradication of brucellosis, tuberculosis and enzootic leukosis in cattle, 1977 O.J. (L 015), 0034 - 0041.

for testing and herd qualification (Council Directive 64/432/EEC³²).”³³ While field trials of new vaccines are not prohibited,³⁴ it is not anticipated that any trials would be completed before 2016, and it may be ten years before vaccines are fully available in accordance with European and international rules.³⁵ An injectable badger vaccine has been available since 2010, and research is ongoing on a more practical oral vaccine, which may be distributed in bait and would not require trapping the animals.³⁶ However, vaccinating either cattle or badgers does not cure TB, and the actual efficacy of the vaccines in the field is still debated. As Anne McIntosh MP, and Chair of the House of Commons Committee on the Environment, Food and Rural Affairs recently declared while introducing the Committee’s Report on Bovine TB:

While progress to develop vaccines is clearly being made, debate on this subject has been characterised by lack of clarity for public understanding. The Government must share a great deal of the blame for this.

The Government is right to invest millions of pounds in developing vaccines against bovine TB. We should use every tool to combat this disease, but vaccination alone will not, at least in the short term, provide a complete solution. Vaccines have no impact on already infected animals, offer a range of protection to those that aren’t infected, and will be expensive to deploy.³⁷

³² See Directive 64/432, of the Council of the European Communities of 26 June 1964 on animal health problems affecting intra-Community trade in bovine animals and swine, 1964 O.J. (L 121), 1977- 2012

³³ *Correspondence: Bovine TB Eradication Program: Letter From The European Commission: Patterson* (January 14, 2013), DEPARTMENT FOR ENVIRONMENT, FOOD & RURAL AFFAIRS, available at <https://www.gov.uk/government/publications/bovine-tb-eradication-programme-letter-from-the-european-commission-to-owen-patterson>.

³⁴ See REPORT OF THE ENVIRONMENT, FOOD AND RURAL AFFAIRS COMMITTEE, *Vaccination against Bovine TB*, 2013-4, H.C. 258, ¶ 21-8, available at <http://www.publications.parliament.uk/pa/cm201314/cmselect/cmenvfru/258/258.pdf>.

³⁵ See DEPARTMENT FOR ENVIRONMENT, FOOD & RURAL AFFAIRS *supra* note 33.

³⁶ *Badger Vaccination*, DEPARTMENT FOR ENVIRONMENT, FOOD & RURAL AFFAIRS (November 30, 2012), available at <http://www.defra.gov.uk/animal-diseases/a-z/bovine-tb/vaccination/badger-vaccination>.

³⁷ *Bovine TB Vaccination No Magic Bullet Say MPs*, HOUSE OF COMMONS SELECT COMMITTEE ON ENVIRONMENT, AND RURAL AFFAIRS (June 5, 2013), available at <http://www.parliament.uk/business/committees/committees-a-z/commons-select/environment-food-and-rural-affairs-committee/news/bovine-tb-report-publication/>.

Accordingly, the Government decided to proceed with a pilot badger cull under its bTB Eradication Plan, which began in June 2013 when the licensing authority for protected species, Natural England, issued licenses to cull badgers in the counties of Gloucestershire and Somerset.³⁸ Moreover, DEFRA announced that its goal is to rid the U.K. of bTB over the next twenty-five years, in a phased program which primarily relies on expanding the badger cull but explores other alternatives such as enhanced testing, vaccination, or contraception, as they become feasible over time.³⁹

The plans for the badger cull prompted an emotional response across the country, often generating heated controversy among a complex and constantly shifting mix of politicians, farmers, scientists, animal advocates, environmentalists, and the public, each with a different perspective on whether the badger is good or bad.⁴⁰

To the anti-cull advocates, “[d]eath is always the soft option—at least, it is for those not doing the actual dying. The badger cull is all of the peace slaughter of predators that was all the rage in the 19th century and still continues in some places, illegally, today when in doubt, blame a wild creature; and then kill it. Job done.”⁴¹ Brian May, the animal activist and former guitarist with Queen, launched an online petition drive to stop the badger cull which captured this sentiment and received more than a quarter million supporters, making it the highest ranking measure on the Government’s e-petition website.⁴² He also led a protest march to the Westminster Parliament.⁴³ The RSPCA and

³⁸ See *infra* text accompanying note 169; see also *infra* text accompanying note 170; see also *infra* text accompanying note 171.

³⁹ See *Draft Strategy for Achieving “Officially Bovine Tuberculosis-Free” Status for England*, DEPARTMENT FOR ENVIRONMENT, FOOD & RURAL AFFAIRS (July 4, 2013), available at https://consult.defra.gov.uk/farming/tb/supporting_documents/Draft%20%20Strategy.pdf (stating that Wales and Northern Ireland are conducting research into vaccinating badgers, Scotland is free of bTB, and The Republic of Ireland has been culling badgers since the 1980s); see also Helen Briggs, *Q&A: The Badger Cull*, BBC NEWS (June 7, 2013), available at <http://www.bbc.co.uk/news/science-environment-22614350>.

⁴⁰ See Jon Walker, *Battle To Save Badgers Pits Town Against Country*, THE JOURNAL, (July 3, 2013).

⁴¹ Simon Barnes, *Stop Picking On Mr. Brock: It’s This Silly Cow With TB You Should Be Blaming*, THE TIMES (Oct. 7, 2006), available at <http://www.thetimes.co.uk/tto/opinion/columnists/simonbarnes/article1885320.ece>.

⁴² See Brian May, *Stop the Badger Cull e-petition*, HM GOVERNMENT (July 9, 2013), available at <http://epetitions.direct.gov.uk/petitions/38257>; see also *250,000 Anti-Cull*, THE (NEWCASTLE) JOURNAL, (June 20, 2013).

⁴³ *Badger Cull Protest In Westminster Led By Brian May*, THE HUFFINGTON POST (Jan. 6, 2013), available at http://www.huffingtonpost.co.uk/2013/06/01/badger-cull-protest_n_3372032.html.

other groups established websites opposing the cull.⁴⁴ Opponents of the cull employed a number of other tactics, “naming and shaming” farms and marksmen participating in the cull,⁴⁵ and boycotting dairy products from those farms.⁴⁶ Other tactics being advocated included hoax phone calls, playing loud heavy metal music, and using vuvuzelas, and flashlights to scatter badgers and disrupt the nighttime culls.⁴⁷ DEFRA and local police monitored social media for protest activity, but also advocated a “common sense approach” where they said they would focus their enforcement on acts of illegality rather than inhibiting peaceful protests, and even engaged in “wargames” with activists in order to reach mutually agreeable ground rules in advance.⁴⁸ Even so, some cull opponents advocated borrowing more “direct action” tactics from the anti-fox hunting movement; these “cull saboteurs” stated they would put themselves “between the bullets and the badgers.”⁴⁹ Others leafleted farms, threatened blackmail, and at least one fire was suspected of being set by anti-cull activists.⁵⁰

⁴⁴ See generally, *Stop the Badger Cull*, RSPCA, available at <http://www.rspca.org.uk/getinvolved/campaigns/wildlife/stop-the-cull/>; *Stop the Cull*, BADGER KILLERS, available at <http://badger-killers.co.uk/>.

⁴⁵ ‘Badger Defenders’ Say They Will ‘Name And Shame’ Shooters In Cull, GLOUCESTER CITIZEN 4 (June 11, 2013), available at 2013 WLNR 14350788; *Badger Cull has Begun*, DAILY POST (June 1, 2013), available at 2013 WLNR 13491174.

⁴⁶ Charlie Cooper, *RSPCA Calls For Milk Boycott As Farmers Prepare For Badger Cull*, INDEPENDENT (Sep. 20, 2012), available at <http://www.independent.co.uk/environment/nature/rspca-calls-for-milk-boycott-as-farmers-prepare-for-badger-cull-8157382.html>.

⁴⁷ *Saboteurs Aim To “Dig Dirt” On Landowners In Gloucestershire To Stop Cull*, GLOUCESTER CITIZEN (June 3, 2013), 2013 WLNR 13653952; *Trying To Stop The Badger Cull - With Vuvuzelas And Loud Music*, WESTERN MORNING NEWS (June 3, 2013), available at <http://www.thisiscornwall.co.uk/Trying-stop-badger-cull-ndash-vuvuzelas-loud/story-19169815-detail/story.html#axzz2qlcOtTFC>.

⁴⁸ See *Gloucestershire Police Unveil Plan For Badger Cull*, GAZETTE SERIES UK (June 25, 2013), available at 2013 WLNR 15451744; see also *DEFRA Scans Social Networks To Monitor Rural Protest Plans*, WESTERN MORNING NEWS (June 24, 2013) at 2, available at 2013 WLNR 15422632; see also Damian Carrington, *Badger Cull Activists Can ‘Bend The Rules’ During Protests, Say Police*, GUARDIAN (June 14, 2013), available at 2013 WLNR 14499958.

⁴⁹ Sarah Morrison, *We will put ourselves between the bullets and the badgers’*, INDEPENDENT UK (June 15, 2013), available at 2013 WLNR 14664428.

⁵⁰ See *Saboteurs Aim To “Dig Dirt” On Landowners In Gloucestershire To Stop Cull*, *supra* note 47; see also *Trying To Stop The Badger Cull - With Vuvuzelas And Loud Music*, *supra* note 47; see also *Cull Opponents Blamed For Tractor Blaze*, GLOUCESTER CITIZEN (July 15, 2013), available at 2013 WLNR 17232729, <http://www.gloucestercitizen.co.uk/Cull-opponents-blamed-tractor-blaze/story-19519861-detail/story.html>; see also Tina Rowe, *Extremists Suspected Of Tractor Arson*, WESTERN DAILY PRESS (July 15, 2013), available at 2013 WLNR 17233166.

Pro-cull advocates, such as the Farmers Union, challenged anti-cull campaign advertisements for deceptive and misleading claims regarding efforts to “exterminate” badgers in complaints to the Advertising Standards Authority.⁵¹ Some farmers and dealers seeking to evade regulatory controls and testing requirements have moved bTB infected animals into disease free herds and falsified their records, which also resulted in the sale of infected meat and milk to consumers and the imposition of fines and suspended jail sentences.⁵² The intensity of the pro-cull advocates is perhaps illustrated by this somewhat tongue-in-cheek excerpt from a 2004 piece in *The Times* of London:

So what’s new, I ask of friends in the country. What menace this week stalks the rural acres? ... “Badgers,” was the loud reply.

Not since the Beast of Bodmin, not since the Hound of the Baskervilles, had so awful a creature plagued the countryside. *Meles vulgaris*, something between a weasel and a bear, was overrunning hill and dale. And it was, of course, Labour’s fault. What were the teddy-hugging, town-dwelling, pizza-eating classes going to do about it, I was asked? They would not be content until every rustic parlour was a zoo of free-range foxes, badgers, stags, kites and predatory geese?

I could not argue the damage. Across the landscape meadows were being upheaved, hedges, banks and bridleways subsiding, tennis courts falling into holes. Tunnels of Ho Chi Minh ingenuity were sapping the ancient walls and lawns of England with a verminous Vietcong. These omnivorous monsters were eating lambs and ground-nesting birds. They were the only known predator of the hedgehog. Archaeological sites were being destroyed. The killer brock was prowling at will, cockily secure under the 1992 Protection of Badgers Act. Not a hand could be raised against him.

⁵¹ *FUW Call For Action Over Anti-Badger-Cull Adverts*, WESTERN MAIL, (July 2, 2013).

⁵² See Stuart Winter, *Badger Cull: Farmers Flout TB Cattle Rules*, EXPRESS ON SUNDAY UK (July 7, 2013), available at 2013 WLNR 16469783; see also Louise Gray, *Milk From Cows With TB In Shops As Row Over Infected Meat Intensifies*, DAILY TELEGRAPH UK (July 1, 2013), available at 2013 WLNR 15946222.

Nor is that all. The Act has taken badgers from near endangered status to “a population the size of Bristol”, and growing. Farmers regard it as axiomatic that this growth is the cause of the epidemic of bovine tuberculosis. This disease is threatening cows (and taxpayers) on a scale approaching that of foot-and-mouth. But you will never persuade the wildlife lobby of this ... Public resentment over decades of farm subsidy is now concentrated on protecting every fox, deer and badger extant.

Of one thing I am clear. Sherlock Holmes was right. The most foetid and conspiratorial backstreets of London cannot equal the “smiling and beautiful countryside” for raw conflict ...

The cattle tuberculosis epidemic is appalling. Twenty thousand cows were killed last year alone, costing the Treasury close to £100 million in compensation. Incidence is rising by 20 per cent a year, with 4 per cent of the national herd already afflicted. Since badgers are known carriers and their numbers have soared, farmers naturally put two and two together....

The NFU and farm lobbyists are convinced that badgers threaten not just cattle but also the ecological balance of the countryside. They want to be allowed to control numbers. Their foes on the vociferous National Federation of Badger Groups disagree. To them, these appealing creatures are innocent victims of the NFU’s culling fields. Bovine tuberculosis is the result not of badgers but of sloppy cattle husbandry.

To put it mildly these points of view are not compatible.⁵³

Kevin Pearce, the head of food and farming at the National Farmers Union, admits a part of the problem is an “image issue.” “A lot of farmers like badgers but we also want to control the disease. If your vector spreading TB was a rat, I’m sure that there’d be no problem for farmers in securing a license to take action.”⁵⁴ The public, however,

⁵³ Simon Jenkins, *A Verminous Vietcong Stalks The Countryside*, THE TIMES, (May 21, 2004), available at <http://www.thetimes.co.uk/tto/law/columnists/article2047360.ece>.

⁵⁴ Tom de Castella, *Badger Cull; Are We Silly To Be So Sentimental?* BBC NEWS (Nov.19, 2010), available at <http://www.bbc.co.uk/news/magazine-11380921>.

appears not to have been as fully convinced that badgers are either as good or as bad as the advocates on either side of the issue might claim. While older surveys suggest as much as two-thirds of the British public oppose culling badgers to control bTB,⁵⁵ some more recent polls suggest that public opposition to a cull is much lower, perhaps as low as one-third, and almost matched by those who would support a cull.⁵⁶ In some surveys, milk prices and the general plight of the farmers, far outweighed the badgers' role in the spread of bTB—and that few consumers would alter their purchasing habits based upon whether a particular farm or supermarket supported the cull.⁵⁷ Moreover, the majority of consumers surveyed would accept a humanely conducted cull as part of the measures needed to address the spread of bTB.⁵⁸ This suggests that the characterization of badgers as either good or bad by the advocates on both sides of the bTB issue have yet to convince the public that one view or the other should prevail.

b. Other examples of “Good” and “Bad” Wildlife

White-tailed deer offer a comparable example with a similar range of perspectives on these types of issues as they are played out in the United States. The white-tailed deer is among the preeminent symbols of “the wilderness,” and one of the most common charismatic megafauna found in America. But they too, like the badger, are seen from multiple viewpoints, which greatly impacts how humans relate to these wild animals.

⁵⁵ See Richard Black, *UK Public Opposed To Badger Cull, Opinion Poll Suggests*, BBC NEWS (June 8, 2011), available at <http://www.bbc.co.uk/news/science-environment-13684482>.

⁵⁶ See Jonathan Riley, *Poll Shows Badger Cull Not Big Issue For Public*, FARMERS WEEKLY (May 31, 2013), available at <http://www.fwi.co.uk/articles/31/05/2013/139295/poll-shows-badger-cull-not-big-issue-for-public.htm>.

⁵⁷ Julia Glotz, *Badger Cull? Shoppers Think Low Milk Prices Matter More*, THE GROCER (May 25, 2013), available at <http://www.thegrocer.co.uk/topics/badger-cull-shoppers-think-low-milk-prices-matter-more/343586.article>.

⁵⁸ See *Poll Reveals Attitudes to Badger Cull*, NATIONAL FARMERS UNION, (May 31, 2013), available at <http://www.nfuonline.com/news/latest-news/poll-reveals-attitudes-to-badger-cull/> (stating that 55% of consumers accept the cull is necessary or support it as long as it is done humanely); see also Gareth Enticott, *Social Research is Good! But the NFU Badger Cull Survey Is Misleading*, BIOSECURITY RESEARCH (August 20, 2011), available at <http://biosecurityresearch.blogspot.co.uk/2011/08/social-research-is-good-but-nfus-survey.html>.

[W]ildlife watchers lure deer to backyard feeders, locavore foodies trade gourmet venison recipes, antler-obsessed bowhunters perch in tree stands, and millions more hunters spend big bucks in pursuit of big bucks [but at the same time there] are car crashes, Lyme disease, agricultural losses, environmental devastation, and endless hordes of deer invading America's suburbs.⁵⁹

Although the presence of bovine TB in American deer is rare, bTB was identified in deer in New York in 1933, 1937, and 1961. It was subsequently identified in free ranging deer in northern Michigan in 1975, and when it was again documented not only in the same area of Michigan in 1994, but also in neighboring Minnesota, serious concerns arose over deer acting as a reservoir for the bTB bacterium.⁶⁰ Additionally, the practice of deer baiting by hunters and the use of feeding stations by deer farmers, which was also common in more than half the states in the country, helped facilitate nose-to-nose transmission of the disease.⁶¹ However, ongoing federal and state governmental TB surveillance and eradication programs have helped to dramatically reduce, but not eliminate, the presence of bTB in cattle in the U.S.⁶² For many years, ongoing active surveillance for TB in wildlife was conducted only in Michigan and Minnesota. However, short-term surveillance of wildlife is often conducted in other parts of the U.S. when bTB is detected in domestic livestock and captive deer or similar species.⁶³

⁵⁹ AL CAMBRONNE, *DEERLAND: AMERICA'S HUNT FOR ECOLOGICAL BALANCE AND THE ESSENCE OF WILDNESS* vi (2013).

⁶⁰ National Wildlife Disease Program, *Bovine Tuberculosis*, APHIS (last visited Nov. 5, 2012), available at http://www.aphis.usda.gov/wildlife_damage/nwdp/tb.shtml. The Bovine TB bacterium has subsequently been detected, at varying levels, in a wide number of species of North American wildlife, including white-tailed deer, mule deer, elk, bison, moose, raccoons, coyotes, opossums, feral cats, grey fox, black bears, feral swine, gray wolves, red fox, and bobcat.

⁶¹ Some segments of the hunting community, however, assert that baiting is unethical. See JIM STERBA, *NATURE WARS* 103-105 (2012).

⁶² See U.S. DEPT. OF AGRIC., ANIMAL AND PLANT HEALTH INSPECTION SERV., *National Wildlife Disease Program Annual Report 2011* at 45, available at http://www.aphis.usda.gov/wildlife_damage/nwdp/pdf/2011_Annual_Report.pdf. See also, STATE OF MICHIGAN, *Emerging Disease Issues, Bovine Tuberculosis; Summary of bovine tuberculosis management in Michigan's wild deer*. Available at http://www.michigan.gov/emergingdiseases/0,4579,7-186-25804_25811-75930--,00.html.

⁶³ U.S. DEP'T OF AGRIC., ANIMAL AND PLANT HEALTH INSPECTION SERV., NAT'L WILDLIFE DISEASE MGMT PROGRAM: BOVINE TUBERCULOSIS, Nov. 5, 2012, *supra* note 60. The surveillance program in Minnesota ended in February 2013. Minnesota Department of Natural Resources, News Release, *No bovine TB found in northwestern Minnesota deer; disease monitoring and management program ended* (Feb. 11, 2013) available at <http://www.highbeam.com/doc/1G1-318589600.html>.

Deer overpopulation is also a much more widespread problem in North America, with population numbers estimated at greater than 30 million animals and growing at a rapid rate.⁶⁴ This overpopulation leads to unhealthy animals, the spread of Lyme disease and other diseases, as well as damage to forest vegetation, crops, and wildlife habitat.⁶⁵ When combined with increasing urban and suburban sprawl, deer overpopulation also contributes to increasingly significant human interaction, including an estimated 150 human fatalities, 30,000 injuries, and reported insurance payouts of over \$3.8 billion from more than one million annual deer-vehicle crashes.⁶⁶ The solution often offered to “the deer problem,” irrespective of whether that is seen as the spread of bTB or overpopulation, is to manage the resource—to cull Bambi.⁶⁷

Since wildlife law and management in the U.S. is much less centralized than in the U.K. the “deer wars” tend to repeatedly play out in a predictable manner in local communities across the country; these conflicts play out with the “same characters, same anger, same arguments, same questions, same certainty, same ignorance, same grief,” that is, with the same range of perspectives, but asserted by different casts.⁶⁸ In 1997, two scientific researchers satirized this process describing a meeting in the fictional town of East Overshoe.

The adventure begins, usually, when a group of residents from the Town of East Overshoe calls one of us and begs for help in saving their urban deer from a planned hunt or cull. These are generally nice people who dislike the killing of animals in general, and in their backyards in particular. The first and most consistent characteristic we notice about them is that they have absolutely no legal authority to do anything about the deer. . . . The town meeting is a reliably consistent phenomenon. Its parti-

⁶⁴ D.R. McCullough, *Lessons from the George Reserve, Michigan*, L.K. Halls, *WHITE-TAILED DEER: ECOLOGY AND MANAGEMENT*, 211 (1986) (indicating further that, under optimal conditions, deer populations can double every two years).

⁶⁵ See, e.g., Stephen B. Horsley, Susan L. Stout, & David S. deCalesta, *White-Tailed Deer Impact On The Vegetation Dynamics Of A Northern Hardwood Forest*, 13 *ECOLOGICAL APPLICATIONS* 98 (2003).

⁶⁶ See Max Watman, *The White-Tailed Menace*, WALL ST. J., May 31, 2013, available at <http://online.wsj.com/news/articles/SB10001424127887323744604578474892342924414>; and CAMBRONNE, *supra* note 59.

⁶⁷ See INTERNET MOVIE DATABASE, BAMBI, <http://www.imdb.com/title/tt0034492/>. “Bambi” is well known as the 1942 Disney Academy Award winning animated film, based upon Felix Salten’s book, “Bambi, A Life in the Woods” (1923), about a young deer that grows up in the woods after off-screen human hunters kill Bambi’s mother.

⁶⁸ STERBA, *supra* note 61, at 112.

cipants include; (1) those who want to save “their” particular deer, (2) those who object to hunting in general, (3) those who object to management of any kind, (4) those who hate deer for eating their shrubbery or defecating on their lawns, or who believe that the deer will give them Lyme disease or wreck their cars, (5) some township and county officials who want to be re-elected, (6) at least one representative from the state fish and wildlife agency, (7) some shotgun hunters, (8) some bow hunters, (9) a representative from either an animal rights or an animal-welfare organization, and (10) the media.⁶⁹

The authors then describe the various participants’ positions and arguments with humorous detail, positions that are sometimes serious and sometimes irrelevant to the discussion –they are especially critical of the role of the media in the process. That is because their experience shows that “few of the published ‘facts’ regarding the science...are correct; [as] the media focuses on the interpersonal conflicts rather than the substantive issues... . In general, the media merely inflames the issues and offers nothing constructive to the community in the way of education.”⁷⁰ The fictional East Overshoe town meeting “finally ends after exchanges become hostile and insults frequent, without decisions by anyone with legal authority to act on the problem.”⁷¹ The authors conclude their parable observing that:

The deer are in this fix because people put them there. We suburbanized their historic habitat. Then we built up humanity all around them, so they couldn’t get out even if they wanted to. We owe them a solution. Working together we can find it: the solution will most certainly be a compromise. But until we put aside our egotism, territorialism, and defensiveness and sort through the facts as a focused interdisciplinary team, all of us and the deer will suffer.⁷²

* * *

Our lessons have been that obstacles to [the] deer [problem] are social and political, not a lack of science.⁷³

⁶⁹ Jay F. Kirkpatrick & John W. Turner, Jr., *Urban deer contraception: the seven stages of grief*, 25 WILDLIFE SOCIETY BULLETIN 515-17 (1997).

⁷⁰ *Id.* at 517.

⁷¹ *Id.*

⁷² *Id.* at 519.

⁷³ *Id.* at 518.

Over the years, other commentators have observed the same story actually unfold in numerous communities across the U.S. The author of “Nature Wars” also notes:

because these fights are local, there is virtually no learning curve from one place to another, from one community to the next. The vested interests, on the other hand, long ago honed their arguments and march them from one fight to the next. Local bow hunters can solve the problem, cheap, if only given the chance. Fertility control is just around the corner. Meanwhile, the magnificent white tailed deer, a visual treasure to behold, becomes a long-legged rat.⁷⁴

Other examples abound. Although populations of Canadian geese were once much reduced due to over-hunting and habitat loss, following successful reintroduction and management programs they are now abundant across North America—especially around human engineered landscapes such as golf courses, city lakes, and parks, which provide food, water, and protection for the birds.⁷⁵ The rapid increase of local breeding populations over the last 50 years, combined with the mixing of resident birds with winter migrants, now results in the geese being regarded as a problem in more than 100 urban areas across 37 states because of their droppings, crop damage, impact upon water quality, sometimes-aggressive behavior towards humans, and accidents with aircraft.⁷⁶ This leads to calls to manage or cull the geese.⁷⁷ Although some advocates dispute the claims that the geese pose a threat to public health,⁷⁸ calls to manage the birds, including by lethal means if necessary, increased following the crash landing of US Airways Flight 1549 in New York’s Hudson River after a flock of geese struck the plane on take off.⁷⁹

⁷⁴ *Id.* at 117.

⁷⁵ Thomas B. Mowbray, Craig R. Ely, James S. Sedinger & Robert E. Trost. 2002. *Canada Goose (Branta canadensis): Conservation and Management*, THE BIRDS OF NORTH AMERICA ONLINE (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online, available at <http://bna.birds.cornell.edu/bna/species/682>.

⁷⁶ *Id.*

⁷⁷ See 16 U.S.C. § 703 *et seq.* (noting, however, that Canadian geese are among the species protected by the Migratory Bird Treaty Act of 1918, which brought the regulation of migratory game birds and feathers under federal, rather than state, control and was one of the first environmental/conservation laws in the U.S.).

⁷⁸ See, e.g., *Canadian Geese as a Suburban Wildlife Issue: Public Health*, COALITION TO PREVENT THE DESTRUCTION OF CANADA GEESSE available at <http://www.canadageese.org/doc3c.html>.

⁷⁹ Simon Akam, *For Culprits in Miracle on Hudson, the Flip Side of*

According to at least one former wildlife scientist at the U.S. Department of Agriculture, “[t]he bottom line with Canad[ian] geese is that they truly are the most hazardous species of bird that poses a threat to aviation.”⁸⁰ The challenge for wildlife managers, of course, is to achieve a balance between too few and too many geese, while maintaining the diversity of this species throughout its range in North America.⁸¹

Numerous other species of wildlife in North America, such as bears,⁸² beavers,⁸³ coyotes,⁸⁴ wild pigs,⁸⁵ wild turkeys,⁸⁶ among others, pose issues that are subject to similar debates over whether they represent “good” or “bad” wildlife. However, perhaps nothing in the U.S. comes quite as close to matching the emotional tenor generated by the badger cull in the U.K. as the efforts to address exploding feral cat populations, particularly in urban areas.

Although cats may not immediately be associated with wildlife and wildlife management issues, feral cats are listed as among the world’s top 100 “invasive species” by the World Conservation Union’s Invasive Species Specialist Group because they “threaten native birdlife and other fauna,” both as predators and as reservoirs for disease.⁸⁷ Cats are blamed for the extinction of thirty-three species; according to a recent study by the Smithsonian Conservation Biology Institute and the US Fish and Wildlife Service, “free-ranging domestic cats kill [between] 1.4-3.7 billion birds and 6.9–20.7 billion mammals annually” in the United States.⁸⁸ The fact that cats kill more wildlife than other human-related

Glory, N.Y. TIMES (Oct. 2, 2009) available at http://www.nytimes.com/2009/10/03/nyregion/03geese.html?_r=2&partner=rss&emc=rss&.

⁸⁰ *Id.* See also, 50 CFR § 21.49 (authorizing federal control and management activities including both direct and indirect strategies such as trapping and relocation, nest and egg destruction, gosling and adult trapping and culling programs, or other lethal and non-lethal control strategies).

⁸¹ MOWBRAY ET AL., *supra* note 75.

⁸² See, e.g., Darcy Frey, *The Bears Among Us*, N.Y. TIMES, MAGAZINE (Nov. 25, 2007).

⁸³ See, e.g., Cornelia Dean, *Return of the Once-Rare Beaver? Not in My Yard*, N.Y. TIMES, June 8, 2009, at D1.

⁸⁴ See, e.g., Kristy Sucato, *A Close Call, and a Sign of a Thriving Animal World*, N.Y. TIMES, May 6, 2007, at 14NJ.

⁸⁵ See, e.g., Patricia Leigh Brown, *It’s Always Fair Game for Wild Pigs*, N.Y. TIMES, Sept. 30, 2005, at F1.

⁸⁶ See, e.g., Peggy Orenstein, *Nature, Nuisance, or Worse?*, N.Y. TIMES, Dec. 7, 2008 at MM1.

⁸⁷ INTERNATIONAL UNION FOR CONSERVATION OF NATURE, *Global Invasive Species Database: *Felius Catus**, available at <http://www.issg.org/database/species/ecology.asp?si=24&fr=1&sts=&lang=EN>.

⁸⁸ Scott R. Loss, Tom Will, & Peter P. Marra, *The Impact Of Free-Ranging Domestic Cats On Wildlife Of The United States*, 4 NATURE COMMUNICATIONS 1, Jan. 29, 2013, <http://www.nature.com/ncomms/journal/v4/n1/pdf/ncomms2380.pdf>.

causes prompted the study to conclude that free-ranging cat populations are the “top threat to US wildlife.”⁸⁹ Accordingly, commentators have noted that

the domestic cat occupies a dominant and unthreatened niche; its few natural enemies, like coyotes, are no match for tens of millions of free-roaming cats, including beloved pets and feral cats . . . Most of the killing is done by stray or feral cats, and there is no easy way to reduce that population. Programs that trap and neuter feral cats and then release them may actually encourage more people to abandon cats to the wild. Conservationists in Australia, where the feral cat problem is perhaps even more serious, have experimented successfully with allowing the cat’s natural predator there—the dingo—to rebound in numbers. But most Americans will never put up with a burgeoning coyote population, which leaves euthanasia for feral cats as the unpalatable response to reducing the wildlife slaughter.⁹⁰

While feral cats may not have owners, they, like badgers, do have vocal defenders and lobbyists, such as Alley Cat Allies (ACA)⁹¹ and more than 350 local feral cat protection charities which advocate “trap-neuter-return” (TNR) programs as a humane alternative to euthanasia.⁹² Indeed, ACA studies show that while virtually all stray cats are killed in shelters, most Americans oppose using public funds to euthanize strays, which has helped lead to a tenfold increase in local government support for TNR programs over the past decade.⁹³ Advocates of these programs assert that they stabilize the population of feral colonies, and lead to

⁸⁹ *Id.* *Contra* Alley Cat Allies Press Release, *Alley Cat Allies Delivers 55,000 Signatures To Smithsonian To Protest Flawed Study On Cats And Birds*, (May 1, 2013) available at <http://www.alleycat.org/page.aspx?pid=1445> (challenging the Smithsonian study’s methodology and conclusions).

⁹⁰ Editorial, *Soft and Deadly*, N.Y. TIMES, Jan. 31, 2013, at A22.

⁹¹ See ALLEY CAT ALLIES, ABOUT US, available at <http://www.alleycat.org/page.aspx?pid=616>. Alley Cat Allies is “the only national advocacy organization dedicated to the protection and humane treatment of cats. An engine for social change, Alley Cat Allies was the first organization to introduce and advocate for humane methods of feral cat care, particularly Trap-Neuter-Return, in the American animal protection community.”

⁹² STERBA, *supra* note 61, at 253.

⁹³ Alley Cat Allies Press Release, *Support For Trap-Neuter-Return For Cats Rose Ten-Fold Among Local Governments Over Past Decade*, (May 16, 2013) available at <http://www.alleycat.org/page.aspx?pid=1448>.

their eventual decline, while protecting cats' lives and avoiding the "vacuum effect" created with catch-and-kill or relocation programs.⁹⁴

Opponents of TNR programs, such as the American Association of Wildlife Veterinarians (AAWV), point out that "the maintenance of feral cat colonies (with food and health care following the TNR procedure) does not eliminate predation on native birds and small mammals by feral cats." TNR programs generally address neither the potential for the spread of zoonotic diseases by feral animals nor establish guidelines for assuring the quality of life within the colony. Indeed, even People for the Ethical Treatment of Animals (PETA) has similar concerns and generally oppose TNR programs as not being in the cats' best interests.⁹⁵ Accordingly, the AAWV called for the elimination of feral cat colonies on public lands and discouraged their maintenance on private property.⁹⁶ Similarly, freelance conservationist Ted Williams wrote in Audubon Magazine in 2009 that "[w]ith something like 150 million free-ranging house cats wreaking havoc on our wildlife, the last thing we need is Americans sustaining them in the wild," and he continued to note that feeding feral cats could potentially contravene portions of the Migratory Bird Treaty Act and the Endangered Species Act while observing that enforcement of those provisions is politically unpalatable.⁹⁷ In other words, the concern expressed by the Audubon Society,⁹⁸ the American Bird Conservancy,⁹⁹ and others is that "TNR has been approached largely as an animal welfare issue instead of being recognized as a broad environmental issue with a range of impacts on species conservation, the physical environment, and human health."¹⁰⁰

This is especially evident when the welfare interests of individual animals, such as cats, directly compete with the broader aim of protecting the habitat or another species, and particularly the need to protect endangered species. For example, the ground-nesting piping

⁹⁴ The "vacuum effect" refers to new animals moving into the original territory as a result of the opportunity created by the control efforts. Alley Cat Allies, *The Vacuum Effect: Why Catch and Kill Doesn't Work* <http://www.alleycat.org/page.aspx?pid=926>.

⁹⁵ PETA, *Animal Rights Uncompromised: Feral Cats*, available at <http://www.peta.org/about/why-peta/feral-cats.aspx>.

⁹⁶ *AAWV Position Statement on Feral Cats*, AMERICAN ASSOCIATION OF WILDLIFE VETERINARIANS July 1996, available at <http://www.aawv.net/AAWVFERALCATPOSITIONSTATEMENT.doc>.

⁹⁷ Ted Williams, *Felines Fatales: Feral Cats Take a Horrific Toll on Wild Birds*, AUDUBON MAGAZINE (September-October 2009), available at <http://archive.audubonmagazine.org/incite/incite0909.html>.

⁹⁸ See, Audubon Society, *Audubon Comments on Bird and Cat Safety*, available at <http://www.audubon.org/audubon-comments-bird-and-cat-safety>.

⁹⁹ See, American Bird Conservancy, *Cats Indoors*, available at <http://www.abcbirds.org/abcprograms/policy/cats/index.html>.

¹⁰⁰ Williams, *supra* note 97.

plover is an endangered shorebird species at the center of recurring controversies between feral cat advocates and conservationists. When James Stevenson, a birding enthusiast and founder of the Galveston Ornithological Society, killed a feral cat, which he claimed was stalking endangered piping plovers in the Galveston sand dunes, and was arrested, indicted, and tried for animal cruelty, there was an outcry across the country among both feral cat advocates and birders. Stevenson subsequently declared, “[t]hese birds . . . are protected by state and local laws. Do we ignore what is happening with these stray cats, or do we finally stand up and do something about it? Sometimes you get pushed to a point where you can no longer ignore a situation.”¹⁰¹ In response the prosecution’s chief witness, John Newland, who provided food for the feral colony, replied, “[t]here are a lot of cat lovers. . . . Unfortunately, I’ve found that there are also cat haters.”¹⁰² Stevenson was both reviled across the Internet as a “diabolical monster” and hailed as a hero for taking action to deal with the “terrible menace” that feral cats posed to birds. The jury also reflected this dichotomy of perspectives when it deadlocked after two days of deliberation, resulting in dismissal of the charges against Stevenson.¹⁰³

In another example illustrating this clash of perspectives, Ted Williams was removed from the post which he had held for 33 years as a freelance editor-at-large for Audubon Magazine following a March 2013 editorial in the Orlando Sentinel which declared that TNR programs make the feral cat problem worse and advocated euthanasia. Although this was a familiar theme in his writing, cat advocates were particularly outraged by Williams’ assertion in the editorial that over-the-counter medications, including Tylenol, would be a humane way to kill cats. Alley Cat Allies mounted a campaign which generated tens of thousands of emails demanding Williams’ dismissal, in part because Tylenol is neither approved nor registered for use in euthanizing cats.¹⁰⁴ The Audubon Society stated that it “absolutely reject[ed] the notion of

¹⁰¹ Miguel Bustillo, *Cat’s Death Was For Good Cause, Birder Accused Of Cruelty Says*, SOUTH FLORIDA SUN-SENTINEL (November 26, 2006) at 18A.

¹⁰² Miguel Bustillo, *Alleged Cat Slayer Says He’s Martyr For Birds*, LA TIMES (November 25, 2006) at 15.

¹⁰³ See, Kate Murphy, *Birder Admits Killing Cat, But Was It Animal Cruelty?* NY TIMES (November 14, 2007) at A16; Bruce Barcott, *Kill the Cat that Kills the Bird?* NY TIMES MAGAZINE (December 2, 2007) at 646. Since one of the issues in the Stevenson case was whether the cat “belonged” to someone, the case also prompted a change in Texas law to protect all cats, regardless of whether they have an owner. The cat that was killed was part of a feral colony that was fed and supported by John Newland, but Newland was not the “owner” of the cats in the colony. Kate Murphy, *Judge Declares a Mistrial in Cat Killing Case*, NY TIMES (November 17, 2007) at A12.

¹⁰⁴ Christine Haughney, *Writer, and Bird Lover, at Center of a Dispute About Cats Is Reinstated*, NY TIMES (March 27, 2013) at B3.

individuals poisoning cats” and suspended Williams.¹⁰⁵ The Orlando Sentinel modified the op-ed piece on its website, and Williams also added a correction and apology, which stated that while his statements were “not inaccurate, it was unwise because readers might construe it as a suggestion to go out and start poisoning feral cats. What’s more, the statement could be, indeed was, manipulated by feral-cat advocates into something I didn’t write or intend.”¹⁰⁶ However, bird advocates and journalists also mounted a counter-campaign, and Williams was reinstated ten days later.¹⁰⁷ Somewhat ironically, Williams’ 2009 article in Audubon Magazine observed that “[t]he political power of wildlife advocates is dwarfed by that of the feral cat lobby” and further went on to quote the Audubon Society’s Director of Bird Conservation as saying that, “[u]nfortunately, the cat people have an emotional appeal with the public that’s superior to anything we bird people have.”¹⁰⁸

Indeed, there is perhaps no greater public relations problem for wildlife managers than attempting to deal with a cute furry “pest”—especially one that reminds us of a pet even though it’s also recognized that feral unsocialized animals are unsuitable as human companions.¹⁰⁹ This makes TNR, or other non-lethal means of control, tremendously attractive. Ultimately, however, these debates are not really about badgers, deer, geese, cats, or birds, but rather about the nature of human relationships to wild animals.

¹⁰⁵ *Id.*

¹⁰⁶ Ted Williams, *Trap, Neuter, Return Programs Make Feral-Cat Problem Worse*, ORLANDO SENTINEL (Mar. 14, 2013) available at http://articles.orlandosentinel.com/2013-03-14/news/os-ed-feral-cats-031413-20130313_1_feral-cats-feral-cat-problem-alley-cat-allies.

¹⁰⁷ *Id.*; Stephen J. Bodio, *The Crazy Cat Lobby*, STEPHEN BODIO’S QUERENCIA (Mar. 21, 2013) available at <http://stephenbodio.blogspot.com/2013/03/the-crazy-cat-lobby.html>; David Petersen, *Feral Kat Krazies Eat Audubon Star Reporter Ted Williams*, THE HUFFINGTON POST (Mar. 25, 2013) available at http://www.huffingtonpost.com/david-petersen/ted-williams-feral-cats_b_2935206.html.

¹⁰⁸ Williams, *supra* note 97.

¹⁰⁹ See, *Feral and Stray Cats: An Important Difference*, ALLEY CAT ALLIES, available at <http://www.alleycat.org/page.aspx?pid=712>.

III. THE EXISTING FRAMEWORK FOR WILDLIFE LAW IN ENGLAND & WALES

“No animal enjoys better protection than the badger, though few need it less. Uniquely, it has its own Act of Parliament to defend its wellbeing, yet—unlike hundreds of much more poorly safeguarded species—it is not at all endangered.”¹¹⁰ As the Law Commission noted in its consultation paper, the legal regimes dealing with wildlife are inextricably intertwined with socio-economic structures. Accordingly, English law historically treated wildlife as an economic or leisure resource that is something to be controlled rather than something to be protected in its own right.¹¹¹ In particular, it focused on the creation and protection of rights over wildlife associated with particular interests in land. Following the Saxon and Norman invasions, lands were parceled out to the nobility, and those that were not parceled out were reserved as royal forests and fisheries. Thus, the sovereign had both the exclusive right to hunt in these royal preserves, and to allocate the ability (and the means¹¹²) to pursue wild animals elsewhere. While royal power gradually gave way to Parliament, that authority was exercised primarily through “qualification” statutes and game laws, which effectively allowed only prominent citizens to take game, possess certain weapons, and ultimately to consume certain animals.¹¹³ Over time, the idea that wild animals belonged to the sovereign which could allocate the privilege of hunting¹¹⁴ eventually evolved into the notion that the government in Parliament, as the political embodiment of the people’s will, had a duty

¹¹⁰ Geoffrey Lean, *Bovine TB: An ill wind blows for Mr Badger*, THE TELEGRAPH (January 22, 2010) available at <http://www.telegraph.co.uk/earth/earthcomment/geoffrey-lean/7054939/Bovine-TB-An-ill-wind-blows-for-Mr-Badger.html>. The statement that badgers are “unique” in having protection under their own Parliamentary Act is inaccurate. See *infra* notes 123-129 and accompanying text.

¹¹¹ CP No. 206, *supra* note 2, at 1. See also, MICHAEL J. BEAN & MELANIE J. ROLAND, *THE EVOLUTION OF NATIONAL WILDLIFE LAW* 7-10 (3rd ed. 1997).

¹¹² One commentator has observed that early English game laws “were originally made with the view of taking arms out of the hands of the common people, or at least with the design rendering them inexpert in the use of them.” S. PURLWENT, *A DIALOGUE BETWEEN A LAWYER AND A COUNTRY GENTLEMAN UPON THE SUBJECT OF GAME LAWS* 14 (3rd ed. 1771) quoted in THOMAS A. LUND, *AMERICAN WILDLIFE LAW* 112 (1980).

¹¹³ Lund, *supra* note 12 at pp. 7-10. Land ownership, wealth, and profession were the principal qualifications criteria. The qualification statutes remained in effect until as late as 1831.

¹¹⁴ Some commentators dispute this conclusion and assert that there is little evidence that the King of England had any important property interest in wildlife, at least after the early medieval period. See e.g. Dean Lueck, *Wildlife Law*, THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW, (P. Neuman ed. 1998) at p. 697; Dean Lueck, *The Economic Nature of Wildlife Law*, 18 JOURNAL OF LEGAL STUDIES 291 (1989).

to conserve and protect wildlife as a public good. This is reflected in the gradual evolution of legal protections afforded to badgers and other wild animals.

Martin's Act in 1822 famously became the first piece of legislation specifically intended to prevent cruelty to animals.¹¹⁵ This was followed by a prohibition within the City of London on animal baiting and fighting in 1833,¹¹⁶ which was extended to the rest of the country in 1835 with Pease's Act, and specifically addressed fighting and baiting badgers, bears, bulls, and a variety of other animals.¹¹⁷ Pease's Act was in turn replaced and further expanded with the Prevention of Cruelty to Animals Act in 1849¹¹⁸ and the Cruelty to Animals Act of 1876.¹¹⁹ However, these animal cruelty measures only applied to domestic animals and did not protect wild animals at all, even when held in captivity,¹²⁰ such as in zoos or as performing animals.¹²¹ This was partially remedied with

¹¹⁵ "An Act to prevent the cruel and improper Treatment of Cattle"(1822), 3 Geo. IV, c. 71. Martin's Act made it an offense for anyone to wantonly and cruelly beat, abuse, or ill-treat any horse, mare, gelding, ass, ox, cow, heifer, steer, sheep, or other cattle.

¹¹⁶ "An Act for the more effectual Administration of Justice in the Office of a Justice of the Peace in the several Police Offices established in the Metropolis" (1833), 3 & 4 Will. IV, c. 19.

¹¹⁷ "An Act to consolidate and amend the several Laws relating to the cruel and improper Treatment of Animals, and the Mischiefs arising from the driving of cattle" (1835), 5 & 6 Will. IV, c. 59. Pease's Act repealed and reenacted the protections of Martin's Act and extended the anti-cruelty prohibition to bulls, calves, lambs, dogs, and other domestic animals.

¹¹⁸ "An Act for the more effectual Prevention of Cruelty to Animals" (1849), 12 & 13 Vict., c. 92. The 1849 Act made it an offense cruelly to beat, ill-treat, overdrive, abuse, or torture any animal, and removed the requirement found in the earlier legislation that the offense be committed both wantonly and cruelly. Additionally, the act made it an offense to cause unnecessary pain or suffering while transporting an animal, which significantly represents a broader concept of Cruelty which focuses upon the condition of the individual animal rather than the attitude or conduct of the perpetrator. Lastly the act introduced a definition of the term "animal" as encompassing any "horse, mare, gelding, bull, ox, cow, heifer, steer, calf, ass, sheep, lamb, hog, pig, sow, goat, dog, cat, or any other domestic animal."

¹¹⁹ "Cruelty to Animals Act" (1876), 39 & 40 Vict., c. 77. The 1876 Act also made it an offense to perform experiments on living animals unless they were carried out to advance medical knowledge or alleviate suffering. It required the use of anesthesia and provided for regulatory oversight administered by the Home Secretary.

¹²⁰ Courts applying these statutes struggled with trying to distinguish between wild animals tamed to serve some useful purpose and those that were merely wild animals in confinement. For example, trained decoy birds were considered domestic animals, *Colam v. Pagett* [1893] 12 Q.B.D. 66, but rabbits caught and kept to be used for coursing with dogs were still wild. *Aplin v. Porritt* [1893] 2 Q.B. 57.

¹²¹ In holding that five full grown lions used in a traveling performance were not within the ambit of the Anti-Cruelty Acts, J. Cave noted, "[t]he mere caging and keeping in captivity a wild animal is not enough to make it a domestic animal." *Harper v. Marks* [1894] 2 Q.B. 319, 322.

the Wild Animals in Captivity Protection Act in 1900,¹²² and a handful of other statutes aimed at providing a measure of protection to certain species in the wild, primarily birds.¹²³ The Protection of Animals Act of 1911 consolidated and expanded much of the anti-cruelty legislation dating back to Martin's Act. While it focused primarily upon domestic animals, it also expressly included captive animals within its scope—and significantly expanded liability for acts of omission or the failure to exercise reasonable care or supervision in preventing cruelty.¹²⁴

¹²² Wild Animals in Captivity Protection Act, 1900, 63 & 64 Vict., c. 33 (U.K.). [Rule 20,1, T2.42] The Act makes it an offense to wantonly or unreasonably cause or permit any unnecessary suffering to a captive, maimed, pinioned, or imprisoned animal, or to cruelly abuse, infuriate, tease, or terrify such an animal. It broadly applies to any non-domestic animal of whatsoever kind or species—including fish or reptiles—and therefore expands beyond Parliament's traditional focus on mammals and birds. Hunting and coursing (i.e. using dogs to pursue game), however, were expressly excluded from the Act's coverage.

¹²³ Prior to passage of the Wild Animals in Captivity Protection Act there had been several measures aimed at conserving wild birds, and one which protected hares. The Sea Birds Preservation Act, 1869, 32 & 33 Vict., c. 17 (U.K.), first introduced statutory closed seasons for hunting seabirds, which was subsequently extended first to designated species of wild birds and fowl, and then to all wild birds in order to preserve their numbers. See Wild Birds Protection Act, 1872, 35 & 36 Vict., c. 78 (U.K.); An Act for the Preservation of Wild Fowl, 1876, 39 & 40 Vict., c. 29 (U.K.); Ground Game Act, 1880, 43 & 44 Vict., c. 47 (U.K.). The Hares Preservation Act, 1892, 55 & 56 Vict., c. 8 (U.K.), was the only measure passed during this period addressing wild mammals. While it did not address killing hares it prohibited their sale during five months of the year. The Wild Birds Protection Act, 1894, 57 & 58 Vict., c. 24 (U.K.), provided additional protection by prohibiting taking or destroying wild birds' eggs.

¹²⁴ Protection of Animals Act, 1911, 1 & 2 Geo. 5, c. 27 (U.K.). The Act makes it an offense to "cruelly beat, kick, ill-treat, over-ride, over-drive, over-load, torture, infuriate, or terrify any animal", or to "cause or procure, or, being the owner, permit any animal to be so used, or shall, by wantonly or unreasonably doing or omitting to do any act, or causing or procuring the commission or omission of any act, cause any unnecessary suffering, or, being the owner, permit any unnecessary suffering to be so caused to any animal". It also prescribes, among other things, "assist at the fighting or baiting of any animal", or managing the premises where such activities occur. Furthermore, that act states that "an owner shall be deemed to have permitted cruelty within the meaning of this Act if he shall have failed to exercise reasonable care and supervision in respect of the protection of the animal therefrom". Hunting and coursing were still generally excluded from the Act's coverage unless a captive animal used in hunting or coursing "is liberated in an injured, mutilated, or exhausted condition". The Act was also amended in 1921 to eliminate the hunting and coursing exclusion in circumstances where the animal is "in an enclosed space from which it has no reasonable chance of escape". Protection of Animals Act (1911) Amendment Act, 1921, 11 & 12 Geo. 5, c. 14 (U.K.). While much of the Protection of Animals Act is now superseded, the provision requiring anyone setting a spring trap which is likely to ensnare a rabbit or hare must check the trap daily between sunrise and sunset. *Id.* at § 10. See also CP No. 206, *supra* note 2, at p.42.

Thus, by the early 20th century, the legal framework, while still largely a patchwork of ad hoc measures dealing with particular issues, began to consider the effect of an act or omission on individual animals rather than focusing exclusively on the behavior of individuals accused of an offense.

Animal issues were then largely sidelined until the late 1960s by two world wars and momentous changes on both the domestic and international levels, which occurred during the first half of the 20th century. Externally, this period saw the growth of a number of new international regimes affecting the environment and wildlife, including those with tangential impact such as: the 1951 International Plant Protection Convention,¹²⁵ the 1971 Convention on Wetlands of International Importance (Ramsar Convention),¹²⁶ the 1982 United Nations Convention on the Law of the Sea,¹²⁷ or those which directly address wildlife issues as part of their core objectives such as the 1973 Convention on the International Trade in Endangered Species,¹²⁸ and the

¹²⁵ The IPPC, which was reformatted in 1997, aims to secure coordinated, effective action to prevent and to control the introduction and spread of pests of plants and plant products. Although the agreement focuses upon plants, it also addresses standards to regulate “pests,” which include “any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products” and therefore impacts wildlife that is regarded as an invasive non-native species. See International Plant Protection Convention, Arts. 2, 8, available at <https://www.ippc.int/about/convention-text>.

¹²⁶ Convention on Wetlands 1971, available at http://www.ramsar.org/cda/en/ramsar-documents-texts/main/ramsar/1-31-38_4000_0__. While the Ramsar Convention primarily deals with wetlands habitats it, like the IPPC, the parties to the Convention have also addressed invasive non-native species and the steps to take to “identify, eradicate and control” such species. See, *Resolution VII:14, 7th Meeting of the Conference of the Contracting Parties to the Convention on Wetlands (Ramsar, Iran, 1971)* San José, Costa Rica, 10-18 May 1999, available at http://www.ramsar.org/pdf/res/key_res_vii.14e.pdf; and *Resolution VIII:18, 8th Meeting of the Conference of the Contracting Parties to the Convention on Wetlands (Ramsar, Iran, 1971)* Valencia, Spain, 18-26 November 2002, available at http://www.ramsar.org/pdf/res/key_res_viii_18_e.pdf.

¹²⁷ UNCLOS, replaced four earlier treaties when it came into full effect in 1994, and defines the rights and responsibilities of nations in their use of the world’s oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources. Accordingly, it addresses a range of issues affecting the marine environment, as well as specifically addressing “the intentional or accidental introduction of species, alien or new, to a particular part of the marine environment, which may cause significant and harmful changes thereto.” United Nations Convention on the Law of the Sea, 1982, 1833 U.N.T.S. 397, art. 196(1), available at http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf.

¹²⁸ CITES is one of the oldest and largest international conservation agreements, which establishes a framework for individual parties to implement in their national legislation in order to regulate trade in listed species so that their survival in the wild is not threatened. Convention on International Trade in Endangered Species of Wild Fauna and Flora, June 22, 1979, 27 U.S.T. 1087, available at <http://www>.

1992 Convention on Biological Diversity,¹²⁹ among others. Similarly, a variety of regional European measures also impact British wildlife law and policy as a result of the U.K.'s membership in European Union. This notably includes the 1979 Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention).¹³⁰ Additionally, the Treaty on the Functioning of the European Union (TFEU)¹³¹ provides the EU with competence to act on environmental matters in addition to its powers to legislate for the common market, and specifically addresses the need to consider animal welfare in formulating and implementing particular EU policies.¹³² Accordingly, there are a variety of European directives and regulations that affect what the U.K. does with wildlife domestically, including, for example, the Wild Birds Directive¹³³ and the Habitats Directive.¹³⁴ Moreover, internally, Parliament's role also changed during this period with a dramatic increase in the use of delegated legislation or regulation by administrative agencies, as well as in response to these new "external" developments.

These influences can be seen in the current framework for addressing wildlife in English law. Badgers provide an example of a purely domestic, and perhaps "older-style," effort at species protection,

[cites.org/eng/disc/text.php](http://www.cites.org/eng/disc/text.php). CITES currently calls for varying levels of protection to more than 34,000 species of plants and animals. For the UK and other EU member states, the obligations CITES imposes are found in EU *Council Regulation (EC) No 338/97 on the protection of species of wild fauna and flora by regulating trade therein*, OFFICIAL JOURNAL L 61/1 of March 3, 1997.

¹²⁹ The CBD imposes a range of obligations on contracting states, including developing national strategies for the conservation and sustainable use of biodiversity, and for the prevention, eradication, or control of invasive non-native species. *See e.g.* Convention on Biological Diversity, Arts. 6, 8, *available at* <http://www.cbd.int/convention/text/default.shtml>.

¹³⁰ The Council of Europe's Bern Convention covers most of the natural heritage of European continent and some African states. It aims to conserve wild flora and fauna and their natural habitats and to promote European cooperation to protect endangered habitats and species including migratory species. Its detailed structure and provisions form the backdrop for a great deal of EU legislation, including the Wild Birds and Habitats Directives. *See* Convention on the Conservation of European Wildlife and Natural Habitats, Bern, September 19, 1979, *available at* <http://conventions.coe.int/Treaty/en/Treaties/Html/104.htm>.

¹³¹ *Consolidated Version Of The Treaty On The Functioning Of The European Union*, OFFICIAL JOURNAL C 83/47, March 30, 2010.

¹³² *Id.* at arts. 13, 26-27, 191-193.

¹³³ Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds, OFFICIAL JOURNAL L103/1 of April 25, 1979. Original Directive and amendments consolidated in Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds, OFFICIAL JOURNAL L 20/7 of January 26, 2010.

¹³⁴ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, OFFICIAL JOURNAL L 206/7, July 22, 1992.

whereas many of the other British wildlife measures are more obviously influenced or driven by this proliferation of external influences and the growth of public awareness of a broader range of conservation, environmental, and animal welfare issues.

Despite the laws against animal baiting, badger digging remained popular, and concerns over their population decline led to the “Look Out for the Badger” campaign and passage of the Badger Act of 1973,¹³⁵ which was twice amended in 1991.¹³⁶ The Act was designed to stop the persecution of badgers, while allowing the Ministry of Agriculture, Fisheries and Food to license individuals to kill badgers suspected of spreading disease recalling that a badger had died of bovine tuberculosis in 1971. This legislation protected badgers but not their setts so the Protection of Badgers Act of 1992¹³⁷ consolidated the earlier anti-cruelty measures together with new protections for their setts.¹³⁸ Accordingly, unless specifically permitted or licensed, it is an offence to wilfully kill, injure, or take a badger, or to attempt such acts; to cruelly ill-treat a badger; to use badger tongs or to dig for a badger; and to interfere with or disturb a badger sett. It is also an offence to possess, sell, or offer to sell a badger. There are, however, exceptions for harming badgers or their setts when necessary to prevent serious damage to the land, crops, poultry or other property, or which could not be avoided when incidental to a lawful operation, or when hunting foxes with hounds.¹³⁹

As public attitudes towards the environment, conservation, and animals increasingly changed over the latter part of the 20th century, a variety of other domestic legislative measures were also passed. Among the notable measures promulgated on the domestic level were the Wildlife and Countryside Act of 1981,¹⁴⁰ the Wild Mammals (Protection) Act of 1996,¹⁴¹ the Hunting Act 2004,¹⁴² the Animal Welfare Act of 2006,¹⁴³

¹³⁵ Badgers Act, 1973 c. 57 (U.K.). (repealed October 16, 1992). The 1973 Act was also modified by The Wildlife and Countryside Act, 1981 c. 69 (U.K.) (repealed October 16, 1992), and The Wildlife and Countryside (Amendment) Act, 1985, c. 31 (U.K.) (repealed October 16, 1992).

¹³⁶ Badgers (Further Protection) Act, 1991, c. 35 (U.K.) (repealed October 16, 1992); Badgers Act, 1991, c. 36 (U.K.) (repealed October 16, 1992).

¹³⁷ Protection of Badgers Act, 1992, c. 51 (U.K.).

¹³⁸ Doug Lucyshyn, *The Problem with Britain's Badgers*, INTERNATIONAL GAME WARDEN MAGAZINE (2008) at 16.

¹³⁹ Protection of Badgers Act, 1992, c. 51 (U.K.).

¹⁴⁰ Wildlife and Countryside Act, 1981, c. 69; Wildlife and Countryside (Amendment) Act, 1985, c. 31 (U.K.); Wildlife and Countryside (Amendment) Act, 1991, c. 39 (U.K.).

¹⁴¹ Wild Mammals (Protection) Act, 1996, c. 3 (U.K.).

¹⁴² Hunting Act, 2004, c. 37 (U.K.).

¹⁴³ Animal Welfare Act, 2006, c. 45 (U.K.).

and the Conservation of Habitats and Species Regulation 2010.¹⁴⁴ These measures in large part form the core of the current framework to protect wildlife in England and Wales.

The Wildlife and Countryside Act addresses the treatment and management of scheduled protected species including birds, mammals, reptiles, fish, invertebrates, and plants. While the Act has a wider scope, it is nevertheless also one of the principal means through which the U.K. implements its obligations under the European Union's Wild Birds Directive,¹⁴⁵ although the country's obligations specifically regarding game birds were already deemed addressed in the pre-Victorian Game Acts.¹⁴⁶ The Wildlife and Countryside Act makes it an offence to intentionally or recklessly kill, injure, or take a scheduled species that is living wild at the time; to use certain methods or means of killing or taking (e.g. self-locking snares, automatic weapons, etc.) a wild animal; or to possess, sell, or advertise for sale a scheduled species; or to damage, destroy or obstruct access to the place of refuge used by the protected species.¹⁴⁷ It also outlines a scheme to address the introduction of non-native species.¹⁴⁸

The Wild Mammals Protection Act Protects prohibits the intentional infliction of unnecessary suffering by specified acts of wilful cruelty, such as beating, stabbing, burning, or drowning any wild

¹⁴⁴ The Conservation of Habitats and Species Regulations 2010, S.I. 2010 No. 490. The 2010 "Habitats Regulations" consolidate and update the Conservation (Natural Habitats, & c.) Regulations 1994, S.I. 1994 No.2716.

¹⁴⁵ Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds, OFFICIAL JOURNAL L103/1 of April 25, 1979. Original Directive and amendments consolidated in Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds, OFFICIAL JOURNAL L 20/7 of January 26, 2010.

¹⁴⁶ See e.g. Game Act 1831, 1 & 2 Will. 4, c. 32 (Eng.). Accordingly, game birds—such as pheasants, partridges, grouse (or moor game), black (or heath) game, or ptarmigan—are generally excluded from the Wildlife and Countryside Act, with the exception of the provisions prohibiting certain methods of taking or killing wild species. The Act also excludes poultry—domestic fowls, geese, ducks, guinea-fowls, pigeons and quails, and turkeys—from its coverage as these are not deemed to be wild birds. Wildlife and Countryside Act, 1981, c. 69, § 27 (U.K.). Finally, the protection afforded to wild birds does not include any bird shown to have been bred in captivity, unless the bird has been lawfully released into the wild as part of a repopulation reintroduction program. Wildlife and Countryside Act, 1981 c. 69, § 1(6) (U.K.).

¹⁴⁷ Wildlife and Countryside Act, 1981, c. 69, § 1-11 (U.K.). Badgers are specifically listed as a species which is protected from being taken or killed by the means proscribed by section 11 of the Act. Wildlife and Countryside Act, 1981, c. 69, Sch. 6 (U.K.).

¹⁴⁸ Wildlife and Countryside Act, 1981, c. 69, § 14-15 (U.K.).

mammal not covered by the Animal Welfare Act of 2006.¹⁴⁹ However, there is currently an exception for the humane killing of a wild mammal injured by lawful shooting, hunting, coursing, or pest control activity, and a further exception for the otherwise legal use of traps, poisons, and birds of prey or dogs.¹⁵⁰

The Hunting Act makes it an offence to hunt wild mammals with dogs, or for someone who knowingly permits their dogs or land to be used for such an activity; or similarly participates, attends, or facilitates in hare coursing events.¹⁵¹ There are exemptions, however, for stalking or flushing an animal from cover for food, to prevent or reduce serious damage that the mammal might cause, or for field trial competitions; for falconry; and hunting rats or rabbits; as well as for recapture, rescue, or research purposes.¹⁵²

The Animal Welfare Act is primarily directed at domesticated vertebrate species and does not generally apply to wild animals. However, even animals that are not commonly domesticated become “protected animals” when they are not living independently in the wild or become subject to human control, an approach which was specifically intended to have a broader scope than the term “captive animal” used in the Protection of Animals Act of 1911.¹⁵³ The Act’s aim is to prevent unnecessary suffering and generally promote animal welfare. It does so by creating a number of offences for acts or omissions, by those responsible for animals, which fail to promote animal welfare.¹⁵⁴ With regard to animal fighting offenses, the Animal Welfare Act also builds upon the anti-cruelty provisions of the Protection of Animals Act of 1911, and covers a variety of activities related to animal fighting including keeping the premises or possessing necessary equipment; training the animals; publicizing or participating in the fights; betting or handling monies; and making, supplying, or showing recordings of animal fights.¹⁵⁵

The 2010 Habitats Regulations were promulgated under the European Communities Act of 1972,¹⁵⁶ and are the principal means

¹⁴⁹ Wild Mammals (Protection) Act, 1996, c. 3, § 3 (U.K.). The Animal Welfare Act defines a protected animal as one that is commonly domesticated in the British Islands, or under the control of man whether on a permanent or temporary basis, or not living in a wild state. Animal Welfare Act, 2006, c. 45, § 2 (U.K.).

¹⁵⁰ Wild Mammals (Protection) Act, 1996, c. 3, § 1-2 (U.K.).

¹⁵¹ Hunting Act 2004, 2004, c. 37, ss. 1-5 (U.K.).

¹⁵² Hunting Act 2004, 2004, c. 37, sched. 1 (U.K.).

¹⁵³ Thus, typically “wild” species which escape from a zoo or circus would be covered. *See*, Animal Welfare Act 2006, 2006, c. 45, ss. 1-2 (U.K.).

¹⁵⁴ Animal Welfare Act 2006, 2006, c. 45, ss. 4-9 (U.K.).

¹⁵⁵ Animal Welfare Act 2006, 2006, c. 45, s. 8 (U.K.).

¹⁵⁶ European Communities Act 1972, 1972, c. 68, s. 2(2) (U.K.).

by which European Union's Habitats Directive¹⁵⁷ is transposed into domestic law for England and Wales and their adjacent territorial seas. The Habitats Directive was aimed at preserving biodiversity at significant European sites. Accordingly, it obligates European member states to take measures to maintain or restore the natural habitats and wild species found on Special Protection Areas or Special Areas of Conservation. The Directive and the U.K.'s implementing Regulations also identify particular "European Protected Species", which include a variety of plants, insects, reptiles, fish, birds, and mammals—but not badgers.¹⁵⁸ With regard to protecting scheduled wildlife, the Regulations generally make it an offense to deliberately disturb, injure, capture, or kill protected species of animals; to take or destroy their eggs; to possess, transport, sell or offer to sell such species or their eggs, or any part of a protected species; or to damage or destroy their breeding or resting places.¹⁵⁹ The Regulation also restricts or prohibits the means by which a wide range of other animals may be caught or captured.¹⁶⁰ Additionally, the deliberate introduction (from those onboard a ship) of new species whose natural range does not include Great Britain is also made an offense where that might damage the natural marine habitat.¹⁶¹

Other notable acts include the Conservation of Seals Act of 1970,¹⁶² which makes it an offense to kill or take seals with poison or a firearm, and the Salmon and Freshwater Fisheries Act of 1975¹⁶³ which, not unlike the Game Acts, establishes closed seasons, prohibits the use of certain means of taking or killing, and creates a licensing scheme to pursue the listed species. The Deer Act of 1991 also regulates the killing and taking of deer by establishing closed seasons and prohibits the use of certain methods such as specified firearms or spears. It also makes it an offense to kill, take, or injure deer on another's land without the permission of the owner or occupier.¹⁶⁴

¹⁵⁷ See Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, OFFICIAL JOURNAL L 206/7, July 22, 1992.

¹⁵⁸ Directive Annex IV(a); The Conservation of Habitats and Species Regulations 2010, S.I. 2010, No. 490. Regulation 40, and Schedule 2 lists European Protected Species of Animals, and European protected species of plants are addressed in Schedule 5. Badgers, unlike otters or bats found on the European Protected Species list for example, are protected solely as a matter of domestic UK law and policy.

¹⁵⁹ The Conservation of Habitats and Species Regulations 2010, S.I. 2010, No. 490. Reg 41.

¹⁶⁰ Directive Art 15 & Annex V(a); The Conservation of Habitats and Species Regulations 2010, S.I. 2010 No. 490. Regulation 43, and Schedule 4.

¹⁶¹ The Conservation of Habitats and Species Regulations 2010, S.I. 2010, No. 490. Reg 52.

¹⁶² Conservation of Seals Act 1970, 1970, c. 30.

¹⁶³ Salmon and Freshwater Fisheries Act 1975, 1975, c. 51.

¹⁶⁴ Deer Act 1991, 1991, c. 54.

Each of these acts provides for a range of exceptions and defenses. So, for example, hunting wildlife outside of a closed season may be permitted¹⁶⁵ and specific persons may be authorized to take otherwise prohibited acts to tend to sick or injured wildlife;¹⁶⁶ to preserve public health or safety; to prevent the spread of disease; or to prevent serious damage to livestock, food supplies, and so on.¹⁶⁷ Additionally, an otherwise prohibited action may be taken under an approved license in appropriate circumstances, which are often detailed in the legislation, especially where the act to be taken is incident to some other lawful operation and there is no other reasonably available or satisfactory alternative.¹⁶⁸

Accordingly, the pilot badger cull in West Gloucestershire and West Somerset under the Government's bTB Eradication Plan, which began in June 2013, was authorized by licenses for each County issued by the licensing authority for protected species, Natural England.¹⁶⁹ Under the terms of Natural England's pilot program, licensed farmers agree to attempt to intensively cull 70% of the badgers within particular areas during an initial six-week season, and then to maintain that population level with subsequent annual seasons over the duration of the four-year pilot. The licenses also establish closed seasons during which particular types of control operations may not take place: controlled shooting operations may not take place between February 1 and May

¹⁶⁵ See e.g., Wildlife and Countryside Act 1981, 1981, c. 69, s. 2.

¹⁶⁶ See e.g., Wildlife and Countryside Act 1981, 1981 c. 69, ss. 4, 10; The Conservation of Habitats and Species Regulations 2010, S.I. 2010, No. 490, Reg. 42; Wild Mammals (Protection) Act 1996, 1996, c. 3, s. 2; Conservation of Seals Act 1970, 1970 c. 30, s. 9;

¹⁶⁷ See e.g., Wildlife and Countryside Act 1981, 1981, c. 69, s. 4; Deer Act 1991, 1991 c. 54, s.7.

¹⁶⁸ See e.g., Wildlife and Countryside Act 1981, 1981, c. 69, s. 16; The Conservation of Habitats and Species Regulations 2010, S.I. 2010, No. 490, Reg. 53; Conservation of Seals Act 1970, 1970, c. 30, s. 10; Deer Act 1991, 1991, c. 54, s.8.

¹⁶⁹ Natural England, *Final authorisation of badger control licences in west Gloucestershire and west Somerset* (February 27, 2013), available at http://www.naturalengland.org.uk/about_us/news/2013/270213.aspx. (Natural England is an Executive Non-departmental Public Body responsible to the Secretary of State for Environment, Food and Rural Affairs which, in addition to issuing licenses, serves as the Government's institutional advisor on the natural environment); see, Natural England, *About Us; What We Do* available at http://www.naturalengland.org.uk/about_us/whatwedo/default.aspx. (The licenses were first issued in September 2012, but the initial cull was postponed until the summer of 2013 following various legal challenges to the cull and as the direct result of a request by the National Farmers' Union, who determined they were not then in a position to be able to successfully cull desired percentage badger population in the targeted areas); Department for Environment, Food & Rural Affairs, *Press Release: Badger cull to proceed next year*, (October 23, 2012), available at <https://www.gov.uk/government/news/badger-cull-to-proceed-next-year>.

31, cage trapping and shooting may not occur between December 1 and May 31, and cage trapping and vaccination operations may not occur between December 1 and April 30.¹⁷⁰ Only two culling methods are permissible, either controlled shooting of badgers in the field, or cage trapping followed by shooting, although trapping and vaccinating badgers is also listed as an alternative licensable control method. The number of licenses is limited, and those engaging in the cull must demonstrate their competence with the method to be employed under their particular Badger Control Plan. Furthermore, they are also subject to governmental monitoring and must observe DEFRA's Best Practices Guidance and are subject to its Enforcement Policies for any breach of the license terms.¹⁷¹

The stated objective of DEFRA's Best Practices Guidance (hereafter "the Guidance") on "controlled shooting of badgers in the field under license to prevent the spread of bovine TB in cattle" is to ensure a humane cull.¹⁷² The Guidance establishes rifle marksmanship standards and training requirements, specifies the type and size of weapons and ammunition to be used, and envisions that shooting may occur while searching for these nocturnal animals over an area with a spotlight or night vision device, when shooting over a fixed bait point. It further directs that shots at a badger in the field "must only be taken when the animal is stationary, when the target area is clearly visible in the animal is more or less broadside on, so the shooter is confident of an accurate shot" of the small heart/lung area.¹⁷³ Additionally, "bait points must be at least 30 m from the nearest sett (i.e. burrow) and must be far enough from dense cover, where a badger might be lost, to avoid the risk of a wounded animal getting away."¹⁷⁴ Shooting at bait points is the only method where shotguns may be used. The aim is to kill the animal quickly with the first shot. While a single leashed dog may be used to track badgers, dogs are not to be used to flush or drive badges from

¹⁷⁰ Natural England, *Final authorisation of badger control licences in west Gloucestershire and west Somerset* (February 27, 2013), available at http://www.naturalengland.org.uk/about_us/news/2013/270213.aspx.

¹⁷¹ *Guidance to Natural England: Licences to kill or take badgers for the purpose of preventing the spread of bovine TB under section 10(2)(a) of the Protection of Badgers Act 1992*, DEPARTMENT FOR ENVIRONMENT, FOOD & RURAL AFFAIRS (Dec. 14, 2011), available at <https://www.gov.uk/government/publications/guidance-to-natural-england-preventing-spread-of-bovine-tb>.

¹⁷² Department for Environment, Food & Rural Affairs, *Controlled shooting of badgers in the field under licence to prevent the spread of bovine TB in cattle* (May 2013), ¶s 1,3, available at <https://www.gov.uk/government/publications/controlled-shooting-of-badgers-in-the-field-under-licence-to-prevent-the-spread-of-bovine-tb-in-cattle>.

¹⁷³ *Id.* ¶¶ 23-36.

¹⁷⁴ *Id.* ¶¶ 44-51.

their setts.¹⁷⁵ DEFRA similarly issued Best Practice Guidance on “cage trapping and shooting of badgers under license prevent the spread of bovine TB in Cattle,” which additionally details the caging equipment to be used, the placement, baiting, setting of the traps, when they should be checked, and how the animal should be shot, in order to meet its humane standards.¹⁷⁶ However, although permitted by the licensing scheme and Best Practices Guidance, controlled shooting in the field is the preferred method for the pilot cull, and badgers will not be cage-trapped before shooting.¹⁷⁷

Unlike the RBCT, these pilot culls are industry-led, not government-led, and cover a much a wider area with culling only carried out in areas surrounded by hard barriers to prevent perturbation—the spread of disease to other areas due to the targeted animals roaming outside their usual territories.¹⁷⁸

IV. THE WILDLIFE LAW REFORM EFFORT

a. Choice of Perspective

The badger cull, and the Law Commission’s much broader wildlife law reform project, highlights the different perspectives that can be brought to wildlife issues. The wildlife law reform project advocates codifying and rationalizing the complex existing legal framework into a single statute to meet the needs of the 21st century. As the Law Commission notes in its wildlife consultation paper, four general perspectives have characterized the development of wildlife law, and these views sometimes compete or conflict with one another.¹⁷⁹

Older laws emphasized issues associated with the “exploitation” of wildlife as a resource, and the “control” of wildlife when it interferes with human activities—both of which tend to emphasize specific interests in land. In the late 20th century, “conservation” and environmental concerns increasingly prompted domestic and international wildlife measures focused on species protection as part of the common heritage of humanity or as part of the global commons. These measures tend to

¹⁷⁵ *Id.* ¶¶ 10-12, 53.

¹⁷⁶ Department for Environment, Food & Rural Affairs, *Cage-trapping and shooting of badgers under license to prevent the spread bovine TB in cattle* (May 2012), available at <https://www.gov.uk/government/publications/cage-trapping-and-shooting-of-badgers-under-licence-to-prevent-the-spread-of-bovine-tb-in-cattle>.

¹⁷⁷ *Badgers: the debate continues*, BRITISH ECOLOGICAL SOCIETY, available at <http://www.britishecologicalsociety.org/blog/2013/04/25/badgers-the-debate-continues/>.

¹⁷⁸ *Id.*

¹⁷⁹ CP No. 206, *supra* note 2, ¶¶ 1.9 to 1.19.

focus on specific species or ecosystems themselves, as distinct from the interests of particular owners or occupiers of land.¹⁸⁰ And most recently a new perspective has gained momentum, especially in Europe and the U.K., which focuses on the “welfare” of individual animals as opposed to broader concerns regarding an entire species.

The bulk of the existing legal framework, and consequently the bulk of the Law Commission consultation paper and recommendations, focuses on legal measures dealing with the exploitation or control, and to a lesser degree on the conservation, of wildlife.

While the Law Commission did attempt to consider the need to conserve and protect particular species, it excluded general habitat protection from the scope of its project.¹⁸¹ Although the need to do so in order to keep the project manageable may be self-evident, modern wildlife issues are so inextricably intertwined with habitat that maintaining this position is problematic. For example, as noted below, the Law Commission consultation paper regards fungi as part of the flora and fauna comprising wildlife, but dealing with fungi without regard to habitat is difficult. It is similarly difficult to deal with issues regarding both protected and invasive species without regard to habitat.

The Law Commission further recognized that one of the project’s principal tasks is to ensure that various EU measures addressing wildlife are properly implemented within England & Wales.¹⁸² However, key measures, such as the Habitat¹⁸³ and Wild Birds¹⁸⁴ Directives, go beyond the species-specific focus chosen for the wildlife project to also address environmental or habitat related issues associated with wildlife.

¹⁸⁰ One of the aims of the conservation movement is to deal with the “Tragedy of the Commons,” the social dilemma created when individuals acting in their own self-interest over-use a shared resource to the detriment of all—which represents a shift from focusing, for example, only on the interests of particular landowner in exploiting wildlife found on their property. See Garrett Hardin, *The Tragedy of the Commons*, 162 *SCIENCE* 1243, (Dec.1968), available at <http://www.sciencemag.org/content/162/3859/1243.full>.

¹⁸¹ CP No. 206, *supra* note 2, ¶¶ 1.24, 5.5 and Provisional Proposal 5-1. Wildlife’s connection to agriculture and public health is similarly excluded from the scope of this project. *Id.* at ¶ 1.29.

¹⁸² The CP does note that Wales is endeavoring to take a broad approach to reforming its devolved environmental, planning, wildlife management, and habitat protection laws as part of its Natural Environment Framework. *Id.* at ¶¶ 1.33 to 1.37.

¹⁸³ Council Directive 92/43, on the conservation of natural habitats and of wild fauna and flora, 1992 O.J. (L 206) 7 (EC).

¹⁸⁴ Council Directive 79/409, 1979 O.J. (L 103) 1 (EC) on the conservation of wild birds, Original Directive and amendments consolidated as Directive 09/147 of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds, 2010 O.J. (L 20) 7 (EC).

Additionally, apart from noting that animal welfare is also a concern or theme in modern wildlife law, and describing the current provisions of the Animal Welfare Act 2006 and the Wild Mammals (Protection) Act 1996,¹⁸⁵ there is little focus in the Law Commission consultation paper on animal welfare as an emerging driver for the future of wildlife law. Indeed, the Law Commission consultation paper's proposed new statute would generally exclude welfare concerns from its coverage.¹⁸⁶

As a consequence, the Law Commission's wildlife reform project is focusing on a conception of wildlife law, which emphasizes the older more species-specific "exploitation" and "control" perspectives, rather than newer trends. Since much of the law that needs to be updated was also initially crafted with those same perspectives in mind, that focus is entirely appropriate. However, to the degree that newer challenges in the field of wildlife law will be addressed from a conservationist/environmentalist or welfarist perspective, excluding or minimizing these themes misses an opportunity to create the sort of framework policy makers and regulators may need in the future.

b. The animal welfare perspective

The absence of greater focus on animal welfare is perhaps one of the more striking aspects of the Law Commission's wildlife law reform project. Acknowledging and including the animal welfare perspective may not only play well to popular sentiment (as seen in the badger cull debate) thereby helping to enhance support for any reforms which are eventually adopted, but doing so in the broader wildlife law reform effort is perhaps also easier and less disruptive to the project than might first appear. Moreover, there may be arguments that European law requires considering the welfare of wild animals in some circumstances.

Eurobarometer surveys have shown that respondents in the U.K. tend to be more concerned with animal welfare issues than the average European respondent, and that a majority would agree that humans have a duty to protect the rights of animals "whatever the cost".¹⁸⁷ In other words, animal welfare is a popular topic in the U.K., as further reflected in the multiplicity of interest groups supporting badgers and a

¹⁸⁵ CP No. 206, *supra* note 2, ¶¶ 3.108 to 3.121.

¹⁸⁶ *Id.* at ¶ 5.5. However, Proposal 5-2 does ask whether welfare offenses should be included in the new single act.

¹⁸⁷ See *Commission Special Eurobarometer 238: Risk Issues* (Feb. 2006), available at http://ec.europa.eu/food/food/resources/special-eurobarometer_riskissues20060206_en.pdf; *Commission Special Eurobarometer 225: Social Values Science and Technology*, (June 2005), available at http://ec.europa.eu/public_opinion/archives/ebs/ebs_225_report_en.pdf.

wide range of other species. It is also seen in the number of responses the Law Commission received to its consultation paper urging stiffer penalties and greater enforcement for wildlife offences. Acknowledging, rather than excluding, the welfare theme in dealing with wildlife should therefore help garner popular support for the proposal—and incidentally help promote greater support for the enforcement of any subsequent legislation based upon the proposal.

Moreover, the U.K. has long been a leader in developing the field of animal welfare science. While animal welfare science focuses heavily on farm animal welfare and agricultural industries, where human activity tends to impact the greatest number of animals, this is not the field's exclusive focus. U.K. leadership in animal welfare dates back to the Universities Federation for Animal Welfare (UFAW) development of the "Three Rs" in the late 1950s advocating the reduction of reliance upon animals in scientific experimentation;¹⁸⁸ the Brambell Report on farm animal welfare in 1965;¹⁸⁹ and the Farm Animal Welfare Council's reformulation of that work into a statement of the "Five Freedoms."¹⁹⁰ While the Five Freedoms and the Three Rs are now regarded as rather

¹⁸⁸ The "Three Rs" call for the Replacement, Reduction, and Refinement of animal testing. See *Highlights from UFAW's History*, UFAW, available at <http://www.ufaw.org.uk/highlights.php>.

¹⁸⁹ TECHNICAL COMMITTEE TO ENQUIRE INTO THE WELFARE OF ANIMALS KEPT UNDER INTENSIVE LIVESTOCK HUSBANDRY SYSTEMS, REPORT, 1965, (UK).

¹⁹⁰ The FAWC states that "any animal kept by man must at least be protected from unnecessary suffering. We believe that an animal's welfare, whether on farm, in transit, at market or at a place of slaughter should be considered in terms of 'five freedoms'. These freedoms define ideal states rather than standards for acceptable welfare. They form a logical and comprehensive framework for analysis of welfare within any system together with the steps and compromises necessary to safeguard and improve welfare within the proper constraints of an effective livestock industry."

The Five Freedoms are:

1. Freedom from Hunger and Thirst—by ready access to fresh water and a diet to maintain full health and vigour.
2. Freedom from Discomfort—by providing an appropriate environment including shelter and a comfortable resting area.
3. Freedom from Pain, Injury or Disease—by prevention or rapid diagnosis and treatment.
4. Freedom to Express Normal Behaviour—by providing sufficient space, proper facilities and company of the animal's own kind.
5. Freedom from Fear and Distress—by ensuring conditions and treatment which avoid mental suffering.

Five Freedoms, FAWC, available at <http://www.fawc.org.uk/freedoms.htm>.

basic statements of the tenets of animal welfare science, which has continued to develop a more scientific basis under the direction of figures such as Professor Donald Broom at Cambridge University's Centre for Animal Welfare and Anthrozoology,¹⁹¹ these statements nevertheless helped influence international standards issued by the World Organization for Animal Health (OIE)¹⁹² and the development of the EU's Animal Welfare Strategy for 2012 to 2015.¹⁹³

Given the U.K.'s leadership in developing a scientific rather than an emotional or anecdotal basis to assess animal welfare, it is somewhat ironic that so much of the current badger cull debate revolves around competing claims regarding the scientific findings pertaining to the welfare aspects of the cull. Both proponents and opponents of the cull point to the 1998-2006 RBCT, and similar studies, to support their respective positions. For example, the Government and the National Farmers' Union extrapolate from the RBCT to conclude that the pilot cull should lead to as much as a 16% net reduction in the incidence of bTB.¹⁹⁴ This contrasts with assertions by Team Badger, a coalition of sixteen of the largest animal and wildlife protection groups, which point to the RBCT findings showing that while culling reduced badger numbers it actually increased the prevalence and spread of bTB within the remaining badger population,¹⁹⁵ and the explicit finding in the RBCT Final Report that "badger culling cannot meaningfully contribute to the control of cattle TB in Britain."¹⁹⁶ They also cite the Report's "further conclu[sion] from the scientific evidence available, that the rigorous application of heightened control measures directly targeting cattle will reverse the year-on-year increase in the incidence of cattle TB and halt

¹⁹¹ See, *Professor Donald M. Broom*, ANIMAL WELFARE INDICATORS, available at <http://www.animal-welfare-indicators.net/site/index.php/professor-donald-m-broom>.

¹⁹² See *The OIE's Achievements in Animal Welfare*, WORLD ORGANIZATION FOR ANIMAL HEALTH, available at <http://www.oie.int/animal-welfare/animal-welfare-key-themes>.

¹⁹³ See *European Union Strategy for the Protection and Welfare of Animals 2012-2015*, COM (2012) 6 final (Feb. 15, 2012) ; and the accompanying Impact Assessment, at ¶2.1, SEC(2012) 55 final (Jan. 19, 2012).

¹⁹⁴ See *The Government's policy on Bovine TB and badger control in England*, *supra* note 30, at ¶'s 4.1-4.11; Alastair Driver, *NFU restates commitment to badger cull after MP vote*, FARMERS GUARDIAN (October 26, 2012), available at <http://www.farmersguardian.com/nfu-restates-commitment-to-badger-cull-after-mp-vote/50842.article>.

¹⁹⁵ *Backing Badgers: Why the cull will fail*, TEAM BADGER (June 5, 2013) at 16, available at <http://www.rspca.org.uk/ImageLocator/LocateAsset?asset=document&assetId=1232733074865&mode=prd>.

¹⁹⁶ THE INDEPENDENT SCIENTIFIC GROUP ON CATTLE TB, FINAL REPORT , 2007, at 181, available at http://archive.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/tb/isg/report/final_report.pdf.

the geographical spread of the disease.”¹⁹⁷ Moreover, opponents of the cull also point to notable figures such as Lord Krebs, who designed the RBCT, as saying that, “[t]he scientific case is as clear as it can be: this cull is not the answer to TB in cattle. I have not found any scientists who are experts in population biology or the distribution of infectious disease in wildlife who think that culling is a good idea. People seem to have cherry-picked certain results to try and get the argument they want.”¹⁹⁸

However, despite Lord Krebs’s assertion, the British Veterinary Association publicly stated that it supports the badger cull, in part, on the grounds that the scientific link between badgers and bTB needs to be further addressed:

As the open season for shooting badgers begins...the British Veterinary Association (BVA) is reiterating its support for the planned badger cull pilots as part of the overall bovine TB eradication strategy in England... The BVA pointed to the evidence base behind the policy—data from the Randomised Badger Culling Trials (RBCTs)—which shows that bovine TB in cattle can be reduced by around 16% in areas where a targeted, humane badger cull has taken place. The pilot culls will use different culling methods to the RBCTs and are therefore being monitored by the Independent Expert Panel made up of experts in veterinary pathology, animal welfare physiology, wildlife ecology, badger behaviour, wildlife management, ecological theory, statistics, and marksmanship... Peter Jones, President of the BVA, said[,] “We accept that there is a gap in our knowledge, which is whether controlled shooting can deliver a badger cull humanely and safely, and to the same degree of effectiveness as cage trapping and shooting. That is what the pilots are designed to address and why is it important that they are allowed to go ahead unhindered. We understand that this is a highly emotional issue but we must be able to gather the evidence to enable future policy decisions to be based on science.”¹⁹⁹

¹⁹⁷ *Id.*

¹⁹⁸ Lord Krebs comments on BBC Radio *Today* (October 12 2012) quoted in *Backing Badgers*, *supra* note 195, at 15.

¹⁹⁹ *Badger cull pilots the right scientific approach, says BVA*, BRITISH VETERINARIAN ASSOCIATION, (May 31, 2013), available at <http://www.bva.co.uk/news/3431.aspx>; *See also Badger cull delay: science has not changed, say vets*, BRITISH VETERINARIAN ASSOCIATION, (October 23, 2012), <http://www.bva.co.uk/news/badgerculldelaysciencehasnotchangedsayvets.aspx>.

The BVA's endorsement of the badger cull prompted Alasdair MacMillan, the former chief scientific officer at the RSPCA, Mark Jones, the executive director of the Humane Society International, along with several members of the BVA, to publish a letter fiercely criticizing the BVA's leadership because:

[t]heir support comes in spite of the overwhelming scientific opinion that culling badgers will not help to reduce TB in cattle, and amidst grave concerns over the impact that culling will have on the welfare of badgers and the future of many populations ...

The British Veterinary Association reached its position of support for the Government's pilot culls without consulting its full membership, and has ignored subsequent calls from veterinarians and one of its own member societies for it to reconsider. The public needs to understand that the BVA's position is not necessarily representative of majority veterinary opinion, and that many vets oppose or have serious reservations about the policy.

Rather, it represents the position of an organisation that, in our view, has lost touch with its key purpose of providing leadership and guidance on animal welfare on this issue and whose judgment is being influenced by a close historic alignment with the farming industry. Their failure to respond to very serious concerns raised over the humaneness assessment is damning.

We are saddened that this episode brings shame upon the profession ... That some vets in positions of influence appear to have abandoned precaution for the sake of what appears to be political and perceived economic expedience, casts a dark shadow over our profession. In our opinion these actions damage the credibility of the profession and bring it into disrepute.

We can only hope that its future leaders will adopt a more precautionary, independent, science-led and, most importantly, empathetic and welfare-led approach to the issues facing all of the animals with whom we share our world.²⁰⁰

²⁰⁰ *Letters: Badger cull has no basis in science*, THE INDEPENDENT, June 5,

Despite this dissention among veterinary scientists over the particulars of the badger cull, the discipline of animal welfare science, which the U.K. helped pioneer, is now well established as an important part of the formal policy process within Europe. One part of the current EU Animal Welfare Strategy is the creation of a new European Animal Welfare Framework Law for all animals kept in the context of economic activity, including wildlife, which would replace the current patchwork of European measures. The new law is also intended to be science based using the OIE principles. The European Parliament has called upon the Commission to present its proposal as soon as the end of 2013 in conjunction with its review of the general welfare measures aimed at farm animals under Directive 98/58/EC.²⁰¹

Moreover, addressing animal welfare may already be legally required for some wildlife related issues. Animal welfare is now addressed in Article 13 of the Lisbon Treaty, which provides that:

in formulating and implementing the Union's agriculture, fisheries, transport, internal market, research and technological development and space policies, the Union and the Member States shall, since animals are sentient beings, pay full regard to the welfare requirements of animals, while respecting the legislative or administrative provisions and customs of the Member States relating in particular to religious rites, cultural traditions and regional heritage.²⁰²

This provision essentially takes the language of the EU's earlier animal welfare protocol to the Treaty of Amsterdam and elevates it to treaty level language in the TFEU. It is found in the same section (Part II) of the Lisbon Treaty as are several other "provisions of general application"

2013, available at <http://www.independent.co.uk/voices/letters/letters-badger-cull-has-no-basis-in-science-8644011.html>. The humaneness of the cull, even under DEFRA's Guidelines, has also been criticized. For example Jack Reedy of the Badger Trust states that, "[t]his ... is a trial on whether the method of killing is humane and safe. The badgers are not going to be caged or contained. They are going to shoot a badger and time the length of its squealing. It's the most appalling and brutal thing to do." Jim Greenhalf, *Badgers, to cull or not to cull?*, BRADFORD TELEGRAPH AND ARGUS, June 3, 2013, available at 2013 WLNR 13590434.

²⁰¹ Council Directive 98/58, concerning the protection of animals kept for farming purposes, 1998 O.J. (L 221). See also Resolution on the European Union Strategy for the Protection and Welfare of Animals 2012–2015, Eur. Parl. Doc. (2012/2043(INI)) ¶ 61.

²⁰² Consolidated Version of the Treaty on the Functioning of the European Union art. 13., Sep. 5, 2008, 2008 O.J. (C 115) 47.

addressing a range of fundamental objectives such as gender equality,²⁰³ employment and social protection,²⁰⁴ non-discrimination,²⁰⁵ religious freedom,²⁰⁶ and environmental protection.²⁰⁷ While the animal welfare obligations imposed by the treaty continue to be subject to several exclusions and limitations, which were also found in the earlier protocol, the provision still covers some wild animals.

By its own terms, Article 13 does not apply to all EU policy areas. While Article 13 does impose obligations upon member states to “pay full regard” to animals’ welfare requirements when implementing EU policies on agriculture, fisheries, transport, and the internal market, for example, other pertinent policy areas—notably the environment—are not listed. This means that significant European measures affecting wildlife, such as the Habitat and Wild Birds Directives, do not trigger Article 13.

Nevertheless, some European measures dealing with wild animals are expressly or implicitly aimed at harmonizing the internal market, or other enumerated policies, and therefore would trigger Article 13 on that basis. For example, the EU regulations restricting transactions involving seal products were motivated by concerns over cruel killing practices, and expressly predicated upon a need to harmonize the internal market, rather than any environmental or conservation policy.²⁰⁸ The EU’s ban on trade in cat and dog fur and related products was similarly motivated by welfare concerns and the need to prevent obstacles to the functioning of the internal market.²⁰⁹ The EU Directive governing animals kept in zoos (including fish and invertebrates) was also motivated both by conservation concerns and a need to harmonize the standards and treatment of wild animals in captivity, and therefore was deemed to fall within the coverage of Article 13.²¹⁰ Similarly, the Leghold Trap Regulation reflects welfare concerns over inhumane trapping methods and a need for uniformity in the EU’s internal and external relations.²¹¹

There are several more general measures that might apply to wild animals in some circumstances, which also fall within the ambit of

²⁰³ *Id.* art. 8.

²⁰⁴ *Id.* art. 9.

²⁰⁵ *Id.* art. 10.

²⁰⁶ *Id.* art. 17.

²⁰⁷ *Id.* art. 11.

²⁰⁸ Commission Regulation 1007/09, on Trade in Seal Products, 2009 O.J. (L 286) 36 (EC); Commission Regulation 737/10, on Seal Products Regulation Rules, 2010 O.J. (L 216) 1 (EU).

²⁰⁹ Commission Regulation 1523/07, 2007 O.J. (L 343) 1 (EC).

²¹⁰ See Council Directive 1999/22, O.J. (L 94)24 (EC); *Commission Staff Working Paper Impact Assessment*, at ¶ 2.2, SEC(2012) 55 final (January 19, 2012.).

²¹¹ See Council Regulation 3254/91, 1991 O. J. (L 308) 1(EC); *Commission Staff Working Paper Impact Assessment*, *supra* note 210.

Article 13. The regulation on the protection of live vertebrate animals during transport specifically references the animal welfare protocol which was subsequently embedded in Article 13 of the Lisbon Treaty, and addresses wild animals in several of its technical rules.²¹² The new European Regulation on the protection of animals at the time of killing, which went into effect on January 1, 2013, applies to commercially farmed deer, goats, rabbits, ostriches, ducks, geese, and quail, and similarly references the animal welfare protocol.²¹³

The newest such measure, the Directive on the protection of animals used for scientific purposes, is also expressly predicated upon the need to harmonize the internal market, and specifically cites Article 13 of the Lisbon Treaty.²¹⁴ Conceptually related to the Experimental Animals Directive are the provisions aimed at reducing or eliminating animal testing found both in the Cosmetics Directive²¹⁵ and the REACH (Registration, Evaluation, Authorisation and restriction of Chemical substances) Regulation,²¹⁶ which could impact some wild species.

Even if the animal welfare obligations of Article 13 are triggered, those obligations are not particularly onerous—especially when dealing with wildlife. That is because the provision balances the member states' obligation to “pay full regard” to animal welfare against “the legislative or administrative provisions and customs of the Member States relating in particular to religious rites, cultural traditions and regional heritage.” Given that much of what the wildlife project is addressing reflects English and Welsh customs, heritage, and traditions regarding wildlife and wildlife management, the substantive impact of Article 13 is perhaps minimal—assuming the more detailed requirements of the various EU Directives and Regulations are met.

Nevertheless, there is perhaps a sufficient domestic and EU dimension to the animal welfare theme in wildlife law and regulation such that it warrants more mention than what currently appears in the Law Commission's current reform proposals.

²¹² Council Regulation 1/2005, 2004 O. J. (L 3) 1(EC).

²¹³ However, the new Regulation does not apply to farmed fish; nor to poultry, rabbits or hares killed outside of a slaughterhouse for private consumption; nor to the killing of wild or stray animals for population control purposes. Council Regulation 1099/2009, 2009 O. J. (L 303), 1(EC). The Regulation updates and replaces Council Directive 93/119, 1993 O. J. (L 340), 21(EC).

²¹⁴ Directive 2010/63, 2010 O. J. (L 276), 33 (EU). The earlier directive 86/609/EC, which the new Directive replaces, was also regarded as a welfare measure. See Commission Staff Working Paper Impact Assessment, *supra* note 210.

²¹⁵ Council Directive 76/768 1976 O. J. (L 262) 169 (EC). The animal testing provisions were added in the 7th amendment to this original measure by Council Directive 2003/15 2003 O. J. (L 66) 26 (EC). From 11 July 2013 the Cosmetics Directive will be replaced by Council Regulation 1223/2009, 2009 O. J. (L 342) 59 (EC), which incidentally specifically cites Article 13 of the Lisbon Treaty.

²¹⁶ Regulation 1907/2006, 2006 O. J. (L 396) 1 (EC).

c. Species and the definition of “wildlife”

The welfare discussion, while focused on animals, implicitly highlights a number of definitional problems associated with the broader question of what actually constitutes “wildlife,” and the Law Commission consultation paper identifies further issues. The Law Commission’s reform project obviously focuses on the legal use of the term, but “wildlife” has scientific or cultural connotations as well. In the world of science, specifically in taxonomy, all living things are categorized based upon their biology; for example as plants, animals or fungi, among other categories. However, scientists are concerned with genetic and biologic structure and relationships rather than cultural or legal conceptions such as what is wild, endangered, or a pest. Under the microscope or on the dissection table it typically makes no difference whether a badger, bird, or rabbit was raised in a cage or taken from a field.

Culturally, there is a wide range of views as to what constitutes wildlife. Typically the term refers to animals (and sometimes plants) in their natural habitat that are not within the possession or control of humans, although they might be managed or hunted by humans. So, for example, badgers may more easily fit within a popular conception of wildlife than feral cats. Wildlife law, on the other hand, is a system that must address issues created by the whole range of interaction of human interests and control over plants, animals, and fungi—rather than either biology or popular perceptions alone—and this contributes to the complexity of the existing laws and regulations.

The Law Commission consultation paper states that it takes a wide view of wildlife and includes consideration of wild animals, plants and fungi within its scope. However, it generally excludes both agriculture and commercial fishing and their associated Common Fisheries and Common Agricultural Policies. The consultation paper also limits its marine focus to territorial waters, but a number of responses made the case that the marine extent of the project should be expanded.²¹⁷ A

²¹⁷ See CP No. 206, *supra* note 2, at Question 1-1. The wildlife law reform project considered laws applicable out to 12 nautical miles (NM) from the baseline, the territorial waters of England and Wales. *Id.* at ¶ 1.30 Consequently, the Wildlife and Countryside Act 1981, the Conservation of Habitats and Species Regulations 2010 and the Conservation of Seals Act 1970 are within the scope of the project. Outside the scope of the project are the Offshore Marine Conservation Regulations 2007, SI 2007 No 1842. Responses from consultees such as the Marine Management Organisation, the Institute of Ecologists and Environmental Managers, and individual environmental consultants, all suggested that the scope of the project should extend out to 200NM and unifying all the wildlife species management provisions within that reach, including the Offshore Marine Conservation Regulations 2007. [There should be a cite here] This would allow for consideration of a single regulatory and licensing regime covering the entire marine environment, which might be of particular

“species specific” approach is central to the Law Commission’s approach to the wildlife law reform project,²¹⁸ which generally aligns with the bulk of existing wildlife laws. This reflects not only the historical emphasis placed on the exploitation and control perspectives, but also the decision made to deemphasize the conservation/environmental perspective in this project to the degree that implicates broader issues such as habitat.

Thus, the Law Commission consultation paper envisions a new “single wildlife statute dealing with species specific provisions for wildlife conservation, protection, exploitation and control” and that this new law will “continue to be organized by reference to individual species or groups of species.”²¹⁹ This could be characterized as a traditional vertical approach tied to particular issues historically posed by specific types of plants and animals as opposed to an arguably more horizontal approach that looks at the impact of all types of wildlife upon particular human interests.

This vertical, species specific, approach is also influenced by being analyzed primarily through the lens of existing legislation—which goes back to the issue of whether the project should primarily be regarded as a backward-looking or forward-looking exercise. Perpetuating the existing regulatory approach may not be essential to maintaining current polices and levels of protection. The alternative would be to address wildlife issues horizontally with an interest-based framework as discussed below in connection with possible options for structuring the new law.

The Law Commission notes that under the existing laws and regulations some animals, plants or fungi receive more or less protection than others simply by virtue of their membership in a particular species. This is the case with the legal regime protecting badgers, for example. Additionally, some existing legal measures only apply to members of a species that are actually in the wild and exclude animals or game being bred or reared in captivity whereas other measures would apply to all members of a given species.²²⁰

Thus, the species specific approach necessarily results in different treatment purely based upon the category in which the animal, plant or fungi is placed. This categorization decision may be problematic, especially at the margins as, for example, when dealing with hybrid species—irrespective of whether the hybridization occurs with or without human intervention.

use when licensing offshore wind farms, or other offshore installations and activities; extending the Protection of Seals Act 1970 out to 200NM; establishing closed seasons in the complete marine environment if that were thought necessary in the future; and facilitate harmonizing the invasive non-native species’ framework out to 200NM.

²¹⁸ CP No. 206, *supra* note 2, at ¶ 1.20.

²¹⁹ *Id.* at Proposals 5-1 and 5-7.

²²⁰ *Id.* at ¶¶ 5.4 to 5.18

In addition wildlife law introduces a multiplicity of additional terms and definitions of what might be “wild,” “domestic,” “captive,” or “controlled.” These legal categorizations which further refine species-specific regulation may not always suit their intended purpose. For example, language and concepts that may work well when dealing with animals might be problematic when applied to plants, and even more problematic when applied to fungi.²²¹

“Species” is much more of a scientific than legal concept, and therefore further issues with species based regulatory schemes may be caused by scientific developments in taxonomy. Law typically adapts to change more slowly than science. Not only do concepts such as species evolve and change over time, but the legal use of the terms might not be scientifically accurate. For example, the assumption implicit in many laws that fungi can be treated the same as plants fails to reflect the scientific recognition of fungi as part of an entirely different taxonomic “kingdom” with an entirely different biology.²²² Accordingly, terms commonly used to outline an offence such as “taking,” “planting,” or “disturbing,” or even the notion of what constitutes an individual organism in regulatory or statutory language may be ill suited to dealing with fungi. This simply illustrates how laws based upon non-legal concepts can be overtaken by other developments—posing numerous drafting difficulties.

Moreover, emphasizing the manner in which species are handled in existing wildlife law and regulation can miss significant emerging developments such as the increasing recognition of the need to address wildlife kept as exotic pets²²³ or cloned, transgenic, or genetically modified or engineered flora and fauna as part of the effort to manage invasive non-native species.²²⁴ Grappling with emerging issues such as

²²¹ See e.g. *id.* at ¶¶ 8.85 to 8.93.

²²² See e.g., R.H. Whittaker, *New Concepts of Kingdoms or Organisms. Evolutionary relations are better represented by new classifications than by the traditional two kingdoms*, 63 *SCIENCE* 150 (January 1969).

²²³ See e.g., *Opportunity or Threat: the Role of the European Union in Global Wildlife Trade*, TRAFFIC Europe 2007, at 30 (TRAFFIC, an international nongovernmental organization that monitors wildlife trade, conducted a study in 2005 which showed the EU was the world’s leading importer of live reptiles); See also Convention on Biological Diversity Ad Hoc Technical Expert Group, *Addressing the Risks Associated with the Introduction of Alien Species as Pets, Aquarium and Terrarium Species, and as Live Bait and Live Food*, UNEP/CBD/AHTEG-IAS/2/2 (7 Feb 2011); ENDCAP, *Wild Pets in the European Union* (3 Oct. 2012), available at http://www.bornfree.org.uk/fileadmin/user_upload/files/zoo_check/reports/Endcap_Wild_Pets_EU_Report_0812_ROUGH_v10.pdf.

²²⁴ In June 2012 the European Food Safety Authority launched a public consultation on the possible environmental impact of genetically modified animals, which includes their risk of becoming invasive. See, EFSA, *Public consultation on the draft Guidance Document on the Environmental Risk Assessment of Genetically Modified Animals*, available at <http://www.efsa.europa.eu/en/consultationsclosed/>

those presented by exotic pets and GMOs as potential invasive non-native species challenges traditional conceptions of wildlife, control/ownership, and even species. The application of new developments in genetic science to plants and animals represents yet a further extension of the challenges facing species based regulatory schemes initially posed by selective breeding and hybridization. The plant world has struggled with questions regarding GMOs for a number of years, and they are now increasingly an issue with regard to animals as well. One current notable example is provided by the pending application in the U.S. for approval to patent and market AquaAdvantage® salmon, a genetically engineered fish specifically designed to grow to market size in half the time of conventional salmon.²²⁵ It is also quite possible that the anticipated EU directive on invasive non-native species will address both the exotic pet trade and GMOs in some fashion.²²⁶ The Convention on Biological Diversity already imposes an international obligation to control or eradicate invasive alien species, which potentially poses a direct conflict between the aims of conserving and preserving biodiversity and the welfare interests of animal species deemed to invasive.²²⁷

d. Structure for the new wildlife law

Determining how to balance all these competing perspectives in structuring a new comprehensive wildlife law will be a challenging task for Parliamentary Counsel. It is also inextricably intertwined not only with the political process but also with complex issues regarding what is appropriate for primary and secondary legislation, the scope of government authority in a non-federal system, and the role of judicial oversight in the English legal system.

The Law Commission consultation paper states that the objective is to maintain current polices and the levels of protection afforded to particular species unless a change is required by EU law.²²⁸ What

call/120621.htm; see also EFSA, *Cloning*, <http://www.efsa.europa.eu/en/topics/topic/cloning.htm>.

²²⁵ AquaBounty Technologies, *AquaAdvantage Fish*, available at <http://www.aquabounty.com/products/products-295.aspx>. The popular press both in the US and Europe refers to this genetically engineered salmon as the “Frankenfish.”

²²⁶ See, Wildlife and Countryside Link, *Invasive Non-Native Species Task and Finish Group: Update* (last updated Oct. 31, 2013), available at <http://www.wcl.org.uk/invasive.asp>.

²²⁷ See, Convention on Biological Diversity (1992), Art. 8(h), available at <http://www.cbd.int/convention/articles/default.shtml?a=cbd-08>; *Strategic Plan for Biodiversity (2010), Aichi Biodiversity Targets*, Target 9, available at <http://www.cbd.int/sp/targets/>.

²²⁸ Additionally, the provisions of the Hunting Act 2004 are not within the scope of the wildlife reform project. CP No. 206, *supra* note 2 ¶¶ 1.25 to 1.27.

is envisioned, however, is maintaining the species-specific vertical approach of the existing legislative framework in a new single statute. Much of the existing legislation focuses on conduct with respect to particular species that should be considered a criminal, particularly when failing to properly exercise control over wildlife or interfering with another's right to exploit a wildlife resource.

This approach presents its own web of definitional issues regarding the general prohibition at the core of any given offence along with various "excuses" from liability in the form of derogations, exceptions, defences, and licenses. The broader the definition of the core offence, the more likely it becomes that extensive excuse provisions in some form are required. Additionally, the more these excuse provisions are required, the more complex the law becomes—which arguably also makes the law more specialized and less comprehensible to the regulated public, which is one of the criticisms of the current scheme. While it is less likely that extensive excuse provisions are needed with narrowly defined offences, that perhaps presents a greater possibility that regulatory objectives will not be achieved due to oversimplification.

In other words, despite the often repeated maxim that under English law everything is permitted that is not expressly prohibited by law,²²⁹ the dependence upon criminalization in the existing framework for wildlife legislation is a classic example of a "stop until I tell you to run" regulatory scheme. That is, one which is based upon prohibitions accompanied by various excuses from liability for the core offences. Such a regulatory scheme is effectively a "top down" set of controls, primarily dependent at its core upon legislated predicate offences. The Law Commission consultation paper consciously perpetuates this species-specific vertical approach, and continues to emphasize criminalization at the core of a top down regulatory scheme.²³⁰

Would it not be possible to still meet the objective of maintaining current policies and levels of protection with more of a "run until I tell you to stop" regulatory scheme? In other words, structuring the new wildlife statute as a "bottoms up" regulatory scheme, which minimizes criminal prohibitions. This would also be in line with the Law Commission's earlier exploration the dramatic growth in criminal offences in recent years, and the limits of criminalization in its consultation paper on *Criminal Liability in Regulatory Contexts*,²³¹ and other commentary

²²⁹ See e.g., *Malone v. Comm'r for the Metropolitan Police* (no.2) 69 Cr. App. R. 168 (Ch. 1979) .

²³⁰ CP No. 206, *supra* note 2, chs. 5-9. However Proposal 9-2 does suggest that the "full range of civil sanctions" should augment the wildlife offenses outlined in the paper. [citation needed]

²³¹ Law Commission of England and Wales, Consultation Paper No. 195; *CRIMINAL LIABILITY IN REGULATORY CONTEXTS* (2010).

such as Professor Richard Macrory's report on *Regulatory Justice: Making Sanctions Effective*.²³²

The result would be a more horizontal system, one where the key factor would be the human interests being pursued rather than the species at issue. The four themes or perspectives identified at the outset of the Law Commission consultation paper might provide a starting point for this interest analysis. For example, the exploitation theme essentially deals with issues of controlling access to wildlife resources—primarily for the benefit of landowners; the control theme deals with issues where wildlife harms or interferes with other activities—but are not necessarily tied to an ownership interest either in land or in the wildlife at issue; the conservation theme shifts to a focus on broader societal interests; and the welfare theme does not prevent wildlife exploitation but tempers that ability with a duty on humans to avoid imposing unnecessary suffering on animals.

Individual licensing would only be required where some level of control is required in order to ensure that a proper balance is maintained between competing interests (e.g. balancing landowners' exploiting game, and the need to conserve the species or the welfare of the game at issue). In essence, the aim would be to create a regulatory management system focused on three categories of human behavior, where given actions or behaviour are either permitted, licensable, or prohibited,²³³ and the controls would then largely be separated from the species being regulated. Commercial transactions affecting these various interests should also be factored into the licensing matrix, although this is not a major feature of the Law Commission consultation paper. Controls on transactions in wildlife or wildlife-related products already infuse many EU measures mentioned above and are central to managing invasive species.

Incorporating a range of administrative control "tools" into a licensing matrix also facilitates making the regime more flexible and forward-looking. That is, the various tools could be selectively invoked to match the political requirement to maintain current policies and levels of protection, but then provide the means to more easily adapt to new circumstances when future changes are required, without the need for new legislation. One further advantage of a horizontal focus upon the interests at issue rather than species specific offences is that it should make managing issues that cut across species lines easier and minimize

²³² Richard Macrory, REGULATORY JUSTICE: MAKING SANCTIONS EFFECTIVE (Final Report, November 2006).

²³³ This three category system envision fewer options than described in the consultation paper. See CP No.206, *supra* note 2, ¶¶ 5.64 to 5.98 and Question 5-13. Tailoring this framework to the needs of particular circumstances or species would be accomplished primarily by a listing matrix similar to the one already described in Chapter 5 of the Law Commission consultation paper. See *id.* at ¶¶ 5.50 to 5.59.

the disruption caused by changes in taxonomy. These would be addressed by administrative listing changes and revisions to the matrix.

Thus, the focus of the regulatory regime would be on affirmative statements of licensing requirements rather than providing for criminal offences. Licensing requirements would be backed up with administrative and civil sanctions with criminal sanctions used only for behaviour that is always proscribed or abusive violations of the regulatory regime.

This obviously represents a much greater change in the regulatory approach than presently envisioned and would require a great deal more work and thought to match the detail found in the existing regime and the current approach reflected in the Law Commission consultation paper. But it might also serve as a creative new approach to managing wildlife regulation in England and Wales.

V. CONCLUSION

Since the 19th century, industrialization has led to a more urban society. Moreover, in more recent years the shift has been from urbanization to suburban sprawl. This has changed the way we perceive and relate to animals.

In the early years of the conservation and environmental movements the task was to protect and restore animals, birds, and other species that were at risk and create habitats where they would survive and thrive. In the U.K., and also in the US and many other countries, these efforts often focused on species attractive to sport hunters, but habitat restoration and preservation helps other species—such as the badgers—as well. While wildlife managers were focusing on maintaining healthy populations, animal welfare and protection advocates were becoming increasingly active and successful in protecting a wide variety of animals from human interference or harm. Simultaneously, large segments of a rapidly growing general population are increasingly becoming separated from the natural environment and wildlife. However, the green belts, parks, preserves, suburbs, and the sprawl which are very much part of modern life are creating new habitats which attract and support a wide range of wildlife. This creates an unprecedented new dynamic where wildlife is increasingly likely to come into contact, if not conflict, with humans at a time when people's general familiarity and tolerance for wildlife outside of a controlled environment may be declining.

Farmers may see badgers as a threat to their livestock and their way of life, and as pests to be eliminated. Animal advocates may see badgers as scapegoats for other problems and seek to prevent or avoid unnecessary suffering for the animals. The general public, however, may find that it is one thing to admire badgers in the forest, on television, in movies, or in children's books, and yet altogether another thing when

one's garden has been dug up. Thus, apart from advocates directly concerned with the issues, for many "wildlife" may be more of an abstract concept—and the ambivalence of not being comfortable with wildlife encounters yet also being troubled by wildlife control efforts.

This creates a conundrum for advocates, policy makers, and legislators in democratically elected governments because, as commentators have noted, it "is a formidable task [to get the balance right] for a suburbanized human population that is generally poorly informed about nature and wildlife dynamics and is largely opposed to the most ready means of wildlife regulation: hunting and trapping."²³⁴ Whether it is the badger cull, controlling deer overpopulation, maintaining feral cats, or the much wider task of wildlife law reform, effectively addressing the issues requires less focus on whether specific animal species are "good" or "bad," and more attention broader question of how to properly address human relationships and interactions with all forms of wildlife. Getting that balance right and addressing each of the various perspectives is the challenge for wildlife management, reform, and legislation for the coming century.

²³⁴ David R. Foster, Glenn Motzkin, Debra Bernardos, and James Cardoza, *Wildlife Dynamics In The Changing New England Landscape*, 29 JOURNAL OF BIOGEOGRAPHY 1337, 1351 (2002).

