ISSN 2154-9656

VOL. XI 2015

JOURNAL OF ANIMAL & NATURAL RESOURCE LAW

Michigan State University
College of Law

For optimum page navigation of this Journal, open Bookmarks in Adobe Acrobat Reader.

JOURNAL OF ANIMAL & NATURAL RESOURCE LAW

Michigan State University
College of Law

MAY 2015

VOLUME XI

The *Journal of Animal & Natural Resource Law* is published annually by law students at Michigan State University College of Law.

The *Journal of Animal & Natural Resource Law* received generous support from the Animal Legal Defense Fund and the Michigan State University College of Law. Without their generous support, the *Journal* would not have been able to publish and host its annual symposium. The *Journal* also is funded by subscription revenues. Subscription requests and article submissions may be sent to: Professor David Favre, *Journal of Animal & Natural Resource Law*, Michigan State University College of Law, 368 Law College Building, East Lansing MI 48824, or by email to msujanrl@gmail.com.

Current yearly subscription rates are $27.00 in the U.S. and current yearly Internet subscription rates are $27.00. Subscriptions are renewed automatically unless a request for discontinuance is received.

Back issues may be obtained from: William S. Hein & Co., Inc., 1285 Main Street, Buffalo, NY 14209.

The *Journal of Animal & Natural Resource Law* welcomes the submission of articles, book reviews, and notes & comments. Each manuscript must be double spaced, in 12 point, Times New Roman; footnotes must be single spaced, 10 point, Times New Roman. Submissions should be sent to msujanrl@gmail.com using Microsoft Word or PDF format. Submissions should conform closely to the 19th edition of *The Bluebook: A Uniform System of Citation*.

JOURNAL OF ANIMAL & NATURAL RESOURCE LAW

VOL. XI **2015**

JOURNAL OF ANIMAL &
NATURAL RESOURCE LAW

VOL. XI 2015

PEER REVIEW COMMITTEE
2014-2015

Journal of Animal & Natural Resource Law

Vol. XI **2015**

Peer Review Committee

Taimie L. Bryant is a Professor of Law at UCLA School of Law where she teaches Property and Nonprofit Organizations in addition to teaching different courses on animal law. Prior to receiving her J.D. from Harvard Law School, Professor Bryant earned a Ph.D. in anthropology from UCLA. Since 1995, she has turned her attention to animal rights, focusing both on the theoretical issues of conceptualizing such rights and on legislative and other legal regulations of human treatment of animals. Recent publications include *Similarity or Difference as a Basis for Justice: Must Animals be Like Humans to be Legally Protected from Humans?*, *False Conflicts between Animal Species*, and *Transgenic Bioart, Animals and the Law*.

David Cassuto is a Professor of Law at Pace University School of Law where he teaches Animal Law, Environmental Law, Property Law, and Professional Responsibility. Professor Cassuto has published and lectured widely on issues in legal and environmental studies, including animal law. He is also the Director of the Brazil-American Institute for Law & Environment. He holds a B.A. from Wesleyan University, an M.A. & Ph.D. from Indiana University, and a J.D. from the University of California, Berkeley, Boalt Hall School of Law.

David Favre is a Professor of Law at Michigan State University College of Law. He is Faculty Advisor to the *Journal of Animal Law* and Chair of the Peer Review Committee of the *Journal*. As Editor-in-Chief of the *Animal Legal and Historical Web Center*, he has published several books on animal issues. Professor Favre teaches Animal Law, Wildlife Law, and International Environmental Law.

Peer Review Committee continued

Rebecca J. Huss is a Professor of Law at Valparaiso University School of Law in Valparaiso, Indiana. She has a LL.M. in International and Comparative Law from the University of Iowa School of Law and graduated *magna cum laude* from University of Richmond School of Law. Recent publications include *Companion Animals and Housing* in Animal Law and the Courts: A Reader; *Rescue Me: Legislating Cooperation between Animal Control Authorities and Rescue Organizations*; *Valuation in Veterinary Malpractice*; and *Separation, Custody, and Estate Planning Issues Relating to Companion Animals*. Professor Huss's primary focus in research and writing is on the changing nature of the relationship between humans and their companion animals and whether the law adequately reflects the importance of that relationship.

Peter Sankoff is an Associate Professor at the University of Western Ontario Faculty of Law who specializes in animal law, criminal law, and the law of evidence. He is the author or editor of five books, including *Animal Law in Australasia: A New Dialogue*, the first book ever published in the southern hemisphere to focus exclusively on animal law issues. Peter lectures and publishes on a variety of animal law topics. Professor Sankoff taught animal law at the University of Auckland from 2006-2010, and also as a Visiting Professor at Haifa University in Israel, and the University of Melbourne Australia. He has also taught an advanced animal law course entitled Comparative Concepts in Animal Protection Law at Lewis and Clark College of Law

Steven M. Wise is President of the Center for the Expansion of Fundamental Rights, Inc. and author of *Rattling the Cage—Toward Legal Rights for Animals* (2000); *Drawing the Line—Science and The Case for Animal Rights* (2002), *Though the Heavens May Fall—The Landmark Trial That Led to the End of Human Slavery* (2005), as well as numerous law review articles. He has taught Animal Rights Law at Vermont Law School since 1990, and at Harvard Law School, John Marshall Law School, and will begin teaching at St. Thomas Law School. Mr. Wise has practiced animal protection law for over twenty-five years.

Journal of Animal & Natural Resource Law

Vol. XI **2015**

Table of Contents

ARTICLES

NOTES AND COMMENTS

Protecting America. Protecting Animals: The Department of Defense's Efforts to Protect Animals In and Near Military Bases

Julianne Kelly-Horner, J.D.*

I. Introduction

The Department of Defense ("DoD") has received a fair amount of criticism regarding environmental efforts from various scholars, citizens, and environmental groups.[1] These critics argue that DoD training and operations on military bases directly results in environmental harm, including nuclear contamination, water pollution, air pollution, and harm to endangered species.[2] This paper, however, will demonstrate through several case studies of animals on military lands, that DoD has effective tools for preserving endangered species while maintaining a ready military, but needs to continue its efforts by allocating additional financial resources to protect endangered species.

Since President Nixon signed the Endangered Species Act ("ESA")[3] in 1973, DoD, as well as all federal agencies, is responsible for preserving endangered species on its land.[4] As such, DoD must "reconcile two seemingly conflicting missions—national defense and

* General Attorney with the Department of Homeland Security, Customs and Border Protection, Office of the Assistant Chief Counsel. This article was prepared in a personal capacity. The opinions expressed in this article are the author's own and do not necessarily reflect the views of Customs and Border Protection, the Department of Homeland Security, or the United States government.

The author would like to thank Professor Jane Henning, University of San Diego School of Law; Walt Wilson, Marine Biologist Navy Region Southwest; Tiffany Shepherd, Wildlife Biologist at Naval Base Coronado; and LCDR Gretchen Sosbee, Deputy Region Environmental Counsel at Navy Region Southwest, for their comments, edits, and guidance.

[1] *See generally,* Marcilynn A. Burke, *Green Peace? Protecting Our National Treasures While Providing for Our National Security*, 32 Wm. & Mary Envtl. L. & Pol'y Rev. 803 (2008).

[2] Scott M. Palatucci, *The Effectiveness of Citizen Suits in Preventing the Environment From Becoming a Casualty of War*, 10 Widener L. Rev. 585, 587 (2004).

[3] Endangered Species Act, 16 U.S.C. §§ 1531-1544 (1973).

[4] Paul C. Kiamos, *National Security and Wildlife Protection: Maintaining an Effective Balance*, Envtl. Law. 457, 494-95 (2002).

environmental conservation."[5] This reconciliation requires constant compromise because many military bases have become refuges for species either fleeing urban development and encroachment or simply remaining within their historic range, which converted into military land at some point.[6] In fact, approximately 300 of the 1,200 species protected under the ESA are found on DoD land, which is more species per acre than both the National Park Service and the U.S. Fish and Wildlife Service ("USFWS").[7] As such, DoD is tasked with the large burden of protecting the country's endangered species—all while protecting the United States by maintaining military readiness.

The burden of protecting species under the ESA is costly. Between 1993 and 2008, DoD spent the most money on the following species: $99.6 million on the red-cockaded woodpecker; $71.3 million on the desert tortoise; $24.7 million on the San Clemente loggerhead shrike; $20.8 million on the Mexican spotted owl; $18.2 on the bald eagle; $16.4 million on the black-capped vireo; $14.4 million on the golden-cheeked warbler; $11.5 million on the California least tern; $11.2 million on the western snowy plover; and $10.4 million on the southwestern willow flycatcher.[8] These extraordinary figures stem from various DoD efforts, including rescheduling or canceling training exercises that may interfere with endangered species, affirmative actions to protect species from military and non-military threats, and obtaining land to protect habitat.[9] The paper will go into further detail about a few military bases' efforts to protect specific species.

In Part II, this paper provides an overview of environmental laws impacting military bases. Part III considers the problem of endangered species on military bases. Part IV looks at DoD's efforts to protect endangered species and other animals on-base. Part V addresses

---

[5] Louis J. Puleo, *Conservation Issues on Military Lands: Some Thoughts on a Framework for Successful Mission Integration*, 17 J. Land Use & Envtl. Law 431, 431 (2002).

[6] *Id.* at 434.

[7] Robert Boonstoppel & Adriane Miller, *U.S. Military and Communities Seek Ways to Share Natural Resources*, Md. B.J. 32, 34 (2005) (citing the Natural Heritage Data Network).

[8] *Threatened and Endangered Species on DoD Lands*, U.S. Department of Defense (Jan. 2010), http://perma.cc/7Y3S-6XQN. [hereinafter "Defending our Nation's Resources."]

[9] Catherine M. Vogel, *Military Readiness and Environmental Security—Can They Co-Exist?*, 39 Real Prop., Prob., & Tr. J. 315, 339 (2004). Vogel includes a couple examples of rescheduling training exercises. At Eglin Air Force Base in Florida, the base tags and tracks endangered sturgeons. If the fish are located in an impacted area during training, the training must be delayed or moved. A similar situation occurs at the Barry M. Goldwater Range in Arizona, where bombing exercises are relocated or canceled if the base spots an endangered pronghorn within two hours of the bombing. *Id.* at 341.

DoD's efforts off-base to protect animals and their habitat. Finally, Part VI contends that DoD should continue its preservation efforts by maintaining its internal standards to protect animal species and that DoD should further engage local communities around military bases to prevent encroachment from threatening both endangered species' habitat and military preparedness.

II. Overview of DoD & Relevant Laws

The Department of Defense manages the military and seeks to prevent war and protect the United States.[10] DoD maintains hundreds of thousands of buildings located at more than 5,000 locations and military bases throughout the world.[11] DoD has approximately 420 military bases in the United States, ranging in size from a half-acre to 3.6 million acres.[12] In total, DoD manages more than 30 million acres of land.[13] DoD uses military bases for a variety of tasks, including "daily operations, realistic training, and effective weapon system testing."[14] These functions are essential to a successful, effective military.[15] While defending the United States, DoD must also comply with federal environmental laws. Since the 1970s, Congress has enacted several laws which impact environmental efforts on military bases, including (A) the Endangered Species Act, (B) the Sikes Act, and (C) the National Environmental Protection Act.[16]

a. The Endangered Species Act

The ESA was enacted in 1973.[17] Congress intended the ESA to increase conservation efforts on "ecosystems upon which endangered species and threatened species depend."[18] Under the ESA, it is illegal, for example, for any person to import, take, possess, sell, transport, or offer, any listed species.[19] The ESA's definition of "person" makes it clear that the ESA applies to private individuals under the jurisdiction of

[10] U.S. Department of Defense, http://perma.cc/V9S7-QP4L (last visited Dec. 18, 2013).

[11] *Id.*

[12] *Id.*; *Defending our Nation's Resources*, *supra* note 8.

[13] U.S. Department of Defense, *supra* note 10.

[14] *Readiness and Environmental Protection Integration*, http://perma.cc/X6MK-XWA5 (last visited Dec. 18, 2013).

[15] *Id.*

[16] *See also* Migratory Bird Treaty Act, 16 U.S.C. §§ 703-712 (2004). For the purposes of this paper, this treaty will not be covered.

[17] Endangered Species Act, 16 U.S.C. §§ 1531-1544 (1973); Kiamos, *supra* note 4, at 494-95, 457.

[18] 16 U.S.C. § 1531(b).

[19] 16 U.S.C. § 1538(a)(1)(A)-(G).

the United States, as well as government entities.[20] As such, all federal entities must help the conservation efforts.[21] The ESA limits federal actions that may impact endangered species and "imposes an affirmative duty on these agencies to conserve these species."[22]

Under the ESA, the USFWS, a part of the Department of the Interior ("DoI") maintains an endangered species list.[23] Listing species is based only on scientific evidence and not any possible economic effects of listing the species.[24] DoI also designates "critical habitat" for listed species.[25] When designating such habitat, DoI considers not only scientific information but also the economic effects of the proposed designation.[26] Critical habitat land requires the land manager "to restore the species to the point it is no longer endangered, not merely prevent the species from being in jeopardy."[27] As such, land designated as critical habitat requires a higher standard of care.[28]

When a species is listed, DoI generally creates a recovery plan for the species' future.[29] Such a plan includes: necessary actions to conserve the species, criteria for removing the species from the list, and an estimate of the time it will take to take to conserve the species.[30] In *Tennessee Valley Authority v. Hill*, the Supreme Court acknowledged "that the legislative history of the ESA indicated that Congress intended to impede or reverse the trend toward species extinction no matter what cost resulted."[31]

The ESA allows citizens to initiate private suits against the government for any violations.[32] DoD, however, may invoke the National Defense Exemption of 16 U.S.C. section 1536(j), which bars citizen suits if the alleged ESA violation is "necessary for reasons of national security."[33] This exemption, however, is considered "an extraordinary remedy" and has not yet been used.[34]

---

[20] 16 U.S.C. § 1532(13); Kevin D. Batt, Comment, *Above All, Do No Harm: Sweet Home and Section Nine of the Endangered Species Act*, 75 B.U. L. Rev. 1177, 1191 (1995).

[21] 16 U.S.C. § 1531(c)(1).

[22] Major David N. Diner, *The Army and the Endangered Species Act: Who's Endangering Whom?*, 143 Mil. L. Rev. 161, 162 (1994).

[23] *Id.* at 175.

[24] *Id.*; Palatucci, *supra* note 2, at 590.

[25] Diner, *supra* note 22, at 177.

[26] *Id*.

[27] Major Lori L. May & Major Jonathan P. Porier, *Master Environmental Edition II: It's Not Easy Being Green: Are DoD INRMPs a Defensible Substitute for Critical Habitat Designation?*, 58 A.F. L. Rev. 175, 185 (2006).

[28] *Id*.

[29] Diner, *supra* note 22, at 178.

[30] *Id.* at 178-79; 16 U.S.C. § 1533(f)(1)(B).

[31] 437 U.S. 153, 187 (1978); Kiamos, *supra* note 4, at 495.

[32] Palatucci, *supra* note 2, at 591.

[33] *Id.*; *see also* Diner, *supra* note 22, at 196; Kiamos, *supra* note 4, at 499.

[34] Kiamos, *supra* note 4, at 499.

b. The Sikes Act

The Sikes Act was passed in 1960 and amended in 1997.[35] This act requires DoD to "provide for the conservation and rehabilitation of natural resources on military installations."[36] To do this, every military installation generally must develop an integrated natural resources management plan ("INRMP") in cooperation with the Department of the Interior.[37] If DoI believes the INRMP benefits the species, then DoD land will not be designated as a critical habitat under the ESA, which requires a higher level of care than non-designated land.[38] To qualify for this exemption from critical habitat designation, an INRMP must meet three qualifications: 1) it must be "complete and provide a benefit to the species"; 2) it must assure that the strategies set forth will be implemented; and 3) it must assure that the implemented strategies will be effective, which may require monitoring and revisions to the INRMP.[39]

DoD generally prefers INRMPs to designations of critical habitat under the ESA because critical habitat designation requires a higher standard of care for the land and the species.[40] DoD argues that critical habitat designations are "duplicative" of INRMPs, which already conserve species and their habitats.[41] The Sikes Act required about 379 military bases to develop INRMPs, of which 350 were completed by 2008.[42] Where an INRMP does not follow procedure or does not provide a benefit to the endangered species however, the Secretary of the Interior may designate a military base as a critical habitat under the ESA.[43]

c. National Environmental Policy Act

The National Environmental Policy Act ("NEPA") requires federal agencies, including the military, to consider the environmental impact of proposed actions and projects.[44] NEPA also requires federal

[35] Sikes Act, 16 U.S.C. §§ 670-670f (2013).

[36] 16 U.S.C. § 670a; Vogel, *supra* note 9, at 337.

[37] 16 U.S.C. § 670a.

[38] 16 U.S.C. § 1533; Burke, *supra* note 1, at 839; May & Porier, *supra* note 27, at 185.

[39] 16 U.S.C. § 1533; Burke, *supra* note 1, at 840.

[40] May & Porier, *supra* note 27, at 190.

[41] *Id*.

[42] Burke, *supra* note 1, at 841.

[43] *Id*.; *see also Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Mexican Spotted Owl*, 69 Fed. Reg. 53,182, 53,225 (Dep't of Interior Aug. 31, 2004).

[44] National Environmental Policy Act of 1969, 42 U.S.C. § 4321-4370h (2006); Julie G. Yap, *Just Keeping Swimming: Guiding Environmental Stewardship Out of the Riptide of National Security*, 73 Fordham L. Rev. 1289, 1297 (2004) ("It is well settled that NEPA does apply to the military, even though the statute does not explicitly provide for this." (*Id*. at 1298.))

agencies to consider alternative courses of action and possible ways to mitigate any impact to the environment.[45] NEPA created the Council on Environmental Quality ("CEQ"), which monitors and regulates actions under NEPA.[46] The CEQ's regulations generally require federal agencies to prepare Environmental Impact Statements ("EIS") or Environmental Assessments ("EA").[47] Federal agencies must prepare an EIS before undertaking major action that will affect the environment.[48] The Environmental Protection Agency reviews and maintains a database these reports.[49] Before preparing the EIS, the federal agency must go through "scoping," which is a period of identifying issues the EIS should address and holding public hearings to receive comments from the community.[50]

If a federal agency is unsure whether an action will significantly impact the environment, thereby requiring an EIS, the agency may prepare an EA.[51] An EA is less detailed than an EIS and is meant to determine whether an EIS is necessary.[52] If, after completing the EA, the agency finds there will be no significant environmental impact from the proposed action, the agency will issue a finding of no significant impact ("FONSI").[53] On the other hand, if the EA finds that the proposed action may significantly impact the environment, the federal agency must then prepare an EIS.[54]

III. Overview of Endangered Species on Military Bases

Despite this scheme of federal laws detailing conservation efforts, DoD has been the subject of much criticism and many environmental lawsuits.[55] Some scholars argue that DoD's precarious balancing act between protecting the United States while also conserving natural resources is inadequate.[56] Likewise, others argue that DoD and

[45] Joel R. Reynolds, *Submarines, Sonar, and the Death of Whales: Enforcing the Delicate Balance of Environmental Compliance and National Security in Military Training*, 32 Wm. & Mary Envtl. L. & Pol'y Rev. 759, 771-72 (2008).

[46] 40 C.F.R. §§ 1500-1518 (1978); Yap, *supra* note 44, at 1296.

[47] *National Environmental Policy Act*, Environmental Protection Agency, http://perma.cc/SJ39-5U6R (last visited Dec. 18, 2013).

[48] Yap, *supra* note 44, at 1296.

[49] National Environmental Policy Act, *supra* note 47; Yap, *supra* note 44, at 1296.

[50] Nathalie M. Armas, Comment, *Military Aviation Noise and its Effects on Domesticated and Wild Animals*, 12 Penn St. Envtl. L. Rev. 367, 372 (2004).

[51] 40 C.F.R. § 1501.3; Yap, *supra* note 44, at 1297.

[52] Yap, *supra* note 44, at 1297.

[53] 40 C.F.R. § 1501.4; Yap, *supra* note 44, at 1297.

[54] 40 C.F.R. § 1508.11; Armas, *supra* note 50, at 372.

[55] *See, e.g.,* Burke, *supra* note 1, at 803; Nancye L. Bethurem, *Environmental Destruction in the Name of National Security: Will the Old Paradigm Return in the Wake of September 11?*, 8 Hastings W.-Nw. J. Envtl. L. & Pol'y 109 (2002).

[56] Burke, *supra* note 1, at 803.

politicians may "sacrifice environmental protection in the name of national security" since 9/11.[57] In 2002, for instance, the Vice Chairman of the House Committee on Government Reform stated that "what is right is what will better prepare our warriors to win and survive on the battlefield, not limiting training so we don't run a risk of trampling blades of grass or upsetting the nesting habits of a cockamamie warbler."[58] Critics also note that preparing the military for combat has "disastrous effects" on the environment. [59] Furthermore, citizen suits, which the ESA explicitly provides for, are meant to be one method to enforce the ESA, but their efficacy is questionable.[60] In lawsuits under the ESA, for instance, courts generally defer to USFWS decisions and the importance of maintaining military training.[61]

Criticism regarding how DoD balances military readiness with protecting endangered species is not unfounded. At least a few examples demonstrate the military's rejection of the affirmative duties required under the ESA, citing the resulting limitations on training as unacceptable. In 1989, the Army base at Fort Bragg defiantly challenged the affirmative duty to avoid harm to endangered species on its base.[62] That March, Fort Bragg released a biological assessment "that demanded total flexibility to train 'without environmental consideration.'"[63] Then, in defiance of the ESA, the base allowed large-scale training exercises of about seventeen artillery battalions, causing damage to the habitat of the red-cockaded woodpecker, a species listed under the ESA and discussed in part V of this paper.[64] Pentagon officials visited Fort Bragg in July 1989 and found other actions incompatible with protecting the woodpecker and its habitat on-base, such as guns underneath tees, digging around trees, vehicle damage to trees, and cable and parachute lines wrapped around the trees.[65] In response, the USFWS released a biological opinion in 1990 that severely restricted training on the base.[66] Accordingly, the base had to close a $15 million live-fire range it had recently built near active woodpecker colonies.[67]

---

[57] Palatucci, *supra* note 2, at 585.

[58] Burke, *supra* note 1, at 807.

[59] Palatucci, *supra* note 2, at 585.

[60] *See generally*, Palatucci, *supra* note 2.

[61] Vogel, *supra* note 9, at 334 (including as examples Pyramid Lake Paiute Tribe of Indians v. Dep't of the Navy, 898 F.2d 1410, 1418 (9th Cir. 1990) and Waterkeeper Alliance v. United States Dep't of Def., 152 F. Supp. 2d 155, 157 (D. P.R. 2001)).

[62] Diner, *supra* note 22, at 206.

[63] *Id*.

[64] *Id*. at 207.

[65] *Id*. at 206.

[66] *Id*. at 207.

[67] *Id*. at 207, fn. 287.

A similar situation occurred at the Chocolate Mountain Aerial Gunnery Range in 1996. In 1996, the range was designated a critical habitat under the ESA to protect the desert tortoise.[68] As a result, Navy SEAL firearm training was significantly limited to a narrow area not designated as a critical habitat, whereas the SEALs had much more space to conduct realistic training before designation.[69] As such, at the very least, avoiding detrimental impacts to bases provides an incentive to DoD to better protect and manage endangered species.

These few examples, however, are not an accurate reflection of DoD's perspective today. Indeed, DoD has a strong self-interest motivation in complying with environmental laws to protect species on its military bases. If DoD does not comply, it will be forced to close facilities or ranges, which happened at Fort Bragg, or change training methods and locations, which happened at the Chocolate Mountain Aerial Gunnery Range.

The military branches now seem aware of the self-interest in protecting endangered species. After the Fort Bragg incident, for instance, the army released a memo noting the vital importance of managing endangered species to reduce conflicts with training:

The Army continues to experience serious problems in meeting its responsibilities under the Endangered Species Act of 1973 (ESA). ESA requirements have had a significant impact on training operations at Fort Bragg and have the potential to significantly restrict Army training operations at other installations. Therefore, it is crucial that the Army adopt policies and procedures that will provide for more effective endangered species management and reduce the conflict with mission requirement.[70]

As the Army, and the other military branches, now understand the importance of complying with environmental laws protecting listed species, military bases protect animals on-base in a variety of ways, as discussed in the next section.

IV. On-Base Efforts to Protect Animals

Internal, on-base efforts are necessary to protect the future of listed species and other animals on military bases. Under the various environmental laws discussed above, military bases are required to prepare INRMPs, Environmental Assessments, and Environmental Impact Statements. These plans and reports help the base to identify

[68] Thomas Ledvina, *Defending America—A Question of Balance: The Department of Defense's Range and Readiness Preservation Initiative*, SJ023 ALL-ABA 163, 169-79 (2003).

[69] *Id.*

[70] Diner, *supra* note 22, at 199.

environmental issues, including protecting listed species. Bases use these documents to help affirmatively protect animal species in a variety of methods, as seen in the following case studies of the (A) California least and western snowy plover and (B) the island fox.

a. California Least Tern & Western Snowy Plover, Coronado Naval Base and Camp Pendleton

Two species of listed birds call military bases "home" in southern California: the California least tern and the western snowy plover. Both birds nest on Camp Pendleton and Naval Base Coronado, where the birds find natural beaches with much more open space than beaches where civilians have access. According to a breeding survey of the California least tern, in 2011, between 1,014 and 1,510 least tern nesting pairs nested on Camp Pendleton, and between 950 and 976 pairs nested on Coronado.[71] This represents a significant number of the total nesting pairs in California, which is between 4,826 and 6,108, making DoD efforts critical to both species.[72]

Both species have faced multiple hardships, which has resulted in the least tern being listed as threatened and the plover listed as endangered.[73] These hardships include: natural predators, which drastically damaged the species on Coronado in 2008 and 2009;[74] unstable food supply;[75] invasive plant species covering the beach;[76] climate change;[77] military training on the beach;[78] and civilian intervention. Though the military tries to prevent civilians from entering military-owned beaches, civilians wander onto military bases from public beaches, often bringing their dogs with them, which disrupts the habitat and nesting sites of the birds.[79]

---

[71] Daniel A. Marschalek, *California Least Tern Breeding Survey: 2011 Season*, State of California, Natural Resources Agency, (2012), https://perma.cc/EUE5-A8Y6.

[72] *Id*.

[73] Joelle Fournier, *Saving Shorebirds: Least Terns and Snowy Plovers*, San Diego Zoo Inst. for Conservation Research (Dec. 18, 2013), http://perma.cc/DJ8G-984J.

[74] Telephone Interview with Tiffany Shepherd, Navy Biologist (Nov. 14, 2013).

[75] Fournier, *supra* note 73.

[76] Public Review Draft, INRMP, Naval Base Coronado, 4-47 (March 2013), https://www.piersystem.com/external/content/document/4275/1725359/1/NBC_Public_Review_Draft_INRMP_031213_small.pdf. [Link requires login].

[77] *Id.* at 4-47.

[78] *Id.*

[79] *Id.*; Interview with LCDR Gretchen Sosbee, Environmental JAGC Officer (October 1, 2013).

The Public Draft INRMP from March 2013 explains the Navy's current activities and future plans for protecting the birds.[80] These include a variety of methods, including holding a permit for predator control to protect the birds; collecting eggs to raise chicks in safety in captivity then releasing them; placing educational and trespassing signs on the beach; training construction workers to avoid the birds and nests; shielding light away from the beach during nesting season; and working with California to station law enforcement around the birds during nesting season to reduce civilian impacts on the birds.[81] The military also works with the Terns and Plovers Project of the San Diego Zoo Institute for Conservation Research to monitor the species and brainstorm ideas on how better to protect them.[82] During nesting season, biologists carefully locate nests and monitor the health of newly-hatched chicks.[83] In addition, the Navy also prepares its section of the Coronado beach for nesting season by hosting large beach clean ups.[84] These help remove debris that washes to shore, which poses a threat to the sensitive birds. For instance, the birds can get caught in strings or rope, and hazardous items, such as batteries, can contaminate the sands.[85]

Another creative plan to help the least tern in particular is to attract the bird to a new nesting site previously unused for tern nesting.[86] The Navy cleared a potential nesting site of vegetation and added sand to entice the birds to nest at an alternative nesting site on North Island. The Navy also places tern decoys and uses sound to attract the birds to the site.[87]

Another way the Navy protects these birds is by limiting Navy SEAL beach training during nesting season. When landing on the beach, the SEALs "disrupt their tactical formations to move in narrow lanes, marked by green tape, to avoid disturbing the potential nests."[88] Altering SEAL training reduces the likelihood of impacting the birds during nesting season.

b. The Island Fox, San Clemente Island

In some circumstances, the military has enough foresight to not only protect listed species, but to protect species that *could* be

[80] Public Review Draft, *supra* note 76.

[81] *Id.* at 2-49, 4-50, 4-47, 4-48, 4-50, 4-70.

[82] Fournier, *supra* note 73.

[83] Fournier, *supra* note 73; Public Review Draft, *supra* note 76, at 4-48.

[84] Amanda Cabasos, *NBC Prepares for Nesting Season*, U.S. Navy (Feb. 26, 2012, 5:50 AM), http://perma.cc/C8KK-GHXT.

[85] *Id.*

[86] Public Review Draft, *supra* note 76, at 4-49.

[87] *Id*.

[88] Vogel, *supra* note 9, at 318-19.

listed under the ESA. One example is the island fox, located on San Clemente Island, one of the Channel Islands. The Channel Islands generally represents a success story for conservation of species on DoD land. The U.S. Navy owns two of the Channel Islands, San Nicolas and San Clemente, and San Clemente Island is an important site for Naval weapons research and testing.[89]

A 2013 *Los Ángeles Times* article notes that the Navy has taken several important steps in securing the future of the various endangered species on San Clemente Island.[90] One problem facing the indigenous species on the island was the introduction of non-indigenous goats and pigs in the 1800s.[91] By the early 1990s, the Navy removed these non-indigenous animals, which then allowed native vegetation to thrive, partially restoring the natural habitats of indigenous endangered species.[92] Furthermore, the article notes that the Navy moved sniper training to avoid disturbing animal nests and moved practice bombing targets away from areas endangered species were located.[93]

In particular, the military has paid special attention to the island fox. By 1998, the island fox was on the brink of extinction, with only a few dozen foxes known to be alive.[94] The National Park Service notes that a "coordinated, organized and highly focused strategy was able to reverse certain extinction."[95] There are about six subspecies of the island fox living in the Channel Islands, four of which are listed as endangered.[96] Interestingly, the fox species on San Clemente Island and San Nicholas Island, both owned by the Navy, are not currently listed as endangered. According to the USFWS, these subspecies are not in "steep decline" even though there are only around 500 foxes on each island.[97]

Nevertheless, the Navy spends about $650,000 per year protecting the fox.[98] One of the most effective methods for preventing

---

[89] Luis Perez, *Endangered Species: San Clemente Island*, NatureServe (2008), http://perma.cc/Z3JW-K9WB.

[90] Louis Sahagun, *On Navy's San Clemente Island, Endangered Species Stage a Comeback*, L.A. Times, July 21, 2013, http://perma.cc/SSW9-PEH3.

[91] *Id.*

[92] *Id.*

[93] *Id.*

[94] *The Decline of the Island Fox*, National Park Service, http://perma.cc/6ASB-FTH5 (last visited Dec. 19, 2013).

[95] *Island Fox*. National Park Service, http://perma.cc/8YHE-L7X3 (last visited Dec. 19, 2013).

[96] *Environmental Conservation Online System*, U.S. Fish & Wildlife Service, http://perma.cc/5G45-XFGZ (last visited Dec. 19, 2013).

[97] *Facts and Q&A About the Proposed Listing of the Island Fox as an Endangered Species*, U.S. Fish & Wildlife Service, http://perma.cc/46DQ-54HK (last visited Dec. 19, 2013).

[98] Tony Perry, *On This Military Training Ground, Foxes Aren't Afraid of SEALs*, L.A.Times., Feb. 28, 2011, http://perma.cc/6933-M5NN.

harm to the fox was a surprisingly simple solution: reducing the speed limit for vehicles to avoid collisions with the fox.[99] The Navy also tracks foxes' movements by fitting them with electronic tracking collars[100] Other efforts to protect the fox include prohibiting service members from bringing pets to the island, mowing grass along roads to make foxes more visible before they become road-kill, and providing brief instructions to service members arriving on the island.[101]

The Navy is not alone in its concern for the fox; it works with various organizations including the Institute for Wildlife Studies, UC Davis, Colorado State University, the University of Wyoming, and the Santa Barbara Zoo help care for injured foxes and study them.[102]

V. Encroachment & the Readiness and Environmental Protection Initiative

a. The Problem of Encroachment

One of the major challenges DoD faces stems not only from protecting the endangered species on military bases, but also preventing further strain on the species and their habitat from encroachment by the private sector, such as population growth and urban development in areas surrounding military bases.[103] Many military bases were originally located far from cities and dense population areas, but as the bases have grown and the cities have sprawled, "the once rural areas that surrounded installations are now increasingly home to a mix of residential, commercial, industrial, and other land uses, many of which are incompatible with military operations."[104] Now, the close proximity of many bases to local populations areas causes a myriad conflicts, including noise pollution, light pollution, and even on occasion military

[99] *Id.*; Telephone Interview with Walt Wilson, Marine Biologist, U.S. Navy (October 25, 2013).

[100] Perry, *supra* note 98.

[101] *Id.*

[102] *Id.*

[103] Department of Defense, Report to Congress on Sustainable Ranges, 1, 8 (2013), http://perma.cc/PB8R-QU2W. The term "encroachment" is used to describe urban sprawl putting pressure on endangered species on DoD land, but is also used to describe other limitations the military faces, such as "restrictions on allowed munitions, degraded access to the frequency spectrum, noise-based restrictions on training, incompatible adjacent land use, and renewable energy such as wind and solar farms." *Id*. at 7. This paper analyzes encroachment only insofar as it affects endangered species.

[104] Ross Appel & Tyson Smith. *Compatible Land Use Near Military Installations: The Problem and the Local Government Response*, 63 Plan. & Envtl. L. No. 4, 1 (2011).

plane crashes affecting civilians.[105] Another significant side effect of military bases now being closer to urban centers is decreasing natural habitat for animal species.[106]

Encroachment "surrounding installations continue[s] to restrict the available habitat for many species."[107] Unfettered urban development often prompts animals to seek new places to live, and some find a suitable habitat on military land.[108] As former Vice Admiral Amerault of the U.S. Navy explained to Congress in 2001, residential and commercial development continues to "surround[] our once-isolated installations and ranges. This 'encroachment' has made many of our installations the habitat of choice for a number of threatened and endangered species."[109] Bases have thus become de facto refuges for species seeking new habitat.[110] As such, "some of the finest remaining examples of rare wildlife habitats are found on military installations. In fact, DoD has the highest density of species listed as threatened or endangered…under the Endangered Species Act (ESA) of any other federal land management agency."[111]

The presence of these species negatively impacts training because the military is forced to modify its training methods to comply with environmental laws. The former Vice Admiral boldly noted that environmental laws, and their effects on military training, are causing a loss in military readiness.[112] As such, encroachment not only threatens natural habitats and the future survival of endangered species, but also threatens military preparedness.

Nevertheless, every federal agency is charged with the duty to protect endangered species under the ESA, no matter the cost.[113] This puts an immense pressure on DoD to not only protect the species on DoD land, but also to prevent future encroachment that could further reduce endangered species' habitat, thereby putting even more pressure on the population on military bases.

---

[105] *Id*.

[106] Boonstoppel & Miller, *supra* note 7, at 34.

[107] Report to Congress on Sustainable Ranges, *supra* note 103, at 42.

[108] Boonstoppel & Miller, *supra* note 7, at 34.

[109] *'Encroachment' Issues Having a Potentially Adverse Impact on Military Readiness: Hearing Before the Subcomm. on Readiness and Management Support of the S. Armed Services Comm*, 107th Cong. 6 (2001) (Statement of Vice Admiral James F. Amerault, Deputy Chief of Naval Operations, Fleet Readiness and Logistics), *available at* http://perma.cc/4RM5-V3DD.

[110] Puleo, *supra* note 5, at 434.

[111] *Defending our Nation's Resources*, *supra* note 8.

[112] *'Encroachment' Issues Having a Potentially Adverse Impact*, *supra* note 109, at 6.

[113] *Hill*, 437 U.S. 153, *supra* note 31, at 187-88.

Working to protect natural habitat for endangered species is an ongoing issue for DoD as unchecked urban development continues to threaten natural habitats around military bases.[114] Further, in 2017, the USFWS is set to determine the status of 251 species that may need to be listed.[115] Of these, DoD has found that 110 of these species would impact military training if they were listed, with eight of these species, including the greater sage grouse, the red knot shorebird, and Taylor's Checkerspot butterfly, having a potentially "significant impact."[116] Accordingly, DoD needs to prepare for ongoing protection for endangered species. One way to protect endangered species' habitat and prevent further encroachment is to establish "buffer zones" between military bases and urban development.

b. The Readiness and Environmental Protection Initiative

In 2004, DoD launched the Readiness and Environmental Protection Initiative ("REPI") to help DoD create effective buffer zones.[117] REPI allows DoD to partner with various entities, including local and state government, nongovernment organizations, and private landowners, to acquire property interests or establish conservation easements to prevent future encroachment.[118] This property then serves as a buffer zone to protect critical habitat and limit incompatible private sector development.[119] Before REPI, DoD was at the whim of local government zoning, which can quickly change according to local politics.[120] Now, DoD may proactively identify areas of concern around military bases and work with various entities to prevent future residential or commercial development in these areas.[121] This forward-thinking approach allows DoD to address potential problems before they become reality.[122] Between 2005 and 2008, 59,000 acres were secured.[123]

---

[114] *See* Puleo, *supra* note 5, at 434.

[115] Report to Congress on Sustainable Ranges, *supra* note 103, at 42.

[116] *Id*.

[117] *See* Christopher Jarboe, *REPI Program Protects Atlantic Test Ranges from Urban Sprawl*, Currents, Summer 2012, at 28-29. The statutory authority for REPI is 10 U.S.C.§ 2684a (2002) (effective Dec. 26, 2013). *See* Report to Congress on Sustainable Ranges, *supra* note 103, at 37-38.

[118] *See* Jarboe, *supra* note 117, at 28-29; REPI 2013 7th Annual Report to Congress, 1, 2 (2013), http://perma.cc/C4D2-R3AN, Report to Congress on Sustainable Ranges, *supra* note 103, at 37-38.

[119] Report to Congress on Sustainable Ranges, *supra* note 103, at 37-38.

[120] Jarboe, *supra* note 117, at 29; Beth E. Lachman, Anny Wong & Susan A. Resetar, The Thin Green Line: An Assessment of DoD's Readiness and Environmental Protection Initiative to Buffer Installation Encroachment, 20 (RAND Corp. 2007).

[121] *See* Jarboe, *supra* note 117, at 28-29.

[122] *See* REPI 2013 Report, *supra* note 118, at 1.

[123] Harry M. Parent, III, *Brac to the Future: Managing Past Encroachment,*

A recent REPI report to Congress emphasizes the advantages of the initiative's cost-sharing paradigm, claiming to "multiply taxpayer dollars" by combining REPI funds and other government expenditures with partner investments in the same goals.[124] The report notes that these partner expenditures, constituting 49% of total expenditures, nearly matched DoD expenditures in FY 2012.[125] The REPI report further states:

REPI investments serve as a cost-effective tool to protect current test, training, and operational capabilities. REPI not only protects critical and irreplaceable military capabilities from degradation and loss due to encroachment, it avoids the need for expensive and time-consuming workarounds, while providing added value to the taxpayer through cost-sharing partnerships.[126]

c. The Red-Cockaded Woodpecker, Camp Lejeune

One the most highly-praised success stories involving endangered species on a military base is the recovery of the red-cockaded woodpecker on Camp Lejeune, a Marine Corps facility in North Carolina.[127] The base is the Marine Corps' "largest amphibious training base" and spans about 143,000 acres.[128] The woodpecker, which used to span the southern United States, has been listed as an endangered species since 1970 due to the destruction of its habitat.[129] Groups of the woodpeckers, called a cluster, generally nest in nearby trees.[130] Since 1986, when Camp Lejeune first began intensive monitoring the woodpeckers, the number of clusters increased from 32 to 81, representing an increase of 161%.[131]

To protect the woodpeckers, the base has combined internal efforts to protect the bird and with REPI buffering projects to protect its habitat off-base. The base has limited various activities on-base, including: operating vehicles off roads; damaging pine trees; disturbing soil; tree topping; and firing artillery close to tree cavities where the woodpeckers nest.[132]

Present Growth, and Future Land Use Around Military Installations, 60 PLAN. & ENVTL. L. 9, p. 3 (2008).

[124] *See* REPI 2013 Report, *supra* note 118, at 1.

[125] *Id*.

[126] *Id.* at 2.

[127] Telephone Interview with Walt Wilson, Marine Biologist, U.S. Navy, (Oct. 25, 2013).

[128] *Encroachment: MCB Camp Lejeune*, CONSERVING BIODIVERSITY ON MILITARY LANDS, http://perma.cc/8BB8-ZKAR.

[129] *MCB Camp Lejeune Red-Cockaded Woodpecker Management Plan*, 2006, http://perma.cc/49SJ-HTKJ (last visited Dec. 20, 2013).

[130] *Id*. at 2.

[131] *Id.* at 5.

[132] *Id.* at 7.

A significant aspect of the Marines' efforts to protect the woodpecker is the development of buffer zones around the base through REPI. To protect the woodpecker's environment, Camp Lejeune joined with local partners to create buffer zones around the base.[133] As of 2013, Camp Lejeune successfully protected 1,885 acres at a total cost of $12,822,350.[134] Now, the area not only serves as an "effective barrier against encroachment," but also is a wildlife preserve with public access.[135] In 2007, the Marine Corps further protected woodpecker habitat by implementing the first multi-installation agreement under REPI, protecting not only Camp Lejeune, but also Marine installations Cherry Point and New River.[136]

d. Other Examples

At the Army's Joint Base Lewis-McChord in Washington, the military protects the mardon skipper butterfly by protecting the population and its habitat.[137] The base uses buffer lands to ensure the butterfly's habitat is protected both on and off base.[138] Since the base began expenditures under REPI through 2012, the Army successfully protected 1,035 acres, at a total cost of $16,515,905.[139] Its efforts seem to paying off, as the USFWS found listing the butterfly under the ESA was unnecessary, noting the "high level of protection" the military provides to the butterfly.[140]

A similar situation happened at Camp Pendleton for the fairy shrimp.[141] USFWS noted that the base's INRMP under the Sikes Act and the base's acquisition of buffer lands provided enough protection for now.[142] Since REPI's inception through 2012, Camp Pendleton successfully protected 1,681 acres under REPI, with a total cost for the program at $6,081,466.[143] The USFWS noted that the INRMP and the buffer lands demonstrated "the base's commitment to benefiting the

[133] Partners include: The Nature Conservancy, North Carolina Coastal Land Trust, State of North Carolina, North Carolina Clean Water Management Trust Fund, North Carolina Natural Heritage Trust Fund, North Carolina Division of Parks and Recreation. *See MCB Camp Lejeune, NC*, Readiness and Environmental Protection Integration, http://perma.cc/2LVD-PLJ3 (last visited Dec. 19, 2013).

[134] REPI 2013 Report, *supra* note 118, at 4.

[135] Parent, *supra* note 123, at 8.

[136] *MCB Camp Lejeune*, *supra* note 133.

[137] Report to Congress on Sustainable Ranges, *supra* note 103, at 37-38; REPI 2013 Report, *supra* note 118, at 4.

[138] Report to Congress on Sustainable Ranges, *supra* note 103, at 37-38.

[139] REPI 2013 Report, *supra* note 118, at 4.

[140] *Id.* at 3; Report to Congress on Sustainable Ranges, *supra* note 103, at 37-38.

[141] Report to Congress on Sustainable Ranges, *supra* note 103, at 37-38.

[142] *Id*.

[143] REPI 2013 Report, *supra* note 118, at 4.

species," and ultimately decided not to designate the shrimp's habitat as critical under the ESA.[144] As seen in these examples, REPI seems to be an effective way to manage both endangered species, like the red-cockaded woodpecker, and to prevent other species, including the mardon skipper butterfly and the fairy shrimp, from being listed. As such, REPI is not only useful for protecting animals, but is also a proactive tool to identify and protect potential at-risk species.

e. Concerns about REPI

As discussed above, DoD employs various tactics for protecting listed and non-listed species. Internal conservation efforts benefit endangered and potentially endangered species on-base. With encroachment driving development closer and closer to military bases and sending animals scurrying to the relative safety of the open sprawl of military bases, however, DoD must continue partnering with local entities to protect natural habitat off-base through REPI. A 2006 report by the RAND Institute concluded that REPI is an effective tool after looking at the following factors: "promoting military readiness and other mission benefits; addressing sprawl and limiting other incompatible land use; preserving habitat and other environmental benefits; community relationship and partnership benefits; additional community benefits."[145] Even though REPI successfully promotes the military's goals while also protecting natural habitat, there are several areas of concern and areas where DoD may improve REPI.

i. Decreasing Budget

One of the biggest challenges DoD currently faces in protecting endangered and at-risk species is budgeting sufficient funds to fully utilize REPI. In a statement to a House of Representatives subcommittee on military appropriations, the acting deputy undersecretary of defense noted:

It would be an understatement to say these are challenging times for DoD budget. The impact of sequestration on our installations budgets in FY 2013, combined with the uncertain budget context it poses for the next decade, requires us to change the way we think about our installations and the funds we will allocate to maintain them.[146]

---

[144] *Id.* at 3; Report to Congress on Sustainable Ranges, *supra* note 103, at 37-38.

[145] Lachman et al., *supra* note 120, at 40.

[146] *FY 14 Budget Request Installations, Environment, Energy and BRAC: Hearing Before the H. Appropriations Subcomm. on Military Construction, Veterans Affairs and Related Agencies*, 113th Cong. 1 (2013) (statement of John Conger, Under Deputy Under Secretary of Defense Installations and Environment), *available at* http://perma.cc/G6GU-6NJE.

REPI is not immune from budgetary constraints. In April 2013, DoD requested $50.6 million from Congress for the REPI budget for 2014, a drop from 2013's budget of $54.5 million.[147] Unfortunately, the REPI budget for 2014 is now set at $34 million, and will remain close to that level through 2017.[148] This drastic decrease in the REPI budget is a red flag for future conservation efforts, especially considering that the RAND report concluded in 2006 that REPI is underfunded, and should receive $150 million.[149]

Arguably the most important step DoD and Congress need to take is to increase the REPI budget. REPI's budget reduction beginning FY 2014 will affect future projects and threaten the long-term future of endangered species. As such, DoD should attempt to persuade Congress to increase the budget. Even though the RAND Institute recommended a budget of $150 million a year, this figure may be out of date since that report was released in 2006. Accordingly, DoD should yet again determine an ideal amount to invest in REPI, and strive to reach that figure. Any increase in the budget, however, will help conservation efforts.

ii. Urgency

Another potential problem with REPI is the need for urgency to buffer lands around military bases. The 2013 DoD Sustainable Ranges report notes that "As U.S. Forces drawdown from Afghanistan and home station training increases, the competition for ranges, airspace, and maneuver training land is expected to increase. This competition within the live training domain will be exacerbated by existing shortfalls and growing encroachment challenges."[150] As such, training at domestic military bases is expected to increase in the next few years as the United States brings troops home from abroad. With domestic training increasing, it may become even more important to secure off-base habitats for animals to mitigate any future harm from this increase in training.

Even back in 2006, RAND also argued that buffering requires urgent attention.[151] The report noted that DoD has a limited timeframe to establish buffer zones due to possible increasing land prices.[152] Further, current landowners of farms and ranches are selling parts of their

[147] *Id.*; Report to Congress on Sustainable Ranges, *supra* note 103, at 35.

[148] Report to Congress on Sustainable Ranges, *supra* note 103, at 35. The exact numbers are $34 million for FY 2014; $34.1 million for FY 2015; $34.2 million for FY 2016; and $34.4 million for FY 2017.

[149] Lachman et al., *supra* note 120, at xviii-xix.

[150] Report to Congress on Sustainable Ranges, *supra* note 103, at 42.

[151] Lachman et al., *supra* note 120, at xviii.

[152] *Id*.

property to various developers.[153] Once this happens, DoD will need to deal with multiple developers instead of one farmer to obtain buffer lands, which will make negotiations lengthy and more expensive.[154] As such, buffering now and increasing the budget sooner rather than later may save DoD money in the future.[155]

iii. Other Concerns in the RAND Report

Other issues include understaffing and a lack of uniform strategizing for the future of REPI.[156] For instance, even bases that are not experiencing encroachment from urban sprawl today should plan for the future by buffering land now since urban sprawl is a national trend.[157] RAND notes that it is foreseeable that bases not currently close to urban areas will still be affected by urban sprawl at some point in the future. Buffering land through REPI now may be easier and cheaper than waiting to buffer until encroachment becomes a problem.[158]

To address these issues, the RAND Institute suggests investing more resources; providing new, consistent guidelines for the military branches; streamlining the buffering process; increasing community involvement; and ensuring every base has at least one person whose full time job is related to REPI.[159] If implemented, these recommendations, in addition to increasing the REPI budget, should help DoD to better utilize REPI to not only protect its own interests, but also to protect endangered and at-risk species.

iv. Inconsistencies Among Military Branches

Additionally, the RAND report notes that the military branches need more policy guidance from DoD, and in particular, the Office of the Secretary of Defense ("OSD"), in implementing REPI.[160] It notes that lack of uniform guidelines for the military branches has led to unnecessary inconsistencies and inefficiencies.[161] The report, however, does not give any particular guidance to DoD for establishing uniform guidelines for REPI.

---

[153] *Id*.
[154] *Id*.
[155] *Id.* at xix.
[156] *Id.* at xx.
[157] *Id*. at xxi.
[158] *Id.*
[159] *Id.* at xxii-xxiii.
[160] *Id.* at xxi.
[161] *Id*.

Perhaps one way to improve upon the effectiveness of REPI while addressing policy-related inconsistencies among the military branches is to consolidate oversight for the program within the OSD The OSD created REPI and currently administers congressional funding for projects.[162] The OSD is not responsible for implementing REPI, however; each military branch is responsible for strategizing, partnering with local entities, and implementing transactions.[163] Each military branch has its own methods and procedures for carrying out REPI projects. The Army, for instance, created the Army Compatible Use Buffer Program (ACUB) to implement REPI authority.[164] Under this program, the Army forms partnerships with local entities, which then obtain a land interest in buffer areas.[165] The Army retains rights to monitor the land or transfer the partner's interest if the partner violates the partnership agreement.[166] In contrast, the Navy and the Marine Corps created the Encroachment Management Program to implement REPI.[167] The Navy and Marine Corps, unlike the Army, consistently obtain a property interest from the local partners typically in the form of easements.[168] Lastly, the Air Force does not currently have a program through which to implement REPI, but instead, individual military bases identify potential REPI projects then submit them to Air Force headquarters, which then may choose to nominate the project for REPI funding from the OSD.[169]

While REPI seems to be effective at this point, one way to increase productivity and the overall effectiveness of the program may be to centralize authority within OSD instead of splitting authority between the OSD and each military branch. As RAND generally pointed out and the REPI website demonstrates, military branches have various implementation protocols to implement REPI. If REPI authority is consolidated within the OSD, military bases may propose projects directly to the OSD who then may prioritize projects regardless of branches on a national level. The OSD will then be able to implement REPI projects uniformly across the branches.

---

[162] *What is REPI?,* Subsection in *About REPI*, Readiness and Environmental Protection Integration, http://perma.cc/9YNU-PPKE (last visited Dec. 18, 2013).

[163] *Service Programs*, Subsection in *Buffer Projects*, Readiness and Environmental Protection Integration, http://perma.cc/BEC7-5NZ4 (last visited Dec. 18, 2013).

[164] *Id.*

[165] *Id.*

[166] *Id.*

[167] *Id.*

[168] *Id.*

[169] *Id.*

VI. Conclusion

DoD's efforts to protect species on-base and securing important habitat off-base through REPI are effective tools at securing the future of endangered species and other animal species. As cities continue to grow, further reducing available habitat for animals, military bases may become even more important de facto refuges for animals. Because the presence of these animals impacts DoD training and land use, it is essential that DoD continues to use REPI to secure off-base land animals may use as habitat. Despite budget concerns, investing more money in REPI now will likely save money long-term by preventing future conflicts between endangered species and military training and operations. Consolidating REPI oversight and implementation within the Office of the Secretary of Defense, instead of dispersing this authority among the branches, may help DoD to better prioritize REPI projects on a national level. With better funding and consolidated authority for implementation, DoD will be better able to fulfill its mission of defending the country and its animals.

Transgressing Trainers and Enhanced Equines: Drug Use in Racehorses, Difficulty Assigning Responsibility and the Need for a National Racing Commission

Kjirsten Lee *

I. Introduction

From Saratoga Race Track in New York State to Santa Anita Park in California, and from Canterbury Downs in Minnesota to Gulfstream Park in Florida, horse racing spans the United States and has always been a part of American culture.[1] It is known as "the sport of kings,"[2] and millions of dollars change hands every year chasing "1,200-pound investment vehicles running on legs more slender than the average human's."[3] Tragically, the sport has been tainted by the use of steroids and painkilling drugs, the administration of which masks injury and creates an unfair advantage by allowing horses to race that are not physically up to the challenge.[4] Genetically built for speed, over time the Thoroughbred horse has been bred to be faster, with little concern for what might be sacrificed in return. Recently, the American general public has become more aware of the sacrifices breeders make as horses in prestigious races break down on the track.[5]

* Kjirsten Lee is a member of the Tennessee Bar Association. She graduated from Michigan State University College of Law. Kjirsten would like to thank Professor David Favre for his guidance in the creation of this article. She also thanks Professor Bradley Deacon for his support during her time with the Michigan Department of Agriculture and Rural Development, where she developed an interest in the administrative side of Thorougbred racing.

[1] *See, e.g.*, *Horse racing*, Wikipedia http://perma.cc/5F7H-LL9M, stating that the oldest Thoroughbred track in the United States dates back to 1665 on Long Island.

[2] Marino Specogna, Become a Winner Claiming Thoroughbred Racehorses 1 (2005).

[3] John Worden, *They Sue Horses, Don't they?: Understanding Equine Law*, 26 San Francisco Att'y 22, 22 (2000). Warden also notes that both owners and bettors invest significant amounts of money in horse racing.

[4] Anthony Russolello, "*Avoiding a Triple Frown: The Need for a National Horse Racing Commission*, Animal Legal & Historical Center (2009), http://perma.cc/V94J-JKZ8.

[5] Walt Bogdanich, Joe Drape, Dara L. Miles, Griffin Palmer, *Mangled Horses, Maimed Jockeys*, N.Y. Times (Mar. 24, 2012), *available at* http://perma.cc/EHM9-LGND.

In 2006, Americans' hearts stopped in their chests when Barbaro shattered his leg in the Preakness Stakes, the second jewel of racing's illustrious Triple Crown. He was euthanized in January of 2007 when veterinarians were unable to repair his leg following multiple surgeries.[6] The next year was particularly dark for racing: after watching the remarkable filly Eight Belles collapse after finishing second to Big Brown in the Kentucky Derby,[7] racing fans hoped Big Brown, after winning the Kentucky Derby and the Preakness Stakes, might be the first Triple Crown champion since Affirmed in 1978.[8] But hopes were dashed when the Derby and Preakness winner was pulled up around the final turn and trotted across the finish line in last place.[9]

This article critiques the current lack of standardized regulations in Thoroughbred horse racing[10] across the country. Parts I and II discuss the history of horse racing in America and the sport's lack of a uniform set of regulations, attributing said lack to the absence of a national organization overseeing the industry. Part II additionally explores the Thoroughbred horse as a breed, including brief looks at instances of infamous horse breakdowns. Part III examines the trade-off of soundness for speed, including a discussion of the use of steroids and breeding shortfalls. Part IV proposes a solution to the problem of steroids and painkillers in racehorses, premised in large part on the creation of a national governing body. The proposed solution is further developed in the section following Part IV.

II. Background

a. Introduction to "The Sport of Kings"

Horse racing has enjoyed a long and storied history, dating back to the late 1100s.[11] These contests of speed are among the oldest amusements for humankind, and it is no surprise the sport that enjoyed such popularity would find its way from Europe to America.

---

[6] Associated Press, *Barbaro Euthanized After Lengthy Battle* (Jan. 30, 2007), *available at* http://perma.cc/M5R4-Y38K.

[7] Associated Press, *Runner-up Eight Belles breaks front ankles, euthanized on track*, ESPN (May 3, 2008), *available at* http://perma.cc/UA84-88PN.

[8] Associated Press, *Big Brown waits patiently, then charges off with Preakness win*, ESPN (May 19, 2008), *available at* http://perma.cc/PQS6-6E2T.

[9] Jay Hovdey, *Triple Crown near-misses: Big Brown, 2008*, Daily Racing Forum (May 31, 2012), *available at* http://perma.cc/SP24-RWDE.

[10] This paper focuses exclusively on Thoroughbred racing, referred to hereafter as "racing" or "horseracing." The paper does not intend to discuss issues associated with Quarter Horse racing, Standardbred harness racing, racing at county fairs, and so on, although each of these areas of racing undoubtedly face the same concerns regarding drug use.

[11] Russolello, *supra* note 4.

b. History of Racing in America

Horse racing came to the United States with the colonists, and American horse breeders and racers established the American Jockey Club in 1750.[12] On May 27, 1823, two Thoroughbreds met for a North versus South match-up race, beginning a North-South horse racing rivalry that continued up until the Civil War.[13] When settlers and prospectors moved west in the mid-1800s they took horse racing with them, establishing the sport in Illinois, Missouri, Texas, Louisiana, and California.[14] Both the sport and the Thoroughbred breed suffered during the Civil War, when breeding centers were destroyed and the horses entered military service.[15] Following the Civil War, the first Belmont Stakes, Preakness Stakes and Kentucky Derby were run individually. The three races together were dubbed the "Triple Crown" in 1930.[16] Betting on racing was allowed at over 300 racetracks across the country in 1900, but gambling corruption led to the practice being banned, first in California in 1909 and shortly thereafter in New York.[17]

Horse racing took off after World War I, when the racetracks were freed from wartime rationing and limited transportation.[18] With the increased use of the pari-mutuel system,[19] betting on horses was slowly becoming legal again, and it was legalized in California in 1933.[20] Between 1933 and 1939, betting was legalized in 21 states because it was seen as a source of revenue by the Depression-era government.[21] Surprisingly, the Depression years from 1936 to 1940 exemplify racing's newfound popularity. Americans packed the racetracks and train stations to see the undersized, crooked-legged racehorse, Seabiscuit—the "equine Cinderella." Seabiscuit became more than a racehorse to the American people; as the quintessential underdog, he was a symbol

[12] *American Experience: Timeline: Horseracing in the U.S.*, PBS, http://perma.cc/828Z-SU6M [hereinafter *Timeline: Horseracing*].

[13] *Id*.

[14] *Id*.

[15] *Id*.

[16] *Id*.

[17] *Id*.

[18] *Id*.

[19] Pari-mutuel is a gambling system where bettors wager against each other rather than against the track. *Pari-mutuel Horse Betting Explained*, The Sports Geek, https://perma.cc/2DAU-4HXB?type=source, For a discussion of the legality of pari-mutuel wagering, *see* M. Shannon Bishop, *And They're Off: The Legality of Interstate Pari-mutuel Wagering and Its Impact on the Thoroughbred Horse Industry*, 89 Ky. L.J. 711 (2000–2001).

[20] *Timeline: Horseracing, supra* note 12.

[21] *Id.*

to which people in the Great Depression could relate.[22] After World War II, the sport began to again lose popularity. Racing has slowly been regaining popularity, helped by horses winning the Triple Crown and increased media coverage.[23]

c. American Racing Jurisdictions

American racing is divided into 38 jurisdictions,[24] and each state has an agency designed and authorized by the legislature to regulate horseracing in that jurisdiction.[25] The agencies, generally known as racing commissions or racing boards, have the discretion to license trainers and owners, the authority to create new rules, and the ability to resolve disputes.[26] Because there are multiple racing jurisdictions, each run by people with different ideas and goals, there is a concerning lack of uniformity among regulations. For example, the language contained in Pennsylvania's horseracing statute essentially creates a ban on using drugs in racehorses, stating that any person who administers a drug, administration of which results in a positive test, is in violation of that state's regulations.[27] In contrast, New York continues to allow administration of several drugs and it was only recently that the state significantly restricted the list of drugs that could be used on racehorses, particularly on race day.[28] Kentucky is known to be the most lenient state when it comes to permissible substances.[29] Florida similarly lags behind states such as New York and Pennsylvania in racehorse drug regulations, with "antiquated state laws, lenient penalties[,] and a system that tolerates repeat offenders and sometimes leaves violators unpunished for years."[30] Bringing all these jurisdictions closer together on their drug regulations is the first step to having healthier horses and a respectable racing industry.

---

[22] Stefan Lovgren, *From Nag to Riches: The Story of Seabiscuit*, National Geographic News (July 28, 2003), *available at* http://perma.cc/Z7FJ-YZ7G.

[23] *See, Horse racing*, *supra* note 1.

[24] *Reformed Racing Medication Rules*, The Jockey Club (Aug. 12, 2012), *available at* https://perma.cc/8G3X-RRPQ?type=pdf.

[25] Kimberli Gasparon, *Comment: The Dark Horse of Drug Abuse: Legal Issues of Administering Performance-Enhancing Drugs to Racehorses*, 16 Vill. Sports & Ent. L.J. 199, 202 (2009).

[26] *Id*. at 203.

[27] Reichard v. Commonwealth, 499 A.2d 727, 729 (Pa. Commw. Ct. 1985).

[28] Joe Drape, *New York State Tightens Drug Rules for Racehorses*, N.Y. Times, Oct. 11, 2012, http://perma.cc/QG93-UJ55.

[29] *Horse Racing Fact Sheet*, International Fund for Horses, http://perma.cc/FL4L-YD2R; *see also* 810 Ky. Admin. Regs. 1:018 (2012).

[30] Amy Shipley, *Florida lags in racehorse doping regulations*, The Sun Sentinel, Dec. 1, 2012, *available at* http://perma.cc/DR56-XBAF.

Because of differing regulations among racing jurisdictions, horses sometimes run on a steroid, or combination of steroids, that is legal in one jurisdiction but illegal in others.[31] The variance among regulations means that even if a horse tests positive for a banned substance, the trainer need only find another jurisdiction where the substance is legal. Since horses regularly travel between jurisdictions for races, moving to a different jurisdiction may be little more than a mild inconvenience for the trainer. Additionally, the trainer likely received little more than a small fine, equivalent to a slap on the wrist, for being caught running horses on drugs. The practice of banning drugs loses its potency when trainers can simply move on to another jurisdiction where the drug is legal after paying a small fine. This problem has recently been addressed by eight Mid-Atlantic states:—New York, Pennsylvania, Maryland, New Jersey, Delaware, Virginia, West Virginia, and Massachusetts,—that agreed on March 12, 2013, to "operate their racetracks under one set of rules that will severely restrict the administration of medication."[32] Essentially, trainers on the Atlantic seaboard will no longer be able to travel down the coast to a more lenient jurisdiction if they are caught administering drugs. Duncan Patterson, chairman of the Association of Racing Commissioners, heralds the agreement as a "historic moment for racing and long overdue."[33] With regulators in these eight Mid-Atlantic states agreeing to adopt uniform regulations,[34] there is hope that other jurisdictions—ideally *every* jurisdiction throughout the country—will soon follow suit.

Responsibility for administering illegal substances can fall on the horse's owner, trainer, or veterinarian. Generally, trainers are considered responsible for the care of their horses and therefore responsible for what is administered to the horses.[35] Most jurisdictions employ one of two rules to determine who is responsible for the presence of an illegal drug in a racehorse's system. The first is called the "absolute insurer rule,"[36] which "creates an irrebuttable presumption that a trainer is responsible for any drug positives."[37] The second is known as the "rebuttable presumption rule,"[38] where "there is a presumption that the

---

[31] *Reformed Racing Medication Rules*, *supra* note 24 (An example is the drug Winstrol.).

[32] Joe Drape, *Eight States Approve Medication Standard*, N.Y. Times, March 12, 2013, http://perma.cc/79KM-JP7C?type=live.

[33] *Id.*

[34] *Id.*

[35] Bennett Liebman, *The Trainer Responsibility Rule in Horse Racing*, 7 Va. Sports & Ent. L.J. 1 2007–2008.

[36] *Id.*

[37] *Id.*

[38] *Id.*

trainer is responsible for the drug positive, but the presumption may be overcome by evidence demonstrating the lack of responsibility of the trainer."[39]

Under the absolute insurer rule, the trainer is strictly liable for any drug positives in any of his horses.[40] The absolute insurer rule applies not only to passive conduct of the trainer, but also to "actions by third parties who are not employees or hired help of the trainer, whether intentional or not."[41] In contrast, the rebuttable presumption rule provides results similar to the absolute insurer rule, but is able to "'strike a fair balance between onerous absolute liability and the requirement that trainer culpability be proven,'"[42] because it "makes allowances for the instances where a trainer can establish his or her lack of fault."[43] Both of these rules for determining trainer responsibility have withstood constitutional challenges, and are discussed below under the category of owner, trainer, and veterinarian responsibility.[44]

While regulations regarding what substances are legal and who is responsible for administering illegal drugs differ among jurisdictions, most have placed the authority to regulate racing in an administrative agency concerned with gaming and wagering. The administrative body then has the statutory authority to create a racing board or commission to promulgate and enforce racing regulations.[45]

d. Infamous Horse Breakdowns and Public Awareness of Industry Issues

In the past five years, the public's view of horse racing has shifted from wonder at the animals' power and athleticism to horror

[39] *Id.*

[40] *Id.* at 2.

[41] *Id.* at 33.

[42] Liebman, *supra* note 35, at 34, quoting Luke P. Iovine & John E Keefe, *Horse Drugging—The New Jersey Trainer Absolute Insurer Rule: Burning Down the House to Roast the Pig*, 1 Seton Hall J. Sports L. 61, 86 (1991).

[43] Liebman, *supra* note 35, at 34.

[44] *See infra* text accompanying notes 47-84 for a discussion of owner, trainer, and veterinarian responsibility for racehorse breakdowns.

[45] *See, e.g.,* Mich. Comp. Laws § 431.303 (2012), creating the office of racing commissioner; Fla. Stat. Ann. § 550.0251 (West 2012), charging the Division of Pari-mutuel Wagering with adopting rules for control, supervision, and direction of licensees and holding, conducting, and operating of racetracks, race meets, and races; 4 Pa. Cons. Stat. Ann. § 325.201 (West 2013), establishing the state horse racing commission; N.Y. Racing, Pari-Mutuel Wagering and Breeding Law § 102 (McKinney 2013), establishing the state gaming commission to oversee horse racing along with gaming and lottery.

at the number of racehorse injuries and fatalities.[46] Breakdowns of nationally known horses like Barbaro and Eight Belles have led to escalated claims of cruelty in the sport.[47] With notable racehorses dying on the track following major races, people begin to wonder who is ultimately responsible for these catastrophic injuries.[48] According to some scholars, the trainer bears that responsibility.[49] Growing public awareness of soundness issues has led the industry itself to recognize the desperate need for national racehorse drug reform,[50] which may be achieved through the establishment of a national authoritative body.

III. Analysis

a. More Speed, Less Soundness

Racehorses have been bred to be bigger, but this does not necessarily mean they are also stronger.[51] This section looks at three reasons for the tradeoff of speed for soundness:

- First, the influence of people responsible for making decisions about racing horses: the owners, trainers, and veterinarians, who do not always put the horse's welfare first.
- Second, the fact that use of steroids not only masks any pain a racehorse is experiencing, but may also inhibit the horse's growth and make the horse more susceptible to break downs.[52]
- Third, genetics play a role in making horses bigger and faster, but also weaker.[53]

[46] Cynthia A. Hodges, *That's the Breaks: Trainer Responsibility for Horse Breakdowns in New York*, Animal Legal and Historical Center (2008) https://perma.cc/BW5C-NP8A.

[47] *Id.*

[48] *Id.*

[49] *See id.*; Reichard v. Commonwealth, 499 A.2d 727 (Pa. Commw. Ct. 1985); Liebman, *supra* note 35.

[50] Tom LaMarra, *Industry Stakeholders Discuss Racehorse Drug Reform*, The Horse (Feb. 7, 2013).

[51] *See, infra,* text accompanying notes 127-33 for a discussion of how racehorses, in being bred to be bigger, have actually lost strength in their bones and joints.

[52] *See, infra,* text accompanying notes 85-122 for a discussion of how the use of steroids specifically affects a racehorse's soundness.

[53] *See, infra,* notes 127-33.

b. The Key Players: Owners, Trainers, and Veterinarians

Assigning responsibility for bad acts, and even freak accidents in horse racing, can be challenging. Many racehorses have multiple owners,[54] making it difficult to point to one owner as being responsible for making decisions. In addition to multiple owners, most barns employ a head trainer and assistant trainers, meaning that each horse may have multiple people making decisions about its care and training.[55] One challenge rulemaking agencies face is deciding who should be responsible when illegal drugs or other foreign substances are found in a racehorse's system.

i. Owners

Industry outsiders may be surprised to learn that in horseracing, the owner is not necessarily the person ultimately held responsible for the horse's care, even when illegal drugs are found in the horse's system. This is because owners are frequently absent, ignorant, or in some cases, both.[56] Generally speaking, trainers, not owners, are responsible for the care of a racehorse, including medical treatment.[57] However, in *Reichard*, the court found that the owner was not relieved of responsibility for administering medication to the horse because the Pennsylvania regulations provide that "*any* person who administers a drug which results in a positive test shall be considered in violation," and further, "an owner's license may be suspended, revoked or a money fine may be imposed for violation of any Rule of the Commission."[58] In *Reichard*, the Commission fined the racehorse owner $250.00 for administering Procaine, a banned substance, to the horse, Annihilate.[59] The Pennsylvania Commonwealth Court found that the fine was appropriate because Reichard was the undisputed, licensed owner of the horse, and therefore responsible for the positive post-race test results.[60]

Owners can have some influence over care of their horse, however, and increasing owner awareness and involvement could be key to reducing the number of injuries seen on racetracks. For instance,

[54] *Thoroughbred Ownership*, Thoroughbred Owners and Breeders Association, http://perma.cc/BQ29-9VNK.

[55] *See generally*, Henry v. Zurich Am. Ins. Co., 2012-888 (La. App. 3 Cir. 2/6/13), 107 So. 3d 874, for the concept of multiple people being involved in decisions made regarding horse care.

[56] *See, e.g., id*.

[57] *Id.*

[58] Reichard v. Commonwealth, 499 A.2d 727, 729 (Pa. Commw. Ct. 1985).

[59] *Id.*

[60] *Id.*

Allie Conrad is the Executive Director for CANTER Mid-Atlantic.[61] In front of a congressional hearing, Conrad testified that "[t]he only thing that protects a racehorse from a horrific death is having the good fortune of being owned and trained by caring, honest people."[62] Conrad would like to see owners take more responsibility for injuries sustained during racing.[63] As it stands, owners appear to look at caring for the animals as an afterthought, when it should be the first thought.[64]

ii. Trainers

In most jurisdictions, trainers are ultimately responsible for the care of the racehorse and for ensuring that everything about the horse's training and racing complies with all applicable regulations.[65] Professor Bennett Liebman[66] calls this concept the "doctrine of trainer responsibility."[67] Based on the doctrine of trainer responsibility, horse trainers are understood to be responsible for the physical condition of the horse, which leads to a per se rule that "when a horse tests positive for a prohibited medication, the trainer bears the responsibility for the drug test."[68] Under Pennsylvania law, for example, trainers are required to "guard horses within [their] care to prevent administering of any medications."[69] Because trainers are responsible for the physical

[61] CANTER is a 501(c)(3) nonprofit that provides retiring thoroughbred racehorses with opportunities for new careers. *CANTER: Giving Thoroughbreds New Chances!* The Communication Alliance to Network Thoroughbred Ex-Racehorses, http://perma.cc/G98E-JYDG. Allie Conrad began CANTER Mid-Atlantic in 1999 and testified in front of a congressional hearing in 2008 to tell the stories of racehorses (*see infra* note 55).

[62] *Breeding, Drugs, and Breakdowns: The State of Thoroughbred Horseracing and the Welfare of the Thoroughbred Racehorse*, *Hearing before the Subcommittee on Commerce, Trade, and Consumer Protection*, 110th Cong. 125 (2008) [hereinafter, *Hearing Transcript*] (statement of Allie Conrad, Executive Director, CANTER Mid-Atlantic).

[63] *Id.*

[64] *Id.*

[65] Reichard v. Commonwealth, 499 A.2d 727, 729 (Pa. Commw. Ct. 1985); Equine Practitioner's Ass'n v. New York State Racing & Wagering Bd., 488 N.E.2d 831 (Ct. App. N.Y. 1985); Hodges, *supra* note 46; Liebman, *supra* note 35; *cf* Gasparon, *supra* note 25, at 213 for the position that "a trainer's absolute liability under state statutes is relatively harsh."

[66] Bennett Liebman served as the Acting Director of the Government Law Center at Albany Law School in 2007 and served as the coordinator of the Government Law Center's Program on Racing and Gaming since 2002. He was appointed by New York Governor Andrew M. Cuomo to serve as the Deputy Secretary for Gaming and Racing in 2011.

[67] Liebman, *supra* note 35, at 2.

[68] *Id.*

[69] Reichard v. Commonwealth, 499 A.2d 727, 729 (Pa. Commw. Ct. 1985) (citing 58 Pa. Code § 183.357).

condition of their horses, they should therefore be held accountable and charged with animal cruelty in states with laws allowing such a charge, such as racing unfit horses when the horse breaks down.[70]

The Illinois Administrative Code states that the rules therein govern all the relationships on a horse track, "including that between the owner and trainer."[71] Under the Pennsylvania Code, "[a] trainer has 'the complete care and financial responsibility for that horse.'"[72] In New York, the trainer is responsible for deciding the horse's training regimen and for any drugs found in a horse's system.[73] Idaho has gone so far as to state that "[t]he trainer is the absolute insurer of, and responsible for, the condition of the horses entered in a race regardless of the acts of third parties."[74] As stated in the Background section under American racing jurisdictions, above, most jurisdictions use one of two rules to determine the extent of trainer responsibility: the absolute insurer rule and the rebuttable presumption rule. [75]

Texas applies the absolute insurer rule, which means that the trainer is absolutely responsible for drug positives, regardless of whether the trainer can show that they were not at fault.[76] The applicable section of the Texas regulation states that "[a] trainer shall ensure that a horse or greyhound that runs a race while in the care and custody of the trainer or kennel owner is free from all prohibited drugs, chemicals, or other substances."[77] In *Hudson* this rule was tested and upheld by the Fifth Circuit.[78] Hudson claimed that the rule violated his due process rights by making him guilty of a violation absent any showing that he had in fact committed an actual wrongdoing.[79] The Fifth Circuit disagreed with Hudson's contention that the rule created an irrebutable presumption of fault, and held that "[t]he absolute insurer rule does not assign fault, but instead, requires the trainer to bear the responsibility of the horse's condition, as a contingency to being licensed as a trainer by the state."[80] The Fifth Circuit in *Hudson* appears to uphold the absolute insurer rule for the purpose of being able to assign responsibility for the horse to someone, and extending that responsibility to include a duty to ensure

[70] *See* Hodges, *supra* note 47 for an argument that trainers could be criminally liable under New York cruelty law for working an unfit horse.

[71] Hinken v. Laurato, 2012 Ill. App. Unpub. LEXIS 1199, (Ill. Ct. App. 2012).

[72] *Id.*

[73] Hodges, *supra* note 46, citing Liebman.

[74] Idaho Admin. Code R. 11.04.14.100 (2013).

[75] *See infra* text accompanying notes 31-34 giving a brief overview of the two rules used by most jurisdictions to determine trainer responsibility.

[76] Liebman, *supra* note 35, at 3.

[77] 16 Tex. Admin. Code § 311.104(b)(2) (West 2007).

[78] Hudson v. Texas Racing, Comm'n, 455 F.3d 597, 601 (5th Cir. 2006).

[79] *Id.* at 599.

[80] *Id.* at 600.

that the horse does not have any illegal drugs in its system when it races.[81]

New York, in contrast to Texas, uses the rebuttable presumption rule. The New York regulation states that "[t]he trainer shall be held responsible for any positive test unless he can show by substantial evidence that neither he nor any employee nor agent was responsible for the administration of the drug or other restricted substance."[82] While the rebuttable presumption rule has also been challenged on constitutional grounds, "[t]he courts have had little difficulty in finding the rebuttable presumption of trainer responsibility constitutional."[83] The test for what constitutes a rebuttable presumption came in *Casse*[84] where the New York Court of Appeals asked "whether there was a logical and rational connection between the facts proven (the positive drug test of a horse for which the trainer was responsible) and the fact presumed (that the trainer was responsible for the positive drug test)."[85] The court in *Casse* went on to find that the rebuttable presumption rule "is a practical and effective means of promoting these State interests-both in deterring violations and in enforcing sanctions…the rebuttable presumption of responsibility facilitates the very difficult enforcement of the restrictions on the use of drugs and other substances in horse racing."[86]

Liebman finds the rebuttable presumption rule preferable over the absolute insurer rule, because while "the trainer is the most logical person on whom to place the burden, [he or she] is not always able to prevent drugging."[87] The rebuttable presumption rule is effective in making sure that the penalty fits the crime in terms of who is punished, which is not always the case with the absolute insurer rule.[88] Under the rebuttable presumption rule, it is more likely that the right person would be held responsible for violating regulations, rather than allowing a trainer to take the fall for an owner. Holding the right person responsible would have a more effective deterrence effect because that person would be unable to shift the blame onto someone else and keep administering illegal drugs to their horses, at the expense of both horse and trainer.

---

[81] *See generally, id.*

[82] N.Y. Comp. Codes R. & Regs. Tit. 9 § 4043.4 (2013). "Positive test" is defined as a finding by the laboratory that a drug or other substance whose use is restricted was present in the sample (for a "post-race positive test" or could be present in the sample (for a "pre-race positive test". 9 NYCRR § 4043.1 (2013).

[83] Liebman, *supra* note 35, at 21.

[84] Casse v. New York State Racing and Wagering Board, 517 N.E.2d 1309, 1309 (N.Y. 1987)

[85] Liebman, *supra* note 35, at 22.

[86] 517 N.E.2d 1309 at 596.

[87] Liebman, *supra* note 35, at 34.

[88] *Id.* at 37.

iii. Veterinarians

The third part of the equation is the veterinarian who administers or supplies the drugs. Racing regulation enforcement agencies employ a regulatory veterinarian at the racetrack who "is charged with preventing injury; mitigating injury should it occur; and affording prompt humane euthanasia when an injury cannot be mitigated."[89] The regulatory veterinarian is not the same person as the trainer's personal veterinarian, who prescribes and may administer the drugs.[90]

In Pennsylvania a veterinarian is "required to prevent a horse from racing if the vet knows or by exercise of reasonable care should have known that the horse has received a drug that could result in a positive test."[91] Under this statute, the veterinarian may be liable for a horse racing on illegal drugs, regardless of whether the veterinarian personally administered the drugs. The Pennsylvania statute does not distinguish between the regulatory veterinarian employed by the racetrack and the private veterinarian working for horse owners and trainers. The challenge is being able to show that the veterinarian knew or should have known that the horse had received the illegal drug, and would probably test positive.

Kentucky penalizes the prescribing veterinarian when a horse tests positive for a banned substance.[92] The applicable section reads: "A veterinarian who administers, or is a party to, or facilitates the administration of, or is found to be responsible for the administration of a Class A drug to a horse…shall be reported to the Kentucky Board of Veterinary Examiners and the state licensing Board of Veterinary Medicine by the stewards."[93]

c. Use of Steroids

The most concerning threat to racing is the "intentional use of drugs…where the trainer, or whoever is administering the drug, believes that the testing laboratory has no test for the drug."[94] In general, what is legal and what has been banned varies by jurisdiction.[95] Racing, like other equestrian sports, does not ban all drugs, partly because

[89] *Hearing transcript*, *supra* note 62, at 114 (statement of Mary C. Scollay, D.V.M., Equine Medical Director, Kentucky Horse Racing Authority).

[90] Some drugs are administered by the trainer or owner rather than by the prescribing veterinarian.

[91] Reichard v. Commonwealth, 499 A.2d 727, 729 (Pa. Commw. Ct. 1985) (citing 58 Pa. Code § 183.356).

[92] Gasparon, *supra* note 25, at 205.

[93] 810 Ky. Admin. Regs. 1:028(2)(11) (2013).

[94] Liebman, *supra* note 35, at 38.

[95] Gasparon, *supra* note 25, at 200; Hodges, *supra* note 46.

some drugs are considered to have therapeutic qualities that will not affect the performance of the horse.[96] For example, furosemide, better known as Lasix, is a drug that is both permissible and widely used.[97] Phenylbutazone, or "bute," a common equine painkiller, is a non-steroidal anti-inflammatory drug ("NSAID") that is also widely used in the horse industry and is permissible in racehorses, but only up to a certain amount.[98] Other NSAIDs that are legal in Kentucky at even smaller levels are Flunixin (commonly known as "banamine") and Ketoprofen (commonly known as "Ketofen").[99] These three NSAIDs—bute, banamine, and Ketofen—may not be administered within 24 hours of post time for the race in which the horse is entered, there cannot be more than one NSAID administered, and the NSAID may only be used by a single intravenous injection.[100]

There are different categories or classes of drugs, each carrying different penalties.[101] The Association of Racing Commissioners International, Inc. ("ARCI") classifies drugs using pharmacology, drug use patterns, and appropriateness of drug use.[102] Lower classes of drugs include those that are clearly intended for therapeutic use as well as those that have or would be expected to have "little effect on the outcome of a race."[103] The ARCI lists most drugs that have been detected by Association of Official Racing Chemists ("AORC") laboratories, but ARCI does not include in its list drugs "which would seem to have no effect on the performance of the horse."[104]

While the person held responsible for illegal drugs found in a racehorse's system is penalized, the use of such drugs more importantly

---

[96] Gasparon, *supra* note 25, at 206; *see also United States Equestrian Federation Drugs and Medications Guidelines 2013*, United States Equestrian Federation, https://perma.cc/T9MK-YTY7?type=pdf.

[97] Gasparon, *supra* note 25, at 206. Lasix is permitted because it is believed not to affect the horse's performance, and it diminishes the risk of bleeding in the lungs, which is disturbingly common in racehorses. *Id. See also,* 810 Ky. Admin. Regs 1:018(6) for specific directions regarding administration of furosemide on race day.

[98] 810 Ky. Admin. Regs 1:018(8)(a).

[99] 810 Ky. Admin. Regs 1:018(8)(b).

[100] 810 Ky. Admin. Regs 1:018(8).

[101] *See generally Kentucky Horse Racing Authority Uniform Drug and Medication Classification Schedule*, available at https://perma.cc/56VA-QQU9?type=pdf (listing classifications of hundreds of drugs).

[102] *See generally Uniform Classification Guidelines for Foreign Substances and Recommended Penalties and Model Rule*, Ass'n of Racing Commissioners Int'l (Dec. 2012), https://perma.cc/WJ9T-X6HS?type=pdf (specifying classification criteria, listing hundreds of drugs, and providing recommended penalties and model rule).

[103] *Id.*

[104] *Id.*

can result in serious physical consequences for the horse.[105] Serious physical consequences can also come from people administering legal substances to horses in greater amounts than prescribed by regulation based on a determination of what is safe. When given in quantities greater than allowed by regulation, pain medications such as bute mask the pain of an injury but do not address the underlying injury.[106] Giving a horse bute takes away inflammation and reduces pain so that the horse cannot feel the pain of an injury and the trainer does not notice if a horse is injured.[107] Using painkilling drugs also can hinder healing because the horse will not unload an injured limb while cells repair themselves if the horse does not realize, through pain, that it is injured. The drugs themselves can hinder the healing process when they reduce inflammation because inflammation is part of the healing process.[108] Furthermore, "a 2002 Ohio State University study reported that bute suppressed healing and bone formation."[109] Painkillers are not the only culprits—corticosteroids have also been found to "seriously weaken the soft tissue in the racehorse's joints" and to be associated with the development of laminitis.[110]

Beyond affecting healing, administration of steroids can affect a young horse's overall physical development. Jack Van Berg, a trainer from California, testified before a congressional subcommittee that "[s]teroids given to young horses can cause an unnatural increase in muscle mass and makes them much heavier than their still-maturing bone structure. They just get so heavy, and on their young bones that haven't matured yet, they just can't take it."[111]

Unfortunately, banning harmful substances is only the first step in addressing the issue of steroids leading to racehorse breakdowns. Banning drugs is only effective if those bans can be enforced, and currently, there are relatively few tests that exist to check for banned drugs.[112] Additionally, the drug market is always changing as people discover new substances that can have the same effects as banned drugs, but cannot be found by the same methods. As recently as 2012, racing regulators were unable to pinpoint the source of a new performance-enhancing substance, until a Denver lab tweaked its testing procedure

[105] Hodges, *supra* note 46, stating that the use of drugs has been found to be a contributing factor in racehorse breakdowns.

[106] *Id.*

[107] *Id.*

[108] *Id.*

[109] *Id.*

[110] *Id.* Laminitis is a disease in the hoof where the tissues separate, causing extreme pain and sometimes leading to the horse being crippled for life.

[111] *Hearing transcript*, *supra* note 62, at 27 (statement of Jack Van Berg, racehorse trainer).

[112] Gasparon, *supra* note 25, at 208.

and happened to find the substance, which turned out to be "a painkiller far more powerful than morphine."[113] Alan M. Foreman, chairman of the Thoroughbred Horsemen's Association, would like to see state-of-the-art labs testing the same way for the same things.[114] Such labs are expensive, however, and not all jurisdictions can afford the same staff and equipment. In 2009, New York's Cornell University closed its equine drug-testing laboratory because "it could no longer afford to run the facility on what the state provided in the way of funding for the tests."[115] At the same time, New York State Racing and Wagering Board claimed that the Cornell drug testing was becoming more expensive because the drug testing started growing from $2.2 million in 2004 to $3.6 million in 2009.[116]

Van Berg proposed a solution to the drug testing issue in 2008.[117] Van Berg urged that

> [T]he first and most important thing should be to implement the most sophisticated drug testing available. It should be funded by a small percentage of the simulcast money, approximately one-eigth of one percent. Three labs should conduct the testing: one in the West, one in the East, one in the Midwest. It would be the responsibility of the trainer or his representative to monitor the collection of the sample after the race.… If the test is positive, then they should face a stiff penalty... instead of a slap on the hand.[118]

---

[113] Walt Bogdanich and Rebecca R. Ruiz, *Turning to Frogs for Illegal Aid in Horse Races*, N.Y. Times, June 19, 2012, *available at* http://perma.cc/34FH-YJSW. In this instance, the substance was drawn from the backs of a certain frog. The article goes on to quote Edward J. Martin, president of Racing Commissioners International, who acknowledges the on-going challenge for regulators to find and regulate the substances actually being used on the track. Martin says, "It's a cat-and-mouse game. As soon as you call out dermorphin [the painkiller found on the frog], they will try something else." *Id.*

[114] Drape, *supra* note 32.

[115] Tom Precious, *Move Planned for New York Drug-testing Lab*, Bloodhorse.com (Nov. 20, 2009), http://perma.cc/75YL-U2JS.

[116] *Id.* The article goes on to discuss the proposed move to Morrisville State College, which could theoretically run the testing program for less because the research operation would not be conducted at the Cornell lab. The cost would be decreased by the actual move in not having to pay Cornell lab costs, which would allow the saved money to be passed along to tracks, owners, and breeders, thereby also gaining support from the state's horse industry.

[117] *Hearing transcript*, *supra* note 62, at 27 (statement of Jack Van Berg, racehorse trainer).

[118] *Id.*

Van Berg's solution would be effective in insuring uniformity in drug testing procedures and addresses the issue of funding. However, there would likely be a large amount of time between when the samples were taken and when the results came in due to there being only three labs. The length of time between drawing a sample and getting results could make it more difficult to assign and enforce penalties when trainers and horses may have already moved to another racetrack. It would be an ideal solution, if the same funding could be used for uniform labs in each jurisdiction, but as previously stated such a solution is highly unlikely.[119]

Another challenge regulators face in controlling drugs is that not every horse that runs on a racetrack is tested. For example, the Michigan regulation 431.1301(7) states that "[a] drug or foreign substance . . . shall not be present or carried in a horse that is entered or participates in any race conducted at a licensed race meeting in the state . . . ."[120] But, it is still impossible to test every horse to be able to enforce this regulation. In reality, only the horses placing first, and at some tracks horses placing second and third, are routinely tested. This means that a horse coming in fourth in a race could be full of all sorts of banned substances, but chances are the trainer or another person responsible will not be caught due to the horse not being tested. The ARCI recognized the difficulty of enforcing penalties and in 2012 proposed soliciting help from agencies outside jurisdictional racing commissions.

The ARCI proposes referring some anti-drug regulation violations to law-enforcement agencies, as well as subjecting veterinarians to sanctions by state licensing boards.[121] The proposal to involve law-enforcement agencies is based on filing animal cruelty charges and has little precedent in racing.[122] While bringing animal cruelty charges against trainers, who administer illegal drugs to race unfit horses, addresses the complaints of critics, who believe racing does not adequately punish wrongdoers.[123] Such action could be met by strong opposition from prosecutors faced with already too-full caseloads, who believe there are more important issues than protecting racehorses.

Subjecting veterinarians to sanctions, on the other hand, would not be new ground in horse racing regulations,[124] but might initiate

[119] For further discussion of the funding difficulties involved in drug testing, see *infra* notes 88—92 and accompanying text.

[120] Mich. Admin. Code r. 431.1301(7) (2013).

[121] Matt Hegarty, *Enforcing drug penalties may need help from outside agencies*, The Daily Racing Forum (Aug. 2, 2012), http://perma.cc/D2PE-BEEL.

[122] *Id. See also* Hodges, *supra* note 46, for the proposition that horse trainers in New York specifically should be subject to New York cruelty statute.

[123] Hegarty, *supra* note 121.

[124] *Id.*, stating that "state veterinary boards currently have broad powers to

some pushback from the veterinary science community. Veterinarians tend to work in specialized niches and one regulatory veterinarian stated, "most members of state [veterinary] boards are not familiar with racetrack veterinary practices."[125] For this reason, veterinarians would likely push for creating veterinary review panels at racing commissions composed of retired veterinarians and trainers, for the express purpose of adjudicating penalties against veterinarians, who administer illegal drugs.[126] This could cause its own issues, as veterinarians and trainers might have previously established relationships that could lead to challenges of bias in the adjudication process and unfair results, even if a veterinarian were to appear before the panel.[127]

Currently, penalizing the person held responsible for administering illegal drugs can come in the form of fines, disqualification, redistribution of the purse,[128] sanctions, or a combination thereof.[129] The hope is that such penalties will have a deterrent effect, but it is a far-reaching hope. In reality, horses regularly travel between states to race.[130] Therefore, transgressing trainers can merely leave a jurisdiction where they have been caught using illegal drugs, or they can change their drug of choice to one that will not test positive.[131] There is also the possibility that offenders may be penalized in one jurisdiction but not another for the exact same behavior.[132]

d. Breeding Shortfalls

While use of steroids is a contributing factor, it is not the only factor involved in racehorse breakdowns. Another factor is genetics. All Thoroughbred horses can be "trace[d] back to three stallions … [from] the late 17th and early 18th centuries: the Byerley Turk (1680s),

---

suspend or revoke a veterinarian's license" and Kentucky statutes are already in place that could easily be cited "if a veterinarian knowingly administered a drug to a horse that is in racing's Class A category."

[125] *Id*.

[126] *Id.*

[127] Additionally, New York regulators in 2012 issued an indefinite suspension to a trainer after veterinary records revealed 1,719 violations of racing rules. While the case against the trainer rested entirely on the veterinarian's records, the veterinarian himself had not been sanctioned as of August, 2012. *Id.*

[128] The purse is the amount of money paid to the owners of the top-finishing horses. *Purse distribution*, Wikipedia, http://perma.cc/4KQ6-6Y3X (last visited Apr. 8, 2015).

[129] Reichard v. Commonwealth, 499 A.2d 727, 729 (Pa. Commw. Ct. 1985); Gasparon, *supra* note 25.

[130] Tom LaMarra, *Racing Group Endorses Deadline for Steroid Rule Adoption*, The Horse (Feb. 1, 2008), http://perma.cc/9WH7-KMBX.

[131] Gasparon, *supra* note 25, at 200.

[132] LaMarra, *supra* note 130.

the Darley Arabian (1704), and the Godolphin Arabian (1729)."[133] Throughout the years, young male horses that found success on the racetrack were sought after as breeding stallions. A well-known example is the famous stallion Secretariat, whose name can be found in countless Thoroughbred pedigrees across the country. In the hope of tapping into a successful bloodline, breeders began to inbreed their horses,[fn131] leading to genetic weaknesses as a result of lack of genetic diversity.[134] Illinois Representative Jan Schakowsky showed Eight Belles's pedigree at the 2008 subcommittee hearing on the state of the Thoroughbred horse, stating, "Eight Belles came from a brilliant but fragile line. All of those sires [in her bloodlines] had problems in their ankles . . . . To professional breeders her pedigree should have raised alarms but they proceeded anyway, and many would argue that millions of people saw the horrible consequence of their choice live on national television."[135]

Because racehorses start racing at such a young age,[136] their bodies have not fully developed and their size takes a large toll on young joints that have not closed.[137] Richard Shapiro, then Chairman of the California Horseracing Board, testified in front of the Congressional subcommittee in 2008 that "[f]or the sake of speed and for having the fastest horse on the first Saturday in May,[138] fewer horses are bred for durability, longevity, and stamina. We push 2-year-olds onto the track before many can handle the rigors of racing. The game has become more horse breeding than horseracing."[139] Breeding for size and speed has evidently been accomplished at the cost of strength in young

[133] *Thoroughbred*, Wikipedia, http://perma.cc/532Z-FDPQ (last visited Apr. 24, 2015).

[134] *Inbreeding Notations in Thoroughbred Pedigrees*, Bloodhorse.com (Mar. 31, 2009), http://perma.cc/5PZX-YQQK.

[135] *Hearing transcript*, *supra* note 62 at 2 (statement by Hon. Jan Schakowsky, Illinois Representative).

[136] Thoroughbreds generally begin their racing careers at age two. *Thoroughbred Adoption Network FAQs*, Thoroughbred Adoption network, http://perma.cc/J4L7-HUKW (last visited April 8, 2015).

[137] Interestingly, the University of Sydney recently came out with a study finding that there are no detrimental effects to a horse's career if it begins racing at two years old. *Racing start for two-year-old thoroughbreds not detrimental*, Phys Org (April 5, 2013), http://perma.cc/B6L8-MHW4. This author points out, however, that the study was aimed only at determining whether the age at which a horse started racing affected the length of their career, not at the long-term effects of racing at such a young age. Additionally, the researchers stress that despite the study's findings, not all horses are physically able to start racing at two years old, and that "combining an inappropriate training regime with a genetic predisposition to injuries can result in injuries that prevent the horse from continuing or beginning its racing career." *Id.*

[138] The Kentucky Derby is run on the first Saturday in May every year.

[139] *Hearing transcript*, *supra* note 62, at 16-17 (statement of Richard Shapiro, Chairman, California Horseracing Board).

horses, resulting in horses that may be bigger and faster, but are also universally weaker and will not race for as long. Add to that fact that use of performance-enhancing drugs that further weaken the horse's bone- and joint-structure, and it is no surprise that racing has been plagued with breakdowns of promising young horses.

e. Forced Reform: Creation of a National Racing Commission

Harsher penalty enforcement is one option for reducing the use of performance-enhancing drugs in the horseracing industry. However, as discussed above, such enforcement is not the most feasible option based on the way jurisdictions are currently structured and operating.[140] According to Randy Moss, a horseracing commentator for ESPN, "the States that have been entrusted with regulating horseracing have proven unable and unwilling, more importantly, to rectify many of the problems."[141] Arthur Hancock, President of Stone Farm in Kentucky, found that the real problem was "nobody is in charge," and opined, "only the Federal Racing Commission or Commissioner can save [the Thoroughbred industry] from [it]sel[f].[142] In short, the best way for racing to address its drug problem is to create a national racing commission to promulgate and enforce uniform drug prohibitions for all racing jurisdictions. A racing commission and commissioner would provide the necessary authority and person in charge to rectify the industry's problems.

f. Current National Authorities: the National Thoroughbred Racing Association and the American Jockey Club

The National Thoroughbred Racing Association ("NTRA") is a membership-based trade association composed of representatives from member racetracks, horsemen's groups, owners, and breeders.[143] However, the NTRA does not have the authority to promulgate regulations. The organization has approached Congress with a model national horse racing statute banning certain substances, but so far no such statute has been passed.[144] Representative Pitts asked at the 2008 subcommittee meeting about penalties issued by the NTRA, and was informed that doling out penalties is not the NTRA's job and that the NTRA

[140] For a further discussion of the difficulties in harsher penalty enforcement, see *infra* notes 69-104 and accompanying text.

[141] *Hearing transcript*, *supra* note 62 at 29 (statement of Randy Moss, ESPN horseracing analyst).

[142] *Id.* at 33.

[143] *NTRA Board of Directors*, National Thoroughbred Racing Association, http://perma.cc/7AYN-BVPH (last visited Apr. 25, 2015).

[144] Gasparon, *supra* note 25, at 200.

is "an agency to promote the industry and make recommendations …. [without] any power to enforce the penalties."[145]

The Jockey Club is the breed registry for Thoroughbred horses in North America.[146] The organization maintains The American Stud Book, in which every Thoroughbred is registered.[147] In May 2008, The Jockey Club established the Thoroughbred Safety Committee to "review equine health issues and to recommend actions based upon good science, sound thinking and solid conclusions."[148] However, The Jockey Club does not have the authority to enforce the regulations it recommends. Its only power lies in the ability to deny the rights and privileges of registering with The American Stud Book to any person or entity when such person is found to have killed, abandoned, mistreated, abused, or otherwise committed an act of cruelty to a horse.[149] While there is a viable argument for holding trainers criminally liable for violating anti-cruelty statutes through the use of performance-enhancing drugs,[150] such liability is not the general practice and it would be difficult for The Jockey Club to deny registration to a person who was found only to have given drugs to a horse without any further finding of neglect or cruelty.

In 2011 The Jockey Club reviewed and synthesized rules from all thirty-eight racing jurisdictions in the United States, as well as rules from other countries, and came up with the Reformed Racing Medication Rules ("the Rules").[151] The Rules are summarized as follows:

> - Horses should be allowed to compete only when free from the influences of medication
> - Medications permitted in the race horse are subjected to stricter regulatory thresholds with increased recommended withdrawal times
> - Furosemide administration on the day of the race is currently allowed in all U.S. racing jurisdictions….

[145] *Hearing transcript*, *supra* note 62, at 55—56 (question period).

[146] *Welcome to the Jockey Club!*, The Jockey Club, http://perma.cc/787W-J7BC. The Jockey Club was set up in order to improve Thoroughbred racing but has no regulatory authority. Matt Hunter, *Does Horse Racing Need a Commissioner?*, Time Warner Cable News, http://perma.cc/5KS5-D8JS (Aug. 28, 2014).

[147] *About the Registry*, The Jockey Club, http://perma.cc/WX84-YVLZ.

[148] Letter from James Gagliano, President and Chief Operating Officer, The Jockey Club, to the Honorable Tom Udall, United States Senate, and the Honorable Ed Whitfield, United States House of Representatives (May 14, 2010), http://www.jockeyclub.com/resources/congress_letter_web.pdf.

[149] *Id.*, quoting Section V, Rule 19A(4) of the Principal Rules and Requirements of the American Stud Book.

[150] *See generally* Gasparon, *supra* note 25.

[151] *Reformed Racing Medication Rules*, The Jockey Club (Aug. 12, 2012), https://perma.cc/C4YX-XPMX?type=pdf.

- Only RMTC-accredited laboratories are permitted to test samples, with results available to the public
- Medication violations result in points that accumulate to trigger stronger sanctions for repeat violations; up to lifetime suspensions.
- Medication histories for all horses available for review
- Contact with a horse within 24 hours of post time of the race shall be subject to surveillance; certain regulations and track ship-in policies may be subject to adjustment
- Reciprocal enforcement of uniform mandatory rest periods among racing regulatory authorities for horses with symptoms of exercise induced pulmonary hemorrhage
- Expansion of regulatory authority to include all jurisdictions where official "workouts" are conducted
- Administration and withdrawal guidelines are published for all approved therapeutic medication subject to regulatory control
- Best practices for improved security and monitoring of "in today" horses are provided for guidance to racing associations[152]

Since introducing the Rules, The Jockey Club has worked with representatives of the Racing Medication and Testing Consortium ("RMTC"), the International Federations of Horseracing Authorities ("IFHA"), and other similar industry organizations to encourage the implementation of regulations that are "on par with international standards . . . [with] stronger penalties and deterrents."[153] However, the Rules are not mandatory in all jurisdictions—they are simply a model that The Jockey Club believes provides the safest environment for equine and human athletes.[154]

In response to a question from Representative Sterns, Randy Moss stated that The Jockey Club "is great for what it does, but it has no way to control the rest of the industry."[155] It essentially has "responsibility with no authority."[156] The lack of authority to enforce regulations was a point brought up repetitively at the 2008 hearing, with Moss at one point stating that "the NTRA and other agencies in

[152] *Id.* at 4.
[153] *Id.* at 3.
[154] *Id.*
[155] *Hearing Transcript*, *supra* note 62, at 52 (question period).
[156] *Id.*

thoroughbred racing have no teeth. They have no power to mandate any sort of meaningful changes in thoroughbred racing."[157] The Jockey Club is one of the "other agencies" with similar interests and goals aimed at improving the Thoroughbred breed and racing industry, but at the same time lacking the ability to mandate change.

g. What is Needed—A National Commission and Uniform Standards

Horse racing would by no means be the first sport to establish a national commission.[158] A national racing commission would have the ability to promulgate and enforce desperately-needed uniform standards and regulations, ensuring that racing would be governed by the same rules in all jurisdictions and giving greater deterrence effect to banning steroids.[159] Initially, a national racing commission could adopt and enforce the Jockey Club's Reformed Racing Medication Rules, with the eventual goal of a zero-tolerance policy as to all performance-enhancing and painkilling drugs used not only on race day, but also during the horse's training at home.

The National Collegiate Athletic Association ("NCAA") has been held up as a primary example of a model for national sport regulation.[160] This model would offer creation of committees dedicated to specific programs, legislation applicable to all jurisdictions on a variety of different matters, and a promise of representation to industry stakeholders.[161] The NTRA already serves as a representative organization for industry stakeholders. Combined with The Jockey Club's research efforts and rules, the NTRA is an organization that could easily transition into a national racing commission based on the NCAA model. The argument against the NCAA model is that it would take away most of the independence currently retained by racing jurisdictions, making individual jurisdictions unable to deal with issues specific to them. The counterargument is that the jurisdictions have, on the whole, been failing to enforce any sort of useful regulations banning harmful substances and they, therefore, do not deserve the ability to self-regulate.

The national organization could do many things: offer committees devoted to making decisions in the interest of promoting the

[157] *Id.* at 56.

[158] Most professional and semi-professional sports have established such national commissions and national guidelines. For example, football has the NFL, collegiate sports have the NCAA, hockey has the NHL, and so on.

[159] *See* Gasparon, *supra* note 25, at 217; Lamarra, *supra* note 130; Anthony Russolello, *supra* note 4.

[160] *Id.*

[161] *Id.*

sport; provide stakeholder representation; create a national horseracing license to enforce penalties on a national basis; "unify various persuasive organizations that specialize in particular interests;" and mitigate pressure on racing agencies from outside organizations with competing interests.[162] A national horseracing license would ensure that all trainers, owners, and racetracks were held to the same standards, particularly regarding prohibited substances and testing for those substances. By unifying different organizations, the national commission could form a committee "dedicated to developing more accurate drug testing procedures, withdrawal times and publication issues."[163]

Throwing out the proposal for a national organization based on the NCAA-model, a similar enforcement result could be achieved without creating a national commission if all racing jurisdictions would follow the lead of New York, Pennsylvania, Maryland, New Jersey, Delaware, Virginia, West Virginia, and Massachusetts in adopting tough uniform rules for the operation of their racetracks.[164] Agreeing to adopt tough uniform rules would require discussion from industry stakeholders in each jurisdiction and agreement among people who may have competing interests. If other states follow the progressive lead of these eight jurisdictions in recognizing and acting on the need for uniformity of drug regulations, there will be no need for Congress to take action in the way this article suggests.

h. What Congress Can Do

The United States Congress has previously recognized the importance of Thoroughbred welfare in horse racing.[165] In a 2008 hearing referenced throughout this article, the Subcommittee on Commerce, Trade, and Consumer Protection heard from a number of industry stakeholders on the issue of drug use to enhance racehorse performance. The Honorable Jan Schakowsky, Illinois Representative, opened the hearing, stating, "[i]t seems that greed has trumped the health of horses, the safety of the jockey, and the integrity of the sport. Although breakdowns have always been a part of this sport, long-term racing commentators and horsemen assert that the thoroughbred horse as a breed is becoming weaker."[166] Some stakeholders, such as Alan Marzelli, then President and Chief Operating Officer of The Jockey Club, believed that the industry needed to "eliminate all performance-

[162] Gasparon, *supra* note 25, at 217.
[163] *Id.*
[164] Drape, *supra* note 28.
[165] *See generally, Hearing transcript*, *supra* note 62.
[166] *Id.* at 2.

enhancing drugs from the sport."[167] The answer according to Marzelli would be a complete ban on steroids,[168] instituted by Congress if necessary. Jess Stonestreet Jackson, proprietor of Kendall Jackson winery, racing reform advocate, and owner of Curlin, the world champion who raced in Dubai, believes that Congress needs to take an active role by banning drugs and by rewording the Interstate Horse Racing Act to make horsemen's groups representative only of owners, not trainers.[169] Jackson is another proponent of having a league and a commissioner, and he believes immediate action is necessary.

Other stakeholders testifying at the hearing recognized that there was a problem, but asked Congress to give the industry time to regulate itself.[170] Moss acknowledged this, stating, "there is a fear of Federal involvement, the fear of loss of control of their own destiny, of their own sport."[171] Alexander Waldrop, Chief Executive Officer in 2008 of the NTRA, requested Congress hold off on passing any federal regulations.[172] Waldrop discussed NTRA's position as the industry's centralized authority representing virtually all industry stakeholders, along with State regulation through State racing commissions, and the adoption in thirty-two of thirty-eight racing jurisdictions of the RCI's model rules governing medications.[173] Waldrop brings up a valid point that "the NTRA and [the] industry stakeholders are uniquely qualified," but there seems ample evidence to refute the second part of his statement, that the NTRA and stakeholders are "fully committed to working through our sport's complex issues as they relate to equine health and safety."[174]

At this point, the industry has been given multiple opportunities for self-regulation and the issue has not been resolved. To those who argue that Congress should not be involved, Representative Schakowsky pointed out at the hearing that Congress is already involved, because the Interstate Horseracing Act, under the jurisdiction of the Subcommittee on Commerce, Trade, and Consumer Protection, allows racetracks a unique status under Federal law.[175] Hancock expands on existing congressional authority, suggesting that "[e]ach State can be controlled

[167] *Id.* at 10.

[168] At this point, the author notes that steroids have already been banned at racetracks in Europe and in Dubai.

[169] *Hearing transcript, supra* note 62, at 37 (statement of Jess Stonestreet Jackson, owner of Stonestreet Farm).

[170] *Id.*

[171] *Id.* at 58 (question period).

[172] *Id.* at 169 (statement of Alexander M. Waldrop, Chief Executive Officer, National Thoroughbred Racing Association).

[173] *Id.* at 168 (statement of Alexander M. Waldrop, Chief Executive Officer, National Thoroughbred Racing Association).

[174] *Id.*

[175] *Id.* at 3 (opening statement of Honorable Jan Schakowsky, Illinois Representative).

by the Federal Government, because if the State does not comply with the rules, the racing signal can be cut off. For instance, if there is a Federal ban on steroids, and the State does not comply, it would lose its signal."[176] Representative Whitfield pinpoints the problem, stating that after talking to different racing authorities in each state, he found that "[t]here is no agreement on the penalty levels of any of these so-called uniform rules. There is total confusion about the anabolic steroids."[177] Jackson cites the industry's lack of making productive strides toward change, stating, "it takes a regulatory body with an investigative arm to ferret out where [bad acts] happen[] to process the claims or suspicions. Then they also have to have a body to adjudicate that. And then they have to have an enforcement mechanism. The industry hasn't done that."[178] It is time for change, which requires the creation of a National Racing Commission, potentially with Congressional oversight.[179]

Congress should amend the Interstate Horse Racing Act to create a national racing commission and appoint a commissioner, and to require uniform drug regulations among all jurisdictions. Then, Congress can provide government sanctions as part of the amended federal law in the form of prison time, to make an example of the people who still refuse to abide by drug regulations. Enforcement can be achieved by bringing in the state agencies—racing commissions and racing boards—that already have inspection and police power. Much like state department of agriculture inspectors, racing commissions would employ at least one veterinarian at each track in the jurisdiction to test for illegal substances. The money to employ the regulatory veterinarians would come out of a fee charged as part of entering the horse in a race, similar to how the United States Equestrian Federation charges a drug fee at every one of its recognized competitions. Create an example out of trainers who violate the regulations by assessing a hefty fine along with sanctions, and give chance for a new culture to take root where owners, trainers, and veterinarians make the welfare of the horse their top priority, rather than the welfare of their pocketbook. Such a structure would look a great deal like the Great Lakes Water Consortium—the national racing commission would create a model law, asking each state to adopt it, with social pressure from within the industry for each jurisdiction to adopt the same goals.

---

[176] *Id.* at 33 (statement of Arthur Hancock, President, Stone Farm).

[177] *Id.* at 171 (question period).

[178] *Id.* at 60 (question period).

[179] Even the threat of federal regulation might be sufficient to force the industry to reform by adopting and enforcing uniform regulations. For example, the agreement between eight Mid-Atlantic states (*see* Drape, *supra* note 28) was a push that came after officials were forced to concede that a drug culture is diminishing the racing sport. Their concession only came after multiple Congressional hearings and proposals for federal legislation to take over the sport.

IV. Proposed Action: Creating a National Racing Commission Charged with Promulgating and Enforcing Regulations, and Advising Congress on Needed Legislative Action

Although the NCAA model would be workable, it is not ideal because there are too many pieces. Likewise, while the Mid-Atlantic states set an admirable example, it is unrealistic to expect every racing jurisdiction to follow suit in a timely manner. The United States Equestrian Federation ("USEF"), as the National Governing Body ("NGB") for equestrian sports outside racing, has the power to regulate competitions and promote equine safety and welfare.[180] Under the its bylaws, the USEF "[p]rotect[s] and support[s] the welfare of horses by inspecting, monitoring and testing to deter the use of forbidden substances and other cruel, unsafe and/or unsportsmanlike practices and by adopting and enforcing rules to prohibit such practices."[181] The USEF has taken it upon itself to provide a body of rules to govern equestrian sport at the national level,[182] and exemplifies the ideal structure for governing horse sports, including racing, in America.

Racing should not, however, come under the umbrella of the USEF's authority because there simply are not enough resources for the USEF to stretch so far. The origins of the USEF reflect a concern very similar, if not identical, to the racing industry's current concern: in 1917, a group of horsemen and women met in New York City in a "unity of intention to maintain clean competition and fair play in the show ring."[183] The USEF gains its authority over shows by enrolling, or licensing, shows. This article proposes a national racing commission that would follow the same procedure—similar to how The Jockey Club registers each Thoroughbred horse, each Thoroughbred racetrack would be required to be licensed by the national racing commission.

The most effective way to create a national racing commission, which has the ability to regulate and enforce racing so that racehorse welfare is the utmost priority, would be through Congressional action. Congress should amend the Interstate Horse Racing Act to create a national racing commission charged with promulgating and enforcing regulations to maintain clean competition on the racetrack. The first regulation the national racing commission should promulgate is an absolute ban on all anabolic steroids and other drugs that are currently

---

[180] *USEF Mission Statement*, Bylaw 102, Sec. 1, *available at* http://perma.cc/7EXC-7HE3 (last visited Apr. 25, 2015).

[181] United States Equestrian Federation Bylaw 102, Sec. 2, *available at* http://perma.cc/7EXC-7HE3 (last visited Apr. 25, 2015).

[182] *Id.*

[183] *USEF History*, United States Equestrian Federation, *available at* http://perma.cc/XFM8-BKFD.

used in racehorses. Other countries require horses to run completely clean; there is absolutely no reason why American horses cannot also run without any drugs whatsoever in their systems. Congress should also charge the new racing commission with making recommendations to Congress regarding the need for possible criminal offenses related to racehorse welfare.

It is clear that the current enforcement scheme of fines and suspensions is ineffective. The national racing commission would have the ability to recommend to Congress more effective means of enforcement. Specifically, the commission could recommend that Congress create, under the Interstate Horse Racing Act, criminal penalties for anyone found to have violated the regulations promulgated by the commission. The language would read, "Under this Act, any individual found to have violated regulations promulgated by the National Horse Racing Commission is guilty of a misdemeanor and shall be fined not more than $10,000, or imprisoned not more than 3 years, or both."[184] Such language would create much stronger and more effective penalties to deter people from violating more regulations.

V. Conclusion

The racing industry needs a national racing commission and commissioner, similar to the NCAA. As it stands, the lack of uniformity among racing jurisdictions makes it easy for trainers and veterinarians to continue running horses that should not be on the track. Creation of a national racing commission charged with promulgating and enforcing uniform regulations would answer the question of who has the authority to regulate the racing industry. The commission would have the power that the NTRA and The Jockey Club lack to enforce and effectively deter illegal behavior on the part of racehorse owners, trainers, and veterinarians.

An alternative to a national racing commission would be for each racing jurisdiction to adopt the same standards, thereby creating a uniform structure of regulations. These regulations would need to reflect a zero-tolerance policy towards the use of performance-enhancing steroids and painkillers that mask pain and injuries that might culminate in breakdowns and trackside euthanasia.

If the industry does not take action, Congress has the power to create a national racing commission. Congress has power over the racing industry because the industry is part of interstate commerce,

[184] This language is similar to the criminal penalty provisions found in the Animal Welfare Act, 18 U.S.C. § 49 (2008).

and Congress could therefore create a national racing commission and charge the commission with promulgating and enforcing uniform regulations, as suggested. The commission's power to enforce those regulations would be unquestionable, as it would come from Congress. Congressional action should not be undertaken lightly, however, as the interstate commerce argument is not infallible.

Terrorism and the Animal Rights and Environmental Movements

Alexandra T. Stupple*

I. Introduction

a. Overview

The definition of "terrorism" has been the subject of debate since the term's inception. There are legal definitions and lay definitions of "terrorism," both of which change over time. Under federal law, terrorism was originally closer to an act of treason or war but has more recently begun to also apply to certain already codified domestic crimes when the impetus for the criminal act is a certain idea.

This trend is readily identifiable in the Animal Enterprise Terrorism Act, which creates a legal regime that labels certain acts "terrorism" that are not deserving of the title. The AETA increases the punishment for actions that are already illegal under state and federal law and for acts that are constitutionally protected as a way to protect the business interests of those involved in harm to animals. The Act also stigmatizes persons carrying out such acts in a way not before seen in American history, ultimately resulting in injustice for activists and criminal defendants and a diminution of the rightful appearance of the seriousness of religion- and anti-government-based violence.

In this article, I first discuss the theory of memes and the reasons some ideas are inherently more dangerous to life than others. In Section II, I provide a brief history of ideology-based violence on American soil since the late nineteenth century. Next I outline how the label of "terrorism" may be used to stifle unpopular political movements. The ways international ideology-based violence has been treated under the law, with an emphasis on the confusion between whether such terroristic acts are crimes or acts of war, is outlined in Section IV, after which I discuss Federal Sentencing Enhancement Guidelines for terrorism.

In Sections VI and VII, I delve into the way environmental- and animal rights-based ideological violence has been dealt with through the law. The article culminates with an explanation of the origins and injustice of the Animal Enterprise Protection Act and its successor, the Animal Enterprise Terrorism Act.

* Alexandra Stupple is an attorney working with the State of California and a graduate of the University of California, Hastings College of the Law. I would like to thank Gregory L. Holtom for his insightful edits of this article and my father, A. James Stupple, for being the best coach I ever had.

b. Dangerous Memes

Terrorism is easy to hate. It is a primitive means of communication, one that maims and kills. It is antidemocratic and is the antithesis of the values of the Enlightenment, the values under which the United States was formed. It is anti- life, and it makes no distinction between political institutions and civilians. It is unpredictable and hurts the innocent.

Acts of terror are usually carried out by persons who have been infected by a dangerous meme, an element of culture that may be considered to be passed on by non-genetic means.[1] Memes spread like viruses, moving from one person to another via its host's actions.[2] Some memes take hold of their hosts more forcefully than do others, and some memes are more dangerous than others. Daniel Dennett notes that once someone starts championing a meme, the "original commitment gets buried in pearly layers of defensive reaction and meta-reaction."[3] Religious beliefs are examples of memes that are not meant to be tested; no logic or empirical test can upset a true believer.[4] These are memes that have effectively disabled the ability to be skeptical. Therefore, it may be concluded that religious beliefs that carry with them mandates to kill or otherwise hurt life are apt to be more dangerous than other types of beliefs, ones that can be altered or dismissed altogether. Islam-based terrorism is an example of a dangerous meme that often results in murder and suicide.

Memes that are not based on religion, however, may also be dangerous to life because true and avid believers in anything can be a force to be reckoned with. But there is a scale of danger: some ideologies result in more suffering than do others. For instance, environmental and animal rights activists have set buildings on fire because of their beliefs. Therefore, it may easily be argued that their beliefs are dangerous. However, to date, none of these activists' acts have resulted in physically hurting a human or animal.

In addition, the likelihood of the transmission of a dangerous meme is a factor to consider when determining where a particular meme falls on the scale of danger. How likely is this toxic idea to spread to others? It is obvious from the numbers of adherents that religion is more likely to spread than is the belief in not eating animal products, and because religious belief relies on "faith," a religious belief that demands

[1] "Meme" was coined by Richard Dawkins in *The Selfish Gene*. Richard Dawkins, The Selfish Gene 192 (Oxford Univ. Press 30th anniversary ed. 2006).

[2] *Id*.

[3] Daniel C. Dennett, Breaking the Spell: Religion as a Natural Phenomenon 202 (Penguin Books 2006).

[4] Keith E. Stanovich, The Robot's Rebellion: Finding Meaning in the Age of Darwin 188 (Univ. of Chi. Press 2004). The free speech meme is another "absolutist" meme that is not susceptible to questioning, but its profession doesn't carry with it negative effects as do many religion-based memes. *Id.* at 188-89.

death and destruction is probably more dangerous than any political belief that demands the same. Religion as a meme has adapted over the years to be more virus-like than any other.[5]

For this reason it is dangerous to treat, under the law, every ideology-based act of violence or criminality as an act of terror. Some ideas that incite violent actions are more dangerous than others, and melding them together tends to dilute in the public's mind the seriousness of the truly heinous acts of terror. Some acts should remain "crimes," not "terrorism." Alternatively, there should be a sliding scale of how severely ideology-based violent acts are treated.

It is also important to note that, originally, the law treated international crimes of terrorism as a mix between war crime and common domestic crime. For practical purposes and to avoid the unfair treatment of certain groups, I proffer that all "domestic terrorism" cases be treated as common criminal acts, particularly if no people are hurt. Federal sentencing enhancements may be warranted, but such a determination should be based on the danger and content of the idea that motivated the crime, with the desire for mass destruction of life resulting in the harshest punishment and the desire to protect sentient beings (both human and non-human) deserving the least harsh.

II. Domestic Ideology-Based Violence

In 1886, 2000 Chicagoans gathered near Haymarket Square to protest the city police, and someone threw a dynamite bomb into a group of 170 policemen.[6] Throughout the early twentieth century, labor activists, such as the International Association of Bridge and Structural Iron Workers (IABSIW) dynamited construction sites and bridges.[7] Between 1905 and 1911, 86 structural steel jobs were bombed or damaged.[8] Around this time the International Workers of the World (IWW) were taking up sabotage as well. A Wobbly poet provided a glimpse of the group's motivations: "We have nothing in common with you, we do not recognize the 'public,' the 'people,' the 'nation,' Christendom or humanity—we know only the working class."[9]

The IABSIW, in 1910, dynamited the *Los Angeles Times* office, the only act of union dynamiting to result in a loss of life, that of, ironically, 20 workers.[10] The bombing had an effect on the cultural

[5] *Id*. at 189.

[6] Jeffory A. Clymer, America's Culture of Terrorism: Violence, Capitalism, and the Written Word 33 (Chapel Hill: Univ. of N.C. Press 2003).

[7] *Id*. at 171.

[8] *Id*. at 173.

[9] *Id*. at 185. (quoting Arturo M. Giovannitti, *Syndacalism—The Creed of Force*, in 76 The Independent 211 (1913)).

[10] *Id*. at 175-76.

imagination of America. It was feared that the men who planted the dynamite, the McNamara brothers, would "inspire others to use dynamite, leading to nothing 'less than the overthrow of civilization.'"[11] The newspaper the *Century* "intoned that sabotage is 'damaging to the essential foundations of law and order.'"[12]

After such acts of deadly violence, "sabotage" became synonymous with "terrorism" and led to harsh treatment of labor activists. "The threat and seeming ubiquity of sabotage undergirded calls for the suppression of labor activists."[13] This suppression came through "legal" means: quick trials and executions.[14]

There are other moments of "domestic terrorism" in America's history as well. In 1920, there was an explosion on Wall Street. There were lynchings of African-Americans in the South and throughout the United States. In the 1970s, the Weather Underground took to using violence. Later, abortion clinics were bombed, and doctors killed. In 1995, the Oklahoma City Federal Building was bombed.

Obviously, there is a strong history of ideology-motivated violence in the United States. All of these crimes, however, were dealt with through the criminal justice system in a way that did not add extra punishment for the motivation behind the crimes. Therefore, perhaps only now that "terrorism" is such a strong concept do we have a means of understanding and talking about ideology-based violence. Also true may be the idea that with the rise of "terrorism" as an idea, we have a new way to suppress movements and limit the civil liberties of individuals deemed unworthy of such protection.

III. The "Terrorism" Label as a Means of Suppressing Movements

There is terrorism as a layman's term and terrorism as legal term. As a layman's term it is hard to define. Perhaps it is violence that "appears to be simultaneously both selective and indiscriminate, [whose] efficacy derives precisely from such confusion of target categories."[15] Or perhaps it's any criminal and dangerous act that is politically or religiously motivated. Was John Brown, the radical abolitionist who believed in the violent overthrow of slavery, a terrorist? Christopher Hitchens has described him as "careless of his own safety and determined to fill the ungodly with the fear of the risen Christ."[16] This is reminiscent of the

[11] *Id*. at 184.
[12] *Id*.
[13] *Id*.
[14] *Id*. at 187.
[15] *Id*. at 181.
[16] Christopher Hitchens, *John Brown: The Man Who Ended Slavery*, *in* Arguably (Twelve; 2011).

mindset of Osama bin Laden, and a reasonable view might indeed be that Brown was a terrorist.

Currently, the definition of "terrorism" is most clear when the target is the government, and the label slips off the tongue more easily when the violence is carried out by international agents. And "terrorism" is easiest to use when the violence involves the murder of innocents. However,

> [t]errorism is not limited to actions that are necessarily and definitely intended to kill people. The mere threat of horrific mass violence—the possibility, for example, that the bombing of a construction site was actually a botched attempt to take lives, or that the bombing of inanimate structures is only a harbinger of worse violence to come—creates the dread inherent to terrorism.[17]

Civilians, inherently innocent, as targets and the surprise element of terroristic acts are at the core of real terrorism: there is a "dangerous choreography of chance and innocence that is a key component of terrorism"[18]

The most that can be agreed upon by all is that a terrorist is a criminal motivated by ideology. This is the main difference between a criminal and a terrorist.

> [U]nlike the ordinary criminal … the terrorist is not pursuing purely egocentric goals—he is not driven by the wish to line his own pocket or satisfy some personal need or grievance. The terrorist is fundamentally an altruist: he believes that he is serving a 'good' cause designed to achieve a greater good for a wider constituency—whether real or imagined—which the terrorist and his organization purport to represent.[19]

(This is in sharp contrast to FBI Director Mueller's statement that "Terrorism is terrorism, no matter what the motive."[20])

Terrorism as a legal term, as a federal crime, is less clearly defined and, like the lay term, is not used consistently. The label of "terrorism" has been used as a "well-worn brush of un-American and disloyal radicalism."[21]

---

[17] Clymer, *supra* note 6, at 177.

[18] *Id*. at 180.

[19] Bruce Hoffman, Inside Terrorism 43 (Columbia Univ. Press; 1998) (1998).

[20] David Roberts, *'Eco-Terrorism': Motive Matters*, Grist (May 9, 2006, 3:30 AM), http://perma.cc/T8VK-7PU7 (quoting Hal Bernton, *Is ecosabotage terrorism?*, The Seattle Times (May 7, 2006, 5:54 PM), http://perma.cc/5FX3-XUXA).

[21] Clymer, *supra* note 6, at 179.

This may be so because it is comforting to think of some acts as "other." "Terrorists" are another breed of person, not part of American society. Labeling persons terrorists doesn't leave the "unthinkable possibility that violence was endemically American after all."[22] For instance, in the time of the severe labor union violence of the first decade of the twentieth century, "[b]oth the large amount and the form of rhetoric produced at the time to separate union violence from the ideological construct of 'America' stands as testimony to Americans' intense need to imagine otherwise" (i.e., that violence was not endemic to America).[23] It is easy to forget that "[b]arbarism is not the inheritance of our prehistory. It is the companion that dogs our every step."[24]

Labeling persons terrorists is a convenient tool to meet political ends. "It is not surprising that part of 9/11's discursive fallout has been this invocation of terrorism to buttress political arguments and ratchet up their appeals for urgent action."[25] A representative of the People for the Ethical Treatment of Animals noted in her testimony before a Senate Committee that industry was "unashamedly distorting the truth in order to protect their interests" and were "trying to take advantage of fears of real terrorism to improperly insulate themselves against public criticism and protest regarding their practices."[26] Will Potter, an animal rights–sympathizing journalist, stated that the word terrorism "should not be batted around against the enemy of the hour, to push a partisan political agenda."[27]

An example of the fear mongering is the statement of McGregor W. Scott, a U.S. Attorney for the Eastern District of California describing animal rights activists: "Make no mistake about it, the individuals who commit these crimes are hardcore, dangerous, and well-funded criminals who weapons are firebombs, timed detonation devices, Molotov cocktails, and poison."[28]

In a society where "terrorism" has sharp and powerful connotations, it is irresponsible and, worse, harmful to overly broaden

---

[22] *Id*. at 183.

[23] *Id*.

[24] Alain Finkielkraut Quotes, Goodreads, https://perma.cc/5658-RTJ6 (last visited Oct. 23, 2014).

[25] *Id*. at 213.

[26] *Animal Rights: Activism vs. Criminality: Hearing Before the S. Comm. on the Judiciary U.S. Senate*, 108th Cong. 76 (2004) (statement of Lisa Lange, PETA activist).

[27] *Animal Enterprise Terrorism Act: Hearings on H.R. 4239, Before the H. Subcomm. on Crime, Terrorism, and Homeland Sec. of the H. Comm. on the Judiciary*, 109th Cong. 23 (2006) (statement of Will Potter, journalist).

[28] *Animal Rights: Activism vs. Criminality: Hearing Before the S. Comm. on the Judiciary U.S. Senate*, 108th Cong. 131-32 (2004) (statement of Scott W. McGregor, U.S. Att'y).

the definition of the word to include acts that do fall under the distinct disregard for life and liberty that true terrorism invokes. Yet this is precisely what has happened, particularly to environmental and animal rights activists.

IV. International Terrorism

a. Act of War or Common Crime?

In understanding how the law treats domestic terrorists, it is important to understand how it treats international terrorists. The law has treated international terrorists as something between prisoners of war (POWs) and regular criminals. The United States has created its own system for dealing with terrorism, essentially making its own quasi laws of war. This was partly due to terrorists not neatly fitting into either category (soldier or POW, or common criminal). The Third Geneva Convention defines a POW as someone who was a member of a fighting group that (1) was being commanded by a person responsible for his subordinates; (2) had a fixed distinctive sign recognizable at a distance; (3) carried arms openly; and (4) conducted their operations in accordance with the laws and customs of war.[29] In 2011, both al Qaeda and the Taliban were private armed groups and therefore did not meet the prerequisites for POW status.[30] The Geneva Conventions seem outdated and inapplicable: terrorist organizations like al Qaeda are not states, and conflicts with such entities are materially different from interstate wars and civil wars, and terrorist organizations enjoy no protection under the rules of war because they do not accept or observe these rules themselves.[31]

There are pragmatic reasons to not treat enemy combatants as criminals under federal law. The U.S. fears releasing dangerous men who will seek to harm the country and its citizens again. Often there is not enough evidence to convict, because an international war scene is not a traditional crime scene, and evidence can be hard or impossible to gather.[32]

---

[29] Geneva Convention Relative to the Treatment of Prisoners of War, art. 3, Aug. 12, 1949, 6 U.S.T. 3316, 75 U.N.T.S. 135.

[30] *See* W. Hays Parks, *Combatants*, *in* The Law of Counterterrorism 25-27 (Lynne K. Zusman, ed., American Bar Association; 2011).

[31] Derek Jinks, *Hamdan and the Law of War: The Applicability of the Geneva Conventions to the "Global War on Terrorism,"* draft chapter in The Rules of War: The Geneva Conventions in an Age of Terror (Oxford University Press; 2008).

[32] Dept. of Justice, et al., Final Report. Guantanamo Review Task Force, at 22 (2010).

> [T]he vast majority of the detainees were captured in active zones of combat in the Afghanistan or the Pakistani border regions. The focus at the time of their capture was the gathering of intelligence and their removal from the fight. They were not he subjects of formal criminal investigations, and evidence was neither gathered nor preserved with an eye toward prosecuting them.[33]

And finally, if all detained enemy combatants were deemed triable, habeas corpus would apply (not just to their prisoner status, but their actual imprisonment), and those whom the government did not have a strong enough case to convict would be let go.[34]

The strange and new shape of this modern warfare has resulted in a perceived need for an amorphous category of soldier-criminal, the "enemy combatant," who, at the government's discretion, may be detained indefinitely, tried in federal court, tried by military tribunal, or released, all the while being granted some constitutional rights and not others.

b. PATRIOT Act

In response to the attacks of 9/11, Congress passed the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act, or more simply known as the USA PATRIOT Act, in October of 2001.[35] The Act added 18 U.S.C. section 2331(5), which defines "domestic terrorism" as activities that

> (A) involve acts dangerous to human life that are a violation of the criminal laws of the United States or of any State;
> (B) appear to be intended—
> (i) to intimidate or coerce a civilian population;
> (ii) to influence the policy of a government by intimidation or coercion; or
> (iii) to affect the conduct of a government by mass destruction, assassination, or kidnapping; and
> (C) occur primarily within the territorial jurisdiction of the United States.[36]

[33] *Id*.

[34] *See* Hamdan v. Rumsfeld, 548 U.S. 557 (2006).

[35] Department of Justice, The USA PATRIOT Act, Preserving Life and Liberty. Available at: http://perma.cc/9A53-QFVX.

[36] 18 U.S.C. § 2331 (2012).

The PATRIOT Act demands three important elements: (1) danger to human life; (2) the intention to intimidate or coerce a civilian population or (3) to influence the policy of the government through intimidation. As the scope of meaning of "terrorism" in the domestic sphere has broadened since 2001, these elements have been mostly left behind. This raises the question of whether true terrorism is at the heart of the bills and acts that followed the PATRIOT Act.

V. Federal Sentencing Enhancements for Terrorism

a. Overview

The Federal Sentencing Guidelines allows for four victim-related offense-related adjustments: (1) hate crimes or vulnerable victims, (2) official victims, (3) restrained victims, and (4) terrorism.[37] In 1994, the United States Sentencing Guidelines section 3A1.4 was promulgated, providing for an upward sentencing adjustment for felonies that involved or were intended to promote an "international crime of terrorism."[38] Then, in 1995, Timothy McVeigh and Terry Nichols killed 168 and injured several hundred individuals in the Oklahoma City bombing,[39] after which the guidelines were amended, and "international crime of terrorism" became "federal crime of terrorism."[40]

In making the change, Congress noted that terrorism is an act in which "[i]nnocents are annihilated," in which "victims of terrorism typically have no relationship to the cause motivating the crime."[41]

Congress also, however, recognized that "terrorism" is a label with far-reaching connotations and that it should not be used indiscriminately.[42] The legislators sought to narrow the definition "in order to keep a sentencing judge from assigning a terrorist label to crimes that are truly not terroristic, and to adequately punish the terrorist

---

[37] Charles Doyle, Cong. Research Serv., RS22105, Sentencing Under the Sentencing Guidelines: An Abridged Terrorism Related Example 2. Available at: http://perma.cc/3ZFN-FAQA.

[38] Deborah F. Buckman, *Construction and Application of Federal Domestic Terrorism Sentencing Enhancement, U.S.S.G. § 3A1.4*, *in* 186 A.L.R. Fed. 147 (West 2012).

[39] *Terror Hits Home: The Oklahoma City Bombing,* Federal Bureau of Investigation, http://perma.cc/2MFY-9RWN (last visited September 29, 2014).

[40] *See* 18 U.S.C. § 3A1.4 (2012).

[41] H.R. Rep. No. 104-383, at 41-42 (1995). "Background and Need for the Legislation."

[42] *See id*. Rep. Henry Hyde, the House Judiciary Committee's Chairman, saw the goal of revamping the guideline as "deleting the overly broad definition of terrorism."

for his offense."[43] It accomplished this by enumerating certain crimes.[44] To qualify as a "federal crime of terrorism" for purposes of a sentencing enhancement, an offense must be listed in the above statute, and it must be an offense calculated to influence or affect the conduct of government by intimidation or coercion, or to retaliate against government conduct.[45]

b. Transcending National Boundaries

Although the amendment seemed to be aimed at Oklahoma City–type domestic terrorism events, the list of crimes that constitute federal crimes of terrorism still retained the heading "§ 2332b. Acts of terrorism transcending national boundaries."[46] The lead in to the list of crimes is "[w]hoever, involving conduct transcending national boundaries and in a circumstance described in subsection (b)--[list of crimes]."[47] This would make it seem that an international element is needed for a sentencing enhancement to apply, and indeed for many courts that was so.[48]

Eventually, however, courts began to work around that and finding that no international element was needed. In 2005, in *United States v. Harris*, the Fifth Circuit was the first to find that transcending national boundaries was not a necessary element of a "federal crime of terrorism" and that section 3A4.1 did not impute the rest of section 2332b.[49] *Harris* involved a man who set fire to a municipal building with a Molotov cocktail in order to destroy evidence against his father and allegedly in retaliation for having been recently arrested.[50] His act was found to be domestic terrorism.[51]

The Eleventh Circuit followed suit. In *United States v. Garey*, a man was making bomb threats involving government building in the hopes that he would be paid to discontinue the threats or bombing. The Court found that, because "international" had been replaced with "federal" in section 3A1.4 and because of the intent of the lawmakers at the time of amendment, no transcending of national boundaries is required.[52]

---

[43] *Id*. at 93.

[44] 18 U.S.C. § 2332b(a)(1) (2012).

[45] 18 U.S.C. § 2332b(g)(5)(B) (2012).

[46] 18 U.S.C. § 2332b (2012).

[47] 18 U.S.C. § 2332b(a)(1) (2012).

[48] United States v. Salim, 287 F. Supp. 2d 250 (S.D.N.Y. 2005) (finding insufficient evidence that defendant's attack on officer involved conduct transcending national boundaries).

[49] 434 F.3d 767, 773 (5th Cir. 2005).

[50] *Id*. at 774.

[51] *Id*.

[52] United States v. Garey, 546 F.3d 1359, 1361-62 (11th Cir. 2008).

c. Application Note 4

As noted in *Harris*, "[a]ll that section 3A1.4 requires for an upward adjustment is that one of the enumerated offenses was 'calculated to influence or affect the conduct of government by intimidation or coercion, or to retaliate against government conduct.'"[53] There is no mention of the same motive directed against civilians. However, in a case involving an arson to an abortion clinic, the Eleventh Circuit found that an upward adjustment in sentencing was warranted, not based on section 3A1.4, but on Application Note 4 of section 3A1.4, which states that the motive to "intimidate or coerce a civilian population" may warrant a sentencing enhancement.[54] Application Note 4 does not require an interpretation of section 3A1.4.[55]

As will be shown, the applicability of section 3A1.4 expanded even more after cases against environmental and animal rights activists began to come before courts, such that not even appeal to Application Note 4 would be needed.

VI. Animal Rights and Environmental Activism Cases

The 1990s saw an upsurge in animal rights and environmental "direct action." "Direct action" is a term used by activist groups to mean civil disobedience, sabotage, and more extreme measures. Some examples include blocking entrances to slaughterhouses or facilities in which animal experimentation takes place, gluing locks, vandalism, releasing or taking animals from labs or farms, or, at the extreme end, arson.

Starting in 1993, the government conducted a multi-agency, multi-jurisdictional investigation into a string of crimes carried out by animal rights and environmental activists association with the Animal Liberation Front (ALF) and the Earth Liberation Front (ELF).[56] The crimes included arsons and other property damage to dairy farms, horse slaughterhouses, the infamous Vail ski resort, car dealerships, an energy station, and ranger stations.[57] In 1997, after an activist turned government informant, a slew of activists were arrested and indicted. At a press conference announcing the indictment, FBI Director Robert Mueller, standing alongside Attorney General Alberto Gonzales, cited the pursuit of environment- and animal rights–related criminal acts and

[53] 434 F.3d at 773. *See* 18 U.S.C. § 2332b(g)(5)(A) (2012).

[54] United States v. Jordi, 418 F.3d 1212, 1214-15 (11th Cir. 2005).

[55] *Id*. at 1216.

[56] Leighton Woodhouse, *How the Pursuit of Animal Liberation Activists Became Among the FBI's "Highest Domestic Terrorism Priorities,"* Huffington Post (Oct. 24, 2012), http://perma.cc/M4AF-QLM7 (last visited Oct. 26, 2012).

[57] *Id*.

actors as among the agency's "highest domestic terrorism priorities."[58] He failed to mention, however, that, of the 20 criminal acts investigated under Operation Backfire, not one targeted humans or caused injury to a single person and that, in fact, great effort was taken to avoid any injuries.[59]

Unfortunately for the defendants, 9/11 took place during the 10 years that elapsed from their arrests to sentencing, which was enough time for "terrorism" as a law enforcement notion to take even stronger hold and for the terrorism sentencing enhancement guidelines to be found to cover purely domestic acts of "terrorism."

a. Personal Property

The acts of the defendants involved mostly private property, and during the group's 2007 terrorism sentencing enhancement trial, the government seemed hard-pressed to make the requisite connection between their violent acts of arson and vandalism and the government, but it certainly tried. For instance, in the prosecution's sentencing memorandum, the prosecution characterized defendant Daniel McGowan's participation in the 1999 World Trade Organization protests as an attempt to "disrupt meetings attended by President Clinton and other world leaders."[60] Regarding one of the group member's arson of a privately owned horse corral, it pointed out that the ELF's communiqué on the event referenced an Associated Press article linking the Bureau of Land Management's wild horse program to private slaughterhouses.[61] From this they deduced that the arson of the horse corral was "calculated to retaliate against the government program and to intimidate and coerce the government into stopping."[62] It concluded that because the private facility bought horses from the government, its destruction was therefore a terrorist act.

When talking about the destruction of a transmission tower, the prosecution wrote, "[u]nquestionably, this arson was in retaliation for the conduct of both government and private business."[63] It made the same connection for the crimes involving arsons on timber companies' land because "government timber contracts throughout Oregon were a matter of intense dispute"; the ELF "carefully selected three businesses to retaliate against their private and government-related conduct."[64]

---

[58] *Id*.

[59] Government's Sentencing Memorandum, United States v. Dibee (No. 06-60125-AA) 2007 WL 3000996.

[60] *Id*.

[61] *Id*.

[62] *Id*.

[63] *Id*.

[64] *Id*.

Finally, it requested the court "look at the totality of the circumstances surrounding each arson to determine whether each offense was calculated to influence, affect, or retaliate against government conduct."[65] And in the event the court did not see this government connection, the prosecution asked for an Application Note 4 upward departure, which can be warranted when "the terrorist motive was to intimidate or coerce a civilian population, rather than to influence or affect the conduct of government . . . or to retaliate against government conduct."[66] Presumably, the "civilian population" would be the companies whose property had been damaged.

In an opinion meant to provide the court with guidance as to how to apply the law to each defendant during their upcoming sentencing hearings, the court found that Application Note 4 could not be used against any of the defendants because their crimes had taken place before the note took effect.[67] This finding seemed like it would preclude the Court from applying § 3A1.4 to those defendants who only targeted private property, but they soon learned this would not be the case.

In defendant Tankersley's hearing, it became clear that that reference to Application 4 would no longer be necessary and that private property, not just government property, could warrant an upward departure under the sentencing guidelines. The Ninth Circuit upheld the district court's finding that, in the interest of avoiding sentencing disparities, a 12-level upward departure was warranted for the defendant who had been involved in purely private-property-related crimes. The court held that "a sentence outside the applicable advisory guidelines range is not per se unreasonable when it is based on the district court's efforts to achieve sentencing parity between co-defendants who engaged in similar conduct, where some defendants were properly subject to a sentencing enhancement, and others were not."[68] Therefore, "a sentence is reasonable where the district court departs upward twelve levels in order to achieve sentencing parity between defendants, where some co-defendants targeted government property and were properly subject to the terrorism enhancement, and others targeted only private property and were not."[69]

---

[65] United States v. Thurston, CR 06-60069-01-AA, 2007 WL 1500176 (D. Or. May 21, 2007) *aff'd sub nom* United States v. Tubbs, 290 F. App'x 66 (9th Cir. 2008).

[66] *Id*.

[67] *Id.*

[68] United States v. Tankersley, 537 F.3d 1100, 1116 (9th Cir. 2008).

[69] United States v. Paul, 290 F. App'x 64, 65 n.1 (9th Cir. 2008) (unpublished) (citing Tankersley, 537 F.3d 1100 (9th Cir.2008)).

VII. Animal Enterprise Terrorism Act

a. AEPA

In 1992, the Animal Enterprise Protection Act (AEPA) was passed, which made it a federal crime to cause the "physical disruption to the functioning of an animal enterprise by intentionally stealing, damaging, or causing the loss[] of any property (including animals or records) used by the animal enterprise."[70] The maximum penalty was 1 year in prison, 10 years if the defendant caused great bodily injury, and life imprisonment if the defendant caused death.[71]

The first cases to be brought under the AEPA were against two men who released over 8,000 mink from a fur enterprise.[72] Each man was given two years in prison plus the requirement to pay back a combined $614,000 in restitution.[73]

Despite these sentences, and because of the uptick in animal rights activism, in 2002—shepherded by the National Association for Biomedical Research, an industry group for pharmaceutical companies—the AEPA was broadened. Congress eliminated the requirement that economic damage exceed $10,000, thereby making even minimal economic damage fall within the statute, and it tripled the maximum sentence.[74]

Under the amended 2004 AEPA, six activists and a corporation who maintained a website in support of the Stop Huntington Animal Cruelty (SHAC) were indicted.[75] The website they maintained contained the home addresses of Huntington Life Sciences employees and their family members, as well as communiqués submitted by activists who had engaged in "direct action."[76] They were charged with conspiracy to violate the AEPA,[77] even though none of the government's witnesses could identify the SHAC 7 as activists who had engaged in criminal acts against them.[78] U.S. attorney Glenn J. Moramarco spoke candidly about the government's motivations, acknowledging that "[t]his case was never fought on the basis of what actually happened, by and large.... [t]his case was fought on the battleground of [s]hould [they] be held responsible

[70] 18 U.S.C. § 43 (1996) (amended 2002).

[71] 18 U.S.C. § 43(1996) (amended 2002).

[72] Jared S. Goodman, *Shielding Corporate Interests From Public Dissent: An Examination of the Undesirability and Unconstitutionality of "Eco-Terrorism" Legislation*, 16 J.L. & Pol'y 823, 837.

[73] *Id*. at 837-38.

[74] *Id*. at 838-39.

[75] *Id*. at 841.

[76] *Id*.

[77] *Id*.

[78] *Id*. at 842.

for what other people are doing.'"[79] Each member was sentenced to between three and six years in prison. Although none received terrorism sentencing enhancements (presumably because having a website is not listed as a federal crime of terrorism), Andrew Stepanian, one of the defendants, was sent to a Communications Management Unit, a secretive "Guantanamo of the North" facility.[80]

b. AETA

In 2004, lawmakers and their corporate sponsors sought again to strengthen the Act because, they argued, it did not the address the increased use of actions that cause economic harm, nor actions that are aimed at third-party companies that do business with animal enterprises.[81] The proposed amendments sought to criminalize causing economic loss, even in the absence of any physical destruction.[82] In the hearing, William Green, General Counsel for the Chiron Corporation, testified that the Act did not target certain acts like those that "threaten and cause physical, economic, and emotional harm to these third-party companies."[83] Green testified that "extremists . . . have shifted tactics from physical disruption to economic disruption" and that the Act doesn't aim at those acts that "were not intended to cause physical disruption of an animal enterprise and did not damage property used by an animal enterprise."[84] Another speaker called this type of activism "corporate terrorism."[85]

One way of gathering support to strengthen the Act this way was to label acts of animal rights activism "terrorism." Calling such acts "terrorism" would allow for sentencing enhancements and prejudice the legal community and the public against activists. The word "terrorism" was bandied about by nearly all of the corporate sponsors of the bill, as well as by Orrin Hatch. Indeed, the original name of the hearing had

[79] *SHAC 7 - Kevin Kjonaas Released*, Break all Chains Blog (Aug. 04, 2011), http://perma.cc/24HG-H5LZ.

[80] *Animal Rights Activist Jailed at Secretive Prison Gives First Account of Life Inside a "CMU,"* Democracy Now!, http://perma.cc/J3AJ-AXT6 (last visited December 7, 2012).

[81] *Animal Rights: Activism vs. Criminality: Hearing Before the Comm. on the Judiciary,* 108th Cong. 76 (2004) [hereinafter *Hearing*] (statement of William Green, Sr. Vice President, Chiron Corporation).

[82] Goodman, *supra* note 72, at 844.

[83] *Hearing, supra* note 81, at 39 (statement of William Green, Sr. Vice President, Chiron Corporation).

[84] *Id*.

[85] *Id*. at 11 (statement of Jonathon Blum, Sr. Vice President of Public Affairs, YUM! Brands).

been "The Threat of Animal and Eco-Terrorism."[86] (The hearing name was changed to "Animal Rights: Activism vs. Criminality."[87])

One of the few voices of dissent at the hearing was that of Senator Patrick Leahy. He noted that "most Americans would not consider the harassment of animal testing facilities to be 'terrorism,' any more than they would consider anti-globalization protestors or anti-war protesters or women's health activists to be terrorists. This Administration aggressively stamps everything with a 'terrorism' label."[88] He said that "even this Administration had not up until now . . . thought the Animal Enterprise Protection Act a major component of its 'war on terrorism' . . . . Nor has anyone ever thought to include it in the ever-expanding laundry list of predicate offenses that make up the statutory definition of 'federal crime of terrorism.'"[89] Senator Leahy ended his testimony by saying, "Today, the Administration may be adding physical disruption of a commercial enterprise that uses animals for testing to its laundry list of terrorist acts. We will see."

Indeed we did see. In 2006, Congress passed the Animal Enterprise Terrorism Act (AETA).[90] Despite the seeming ease with which the FBI was already investigating and prosecuting animal activists (Lewis stated that 34 FBI offices had over 190 pending investigations into ALF and ELF activities[91]), the AEPA was broadened, and "interference" with an animal enterprise was now a terrorist act.[92] In the 2006 hearing held on the bill to create the AETA, the cry of "Terrorist" was even more overt than it had been in 2004. Citing now the placement of "law-abiding citizens in reasonable fear of death of, or seriously bodily injury to, themselves or loved ones," more criminal prosecutors and their corporate sponsors stepped forward to tell tales of "terrorism."[93] These acts included playing videos in front of vivisectionists' homes, ringing doorbells and running away, Internet stalking, sending black faxes (which results in the receiving fax machine running out of ink), vandalism, property damage, trespass, and, at the extreme end, arson of unoccupied areas.[94]

---

[86] *Id*. at 67 (statement of Sen. Leahy, Mem., S. Comm. of Judiciary).

[87] *Id*.

[88] *Id*.

[89] *Id*.

[90] 18 U.S.C. § 43 (2012).

[91] *Hearing*, *supra* note 81, at 3 (statement of John M. Lewis, Asst. Dir., FBI).

[92] § 43(a)(1)

[93] *Animal Enterprise Terrorism Act: Hearing on H.R. 4239 Before the H. Subcomm. on Crime, Terrorism, and Homeland Security of the H. Comm. on the Judiciary*, 109th Cong. 9 (2006) (statement of Brent J. McIntosh, Deputy Assistant Att'y Gen. of the United States)

[94] *Animal Enterprise Terrorism Act: Hearing on H.R. 4239, Before the H. Subcomm. on Crime, Terrorism, and Homeland Security of the H. Comm. on the Judiciary*, 109th Cong. 95-98 (2006).

With AETA's passage, it became an act of terrorism to travel in interstate commerce for the purpose of "damaging or interfering with the operations of an animal enterprise."[95] It is also a terroristic crime to damage or "cause the loss of any real or personal property" use by an animal enterprise or by any "person or entity having a connection to, relationship with, or transactions with an animal enterprise."[96] Attempt and conspiracy to commit these crimes are treated the same as the completed crime.[97]

c. Departure from the PATRIOT Act

It is important to note that the AETA's definition and the PATRIOT Act's definition of terrorism differ in significant ways. For one, the AETA includes in its definition of terrorism acts involving intangible private property (i.e., economic damage), acts that can be, and usually are, carried out without violence.[98]

Additionally, the AETA finds conduct to be terrorism without reference to political motive;[99] you must only possess the "purpose to interfere." The intent requirement so important in the PATRIOT Act—that one intend to coerce or influence a government or civilian population—is completely missing from the AETA definition. Therefore, letting lose 20 mink from a mink farm with the wish only to free the animals, not to change the mind of the mink farmer, is terrorism under the AETA.

Indeed, a puppy mill brought an AETA action (even though it does not provide a private right of action) against county officials for taking their dogs away.[100] Although this absurd complaint was thrown out, it would seem that technically such an action could be brought, because there is no requirement that the "interference" or economic or property damage be illegal activity. Importantly, that also means there is no whistleblower exception.

"Use of the law against an act that implicates neither of the two most common components of a terrorism definition—violence and political purpose—expand[s] the legal meaning of terrorism dramatically."[101] The terrorism label "adheres equally to vandals in

[95] § 43(a)(1).

[96] § 43(a)(2)(A).

[97] § 43(a)(2)(C).

[98] *See* 18 U.S.C. § 2331; § 43(d)(3).

[99] 18 U.S.C. § 43.

[100] *Moore v. Garner*, No. C.A. 6:04CV79, 2005 WL 1022088, at *1 (E.D. Tex. Jan. 1, 2005).

[101] Dane E. Johnson, Comment, *Cages, Clinics, and Consequences: The Chilling Problems of Controlling Special-Interest Extremism*, 86 Or. L. Rev. 249, 262 (2007).

empty research labs and hijackers in fully loaded passenger planes."[102] Anyone who, for whatever reason, causes economic damage to an animal enterprise is guilty of terrorism.

There are many types of legal direct action that can interfere with commercial enterprises. Does this definition include boycotts (which, of course, are legal)? During the early twentieth century, labor activists worked slowly, misdirected shipments or bills of lading, exposed company secrets and owners' bad-faith practices, among other things.[103] Could such action, in a law similarly drafted to the AETA, meant to address labor "terrorists" make such actions "terrorism" because they interfere with commercial enterprises? Under a law like the AETA, the Boston Tea Party would be certainly be labeled terrorism if the tea spilled had been owned by an animal enterprise.

VIII. Conclusion

a. True Terrorism

The crimes of both international and domestic terrorism in the PATRIOT Act involve "violent acts or acts dangerous to human life" that appear intended to intimidate or coerce a civilian population, influence the policy of a government, or affect the conduct of a destroyed property, mostly private property, and although such "direct action" never aimed to harm humans or animals, the fears and rhetoric around the attack on 9/11 allowed for them to be punished as domestic terrorists.

The expansion of the legal meaning of "domestic terrorism" is dangerous. Defining a violent outburst against property as terrorism raises "fundamental questions concerning the relationship between violence enacted against structures, against bodies, against corporations, and against the American government."[104] In terms of the concept of terrorism, there should be an important distinction between harm to inanimate objects and harm to people (or animals). "Whereas sabotage is often believed to be aimed at the crippling of machinery, terrorism is thought to be random, indiscriminate, and unpredictable violence against people."[105]

As part of the record looking into the passage of the AETA was a list of the top 20 illegal actions taken by animal and environmental activists in the United States, submitted by the Foundation for Biomedical Research—a group who represents the very antithesis of the animal rights movement and is therefore fully motivated to pick the

[102] *Id*.
[103] Clymer, *supra* note 6, at 187.
[104] *Id*. at 178.
[105] *Id*. at 176.

worst crimes committed for such a list.[106] Not one involved an injury to any person.[107] Number one in "severity" on their list was ELF's arson of a new (and empty) housing development near San Diego, which resulted in $50 million worth of damages.[108]

So why has the intent behind the PATRIOT Act and other terrorism legislation been ignored, and why has there been such an eager appeal to label some criminal (and noncriminal) acts against private parties where no one is hurt "terrorism"? Because the difference between standard criminal behavior and the "terrorism" (i.e., direct action) carried out by animal rights and environmental groups is that the latter is adverse to corporate interests.[109]

b. Criminality

In his testimony before the House committee regarding the AETA, Representative Delahunt notes that he didn't see "a single case that would not fall within the purview of multiple, multiple state statutes, as well as a variety of Federal existing statutes . . . ."[110] He named arson, assault, and stalking as crimes that the animal rights activists could be convicted under. He also noted that instead of creating a conspiracy statute, the RICO Act could be used to prosecute conspiracies.[111] Representative Scott of Virginia similarly noted that every offense the AETA makes illegal is already illegal under existing law.[112]

Unlike in the "War on Terror," there is no ambiguity between an act of war versus a criminal act, and there is no question of whether there are laws that exist under which such actors may be prosecuted. The scenes of the crimes are regular crime scenes in which evidence may be obtained as it usually is in criminal contexts. There is a large difference between evidence gathered when a suspect is "[c]aptured in a zone of active combat in a foreign theater of war"[113] and when it is gathered after a domestic crime. All "domestic terrorists" commit acts proscribed by state and, often, federal law. Their actions are clearly prohibited, and the laws they break are clearly enforceable.

---

[106] *The Animal Enterprise Terrorism Act: Hearing on H.R. 4239, Before the H. Subcomm. on Crime, Terrorism, and Homeland Security of the H. Comm. on the Judiciary*, 109th Cong. 95-98 (2006).

[107] *Id*.

[108] *Id*. at 95.

[109] Goodman, *supra* note 72, at 833-34

[110] *The Animal Enterprise Terrorism Act: Hearing on H.R. 4239, Before the H. Subcomm. on Crime, Terrorism, and Homeland Security of the H. Comm. on the Judiciary*, 109th Cong. 27 (2006) (statement of Rep. William D. Delahunt, Rep., Mass. 10th Cong. Dist.).

[111] *Id*. at 28.

[112] *Id*. at 34. (statement of Rep. James A. Scott, Rep., Ga. 8th Cong. Dist.).

[113] Hamdi v. Rumsfeld, 542 U.S. 507, 514 (2004).

Therefore, there is no need to call US actors "terrorists" outside the context of al Qaeda– or Taliban-style international terrorist actions because we have a functioning criminal justice system to take care of it. The motive behind criminal actions shouldn't matter as much as the acts themselves and whether they were part of a domestic, treasonous "war" effect against the US government as a whole. Because it is such a changing and unclear term, and because of its incendiary force, the "terrorism" label should only be used when other designations don't fit. Economic sabotage shouldn't be labeled "terrorism," and destruction of private property should likewise fall outside of the "terrorism" label.

Tradition as Precedent: Articulating Animal Law Reform in China

Andrew Kerr and Yu Dan*

I. Introduction

In April 2011, An Lidong solicited the help of some two hundred fellow "netizen" animal activists to intercept a shipment of dogs to be slaughtered as meat for Beijing-area restaurants. The campaigners endured a 15-hour standoff and eventually negotiated the release of the dogs for the sizable sum of 115,000RMB (or approximately 19,000USD), paid for by a local animal hospital and animal welfare charity.[1] The story quickly went viral on Chinese micro blogs and media outlets, inspiring comments from both those that commended the activists as well as those that criticized them as vigilantes who not only acted unlawfully, but also in opposition to a "tradition" of dog consumption in some parts of China. This example is representative of how competing notions of China intersect with human-animal interaction, as well as a signal of an increased consciousness of animal welfare issues in this country. A 2013 survey performed by Nanjing Agricultural University found that only one-third of Chinese people were even familiar with the phrase "animal welfare."[2] However, Chinese millennials came of age under very different economic circumstances as compared to their parents, and are more likely to view animals as companions deserving of

* Andrew Jensen Kerr is a Fellow at Georgetown University Law Center, and was previously a Senior Lecturer at the Peking University School of Transnational Law. He thanks Norman Pai Ho and David Favre for their helpful comments on an earlier draft of this article, and Ryan Conklin and the staff of the *Journal of Animal and Natural Resource Law* for their diligent editorial work. He also wishes zhu haoyun to Yu Dan and the rest of the PKU-STL class of 2015 as they embark on their newest adventures.

Yu Dan (J.D. & J.M. candidate, Peking University School of Transnational Law) thanks Prof. Kerr for encouraging her interests in animal law scholarship, and providing invaluable guidance during the research and writing process of this article.

[1] *Dog Rescue Sparks Pet Law Debate,* China Daily (Apr. 19, 2011), http://perma.cc/4P24-3HQ9.

[2] Yan Huoqi, Li Yibo, You Xiaoling, Zhang Min, Liu Zhiping & Ge Ying, *Zhongguo Gongzhong dui "Dongwu Fuli" Shehui Taidu de Diaocha Yanjiu [A Survey on China's Public Attitudes toward "Animal Welfare"],* 3 Nanjing Nongye Daxue Xuebao (Shehui Kexueban) [J. of Nanjing Agricultural Univ. (Social Sciences Ed.)] 104 (2013).

compassion.[3] Indeed, animal law in China is very much a microcosm of how we might understand the relevance of traditional or foreign values to the lawmaking process. This article first brings clarity to the current debate over animal rights in China, while identifying how China might be able to actualize an ecological basis for animal protection coherent with its evolving identity as a nation. The authors then comment on the relevance of tradition and identity to dog consumption in China.

II. Ethical Context

There is precedent from classical Chinese texts of a reverence for animals. The three great ethical traditions of Confucianism, Daoism and Buddhism each share an ecological motivation.[4] Professor Donald N. Blakely identifies a core Confucian ethic, which prescribes a "harmonious" and sustainable use of animals.[5] Still, in Confucius' world, human interests necessarily trumped animal interests. Hong Kong University professor Fan Ruiping portrays early China as a dramaturgical place where precision in social greeting was inherent to daily life.[6] To welcome a dear guest without meat was understood as gauche, and maybe even a violation of the moral universe. But, Qiu Renzhong contests, Professor Fan's assumption that the devotional form of benevolent love *ren* (仁) is shared exclusively among humans.[7] In addition, he cites to Mencius (the "second most famous Confucian"), who noted the hypocrisy of only eating animals that one has never seen alive.[8] This lack of moral equivalency compares to our present system of an industrial agriculture that is cloistered from consumers.

It can be debated how relevant prescriptions from a pre-industrial society are to our contemporary ways of living. A vocabulary of harmony and devotion seems cliché or remote to modern audiences. At least one scholar has pointed to the tapestry of *Jakata* tales involving the young Buddha as an index of a tradition of animal rights in the region.[9] Lawyers are often guilty of a "presentist" use of precedent. Indeed,

---

[3] Peter J. Li & Michael Charles Tobias, *Animal Rights in China,* Forbes (Nov. 2, 2012), https://perma.cc/VLF2-9TXN?type=source.

[4] *See, e.g., Louis Komjathy, Animals and Daoism,* Encyclopaedia Britannica Advocacy for Animals (Sept. 26, 2011), http://perma.cc/AG8K-D9EM.

[5] Donald N. Blakely, *Listening to the Animals: The Confucian View of Animal Welfare, 30* J. of Chinese Phil. 137, 140 (2003).

[6] Fan Ruiping, *How Should We Treat Animals: A Confucian Reflection, 9* Dao 79, 80 (2010).

[7] Qiu Renzong, *Dongwu Quanli Heyi Keneng? [Why is Animal Rights Possible?],* Shanghai Jiaotong U. (Oct.7, 2012), http://perma.cc/BT6Y-UGHL.

[8] *Id.*

[9] *See* Lisa Kemmerer, *Buddhist Ethics and Nonhuman Animals*, 1 Peace Stud. J. (2008).

there seems to be historio-graphical license in citing to ancient texts (stories about animals) divorced from their social and literary contexts. But perhaps this practice is still intellectually sound if the story is only an example of a concept, and not an illustration of how people from that time period presumptively thought.

For example, legal historian Norman Pai Ho argues that certain core concepts of Neo-Confucian Zhu Xi's philosophy can provide a vocabulary for "couching" ideas related to the rule of law.[10] He posits that Zhu Xi's metaphysic of *li* (理) or "principle" could serve as a natural law limitation on abuse of official power.[11] There is evidence of these Confucian ideas returning to vogue. Professor Ho cites the example of a June 2010 case at the Beijing Dongcheng District Court in which the judge cited to the Confucian text *Xiaojing* (孝经), or *Classic of Filial Piety*, to resolve a real estate dispute between a mother and daughter.[12] This expanded compass of what may be deemed precedent for animal legal reform might also be recognized to include institutions. As far back as the Xizhou dynasty the *yu* (虞) authority managed mountains, forests and their animals.[13] One example of a restraint on animal killing is the traditional "banning time" on hunting in the pre-Qin period.[14] Another continued practice is the eponymous "release of the animals" in which Buddhist temples release animals into the wild.[15]

As described, there is a Chinese tradition for "softer" forms of humanism. Confucius wrote in favor of a proto-sustainability ethic informed by a holistic view of the role of human beings in nature. But to most Westerners this concept of a "soft" humanist or utilitarian position is so intuitive as to register as platitudinous.[16] Don't most humans avoid

---

[10] Norman P. Ho, *The Legal Philosophy of Zhu Xi (1130-1200) and Neo-Confucianism's Possible Contributions to Modern Chinese Legal Reform, 3* Tsinghua China L. Rev. 167, 211 (2011).

[11] *Id.*

[12] *Id.* at 189-70.

[13] Cui Hong, Wang Liang, *Zhongguo Gudai Yesheng Dongwu Baohu de Falv Zhidu* [*Study of Laws and Rules of Wild Animals Protecting in Ancient China],* Zhongguo Renkou Ziyuan yu Huanjing [China population, Resources & Env't] (2001).

[14] Li Chunyan, *Xianqin Rujia Dongwu Baohu Lunli Sixiang Chuyi [The Confucian Idea of Animal Protection in the Pre-Qin Period], 27* Beijing Keji Daxue Xuebao [J. of Beijing Univ. of Science & Tech.] 4, 86-87 (2011).

[15] *See e.g., Henry Shiu & Leah Stokes, Buddhist Animal Release Practices: Historic, Environmental, Public Health and Economic Concerns, 9* Contemporary Buddhism (2008), *available at* http://perma.cc/A2VL-8NZN; *see also* Lu Buwei's Commentaries of History for a contemporary look at the Warring States Period (475-221 BCE) and perhaps the first ever appeal in Chinese thought for a sustainable use of fisheries.

[16] *See* Richard Posner & Peter Singer, *Animal Rights*, Slate (June 12, 2001), http://perma.cc/5K26-SBMS (debating who is the "softie" when it comes to animals and ethics).

animal killing in their immediate life, but also use or consume animals when "necessary" to increase their own hedonic welfare? Western audiences recognize ethical models to be frameworks that require certain kinds of moral choices even though they compete with our present happiness. Both Peter Singer's "hard" utilitarian conception of an animal ethic and Tom Regan's autonomy-centric approach rely on an abstracted "moral individualism" that obliges humans to respect legal protections for animals that are correlative to their capacities for sentience or selfhood. But this ethical equation of the low-functioning human infant and the high-functioning animal might also feel unnatural and reductive to individuals from other cultures. From my[17] own experience teaching Animal Law in China, arguments from "marginal cases" and deontological positions are less resonant with students. Richard Nesbitt's *Geography of Thought* is a popular expression of this Chinese hesitance to "strong ontologies" and preference instead for a more tactile pragmatism.[18] For the Confucian sensitivity is the touchstone; sage-hood is to be achieved by a spiritual cultivation of one's secular life.[19] But this doesn't seem like an easily operative solution. If all humans were sages then human society would be lacking many other problems!

III. Vanguard Voices

The adoption of animal welfare law in China probably requires the development of indigenous forms of animal legal theory. Yang Tongjin's landmark 1993 article "The Animal Rights Theory and The Eco-Centric Arguments" introduced the history of Western animal and environmental ethics to a Chinese audience.[20] Humane Society China specialist Peter Li posited that the distant, academic standpoint of Yang Tongjin was meant to shield him from political criticism.[21] What is interesting is that Qiu Renzhong also separates animal rights as a kind of "cognition" from the activist *doing* of animal liberation as a practical movement.[22]

---

[17] Andrew taught Animal Law at the Peking University School of Transnational Law from 2012-14. *See* Andrew Jensen Kerr, *Pedagogy in Translation: Teaching Animal Law in China,* 1 Asian J. of Legal Ed. (2014).

[18] Richard E. Nesbitt, The Geography of Thought: How Asians and Westerners Think Differently…and Why (2004).

[19] *See e.g.,* Yao Xinzhong, An Introduction to Confucianism at 216 (2000).

[20] Yang Tongjin, *Dongwu Zhongxinlun yu Shengwu Zhongxinlun* [*The Animal Rights Theory and the Eco-centric Arguments*] *9* Ziran Bianzheng Fa Yanjiu [Studies in Dialectics of Nature], 55 (1993).

[21] Peter J. Li, *The Evolving Animal Rights and Welfare Debate in China: Political and Social Impact Analysis,* Animals, Ethics and Trade: The Challenge of Animal Sentience 111, 111 (Jacky Turner and Joyce D'Silva eds. 2006).

[22] Qiu, *supra* note 7.

The most strident opponent of an animal welfare movement in China is Zhao Nanyuan, who recently retired from top-flight Tsinghua University. His arguments are colored by a loathing of animal rights ideals. An especially peculiar argument for animals' lack of a pain sensation is his citation to the (anecdotal/imaginary) fact that foxes—unlike humans—will bite off their own feet when caught in a trap.[23] One reaction here is that Professor Zhao should watch James Franco's tour de force performance in *127 Hours*. Though he does point to the confounding koan of how humans can possibly *feel* what it is like to be an individual of another species.[24] But even if this description of fox v. human behavior is somehow accurate, it would probably better cohere to Gary Francione's point that sentience exist for a very important and immediate reason—because animals require it for their survival, and that they *want* to survive because they share a sense of extended consciousness.[25]

Zhao Nanyuan portrays the animal welfare movement as a crude form of Western moral imperialism.[26] A lexicon of "evil" and "terrorism" permeates his writing; he equates animal rights with an "anti-human" ethic. Although this venom with which Professor Zhao writes might feel less academic compared to Western authors, this same zero-sum calculus of animals v. humans is present in American animal law jurisprudence. For example, Professor Cupp employs a Hohfeldian rights analytic to suggest that the necessary corollary of creating animal rights is to decrease important human freedoms, including an ethereal—but very real—attack on human "dignity."[27]

IV. Reform and Continuity

The recent push for a national anti-cruelty law represents a qualitative break with previous forms of animal law in China. Animal law in China has been mostly limited to administrative regulations such as the 1997 Forestry Ministry's specifications on bear bile farming or the 1980 Department of Agriculture's dog regulations. The 1988 Wildlife Protection Law was notable for its reference to penalties for violators. However, Peter Li has argued that a national obsession with economic growth

[23] Zhao Nanyuan, *Dongwu Quanlilun de Yaohai shi Fan Renlei* [*The Essence of the Animal Rights Arguments is Anti-humanity*], http://perma.cc/WQ4C-A4Z9 (last visited Sept. 10, 2014).

[24] Thomas Nagel, *What Is It Like to Be a Bat?, 83* The Phil. Rev. (1974).

[25] Gary L. Francione, *Animals—Property or Persons?*, *in* Animal Rights: Current Debates and New Directions 108, 127 (Cass R. Sunstein & Martha C. Nussbaum eds., 2004) [hereinafter Animal Rights].

[26] *See also,* The Cove (Participant Media 2009).

[27] *See* Richard L. Cupp, *Moving Beyond Animal Rights: A Legal/Contractualist Critique*, 46 San Diego L. Rev. 27 (2009).

has limited the effectiveness of this legislation.[28] This reference to the economic constraints on the enforcement of animal laws is not unusual. Qiao Xinsheng conditions the implementation of animal welfare laws in more rural, low-income areas of China on the financial security of these communities.[29]

The first iteration of this anti-cruelty legislation was drafted by the Chinese Academy of Social Sciences (CASS) in 2009 and met considerable controversy. It was characterized by its broad ambition and professed aim to safeguard "ecological balance and social order."[30] For example, "animal" was defined here to include things like jellyfish, and the precautionary principle was built into Article 12 governing habitat usage. These data points speak to the ecological compass of those involved with crafting this document.

The CASS enlisted in 2010 the British Royal Society for the Prevention of Cruelty to Animals to help achieve some compromise on animal welfare. After this conference the draft legislation's title was revised from an animal "protection" law to an "anti-cruelty" law, and its number of provisions was reduced to what Professor Chang Jiwen describes as "the bottom limit of animal protection legislation."[31] International observers have echoed this sentiment that the draft legislation had been gutted in its conceptual re-orientation as a basic safeguard against overt forms of cruelty.[32] But the fact that this revised draft reflected a broad swath of stakeholders should be encouraging. Notable was the participation of National People's Congress (NPC) representative and journalist Jing Yidan in this revision.[33] Still, this anti-cruelty bill has yet to be brought to the NPC.

---

[28] Peter J. Li, *Enforcing Wildlife Protection in China: The Legislative and Political Solutions,* 21 China Info. 71, 87-88 (2007).

[29] Qiao Xinsheng, *Dongwu Fuli Lifa Buneng Tuoli Zhongguo Guoqing [Animal Welfare Legislation Cannot be Divorced from China's National Conditions*] Renmen de Richang Shēnghu [People's Daily] (May 23, 2004), http://perma.cc/WQ4C-A4Z9.

[30] Chang Jiwen, *Animal Protection Law of the People's Republic of China (Draft)*, (Sept.19, 2009) (Paul Littlefair trans., Royal Society for the Prevention of Cruelty to Animals, Dec. 2009), *available at* http://perma.cc/63HQ-V7W6.

[31] Li Jia & Lv Jiazuo, *Fan Nuedai Dongwu Fa Tuidao Dixian [The Draft of China's Anti-cruelty Law has Reached its Limits],* Qingnian Zhoumo [Youth Weekend] (Apr. 6, 2010, 2:25 PM), http://perma.cc/YQ4V-JQXH.

[32] *See e.g.,* Amanda Whitfort, *Evaluating China's Draft Animal Protection Law*, 34 Sydney L. Rev. 347, 370 (2012) (pointing to its failure to impose a duty of care on animal owners and concomitant inability to deter negligent care or punish owner ignorance).

[33] *See generally, Jing Yidan Lianghui Tichu Zhiding Fan Nuedai Dongwufa Yian [Jing Yidan Suggested Bringing of "China Animal Anti-Cruelty Law" Bill During the Second Session*] Tengxun Xīnwen [Tencent News], (Mar. 06, 2011, 3:15 PM), http://perma.cc/Y95Z-CJYL.

It is worth questioning if China must necessarily pass something like a comprehensive, stand-alone cruelty bill to adequately deal with animal protection. There is growing evidence that China has been able to affect individual conduct in a more ad hoc, targeted manner. This past spring a new interpretation of the Chinese Criminal Law sections 312 and 341 made international headlines for its heightened penalties for those who knowingly kill or *purchase* endangered animals.[34] Per section 341 if one now simply orders pangolin at a Chinese restaurant they could find themselves with a 10-year prison sentence. Of course there are the corollary questions (as in any world jurisdiction) of whether these sorts of crimes will be enforced and at the full extent of a judge's sentencing authority. But this is at least an index of the environmental calculus that informs the recent push for an animal protection law. With the publication of these new interpretations was a press release by Li Shouwei, the Deputy Head of the Criminal Law Division under the NPC Standing Committee's Commission for Legislative Affairs.[35] He directly referenced the high importance the 18th National Congress of the Chinese Communist Party places on an "ecological civilization." It remains unclear whether lawmakers in China will be able to use this ecological foundation to flesh out protections for individual companion or agricultural animals.

V. Identities and Dialectics

This ambition to create national animal welfare legislation in China has been spearheaded by Chang Jiwen, who is Director of the Social Law Research Department at the CASS. He also participated in the drafting of important air and water pollution legislation. Indeed, worth examining is the intellectual context of animal welfare reform in China. Professor Chang is an environmental law professor, while Qiu Renzhong is a bioethicist. The broader, more holistic perspectives associated with these disciplines might inform the evolution of Chinese animal legal theory. The Austral-American animal law pantheon of Tom Regan, Peter Singer and Gary Francione instead focus their inquiry on the individual and expand outward.

---

[34] *See e.g., Zoe Li, Off the menu: China moves to protect endangered Species,* CNN World (May 5, 2014), http://perma.cc/T9XN-SJLJ.

[35] Cui Qingxi & Chen Fei, *Quanguo Renda Changweihui Tonguo Xingfa Xingsufa Youguan Guiding de Jieshi [Interpretation of the Standing Committee of the National People's Congress on Passing the Notice of the Criminal Law and Criminal Procedure Law and of the People's Republic of China],* The National People's Congress of the People's Republic of China (Apr. 24, 2014), *available at* http://perma.cc/FB7U-X3V6.

A very recent paper by Wu Shuohua and Yang Zhaoxia (both professors of environmental law at Beijing Forestry University) reflects a synthesis of Western and Chinese forms of animal theory. The authors challenge the anthropocentric core of Chinese wildlife law, as well as the wired subjectivities that frame how most all humans recognize their role in nature.[36] However, in their perspective an ecologic ethic does not require the (desired) end to bear bile production in China. Instead, a more diversified approach that includes animal-centricity is necessary to achieve those sorts of goals. Another interesting perspective is from Zhou Chong, who actually characterizes the ecological ethic as narrow in purview. He argues that a habitat-based, life-cycle approach (perhaps informed by Russia's criminal code article 259) would improve upon China's current protections by also respecting the integrity of eggs and larvae.[37] These dialectical approaches to animal law seem familiar to Western audiences, but yet at the same time difficult to squarely frame within our conventional ways of thinking.

There should be optimism that China may find convergence between animal law and environmental law, given in part the historical precedent of an ecological ethic that seems common to all of the great Chinese ethical traditions. In the United States these seemingly kin areas of law have suffered from persistent tension.[38] An archetypal example of this might be the animal lawyer and environmental lawyer's oppositional response to "population control." However this ecological framing of animal rights theory has been present since Yang Tongjin's seminal article. He cited to the "deep ecology" of Arne Næss, Bill Devall and Holmes Roston III as being just as formative as the ideas of Singer and Regan.[39] We assume that very few Animal Law seminars in US law schools include the former thinkers in their syllabi.[40]

---

[36] Wu Shuohua & Yang Zhaoxia, *Dongwu Fuli Shiye xia Woguo Yesheng Dongwu Baohufa de Gexin [Innovations of Wild Animal Protection Law in China from the Perspective of Animal Welfare],* Anhui Nongyue Kexue [Anhui J. of Agriculture and Science] (2013).

[37] Zhou Chong, *Lun Xinfa zhong Shou Baohu Dongwu de Fanwei* [*On the Scope of Animals Protected by the Criminal Law from Independence of Ecological Benefits*], Zhongguo Faxuehui Huanjing Ziyuan Faxue Yanjiu Hue [China L. Soc'y Assoc. Env't and Resources] (2009).

[38] *See, e.g.,* Lars Johnson, *Pushing NEPA's Boundaries: Using NEPA to Improve the Relationship between Animal Law and Environmental Law,* 17 NYU Env'tl L. J. 1367 (2009).

[39] Yang, *supra* note 20 at 55.

[40] See Gary Steiner*, Cosmic Holism and Obligations toward Animals*, 2 J. Animal L. & Ethics 1 (2007) for a rare American "deep" ecological approach to animal welfare.

VI. Defining Tradition

Chinese animal legal theorists are also positioned to answer the still unresolved question of how to manage tradition in animal law. Kiran Nagulapalli highlights the incoherency in how American law privileges "white" pastimes of hunting or rodeo over things like cockfighting, for example, which are common to immigrant or ethnic populations.[41] The core tension here is how to conceptualize facially cruel occurrences like animal fighting that are practiced by only a very small percentage of a minority population, but are still practiced disproportionately by *that* minority population (e.g. African-Americans and dog fighting). Is "tradition" the most appropriate word to describe the historical lineage of these sorts of things? Chinese theorists have also debated the relevance of tradition to the law, and share an intuitive sense that traditions are both long-held and form a covenant between one's attitude on life and way of living.[42] An immediate question for a 5,000 year old civilization is *how old is old?*

One of the most controversial aspects of China's originally drafted anti-cruelty law is that those who eat dogs or cats may face detention of up to 15 days.[43] Dog consumption in China dates back to the Zhou Dynasty (221-100 BCE) when dog meat was enjoyed by all castes of society including upper nobility. Today it is most commonly found in Northeast and Southwest China, regions of China that do include a more marked presence of indigenous or minority populations. But since the Sui (581-618 CE) and Tang (618-907 CE) dynasties dog consumption has become almost exclusively associated with informal dining among the lower strata of society.[44]

The banning of the Jinhua Dog Meat festival by the local Zhejiang government in September 2011 is evidence of a growing public opposition to the practice. The Jinhua festival originated in the early Ming dynasty (1368-1644), and eventually evolved into a sort of "commodity fair" in the 1950s. But an important reason why a consensus opposition

---

[41] Kiran Nagulapalli, *Strictly for the Dogs: A Fourteenth Amendment Analysis of the Race Based Formation and Enforcement of Animal Welfare Laws*, 11 Rutgers Race & L. Rev. 217 (2009).

[42] Gao Yanhui & Luo Xuanzheng, *Falv he Xisu de Boyi* [*The Struggle between Law and Custom*], *7* Nanyang Shifang Xueyuan Xuebao [J. of Nanyang Normal Univ.], 21 (2008).

[43] Wang Fang ed., *Fan Nuedai Dongwufa Qicao, Weifa chi Maogou Huofa 5000 yuan ju 15 tian* [*Anti-Cruelty Law Proposes that Those who Illegally Eat Cat or Dog May Be Detained for No More Than 15 Days with a Fine of 5,000 Yuan*], Fazhi Wanbao [Legal Mirror] (Jan. 26, 2010), http://perma.cc/9JB4-XQC2.

[44] Liu Pu Ping, *Lvelun Zhonguo Gudai de Shigouzhifeng ji Remen dui Shiyong Gourou de Taidu* [*Study on the Fad of Eating Dog Meat in Ancient China*], Yindu Xuekai [Yindu Journal] (2006).

to the Jinhua festival formed was the *method* in which these dogs were killed.[45] A common retelling of the way dog slaughter is carried out is that the live animal is quartered and then beaten so as to bruise or "tenderize" the meat. It is also thought that food-dogs[46] are electrocuted, hung by flesh hooks, and boiled alive.[47] These graphic images are surely disturbing if accurate. Though this cruelty-oriented rationale (even if an extreme form of cruelty) can still be contextualized within a broader logic that includes American USDA requirements for anaesthetization of agricultural animals prior to killing. To this extent the fact these animals were dogs (as opposed to a similarly sentient, intelligent animal) lacked independent significance. This slaughter/cruelty paradigm is supported by other reasons the local population accepted the permanent end to the Jinhua festival. That there are now other distribution nexuses for dog meat negated the festival's value as a commodity fair. Many participants were also incensed over the furtive selling of frozen or contaminated dog meat.[48] What good was an event that no longer achieved its original purpose of being the only place to find fresh dog meat? But surely part of the reason the Jinhua festival was a target of online criticism was because it involved eating *dogs*. For many there is something visceral about eating a supposed kin animal.

The renewed debate over the separate Yulin Dog Meat Festival in Guangxi province suggests the complex matrix of sentiments attached to dog consumption. As a threshold issue the local Yulin government contests the notion of this "festival" even existing. They issued a statement on June 7, 2014 declaring any dog eating in Yulin occurs without official support.[49] Attempts to describe the occasional summer meal of dog meat and lychee fruit as something akin to a community tradition instead represent the revisionist history of activist journalists. Indeed, the ubiquity[50] of editorial coverage on this event has influenced the dis-

[45] What's on Ningbo, *Traditional Dog Meat Festival Cancelled in Zhejiang's Jinhua After Protests,* http://perma.cc/JVF9-MACC (last visited Sept. 21, 2011).

[46] *See e.g.,* Rakhyun E. Kim, *Dog Meat in Korea: A Socio-Legal Challenge*, 14 ANIMAL L. 201, 205 (2008) (stating that in Korea the mongrel breed of food-dog is referred to as "ddong-gae," literally meaning 'shit-dog'").

[47] Stop Animal Abuse, *Thousands of Dogs are Tortured, Killed and Eaten During the Yulin Dog Meat Festival, available at* https://perma.cc/68FF-UZ3T (last visited Aug. 23, 2014).

[48] Wu Zhaoxiang, *Jinhua Hutou Gouroujie Jinji Jiaoting* [*The Jinhua Hutou Dog Meat Festival Was Urgently Canceled*], Qianjiang Wanbao [Qianjiang Evening News] (Sept. 20, 2011), *available at* http://perma.cc/H2MY-FSEF.

[49] *Yulin Renmin Zhengfu Guanyu Suowei"Lizhi Gouroujie" de Jidian Shuoming* [*Notes on the So-Called "Lychee Dog Meat Festival" by the Yulin People's Government*], http://www.yulin.gov.cn/info/300888 (last visited Sept. 10, 2014).

[50] *See e.g.,* Jack Linshi, *5 Things You Need to Know about China's Dog-Eating Festival,* Time (June 18, 2014), http://perma.cc/5TZ2-L4ZZ.

cussion of whether the Yulin festival should continue. Local residents have rejected animal activists as meddlesome troublemakers.[51] And thus the issue of dog consumption is not limited to dogs as food animals, but as well a broader prism for thinking about how perceptions of identity and cultural integrity intersect with universal models of morality. What is it about dogs themselves that make them morally separate from other food animals? And how do we balance the use of dogs as meat against the ineffable sense of experiencing *ritual*?

a. Dogs as Puppies

One framework for thinking about the line drawing of food from non-food animals is using the proxy of cuteness. This is intuitively a very subjective and anthropocentric metric. However, count Judge Posner among those who argue that human kindness is a gestalt for wanting to help others that are similar to us.[52] Animals such as dogs and koalas are the beneficiaries of human philanthropy because they possess humanoid faces that we find aesthetically appealing.[53] (Some) humans don't eat dogs because they are intrinsically adorable. But does this necessarily mean that we must not eat them?

b. Dogs as Dogs

Another reason to separate dogs as non-food animals is by reference to their capacities for sentience, intelligence and autonomy. Dogs are by definition emotionally evolved animals—many were bred to be companion animals. They also possess the native intelligence to work as service animals, and in therapy, rescue, herding, hunting, security, tracking, detection and police and military work.[54] Most people (excepting the likes of Tsinghua Professor Zhao Nanyuan) would also agree that dogs satisfy Tom Regan's "subject-of-a-life" or Stephen Wise's "practical autonomy" thresholds for moral personhood. These more objective determinations all provide excellent reasons for why dog consumption should be derided as unethical. But the second order question is whether it is *legally* permissible to distinguish dogs as non-food animals from analogue animals like pigs, which have even been taught to play video

[51] *See, Protests backfire at Yulin dog-meat festival,* Shanghai Daily (June 22, 2014), http://perma.cc/D8QY-XLLU.

[52] Richard Posner, *Animal Rights: Legal, Philosophical, and Pragmatic Perspectives*, *in* Animal Rights: Current Debates and New Directions 51, 72 (Cass R. Sunstein & Martha C. Nussbaum eds., 2004).

[53] *Id.*

[54] *See e.g., Working Dogs,* Wikipedia, *available at* http://perma.cc/8NYY-V3MK (last visited Sept. 10, 2014).

games and might also be capable of sophisticated social strategies such as deception.[55] Chinese critics have pointed to the myopic hypocrisy of some dog activists—if dog consumption is made illegal, than surely the pork of the more intelligent pig must also be outlawed. [56] This slippery slope seems compelling.[57]

c. Dog as (Hu)man's Best Friend

A final point of distinction is that dogs may be exceptional even when compared to more evolved animals. The argument goes that humans possess a unique bond with dogs that has been forged throughout our shared, primordial history. Dog is our best friend, and inherent to friendship are notions of special treatment. That means we don't eat them.

This special relationship does have some universal relevance. After the Tang dynasty many Chinese gentry began to keep dogs as companion pets. For nobility this practice dates back millennia. Indeed, vivid examples of keeping companion dogs include today's breeds of Chow Chow, Shar Pei, Pug and Shih Tzu. The famous imperial dowager Cixi kept nearly one thousand Pekingese dogs in the specially built *yu gou si* at the Forbidden City.[58] Not only are dogs cherished all over the world, they are also spoiled with our affection.[59] But as lawyers, can we articulate the point at which an animal also becomes a singular kind of friend?[60]

[55] Andy Wright, *Pigheaded: How Smart are Swine?,* Modern Farmer (March 10 2014), *available at* http://perma.cc/N3H8-TNMT.

[56] *See* Shi Xiong, *Yulin Gouroujie Zhizhan* [*Battle of the Dog Meat Festival in Yulin*] Nanfengchuang [South Reviews] (July 7, 2014), *available at* http://news.ifeng.com/a/20140707/41050522_0.shtml.

[57] Indeed, the authors clarify that they in no way encourage dog meat consumption; we instead hope that lawmakers and consumers re-consider the ethical basis for industrial production of pig and other sentient, intelligent animals.

[58] *See Clothing Worn by Cixi's Dog on Display,* China Daily (July 11, 2014), http://perma.cc/S2RU-N8S7.

[59] *See* Ani Satz, *Animals as Vulnerable Subjects: Beyond Interest-Convergence, Hierarchy, and Property,* 16 Animal L. 65, 89 (2009), (stating that American dogs are bequeathed estates and enjoy "petimony" awards held in trust in divorce proceedings).

[60] Or are there only epistemological limits inherent to the precision of the *English language? The Chinese lexical of yuanfen (*缘) approximates the feeling of cosmic, binding affinity between two individuals in a friendship. Perhaps this same gravitational pull is what yokes human and dog (thanks to Dean Stephen Yandle for the inspiration!).

d. Words and their Limits: Community, Glorification and Secular Ritual

An important rejoinder is that for most of Chinese history dogs were kept as companion animals only by the crust of society. Regional differences also matter. The well-known aphorism that Cantonese "will eat anything with four legs except the table" contains more than a kernel of truth. A relevant question is thus how to define the relevant community of dog eaters. Can Guangxi (home of the Yulin festival) residents be categorized as distinct from the rest of the Chinese population? The Declaration on the Rights of Indigenous Peoples protects the brutal Canadian seal hunt. But perhaps this document applies Western-centric notions of ethnicity that map rather awkwardly onto a nation like China. An intuition in American jurisprudence is that minority cultures are ethnic, insular and discrete. And it is true that one-third of Guangxi's population are not members of the dominant Han ethnic group.[61] However, anecdotally Guangxi's 15 million *Zhuang* people mingle freely with its Han population. And this Guangxi history of dog consumption does not seem linked to ethnicity. It's simply a matter of geography—people living in this area sometimes enjoy this activity. What if the Guangxi-Han diaspora of Saigon or Kuala Lumpur or New York City decided to hold a festival of dog meat? Is there any basis for a geographic criterion for determining minority status at a global level?

The authors agree that because of the jurisprudential tensions in separating dogs from other sentient, intelligent food-animals that personal use of dog meat in China should remain legal.[62] Indeed, a perhaps surprising fact to American readers is that recreational dog slaughter (so long as it is humane[63]) for private consumption is legal in most American states.[64] The authors share this prescription that dog slaughter in

---

[61] *See e.g., Guangxi*, China Today, *available at* http://perma.cc/UY3M-NHU6 (last visited Sept. 10, 2014).

[62] Even Chang Jiwen expressed some hesitance as to whether the originally drafted ban on dog consumption should go into blanket effect, citing the need for flexible application given both national and local traditions of eating dog meat. *See e.g., Zhuanjia Jianyi Fan Nuedai Dongwufa Jinchi Maogourou Lijie Youwu* [*There is Misunderstanding of the Experts' Proposed Anti-cruelty Law on Banning the Eating of Dog and Cat Meat*] Zhonggua Wang [China.com] (Jan. 27, 2010), *available at* http://perma.cc/RH9S-F4KJ.

[63] An interesting etymological aside, Professor Joseph Adler notes "that the word 'humane,' which we commonly use in reference to our treatment of animals, also happens to be the best translation of the cardinal Confucian virtue, *jen,* which is cognate with the homophonous word for 'human being.'" Joseph A. Adler, *Response to Rodney Taylor, "Of Animals and Man: The Confucian Perspective", available at* http://perma.cc/X528-3GR9.

[64] Brian Palmer, *Here, Kitty, Kitty, Kitty: Is it legal to eat your cat?,* Slate (Aug. 12, 2010), http://perma.cc/PN6J-E2C3.

China must comport with international best practices. In *Church of Lukumi Babalu,* the local Floridian Santeria sect won First Amendment protection to perform their raw form of animal sacrifice. But the method or process of dog killing in the China context seems irrelevant to the ultimate reason of performing this activity—to merely enjoy the taste of dog flesh. Ritual slaughter is not at issue here.

But this does lead to the broader question of how to define ritual in a secular, non-theistic society such as China. There is a sense that dog eating among these isolated communities can be tolerated so long as it is not glorified. But the Chinese government (and maybe many animal activists) seems to take issue with the idea of a festival *celebrating* dog meat consumption. The effective message seems to be that you can do what you want, so long as you don't bring attention to what you're doing. A potential government ban of the Yulin festival might thus be better interpreted as a public relations move to eliminate one of the more garish examples of dog eating. If so, this nod to Western audiences may further incite those like Zhao Nanyuan who recognize animal welfare in China to be a foreign imposition.[65]

Does this distinction of celebration against personal use possess legal traction? The foie gras controversies of the last decade point to how eating can be a statement of public identity. In the Israeli Supreme Court *Foie Gras* case the court dismissed the fatty delicacy as a "luxury" item that should be substituted with cruelty-free forms of food.[66] But is there a corollary argument that only via these more sublime culinary experiences that we as humans can tap into the apotheosis of e.g. Maslow's peak experience?[67] There seems to be something deeply existential about the French and their foie—that this historicized food is a vehicle that allows them to *be* an expression of their collective national identity.[68] Professor DeSoucey provides empirical evidence that foie gras was even several decades ago much less common in France, and that there could be an element of manipulation of tradition here in France's self-image of a pastoral, foie-eating nation.[69] But it is still

[65] *See e.g.,* Kim, *supra* note 46, at 210 (describing how South Korean government tried to ban urban sale of dog meat during preparation for 1988 Seoul Olympics).

[66] *See* Noah v. Att'y Gen., HCJ 9232/01 (Isr. 2003), *available at* http://perma.cc/CK9W-QPAB (last visited Sept. 9, 2014).

[67] The authors note that an alternative to *gavage* foie gras can be produced by tracking these migratory birds' natural feeding cycle. Eduardo Sousa is most associated with this method. *See e.g., Ethnical foie gras: An alternative to cruelty,* Swide, (Dec 16. 2013), http://perma.cc/RN5U-JHG2.

[68] Michaela DeSoucey, *Gastronationalism: Food Traditions and Authenticity Politics in the European Union, 75* Am. Soc. Rev. 432, 446 (2010).

[69] *Id.* at 443-46.

France's self-image. Can the international community demand how a sovereign nation views itself?

The factual circumstance of China and dog eating seems distinguishable. In China, foods including Peking Duck have been elevated to the status of "intangible cultural heritage."[70] Most Chinese would guffaw at the prospect of dog meat being added to this list. It is simply a food that some people eat sometimes during a certain part of the year. Another relevant detail is that the Chinese government takes a "hard look" at freedom of assembly,[71] and seems unlikely to permit the continued spectacle of a dog meat festival that attracts international attention. In China the political and the legal often merges. And the authors here question whether there even exists an effable basis for articulating notions like "community" and "the existential" in a place like China. But at least for the example of dog meat there does not seem to be any ritual benefit to making this food central to a festival. And many local Guangxi people never meant for it to be either.

[70] *See e.g.,* Curtis Ashton, *Beijing Duck 2008: Tourism, Cultural Performance, and Heritage Protection,* Folklore F. (Apr. 20, 2011), *available at* http://perma.cc/FV54-REAH. Topically, this food is at the time of writing a candidate for UNESCO's world intangible cultural heritage list. *See also,* Zhang Junmian, *Peking Duck Possibly a Candidate for Cultural Heritage,* This is Beijing! (Aug. 22, 2014), http://perma.cc/JEY3-CEWM.

[71] *See* Hu Yuhong*, Jiti Xingdong yu Ren de Lianhe* [*Group Action and Association of People*] Falu Xexue [Sci. of L.] (2007); *see also;* Guan Hongtao & Lun Jihui Ziyou, *On the Boundary Stone of the Freedom of Assembly,* Xingzheng Yu Fa [Pub. Admin. & L.] (2014).

The Death of the Duty to Apply: Limitations to CAFO Oversight Following Waterkeeper & National Pork Producers

William M. McLaren*

I. Introduction

For approximately fifty years, concentrated animal feeding operations[1] (CAFOs) have been the method of choice for the large-scale livestock "farming" industry.[2] CAFOs are facilities designed to house and cultivate livestock in which common feeding practices are mechanized for efficiency. CAFOs are designed to maximize livestock density, and the yields of resulting animal products are thereby increased compared to traditional feeding operations.[3] Through technological improvements and cost-saving methods, CAFO owners can reduce the traditionally required capital to sustain large-scale livestock operations and thereby substantially increase long-term profits.[4]

While CAFOs are often criticized for compromising human health,[5] another significant area of critical focus is their detrimental impacts on surface and groundwater quality caused by incidental

* J.D. *cum laude*, Lewis & Clark Law School, 2014; B.S., Environmental Sciences, *magna cum laude*, Phi Beta Kappa, University of California Riverside; Law Clerk to the Honorable Paul Papak, U.S. District Court for the District of Oregon. The author thanks the Honorable Michael McShane for including him in the case that introduced him to this topic, as well as Jared Lively, MFA, for his thoughtful critique of this work.

[1] Note that "concentrated" and "confined" may be used interchangeably, depending on the authority employing the term. *Compare* 33 U.S.C. § 1362(14) (2006) (including "concentrated animal feeding operations" in the definition of a "point source") *with* Or. Admin. R. 603-074-0010(3)(a) (2012) (defining "confined animal feeding operation" to mean "the concentrated confined holding of animals or poultry"). Regardless of this fact, CAFO overwhelmingly carries the same definition.

[2] *See* David Fraser, Food And Agriculture Organization Of The United Nations, Animal Welfare and The Intensification Of Animal Production: An Alternative Interpretation 4, 6 (2005).

[3] The Pew Comm'n on Indus. Farm Animal Prod., Putting Meat on the Table: Industrial Farm Animal Production In America 2 (2008), *available at* http://perma.cc/CC9T-YSBX.

[4] Doug Gurian-Sherman, CAFOs Uncovered: The Untold Costs of Confined Animal Feeding Operations 19 (2008) , *available at* http://perma.cc/6Z4N-JK7R.

[5] *See generally* Carrie Hribar, Nat'l Ass'n of Local Boards of Health, Understanding Concentrated Animal Feeding Operations and Their Impacts on Communities 2–11 (Mark Schultz ed., 2010) (providing a concise summary of the prominent environmental and health impacts of CAFOs).

animal waste runoff, or "effluent."[6] To address this, the definition of "point source" in the Clean Water Act (CWA) includes CAFOs,[7] and the CWA is the primary tool used by federal and state governments in regulating effects on the nation's waters resulting from CAFO-produced effluent. Importantly, the Environmental Protection Agency (EPA) entered into a consent decree in which the agency proposed to issue a rule to address and limit CAFO pollutants entering federal waters, thereby expanding on previously relaxed enforcement of the industry.[8] After extensive planning, a federal rule was promulgated and adopted in 2003 that imposed permit requirements on CAFOs under the CWA's National Pollutant Discharge Elimination System (NPDES).[9] The NPDES permitting program operates to set and maintain allowable levels of pollutant discharge to protect the waters of the United States and concurrently seeks to meet the concerns of an industry whose progress can be stifled by over-regulation.[10] The adopted rule brought CAFOs under the broad NPDES regulatory scheme, requiring CAFO owners to apply for NPDES permits unless they could proffer evidence showing no potential discharge from their facility.[11] This requirement is broadly referred to as the strict "duty to apply" because it imposes an affirmative duty upon CAFO owners to secure NPDES permits regardless of whether EPA or an affiliate regulatory body affirmatively shows the facility actually discharges in violation of the CWA. For the purposes of this article, the strict duty to apply will be simply referred to as the "duty to apply." When this rule was in effect, CAFO owners who failed to apply were subject to action in response to CWA violations.[12]

---

[6] *Cf.* U.S. Gen. Accounting Office, GAO/RCED-95-200BR, Animal Agriculture: Information on Waste Management Water Quality Issues 1-2 (1995) (indicating, in in the early era of the CAFO water quality regulating regime, that the number of regulated operations was nearly two thousand), *available at* http://perma.cc/3CEB-2Z4Z.

[7] 33 U.S.C. § 1362(14) (2006).

[8] Terrence J. Centner, *Courts and EPA Interpret NPDES General Permit Requirements for CAFOs*, 38 Envtl. L. 1215, 1219 (2008).

[9] National Pollution Discharge Elimination System Permit Regulation and Effluent Guidelines and Standards for Concentrated Animal Feeding Operations, 68 Fed. Reg. 7176 (Feb. 12, 2003) (codified at 40 C.F.R. pt. 122) [hereinafter "the 2003 Rule"].

[10] *See generally id.* at 7179 (explaining that "[a]mong its core provisions, the Act prohibits the discharge of pollutants to the waters of the United States *except as authorized* by an NPDES permit," insinuating that the purpose of NPDES permits is to allow a controlled pollutant discharge within the confines of measured safe levels).

[11] *Id.* at 7202–03 ("[A]n unpermitted CAFO that does in fact discharge pollutants to waters of the U.S., *with or without a determination of 'no potential to discharge,'* would be in violation of the Clean Water Act).

[12] *Id.*

a. Waterkeeper and the Death of the Duty to Apply

In recent years, two pivotal cases have significantly altered the regulatory regime that EPA employs to monitor and police CAFOs. Decided in 2005, *Waterkeeper Alliance, Inc. v. U.S. Environmental Protection Agency* ("*Waterkeeper*") was brought by two primary interest groups classified by the court as the "Environmental Petitioners" and the "Farm Petitioners."[13] These two groups challenged the Final CAFO Rule ("the 2003 Rule") based on three general categories.[14] For the purposes of this article, the most important challenge was that directed against the 2003 Rule's permitting scheme. The petitioners specifically targeted the "mandatory duty to apply for an NPDES permit"[15] that the 2003 Rule imposed on all CAFOs, save for those with "no potential to discharge." Those CAFOs were specifically required to "make such a demonstration in lieu of obtaining a permit."[16]

In *Waterkeeper,* the Farm Petitioners argued that the mandatory permit requirement of the 2003 Rule (also called the "duty to apply")[17] was legally inconsistent with the CWA.[18] The *Waterkeeper* court agreed, declaring that the CWA only authorizes EPA to regulate "the discharge of pollutants," and does not create "a statutory obligation of point sources to seek or obtain an NPDES permit in the first instance."[19] Because of this perceived disparity between the 2003 Rule and the CWA itself, the court determined that the duty to apply, as required by the 2003 Rule, was inconsistent with the intent of Congress and failed the deference test applied by the court.[20] Some commenters argue that the court's application of *Chevron* was in direct contradiction with its ruling

[13] Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486 (2d Cir. 2005) [hereinafter "*Waterkeeper*"] (both of these groups were composed of interests that favored change to EPA's regulatory scheme, but for widely different purposes).

[14] *Id.* at 497 ("(1) challenges to the permitting scheme established by the CAFO Rule; (2) challenges to the types of discharges subject to regulation under the CAFO Rule; and (3) challenges to the effluent limitation guidelines established by the CAFO Rule.").

[15] The 2003 Rule, *supra* note 9, at 7182.

[16] *Id.*

[17] *Waterkeeper*, *supra* note 13, at 504.

[18] *Id.*

[19] *Id.* at 505 (citing National Resources Defense Council v. EPA, 859 F.2d 156, 170 (D.C. Cir. 1988).

[20] *Id.* at 506 ("[T]he Clean Water Act, on its face, prevents EPA from imposing, upon CAFOs, the obligation to seek an NPDES permit or otherwise demonstrate that they have no potential to discharge.") (citing Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837, 842–43 (1984) (noting "where Congress has directly spoken to the precise question at issue and the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress." (internal quotations omitted)).

on other related matters.[21] However, the court clearly declared that the CWA "prevents EPA from imposing upon CAFOs the obligation to seek an NPDES permit."[22] This pivotal decision marked the first in a series of integral blows to EPA's ability to regulate CAFOs using NPDES permits.

b. National Pork Producers and the Invalidation of "Proposes to Discharge"

The validity of NPDES permit requirements under the CWA was revisited in *National Pork Producers Council v. United States Environmental Protection Agency* ("*National Pork Producers*"), a 2011 case in which several of *Waterkeeper's* petitioners reprised their roles[23] to challenge yet another rule relating to the regulation of CAFOs.[24] The breadth of disagreement with EPA's new rule was vast, as the *National Pork Producers* court was by the Judicial Panel on Multi-District Litigation[25] to review an array of challenges filed in *six* different districts.[26] The rule at issue in *National Pork Producers* ("the 2008 Rule") was promulgated by EPA in response to the *Waterkeeper* decision.[27] Specifically, the 2008 Rule included a provision that replaced the 2003 Rule's duty to apply[28] with a seemingly more lenient requirement: "that a CAFO owner or operator [must] apply for a permit only if the CAFO discharges or *proposes to discharge* pollutants."[29] Unsurprisingly, this requirement met opposition from Farm interests once again, who proceeded to challenge it on several grounds.[30]

---

[21] Christopher Brown, *When the "Plain Text" Isn't So Plain: How* National Pork Producers Council *Restricts The Clean Water Act's Purpose and Impairs its Enforcement Against Factory Farms*, 16 Drake J. Agric. L. 375, 383 (2011) [hereinafter "Brown"].

[22] *Waterkeeper*, *supra* note 13, at 506 (citing Chevron U.S.A. Inc. v. Nat'l. Res. Def. Council, Inc., 467 U.S. 837, 842–43 (1984)) (internal punctuation omitted).

[23] The petitioners common to both cases are the National Pork Producers Council, the National Chicken Council, and the American Farm Bureau Federation. Nat'l. Pork Producers Council v. U.S. E.P.A., 635 F.3d 738 (5th Cir. 2011) [hereinafter "*Nat'l Pork Producers*"].

[24] *Id.* at 741.

[25] *Nat'l Pork Producers*, 635 F.3d at 741. The random selection requirement was pursuant to 28 U.S.C. § 2112(a)(3) (2006).

[26] *Nat'l Pork Producers*, 635 F.3d at 741.

[27] *See* Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines for Concentrated Animal Feeding Operations in Response to Waterkeeper Decision, 71 Fed. Reg. 37744 (June 30, 2006) (codified at 40 C.F.R. pt. 122) [hereinafter "the 2008 Rule"].

[28] The 2003 Rule, *supra* note 9, at 7181–82.

[29] *Nat'l Pork Producers*, 635 F.3d at 746 (citing 71 Fed. Reg. 37744, 37747 (June 30, 2006)) (emphases added) (internal quotation marks omitted).

[30] *Id.* at 749–50.

With the argument against any duty to apply bolstered by the *Waterkeeper* decision, the 2008 Rule proved susceptible to the Farm Petitioners' challenge, and ultimately fell in a way similar to of the 2003 Rule.[31] The *National Pork Producers* court also addressed the duty to apply with respect to CAFOs that "propose[] to discharge." The court rejected the notion that "proposes to discharge" means "wants to discharge" or "intends to discharge."[32] Instead, the court identified that a CAFO that "proposes to discharge" means "a CAFO[] designed, constructed, operated, and maintained in a manner such that the CAFO *will* discharge." In a puzzling analysis of the phrase "proposes to discharge," the court declared that the duty to apply would effectively require permits both from CAFOs that are presently discharging pollutants, which is an legically sound outcome, and CAFOs whose operators "*want* to discharge,"[33] which, according to the court, is outside of EPA's statutory authority.[34] Because this particular definition was deemed by the court to require facilities that are not actually discharging to apply for a permit, the court determined that it "runs afoul of *Waterkeeper*."[35] Therefore, the duty to apply, even in a form so innocuous as to require permits from CAFOs that *want* to discharge pollutants, was once again stripped from the NPDES program. This marked the second substantial blow to the CAFO-related NPDES permitting requirements, and led EPA to vacate the duty to apply aspects of the 2008 Rule.[36]

While it is inarguable that the *Waterkeeper* and *National Pork Producers* decisions imposed limitations upon EPA's jurisdiction over CAFOs regarding their potential to discharge pollutants,[37] some commenters posit that artifice led to those outcomes.[38] The reasoning

---

[31] *Id.* at 750.

[32] *Id.* (citing Webster's Third New International Dictionary 1819 (8th ed. 1993)).

[33] *See id.* (emphasis added).

[34] *Id.* at 751.

[35] *Id.* at 750.

[36] *See* National Pollutant Discharge Elimination System Permit Regulation for Concentrated Animal Feeding Operations: Removal of Vacated Elements in Response to 2011 Court Decision, 77 Fed. Reg. 44494 (July 30, 2012) (to be codified at 40 C.F.R. § 122).

[37] *See id.* ("remov[ing] from the Code of Federal Regulations (CFR) the specific "propose to discharge" requirement in 40 CFR 122.23(d)" because the *Nat'l Pork Producers* court "issued an opinion that, among other things, vacated those portions of the 2008 CAFO Rule requiring CAFOs that propose to discharge to apply for an NPDES permit").

[38] Brown, *supra* note 21, at 376–77 (arguing that courts should interpret the CWA in light of its ultimate purpose, "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" and asserting that "pre-discharge permitting and monitoring would appear to further, rather than violate the purposes of the CWA," as the *Waterkeeper* and *Nat'l Pork Producers* courts seem to suggest).

employed by the courts warrants analysis,[39] but the importance of regulating CAFOs and the regulatory structure itself must first be considered.

II. The Effects of CAFOs on Waters

The shift in farming methods away from spacious, decentralized family farms to compact, high-yield factory farms has not come without consequence. The incorporation of CAFOs into rural communities—which, for obvious reasons, are often the locale of choice for CAFO owners[40]—results in a veritable cacophony of impacts that lead to environmental, health, economic, and humanitarian concerns. These impacts include, but are by no means limited to, groundwater contamination,[41] surface water contamination,[42] air quality degradation,[43] proliferation of antibiotic-resistant pathogens,[44] increases in localized insect vectors,[45] inhumane and injurious treatment of animals,[46] shifts towards oligopolies in the agricultural market,[47] reductions in property values based on proximity to CAFOs,[48] and the production of significant

[39] *Infra* Part IV.A–B.

[40] *See* The Pew Comm'n on Indus. Farm Animal Prod., *supra* note 3, at 17.

[41] Hribar, *supra* note 5, at 3; *infra* Part II.A.

[42] *Id.* at 4; *infra* Part II.B.

[43] *Id.* at 5 (explaining that CAFOs "produce ... air emissions, including gaseous and particulate substances," proportionate to the size of the CAFO, and "[t]he primary cause of gaseous emissions is the decomposition of animal manure, while particulate substances are caused by the movement of animals").

[44] Gurian-Sherman, *supra* note 4, at 5 (observing that "the massive use of antibiotics in CAFOs, especially for non-therapeutic purposes such as growth promotion," can contribute to "the development of antibiotic-resistant pathogens [such as Salmonella, Escherichia coli, and Campylobacter] that are more difficult to treat").

[45] Hribar, *supra* note 5, at 8 (describing the production of these vectors, namely those of "Houseflies, stable flies, and Mosquitoes," the most common insects associated with CAFOs, continuing by stating "[h]ouseflies breed in manure, while stable and other flies breed in decaying organic material, such as livestock bedding. Mosquitoes breed in standing water, and water on the edges of manure lagoons can cause mosquito infestations to rise").

[46] The Pew Comm'n on Indus. Farm Animal Prod., *supra* note 3, at 13 (explaining the connection between the intensive confinement practices common to CAFOs and the severe restriction of animal movement and natural behaviors such that animals are unable to walk. The resulting stress from these situations can promote immunodeficiency.).

[47] *Id.* at 17 (finding that "[t]he family-owned farm producing a diverse mix of . . . food animals is largely gone as an economic entity, replaced by larger farm factories that produce just one animal species" and rural communities have fared poorly.).

[48] Ind. Bus. Research Ctr., The Effect of Regulated Livestock Operations on Property Values in Selected Indiana Counties 3 (2008), *available at* http://perma.cc/5SLK-4WKL.

greenhouse gases (GHGs).[49] For the purposes of this article, the most important of these issues are those of ground- and surface water contamination.

a. Groundwater Contamination Caused by CAFO-Produced Effluent

Groundwater is the subject of extensive quality analysis and maintenance by governmental and private interests alike, due in part to its high value and multiple functions, and the benefits of groundwater are shared by citizens, businesses, agricultural interests, and municipalities, among others.[50] Waste runoff from mismanaged CAFOs has the propensity to detrimentally effect groundwater nutrient concentrations and contaminate groundwater resources.[51] Liquid effluent from CAFOs percolates into soils by flowing through their naturally porous infrastructure.[52] Excess percolation can occur in any number of ways, the most prominent of which is over-application of waste runoff to "farmland" immediately adjacent to CAFOs.[53]

In modern practice, the predominant method of disposing of the effluent produced by CAFOs is "land application." Land application redistributes animal waste in the form of solid or liquid effluent over agricultural plots connected to CAFOs.[54] This method spurs increased agricultural yields due to the arguable similarity between effluent nutrient contents and commercial manure.[55] Land application may be performed using direct-soil injection methods or through airborne distribution. Airborne distribution uses "tankers," which are specialized vehicles outfitted with large arms that deploy effluent onto fields in a

[49] Gurian-Sherman, *supra* note 4, at 52, 54–56.

[50] *See generally* State of Or. Dep't of Envtl. Quality, Groundwater Protection in Oregon 2 (January 2011) (explaining the values and functions of groundwater in Oregon and listing as examples, among others, "[g]roundwater makes up approximately 95 percent of [] freshwater resources[,]… Oregon's businesses require clean groundwater for industries such as food processing, dairies, manufacturing, and computer chip production[.] . . . [g]roundwater provides irrigation water for Oregon agriculture and water for livestock[,] . . . [g]roundwater supplies base flow for most of the state's rivers, lakes, streams, and wetlands").

[51] *See* Ind. Dep't of Envtl. Mgmt., Confined Feeding Operations (CFOs/CAFOs), http://perma.cc/QW49-VY3V (last visited Jan. 27, 2013).

[52] *See* Andrés Alcolea & Agustín Medina, Universitat Politecnica De Catalunya, Groundwater Flow in Porous Media 18 (2012) (explaining how soil porosity results in "groundwater flow rules" which "control the quantity and the quality of the groundwater"), *available at* http://perma.cc/6VV9-EP8H.

[53] Ind. Dep't of Envtl. Mgmt., *supra* note 51.

[54] U.S. Envtl. Prot. Agency, Unified National AFO Strategy Executive Summary § 4.4 (1999).

[55] *Id.*

method comparable to an enormous version of a lawn sprinkler.[56] If land application is performed incorrectly or in excess, the chemicals and nutrients contained in the re-applied wastewater may contaminate sub-surface streams, rivers, and aquifers, as explained above.[57]

Groundwater problems and the effects of land application have been recognized and addressed in existing regulatory schemes.[58] To combat these problems, "[i]ndividual [NPDES] permits can allow for the evaluation and accounting of the suitability of the [permitted] land for the application of manure."[59] Therefore, application for and enforcement of NPDES permits may result in a concrete source of information, available to CAFO owners and regulating bodies alike, to help check groundwater contamination.[60] Examples of the data to be gained from site-specific NPDES permits include: measurements of "the soil and subsoil permeability, the presence of aquifers, the vulnerability of groundwater resources, … surrounding land uses, and the existence of water withdrawals downstream of the proposed disposal site."[61] All of this data enable informed decision-making and promote management practices that benefit not only CAFO properties but also surrounding land uses. Thus, site-specific NPDES permits have the capacity to encourage CAFO owners to select methods of effluent application and efficient effluent storage facility locations that account for the site-specific conditions of the property containing the CAFO.[62] Requiring CAFO owners to take account for hydrological and ecological realities of individual properties when executing management and construction decisions can potentially promote groundwater protection.[63]

---

[56] U.S. Envtl. Prot. Agency, Biosolids Technology Fact Sheet: Land Application of Biosolids (2000), *available at* http://perma.cc/NN9E-HGDB.

[57] *See generally* Jorde Battle-Aguilar, Université de Liège, Groundwater Flow and Contaminant Transport in an Alluvial Aquifer: in-situ Investigation and Modeling of a Brownfield with Strong Groundwater—Surface Water Interactions 28 (2008) (explaining, via a study directed towards brownfield contamination mitigation, "ground- and surface water are not independent systems[,] … [c]hanges in surface water [contaminant] levels … are likely to cause changes on groundwater levels … in the adjacent aquifer (or river/stream), as well as water fluxes from one system to the other").

[58] *See* U.S. Envtl. Prot. Agency, Amendments to the Standards for the Use or Disposal of Sewage Sludge (1995); 40 C.F.R. § 503.10 (2007).

[59] Michael Steeves, *EPA's Proposed CAFO Regulations Fall Short of Ensuring the Integrity of Our Nation's Waters*, 22 J. Land RES. & Envtl. L. 367, 378–79 (2002).

[60] *See generally* National Pollutant Discharge Elimination System (NPDES) Concentrated Animal Feeding Operation (CAFO) Reporting Rule, 77 Fed. Reg. 42679 (July 20, 2012) (to be codified at 40 C.F.R. § 9) (proposing to collect information about existing CAFOs from NPDES programs that have officiated permits to those CAFOs in the past).

[61] Steeves, *supra* note 59, at 378–79

[62] *Id.* at 379.

[63] *See* A. Dennis McBride, N.C. Dep't of Health and Human Services, *The Association of Health Effects With Exposure to Odors from Hog Farm Operations*,

b. Surface Water Contamination Caused by CAFO-Produced Effluent

As with groundwater contamination, surface water contamination caused by CAFO-borne effluent byproducts is a near constant source of environmental concern.[64] Surface water is more susceptible to contamination than groundwater simply because there are fewer natural, pollutant arresting barriers (e.g., soil, vegetation) between surface-level contamination sources and surface water bodies.[65] Depending on a CAFO's specific design and structure, runoff from storm events or light rain is a common means by which CAFO-produced animal effluent is conveyed into surface water.[66] When animal waste, whether in solid or liquid state, is kept near waterways that run through or are adjacent to CAFOs, severe weather or poor storage facility design may cause spills directly into surface water.[67] Two representative examples of large-scale failures of CAFO waste storage provide context for the concept of effluent runoff, and were the subject of a major monitoring project on the effects of large effluent spills on surrounding habitats.[68] First, in 1995, due to massive structural failure of a *single* "waste treatment lagoon,"[69] 25 million gallons of swine effluent were released into North Carolina's New River and its estuaries. The effluent polluted approximately 22 miles of river, causing fish kills, algal blooms, and E. coli bacterial contamination throughout.[70] A second event befell Duplin, North Carolina in 1995, when 8.6 million gallons of chicken effluent burst from another ruptured waste lagoon and ultimately flowed into the

---

http://perma.cc/65XB-LQCB (1998) (last accessed Jan. 27, 2013); *see also* William Ritter & Anastasia Chirnside, *The Impact of Land Use on Groundwater Quality in Southern Delaware*, 22 Ground Water 38, 41 (1984) (a Delaware study of a sampling of wells associated with a high water table aquifer in which more than 30 percent of the subjects had nitrate levels that exceeded EPA's designated drinking water standards).

[64] Hannah Connor, *Comprehensive Regulatory Review: Concentrated Animal Feeding Operations Under The Clean Water Act From 1972 To The Present*, 12 Vt. J. Envtl. L. 275, 280 (2011).

[65] Steeves, *supra* note 59, at 374.

[66] *See* U.S. Envtl. Prot. Agency, CAFOs—Livestock Operation Inspection: What to Expect When EPA Inspects Your Livestock 1 (2003), *available at* http://perma.cc/Z686-G7YL.

[67] Gurian-Sherman, *supra* note 4, at 51.

[68] JoAnn Burkholder, et al., *Impacts of Waste from Concentrated Animal Feeding Operations on Water Quality*, 115 Envtl. Health Perspectives 308, 309 (2007).

[69] A "waste treatment lagoon" is an "impoundment made by constructing an embankment and/or excavating a pit or dugout" employed to "biologically treat waste . . . and thereby reduce pollution." Natural Res. Conservation Serv., Conservation Practice Standard: Waste Treatment Lagoon 359-1 (2003).

[70] Gurian-Sherman, *supra* note 4, at 51.

Northeast Cape Fear River.[71] These events merely serve as snapshots of the many instances of surface water contamination resulting from common failures of CAFOs.[72]

Much like groundwater contamination,[73] surface water contamination by CAFOs usually takes the form of increased nutrient concentrations and a resulting propagation of existing bacterial communities which can negatively affect human health. Studies have shown that increased levels of microorganisms spawned by pollutants from CAFOs, specifically cyanobacteria, "may be especially harmful to people with depressed or immature immune systems."[74] Further, eutrophication serves as another example of a frequent and severe surface water impairment resulting from CAFO pollution. Eutrophication is a process that results when CAFO runoff emits high concentrations of nutrient pollutants that reduce oxygen levels in receiving streams and lakes and thereby accelerate the development of naturally occurring algae.[75] Increased algal bloom results in even greater net positive feedback to this process and promotes oxygen depletion in the host water body, both by algal respiration[76] and reduction in sunlight penetration.[77] This process can culminate in massive fish kills, sometimes in the hundreds of thousands,[78] as well as the death of shellfish and other invertebrates in similar magnitudes.[79] To mitigate the effects of these problems, CAFO owners occasionally employ vegetative buffers, composed of densely placed regional, perennial vegetation or other constructed barriers. These buffers decrease effluent runoff rates, lower nutrient pollution in nearby streams and rivers, and tend to increase vegetation-based soil infiltration.[80]

---

[71] Michael Mallin & JoAnn Burkholder, *Comparative Effects of Poultry and Swine Waste Lagoon Spills on the Quality of Receiving Streamwaters*, 26 J. Envtl. Qual. 1622, 1631 (1997).

[72] *See* Robbin Marks, Cesspools of Shame: How Factory Farm Lagoons and Sprayfields Threaten Environmental and Public Health 36 (2001) (offering a compendium of CAFO spills and detrimental environmental effects from throughout the 1990s); *see generally* Natural Resources Defense Council, *Facts About Pollution from Livestock Farms*, http://perma.cc/XNA5-DVE5 (last visited Jan. 27, 2013) (listing specific and generalized concerns over nationwide surface water pollution resulting from CAFOs).

[73] *See infra* Part II.A.

[74] The Pew Comm'n on Indus. Farm Animal Prod., *supra* note 3, at 25 (citing Rao PV et al., *Toxicity Evaluation of In Vitro Cultures of Freshwater Cyanobacterium Microcystis Aeruginosa*, 8 Biomed. Envtl. Sci. 254 (1995)).

[75] Connor, *supra* note 64, at 287.

[76] Archie McDonnell & Rupert Kountz, *Algal Respiration in a Eutrophic Environment*, 38 J. Water Poll. Control Fed'n 841 (1966).

[77] Claudia Copeland, Specialist in Resources and Environmental Policy, Animal Waste and Water Quality: EPA Regulation of Concentrated Animal Feeding Operations, Cong. Research Service 4 (2010).

[78] Marks, *supra* note 72, at 36.

[79] Copeland, *supra* note 77, at 4.

[80] Gurian-Sherman, *supra* note 4, at 51.

As significant as these CAFO-based environmental maladies may be, a regulatory structure that offers both flexibility and consistency can make significant strides toward thorough mitigation of their detrimental effects on the nation's waters. While the NPDES permitting regime, implemented under the CWA and enforced by EPA, has been met with complete acceptance in the private sector, it remains the principal line of environmental defense against the externalities borne of unregulated CAFOs. Because this limited regulatory structure is unlikely to change, these realities will continue affect not only environmental and public interests, but also members of the CAFO industry who tend to play by the regulatory book.

III. The Regulatory Framework

General federal environmental regulation in the United States has a storied past, and the regulation of pollutants entering the nation's waters is no exception. With many of the nation's waterways still impaired, the importance of a stable and evenhanded regulatory regime is immeasurable.[81] The CWA and the NPDES program were not the first federal attempts to implement water quality requirements and control pollutant discharge into the nation's waters, but they have undoubtedly been the most persistent and successful.[82] Effectively, the CWA assures that the amount of pollution that CAFOs, among others, are permitted to produce is bridled by a set of uniform standards.[83] These standards may be generalized or individually tailored, based on the regulating body and the regulated entity.[84] However, this was not always the case.

a. Early Federal Water Pollution Regulation

In their infant stages, federal water pollution control programs were enacted based on the protection of human health, rather than environmental protection or conservation.[85] The first in a litany of varying regimes leading to the current iteration of the CWA was the 1948 Water Pollution Control Act,[86] which "allocated funds to state and

[81] *See* U.S. Envtl. Prot. Agency, Office of Wastewater Mgmt., Water Permitting 101 (1999) [hereinafter U.S. Envtl. Prot. Agency].

[82] David H. Moreau, *The Clean Water Act Revisited: Accomplishments and Issues for Reauthorization, Water Pollution Control in the United States: Policies, Planning, and Criteria*, 94 J. Contemp. Water Res. & Educ. 4, 20 (1994).

[83] *See* 40 C.F.R. 122.45(b) (2000).

[84] U.S. Envtl. Prot. Agency, Types of NPDES Permits: Individual Versus General Permits, http://perma.cc/6PMY-9XKV (last accessed February 1, 2013) (explaining "[a]n NPDES permit can be written to address discharges either from an individual point source or from a number of similar dischargers").

[85] U.S. Envtl. Prot. Agency, *supra* note 81.

[86] Pub. L. No. 80-845, 62 Stat. 1155 (1948).

local governments for pollution control" in general, but had "few, if any, federal goals, objectives, limits, or guidelines."[87]

The role of the federal government in curtailing water pollution increased in the fifties and sixties, during which Congress passed the Water Pollution Control Act Amendments of 1956[88] and the Federal Water Pollution Control Act Amendments of 1961.[89] Both "focused on giving additional funding to municipalities for constructing wastewater treatment works."[90] Then, in 1965, the concept of setting water quality standards for the nation's waters was formally introduced via the Water Quality Act,[91] which required individual states to develop water quality standards that would protect their waterways within a two-year period following the Act's passage.[92] This attempt suffered from limited enforcement because it placed a large burden on the federal government to "prove that pollutant loadings had an impact on human health or violated water quality standards" prior to carrying out enforcement procedures.[93] It became apparent that the loftiness of this goal destined the Act for failure. In addition to those shortcomings, the Water Quality Act attached no substantial penalties to states that violated its requirements,[94] reducing it to a toothless beast.[95]

Although the enacted legislation was largely ineffective, after the passage of the Water Quality Act in 1965, the "view that water quality was deteriorating became an 'uncontested truth' in Washington [D.C.], despite the absence of facts and documentation to back up that position."[96] The movement toward legislative change in the area of water quality culminated in the passage of the Federal Water Pollution Control Act Amendments of 1972.[97] These amendments, along with "modest changes" in the seventies and eighties,[98] have become collectively referred to as the Clean Water Act. These amendments "mark[ed] a distinct change in the philosophy of water pollution control in the United

[87] U.S. Envtl. Prot. Agency, *supra* note 81.

[88] Pub. L. No. 84-660, 70 Stat. 498 (1956).

[89] Pub. L. No. 87-88, 75 Stat. 204 (1961).

[90] U.S. Envtl. Prot. Agency, *supra* note 81.

[91] John H. Minan, *Municipal Separate Storm Sewer System (Ms4) Regulation Under The Federal Clean Water Act: The Role Of Water Quality Standards?*, 42 San Diego L. Rev. 1215, 1230 (2005).

[92] U.S. Envtl. Prot. Agency, *supra* note 81.

[93] *Id.*

[94] *Id.* at 2.

[95] *See* Pub. L. No. 89-234, 70 Stat. 498 (1965); *see also* Andrew P. Morris et al., *The Failure of EPA's Water Quality Reforms: From Environment-Enhancing Competition to Uniformity and Polluter Profits*, 20 UCLA J. Envtl. L. & Pol'y 25, 27 n.9 (2001).

[96] Moreau, *supra* note 82, at 13.

[97] *Id.*

[98] *Id.*

States" by setting ambitious goals to not only maintain the quality-based controls established by prior regulatory system, but to place equal emphasis on "technology-based, or end-of-pipe, control strategies."[99] The system established by the CWA has become the framework for water pollution control in the United States, and has remained that way for over thirty years.[100]

b. Federal Enforcement of Water Pollution Regulations

As Congress learned through past attempts at water quality regulation, effective and enforceable regulations must necessarily attach to pollution control standards for standards to operate as intended and policy goals to be met.[101] In order to meet its lofty goal of "[r]estoration and maintenance of [the] chemical, physical and biological integrity of [the] Nation's waters,"[102] Congress included the NPDES program in the CWA—a large step towards filling the enforcement void that plagued prior legislation.[103] The CWA's revolutionary regulatory scheme, which established uniform water quality standards, best management practices, and best-use technology, would be rendered useless legislation without the NPDES program.[104] The Supreme Court has acknowledged the importance of the NPDES program and described the purpose of a permit as "serv[ing] to transform generally applicable effluent limitations and other standards including those based on water quality into the obligations . . . of the individual discharger."[105] The Court also noted that "with few exceptions, for enforcement purposes a discharger in compliance with the terms and conditions of an NPDES permit is deemed to be in compliance with those sections of the [CWA] on which the permit conditions are based."[106]

Prior to the CWA, similar attempts were made to regulate the quality of the nation's waters but were unsuccessful due to a lack of effective enforcement mechanisms.[107] An interesting historical parallel

[99] U.S. Envtl. Prot. Agency, *supra* note 81, at 2.

[100] Moreau, *supra* note 82, at 13.

[101] *See* U.S. Envtl. Prot. Agency, Report No. 12-P-0113, EPA Must Improve Oversight of State Enforcement 1 (2011), *available at* http://perma.cc/G79F-EHS8.

[102] Connor, *supra* note 64, at 284 (citing 33 U.S.C. § 1251(a) (2006)).

[103] 33 U.S.C. §§ 1342, 1362 (2006). *See also supra* Part III.A.

[104] *See* EPA v. California ex rel. State Water Res. Control Bd., 426 U.S. 200, 204–05 (1976) (calling the NPDES program "a means of achieving and enforcing the effluent limitations" set forth by the CWA).

[105] *Id.* at 205.

[106] *Id.*

[107] *See* Pub. L. No. 89-234, 70 Stat. 498 (1965); *see generally* Morris, *supra* note 95, at 27 n.9 (explaining that the "Water Quality Act direct[ed] states to develop water quality standards that set water quality goals for interstate waters" but "left quality issues to the states.").

to the controversial "duty to apply" issues of *Waterkeeper* and *National Pork Producers*[108] is embodied by the tumult surrounding the Refuse Act Permit Program (RAPP).[109] RAPP was promulgated by the Army Corps of Engineers (the Corps),[110] acting pursuant to Executive Order 11574.[111] It "required any facility discharging wastes into public waterways to obtain a federal permit."[112] Permits under RAPP specified abatement requirements as designated by the Army Corps of Engineers. [113] These requirements outlined the amount of acceptable refuse discharges given the capabilities of the permit-holder.[114] In an even-handed, though somewhat nepotistic manner, RAPP attempted to regulate the discharge of pollutants directly into the nation's waters.[115] RAPP made it unlawful to "discharge … refuse matter of any kind," including industrial waste but excluding liquid sewage,[116] "into any navigable water of the United States, or into any tributary of any navigable water from which the same shall float or be washed into such navigable water."[117] RAPP famously introduced an early form of the "duty to apply," in that it added an enforcement mechanism to the Rivers and Harbors Act of 1899 prohibiting "discharge or deposit of [refuse] in any navigable water … without a permit."[118] A RAPP permit, much like a NPDES permit, was the enforcement mechanism of choice for the RAPP system.

As is clearly illustrated by its wording, RAPP imposed a tacit duty to apply on polluters when it rendered discharge without a permit inherently illegal.[119] Moreover, as noted above, the creation and implementation of RAPP's permitting requirement may be considered a parallel to the implementation of the duty to apply under the CWA's NPDES permitting program, particularly the 2003 Rule.[120] However,

[108] *See supra*, Part I.A–B.

[109] 33 U.S.C. § 407 (1970).

[110] Kalur v. Resor, 335 F. Supp. 1, 4 (D.D.C. 1971).

[111] Exec. Order No. 11574, 35 C.F.R. 19627 (1970).

[112] U.S. Envtl. Prot. Agency, *supra* note 81, at 2.

[113] Richard G. Hildreth, *Federal Control of Water Pollution: The Refuse Act Permit Program*, 27 Bus. Law 567, 569–70 (1971).

[114] *Id.*

[115] *See id*. at 567 (explaining that RAPP, "by its terms . . . does not apply to "operations in connection with the improvement of navigable waters or construction of public works, considered necessary and proper by the United States officers supervising such improvement or public work.")

[116] Deposit of Refuse in Navigable Waters Generally, 33 U.S.C. § 407 (1970); *see* United States v. Republic Steel Corp., 362 U.S. 482, 485 (1960) (differentiating industrial deposits and liquid sewage and concluding that "industrial deposits" are "discharges not exempt under" the Rivers and Harbors Act of 1899, of which RAPP is an extension).

[117] 33 U.S.C. § 407 (1970).

[118] Hildreth, *supra* note 113, at 570 (internal quotations omitted).

[119] *Supra* text accompanying note 118.

[120] *See supra* text accompanying note 9.

RAPP's ultimate failure is where that parallel ends and a stark historical contrast begins. To elaborate, RAPP was challenged in *Kalur v. Resor*[121] and the court determined that the promulgation of RAPP was beyond the authority of the Corps and was stripped of effect by the court.[122] This challenge came on the heels of the enactment of RAPP itself, just one year after the Executive Order recommending its inception and implementation.[123] The court's reasoning did not consider the implications of imposing permit requirements on those who "propose to discharge"[124] or "want to discharge"[125] pollutants, which were the pillars of the *Waterkeeper* and *National Pork Producers* decisions to vacate the duty to apply. Instead, the *Kalur* court struck down RAPP partly because it *allowed* discharge in the first place.[126]

The reasoning of the *Kalur* court and that of the *Waterkeeper* and *National Pork Producers* courts is vastly divergent. The *Kalur* court impugned the Corps' authority to issue permits under RAPP based on the environmental harms that the court believed were attached to the activity being permitted.[127] In contrast, the *Waterkeeper* and *National Pork Producers* courts struck the duty to apply for NPDES permits based on the perceived overreach of EPA requiring industrial polluters, like CAFOs, to actively secure permits when they propose to discharge pollutants.[128] While the difference in the courts' collective opinions is likely a result of the disparities in jurisprudential and legislative philosophy concerning support of environmental regulations between the 1970's and today,[129]

---

[121] *Kalur*, 335 F. Supp. at 10.

[122] *Id.* at 10.

[123] *Id.* at 20.

[124] *See Nat'l Pork Producers,* 635 F.3d at 746 (citing 71 Fed. Reg. 37, 744, 747 (June 30, 2006)) (internal citations omitted).

[125] *See Nat'l Pork Producers,* 635 F.3d at 750.

[126] *See Kalur*, 335 F. Supp. at 11 (explaining that "[o]nce a polluter has received a permit from the Corps of Engineers to dump "refuse" into a non-navigable waterway, the polluter is shielded from prosecution so long as he stays within the permit's terms. Shields from prosecution for otherwise criminal offenses should not be broadly distributed"). Additionally, the *Kalur* court found that the limitation of discharges into non-navigable waterways, more specifically "into any tributary of any navigable water from which the same shall float or be washed into such navigable water," was beyond the authority of the Corps and was another contributor to the lack of validity of RAPP. *Id.* at 10 (citing 33 U.S.C. § 407 (1971)) (alteration in original).

[127] *Id.* at 11.

[128] *Nat'l Pork Producers*, 635 F.3d at 751; *Waterkeeper Alliance, Inc.*, 399 F.3d at 505.

[129] *See* Moreau, *supra* note 82, at 13 (describing how the passage of the CWA occurred "in the still bright afterglow of Earth Day," after commenting that, in 1965, "[t]he view that water quality was deteriorating had become an 'uncontested truth' in Washington"); *see also* William H. Rodgers, *The Environmental Laws of the 1970's: They Looked Good on Paper*, 12 Vt. J. Envtl. L. 1, 32 (2009) (asserting that "the more significant and more dramatic changes [of statutory construction] occurred because the

the *Waterkeeper* and *National Pork Producers* courts desperately tried to think of another, more legally sound, reason to justify their decisions. Ultimately, they found one, however tenuous, in the CWA.[130]

c. The Clean Water Act and the National Pollution Discharge Elimination System

As described above,[131] the CWA is a key component of the federal government's pollution prevention toolbox.[132] By its basic operating terms, the CWA renders it illegal for a person[133] to discharge pollutants from a "point source"[134] into the waters of the United States[135] without first obtaining a permit issued in accordance with the NPDES system.[136] CAFOs were initially brought under the scope of the CWA in 1972[137] and only the larger of them fell into the regulatory requirements at the time.[138] Later considerations resulted in smaller CAFOs falling into the definition of "point source" if they discharged in violation of the CWA.[139] Following the passage of the CWA, using the NPDES permit regime to restrain the massive effluent runoff capacities of CAFOs became a

Supreme Court was able to lay its hands repeatedly and directly upon all sentiments bound up with a 1970s understanding of 'effective judicial review.'").

[130] *Nat'l Pork Producers*, 635 F.3d at 750-51; *Waterkeeper Alliance, Inc.*, 399 F.3d at 505.

[131] *See supra* notes 101–06 and accompanying text.

[132] *See generally Water is Worth It*, U.S. Envtl. Prot. Agency, http://water.epa.gov/action/cleanwater40/ (last visited February 3, 2013) (celebrating the fortieth anniversary of the CWA and touching on milestones of the Act, similar activities performed by other entities, and the basics of the CWA).

133 33 U.S.C. § 1362(5) (2006) (defining "'person'" as an "individual, corporation, partnership, association, State, municipality, commission, or political subdivision of a State, or any interstate body.").

[134] § 1362(14) (defining "'point source'" as "any discernible, confined and discrete conveyance, including . . . any pipe, ditch, channel . . . concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.").

[135] § 1362(7). The statutory equivalent to "the waters of the United States" is "navigable waters," this term includes "territorial seas." *Id.*

[136] *See* 33 U.S.C. § 1342 (2006).

[137] *Environmental Protection Agency Regulations*, 119 Cong. Rec. 34811 (1973) (statement of Sen. Gaylord Nelson).

[138] *Id.* (citing regulations excluding CAFOs with "less than 1,000 beef cattle, 700 dairy cows, 290,000 broilers, 180,000 laying hens, 55,000 turkeys, 4,500 hogs, 35,000 feeder pigs, 12,000 sheep and lambs and 145,000 ducks from compliance with sections 301 and 402" of the CWA).

[139] *Id.* (referring to Senator Edmund Muskie's findings and statement that "'if a man-made drainage ditch … is involved and if any measurable waste results and is discharged into water, it is considered a 'point source' … [therefore] [a]ny feedlot operations which result in the direct discharge of waste in a stream that transverses the feedlot are considered point sources without regard to number of animals involved.'").

regulatory focus, as evinced by the inclusion of CAFOs in the definition of point source.[140] The NPDES program, of course, is the premiere water quality permitting system in the United States, making it the obvious tool for the job.[141] The terms of the CWA are efficiently effectuated by NPDES permits, as they allow each permit to be individualized to its accompanying CAFO so that a CAFO's individual needs and capabilities may be taken into account when setting limitations.[142]

NPDES permits rely on effluent standards[143] that are formulated in accordance with a set of common guidelines.[144] NPDES standards differ based on the industry in question in terms of stringency. NPDES standards employ four general categories: (1) "best conventional pollutant control technology," which is based on a "cost reasonableness" test that "compares the cost for an industry to reduce its pollutant discharge with the cost to a publicly owned treatment works facility for similar levels of" pollutant reduction;[145] (2) "best practicable control technology currently available," which sets a standard "generally based on the average of the best existing performance by plants within an industrial category or subcategory";[146] (3) "best available technology economically achievable," which standardizes the "most appropriate means available on a national basis for controlling the direct discharge of toxic and nonconventional pollutants to navigable waters";[147] and (4) "new source performance standards," which apply to facilities qualifying as new sources under applicable federal regulations[148] and "consider that the new source facility has an opportunity to design operations to

---

[140] § 1362(14).

[141] *See generally* U.S. Envtl. Prot. Agency, Protecting the Nation's Waters Through Effective NPDES Permits, 4 (2001) (providing an overview of the structure of the NPDES water quality permit divisions—illustrating the national efficacy of the program and showing its state, municipal, industrial, and rural viability), *available at* http://perma.cc/AC97-DE2N.

[142] U.S. Envtl. Prot. Agency, *supra* note 84.

[143] 40 C.F.R. §§ 423.12–15 (1983).

[144] Clean Water Act of 1977, Pub. L. No. 95-217, § 53, 91 Stat. 1566 (1977) (explaining that each specific pollutant's effluent standard must "take into account toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms and the nature and extent of the effect of the toxic pollutant on such organisms, and the extent to which effective control is being or may be achieved under other regulatory authority.").

[145] U.S. Envtl. Prot. Agency, NPDES Permit Writer Training Manual G-2 (1996), *available at* http://perma.cc/RTE5-LT9M.

[146] *Id.*

[147] *Id.*

[148] *See* 40 C.F.R. § 122.2 (2000) (defining "[n]ew discharger" as "any … facility … [f]rom which there is or may be a discharge of pollutants … [t]hat did not commence the discharge of pollutants … prior to August 13, 1979" (internal quotations omitted); *see also* 40 C.F.R. § 122.29 (2000).

more effectively control pollutant discharges."[149] Using these categories to tailor permits to individual facilities ideally results in a set of permit requirements that is both restrictive enough to limit water pollution to an acceptable amount and permissive enough to avoid obstruction of industry activity. The NPDES program has been the subject of criticism from a broad spectrum of commentators. Some argue that it stifles industrial actors, in that NPDES implementation and enforcement create a "bad business climate."[150] Others complain that NPDES permits, specifically generalized permits, ineffectively enforce water quality standards because they allow permitting authorities to over-generalize permits.[151] However, the most celebrated aspects of NPDES permits are the perceived environmental benefits, such as water pollution control, protection of drinking water, and wildlife protection.[152]

While the precedent set by *Waterkeeper* is now considered textbook by most measures, and has obviously found footing in subsequent decisions on the duty to apply;[153] the binding nature of the opinion does not apply to all agencies implementing NPDES permits. To elaborate, EPA may authorize state implementation of the CWA and enforcement of NPDES permits, and it has done so to a great degree. EPA has enabled forty-six states to impose state-specific permitting regulations under a cooperative federalism regime.[154] In states that are not qualified to administer the CWA or issue and enforce NPDES permits—Idaho, Massachusetts, New Hampshire, and New Mexico—EPA remains responsible for administration and issuance.[155] In qualifying states, this near-universal delegation allows state regulatory agencies to carry out some of the responsibilities otherwise relegated to EPA.

---

[149] U.S. Envtl. Prot. Agency, *supra* note 145.

[150] *See* David R. Hodas, *Enforcement of Environmental Law in a Triangular Federal System: Can Three Not be a Crowd When Enforcement Authority is Shared by the United States, the States, and Their Citizens?*, 54 Md. L. Rev. 1552, 1615 (1995).

[151] *See* Jeffrey M. Gaba, *Generally Illegal: NPDES General Permits Under The Clean Water Act*, 31 Harv. Envtl L. Rev. 410, 473 (2007) (arguing the "most troubling aspect of the broad use of general permits is EPA's failure to adequately assure compliance with water quality standards").

[152] *See* 33 U.S.C. § 1342 (2006); *see also* U.S. Envtl. Prot. Agency, Benefits Derived From Taking a Watershed Approach, http://perma.cc/396P-RW6J (last accessed Feb. 9, 2013) (explaining that "coordinating programs on a watershed basis," including the implementation of NPDES permits, results in "joint[] review[] . . . of assessment efforts for drinking water protection, pollution control, [and] fish and wildlife habitat protection." Further, "[u]sing this information to set priorities for action allows public and private managers from all levels to allocate limited financial and human resources to address the most critical needs").

[153] *Nat'l Pork Producers*, 635 F.3d at 749–50.

[154] Claudia Copeland, Specialist in Resources and Environmental Policy, Clean Water Act: A Summary of the Law, Cong. Research Serv. ii (2010).

[155] *Id.* at 4.

Aspects of the CWA that may be assigned to qualified states include the authority to issue discharge permits to industries and municipalities, the ability to enforce those permits, and the ability to establish water quality standards.[156]

d. Rounding Up CAFOs

The movement toward stricter regulation of CAFOs mentioned above[157] was a deliberate process that culminated in a call to action in 1998.[158] The Clean Water Action Plan, a legislative blueprint proffered by President Bill Clinton, called for a coordinated effort to initiate a series of strategic decisions to reduce polluted runoff in the waters of the United States.[159] In response to this appeal, EPA and the United States Department of Agriculture (USDA) developed "a Unified National Strategy to minimize the water quality and public health impacts of animal feeding operations."[160] In their unified plan to curb egregious effluent output and bring many unregulated CAFOs into compliance, the Strategy anticipated the inclusion of states, among others, in a grand scheme to diversify the sources of CWA and NPDES regulation and enforcement.[161] The Unified National Strategy led to the development and promulgation of the 2003 Rule,[162] which, as explained above, was subsequently dismantled by the *Waterkeeper* court.[163]

Due to the diversity in regulatory bodies charged with carrying out the CWA's requirements, the *Waterkeeper* and *National Pork Producers* decisions do not effect full-scale change upon existing enforcement regimes. However, this does not mean those decisions are devoid of significant consequences.[164] Even though they are not universally binding, important questions still loom over those decisions and their aftermath; what was the statutory basis upon which the courts prevented EPA from imposing a duty upon CAFOs to apply for NPDES permits? Did congress *truly* intend, when devising the NPDES program,

---

[156] *Id.*

[157] *See supra*, text accompanying note 8.

[158] U.S. Envtl. Prot. Agency, *supra* note 54, at 1.

[159] *Id.*

[160] *Id.*

[161] *Id.* at 2.

[162] *Supra* note 9 and accompanying text.

[163] *See supra*, Part I.A.

[164] *See* National Pollutant Discharge Elimination System Permit Regulation for Concentrated Animal Feeding Operations: Removal of Vacated Elements in Response to 2011 Court Decision, 77 Fed. Reg. 44494, 44495 (July 30, 2012) (to be codified at 40 C.F.R. § 122) (incorporating the decision of National Pork Producers into the regulatory regime used by EPA to enforce NPDES permits and requirements against CAFOs).

such limits on the authority of agencies charged with implementation? The logical answers to these questions seem to contravene the answers provided by the *Waterkeeper* and *National Pork Producers* courts and present an important parable with a subtle lesson: the duty to apply, at least with respect to CAFOs that "propose to discharge," may have suffered a wrongful death.

IV. The Progeny of Waterkeeper and National Pork Producers

For better or worse, after Waterkeeper, unpermitted CAFOs enjoy freedom from required permitting unless EPA can show that they are discharging into the nation's waters.[165] The benefit of this, of course, is that non-discharging CAFOs are not faced with burdensome NPDES permit requirements.[166] A perceived drawback of the Waterkeeper outcome, though, is that even when CAFOs are discharging, they need not actively seek permits unless EPA affirmatively finds them in violation.[167] This burden of proof brings with it the administrative costs that EPA must bear when making individual site determinations—costs that EPA traditionally cannot afford to bear.[168]

Of course, given its limited resources, EPA must delegate its permitting authority to meet its goals of bringing discharging CAFOs into compliance.[169] The freedom of complete delegation has led to states, in some cases, negligently implementing and enforcing their CAFO permitting regulations, leading to intense criticism and objection by members of the public and EPA.[170] Illinois is one such state. In response

[165] 40 C.F.R. § 122.23 (2011); *See also Brown*, *supra* note 21, at 423.

[166] *See* David J. Salmonsen et al., *Regulatory And Incentive Based Approaches To CAFOs*, SJ028 ALI-ABA 357, 359-60 (2003).

[167] *See generally* National Resource Defense Council v. Environmental Protection Agency, Settlement Agrmt., 2 (No. 09-60510), *available at* http://perma.cc/HS3M-3L78 (settling that EPA will specify a duty to apply for CAFOs discharging or proposing to discharge, and requiring information from those facilities and failing to include other CAFOs in the agreement); *see also* Brown, *supra* note 21, at 424–25.

[168] U.S. Envtl. Prot. Agency, Final Action on the Proposed National Pollutant Discharge Elimination System (NPDES) Concentrated Animal Feeding Operation (CAFO) Reporting Rule—

> Questions and Answers 1 (2012) (explaining *why* EPA is seeking to implement an information collection system regarding CAFOs and noting that "[l]imited agency resources warrant a targeted approach" on collecting such information about CAFOs).

[169] *See supra* text accompanying notes 154–56.

[170] U.S. Envtl Prot. Agency, Initial Results of an Informal Investigation of the National Pollutant Discharge Elimination System Program for Concentrated Animal Feeding Operations in the State of Illinois 3 (2010), *available at* http://perma.cc/PE33-AQBT.

to a citizen petition for review of the Illinois Environmental Protection Agency's ("Illinois EPA") CAFO permitting program, EPA conducted an extensive investigation of the practices and programs that the Illinois EPA had implemented.[171] Most importantly, EPA found that the "Illinois EPA does not maintain a program capable of making a comprehensive survey of CAFOs subject to NPDES permit requirements."[172] In response to such a finding, EPA can require and recommend suitable actions.[173] The onus then falls on the state to implement such actions, and failure to do so may result in a disqualification of the state's self-regulation privileges under the CWA.[174] Illinois EPA's failure to implement a proper CAFO regulation scheme is not an isolated incident,[175] and the existence of such failures provides evidence for the argument that EPA is overburdened with similar administrative and regulatory responsibilities in the context of CAFO enforcement, without having the affirmative duty to investigate each individual CAFO to determine whether it actually discharges pollutants into the nation's waters.

Further, EPA maintained that the strict duty to apply provision was necessary based on a sound presumption that all large CAFOs have the potential to discharge pollutants.[176] That argument was met with fervent disagreement by many industry interests, who generally posited that EPA's presumption of universal CAFO discharge was baseless.[177]

a. Before and After Waterkeeper

The Waterkeeper decision shifted the paradigm of CAFO regulation. Before it issued the 2003 Rule, creating the duty to apply, EPA estimated that approximately 4,500 CAFOs were covered by NPDES permits but that another 11,000 would be required to secure permits

[171] *Id.*

[172] *Id.* at 36.

[173] *See id.* at 35–41 (listing all of the federal EPA's required and recommended actions in response to its findings).

[174] *See* 40 C.F.R. § 123.27 (1993); 40 C.F.R. § 123.63 (1998).

[175] *See, e.g.*, U.S. Envtl. Prot. Agency, Preliminary Results of an Informal Investigation of the National Pollutant Discharge Elimination System Program for Concentrated Animal Feeding Operations in the State of Iowa 37–40 (2012), *available at* http://perma.cc/564F-75YP.

[176] The 2003 Rule, *supra* note 9, at 7202 (explaining that "there is a sound basis in the administrative record for the presumption that all CAFOs have a potential to discharge to the waters of the United States such that they should be required to apply for a permit, unless they can show no potential to discharge."). *Id.* at 7201.

[177] Nat'l Pork Producers Council, et al., "Comments on Proposed Post-Waterkeeper CAFO NPDES Regulations," August 29, 2006, p. 38 71 Fed. Reg. 37,744 (June 30, 2006) (arguing "the record demonstrates that CAFOs as a class cannot be presumed to be discharging, and that the probability that most of these CAFOs will not have a discharge in the future under the CWA regulatory provisions as amended by this proposal, is extremely high.").

based on the 2003 Rule's requirements.[178] This disparity in regulation of a highly polluting industry's[179] compliance with the CWA illustrated the problems that informed the inclusion of many of the 2003 Rule's additional provisions.[180] After the 2003 Rule, CAFOs found themselves without a choice in determining whether permits were necessary or beneficial for their operation.[181] The legal implications of not securing a permit outweighed the costs of permit procurement and compliance—however costly NPDES permit compliance actually was.[182] Further, unless an individual CAFO was situated in such a way that there was "no potential to discharge,"[183] all CAFOs were brought in under the broad terms of the 2003 Rule.[184]

After the Waterkeeper deceision vacated the provisions of the 2003 Rule with which the court disagreed, the general approach to permit requirements changed.[185] Even though the strict "duty to

[178] Leonard H. Dougal, American Bar Association Section of Environment, Energy, and Resources, CAFOs & More: Agricultural Policy Meets Environmental Law—Emerging Legal Issues in the Regulation and Operation of CAFOs 4 (2005).

[179] U.S. Envtl Prot. Agency, National Water Quality Inventory Report 52 (2002) (charting fertilizer application, underground storage tanks, septic systems, and runoff from animal feedlots as four of the primary pollutants responsible for groundwater contamination).

[180] *See, e.g., id.* at 3.

[181] The 2003 Rule, *supra* note 9, at 7176.

[182] *See* Or. Rev. Stat. § 468B.220 (2011) (an Oregon state statute imposing $500 in civil penalties on CAFO owners who fail to apply for and secure a permit for their operation). *See also* Ill. Envtl. Prot. Agency, Illinois EPA Livestock Program 2003 Livestock Facility Investigation Annual Report 14–17, 21–24 (2003) (showing an annual summary of the results of CAFO NPDES permit violations and the accompanying site visits, letters of non-compliance, and penalties imposed based on complaints received by the Illinois EPA). *But see* U.S. Envtl. Prot. Agency, Economic Analysis of the Final Revisions to the National Pollutant Discharge Elimination System Regulation and the Effluent Guidelines for Concentrated Animal Feeding Operations ES-8–9 (2002) (listing the estimated total costs of compliance for CAFOs under the NPDES permit requirements imposed by the 2003 Rule).

[183] An example of such a situation would be a CAFO located a great distance from any water of the United States and designed in a way such that rainfall events would not disturb the constitution of the CAFOs waste storage mechanisms or facilities. The 2003 Rule, *supra* note 9, at 7202.

[184] *See id.* at 7181-82 ("In general, all CAFOs have a mandatory duty to apply for an NPDES permit and must comply with the technology and water quality-based limitations in the permit as defined by the permitting authority. Only CAFOs that have successfully demonstrated no potential to discharge may avoid a permit.").

[185] *See* Ellen Steen et al., *EPA Weighs Competing Arguments—And Likely Litigation—On Propose*d *CAFO Requirements*, 11 No. 1 ABA Agric. Mgmt. Comm. Newsl. 2 (Am. Bar Ass'n, Chicago, Ill.) Apr. 2007, at 8 (explaining that the *Waterkeeper* "decision calls for careful consideration of the benefits and burdens of permit coverage, as well as site-specific factors and operational history that may shed light on the risk of a regulated discharge from production areas and from land application areas," and declaring it "certain . . . that, for CAFOs not already operating

apply" was no more, CAFO owners still considered their potential to discharge in deciding whether to secure a NPDES permit.[186] While this new structure—which renewed the ability of some CAFOs to operate without a permit—was more forgiving of potentially polluting CAFOs than the 2003 Rule, the post-Waterkeeper model mirrored many similar permit regimes facing other industries.[187] CAFO owners no longer met a binding requirement when determining whether to come into compliance. Instead, they had a choice of operating without a permit and risking a violation if caught by EPA, or paying the costs associated with the permit.[188] However, the fact that the Waterkeeper ruling "upheld major parts of the rule, vacated other parts, and remanded still other parts to EPA for clarification, [left] all parties unsatisfied to at least some extent."[189] Some commenters argue that the Waterkeeper court's striking of provisions from the 2003 Rule was misguided because the court's actions were contradictory to "the fundamental principle" that "CAFO permit coverage [must increase] if pollutant discharges from CAFOs were to be reduced."[190] In light of some of these perceived problems, the 2008 Rule was promulgated.[191]

Upon the promulgation of the 2008 Rule, which "modif[ied] the requirement to apply for a permit by specifying that an owner or

---

under an NPDES permit, a decision will be required; and operators would be well advised to begin the process—if possible—now, rather than after publication of [the 2008 Rule]").

[186] *See generally*, Ellen Steen et al., *Waterkeeper Alliance, Inc. v. EPA: A View From the Farm Groups' Perspective*, 6 No. 2 ABA Water Quality & Wetlands Comm. Newsl. 9 (Am. Bar Ass'n, Chicago, Ill.) Aug. 2005 (explaining that "CAFO operators should . . . evaluate the potential for regulated stormwater discharges from their operations[,]" and such assessments "should include an assessment of: (1) whether stormwater runoff from the production area or from land application areas will enter navigable waters (which can be very broadly defined to include small streams, wetland areas and even ditches that ultimately connect to rivers or streams); and (2) whether any such discharge would be regulated (subject to NPDES permitting) under the CWA.").

[187] The common practice of trading pollution permits evidences this decision process; when a polluting firm can afford to pay for the additional costs of more volumes of permitted pollution, the firm is effectively making the decision based on a cost-benefit analysis. Further, the firm selling the pollution permit is making a similar decision by forfeiting the permit and foregoing the additional pollution volumes that firm would otherwise be able to emit. While this is a more efficient process that simply deciding whether to operate under a permitting structure in the first place, it still reflects a similar decision-making model. For more on permit trading, *see* Lisa Heinzerling, *Selling Pollution, Forcing Democracy*, 14 Stan. Envtl. L.J. 300, 301 (1995).

[188] *See* Steen, *supra* note 186, at 9*; but cf.* Heinzerling, *supra* note 187, at 334.

[189] Claudia Copeland, Animal Waste and water quality: EPA's Response to the Waterkeeper Alliance Court Decision on Regulation of CAFOs, 2 (2008).

[190] Brown, *supra* note 21, at 379.

[191] *Id.*

operator of a CAFO that discharges or proposes to discharge must apply for an NPDES permit," the permit requirements were pulled back towards the center of the spectrum of regulatory flexibility.[192] The 2008 Rule arguably struck the closest between leniency and stringency since the inception of the Unified National Strategy, described above.[193]

After the 2008 Rule, though, any CAFO proposing to discharge once again fell into the regulatory scope.[194] EPA, after receiving extensive critical comments on the 2008 Rule,[195] clarified that its NPDES permit requirement for CAFOs proposing to discharge was not contrary to the Waterkeeper court's mandate that permits could be required only from CAFOs that actually discharge.[196] EPA explained,

> Unlike the 2003 rule, which categorically required a permit for any CAFO with a "potential to discharge," this final rule calls for a case-by-case evaluation by the CAFO owner or operator as to whether the CAFO discharges or proposes to discharge from its production area or land application area based on actual design, construction, operation, and maintenance.[197]

It is notable here that EPA intended to place the burden of evaluation on the CAFO owner, rather than offer to oversee each individual facility's permitting necessities.[198]

Arguably, this normalization of the previously skewed picture was the high point of CAFO regulation in that it was comprised of an equitable regulatory structure that served regulators, industry, and the public alike.

b. Not "Just Right," According to National Pork Producers

While the duty to apply introduced in the 2003 Rule, tempered by the Waterkeeper court, and restructured by the 2008 Rule was the proverbial third bowl of porridge, it met a large contingent of opposition that ultimately culminated in National Pork Producers.[199]

---

[192] *See* the 2008 Rule, *supra* note 27, at 70419.

[193] *Supra* Part III.D.

[194] *See* the 2008 Rule, *supra* note 27, at 70422.

[195] *See id.* at 70423 (noting that "some commenters thought that "propose to discharge" and "potential to discharge" were not sufficiently distinguishable, and that "proposed" discharges could be understood as contrary to the *Waterkeeper* court's holding that only ''actual'' discharges are subject to CWA requirements).

[196] The 2008 Rule, *supra* note 27 at 70423 ("[i]ncluding a duty to apply for CAFOs that "propose to discharge" is not the same as requiring a permit for CAFOs with only a "potential to discharge").

[197] *Id.*

[198] *See id.*

[199] *E.g.*, Nat'l Pork Producers Council, et al., "Comments on Proposed Post-

In its opinion, the National Pork Producers court reached its conclusions on the 2008 Rule and imposed far-reaching consequences on some of the provisions therein. The court based its findings largely on a simple differentiation between "wanting to discharge pollutants" and "actually discharging pollutants," and by citing precedent only tenuously related to its point. To elaborate, the court relied on *Natural Resources Defense Council, Inc. v. Environmental Protection Agency*[200] when it stated,

> The D.C. Circuit explained more than 20 years ago that the CWA "does not empower the agency to regulate point sources themselves; rather, EPA's jurisdiction under the operative statute is limited to regulating the discharge of pollutants.[201]

This assertion, however astute, is unrelated to the question that was at issue in National Pork Producers: whether EPA may regulate sources that want to discharge pollutants. Instead, the cited case was differentiating between "regulating the discharge of pollutants," which is allowable,[202] and "banning the construction of new sources pending permit issuance" or "impos[ing] permit conditions unrelated to the discharge itself,"[203] which are both beyond the scope of EPA's authority.[204] The "seminal case"[205] so eagerly quoted by the court dealt with issues in a significantly starker contrast than the question facing the National Pork Producers court. To elaborate, supporting a decision as to whether EPA is limited to regulating CAFOs actually discharging pollutants rather than those wanting to discharge pollutants with precedent that determined whether EPA is authorized to ban the construction of buildings seems inherently problematic. These cases are irreconcilably distinguishable. Nonetheless, the court proceeded to disband the "proposes to discharge" provision of the 2008 Rule.[206]

The National Pork Producers decision prompted EPA to initiate a current rulemaking initiative;[207] one that will remove the

---

Waterkeeper CAFO NPDES Regulations," August 29, 2006, p. 38, 71 Fed. Reg. 37,744 (June 30, 2006); *See generally* Brown, *supra* note 21.

[200] Natural Res. Def. Council, Inc. v. E.P.A., 859 F.2d 156 (D.C. Cir. 1988).

[201] Nat'l Pork Producers v. U.S. E.P.A, 635 F.3d 738, 750 (5th Cir. 2011) (citing Nat'l. Res. Def. Council v. EPA, 859 F.2d 156, 170 (D.C. Cir. 1988)).

[202] 33 U.S.C. § 1342 (2006).

[203] Nat'l. Res. Def. Council, 859 F.2d at 170.

[204] *Id.*

[205] Nat'l Pork Producers, 635 F.3d at 750.

[206] *Id.* at 756.

[207] National Pollutant Discharge Elimination System Permit Regulation for Concentrated Animal Feeding Operations: Removal of Vacated Elements in Response to 2011 Court Decision, 77 Fed. Reg. 44494 (July 30, 2012) (to be codified at 40 C.F.R. § 122).

vacated provisions of the 2008 Rule and effectively return the CAFO regulatory regime to the post-Waterkeeper, pre-2008 Rule era.[208] Some commenters laud this as a move in the right direction because, notionally, CAFOs that have curtailed all of their discharges should not be required to secure NPDES permits.[209] Others argue that the total shift away from pre-discharge enforcement can operate to lower permitting and enforcement standards because states with pre-discharge statutes may suffer challenges to their validity.[210] Theoretically, this would seem to be the case. In practice, however, such challenges have already been attempted and met with failure.[211]

V. Conclusion

The death of the duty to apply and the end of pre-discharge CAFO permit requirements under the CWA has resulted, and will continue to result, in spectrum-wide effects. Those CAFOs that are not discharging, whether because of well-designed facilities or ideal geographic location,[212] will not suffer costly permit requirements—which would be imposed only on a presumption that discharge is inevitable.[213] On the other hand, CAFOs without NPDES permits but with inherent structural deficiencies or poor locations relative to waterways will enjoy unchecked discharge until a regulatory body finds occasion for testing and proving that effluent discharge is indeed taking place.[214] To determine which of these effects is more cost-efficient would require years of study and resources simply unavailable to existing regulatory

[208] *Id.* at 44494 (explaining that the rule promulgation is in response to the *Nat'l Pork Producers* court, which "vacated those portions of the 2008 CAFO Rule requiring CAFOs that propose to discharge to apply for an NPDES permit . . . This action removes from the Code of Federal Regulations (CFR) the specific ''propose to discharge'' requirement in 40 CFR 122.23(d).")

[209] Delmar R. Ehrich & Ann E. Prouty, *Federal Courts Limits EPA Jurisdiction Over CAFOs That Do Not Discharge Pollutants*, FAEGRE BANKS DANIELS, http://perma.cc/8L95-W5QX (last visited Mar. 17, 2011).

[210] *See* Agricultural Management: 2011 Annual Report, *Concentrated Animal Feeding Operations,* 2011 ABA SEC. Env't Energy, & Res. L.: The Year in RevIEW 1, 2.

[211] *See* Michigan Farm Bureau v. Dep't of Envtl. Quality, 807 N.W.2d 866 (Mich. Ct. App. 2011).

[212] *Kalur,* 335 F. Supp. at 10.

[213] *Supra* text accompanying notes 175–76.

[214] U.S. Gov't Accountability Office, Concentrated Animal Feeding Operations: EPA Needs More Information and a Clearly Defined Strategy to Protect Air and Water Quality 12 (2008); *See* Catherine Groves, *To Promote Compliance with the Clean Water Act, EPA Should Pursue a National Enforcement Initiative to Regulate Concentrated Animal Feeding Operations*, 39 Ecology L.Q. 321, 326 (2012).

bodies, not to mention the costs associated with the perpetual discharges of the latter group.[215]

To remedy the current circumstances, broad disclosure requirements should be implemented against CAFOs.[216] Such requirements would streamline the process of distinguishing between unpermitted CAFOs potentially taking advantage of the freedom to pollute and those operating efficiently and without the perceived environmental impacts commonly associated with the industry. As it is, though, regulatory bodies face significant hurdles even when attempting to determine the existence of CAFOs.[217] An information-forcing rule would likely address these hurdles and assist in normalizing the regulation of those CAFOs that need regulation, while promoting the continued and only mildly interrupted operation of those CAFOs that choose to comply with relevant regulations. Importantly, a disclosure requirement has been proposed by EPA in a previous settlement agreement and may be implemented, but definitive steps must still be taken.[218]

Whether *Waterkeeper* and *National Pork Producers* are subjectively considered victories or defeats, the reality remains that efforts to protect waters from degradation—the clear purpose of the CWA and its NPDES program—are significantly undercut if permitting requirements cannot be implemented until *after* discharge is already known to be occurring.[219] For that reason, *Waterkeeper* and *National Pork Producers* have established an untenable precedent. Had the courts provided sound legal qualifications for their interpreting the CWA—an act designed to eliminate discharge into the nation's waters—to require discharges to occur before permits may be used to enforce its prohibitions on discharge, then this analysis would be unnecessary. However, because the courts' opinions rested on unrelated precedent[220] and an improper application of *Chevron's* deference test,[221] a second look must be taken at their validity and accompanying results.

---

[215] *See* Christopher Brown, *Uncooperative Federalism, Misguided Textualism: The Federal Courts' Mistaken Hostility Toward Pre-Discharge Regulation Of Confined Animal Feeding Operations Under The Clean Water Act*, 30 Temp. J. Sci. Tech. & Envtl. L. 175, 216–18 (2011).

[216] *Id.* at 216.

[217] *See id.* (arguing that "EPA's lack of information on the existence of CAFOs and their characteristics led the agency to use extraordinary means").

[218] *See* National Resource Defense Council v. Environmental Protection Agency, *supra* note 167, at 2–3.

[219] Brown, *supra* note 21, at 381.

[220] Nat'l. Res. Def. Council, 859 F.2d at 170

[221] *Supra* text accompanying notes 20.

Bridging The Gap: The Connection Between Violence Against Animals and Violence Against Humans

Rebecca L. Bucchieri*

"Compassion for animals is intimately connected with goodness of character; and it may be confidently asserted that he who is cruel to animals cannot be a good man."[1]

I. Introduction

A behavioral warning sign exists that serves as an indicator of an individual's future propensity for violence, yet this warning sign is rarely incorporated into the legal framework used to deter these crimes.[2] Although a robust legal and scientific discourse firmly establishes a link between individuals who abuse animals and the perpetrators' proclivity to commit violent crimes against humans in the future, little has been done to use this connection as a platform for animal law reform.[3] This predictor, if properly used as a legal tool, promises to not only help achieve earlier deterrence of crimes against both animals and humans alike, but also to promote a better understanding of animals as sentient victims in need of broader protections. However, just as animal abuse is a strong indicator of future violence, state neglect in strictly enforcing animal cruelty laws indicate the unfeasibility of imminent animal law reform.[4]

---

* George Mason University School of Law, J.D. Candidate, May 2015; American University, B.A. Law and Society, *Magna Cum Laude*, 2012. I would like to thank my friends and family for their eternal support.

[1] Arthur Schopenhauer, On the Basis of Morality 223 (1965).

[2] Frank R. Ascione, *Animal Abuse and Youth Violence*, Juvenile Justice Bulletin 1 (Sept. 2001), https://perma.cc/4V8T-P9XP ("[A]nimal abuse has received insufficient attention—in fact, is sometimes explicitly excluded...—as one of a number of 'red flags,' warning signs, or sentinel behaviors that could help identify youth at risk for perpetrating interpersonal violence....").

[3] *See, e.g.*, Douglas F. Gansler, *First Strike: The Violence Connection*, The Humane Society of the United States (2008), http://perma.cc/P2ZM-MJ6E.

[4] Joyce Tischler, *Zero Tolerance for Cruelty: An Approach to Enhancing Enforcement of State Anti-Cruelty Laws*, *in* Child Abuse, Domestic Violence, and Animal Abuse: Linking the Circles of Compassion for Prevention and Intervention 298 (Frank R. Ascione & Phil Arkow eds., 1999) ("There is no single or simple reason why we see systematic refusal to prosecute and punish animal abusers aggressively. Perhaps it is because our society as a whole has mixed feelings about animals.").

The general reluctance of states to grant broader protections to animals[5] as well as the fragmented federal laws that safeguard only certain types of animals based on their roles in human consumption or use rather than their species or mental capacities[6] suggest a national uncertainty about how to fit animals squarely into our current laws.[7] Incorporating the connection between animal abuse and human violence into legislation and law enforcement schemes is a suitable direction for US animal law to presently take. Although legislators resist the idea of extensive revisions to animal law, the overall progress that has been made in recent years, while slow, has also been steady.[8] However, this vacillation—between enacting laws that are sympathetic towards animals but that also preserve the hierarchical structure of using animals as a means for an end—creates a patchwork of ineffective animal cruelty laws.

Legal repercussions for abusing animals have become more serious, but actual sentencing and enforcement has remained inferior.[9] Integrating the connection between animal abuse and human violence into animal cruelty laws, sentencing guidelines, and enforcement schemes would bridge the current gap between the desire to provide better animal welfare and the inherently more important priority of preventing human violence.[10]

---

[5] Corwin R. Kruse, *Baby Steps: Minnesota Raises Certain Forms Of Animal Cruelty To Felony Status*, 28 Wm. Mitchell L. Rev. 1649, 1677 (2002) (explaining that "politicians are often reluctant 'to support any new law which might possibly offend any voting' constituent engaged in these industries," which many politicians fear animal law reform will cause.).

[6] D. Smith, *Rats, Mice and Birds Excluded from Animal Welfare Act*, American Psychological Association, July/Aug. 2002, at 14, *available at* http://perma.cc/Z49C-LAHU (explaining that since birds, rats, and mice "make up about 95 percent of nonhuman animals used in laboratory research" the Animal Welfare Act does not consider them "animals" because they serve too important of a purpose in animal testing for lawmakers to significantly regulate their treatment.).

[7] Kruse, *supra* note 5, at 1651 ("Our ambivalent attitude toward other creatures seems to stem from ... the dissociation of human consumptive practices from the infliction of harm ... and our perceived lack of similarity with other animals.").

[8] Joseph G. Sauder, *Enacting and Enforcing Felony Animal Cruelty Laws To Prevent Violence Against Humans*, 6 Animal L. 1, 2 (2000) ("Historically, animal abuse was not a crime, mainly because animals are considered property. This view has progressively changed over the years and anti-cruelty laws now exist in all fifty states.").

[9] *Id.* at 9-10.

[10] Charlotte A. Lacroix, *Another Weapon For Combating Family Violence: Prevention Of Animal Abuse*, 4 Animal L. 1, 32 (1998) ("By strengthening this nation's animal cruelty laws, mandating the reporting of animal abuse, establishing clear guidelines for recognizing abuse, and setting up regional reporting registries, we can better understand and prevent animal abuse. Preventing animal abuse can then benefit other victims of ... violence.").

This Article will argue that a link is missing which is integral to the development of more robust legal protections for animals. Part I examines the progress the nation has made in developing stricter animal cruelty laws—laws which provide an indicator of not only how far animal welfare has come, but also suggesting what range of reforms are practical for the near future. Part I also examines the legal and scientific dialogues that establish a concrete basis for the conclusion that animal abusers are also likely to be involved in violent crimes against humans. Part II proceeds to argue that, while animals and humans need and deserve separate protections as inherently different creatures, the similarities between animals and humans are too compelling to not be incorporated into the sculpting of future animal cruelty laws. Part II also highlights the significant issues implicated by the current gap in the laws and suggests remedies through better enforcement schemes, stricter penalties, and mandated animal abuse registries.

The Article concludes that, in order to protect both humans and animals alike, animal cruelty laws and the regulations implemented to enforce them must be modeled with the connection between animal abuse and human violence in mind. As is evidenced in the following pages, intertwining the ramifications of animal cruelty with those for human violence will not only better protect victims, but will also help to elevate the legal protection provided to animals to a level approaching that of protection provided to humans.

II. Background

To appreciate the severity and complexity of the interaction between animal abuse and human violence, this Article tracks the early and recent developments of animal cruelty laws and then presents accounts of situations where animal cruelty laws have failed to protect animals and humans alike. Section a analyzes the steady expansion of animal cruelty laws while also highlighting how the laws fail in court due to minimal sentencing for even the most horrendous of crimes. Section b will examine the growing legal and scientific discourse on the connection between animal abuse and human violence.

a. The Historical Development and Treatment of Animals in the Law

Setting the foundation for the future animal cruelty legislation is a sees of laws whose roots date back to the 17th through 19th centuries.[11] Enacted in 1641, the first animal cruelty statute was surprisingly far

[11] David Favre & Vivien Tsang, *The Development of Anti-Cruelty Laws During the 1800s*, 1993 Det. C.L. Rev. 1, 3, 6, 7 (1993); *see also* United States v. Stevens, 533 F.3d 218, 238 (3rd Cir. 2008).

reaching, prohibiting brutality and cruelty against any animal used by man.[12] However, the 19th century can be credited with laying the true foundation upon which today's animal cruelty statutes are built.[13] This era also boasts the works of Jeremy Bentham, a renowned British philosopher, who, in explaining the importance of animal rights, declared that, "[t]he questions is not, [c]an they reason? Nor, can they talk? But [c]an they suffer."[14] This notion that the vulnerability and capacity to suffer bestows animals' inherent legal rights marked a turning point for animal welfare and cruelty statutes.[15] This turning point was reflected in the laws drafted at this time, such as an early New York law from 1829 making it a misdemeanor to maliciously kill, maim, wound, beat, or torture another individual's animal.[16] However, these early laws, such as the aforementioned New York law and an 1846 Vermont statute criminalizing the act of harming or stealing another person's horse or cow, but exempting dogs or cats, also reflects a theme that is still alive today: that animals are viewed primarily as property.[17] Thus, although the earliest laws evidence a deeply rooted interest in preventing animal cruelty, "the conceptual bridge that, if it [is] wrong to cruelly torture a cow, it should also [be] wrong to torture a cat or dog," had yet to evolve.[18]

The late 1800s marked a societal change where legislators began to provide more concrete and broader protections to all animals—even for animals that lacked commercial value.[19] However, these new laws were at first still rooted in principles of property rather than in morality, and any moral concerns were directed more for the benefit of human safety and self-interest than for the prevention of cruelty to animals alone.[20] Triggering this shift was, in part, the recognition that cruel

[12] William H. Whitmore, A Bibliographical Sketch Of The Laws Of The Massachusetts Colony From 1630 To 1686 53 (1890) (The statute read, "No man shall exercise any Tirrany or Crueltie towards any bruite Creature which are usuallie kept for man's use."); *see also* United States v. Stevens, 533 F.3d 218, 238 (3rd Cir. 2008).

[13] *See* Stevens, 533 F.3d at 238.

[14] Favre & Tsang, *supra* note 11, at 3. "This era" being the 17th through 19th centuries.

[15] *See id.* at 3-4. ("Bentham argued that the capacity for suffering is the vital characteristic that gives a being a right to legal consideration.").

[16] N.Y. Rev. Stat. tit. 6 § 26 (1829); Favre & Tsang, *supra* note 11, at 9-10.

[17] Favre & Tsang, *supra* note 11, at 7 ("The purpose of this law was to protect commercially valuable property from the interference of others, not to protect animals from pain and suffering.").

[18] *See id.* at 11-12.

[19] *Id.*

[20] *Id.*; *See also* Steven M. Wise, Rattling the Cage: Toward Legal Rights for Animals 44 (2000) ("Every American jurisdiction eventually passed anticruelty statutes. But judges often assumed that the statutes incorporated the biblical transcendence of human over nonhuman animals and that their purpose was to protect human morals, not animal bodies.").

treatment of animals could have broader implications for the safety of humans, evidencing an early acknowledgement that intentional brutality toward a living creature serves as an acute reflection of the immorality of the perpetrator initiating such conduct.[21] States like New Hampshire, Minnesota, and Michigan all enacted animal cruelty codes with titles such as, "Of Offenses Against Chastity, Decency, and Morality," evidencing the newfound recognition that a compelling connection exists between the cruel treatment of animals and the repercussions of that conduct on crimes of violence against humans.[22] Thus, from the earliest animal cruelty statues two enduring themes indicate the reason for such a long history of animal cruelty laws: firstly, that animals should be considered property with commercial value from which any losses at the hands of others should be remedied by the courts and, secondly, that cruelty towards animals lends itself to cruelty toward human beings.[23]

The formation, in 1866, of the American Society for the Prevention of Cruelty to Animals (ASPCA), served as a catalyst for the animal rights and welfare movement, which has since steadily grown in support and strength.[24] The ASPCA was a revolutionary organization not only because it was the first organization of its kind, but also because a national charter was created to give the ASPCA authority to investigate acts of animal cruelty, as well as the discretion to enforce anti-cruelty laws, granting them a general police power that had been absent from animal legislation up the ASCPA's formation.[25] While the ASPCA initially struggled against a system that was still uncomfortable with the concept of granting legal rights to animals, the ASPCA succeeded in passing powerful legislation that mirrors our laws today, such as laws requiring sufficient sustenance for animals,[26] safe transportation,[27] and criminalizing animal fighting.[28]

In one early animal cruelty case in 1888, where the defendant shot and killed several of his neighbors hogs, the Judge presiding over the case proclaimed, "Laws and the enforcement or observance of laws for the protection of dumb brutes from cruelty are, in my judgment, among the best evidences of the justice and benevolence of men."[29] This

[21] Favre & Tsang, *supra* note 11, at 11 ("While some did not believe moral duties were owed to animals, they did accept that cruelty to animals was potentially harmful to the human actor, as it might lead to cruel acts against other humans.").

[22] Favre & Tsang, *supra* note 11, at 11.

[23] Deborah J. Challener, *Protecting Cats And Dogs In Order To Protect Humans: Making The Case For A Felony Companion Animal Statute*, 29 Miss. C. L. Rev. 499, 501 (2010).

[24] Favre & Tsang, *supra* note 11, at 13.

[25] *Id*.

[26] *Id.* at 16.

[27] *Id.*

[28] *Id.*

[29] Stephens v. State, 65 Miss. 329, 331 (Miss. 1888).

sentiment was soon reflected in new legislation that arose at the turn of 20th century.[30] By the 1920s most states had some form of animal cruelty statute[31] and today every state not only has an animal cruelty statute, but fifty states have provisions that sentence perpetrators to felonies for their animal cruelty crimes.[32] Paralleling expansion of animal cruelty laws in the states was the development of federal laws such as enactment in 1966 of the Animal Welfare Act.[33] However, because this bill only regulates minimal standard of care for animals in research facilities, exhibitions, and transport, it does little to combat the egregious acts of animal cruelty that later bleed into violence against humans.[34] Other federal laws are similarly limited in their reach and effects at combatting intentional animal cruelty.[35]

A typical state animal cruelty statute today generally includes: (1) a provision describing the types of animals covered, such as "a domestic animal, a household pet or a wild animal in captivity"[36] (2) a description of the perpetrator's requisite *mens rea*, which is usually "intentionally"[37] committing an act "with no justifiable purpose"[38] (3) the specific acts of animal cruelty prohibited, such as conduct that is "intended to cause extreme physical pain... carried out in an especially depraved or sadistic manner,"[39] (4) exemptions from the act, such as conduct carried out for purposes of animal husbandry practices, hunting, and pest control[40] and (5) available sentences and penalties, which differ from misdemeanors to felonies and various fines amongst states.[41]

---

[30] *E.g.*, Larry Falkin, *Taub v. State: Are State Anti-Cruelty Statutes Sleeping Giants?*, 2 Pace Envtl. L. Rev. 255, 266 (1985) ("by the early 1920's most, if not all, of the states had some form of anti-cruelty statute").

[31] *Id.*

[32] Pamela D. Frasch et al., *State Animal Anti-Cruelty Statutes: An Overview*, 5 Animal L. 69, 69 (1999); *Animal Cruelty Facts And Statistics: Statistics On The Victims And Current Legislative Trends*, 2011, The Humane Society of the United States, http://perma.cc/4HT4-C9ZD.

[33] Animal Welfare Act, 7 U.S.C.A. §§ 2131-2159 (2013).

[34] *See id.*

[35] *See, e.g.*, Humane Methods of Slaughter Act of 1978, 7 U.S.C.A. §§ 1901-1906 (2013).

[36] *See* N.H. Rev. Stat. Ann. § 644:8 (2009); *See also* Tex. Penal Code Ann. §§ 42.09, 42.092 (Vernon 2007) (distinguishing cruelty to livestock animals from cruelty to non-lives stock animals); *See also* Fla. Stat. Ann. § 828.02 (West 2013) (describing an animal as "every living dumb creature").

[37] *See e.g.*, Fla. Stat. Ann. § 828.12 (West 2013).

[38] *See* N.Y. Agriculture and Market Law § 355-a (McKinney 1999); *See also* Fla. Stat. Ann. § 828.12 (West 2013) (using the slightly different terminology of "unnecessary pain and suffering").

[39] *See id.*; *See also* N.H. Rev. Stat. Ann. § 644:8 (2009) (expanding the prohibited acts also to "omissions injurious or detrimental to the health, safety or welfare of any animal").

[40] *See* N.Y. Agriculture and Market Law § 353-a (McKinney 1999).

[41] *See generally* Challener, *supra* note 23, at 505-07.

These provisions, while structurally providing the basic framework to combat animal cruelty, lose much of their force when met with judicial interpretation in court,[42] lack of resources for strong prosecutions,[43] and the ultimate improbability of judges administering sentences and penalties on par with the severity of the crimes committed.[44] Moreover, animal cruelty statutes are still drafted in a way that define animals as resource to humans that can still be harmed, just not "unjustifiably" so.[45]

The lack of national uniformity between different state penalty provisions mirrors the fluctuations between sentences within the states themselves. While states often require forfeiture of the abused animal from the perpetrator, some states include exemptions if, "the court determines the person is able and fit to provide adequately for the animals."[46] Evidencing the disparities in sentencing are the other jurisdictions that are much more stringent about penalties, restricting the individual's ability to own pets in the future,[47] and mandating psychological counseling even when the conduct qualifies as a first offense or minor misdemeanor.[48] However, even in these jurisdictions, such penalties are discretionary.[49] Even the mandatory sentencing provisions in state statutes set maximum penalties and incarceration

[42] *See* Sauder, *supra* note 8, at 7-8 (discussing the outcome of a case where a judge interpreted the defendants' conduct of beating their dog "then repeatedly submerge[ing] the dog's head in a hole filled with water for fifteen to twenty minutes," as falling under the animal cruelty statute's exemption for "punishment administered to an animal in an *honest and good-faith effort to train*" the animal—which does not fall under willful cruelty").

[43] Challener, *supra* note23, at 523 ("prosecutors often do not pursue misdemeanor animal cruelty cases because they devote their limited time and resources to felonies").

[44] *See infra* pp. 9-10.

[45] Margit Livingston, *Desecrating The Ark: Animal Abuse And The Law's Role In Prevention*, 87 Iowa L. Rev. 1, 35 (2001) ("Almost all modern anticruelty laws forbid the unjustified or malicious killing of certain animals. Many of these laws, however, ban only the unnecessary destruction of an animal owned by another and place no direct restrictions on owners' killing of their own animals.").

[46] *See, e.g.,* Minn. Stat. Ann. § 609B.525 (West 2013).

[47] *See e.g.,* Va. Code Ann. § 3.2-6571(D) (2008). Virginia's strict law was put in the spotlight when Michael Vick, an NFL quarterback, was convicted for a felony for dogfighting and prohibited from owning dogs in the future. *See* Michael Vick Banned from Dog Ownership—Ask an Attorney, Animal Legal Defense Fund (Dec. 22, 2010), http://aldf.org/press-room/press-releases/michael-vick-banned-from-dog-ownership-ask-an-attorney/.

[48] *See, e.g.,* N.J. Stat. Ann. § 4:22-17(g) (West 2013) (requiring juveniles convicted of animal cruelty to undergo psychological counseling); Me. Rev. Stat. tit. 17, § 1031.3-B (2013) (giving the court the option to require psychological counseling upon probation); Tenn. Code Ann. § 39-14-212(f) (West 2014) (psychological counseling can be required for aggravated animal cruelty offenses); Utah Code Ann. § 76-9-301(11)(a) (West 2008).

[49] *See, e.g.* Me. Rev. Stat. Ann. tit. 17, § 1031.3-B (2013).

times, under which the judge can order the bare minimum.[50] With first offense maximum fines often being set at one thousand dollars and maximum imprisonment terms being capped at six months, the holes in the cruelty laws become evident especially when compared to the crimes that qualify for such low penalties, such as intentionally poisoning, beating, tormenting, and starving an animal.[51] Moreover, because most states classify first offenses of animal cruelty as misdemeanors, the individual prison sentence will rarely be more than one year.[52]

While some recent court cases stand as triumphs against this malleable system,[53] most animal cruelty judgments accentuate the problem.[54] A couple from Texas recently killed three puppies by smashing their skulls and burning their bodies in a barrel.[55] Pleading guilty to these crimes, the judge sentenced the man to serve only thirty days in jail and the woman to three years' probation.[56] However, what's most shocking is that the couple is permitted to own animals in the future.[57] Another defendant, who threw boiling water on his dog's head and torso after the dog peed on the floor, was sentenced to one year of probation with no restrictions on animal ownership after that period.[58] A woman who was charged with beating two kittens to death with a baseball bat was sentenced to one year in jail, although the judge could have sentenced her to twelve years.[59] Demonstrating that criminal animal cruelty sentences are inadequate for the severity of the crimes, this problem is compounded by the frequency with which low maximum sentences are suspended for lesser penalties.[60]

---

[50] *See* Challener, *supra* note 23, at 526 (discussing judicial discretion in animal cruelty cases).

[51] *See* La. Rev. Stat. Ann. § 102.1 (2009).

[52] *See* Challener, *supra* note 23, at 507 ("Regardless of whether animal abuse is treated as a misdemeanor or a felony, however, the maximum prison term available is often one year, especially for a first offense, and may be as light as thirty days or six months.").

[53] *See generally* Patterson v. State, 353 S.W.3d 203 (2011) (sentencing the defendant to eight years in prison for brutally mutilating three cats and duct taping them to a piece of wood on the side of the road).

[54] Sauder, *supra* note 8, at 8 (generally discussing lax punishments from animal cruelty cases in the late 1990's).

[55] Penny Eims, *Probation sentence for Texas couple who killed, burned puppies*, Examiner (Aug. 7, 2013, 10:12 AM), http://perma.cc/2RPA-KFJK.

[56] *Id.*

[57] *Id*.

[58] *Dog-Scalder Gets 1 Year Probation*, NBC Chicago (July 11, 2013, 4:31 PM), http://perma.cc/K8HE-5KLN.

[59] Kristal Roberts, *Wiliana Frazier Found Guilty Of Beating Kittens, Sentenced To One Year In Jail, Probation*, ABC Action News (Aug. 2, 2012 7:37 PM), http://perma.cc/TG3G-3DKW.

[60] For further examples of the rarity for courts to subject perpetrators of animal

b. The Connection Between Cruelty to Animals and Violence Against Humans

Recognized since the earliest of animal cruelty statutes, the legal and scientific literature establishing a connection between animal abuse and human violence has evolved tremendously. Running the gamut, connections have been recognized between bestiality and child abuse, animal abuse and domestic violence, as well as egregious acts of animal cruelty and murderers or serial killers.[61] In particular, bestiality is a difficult animal crime to analyze as a result of the social stigma attached to it and the minimal resources directed at bestiality investigations.[62] However, because many criminal investigations into child pornography or child molestation also simultaneously lead to evidence of bestiality, the connection between these two crimes often speaks for itself. In 2011, while law enforcement officers were investigating accusations that a renowned scientist was involved with child molestation, they also uncovered evidence of her involvement in bestiality.[63]

Investigations into possession of child pornography will also tend to produce evidence of bestiality.[64] The connection between bestiality and child molestation is generally explained by the shared sexual deviance of both crimes, as well as the power and control the perpetrator feels when acting against either category of victims.[65] One criminologist argues that the term "bestiality" should be revised to instead read "interspecies sexual assault" in order to reflect the surge

---

cruelty to maximum sentences, *see generally* Kylie McGivern, *Animal Cruelty Laws—Too Long of a Leash?*, WJHL News (Apr. 23, 2013), http://perma.cc/AAZ2-CY8P.

[61] *See infra* pp. 10-14.

[62] William M. Fleming et al., *Characteristics of Juvenile Offenders Admitting to Sexual Activity with Nonhuman Animals,* 10 Soc'y & Animals 31, 31 (2002) ("Sexual relations between humans and nonhuman animals, sometimes referred to as bestiality, is perhaps the least understood of all human/animal interactions. Studies of bestiality are difficult to conduct since bestiality carries a social stigma and generally is kept secret by those who have engaged in it.").

[63] David Lohr, *Kimberly Lindsey Arrested: Bestiality, Child Molestation Charges Filed Against CDC Researcher*, Huffington Post, (Oct. 11, 2012), http://perma.cc/HY5X-M6Q9.

[64] For further examples of investigations that resulted in uncovering evidence of both bestiality and child pornography, see, e.g., Rachel McDevitt, *Child Pornography, Bestiality Accusations Land Man in Jail*, Fox10 (Mar. 28, 2014 4:258 PM), http://perma.cc/62WW-DRKP *and* Amanda Rakes, *Fishers man arrested on bestiality, child exploitation charges*, Fox59 (July 1, 2013 1:45 PM), http://perma.cc/2EQX-AU82.

[65] Piers Bierne, *Rethinking Bestiality: Towards a Concept of Interspecies Sexual Assault*, 1 Theoretical Criminology 317, 325 (1997) (explaining how the non-consensual act of bestiality parallels the non-consensual act of child molestation and the power and control relationship in domestic abuse).

in cases in the criminal justice system that involve bestiality and child pornography, and because bestiality shares similarities with the sexual exploitation of both women and children.[66] A group of criminologists conducted a study on the relationship between animal abuse and cruelty to humans which showed that bestiality, "is most often found among violent offenders, sex offenders, and those individuals who have themselves been sexually abused," and that it is an "apparent precursor for later recurrent violent crimes."[67]

The power and control dynamic in bestiality becomes increasingly central to the link between animal abuse and domestic violence.[68] Perpetrators of domestic violence, "often threaten, hurt, or kill family pets as a means of coercing and controlling their female partners [so that] women sometimes delay seeking shelter out of concern for the welfare of their pets."[69] The availability of womens' shelters facilitates data collection on the interrelationship between animal abuse and domestic violence, and the numbers are staggering.[70] The vice president of the ASPCA indicated the severity of the problem in an interview with the New York Times for a story the newspaper was doing on this very connection:

> We discovered that in homes where there was domestic violence or physical abuse of children, the incidence of animal cruelty was close to 90 percent. The most common pattern was that the abusive parent had used animal cruelty as a way of controlling the behaviors of others in the home. I've spent a lot of time looking at what links things like animal cruelty and child abuse and domestic violence. And one of the things is the need for power and control. Animal abuse is basically a power-and-control crime.[71]

---

[66] *Id.* at 317.

[67] Christopher Hensley et al., *The Predictive Value of Childhood Animal Cruelty Methods on Later Adult Violence: Examining Demographic and Situational Correlates*, 56 Int'l Journals of Offender Therapy and Comp. Criminology 281, 292 (2011).

[68] Catherine A. Faver & Elizabeth B. Strand, *Domestic Violence and Animal Cruelty: Untangling the Web of Abuse*, 39 J. Soc. Work Educ. 237, 240 (2003) ("A patriarchal culture which gives men power over, women, children, and animals is at the root of family violence.").

[69] *Id.* at 237; *See also* Gansler, *supra* note 3, at 3 ("Animal cruelty in domestic violence situations often significantly worsens the abusive situation because women are more likely to stay in the relationship with their abuser out of fear of leaving their companion animal.").

[70] Delora Frederickson, *Not Without My Pet*, 31 Off Our Backs 33, 33 (2001) (in 2001, 85.4% of women and 63% of children seeking refuge in battered women shelters discussed crimes of animal that occurred in their families).

[71] *See* Charles Siebert, *The Animal-Cruelty Syndrome*, N.Y. Times (June 11, 2010), http://perma.cc/K9VN-PB5V.

Not only is animal abuse psychologically and physically harmful to the animal and its owner, but it also has significant adverse effects on the children who witness the cruelty. Through observing one or both of their parents engaging in animal abuse, children learn by example or are desensitized to feeling empathy for animals and even other humans and, thus, "frequently engage in what are known as 'abuse reactive' behaviors, … re-enacting what has been done to them either with younger siblings or with pets."[72] Instances of abuse leading to more abuse continue to surface in additional situations, such as in cases concerning child molestation where, not only are the adult abusers often also involved in animal cruelty, but the children being sexually abused also show higher rates of involvement in animal abuse.[73]

In propagating this vicious cycle of abuse, animal cruelty provides new meaning for the theory that past behavior is the best predictor of future behavior. Past animal abuse is such a strong indicator of future violent behavior that the Federal Bureau of Investigation utilizes it as a predictor when profiling particularly dangerous and violent criminals and even recently upgraded animal cruelty to a top tier felony for purposes of better data collection.[74] One study conducted over a ten year period discovered that children ages six to twelve who had been involved in acts of animal cruelty in their pasts were more than twice as likely as children who had no history of animal abuse to become juvenile violent offenders.[75] As Margaret Mead, a renowned cultural anthropologist from the 1900's, aptly proffered, **"**One of the most dangerous things that can happen to a child is to kill or torture an animal and get away with it."[76]

In the most extreme cases of murderers and serial killers, the link between animal abuse and human violence is at its strongest. Many of the most infamous serial killers possessed a history stark with animal abuse, such as Jeffrey Dahmer whose brutal rape, cannibalism, and murders of seventeen males were prefaced by a childhood of mutilating,

---

[72] *Id.* (quoting Vice President of the ASPCA, Randall Lockwood).

[73] Ascione, *supra* note 2, at 8 (discussing a study that shows, "cruelty to animals to be more prevalent among patients who had been sexually abused than among those who had not been sexually abused."); *See also* Sauder, *supra* note 8, at 8 ("A disturbing example of this cycle occurred where a nine year-old girl bound her cat's hind legs together with rubber bands and left them there until the cat's paws died and rotted off. Investigators subsequently discovered that the girl was being physically and sexually abused at home.").

[74] *The Animal Abuse-Human Violence Connection*, PAWS, http://perma.cc/82VR-SULQ; *Big News: FBI to Start Tracking Animal Cruelty Cases*, The Humane Society of the United States (Sep. 17, 2014), http://perma.cc/U74Y-EDEQ.

[75] *See* Siebert, *supra* note 71.

[76] PAWS, *supra* note 74.

impaling, dissecting, and tormenting animals.[77] A more recent example is Lee Boyd Malvo—better known as one of the DC snipers—whose mother's abuse of him as a child influenced Malvo to hunt and kill with a slingshot any cat that crossed his path.[78] In one study conducted of nine school shootings that took place in US schools between 1966 and 1999, five of the eleven shooters (forty-five percent) had childhoods involving animal abuse.[79]

III. Analysis

Although animal cruelty statutes have expanded greatly over time to include the structural soundness necessary to combat egregious acts of animal cruelty, the legal system upon which these statutes rely for success has ultimately failed the very subjects that these laws are created to protect. Those subjects include not only animals, but also humans, because the cruelty towards one has manifest repercussions for the other. Section A of this Part argues that a more integrated system of mandatory counseling and increased awareness for prosecutors will lead to better protection for both animals and humans. Section B suggests that new enforcement schemes such as mandatory reporting for animal abuse and the development of animal abuse registries will ultimately mold the criminal justice system into a more animal friendly arena, benefitting animals as well as their human counterparts.

a. An Integrated System of Detection, Counseling, and Prosecution

While protections afforded to animals have significantly increased in recent years, one aspect that has stayed constant is the treatment of animals as property.[80] Labeling animals as property permits a legal status that allows for suffering in ways that are at odds with the legal protections that are afforded to other sentient beings, and is thus commonly targeted as an area of animal law that needs revision.[81] However, although this label facilitates abuse and promotes ignorance as to the inherent similarities between animals and humans, the fact that the property status of animals has remained unchanged amidst other

[77] *See* Siebert, *supra* note 71; Joel Norris, Jeffrey Dahmer 63-67 (1992).

[78] *See* Gansler, *supra* note 3, at 3.

[79] Ascione, *supra* note 2.

[80] *See* Sauder, *supra* note 8, at 2 ("Historically, animal abuse was not a crime, mainly because animals are considered property. This view has progressively changed over the years and anti-cruelty laws now exist in all fifty states. The early property based views, however, continue to influence current legislation.").

[81] Gary L. Francione, *Animal Rights and Animal Welfare*, 48 Rutgers L. Rev. 397, 443 (1995) ("[A]s long as animals are classified as property, … humans [have] license to ignore the basic similarities between humans and nonhumans relevant for attribution of the status of being a subject-of-a-life.").

significant reforms to animal cruelty laws illuminates how unlikely state legislatures are to increase the legal status of animals to match the legal standing of their human counterparts.[82] Because granting animals legal standing akin to personhood is not yet feasible, efforts to enhance protections for animals must be directed elsewhere.[83] Such as acutely targeting the perpetrators of animal cruelty crimes in order to deter future crimes against animals *and* humans, which could garner support from conservative legislatures and animal rights advocates alike.[84]

As research demonstrates, engaging in animal abuse often begins at a young age, developing into more violent and anti-social behaviors involving animals and other humans as the child grows older.[85] Thus a logical stepping stone to target the roots of animal cruelty and subsequent human violence would be to identify youth involved with animal abuse and to treat those individuals by providing counseling or ameliorating the situation that is facilitating such behavior, such as by providing relief from a home environment that involves domestic violence or sexual abuse.[86] Revising state animal cruelty laws to include mandatory rather than discretionary psychological counseling for animal cruelty offenses would not only help to rehabilitate the juvenile offender before committing more serious offenses against animals or humans as an adult, but would also detect other serious issues. Psychological counseling often results in the discovery of underlying problems in the juvenile's life such as abuse or animal cruelty at home.[87]

Unfortunately, laws are only as good as their enforcement and the enforcement of animal cruelty laws lacks the funding, passion, and

---

[82] Jonathan R. Lovvorn, *Animal Law In Action: The Law, Public Perception, and the Limits of Animal Rights Theory as a Basis for Legal Reform*, 12 Animal L. 133, 139 (2006); Kruse, *supra* note 5, at 1675 ("There are a number of reasons for this tendency to see the abuse of animals as an issue of little concern. Perhaps the most basic factor is the previously discussed property status of animals.").

[83] *See* Steven M. Wise, *Legal Whac-a-Mole*, Nonhuman Rights Project, (Jan., 3, 2015), http://perma.cc/4LJE-S69D.

[84] *See* Joseph Carroll, *Republicans, Democrats Differ on What Is Morally Acceptable*, Gallup News Services, (May 24, 2006), http://perma.cc/DX56-DTXQ (polling data shows differences between what republicans and democrats view as morally acceptable, including issues of animal rights).

[85] *See* Faver & Strand, *infra* p. 12.

[86] *See* Livingston, *supra* note 45, at 42 ("In identifying and treating young abusers especially, society arguably diminishes the likelihood that such abusers will progress to violent acts against humans."); *See also*, Faver & Strand, *supra* note 68, at 241 ("[S]ocial workers may help to prevent family violence by identifying effective humane education programs and encouraging their use in schools and childcare centers.").

[87] *See* Tischler, *supra* note 4, 303 ("Effective treatment of mental health disorders may prevent future animal abuse and other violent acts.").

resources to effectively combat perpetrators.[88] As detection of animal cruelty crimes gains more attention from law enforcement officers and other investigators, the deficiencies in the current enforcement scheme become apparent.[89] Many crimes of animal cruelty end without justice, either because the animal survived but cannot self-report or because there is comparatively minimal urgency to report and solve a case involving an abandoned and abused dead animal than there would be for a deceased human body.[90]

However, the ASPCA set a strong precedent in 2008 when the organization created, "the nation's first Mobile Animal Crime Scene Investigation Unit, a rolling veterinary hospital and forensic lab that travels around the country helping traditional law-enforcement agencies track the evidentiary trails of wounded or dead animals back to their abusers."[91] Revamping animal abuse investigations to include practices used for human crime scene processing, such as, "forensic entomology (determining the time of an animal's injury or death by the types of insects around them); bloodstain-pattern and bite-mark analysis; buried-remains excavation; and forensic osteology (the study of bones and bone fragments," is a step towards treating animal crimes with the scrutiny they deserve.[92]

One of the investigators on the ASPCA unit recounted an instance where a dog had to be euthanized by a veterinarian due the severity of his infirmities.[93] However, when the investigator performed the requested necropsy of the dog, the results revealed that the underlying cause of death to the animal was due to being beaten to the point of paralysis by its owners.[94] When the investigator reported these findings to the police, officers investigated the owner's home and discovered a badly beaten child, which led to formal charges of child abuse.[95] The investigator recalled this experience as, "a classic case of the system working like it should."[96] The benefits of adjusting our criminal laws and enforcement schemes in this way are twofold—providing quicker identification of animal abusers as well illuminating signs of human crimes.

---

[88] *See* Lacroix, *supra* note 10, at 16 (discussing the reluctance of law enforcement to enforce animal cruelty laws).

[89] *See* Siebert, *supra* note 71.

[90] *See id.* ("As animal abuse has become an increasingly recognized fixture in the context of other crimes and their prosecution, it is also starting to require the same kinds of sophisticated investigative techniques brought to bear on those other crimes.").

[91] *Id.*

[92] *Id.*

[93] *Id.*

[94] *Id.*

[95] *Id.*

[96] *Id.*

Even when prosecutors do agree to handle an animal cruelty case, "There is a tendency to avoid prosecution entirely, or, at best, to assign to the case the most junior assistant in the prosecutor's office."[97] Exacerbating the problem is that law enforcement officers are rarely trained to detect or handle animal cruelty cases, creating a general unwillingness to work on the issue which, in turn, leads to a large overturn of state cases to private, overworked, and underfunded animal welfare agencies.[98] However, as the link between animal abuse and human cruelty becomes more pronounced in both practice and on paper, more law enforcement officers are striving for more accurate detection of animal cruelty as well as towards raising more awareness within their divisions about the need for other officers to do the same.[99] An Ohio sheriff and dog-fighting expert has traveled to over twenty-four states educating other members of law enforcement about dog-fighting as well as the connection between animal cruelty and human cruelty, with emphasis on the connection between animal abuse and domestic violence. [100] Although the sheriff admits that many law enforcement agencies adopt attitudes disfavoring animal cruelty cases, casting them aside as low priorities, he also reports that this attitude is changing as officers become more aware about the interrelation between animal abuse and human violence.[101]

Arguably the most important benefit from crime scene investigation, mandatory counseling, and taking on larger animal cruelty caseloads, is the deterrence from future crime that will result. Through making the investigation of animal a priority, "today's animal cruelty laws have the potential to protect humans by reducing the overall level of violence and antisocial behavior in society."[102] However, within this beneficial impact also resides a logical concern that by combining efforts to combat animal cruelty and human violence, animals will ultimately be used as a means to an end of preventing human violence, thus marginalizing animals in the same manner as humans have done so in the past—as resources rather than sentient beings who deserve their own protection.[103]

---

[97] Kruse, *supra* note 4, at 1678 (quoting Charles E. Friend, *Animal Cruelty Laws: The Case for Reform*, 8 U. Rich. L. Rev. 201, 220 (1974)).

[98] *See* Tischler, *supra* note 4, at 297 ("Local sheriff and police departments do not train their staffs to investigate animal cruelty cases, leaving the problem to the local human or animal control agency or simply ignoring it.").

[99] *See* Siebert, *supra* note 71.

[100] *Id.*

[101] *Id.*

[102] Deborah J. Challener, *Protecting Cats and Dogs in Order to Protect Humans: Making the Case for a Felony Companion Animal Statute*, 29 Miss. C. L. Rev. 499, 504 (2010).

[103] *See* Randall Lockwood, *Animal Cruelty and Societal Violence: A Brief Look Back from the Front*, *in* Child Abuse, Domestic Violence, And Animal Abuse 3,

Although this concern is valid, the secondary protection of humans through the protection of animals is an inevitable consequence of such anti-animal cruelty efforts, especially in the criminal context as crimes against animals are so intertwined with crimes perpetrated by and against humans.[104] The following excerpt from a counselor urging the senate to increase sentences for animal cruelty to felonies evidences this point:

> If society is to make any significant dent in the enormous problem of family violence of all types, which I am certain is the original cause of all the street and gang violence, preoccupation with guns, myriad serial murders, etc., that occur today, we must approach this issue from every direction possible. *As long as we as a society condone, allow or excuse any type of violence, we give the perpetrators leeway to justify all types of violence.*[105]

If anything, integrating the protection of animals into the heart of the criminal justice system will broadcast the relationship that animals and humans share as sentient beings capable of suffering and will, as a result, elevate the respect they are afforded.[106]

Moreover, even if law enforcement investigations and prosecutions are, at first, geared more towards uncovering human violence as a result of recognizing this connection, the gradual increase in awareness in animal abuse that is necessary to achieve this human oriented end will still benefit animals more than if there were to be no

---

4, 6 (Frank R. Ascione & Phil Arkow eds., 1999). In a survey of 1,000 U.S. households, "[t]he largest number (32%) indicated that tougher laws against animal cruelty should be supported *because* such behavior was an indicator of violence in the home," rather than because animal cruelty is itself inherently wrong. *Id.* at 4 (emphasis added).

[104] *Id.* at 6 ("Law enforcement officers benefit by taking the actions of animal abusers seriously, social workers and other mental health professionals get useful information by paying attention to the treatment of animals in the home, therapists seeking interventions that will build empathy and diffuse violence see the benefits of fostering compassion for animals.").

[105] Mitchell Fox, *Treating Serious Animal Abuse as a Serious Crime*, *in* Child Abuse, Domestic Violence, And Animal Abuse 306, 314 (Frank R. Ascione & Phil Arkow eds., 1999) (quoting Heather Chambers, coordinator of the Sex Offender Treatment Program for the Snohomish Juvenile Court and a counselor).

[106] *See* Siebert, *supra* note 71 ("In addition to a growing sensitivity to the rights of animals, another significant reason for the increased attention to animal cruelty is a mounting body of evidence about the link between such acts and serious crimes of more narrowly human concern, including illegal firearms possession, drug trafficking, gambling, spousal and child abuse, rape and homicide.").

increased awareness or investigations at all.[107] In other words, in light of the hesitancy for legislatures to make any extreme changes to animal cruelty statutes or animal rights, linking animal cruelty and human violence provides a neutral but effective way to enact manageable change.

b. Moving Forward: Mandatory Reporting and Animal Abuse Registries

As a prominent psychologist explained, "Those who abuse animals for no obvious reason are budding psychopaths. They have no empathy and only see the world as what it's going to do for them."[108] While animal abuse and sexual abuse of minors are entirely different offenses that carry different consequences and moral weight, the connections drawn between the perpetrators of both crimes have led many to argue that they should be enforced and patrolled in a somewhat similar manner.[109] Different versions of mandatory reporting laws requiring various professionals to report to law enforcement their suspicions of sexual abuse or neglect of children are enacted in every state.[110] This national spread of mandatory reporting laws speaks to their effectiveness.[111] Doctors, counselors, and teachers are among the many professionals required to report their suspicions under these laws because they often confront situations involving at-risk children and families, the reporting of which leads to earlier intervention of abuse and neglect.[112] Recently, states such as California have added animal protection agencies and veterinarians to the list of professionals who must report suspected abuse because, while they do not work with children directly, their investigations into animal cruelty were so often leading to evidence of child abuse that the state felt it would be foolish to leave them off of the list.[113]

Eleven states currently require veterinarians to report animal abuse.[114] However, broadening the reach of those mandatory reporting

[107] *See* Lockwood, *supra* note 103, at 6. ("Attention to animal cruelty and human violence has helped society to recognize that animal abuse *is* family violence.").

[108] Cathy Kangas, *Animal Cruelty and Human Violence*, Huffington Post (Jan. 18, 2013, 6:36 PM), http://perma.cc/LF2G-GZQF (quoting Dr. Randall Lockwood).

[109] *See* Siebert, *supra* note 71.

[110] *Mandatory Reporters of Child Abuse and Neglect*, Child Welfare Information Gateway 1 (2010), https://perma.cc/WSJ5-EEF4?type=pdf.

[111] *Id.*

[112] *Id.* at 2; *see also Prevent Child Abuse and Neglect: Mandatory Reporters*, NYC Administration for Children's Services (2013), http://perma.cc/7KCZ-P2M9.

[113] *See* Siebert, *supra* note 71.

[114] *State Summary Report: Reporting requirements for animal abuse*, American Veterinary Medical Association, (Aug. 2014), https://perma.cc/73EA-PM77?type=image.

laws to include professionals such as counselors, teachers, doctors, and law enforcement—while also providing for civil immunity for good faith reporting, as well as encouraging cross-reporting between both animal and child protection agencies—would mirror the same results of early intervention that current mandatory reporting laws now produce.[115] Studies show that veterinarians treat animals suffering from recognizable abuse around once per year.[116] Although this low number could be a result of inadequate training for veterinarians to recognize signs of abuse or that individuals who abuse animals are less likely to bring their pets to a veterinarian's office, the expansion of mandatory reporting to other professionals and agencies would help to cover more bases and, thus, lead to higher rates of detection.[117]

Another area that has recently gained traction, praise, and criticism are the proposals for animal abuser registries modeled after the nationally implemented sex offender registries.[118] While national registries such as the ones already enacted for child abuse and elderly abuse do not aid in halting recidivism,[119] the fear of being placed on such a registry may deter crimes up front.[120] Furthermore, having access to a database of sex offenders in one's neighborhood helps families to have a perceived sense of safety and control, although not all families

[115] *See also* Gansler, *supra* note 3, at 7 ("Cross-reporting—the mandated or authorized sharing of information between animal services agencies and child and elder protection agencies—demonstrates another way that attention to the violence connection can support the goals of both animal and human welfare agencies … The full benefits of cross-reporting are not realized until the sharing of information goes in both directions, between child and elder protection agencies and animal service agencies.").

[116] *AVMA animal welfare expert discusses abuse reporting*, NEWSTAT, (Nov. 6 2012), http://perma.cc/VL6K-L7SR.

[117] Lacroix, *supra* note 10, at 20 ("Nationwide adoption of animal abuse reporting laws would provide data to quantify the animal cruelty problem and protect animal victims by facilitating the identification and investigation of animal abusers."); *see also* Gansler, *supra* note 115 and accompanying text.

[118] *See* Lydia O'Connor, *Animal Abuse Registry Created To Track Convicted Offenders*, HUFFINGTON POST, Nov. 05, 2013, http://perma.cc/V8NT-W7SS.

[119] *See* Stacy A. Nowicki, *On the Lamb: Toward A National Animal Abuser Registry*, 17 ANIMAL L. 197, 209 (2010) ("Statewide studies that compare the recidivism rates of registered and unregistered sex offenders find that differences between the rates of recidivism in these two groups are not statistically significant.").

[120] Elizabeth J. Letourneau et al., *Evaluating the Effectiveness of Sex Offender Registration and Notification Policies for Reducing Sexual Violence against Women*, Report for the Nat'l Inst. of Justice a 4 (Sept. 2010), *available at* https://perma.cc/S8WT-H85U?type=pdf ("Results from this program of research indicate that SORN, as implemented in South Carolina, appears to have a positive impact on general deterrence associated with averting approximately three new first-time sex crime cases per month.").

use the registry system or are aware of its existence.[121] Support among the animal welfare community is split on proposals to expand registries to include convicted animal abusers. One registry being drafted by the Animal Legal Defense Fund (ALDF), entitled "Do Not Adopt" intends to build a system that identifies animal abusers to create a registry that animal adoption agencies can use in ensuring that their customers have no prior animal cruelty convictions.[122] However, because states have so far refused to adopt the registry, the ALDF will be forced to rely on information already accessible to the public, limiting the registry's usefulness.[123] Another animal abuser registry bill was recently rejected by lawmakers in Colorado that would have required convicted animal abusers over the age of eighteen to provide the registry with their home address, full name, and a photo for both the police and the public records.[124]

Mirroring the lack of state support for registries of this nature are the concerns from other animal rights groups such as the Humane Society of the United States who argue that these registries will do more harm than good. The Humane Society labeled the registries as a, "shaming of mentally unstable people that are unlikely to threaten pets of neighbors checking the list of offenders," as well as emphasizing that, "experience has made clear that such individuals would pose a lesser threat to animals in the future if they received comprehensive mental health counseling."[125] In rejecting the bill, the Colorado legislature shared the concern that it would unjustly stereotype animal abusers.[126] Part of the reason for these concerns is that the registries drafted so far would be widely accessible to the public.[127] However, if a registry were to have limited access to professionals who work closely animals—such as veterinary officers, animal shelters, adoption centers, counselors, and hospitals—the stereotyping and isolation of the convicted perpetrators could be kept to a minimum.[128] Restrictions such as these would still ensure rapid identification of recidivist animal abusers and would also help to provide states with resources to expand their research on animal abuse, behavioral recognition, and the connection between crimes of

[121] *See* Nowicki, *supra* note 119, at 210 (discussing the benefits and drawbacks of sex offender registries).

[122] *See* O'Connor, *supra* note 118.

[123] *Id.*

[124] *Colorado Animal Abuse Registry Rejected By Lawmakers*, Huffington Post, (Jan. 31, 2012), http://perma.cc/SP52-WBRJ.

[125] *See* O'Connor, *supra* note 118.

[126] *See Colorado Animal Abuse Registry*, *supra* note 124.

[127] *See* O'Connor, *supra* note 118.

[128] *See id.* (discussing how a statewide registry available to only nonprofits and public shelters would be more helpful than a public registry).

animal cruelty and crimes of human violence.[129] Although animal abuser registries are in early stages of development and still face opposition, the fact that they are being discussed and adopted in some counties across the US shows a willingness to adopt a more integrated approach to animal cruelty prevention within our criminal justice system.[130]

The most fundamental changes, and those likely to have the most impact on protection and justice for animals and humans alike, are also changes that are the least likely to immediately occur. However, while major reform is unlikely, revising animal cruelty statutes to increase incarceration sentences and monetary penalties to reflect the severity of the harm to the animal,[131] as well as amending statutes to prohibit perpetrators of certain animal abuse crimes from ever again owning an animal,[132] are both steps that state legislatures should take in order to impact lasting change.[133] By enforcing stricter penalties such as restrictions on animal ownership, increasing incarceration times for animal cruelty, and sentencing perpetrators to felonies more often, not only will the offender receive a more proportional sentence to his crime, but will also, "increase the gravity of the offense in the eyes of judges and prosecutors who will respond by devoting more time and consideration to the prosecution and sentencing of the defendants."[134]

[129] *See* Nowicki, *supra* note 119, at 217 ("A national animal abuser registry would help researchers collect data in order to better understand the relationship between animal abuse and violence against humans.").

[130] *See* Lockwood, *supra* note 103, at 6. Lockwood discusses how animal law has remained largely unchanged and is unlikely to move in the direction of securing protections afforded to children and women. *Id.* However, animal abuse registries would be a step in that very direction and, thus, shows that society might be beginning to interpret animal welfare more broadly.

[131] Lacroix, *supra* note 10, at 12-13 (discussing the prevention of animal cruelty through stricter enforcement).

[132] *See* Tischler, *supra* note 4, at 303 ("If the individual has been convicted of cruelty, the abused animals should not be returned. Additionally, during the probation period, the animal abuser should not be allowed to own any animal.").

[133] *See* Lacroix, *supra* note 10, at 15 ("Scholars of animal law agree that the current anticruelty statutes fail to provide adequate protection for animals and have had little, if any, deterrent effect on the perpetrators committing acts of animal abuse.").

[134] *Id.* at 19.

IV. Conclusion

Although the link between animal abuse and human violence has been firmly established for decades, lawmakers have yet to fully integrate that connection into how animal cruelty laws are drafted and enforced. Using the connection as a legal tool in animal rights law would be a natural and appropriate next step in the progression of legal protections for animals. Once animal rights activists, legislators, and law enforcement officials realize how close a nexus their concerns actually share, a more coherent and expansive legal framework may be possible in granting legal rights to animals and deterring future harm humans.

Aesthetic Danger: How the Human Need for Light and Spacious Views Kills Birds and What we can (and Should) Do to Fix this Invisible Hazard

Devin T. Kenney*

I. Introduction

Although migratory birds are protected by a number of laws, including the Convention for the Protection of Migratory Birds in Canada and United States,[1] "[t]he greatest threat to birds … continues to be loss and[] degradation of habitat due to human development and disturbance."[2] In fact, according to the United States Fish and Wildlife Service (USFWS), "[b]uilding window strikes may account for [between] 97 [and] 976 million bird deaths per year" in the United States alone.[3] The threat, though often unnoticed, is so great that one leading author has determined that it is "the second greatest threat to wild birds" after habitat destruction.[4] Over 800 species worldwide—including many species considered threatened or endangered—have been documented "to strike sheet glass or plastic."[5] Some bird families,

* B.A., University of Utah, 2012; J.D., Michigan State University College of Law, 2015. I am very grateful to Professor David S. Favre, of Michigan State University College of Law, for his assistance while I wrote this Article. I also owe particular thanks to my wife Traci and son Lincoln for their patience and long-suffering and for the sacrifices they both made for me. Thank you.

[1] Convention for the Protection of Migratory Birds in Canada and United States, U.S.-Gr.Brit., Aug. 16, 1916, 39 Stat. 1702 [hereinafter Migratory Bird Treaty].

[2] Div. of Migratory Bird Mgmt., U.S. Fish & Wildlife Serv., *Migratory Bird Mortality: Many Human-Caused Threats Afflict Our Bird Populations*, U.S. Fish & Wildlife Serv. (Jan 2002), https://perma.cc/D4RX-LR7W?type=pdf.

[3] *Id.*

[4] Daniel Klem, Jr., *Avian Mortality at Windows: The Second Largest Source of Bird Mortality on Earth*, *in* Tundra to Tropics: Connecting Birds, Habitats and People 244, 244 (2009), *available at* http://perma.cc/2BV9-TBXZ.

[5] Country List and Number of Species Documented to Strike Sheet Glass or Plastic, Muhlenberg College, http://perma.cc/U2AT-EKWD (last visited Apr. 14, 2014).

such as birds of prey,[6] seabirds,[7] and passerines[8] appear to be particularly vulnerable by virtue of their habits and behavior.

For example, between one-and-a-half and two percent of the breeding population of Swift Parrots, an endangered species endemic to Australia, die each year in window collisions.[9] Studies have shown that avian predators "are capable of exploiting prey-catching opportunities in human modified environments by learning that prey are easily available near windows."[10] These birds, in turn, may suffer a similar fate as they "swiftly rush at their intended prey … at feeding stations which are usually placed near windows."[11] Although predatory birds have been observed to regularly visit areas with high window kill rates, the evidence suggests that these birds merely learn to associate these areas with easy prey and do not actually learn to use the windows themselves to their advantage.[12] During a ten-year period, falconers from the State of Washington, in the United States, reported 108 bird deaths among 215 falconers.[13] The second leading cause of death among captive birds—wild taken or captive bred—were collisions, representing almost ten percent of all deaths.[14] This is of particular concern because, again, these species are endangered and protected.

Part I discusses the natural history of migratory birds and why they are particularly susceptible to collisions. Also, Part I discusses the historical and modern use of reflective and transparent glass in human architecture and its impact on birds. Part II discusses the various legal and ethical issues arising concerning avian mortality in window

---

[6] *See, e.g.,* Daniel Klem, Jr., *Avian Predators Hunting Birds Near Windows*, 55 Proceedings of the Pa. Acad. of Sci. 90, 90-92 (1981), available at http://perma.cc/G6NZ-3HBB.

[7] *See, e.g.,* William Montevecchi, *Influences of Artificial Light on Marine Birds*, *in* Ecological Consequences of Artificial Night Lighting 95 (Catherine Rich & Travis Longcore eds., 2005).

[8] *See, e.g.,* Wallace P. Erickson, Gregory D. Johnson, & David P. Young, Jr., *A Summary and Comparison of Bird Mortality from Anthropogenic Sources with an Emphasis on Collisions*, *in* 2 Bird Conservation Implementation and Integration in the Americas: Proceedings of the Third International Partners in Flight Conference 1029, 1030 (John C. Ralph & Terrell D. Rich eds., 2005), *available at* https://perma.cc/22RE-BYVH?type=pdf.

[9] Daniel Klem, Jr.*, Glass: A Deadly Conservation Issue for Birds*, 34 Bird Observer, 73, 74 (2006).

[10] *See* Klem, *supra* note 6.

[11] *Id.* at 91.

[12] *Id*. ("[P]redators will not learn to capture prey by using objects they themselves cannot see. Rather, . . . they probably return to areas containing windows because they recall that prey was easily captured there.").

[13] Lydia Ash, *Causes of Mortality in Falconry Raptors*, J. of WA. Falconry 19, 19 (2012).

[14] *Id.* at 21, 25.

collisions and compares the existing approaches to the problem, in the United States, Canada, and the European Union, to determine the approach that is at once best for wildlife and most fair to the owners and builders of structures utilizing aesthetic glass. Part III discusses steps that might be taken both from a top-down regulatory approach as well as voluntary construction standards that might be explored to limit mortality in the future. Additionally, Part III considers the possibility of a negotiated international approach to resolution of this issue. Finally, Part IV concludes by calling for more research into the scope of the window collision problem and into the viability of proposed solutions to that problem.

II. Avian Susceptibility to Human Architecture: A Natural and Human History

Birds are particularly susceptible to human-caused habitat change although some species have shown a demonstrated ability to adapt to human alterations.[15] Some studies indicate that relatively large brain size correlates with avian success in an urban environment; for example, a study "focus[ing] on passerines in and around European cities," found that "species of birds that breed in at least one city centre have relatively larger brains and are more likely to belong to large-brained families than their counterparts that avoid urban habitats."[16] The same authors' note that factors such as "environmental tolerance or brain size … can result in only a handful of species succeeding in urban environments."[17] This study suggests that city environments place evolutionary pressure on bird species, selecting both for birds with comparatively large brains.[18]

For example, certain families of birds, such as crows and jays (corviidae) and tits and chickadees (paridae), appear to adapt better than others.[19] Peregrine falcons and rock doves also adapt readily to

[15] *See infra* notes 16-22 and accompanying text.

[16] Alexei A. Maklakov, et al., *Brains and the City: Big-Brained Passerine Birds Succeed in Urban Environments*, Biol. Letters *3, *2 (Apr. 27, 2011), available at https://perma.cc/V86W-HDDV?type=pdf.

[17] *Id.* at *3.

[18] *Id.*

[19] *See, e.g., id.* at *2 (examples of successful European city dwellers include the following taxonomical families: corviidae, paridae, sittidae, aegithalidae, regulidae, sturnidae, and fringillidae). By their common names, these families are crows and jays (corviidae), tits and chickadees (paridae), nuthatches (sittidae), bushtits (aegithalidae), kinglets (regulidae), starlings (sturnidae), and true finches (fringillidae); *Bird Families of the World*, British Trust for Ornithology, http://perma.cc/4QJU-DYVY (last visited Jan. 20, 2015); Paul R. Ehrlich, David S. Dobkin, & Darryl Wheye, *Urban Birds*, Stanford.edu/group/Stanfordbirds/ (1988), *available at* http://perma.cc/5QPP-FGMG (noting that birds such as crows, ducks, House Sparrows, and Brewer's Blackbirds are ubiquitous in North American urban areas).

cities, finding that conglomeration of tall buildings in dense urban areas closely approximates their natural habitat of steep cliffs and difficult to reach nesting spots.[20] Even among those species that have adapted to city life, however, the proliferation of plate glass windows still leads to significant mortality.[21] In addition, inexperienced falcons sometimes find city glass to be hazardous.[22]

The massive increase in the use of clear and reflective panes for aesthetic purposes has led to an attendant increase in the number of birds dying as a result of collisions.[23] As glass is increasingly used to cut energy costs, an unintended consequence of the so-called "Green Building Revolution" may be an increase in bird-window collisions.[24] For example, "[m]any office blocks employ considerable quantities of glass, to minimize the use of artificial lighting during the daytime," meaning that as buildings get "greener" they become proportionally more deadly.[25] Because "the artificial lighting in these office blocks is usually left on all night," these buildings attract birds and other wildlife, leading to increased window strikes.[26] As a result, "some of the

[20] Sarah Morrison, *Invasion of the Falcons: The Peregrine is Back in Town*, The Independent, Aug. 7, 2011, *available at* http://perma.cc/H6JK-63EK (noting that 24 pairs of Peregrine Falcons "live in London" and that "buildings in cities and towns provide perfect cliff-like locations" for young birds); N.Y.C. Dep't of Envtl. Prot., *Peregrine Falcons in New York City*, *available at* http://perma.cc/XLF4-DTVD 16 known pairs of falcons living in New York City); Nicholas Bakalar*, If Big-Brained Birds can Make it Here* …, N.Y. Times (May 2, 2011), available at http://perma.cc/BM5U-A466 (The "urban environment provides pigeons with a close approximation of their natural habitat, so they need little intellectual energy to adapt.").

[21] Lucy M. Rowland, *From Death's Door to Life in the City: The Urban Peregrine Falcon*, Terrain.org, *available at* http://perma.cc/ZKX6-V3V7.

[22] Peregrine Falcons, for example, which are attracted to cities by the large quantity of their primary prey species—Rock Doves—and suitable roosting spaces, sometimes find city conditions to be hazardous. *Id.* ("Some cities' proclivity for creating skylines of large structures with plate glass provides a serious hazard to [falcons], especially young, inexperienced ones that fly into them.").

[23] *See, e.g., Bird-building Collisions*, Audubon Minnesota (2013), http://perma.cc/B6NA-95MM (last visited Jan. 20, 2015) ("New "green" or sustainable architectural trends that encourage the use of both native landscaping and vast expanses of glass to increase natural light, ironically, exacerbate the threat of window strikes by attracting birds to the glass."); Julie Leibach, *When Birds and Glass Collide*, Audubon Magazine (Nov.-Dec. 2008), available at http://perma.cc/XV54-KKNS.

[24] *See* N.Y.C. Audubon & Amer. Bird Conservancy, Bird-Friendly Building Design 5 ("The push to make buildings greener has ironically increased bird mortality because it has promoted greater use of glass for energy conservation ….").

[25] Martin Morgan-Taylor, International Dark Sky Foundation, RCEP Consultation on Artificial Light in the Environment 2, available at https://perma.cc/3N6M-6Y9P?type=pdf ("[Birds] may become drawn in by artificial light, especially in poor weather …. It has been reported that between 100-900 million birds die each year by being attracted to the light from these office block windows….").

[26] *Id.*

buildings that rate highest in energy efficiency and other green factors are also among the biggest bird killers."[27] In truth, the very effects that make such buildings most aesthetically pleasing to humans—such as perimeter vegetation—are a major contributing cause to many window collisions as birds fly in close seeking a place to land on the trees they see reflected around these buildings.[28]

a. Birds Evolved to Fly Through Small Spaces at High Speeds

Birds typically act as if glass were invisible and, under certain circumstances attempt to fly through it.[29] Furthermore, in nature, many of the spaces that humans prize in buildings—such as large windows letting in great quantities of light—appear to be the sort of "small gaps" through which birds often fly.[30] Mirrored glass is a particular risk for this reason, because it is "reflective at all times of day, … birds mistake reflections of sky, trees, and other habitat features for reality."[31] Glass is a particularly insidious threat because it is virtually omnipresent in modern architecture and because "[g]lass causes virtually all bird collisions with buildings."[32] In Manhattan, one study found that for every "10% increase in the area of reflective and transparent glass on a building façade ... [there is] a 19% increase in the number of fatal collisions in spring and a 32% increase in fall."[33]

The presence of vegetation around buildings with significant amounts of reflective glass panes is of concern for two reasons: first, because the vegetation likely attracts birds seeking refuge and second, because "the birds perceive reflected images of vegetation in the windows as continuous vegetation, leading them to collide with the solid glass barrier."[34] Windows reflecting trees, shrubs, and sky "correlate with more collisions," while surfaces reflecting features such as pavement or

---

[27] Joanna M. Foster*, A Reward for Bird-Friendly Buildings*, N.Y. Times (Nov. 2, 2011, 2:25 PM), http://perma.cc/6UEU-FMP2.

[28] *Id.* ("Expanses of glass strategically placed to make the most of the sun's light and heat are invisible to birds. Rain gardens and trees planted around green buildings attract birds and make collisions more likely.").

[29] Laura Agudelo-Álvarez, Johan Moreno-Velasquez, & Natalia Ocampo-Peñuela, *Colisiones de Aves Contra Ventanales en un Campus Universitario de Bogotá, Colombia* [Collision of Birds Against Windows at a Bogotá, Colombia University Campus], 10 Ornitología Colombiana 3, 4 (2010).

[30] N.Y.C. Audubon, *supra* note 16, at 11 ("Birds often fly through small gaps, such as spaces between leaves or branches … . In some light, glass can appear black, creating the appearance of just such a cavity or 'passage' through which birds can fly.").

[31] *Id.* at 12.

[32] *Id.*

[33] *Id.*

[34] Yigal Gelb & Nicole Delacretaz, *Avian Window Strike Mortality at an Urban Office Vuilding*, The Kingbird, Sept. 2006, at 190, 196.

grass have comparatively few.[35] Research has shown that collisions are much greater "where glass surfaces reflect vegetation than where they do not."[36]

A study conducted around a single building in Manhattan found that along "the completely un-vegetated . . . perimeter" bird strikes were virtually absent while statistical analysis of the vegetated perimeters demonstrated that "collisions rates" corresponded directly to the number of trees adjacent to the building. [37] This is concerning because "[m] ost of the bird species involved in collisions . . . occur[red] at th[e] site exclusively as passage migrants" and several of those species "are . . . Species of Management Concern."[38]

b. Rise of Glass in Modern Architecture Has Led to Massive Increases in Mortality

Although the amount of glass on a structure is not the only factor that is determinative of the structures potential to cause bird mortality through collisions,[39] the threat to birds will only increase as does the human use of glass in architecture.[40] In response to measures pushing energy efficiency, the use of glass has—and is—proliferating, with the paradoxical effect that "[e]fforts to shave energy costs by letting in more natural light have meant more glass for birds to collide with."[41] This is problematic principally because "[t]he amount of glass in a building is strongest predictor of how dangerous it is to birds."[42] Leadership in Energy and Environmental Design ("LEED"), in response to concerns that its certification program has led to an increase in bird mortality due to collisions, introduced a program for "builders and designers . . . to earn credit toward LEED certification by featuring design elements that mitigate [avian] fatalities."[43] The Pilot Credit Program recognizes that "[h]ighly reflective and/or transparent surface[s]" have the "Greatest Threat Potential," while opaque surfaces pose comparatively little risk.[44]

---

[35] N.Y.C. Audubon, *supra* note 16, at 8.

[36] Gelb, *supra* note 34, at 196.

[37] *Id.*

[38] *Id.* at 196-97 (emphasis in original).

[39] *See, e.g., id.* at 196 (discussing the presence of trees and other vegetation near highly reflective surfaces); *id.* at 197 ("[A]s urban and suburban centers continue to expand into rural landscapes where migratory birds can be found during spring and fall"); discussion, *infra* Subsection I.C. (discussing urban lighting as a threat to birds).

[40] N.Y.C. Audubon, *supra* note 16, at 8.

[41] Susan Milius, *Collision Course: Scientists struggle to make windows safe for birds*, 184 Science News, September 21, 2013, at 20, *available at* http://perma.cc/4BE9-R6AG.

[42] N.Y.C. Audubon, *supra* note 16, at 8.

[43] Joanna M. Foster, *supra* note 19.

[44] U.S. Green Building Council, LEED Pilot Credit Library, Pilot Credit

The Pilot Credit program establishes standards for both the building façade and interior and exterior lighting.[45] To qualify for the credit, designers must "[d]evelop a building façade strategy to make the building visible as a physical barrier and eliminate conditions that create confusing reflections to birds."[46] The interior lighting requirement is designed "to effectively eliminate or reduce light trespass from the building," which may be accomplished by requiring nighttime personnel to turn off lights after hours or through the use of automatic shutoff devices.[47] The exterior lighting requirement may be met by eliminating certain fixtures.[48] Additionally, there is a requirement that "fixtures that are not necessary for safety . . . shall be automatically shut off from midnight until 6 a.m."[49] This program, as described, has the benefit of promoting bird-safe buildings without requiring expensive government oversight and by providing the public, through the use of the Pilot Credit, with the means to determine whether local buildings and designers employ bird-safe technologies.[50] Because many cities are moving in the direction of requiring that bird safety be considered by builders, "[t]his credit is largely an appeal to enlightened self-interest, saving birds while reaping the financial benefits of green building."[51]

According to the American Bird Conservancy, although a building cannot realistically be declared "bird-friendly before it has been carefully monitored for several years," certain factors are good predictors of the ultimate risk a particular building poses to birds.[52] For example, "[a] bird-friendly building is one where[] [a]t least 90% of exposed façade material from ground level to 40 feet (*the primary bird collision zone*) has been demonstrated in controlled experiments to deter 70% or more of bird collisions."[53] Other factors may include whether the building features passageways or courtyards that attract birds and encourage them to believe that there exists either safe passage through the building or a safe place to land in the city.[54] The combination of these factors is a strong predictor for the danger that the building poses to birds.[55]

55: Bird Collision Deterrence 2 (October 14, 2011), *available at* https://perma.cc/EAY7-XN8A?type=pdf.

[45] *Id.* at 1-3.

[46] *Id.* at 1.

[47] *Id.* at 3.

[48] Such fixtures, for example might be those "emit[ting] any light at a vertical angle more than 90 degrees from straight down." *Id.*

[49] *Id.*

[50] *Id.* at 8.

[51] *Id.*

[52] N.Y.C. Audubon, *supra* note 16, at 9.

[53] *Id.* (emphasis added).

[54] *Id.*

[55] *Id.*

c. Artificial Lighting Poses a Second Hazard—Attracting Flocks of Birds into a Fatal Trap

For well over a century, there have been well-documented incidences of mortality involving nighttime collisions into lighted structures.[56] Such events can be particularly disastrous because "[l]ight-associated mortality of nocturnal avian migrants [often] involve[s] collisions of hundreds or thousands or more birds."[57] Today, some groups advocate a return to a natural "nighttime environment" in recognition of the fact that "bright lights throughout the night can have calamitous effects on animals, insects, and plants … affect[ing] the mating habits, feeding patterns, and navigational skills of mammals, birds, amphibians, reptiles, and insects."[58]

The City of Toronto, recognizing the threat posed to migrating birds "by the combination of light pollution and the effects of glass" adopted an innovative program to encourage local businesses to turn out the lights in order to protect birds.[59] This program, known as "Lights Out Toronto," asks residents to protect avian migrants by turning off unnecessary nighttime lighting.[60] This program has been the model for similar programs in Boston, Massachusetts, Chicago, Illinois, and New York City, New York.[61] Such programs have the added benefit that, in addition to reducing bird deaths, they "also result in energy savings, lower building operating costs and reduced greenhouse gas emissions."[62]

III. International and Municipal Law Affecting Bird-Window Collisions

The conservation of migratory birds inspired some of the first international treaty agreements addressing the environment and, therefore, form the base of much International Environmental Law. For example, perhaps the first treaty directly addressing wildlife conservation, the Migratory Bird Treaty was signed by the United States and Great Britain acting on behalf of Canada in 1916.[63] In the United States, this treaty was enacted into law by the Migratory Bird Treaty

[56] *See* Montevecchi, *supra* note 7.

[57] *Id.*

[58] Int'l Dark-Sky Ass'n, IDA Practical Guide, Topic: Residential Lighting (Good Neighbor Guide) 5, *available at* https://perma.cc/VRH8-TBU5?type=pdf.

[59] City of Toronto Green Dev. Standards, Bird-Friendly Development Guidelines 3, *available at* https://perma.cc/KA86-JVSX?type=pdf.

[60] *See* Int'l Dark-Sky Ass'n, *supra* note 58.

[61] *Id.* ("A stated purpose of th[ese] project[s] was the protection of migrating birds.").

[62] City of Toronto, *supra* note 59.

[63] *See* Migratory Bird Treaty, *supra* note 1.

Act ("MBTA") making it "unlawful at any time, *by any means or in any manner*, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill … any migratory bird … included in the terms of the convention[]."[64]

These concerns are hardly limited to North America; in Europe, for example, the Bird's Directive, "the EU's oldest piece of nature legislation," was implemented in the late 1970s in direct responses to the same concerns articulated in North America.[65] Specifically, the member states adopted the measure as a "response to increasing concern about the declines in Europe's wild bird populations [and in] . . . recogni[tion] that wild birds, many of which are migratory, are a shared heritage … and that their effective conservation require[s] international co-operation."[66]

However, at least in the United States, the MBTA is not widely considered to protect birds from "accidental" collisions with manmade structures.[67] This is ironic because "[d]ata demonstrate that [such] deaths caused by impacts are many times more common, foreseeable, and avoidable than . . . causes of bird deaths courts have accepted as creating MBTA liability."[68] In Canada, on the other hand, a recent case suggests

---

[64] 16 U.S.C. § 703(a) (2004) (emphasis added).

[65] European Comm'n, *The Birds Directive*, EC.Europa.eu, (last visited Sept. 17, 2013), available at http://perma.cc/9RD5-9WJ5. In fact, one of the earliest known pieces of environmental protection law was enacted in 1504 to protect a species of migratory bird in the Swiss Alps. See John Lawton, *Last of the Mohicans*, Saudi Aramco World (Nov.-Dec. 1989), https://perma.cc/9P48-X3QN; Karl Shuker, *Stymphalian Birds, Forest Ravens, And Hermit Ibises—Dreams Of A Feathered Geronticus*, Shuker Nature (Aug. 5, 2013), http://perma.cc/8MH6-AJ6V.

[66] European Comm'n, *supra* note 65.

[67] *See* United States v. Brigham Oil & Gas, L.P., 840 F. Supp. 2d 1202, 1208-09 (D.N.D. 2012) ("In the context of the Act, "take" refers to conduct directed at birds, such as hunting and poaching, and not acts or omissions having merely the incidental or unintended effect of causing bird deaths .... It refers to a purposeful attempt to possess wildlife through capture, not incidental or accidental taking through lawful commercial activity."), *id.* at 1213 ("To be consistent, the Government would have to criminalize driving, construction, airplane flights, farming, electricity and wind turbines, which cause bird deaths, and many other everyday lawful activities."); Newton County Wildlife Ass'n v. United States Forest Serv., 113 F.3d 110, 115 (8th Cir. 1997) ("It would stretch this 1918 statute far beyond the bounds of reason to construct it as an absolute criminal prohibition on conduct . . . that *indirectly* results in the death of migratory birds."). *Cf.* United States v. Moon Lake Elec. Ass'n, Inc., 45 F. Supp. 2d 1070, 1076-77 (D. Colo. 1999) (holding that a construction that differentiates between "direct" and "indirect" taking is both "illogical" and "unpersuasive").

As of this time, the Author is aware of no other American environmental protection law that otherwise protects birds from "accidental" collisions.

[68] Larry Martin Corcoran, *Migratory Bird Treaty Act: Strict Liability for Non-Hunting, Human-Caused Bird Deaths*, 77 Denv. U. L. Rev. 315, 315 (1999) (discussing the inconsistency between enforcing the MBTA against a power company for a relatively small number of bird deaths on power lines, but not against owners of towers where thousands of birds may die in single collision events); *id.* at 357-58 ("A substantial portion, perhaps the majority of all migratory bird deaths caused by people

that existing environmental protection laws do protect migratory birds from window strikes and impose liability on the owners of buildings known to be dangerous to birds.[69]

a. Contrasting Legal Traditions and Interpretations Across the Field of International Law

The plight of migratory birds, as reflected by the number of international agreements, is an international affair. Although many of these of these agreements contain similar language, courts in different jurisdictions have arrived at starkly different conclusions as to their applicability to bird-window mortality cases. The United States' MBTA section 703(a) prohibits the "[t]aking, killing, or possessing of migratory birds."[70] Similar to Canada's Migratory Bird Convention Act ("MBCA").[71] United States' courts, however, are divided over the issue of whether the act applies merely to "intentional" takings or also applies to "unintentional," yet foreseeable, takings as well.[72] Even courts which have denied the more expansive definition of take acknowledge, that "[i]f there is a desire on the part of Congress to criminalize commercial activity that incidentally injures migratory birds … it may certainly do so."[73]

Therefore this issue forms an interesting contrast to the interpretation of similar language in the United States Endangered Species Act, which protects endangered species against "unintentional takes."[74] Some of this discrepancy may be related to the relative age of the MBTA (1918) versus the Endangered Species Act (1973).[75] However given the nearly identical language in both acts, the best explanation is

---

are caused by impacts with human constructions . . . .").

[69] Podolsky v. Cadillac Fairview Corp. [2013] O.J. No. 581 (QL) (Can. Ont.) (finding that reflected light could be considered a contaminant and that managers of buildings where bird strikes were common were aware that this light led to a number of bird strikes with their buildings).

[70] 16 U.S.C. § 703(a) (2006).

[71] Migratory Bird Convention Act, R.S.C. 1994, c. m-7.01.

[72] See *supra* note 67 and accompanying text. For more information regarding the circuit split in the United States, *see* Brooke Wahlberg & Laura Evans, *Potential Legal Implications of Birds and Buildings*, 27-SPG Natural Resources & Env't 53, 54 (2013).

[73] Brigham Oil & Gas, 840 F. Supp. 2d at 1211.

[74] Babbitt v. Sweet Home Chapter of Communities for a Great Oregon, 515 U.S. 687, 696-97 (1995) ("[T]he § 9 prohibition on takings . . . places on respondents a duty to avoid harm that habitat alteration will cause the birds . . . .").

[75] Newton Cnty. Wildlife Ass'n v. U.S. Forest Serv., 113 F.3d 110, 114-15 (8th Cir. 1997). To see the similarities between these statutes, *compare* 16 U.S.C. § 703(a) ("[I]t shall be unlawful at any time . . . [to] take … any migratory bird . . . included in the [Migratory Bird Treaty]."), *with* 16 U.S.C. § 1538(a)(1)(B) ("[I]t is unlawful for any person . . . to take any such species . . . .").

likely that the MBTA is much more broadly sweeping, covering all but a limited number of migratory birds.[76]

Although the United States Fish and Wildlife Service ("Service"), charged with enforcement of the MBTA, has not yet attempted to bring charges under the MBTA for violations relating to window collisions. Given that the Service exercises prosecutorial discretion, potential defendants rely on the chance that "the Service [will] not bring an enforcement action against them."[77] In 2012 the Service adopted a directive relating to enforcement of MBTA against industries "focus[ing] investigative efforts on bird take that is foreseeable, avoidable, and/or proximately caused."[78] Typically the Service works with the person or company to allow the offender the opportunity to fix the problem.[79]

In one case, Judge Hovland, U.S. District Judge for the District of North Dakota, denied that "accidental taking" related to the death of migratory birds from landing in and drinking water from oil drilling reserve pits.[80] The court further suggested that to apply the MBTA to unintentional "takings" would "yield absurd results."[81] After noting that "[t]here are approximately 836 species of birds protected under the Act" and that the MBTA covers even "pigeons, sparrows, and crows," the court turned to discuss the large number of birds "killed each year by human-caused threats."[82] "To be consistent," argued the court, "the Government would have to criminalize driving, construction, airplane flights, farming, electricity and wind turbines, [all of] which cause bird deaths."[83] After all, "it would not be feasible to prosecute all or even most of those persons who *technically violate* the [MBTA]."[84] Clearly then, the MBTA "can be read only to criminalize activity *directed* against migratory birds."[85]

---

[76] *See, e.g.*, U.S. Fish & Wildlife Serv., List of Protected Species November 2013, FWS.gov (Dec. 2, 2013), http://perma.cc/9FP3-JZ7A (listing hundreds of birds protected under the MBTA).

[77] *Id.*

[78] Fish & Wildlife Serv. Office of Law Enforcement, Chief's Directive: Enforcement of the Migratory Bird Treaty Act as it Relates to Industry and Agriculture, CD-B53 1, *available at* https://perma.cc/S6AP-SWRB?type=pdf.

[79] This can be done by "tak[ing] remedial action to halt and/or minimize the take." *Id.* at 2.

[80] *Brigham Oil & Gas*, 840 F. Supp. 2d at 1203.

[81] *Id.* at 1212.

[82] *Id.*

[83] *Id.* at 1213.

[84] *Id.* (emphasis added)

[85] *Id.* (quoting Benjamin Means, *Prohibiting Conduct, Not Consequences: The Limited Reach of the Migratory Bird Treaty Act*, 97 Mich. L. Rev. 823, 842 (1998)).In fact, U.S. Courts have already dealt with, and dismissed, this concern in some venues. See United States v. FMC, Corp., 572 F.2d 902, 905 (2d Cir. 1978) ("Certainly [a] construction [of the statutory language] that would bring every killing

As noted previously, however, the court's position is not as clear as first appears. Leaving to one side Judge Hovland's suggestion that "pigeons, sparrows, and crows" are unworthy of protection, his contention that the government's inability to prosecute all offenders of the MBTA supports his reading of the Act is illogical.[86] Second, statistical evidence suggests that avian mortality from collisions is not only very predictable,[87] but very preventable as well.[88] Enforcing the MBTA against the owners of buildings known to cause large numbers of bird deaths through collisions is at least as logical as prosecuting the owners of wind energy farms[89] for similar bird kills because this "take" is equally "foreseeable, avoidable, and[] proximately caused" through the inaction of the property owner.[90] Indeed, it is virtually certain that a building that "fails to utilize conservation measures or otherwise minimize negative impacts on migratory birds" will result in significant "take."[91] Finally, the Service, again, employs considerable prosecutorial discretion[92] and regularly works with and, when necessary, prosecutes commercial entities

within the statute such as deaths caused by automobiles, airplanes, plate glass modern office buildings or picture windows in residential dwellings into which birds fly, would offend reason and common sense . . . . Such situations can be left the sound discretion of prosecutors and courts."). Although this decision apparently contradicts the thrust of the article, since the time the decision was rendered a number of viable techniques and technologies have emerged that minimize the incidences of bird mortality from collisions into office buildings.

[86] For example, considerably less than half of all reported rapes are prosecuted (37%) and even less result in convictions (18%).*What Percentage of Rape Cases Gets Prosecuted? What are the Conviction Rates?, Top Ten Series: Things Advocates Need to Know*, UK Ctr. For Research on Violence Against Women, Lexington, Ky, Dec. 2011, *available at* https://perma.cc/UV5D-L2ZF?type=pdf. This number drops further for nonviolent property crimes. According to data compiled by the Uniform Crime Reporting Program, in the United States in 2005, "45.5 percent of violent crimes and 16.3 percent of property crimes were cleared by arrest." Federal Bureau of Investigation, U.S. Department of Justice, Uniform Crime Reporting Program: Crime in the United States 2005: Clearances (2005), *available at* http://perma.cc/QZ6V-A6XR. "Of the property crimes . . . burglary was the offense least often cleared with 12.7 percent cleared . . . ." Id. Seemingly, by Judge Hovland's logic, these should not be considered crimes because it is not "feasible to prosecute all . . . those persons" who commit them.

[87] See Corcoran, *supra* note 68, at 357.

[88] *Id.*

[89] U.S. Fish & Wildlife Serv., *supra* note 2, at 2 (estimating bird-window collision deaths at 97 to 976 million death per year and bird-turbine collision deaths at 33,000 birds per year).

[90] Fish & Wildlife Serv. Office of Law Enforcement, *supra* note 79, at 1.

[91] *Id.*

[92] Rachel Abramson, Comment, *The Migratory Bird Treaty Act's Limited Wingspan and Alternatives to the Statute: Protecting the Ecosystem Without Crippling Communication Tower Development*, 12 Fordham Envtl. L. Rev. 253, 280 (2000) (noting that courts "have relied on prosecutorial discretion to limit over-inclusive application of the MBTA.").

for violations of the MBTA.[93] Some of the activities which Judge Hovland believed cannot be regulated "feasibly"—such as driving—often involve an arguably non-commercial element.[94] Finally, enforcing the MBTA

By contrast, in *Podolsky*, the most recent Canadian case interpreting similar legislative language, Justice Green's analysis is instructive. Conceding that "the gist of this prosecution—that is, the regulatory offence liability of a corporation for its failure to respond in a timely and effective manner to injurious bird collision with a building it owns and operates" is "unusual,"[95] he suggests that "[t]he case . . . illustrates the wisdom of observing flexibility in the drafting of regulatory statutes."[96] Although "[t]he environmental insult presented by the instant fact pattern [avian mortality via collisions] was not likely when . . . [the legislation] was promulgated into law, yet the legislation is sufficiently broad and supple to encompass the alleged transgressions."[97] Justice Green further suggests that the principle concern of the opposing American courts—that lawful activity will be prohibited or that prosecution for window collisions will lead to "absurd results"[98]—is unfounded:

> Nor do I find that this conclusion is so expansionist as to lead to absurd consequences such [that] . . . every homeowner ha[s] to fear prosecution for failing to bird-proof their residence against the possibility of isolated avian collisions . . . . [M]inimal or trifling consequences inconsistent with a realistic appreciation of the goals of environmental protections are not captured . . . .[99]

The Canadian statutes at issue—the Environmental Protection Act ("EPA") and the Species at Risk Act ("SARA")—contain very similar language to the United States statute interpreted in *Brigham Oil and Gas*. For example, the Canadian Species at Risk Act ("SARA"), enacted to fulfill Canada's obligations under the Convention on Biological Diversity,[100] reads that "[n]o person shall kill, harm, harass, capture, or take an individual that is listed as . . . an endangered species or a threatened species."[101]

---

[93] Wahlberg, *supra* note 72, at 54.

[94] *Id.* at 53.

[95] Podolsky v. Cadillac Fairview Corp. [2013] O.J. No. 581, para. 58 (Can. Ont.) (QL).

[96] *Id.* para. 70.

[97] *Id.*

[98] *See Brigham Oil & Gas*, 840 F. Supp. 2d at 1212.

[99] Podolsky, [2013] O.J. No. 581 para. 71.

[100] Species at Risk Act, S.C. 2002, c. 29, Preamble (Can.) ("[P]roviding legal protection for species at risk . . . will, in part, meet Canada's commitments under that Convention . . . .").

[101] *Id.* § 32(1).

b. The European Union and the Birds Directive

The "oldest piece of nature legislation" in the European Union is the Birds Directive.[102] As is true in North America, the European Union has recognized that activities that threaten birds, though local, have transnational effects.[103] The Directive specifically prohibits activities that directly threaten birds.[104] Arguably, however, the Directive might be interpreted to go much further because it recognizes the conservation of migratory bird species as "necessary" and tied to "sustainable development."[105] The Directive also calls on members to "take the requisite measures to preserve, maintain or re-establish a sufficient diversity and area of habitats for all [protected] species of birds."[106] Nor is the focus restricted to existing protected zones; indeed, the Directive also asks members to create new spaces for the preservation of bird diversity as well as maintaining the currently existing protected and unprotected spaces to maximize bird productivity.[107]

[102] European Comm'n, *supra* note 65.

[103] *Id.*

[104] *Id.*

[105] Directive 2009/147, of the European Parliament and of the Council of 30 November 2009 On the Conservation of Wild Birds, O.J. (L 20) (5) (EC), available at https://perma.cc/6M9M-VFF3?type=pdf. Several other provisions of the Directive might also be implicated relative to this issue. *See, e.g., id*. (Migratory species "constitute a common heritage and effective bird protection is typically a trans-frontier environment problem entailing common responsibilities"); *Id.* at 6 ("The measures to be taken must apply to the various factors which may affect the numbers of birds, namely the repercussions of man's activities and in particular the destruction and pollution of their habitats . . . ; the stringency of such measures should be adapted to the particular situation of the various species within the framework of a conservation policy."); *Id.* at 8 ("The preservation, maintenance or restoration of a sufficient diversity and area of habitats is essential to the conservation of all species of birds. Certain species of birds should be the subject of special conservation measures concerning their habitats in order to ensure their survival and reproduction in their area of distribution. Such measures must also take account of migratory species and be coordinated with a view to setting up a coherent whole."); *Id.* at Art. 2 ("Member States shall take the requisite measures to maintain the population of [migratory] species . . . which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements . . . .").

[106] *Id.* at Art. 3(1) Furthermore, "[t]he preservation, maintenance and re-establishment of biotopes and habitats shall include . . . (a) creation of protected areas; [and] (b) upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones." *Id.* at Art. 3(1).

[107] *Id.* at Art. 3(2)(a)-(b); *see also id.* at Art. 4 (determining that migratory species "shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution").

IV. An Ounce of Prevention: Regulatory and Market-Driven Approaches to Solving the Mortality Issue

As awareness of the issue increases, it is increasingly likely that regulatory action will be taken to minimize or mitigate the loss of otherwise protected birds in collisions.[108] The building design and construction industry would be wise to voluntarily adopt bird-friendly standards to avoid the need for a regulatory solution and to participate in the creation of a solution that balances human design and aesthetic preferences against the needs of wildlife.[109] As noted, LEED planners are recognizing the shift in public perception of "accidental" avian mortality with windows and are moving toward voluntary adoption of protective measures and certifications by business associations; such action may forestall the need for direct legislation and litigation to resolve the issue.[110]

Furthermore, industry participation in the process ensures a voice in the solution.[111] According to the building manager of a prominent glass structure in Chicago, "[m]ost of this stuff [bird mortalities] is happening 50 feet and down, so we can get to that. It doesn't cost a fortune. We don't have to change 5,000 panels of glass . . . something that buildings or owners would not be able to do."[112] For interested corporations a number of techniques are possible.[113] Others in the industry should begin working with conservationists, scientists and researchers to develop protective measures that are both effective *and* economically feasible.[114]

---

[108] *See* Albert Koehl, *3 Reasons Why Our Work Helps Birds Survive Their Annual Migrations*, The Ecojustice Blog (Nov. 14, 2012, 2:05 PM), http://perma.cc/6LVE-4249 ("Public attention . . . should motivate . . . building owners and managers to install effective, available window films to reduce bird deaths.").

[109] *See generally*, Wahlberg, *supra* note 72.

[110] *See generally*, USGBC, http://perma.cc/7W9R-YXKN (last visited Nov. 20, 2013).

[111] *See, e.g.,* Chris Peterson, *Transcript: A Building Manager Shows the Way: Lights Out! Programs Protect Birds and Save Energy*, BirdNote (Sept. 30, 2013), http://perma.cc/GCH2-8GSB.

[112] *Id.*

[113] *See id.* (describing voluntary measures adopted to decrease bird mortality at low cost); Dresden (Germany), Volkswagen(2013), http://en.volkswagen.com/en/company/responsibility/locations/europe/dresden.html (using "loudspeaker signals with songbird calls emitted every ten minutes [to] help ensure that birds look for other territory); *You Can Save Birds From Flying Into Windows!*, Am. Bird Conservancy, http://perma.cc/52YG-BY67?type=pdf (describing a number of methods that may be used to minimize birds deaths, including tempera paint, window decals, and tape).

[114] "[T]he industry should be involved in delineating the bird-safe measures being incorporated into the guidance [provided by urban planners]. By working in advance with these organizations developing the guidance, the industry increases

This is particularly true because many of the suggested remedies may be unpalatable,[115] unworkable,[116] or inapplicable[117] to commercial developers.[118] Although many options are obviously still in the early research stage, the sheer number of potential solutions suggests that practical measures are available that businesses can employ, particularly in new construction, to avoid or minimize the collision risk to birds.[119] As of now, however, many "architects, engineers, and other building industry professionals .... don't believe the numbers [estimated to be killed] because they don't see the carnage" and are thus unwilling to take action.[120]

One activist described this last challenge as the greatest hurdle faced by groups seeking to prevent further bird deaths:

---

the likelihood that practicable, reasonable measures will be incorporated into these guidance documents." Wahlberg, *supra* note 72, at 53.

[115] One of the greatest concerns militating against bird-safety requirements is that they will force designers and architects to create "windowless warehouses." *See generally* Michelle Locke, Associated Press, *Some Cities Adopting Bird-friendly Building Rules*, Yahoo News (July 31, 2013, 9:06 AM), http://perma.cc/AN32-QN8S. "[B]ird-friendly architecture need not imply more expensive construction nor reduced scope for creativity and generally does imply reduced energy consumption." Ontario Association of Architects, Event: Why You Need to Know About Bird-Friendly Building Design (May 9, 2013), http://perma.cc/JNV9-W97R

[116] For a list of potential solutions, *see* Gelb, *supra* note 34, at 197 ("There are several retrofitting options that can reduce bird collisions at existing structures that incorporate glass in proximity to vegetation: Window etching, also known as sandblasting, eliminates the reflections of habitat in the windows by reducing the reflective quality of the glass. This method can be used to create patterns that both reduce reflectivity and allow the birds to perceive the glass as a solid barrier. Unless the entire window surface is etched, patterns should take into account Klem's findings which recommend un-etched surfaces to be no larger than 2x4 inches in order to prevent birds from flying into the glass .... Window netting is another option which reduces bird collisions by placing a tight net a few inches away from reflecting window panels. This net allows birds to bounce off the net, preventing them from colliding with the glass surface. Other retrofitting options include placing exterior sun-shades and blinds, placing non-reflective film over the windows ... painting over the glass, or growing vines in front of it. NYC Audubon is currently leading the *Bird-Safe Glass Working Group*, an initiative to create a new type of glass which would be visible to birds but not to the human eye.").

[117] Although "it's far from a mainstream design consideration," bird-safe design "will allow for most any type of site landscape design." U.S. Green Building Council, *supra* note 44, at 8, 9.

[118] *Id.*

[119] *See, e.g.,* Gelb, *supra* note 34, at 196 (describing "windows" that "merely cover[] a concrete wall").

[120] Angela Moxely, *Flight Risk: The Collision Course We Create For Birds*, The Humane Soc'y of the U.S. (March 29, 2012), http://perma.cc/HU4Y-8LKR.

> Our biggest battle in getting people to apply a pattern has involved aesthetics and cost. We've now demonstrated that you can address the aesthetic issue without interfering with architectural integrity. The costs are high right now, but the more people get involved, the more solutions will develop, and then costs will come down very quickly.[121]

Moreover, in at least some cases, glass exteriors are pure design elements and not actually windows, meaning that there is, therefore, no practical reason—beyond the interference with human aesthetic preferences—why basic prevention measures cannot be taken.[122] Sometimes the solution can be as simple as removing or altering non-functional or merely decorative panes of glass, such as "windows" that merely "cover[] … concrete wall[s]."[123] Increased enforcement of existing laws and agreements will provide encouragement to create new products and stimulate the market for bird-friendly construction.[124]

This enforcement might take a path similar to that of the "dolphin-safe tuna" label.[125] As public awareness of the problem grows, consumers will begin to put pressure on builders to install "bird-safe" glass and on manufacturers to produce such glass.[126] In response to the growing criticism, the industry might be persuaded to establish a labelling system similar to that in the case of the "dolphin-safe tuna" label.[127] At that point, Congress itself or the Service acting under existing statutory authority, could then act to promote the use of industry-certified "bird-safe" glass in new construction.[128]

---

[121] Lawrence Karol, *The Unfriendly Skies: Millions of Birds Die Each Year When They Fly Into Glass-Clad Buildings*, TAKEPART, (Nov. 3, 2012), http://perma.cc/LGV2-EBJH.

[122] Although many options are obviously still in the early research stage, the sheer number of potential solutions suggests that practical measures are available that businesses can employ, particularly in new construction, to avoid or minimize the collision risk to birds. *See supra* notes 114 and 117.

[123] Gelb, *supra* note 34, at 196.

[124] *See supra* notes 97-100 and accompanying text.

[125] *See generally* Denis A. O'Connell, *Tuna, Dolphins, and Purse Seine Fishing in the Eastern Tropical Pacific: The Controversy Continues*, 23 UCLA J. ENVTL. L. & POL'Y 77 (2005).

[126] Public outcry over the deaths of dolphins during the harvest of tuna led to consumer boycotts and negative publicity for tuna manufacturers. See Jennifer Ramach, *Dolphin-Safe tuna Labeling: Are the Dolphins Finally Safe?*, 15 VA. ENVTL. L.J. 743, 753 (1996) (noting that although "[StarKist]'s revenue and profit actually increased over the two-year consumer boycott," inaction would have harmed the company).

[127] Beginning in April 1990, major producer of tuna began to voluntarily label their tuna as "dolphin-safe" and verified these claims through independent monitoring of tuna fishermen. *Id.* at 752-53.

[128] Following the creation of the "dolphin-safe" label, Congress stepped into

Such legislation, at least in the United States, appeared to be forthcoming in 2010 when Representative Mike Quigley of Illinois introduced the Federal Bird-Safe Buildings Act which, if passed, would have required that "[e]ach public building ... incorporate, to the maximum extent feasible … bird-safe building materials and design features."[129] In addition, the Administrator of General Services, the federal administrator of public buildings, would be instructed to "(1) incorporate bird-safe building materials and design features into existing public buildings; and (2) address interior and exterior lighting's impacts on native bird species."[130] Such building materials specifically include those materials and design features recognized for being safe for birds.[131] If passed, this could lead to the technology forcing necessary to produce a "reduc[tion in] avian mortality and injury."[132] According to one assessment,

> [t]his bill is significant [because] … [f]irst, it recognizes both the economic and non-economic benefits birds provide in the United States. Second, it realizes that avian mortality due to collisions is an increasingly serious threat to many bird populations in the country. Third, it addresses specific causes of the threat, from the building materials used in interior and exterior lighting. Fourth, it attempts to incorporate better practices into current and future building construction, in order to reduce the problem. Lastly, if enacted, it will have an impact on how land use and environmental attorneys advise their clients in both the public and private sectors when it comes to the design and review of proposed development projects.[133]

However, there appears to be no political will to actually pass such a measure at this time.[134] Even accounting for political failure on the issue, the U.S. Fish and Wildlife Service may be able to enforce existing law

---

the void to ensure that any products labelled "dolphin-safe" were, in fact, "safe" by enacting legislation defining what "dolphin-safe" was and ultimately banning the sale, purchase, or importation of non-"dolphin-safe" tuna into the United States. *Id.* at 753-54.

[129] Federal Bird-Safe Buildings Act of 2010, H.R. 4797, 111th Cong. § 3(a)(2)(a) (2010). This legislation was subsequently reintroduced in both 2011 and 2013. See Federal Bird-Safe Buildings Act of 2011, H.R. 1643, 112th Cong. (2011); Federal Bird-Safe Buildings Act of 2013, H.R. 2078, 113th Cong. (2013).

[130] H.R. 4797 § 3(a)(2)(b)(1)-(2).

[131] H.R. 4797 § 3(a)(2)(c).

[132] David Gordon, *Avian Mortality and Buildings: What Zoning Lawyers Need to Know*, 36 No. 6 Zoning & Planning Law Report 1, 3 (2013).

[133] *Id.*

[134] *See id.* at 3 n.32.

against parties that fail to take care to minimize avian mortality from man-created obstacles.[135] Similar legislation in other countries has been held to apply to new building design and construction.[136] For example, in Germany in 2012 the Administrative Court in Cologne determined that a waiver from environmental legislation passed pursuant to the Birds Directive which allowed the construction of a glass cube overlooking an important bird conservation area was illegal because the proposed method for preventing collisions was insufficiently effective.[137] In that instance, Der Bund für Umwelt und Naturschutz Deutschland (BUND) [Association for Environment and Nature Conservation Germany] sued to mandate the installation of glass with visible strips to prevent collisions, forcing contractors who were opposed to the installation of such glass for aesthetic reasons to comply.[138]

Comparing the American and German examples, there is a strong argument that although any one state lacks the political will to remediate the window collision problem alone, strong international legislation may be possible since states have greater incentive to act based on the no-harm principle of international relations.[139] There is already existing precedent for amendments to the Migratory Bird Treaty.[140] As originally drafted, the Treaty left no specific provision for the hunting of migratory birds by Native Alaskans.[141] The Service, recognizing both the impracticality of enforcing the ban in the Alaskan Wilderness

[135] Corcoran, *supra* note 68, at 357; Wahlberg *supra* note 72, at 54.

[136] *See* discussion *supra* Subsection II.A.

[137] Heiko Haupt, *German court case on bird collisions*, Amer. Bird Conservatory Collisions Listserve, (Aug. 9, 2012, 7:17 PM), http://perma.cc/45XN-6X4V. *See also* Jessica Backhaus, *BUND Klagt: Drachenfels: Falke & Co. bremsen Bau aus*, Express.de (Sept. 23, 2011, 6:20 PM), http://perma.cc/6TX6-DSX4.

[138] *Id.*

[139] The no-harm principle—as codified in Principle 2 of the Declaration of the United Nations Conference on the Human Environment—is that "States have . . . the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction." United Nations Conference on the Human Environment, *Declaration of the United Nations Conference on the Human Environment*, U.N. Doc. A/Conf.48/14/Rev. 1 (June 5-16, 1972).

[140] *See, e.g.,* Migratory Bird Protocol with Canada & Migratory Bird Protocol with Canada, Treaty Docs. 104-28 (1995).

[141] Alaska Fish & Wildife Fed. and Outdoor Council v. Dunkle, 829 F.2d 933, 941 (1987).The MBTA was amended in 1978 following a treaty similar to the one between the United States and Canada between the United States and the United Soviet Socialist Republics (USSR). *Id.* at 940. That amendment allowed for regulations "permitting subsistence hunting by Alaskan Natives if the regulations [were] in accordance with the provisions of the [earlier] treaties." *Id.* Subsistence hunting was not specifically permitted by the earlier treaties and was, therefore, prohibited according to the logic of the court. *Id.* at 941-42.

and the cultural aspect of the hunt done by Alaskan Natives, adopted a policy allowing subsistence hunting by Native Alaskans during the closed season.[142] The 9th Circuit reversed this policy, however, finding that the Act unequivocally regulated all hunting of migratory birds because it made no exception for subsistence hunting.[143] Since 1995, the MBTA has been amended, following a protocol signed with Canada allowing subsistence hunting under the Migratory Bird Treaty.[144] A similar protocol, therefore, could recognize and take steps to mitigate the threat posed to birds through passive "take" mechanisms, such as window collisions.[145]

Studies have demonstrated that the combination of risk factors mentioned above—such as large panes of reflective glass in combination with bright lights near tall buildings—renders some buildings in particularly deadly.[146] For example, at some such buildings, the death toll has been recorded in the *hundreds per day*.[147] USFWS should, therefore, recognize that because the deaths are both predictable and preventable, the inaction of building owners and lessees should trigger liability under the existing regulatory regime established under the MBTA.[148] Increased enforcement of the MBTA would fill in this major hole affecting the preservation of endangered migratory species[149]—keeping in line with the purposes of the Migratory Bird Convention[150]—as well as encouraging the development and adoption of alternative technologies that minimize avian collision mortality.[151]

Currently, however, with little binding law protecting birds from collisions, the incentive for research—and the market for bird-friendly glass—is small. As one engineer succinctly noted:

---

[142] *Id.* at 935.

[143] *Id.* at 941.

[144] Migratory Bird Protocol with Canada & Migratory Bird Protocol with Canada, Treaty Docs. 104-28 (1995).

[145] Such a protocol might mirror the language of the Canadian Species at Risk Act which has been found to impose penalties on passive "takers" of protected birds through window collisions. *See supra* notes 75-81 & accompanying text.

[146] *Window Collisions: Bright Lights, Big Cities: Lights & Windows are Deadly Hazards for Birds*, Bird Conservation Network, http://perma.cc/A2W6-M675.

[147] *Id.*

[148] *See, e.g.,* U.S. v. Moon Lake Elec. Ass'n, 45 F. Supp. 2d 1070, 1076-77 (D. Colo. 1999).

[149] David Sibley, *Causes of Bird Mortality*, Sibley Guides (last updated Nov. 18, 2010), http://perma.cc/U84S-ZL7M.

[150] The most recent protocol to the Convention sets forth as its goals that "bird populations shall be managed . . . [t]o ensure a variety of sustainable uses; [t]o sustain healthy migratory bird populations for harvesting needs; [t]o provide for and protect habitat necessary for the conservation of migratory birds; and [t]o restore depleted populations of migratory birds." Protocol Amending the 1916 Convention for the Prot. of Migratory Birds, S. Treaty Doc. No. 104-28 (Dec. 5, 1995).

[151] *Id.*

> [T]he architectural community is saying, 'Well, we're not specifying this product, because it doesn't exist,' and here the technical community is saying, 'We're not building this product, because there's no market for it.'.... There's actually no technical reason whatsoever why we couldn't develop and commercialize the product .... But I don't see any demands in the marketplace that give my leadership the assurances that they can make this investment wisely."[152]

This must change, therefore, in order to increase both the number of alternatives and subsequently decrease the cost of installation and bird-friendly retrofitting.[153] This is especially important because although skyscrapers and other very tall structures account for several hundred thousand or more bird deaths per year, residential buildings and low rise structures account for roughly ninety-nine percent of the total collision deaths.[154] At the current price point, most residential consumers are priced out of the market for bird-friendly technologies; therefore, a significant change will need to occur in order to make it possible for these consumers to adopt similar protective measures to those contemplated by business consumers.

V. Conclusion

Considerably more research is necessary to determine whether suggested alternatives, such as UV-reflective glass, are viable solutions; at this time, however, the relevant research is in its infancy in many ways.[155] Furthermore, largely because the issue is so easy to ignore, we have no clear idea how severe the problem actually is despite the high estimated avian mortality from collisions.[156] For example, beyond research showing that migratory species appear to be acutely threatened,[157] we simply do not know what species are most impacted[158]

[152] Leibach, *supra* note 23.

[153] *Id.*

[154] Susan Milius & Science News, *Stop Blaming Cats: As Many as 988 Million Birds Die Annually in Window Collisions*, Wash. Post, Feb. 3, 2014, http://perma.cc/X2XH-99LJ.

[155] *See* Int'l Dark-Sky Ass'n, *supra* note 58, at 5 ("Scientists and researchers are only now beginning to understand the long term impacts of artificial light at night on ecosystems.").

[156] *See, e.g.,* Milius, *supra* note 41.

[157] "In most cases the victims are nocturnal migrating species, such as yellow-bellied sapsuckers, northern flickers, brown creepers, hermit thrushes, and white-throated sparrows, that touch down to rest and refuel during their long journeys to wintering or breeding grounds." Leibach, *supra* note 23.

[158] To the extent that research has been completed, "several species listed

and how severely,[159] where birds are impacted,[160] and how changes in architecture, building design, urban planning, and even siting might affect mortality rates.[161] After all, "[u]ntil we start to better understand mortality rates and parameters of bird populations, we will not truly understand the biological significance of the mortality."[162]

This is not, however, to suggest that no action should be taken pending those studies. For one, although the full extent of the problem is unknown—and, indeed, may be unknowable—"currently available solutions can reduce bird mortality . . . without sacrificing architectural standards."[163] Secondly, as established by Principle 15 of the Rio Declaration, "lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."[164] The prudent course of action, therefore, is to take swift action now, in line with existing policy, to close this gap in protection putting otherwise protected species at risk.[165]

---

as national Birds of Conservation Concern due to their declining populations were identified to be highly vulnerable to building collisions, including Golden-winged Warbler (Vermivora chrysoptera), Painted Bunting (Passerina ciris), Canada Warbler (Cardellina canadensis), Wood Thrush (Hylocichla mustelina), Kentucky Warbler (Geothlypis formosa), and Worm-eating Warbler (Helmitheros vermivorum)." Scott R. Loss, Tom Will, Sara S. Loss, & Peter P. Marra, *Bird-Building Collisions in the United States: Estimates of Annual Mortality and Species Vulnerability*, 116(1) The Condor 8, 8 (2014), *available at* http://perma.cc/HL3Z-MHAJ.

[159] *See* N.Y.C. Audubon, *supra* note 24, at 8 ("habitat destruction or alteration remains the most serious man-made problem, but collisions with buildings are the largest known fatality threat. Nearly one third of the bird species found in the United States, over 258 species, from hummingbirds to falcons, are documented as victims of collisions . . . . [C]ollisions kill all categories of birds, including some of the strongest, healthiest birds that would otherwise survive to produce offspring.").

[160] Factors that appear to affect a building's impact on birds include "the density and species composition of local bird populations, local geography, the type, location, and extent of landscaping and nearby habitat, prevailing wind and weather, and patterns of migration through the area." *Id.*

[161] *Id.* at 7.

[162] Erickson, et al., *supra* note 8, at 1038. The majority of the data available comes from the United States, but "it is believed that data . . . reflect a global problem that has gone largely unstudied." *Birds and Collisions: Collisions with Buildings, Towers, and Wind Turbines*, Golden Gate Audubon Soc'y, *available at* http://perma.cc/ND2J-GYM9 (last visited Sept. 18, 2013).

[163] N.Y.C. AUDUBON, *supra* note 24, at 7.

[164] Rio Declaration on Environment and Development, 31 I.L.M. 874, 879 (1992).

[165] *Id.*

Sustaining an Unsustainable Fuel Source: How Lifecycle Greenhouse Gas Limitations Can Improve The Sustainability Of The Tar Oil Industry

Brittany DeBord*

I. Introduction

Reliance on fossil fuels is expected to increase over the next two decades despite aggressive development of renewable and nuclear technologies.[1] As a result of this reliance, the United States requires a fossil fuel market that provides energy security and self-sufficiency.[2] The United States has found energy security in its neighbor to the North. Currently, Canada constitutes twenty percent of American foreign energy supply.[3] Roughly fifty percent of this amount comes from Canada's tar oil.[4]

The infamous tar oil operations in Alberta have been called "the most destructive project on Earth."[5] Photos of moonscapes that were once lush boreal forests shock the public conscience and inspire preventative action. Furthermore, the risks associated with oil transport have put the Keystone XL pipeline, which would transport tar oil from Canada to the United States, at the forefront of current environmental issues. Greenhouse gas ("GHG") emissions, however, are one of the most worrisome, albeit invisible, culprits of tar oil operations. Tar oil extraction creates three times more carbon emissions than conventional oil extraction.[6] Thus, further development of tar oil operations contradicts efforts to mitigate the effects of climate change. Nevertheless, United States policy supports the acquisition of fuels from politically stable

* Brittany DeBord graduated from the University of Delaware with a bachelor's degree in environmental engineering before attending the George Washington University Law School. She would like to thank her mother, who taught her how to love the Earth, and Kevin and Mr. Sparkles for their unwavering support.

[1] Cameron Jefferies, *Unconventional Bridges Over Troubled Water—Lessons to be Learned from the Canadian Oil Sands as the United States Moves to Develop the Natural Gas of the Marcellus Shale Play*, 33 Energy L.J. 75, 79 (2012) [hereinafter *Unconventional Bridges Over Troubled Water*].

[2] *Id.* at 80.

[3] *Id*. at 83.

[4] *Id*.

[5] *Tar Sands 101*, Sierra Club, http://perma.cc/F5U8-82KC (last visited Jan. 16, 2014).

[6] *Id*.

countries like Canada.[7] It also supports developing tar oil on domestic soil in order to achieve energy self-sufficiency.[8]

United States acquisition of tar oil from Canada is inevitable, along with the development of domestic tar oil operations. In fact, the first phases of development have begun in Utah, which has the largest supply of tar oil in the nation.[9] However, there is no legislation that specifically addresses the dramatic impacts from GHG emissions of tar oil operations. As the largest consumer of Canadian tar oil[10] and as a nation with a blossoming industry of its own, the United States should assume the responsibility of regulating this fuel.

Since Congress has been slow to pass climate change legislation, an overhaul like the Waxman-Markey bill is unlikely to garner majority support. On the other hand, targeted legislation addressing the effects of a single fuel source, like tar oil, is more likely to pass. In addition, environmentally protective policies in statutes like the Energy Independence and Security Act and treaties like the North American Agreement on Environmental Cooperation encourage legislation that works to mitigate climate change. Restrictions on the lifecycle GHG emissions of tar oil used for transportation fuel would mitigate the climate changing effects of extraction without eliminating the politically important tar oil market.

Part I of this Note provides factual background about tar oil and its lifecycle GHG emissions. Part II provides legal background of United States policy towards tar sands development and GHG emissions reduction, and instances of lifecycle GHG limitations in the law. Part III discusses two legal solutions to reduce the GHG emissions from tar oil and challenges thereto. First, Congress could amend § 211 of the Clean Air Act to require lifecycle GHG limitations for tar oil. Alternatively, the EPA could regulate the lifecycle GHG emissions of tar oil without congressional authorization through §211(c), which allows the Administrator to regulate fuel that contributes to air pollution and may reasonably be anticipated to endanger the public welfare.[11]

---

[7] *See* Energy Independence and Security Act, 42 U.S.C. § 17285(a)(4) (2007).

[8] *See* 42 U.S.C. § 15927(b)(1) (2005).

[9] *U.S. Oil Sands Inc. Announces Third Quarter Results and Provides Operational Update*, U.S. Oil Sands (U.S. Oil Sands Inc., Calgary, AB, Canada), Nov. 12, 2013, at 1, 2, *available at* https://perma.cc/87JE-JZDK?type=pdf.

[10] *Stop U.S. Demand for Tar Sands*, ForestEthics, http://perma.cc/MYZ4-4QJN (last visited Feb. 2, 2014).

[11] 42 U.S.C. § 7545(c)(1) (2007).

II. Factual Background

a. Tar Oil Facts and Controversy

"Tar sands" are a combination of clay, sand, water, and bitumen, a heavy black viscous oil, which is referred to as "tar oil" in this note.[12] Tar oil is extracted either by surface mining or "in situ" extraction.[13] Surface mining is used for shallow deposits of tar oil, whereby tar sands are dug up using large hydraulic and electrically-powered shovels.[14] The tar oil is subsequently separated from the sand.[15] In situ extraction is used for deeper deposits of tar oil.[16] In this process, steam or solvent is injected deep into the ground to separate the tar oil from the other materials, which is then pumped to the surface and refined.[17] Currently, tar oil is not produced on a significantly commercial level in the United States.[18] Rather, the Canadian province of Alberta dominates the tar oil industry.[19] In fact, Canada is the top exporter of crude oil to the United States, a substantial portion of which is tar oil.[20] Moreover, it has been estimated that thirty-seven percent of American foreign oil supplies are expected to come from Canadian tar oil by 2037.[21]

Tar oil has received considerable media attention due to the controversy surrounding the primary mode of tar oil transport--pipelines.[22] Currently, 3.5 million barrels per day of crude oil from Alberta enter the United States via pipeline infrastructure.[23] The Keystone Pipeline transports almost one quarter of that crude.[24] Its proposed new segment, Keystone XL, would provide a direct route from Alberta to Nebraska in order to satisfy the demand of refineries in the Midwest and

---

[12] About Tar Sands, 2012 Oil Shale & Tar Sands Programmatic EIS Information Center, http://perma.cc/WE3X-UJNJ (last visited Nov. 7, 2013) [hereinafter *About Tar Sands*].

[13] *Id.*

[14] *Id.*

[15] *Unconventional Bridges Over Troubled Water*, *supra* note 1, at 82.

[16] *About Tar Sands, supra* note 12.

[17] *Id.*

[18] *Id.*

[19] *Id.*

[20] *Petroleum & Other Liquids, Independent Statistics & Analysis*, U.S. Energy Information Administration (Oct. 30, 2013), http://perma.cc/7DST-WMZN.

[21] *Unconventional Bridges Over Troubled Water*, *supra* note 1, at 83.

[22] *See* Diana Furchtgott-Roth, Manhattan Inst. for Policy Research, Pipelines are Safest for Transportation of Oil and Gas 1-2 (2013) [hereinafter Pipelines Are Safest For Transportation of Oil and Gas], *available at* https://perma.cc/S6PR-SB5R?type=pdf.

[23] *Unconventional Bridges Over Troubled Water*, supra note 1, at 83.

[24] *TransCanada*, Keystone Xl Pipeline, https://perma.cc/H8VT-UAPF?type=image (last visited Nov. 7, 2013).

the Gulf Coast.[25] The Obama administration has delayed approval for the construction of Keystone XL due to concerns that building the pipeline would significantly contribute to increased GHG emissions.[26] However, in January 2014 the State Department released the Final Supplemental Environmental Impact Statement, concluding that Keystone XL would not substantially worsen carbon pollution.[27] The State Department reasoned that increased emissions associated with production and consumption were unlikely, since the approval or denial of Keystone XL is unlikely to significantly impact the rate of extraction of tar oil or the continued demand at refineries in the United States.[28] Environmentalists fear that this report will lead President Obama to determine that the project will serve the national interest and grant a Presidential Permit authorizing its execution.[29]

Citizens of the United States need not only be concerned about Keystone XL. Tar oil development is beginning in states like Utah and Kentucky.[30] Utah is the star player in the U.S. tar oil industry, since the majority of the country's tar oil is concentrated in the Eastern region of the state.[31] U.S. Oil Sands is a Utah-based company that is planning the initial phase of a project that could eventually produce 20,000 barrels of tar oil per day via in situ extraction.[32] The government and citizens of Utah support the project because of its potential to bring jobs and revenue for the state.[33] Deposits of tar oil are also located in Alaska, Alabama, Southwest Texas, California, Oklahoma, and Missouri, with scattered deposits in other states.[34]

---

[25] *The Project,* Keystone XL Pipeline, https://perma.cc/ZN3K-NP37?type=image (last visited Nov. 7, 2013).

[26] *See* Pipelines Are Safest For Transportation Of Oil And Gas, *supra* note 22, at 1; *see also,* Juliet Eilperin, *Obama: Keystone Pipeline Must Not Increase Greenhouse Gases*, Wash. Post, (June 25, 2013) *available at* http://perma.cc/XYL9-BCBS.

[27] Coral Davenport, *Federal Report Removes Hurdle for Oil Pipeline*, N.Y. Times, Feb. 1, 2014, at A1, *available at* http://perma.cc/UW39-8S2X.

[28] U.S. Dep't Of State, Bureau Of Oceans And Int'l Envtl. And Scientific Affairs, Final Supplemental Environmental Impact Statement For The Keystone Xl Project: Executive Summary Es-16 (2014).

[29] Davenport, *supra* note 27.

[30] Stephen Ewart, *Ewart: Oilsands Development and Protests Gather Steam ... In Utah*, Calgary Herald, Sept. 18, 2013, http://perma.cc/29KU-6W5H [hereinafter *Ewart: Oilsands Development and Protests Gather Steam*]; Joel Chury, *U.S. Oilsands Open for Business*, Oilprice (June 20, 2013, 4:27 PM), *available at* http://perma.cc/E6AQ-UUAR [hereinafter *U.S. Oilsands Open for Business*].

[31] *See About Tar Sands*, *supra* note 12.

[32] *Ewart: Oilsands Development and Protests Gather Steam*, *supra* note 21.

[33] Cameron Todd, *Developing the USA's Largest Oil Sand Resource*, U.S. Oil Sands (Feb. 2012), *available at* http://s3.documentcloud.org/documents/409017/us-oil-report-card.pdf.

[34] *Oil Sands,* Energy Minerals Division, http://perma.cc/Y3EE-9N5Q (last visited Nov. 7, 2013).

The main criticism of tar oil operations involves the associated environmental destruction. A primary concern is that both processes of tar oil production, surface mining and in situ extraction, contribute dramatically to climate change.[35] Not only does tar oil extraction perpetuate the use of GHG-emitting fossil fuels, but extraction itself also produces large amounts of GHGs.[36] James Hansen, director of NASA Goddard Institute for Space Studies, states that "[i]f we turn to these dirtiest of fuels, instead of finding ways to phase out our addiction to fossil fuels, there is no hope of keeping carbon concentrations below 500 p.p.m.—a level that would, as earth's history shows, leave our children a climate system that is out of their control."[37]

Currently, tar oil production requires substantial fossil fuel input, which produces large amounts of GHG emissions. For tar oil mined from the surface, five units of oil-based energy are obtained for every one unit of energy invested to extract it.[38] For tar oil extracted in situ, 2.9 units of oil-based energy are obtained for one unit of energy invested.[39] On the other hand, for conventional oil, twenty-five units of oil-based energy are obtained for one unit of invested energy.[40] While these ratios reflect the current industry in Canada, emerging technology can transform tar sands into a more sustainable fossil fuel industry. For example, by using solvents instead of steam to loosen bitumen during in situ extraction, emissions from the process can be reduced by up to eighty-five percent.[41] Emission-reducing technology saves energy, reduces operating costs, and provides value to businesses by reducing environmental risks.[42]

GHG emissions are but one issue among many associated with tar oil production. Tar oil operations cause forest and wildlife habitat loss, water and fisheries poisoning, increased cancer rates in downstream communities, migratory bird death, and other forms of air pollution.[43] Extraction processes also pose the threat of oil spills.[44] Instead of

---

[35] *See* Rachel Nuwer, *Oil Sands Mining uses Up Almost as Much Energy as It Produces*, Insideclimate News (Feb. 19, 2013), http://perma.cc/5TH2-Z9XW.

[36] *See Id.*

[37] James Hansen, *Game Over for the Climate*, N.Y. Times, May 9, 2012, *available at* http://perma.cc/S7LY-RKZM.

[38] Nuwer, *supra* note 35.

[39] *Id.*

[40] *Id.*

[41] Kevin Bullis, *New Process could make Canadian Oil Cheaper, Cleaner*, MIT Technology Review (Aug. 3, 2011), *available at* http://perma.cc/CB2F-VQLV.

[42] *Reducing Greenhouse Gas Emissions in Canada*, Devon Energy Corporation, http://perma.cc/UPR2-MT8A (last visited Jan. 16, 2014).

[43] Brandon D. Cunningham, Student Article, *Border Petrol: U.S. Challenges to Canadian Tar Sands Development*, 19 N.Y.U. Envtl. L.J. 489, 496 (2012) [hereinafter *Border Petrol*].

[44] In June of 2013, a major spill from a Canada Natural Resources Ltd. facility released 10,000 barrels of bitumen. Ian Austen, *Leak at Oil Sands Project in Alberta*

proposing solutions to the myriad of problems associated with the tar oil industry, this note will focus on GHG emissions.

b. Lifecycle GHG Emissions of Tar Oil

One method of analyzing GHG emissions resulting from tar oil operations is lifecycle GHG assessment. Lifecycle assessments identify GHG emissions associated with the entire lifecycle of a fuel.[45] For example, a "well-to-wheel" analysis includes emissions produced from the extraction of the oil source, transport, refining, distribution to retail markets, and combustion in end-use.[46] Since more energy is needed to extract tar oil than the energy needed to extract conventional oil, the lifecycle GHG emissions for tar oil are higher than those of conventional oil.

Well-to-wheel analyses of Canadian tar oil operations represent known lifecycle GHG measurements for tar oil, since lifecycle GHG measurements have not yet been conducted on

U.S. tar oil operations. In 2012, Cambridge Energy Research Associates ("CERA") conducted a meta-analysis on twelve major studies that analyzed Canadian lifecycle GHG measurements.[47] CERA analyzed GHG measurements within a tight boundary and a wide boundary. The tight boundary included emissions measurements drawn solely from production facility and refinery processes.[48] Wide boundary measurements included emissions that occur outside of these processes such as emissions from the production of energy, like natural gas and offsite electricity, used to power extraction facilities.[49] Analyses within the tight boundary revealed that the combined well-to-wheel GHG emissions from refined tar oil are eleven percent higher than the average crude refined in the United States in 2005.[50] Analyses within the wide boundary revealed that emissions from refined tar oil are fourteen percent higher than the United States crude average.[51]

Well-to-wheel emissions from in-situ extraction operations, measured alone, were eighteen and twenty-three percent higher than the United States crude average within the tight and wide boundaries, respectively.[52] Emissions from in situ methods are higher than the average

Heightens Conservationists' Concerns, N.Y. Times, Aug. 8, 2013, *available at* http://perma.cc/MU2G-SC6M.

[45] Richard K. Lattanzio, Congressional Research Service, Canadian Oil Sands: Life-Cycle Assessments of Greenhouse Gas Emissions 3 (2013), *available at* https://perma.cc/5KJW-ZV24?type=pdf.

[46] *Id.*

[47] Cambridge Energy Research Associates, Oil Sands, Greenhouse Gases, and U.S. Oil Supply 6 (2012), *available at* https://perma.cc/7MYM-F8A9?type=pdf.

[48] *Id.* at 12.

[49] *Id.*

[50] *Id.* at 15.

[51] *Id.*

[52] *Id.*

tar oil emissions because significant amounts of energy are required to inject steam into the ground,[53] the favored method of in situ extraction.[54] The steam must heat the oil in order to decrease its viscosity enough to pump it to the surface, leaving the sand component underground.[55] High emissions resulting from in situ extraction are particularly problematic for U.S. tar oil operations, since eighty-five percent of the major deposits in the United States would require the in situ process.[56]

It is important to note that well-to-wheel measurements dilute the difference between the level of emissions produced during tar oil extraction and conventional oil extraction. Emissions released during combustion make up seventy to eighty percent of total emissions, which are the same for all crudes. Thus, lifecycle GHG emissions from refined tar oil could be up to eighty-one percent greater than the United States crude average when measured via well-to-tank analysis, excluding ultimate combustion.[57]

III. Legal Background

a. Statutory Policy: Tar Sands Development and GHG Emissions Reductions

The Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007 ("EISA") govern United States energy policy. These acts emphasize the goals of the United States to achieve energy security and self-sufficiency by reducing reliance on imports from unstable foreign countries. The Energy Policy Act, for example, calls for the establishment of the "United States Commission on North American Energy Freedom" for the purpose of making recommendations for a coordinated and comprehensive energy policy between Canada, Mexico, and the United States, which will achieve energy self-sufficiency in 2025.[58]

---

[53] Richard K. Lattanzio, Congressional Research Service, Canadian Oil Sands: Life-Cycle Assessments of Greenhouse Gas Emissions 5 (2013), *available at* https://perma.cc/R97X-KJMN?type=pdf.

[54] *About Tar Sands, supra* note 12.

[55] Lattanzio, *supra* note 53.

[56] Marc Humphries, Congressional Research Service, North American Oil Sands: History Of Development, Prospects for the Future 3 (2008), *available at* https://perma.cc/MN5B-6W7Z?type=pdf.

[57] Comment Letter from Cynthia Giles, Assistant Administrator for the Office for Enforcement and Compliance Assurance, EPA, to Jose W. Fernandez, Assistance Secretary for the Office of Economic, Energy, and Business Affairs, and Dr. Kerri-Ann Jones, Assistant Secretary for the Office of Oceans and International Environmental and Scientific Affairs (Apr. 22, 2013), *available at* http://www.epa.gov/compliance/nepa/keystone-xl-project-epa-comment-letter- 20130056.pdf.

[58] Energy Policy Act of 2005, Pub. L. No. 109-58, § 1423 (2005).

Tar oil can help achieve both these goals because it is primarily obtained from Canada[59] and commercially viable deposits are located in the United States.[60] Thus, it is the specific policy of the United States to develop domestic tar oil resources.[61] This policy has not changed since at least 1980, when the Crude Oil Windfall Profit Tax Act of 1980 ("COWPTA") was created in reaction to the 1973 oil embargo and the need to reduce reliance on politically and economically unstable sources of foreign oil.[62] Even though the heart of COWPTA was repealed in 1988, provisions offering tax credits for tar oil production have survived.[63]

The pro-development policy towards a domestic tar oil industry is emphasized throughout the Energy Policy Act. The Act requires the Secretary of the Interior to make land available for leasing for the research and development of tar oil, to create a commercial leasing program for tar oil resources on public lands, and to ensure diligent development of the leases by designating work requirements and milestones.[64] The Act also calls for the establishment of a "Task Force" to develop a program to coordinate and accelerate the commercial development of tar oil resources.[65] The Secretary of the Interior must evaluate the locations of tar oil deposits, assign priority to locations particularly rich in tar oil, and facilitate the exchange of public and private land to consolidate land ownership and mineral interests.[66] The Act requires the Secretary of Energy to identify commercially feasible technology for the development of tar oil. [67] While not required, the Secretary of Energy may provide assistance for each technology in meeting environmental requirements.[68] Though tar oil development must be "conducted in an environmentally sound manner, using practices that minimize impacts,"[69] the Act makes clear that programs to further the development of domestic tar oil operations are top priority.

Despite the policy favoring tar oil development, the Energy Policy Act and EISA also promote energy efficiency and reducing GHG emissions to offset climate change. The Energy Policy Act

[59] *Unconventional Bridges Over Troubled Water*, *supra* note 1 at 80.

[60] *Ewart: Oilsands Development and Protests Gather Steam*, *supra* note 30; CHURY, *supra* note 30.

[61] 42 U.S.C. § 15927(b)(1) (2005); *see also* 42 U.S.C. § 13554(a) (1992).

[62] Gregory A. Napier, *Got Gas? A Comment On Shell Petroleum, Inc. v. United States*, 19 J. NAT. RESOURCES & ENVTL. L. 235, 235 (2004-2005); *see also* 42 U.S.C. § 15927(b)(1) (2005).

[63] Gregory A. Napier, *Got Gas? A Comment On Shell Petroleum, Inc. v. United States*, 19 J. NAT. RESOURCES & ENVTL. L. 235, 236 (2004-2005).

[64] 42 U.S.C. § 15927(c)-(f) (2005).

[65] 42 U.S.C. § 15927(h) (2005).

[66] 42 U.S.C. § 15927(m)-(n) (2005).

[67] 42 U.S.C. § 15927(l) (2005).

[68] 42 U.S.C. § 15927(l) (2005).

[69] 42 U.S.C. § 15927(b)(2) (2005).

requires the Secretary of Energy to research fossil energy with the goal of "improving the efficiency, effectiveness, and environmental performance of fossil energy production, upgrading, conversion, and consumption."[70] Furthermore, the purpose of EISA is to "increase the production of clean renewable fuels;… increase the efficiency of products, buildings, and vehicles; promote research on and deploy GHG capture and storage options; and improve the energy performance of the federal government.[71] EISA calls for the establishment of the "International Clean Energy Foundation" to serve the long-term foreign policy and energy security goals of reducing global GHG emissions.[72] EISA also calls for the establishment of the "Office of Climate Change and Environment" within the Department of Transportation "to plan, coordinate, and implement" reductions in "transportation-related energy use and [to] mitigate the effects of climate change."[73]

b. Lifecycle GHG Emissions Limitations

i. Lifecycle Requirements of Biofuels

EPA has started to enact GHG emission standards as a result of the Supreme Court decision in *Massachusetts v EPA*, which gave the EPA the authority to regulate GHGs.[74] One such method of controlling GHG emissions is to impose standards on lifecycle GHG emissions.[75] For example, "concern over the total emissions from biofuels [production] led Congress to include GHG lifecycle analysis requirements for these fuels by amending § 211 of the Clean Air Act ("CAA") via the EISA.[76]

The Renewable Fuel Program was originally established by Congress in the Energy Policy Act of 2005 with the purpose of reducing U.S. dependence on foreign oil, encouraging development of an advanced biofuels industry, and reducing GHG emissions from transportation fuel combustion.[77] The initial program required refiners, importers, and blenders of motor vehicle fuel to include a minimum annual volume

[70] Energy Policy Act of 2005, Pub. L. No. 109-58, § 961 (2005).

[71] Summary of Energy Independence and Security Act, EPA, http://perma.cc/59NV-W9MU (last visited Mar. 3, 2014).

[72] Energy Independence and Security Act, 42 U.S.C. § 17352 (2007).

[73] Energy Independence and Security Act, 49 U.S.C. § 102 (2007).

[74] Massachusetts v. EPA, 549 U.S. 497, 532 (2007).

[75] 42 U.S.C. § 7545(o) (2007).

[76] Colin R. Hagan, *Closing the Gap: Using the Clean Air Act to Control Lifecycle Greenhouse Gas Emissions from Energy Facilities*, 30 UCLA J. Envtl. L. & Pol'y 247, 249 (2012) [hereinafter *Closing the Gap*].

[77] *See* Shannon S. Broome & Paul R. Esformes, *Food v. Fuel: Are Legal Attacks on the Renewable Fuel Standard Just a Bunch of Empty Calories?*, 28 Nat. Resources & Env't 33, 33-34 (Fall, 2013) [hereinafter *Food v. Fuel*].

of biofuel.[78] Biofuels were originally perceived as "carbon neutral" because carbon emissions absorbed during plant growth were thought to cancel out emissions produced during combustion.[79] However, recent scientific evidence suggests that replacing fossil fuels with bioenergy does not by itself reduce carbon emissions, since the "carbon neutral" theory ignores "differences in the types of biomass resources, the period of time it takes the resource to regrow, and [] emissions resulting from … the production process, such as land conversion."[80] Thus, Congress expanded the Renewable Fuel Program in the EISA, implementing lifecycle GHG emissions limitations on biofuels.[81]

The revised Renewable Fuel Program prevents the hidden GHG emissions associated with biofuels from hindering the ultimate goal of GHG reduction. Renewable fuel[82] must achieve at least a twenty percent reduction in lifecycle GHG emissions compared to baseline lifecycle GHG emissions, which are the average lifecycle GHG emissions for transportation fuels sold in 2005.[83] Biomass-based diesel[84] must achieve at least fifty percent less lifecycle GHG emissions than the baseline emissions,[85] advanced biofuel[86] must also achieve at least fifty percent less,[87] and cellulosic biofuel[88] must achieve at least sixty percent less.[89] The Program requires the Administrator of the EPA to promulgate regulations requiring transportation fuel sold or introduced into commerce in the United States to contain, on average, a certain volume of renewable fuel, biomass-based diesel, advanced biofuel, and cellulosic biofuel. The required volume of these fuels increases on a yearly basis.[90]

The Program allows the Administrator to make modifications to the lifecycle GHG emissions requirements.[91] For the fifty and sixty percent reductions in lifecycle GHGs, the Administrator may only modify the requirements if he believes such limitations would not be commercially feasible.[92] Furthermore, the Administrator may not reduce the sixty percent limitations below fifty percent, the fifty percent

[78] *Id.* at 34.
[79] *Closing the Gap*, *supra* note 76, at 256.
[80] *Id.* at 257.
[81] *Food v. Fuel*, *supra* note 77, at 34.
[82] Fuel produced from renewable biomass.
[83] 42 U.S.C. § 7545(o)(2)(A)(i) (2007).
[84] Renewable fuel that is biodiesel.
[85] 42 U.S.C. § 7545(o)(1)(D) (2007).
[86] Renewable fuel other than ethanol derived from corn starch.
[87] 42 U.S.C. § 7545(o)(1)(B)(i) (2007).
[88] Renewable fuel derived from any cellulose, hemicellulose, or lignin.
[89] 42 U.S.C. § 7545(o)(1)(E) (2007).
[90] 42 U.S.C. § 7545(o)(2)(B)(i)(I) (2007).
[91] 42 U.S.C. § 7545(o)(4)(A) (2007).
[92] *Id.*

limitations below forty percent, and the twenty percent limitations below ten percent.[93] The Administrator must review and revise the regulations establishing the adjusted level after five years.[94]

The Program establishes a credit program whereby any person that refines, blends, or imports gasoline that contains a volume of renewable fuel greater than the volume required receives credits.[95] Credits may be transferred to another person for the purposes of complying with the renewable fuel volume requirements.[96] The credits are valid for 12 months from the date of generation to show compliance.[97] Any person that is unable to generate or purchase sufficient credits carries a renewable fuel deficit on the condition that on the following year they achieve compliance and generate additional credits to offset the deficit.[98]

The Administrator may waive the volume requirements in whole or in part on petition by one or more States or by any person subject to the Program.[99] The Administer must make this decision based on one of two possible determinations after public notice and opportunity for comment. One determination is that implementation of a requirement would severely harm the economy or environment of a State, region, or the country.[100] The other determination is that there is an inadequate domestic supply.[101]

ii. Section 526 of EISA

Section 526 of the EISA is the only federal statute that limits tar oil emissions through lifecycle GHG measurements. The provision prohibits federal agencies from entering into contracts for procurement of an alternative or synthetic fuel, including "nonconventional petroleum sources," for mobility-related uses unless the lifecycle GHG emissions associated with the production and combustion of the fuel are less than or equal to lifecycle GHG emissions from the equivalent conventional fuel.[102]

---

[93] 42 U.S.C. § 7545(o)(4)(B) (2007).
[94] 42 U.S.C. § 7545(o)(4)(D) (2007).
[95] 42 U.S.C. § 7545(o)(5)(A) (2007).
[96] 42 U.S.C. § 7545(o)(5)(B) (2007).
[97] 42 U.S.C. § 7545(o)(5)(C) (2007).
[98] 42 U.S.C. § 7545(o)(5)(D) (2007).
[99] 42 U.S.C. § 7545(o)(7)(A) (2007).
[100] 42 U.S.C. § 7545(o)(7)(A)(i) (2007).
[101] 42 U.S.C. § 7545(o)(7)(A)(ii) (2007).
[102] "No Federal agency shall enter into a contract for procurement of an alternative or synthetic fuel, including a fuel produced from nonconventional petroleum sources, for any mobility-related use, other than for research or testing, unless the contract specifies that the lifecycle greenhouse gas emissions associated with the production and combustion of the fuel supplied under the contract must, on an ongoing basis, be less than or equal to such emissions from the equivalent conventional fuel produced from conventional petroleum sources." 42 U.S.C. § 17142.

Section 526 has garnered substantial criticism. Critics of the provision argue that the provision will hurt the military, among other federal agencies, by preventing it from using Canadian tar oil and resorting to more expensive alternatives.[103] In fact, the House of Representatives unsuccessfully attempted to introduce a provision into the National Defense Authorization Act ("NDAA") for 2014 that exempts the Department of Defense from the requirements of § 526.[104] Other criticisms of § 526 assert that the statute puts national and economic security at risk by forcing increased petroleum imports from unstable and dangerous countries.[105] Similarly, opponents argue that the carbon footprint left by Canadian tar oil production should be weighed against the high social and political costs of obtaining oil from volatile countries.[106] Critics also argue that the provision will hurt the U.S. economy, since U.S. refineries have been processing increasingly larger amounts of Canadian tar oil.[107] Finally, critics argue that § 526 would merely divert Canadian tar oil to other countries, like China, and therefore would not remedy emissions problems.[108]

There has also been extensive debate over the definition of "nonconventional petroleum sources."[109] One of the bill's authors, Congressman Henry Waxman, has stated that tar oil is included in this definition.[110] In addition, other statutes, including the Energy Policy Act of 2005, define tar oil as an unconventional fuel.[111] However, through its interpretation of § 526, the Defense Logistics Agency Energy ("DLA Energy"), the energy support center of the Department of Defense, justified contracts for the purchase of petroleum that included Canadian tar oil.[112] The agency claimed that it did not "enter into a contract for procurement of an alternative fuel" because it entered into contracts for the purchase of "commercially available fuels, consistent with acquisition policy."[113] Furthermore, DLA Energy argued that refined tar oil mixed

[103] J. Scott Childs, *Continental Cap-And-Trade: Canada, The United States, And Climate Change Partnership In North America*, 32 Hous. J. Int'l L. 393, 441 (2010) [hereinafter *Continental Cap-And-Trade*].

[104] National Defense Authorization Act of 2014, H.R. 1960, 113th Congress § 316 (2013).

[105] *Continental Cap-And-Trade*, *supra* note 103, at 441.

[106] *Id.* at 443.

[107] *Id.* at 442-43.

[108] *Id.* at 439.

[109] *Id.* at 441.

[110] *Continental Cap-And-Trade*, *supra* note 100, at 440.

[111] "United States oil shale, tar sands, and other unconventional fuels are strategically important domestic resources …" 42 U.S.C. § 15927(b)(1) (2005).

[112] Defense Energy Support Center, Interim Implementation Plan Regarding Section 526 Of The Energy Independence And Security Act Of 2007 8 (2009) [hereinafter Interim Implementation Plan].

[113] *Id.*

with conventional crude is not substantial and that the contracts do not target any particular source of crude oil, much less refined tar oil.[114] DLA Energy asserted that it is almost impossible to purchase fuel containing no tar oil; therefore, attempting to exclude tar oil from purchases of refined products would increase costs and compromise readiness.[115]

Sierra Club subsequently challenged DLA Energy's decision, claiming that the agency violated § 526 by entering into contracts for the purchase of fuels containing tar oil, which is synthetic, or alternatively, a nonconventional fuel source.[116] However, the District Court for the Eastern District of Virginia found that the Sierra Club members did not have standing to sue as individuals, and did not address the substantive issue.[117] The Court concluded that the Plaintiffs did not suffer an injury in fact because they did not sufficiently allege that they have or will suffer climate change-related injuries from pipeline transmission or refining of Canadian tar oil, "let alone DLA Energy's purchasing contracts for fuel that may contain [Canadian tar oil]."[118] Similarly, the Court concluded that the plaintiffs did not suffer procedural injuries because DLA Energy's action would not violate a requisite "separate concrete interest," but rather a "generalized grievance," since every citizen suffers from climate change.[119] Not only does this case demonstrate the standing issues associated with climate-related claims,[120] but it also suggests that § 526 is largely ineffective without government enforcement and clarification of the statute.

iii. The Waxman-Markey Bill, California and the EU

Lifecycle GHG requirements have also appeared in other noteworthy pieces of legislation. A draft version of the Waxman-Markey bill, for example, sought to maintain the average 2005 lifecycle GHG emissions levels of transportation fuels annually until 2022, and impose a five and ten percent reduction in levels in 2023 and 2030, respectively.[121] These Low Carbon Fuel Standards ("LCFS's") would apply to "refineries, blenders, and importers, as appropriate, and to such other transportation

---

[114] *Id.* at 8.

[115] *Id.* at 8-9.

[116] Sierra Club v. Def. Energy Support Ctr., 2011 WL 3321296, at *2 (D. Va. 2001).

[117] *Id.*, at *3-4.

[118] *Id.*, at *3.

[119] *Id.* at *4, *7.

[120] Shepard Daniel, *Sierra Club v. U.S. Defense Energy Support Center: Standing in the Way*, 39 Ecology L.Q. 619, 623 (2012).

[121] Waxman-Markey Bill, 111th Con. § 822(b) (Mar.13, 2009) (discussion draft).

fuel providers as determined by the Administrator."[122] However, the LCFS provision of the bill was dropped between the release of the draft bill in March and the House vote in June, where the Waxman-Markey bill was passed by a narrow margin.[123] The primary mechanism in the remainder of the bill for reducing GHG emissions was a cap and trade system in which all covered industries would be limited and required to possess permits for their emissions.[124]

During the period from March to June, Chairmen Waxman and Senator Markey engaged in political compromise to appease the moderate Democrats who represented districts with carbon-intensive industries. By June, sufficient "horse-trading" had occurred that the bill passed with eight votes from Republicans and all but four Democratic votes.[125] Along with the elimination of the LCFS provision, other changes in the bill included emissions allowances for coal generators as well as allowances for "energy-intensive, trade exposed entities," such as steel and aluminum manufacturers.[126]

The bill did not successfully pass in the Senate. One of the key criticisms of the bill was that its regulations would have an overly negative impact on the U.S. economy.[127] Opponents argued that the bill would increase the cost of energy, which would reduce real economic output, thereby reducing purchasing power and aggregate demand for goods and services.[128] The Department of Energy's Energy Information Administration (EIA) predicted that the dampening effects of the bill on the GDP would range from -0.2 percent to -1.3 percent. The EIA further argued that the bill would not only reduce domestic refining drastically, but also that any emissions reduced domestically would by offset by relocation of refinery operations overseas.[129] Finally, opponents argued that the bill would have a negative impact on domestic jobs and drive industries away from the U.S. to countries with more lenient standards.[130]

Despite failed federal efforts, California has a working law implementing lifecycle GHG limitations as part of its Global Warming

---

[122] *Id.*

[123] Tom Mounteer, *Comprehensive Federal Legislation to Regulate Greenhouse Gas Emissions*, 39 Envtl. L. Rep. News & Analysis 11068, 11075 (2009) [hereinafter *Comprehensive Federal Legislation*].

[124] Roman Yavich, *Waxman-Markey and Failed Senate Legislation: Climate Change Policy Case Study 6-7,* (Dec. 2010) (unpublished research paper, Syracuse University), *available at* https://perma.cc/YRE9-W5BZ?type=pdf.

[125] *Id.* at 11075, 11069.

[126] *Id.* at 11077.

[127] *Id.* at 11070.

[128] *Id*. at 11070-71.

[129] *Id.* at 11071.

[130] *Id.*

Solutions Act.[131] California's LCFS provisions establish carbon intensity ratings for transportation fuels based on their lifecycle GHG emissions, and seek to reduce the carbon intensity of all fuels by ten percent by 2020.[132] The Ninth Circuit has upheld the LCFS program against claims that the provision violates the Dormant Commerce Clause and frustrates the clear objectives of the EISA to foster energy independence and national security.[133] At least thirteen other states have proposed similar LCFS programs.[134]

In 2009, the European Union ("EU") also approved legislation, named the Fuel Quality Directive, which aims to cut GHGs from transportation fuel based on the lifecycle GHG intensity of fuels.[135] The law is in limbo, however, due to ongoing trade deals with the United States and Canada.[136] In addition to the tar oil deposits in Canada, the United States contains unconventional fuel source deposits that could be exported to the EU, which would be disrupted by the Fuel Quality Directive.[137] It has been asserted that Europe is desperate to find new trade opportunities, and that EU officials have been instructed to give way on any issue crucial to getting a deal through.[138] Nevertheless, more than fifty top scientists from Europe and the U.S. have urged the European Commission president to continue with a plan to label tar oil as more polluting than other forms of oil due its high lifecycle emissions.[139]

---

[131] *Continental Cap-And-Trade*, *supra* note 103, at 438.

[132] Kirk Tracy, *Rocky Mountain Farmers Union v. Goldstene: Low Carbon Fuel Standards, Lifecycle Greenhouse Gases, and California's Continued Struggle to Lead the Way*, 24 Tul. Envtl. L.J. 173, 173 (2010).

[133] Rocky Mountain Farmers Union v. Corey, 730 F.3d 1070, 1070 (9th Cir. 2012).

[134] *Continental Cap-And-Trade, supra* note 103*,* at 438-38.

[135] Barbara Lewis, *Scientists Urge EU Action on Tar Sands—Letter*, Reuters, (Dec. 20, 2013, 10:28 AM), http://perma.cc/XT2K-72F9; *Consultation paper on the measures necessary for the implementation of Article 7a(5),* European Commission, https://perma.cc/X4MW-H3M4?type=pdf (last visited Mar. 3, 2014).

[136] Barbara Lewis, *Scientists Urge EU Action on Tar Sands—Letter*, Reuters, (Dec. 20, 2013, 10:28 AM), *available at* http://perma.cc/XT2K-72F9.

[137] Ros Donald, *Carbon Briefing: Who Killed the EU's Transport Fuel Standards?*, The Carbon Brief (Jan 30, 2014, 1:00 PM), http://perma.cc/5MCP-AKU7.

[138] *Id.*

[139] Barbara Lewis, *Scientists Urge EU Action on Tar Sands—Letter*, Reuters, (Dec. 20, 2013, 10:28 AM), *available at* http://perma.cc/XT2K-72F9.

IV. Solution

a. The Need for a Tailored Federal Solution

Addressing the lifecycle GHG emissions of tar oil as a unique source of GHG pollution is the most realistic and appropriate solution, given the congressional climate and the legislative history of attempts at lifecycle GHG regulation. It is likely that congressional action is necessary to address this problem through an amendment of § 211 of the CAA. However, the EPA may also be authorized by the current form of §211 to regulate lifecycle GHG emissions of tar oil. Regardless of its source, regulation tailored specifically to tar oil would effectively reduce GHG emissions due to its distinctively high lifecycle emissions levels.

Regulating lifecycle GHG emissions of tar oil individually is consistent with the current legal mechanisms of addressing climate change. Federal climate change policy is neither comprehensive nor well-coordinated.[140] It has been described as "a hodgepodge of relatively new mechanisms, like emissions trading and carbon taxes, alongside more traditional legal structures, like command-and-control regulation and litigation."[141] Thus, lifecycle GHG limitations specifically on tar oil are more likely to succeed.

Introducing a bill to implement lifecycle GHG emissions on all fuels, or even on a more limited range of fuels such as transportation or unconventional fuels, is less likely to garner congressional support because Congress does not want to "put up with the heat" of moving a major environmental bill.[142] Indeed, the current method of ad hoc lawmaking used by Congress to push environmentally-related agendas is through appropriations riders.[143] By holding congressional appropriations hostage, Congress is able to attach "incidental provisions that otherwise might lack the political momentum (or even majority support) necessary for passage."[144] Pieces of legislation may also be the product of "amendments being passed between the House and Senate as a means of resolving the differences between their respective bills."[145]

---

[140] JP Brisson, Claudia O'Brien, & Bob Wyman, *Using Disjointed Global And Domestic Climate Change Policies To The Client's Advantage*, 2013 WL 1750691, *6 (2013) [hereinafter *Using Disjointed Global And Domestic Climate Change Policies*].

[141] *Id.* at *1.

[142] Richard J. Lazarus, *Congressional Descent: The Demise of Deliberative Democracy in Environmental Law*, 94 Geo. L.J. 619, 629 (2006) (quoting Charles Pope, *Environmental Bills Hitch a Ride Through the Legislative Ganlet*, 56 Cong. Q. Wkly. Rep. 872, 873 (1998)).

[143] *Id.* at 632, 635.

[144] *Id.* at 635.

[145] 153 Cong. Rec. E2265,199 (daily ed. Dec. 28, 2007) (statement of Rep. John D. Dingell), *available at* http://perma.cc/P7JJ-945M.

This is how the Renewable Fuel Program was passed, which is why it lacks written legislative history detailing why certain policies were adopted and others excluded.[146]

The greater likelihood of success of narrower climate change legislation is reflected in the legislative background of this note. The failure of the Waxman-Markey bill illustrates the unwillingness of Congress to implement blanket lifecycle emissions requirements on all transportation fuels. The far reach of Waxman-Markey led opponents to estimate relatively dramatic economic impacts, which, among other reasons, destroyed prospects of the bill passing.[147] Moreover, opponents of the bill pointed out that it required "the wholesale remaking of the entire energy sector over the course of the next four decades" and that the bill's emissions reduction targets were "sheer unreality."[148]

Meanwhile, § 526 of the EISA was passed by Congress, albeit with strong and continuous opposition. Section 526 is much narrower than the Waxman-Markey LCFS provision because the lifecycle GHG requirements are tailored to a particular fuel source, nonconventional fuels, and because the requirements apply only to federal agencies. Thus, successful passage of lifecycle GHG requirements occurs when provisions are tailored to a particular fuel source and when they apply to a specific market. The market need not be particularly small, however, since the Department of Defense is the single largest consumer of energy in the United States.[149]

Accordingly, it is not unrealistic for Congress to implement legislation that tailors lifecycle GHG emissions requirements to tar oil and applies only to the transportation fuel market. Section 526 is also illustrative of the need for more instructive legislation. The unclear language of the statute allows for a less protective, if not unenforceable, mandate.[150] On the other hand, the Renewable Fuel Program establishes specific guidelines for the Administrator of the EPA to enforce the lifecycle GHG emission and volume requirements of renewable fuels.[151]

Additionally, federal legislation addressing the GHG emissions of tar oil is necessary because leaving states to regulate the GHG effects of tar oil production will lead to externalities on other states. While states like California seek to reduce emissions by implementing their

---

[146] *Id.*

[147] *See Comprehensive Federal Legislation*, *supra* note 123, at 11071.

[148] Steven F. Hayward & Kenneth P. Green, *Waxman-Markey: An Exercise in Unreality*, American Enterprise Institute 2 (July 10, 2009), https://perma.cc/UUD2-W25Z?type=pdf.

[149] Schuyler Null, *Defense Sustainability: Energy Efficiency and the Battlefields*, Global Green USA 4 (Feb. 2010), *available at* https://perma.cc/86EA-79LU?type=pdf.

[150] *See supra,* notes 109-30 and accompanying text.

[151] *See supra,* text accompanying notes 90-91.

own LCFS provisions, other states are likely unwilling to implement expensive programs to mitigate GHG emissions, especially those states that accept Canadian tar oil from pipelines. Furthermore, states that anticipate development through tar sands operations, like Utah, may approach the industry with less caution towards emissions.[152] Lenient GHG policy in such states would run counter to national policies of tackling climate change and reducing GHG emissions and would put the welfare of the public and future generations at risk.[153]

b. Solution One: Amendment of § 211 of the CAA

Section 211 of the CAA should be amended to specifically address the high levels of lifecycle GHG emissions of tar oil. The motives for implementing a lifecycle GHG program for tar oil are similar to the justifications for the Renewable Fuel Program. The Renewable Fuel Program was implemented to foster the development of biofuels, specifically cellulosic biomass, which is a young industry in need of technological breakthroughs and the support of the federal government.[154] The tar oil program would be implemented to foster a cleaner tar oil industry, a similarly young industry pursuing technological breakthroughs to reduce emissions from extraction, the development of which should be incentivized by the federal government. Moreover, just as the Renewable Fuel Program was implemented to reduce GHG emissions from the transportation sector, so would a tar oil program.[155]

Modeling a tar oil program after the Renewable Fuel Program would also help to avert the implementation problems associated with § 526 of the EISA. By specifically mandating the EPA to carry out lifecycle GHG regulations, government enforcement would be more certain. Furthermore, since the tar oil program would be implemented primarily to mitigate climate change effects of GHG emissions, citizen suits would likely be unsuccessful, as demonstrated in *Sierra Club v. Defense Energy Support Center*. Therefore, the legislation should allow for citizen suits that do not require a separate concrete interest for procedural harms.

A statutory program modeled after the Renewable Fuel Program would effectively limit emissions from tar oil operations. This program should limit the lifecycle GHG emissions of tar oil to the baseline

[152] *See* David Hasemyer, *Nation's First Tar Sands Mine Stirs Water, Environmental Fears Out West*, InsideClimate News (Aug. 16, 2012), http://perma.cc/2ELY-YU32 [hereinafter *Nation's First Tar Sands*].

[153] *Climate Change*, The White House, http://perma.cc/AMQ4-X6D6 (last visited Jan. 16, 2014).

[154] 153 Cong. Rec. E2266,199 (daily ed. Dec. 28, 2007) (statement of Rep. John D. Dingell), *available at* http://perma.cc/23JU-J7WG.

[155] *Id.*

lifecycle GHG emissions level. The baseline level should be the average lifecycle GHG emissions for transportation fuels sold in a more recent year than 2005, the year used in the Renewable Fuel Program. The baseline level should be re-evaluated every five years to reflect changes in lifecycle GHG emissions of transportation fuels.

A credit program should be implemented to enforce emissions requirements yet maintain flexibility. Where the Renewable Fuel Program grants credits for achieving renewable fuel volumes greater than the required quantities, this program should enable any person that refines, blends, or imports transportation fuel that contains tar oil with lifecycle GHG emissions below the baseline level to receive credits that are tradable to another person for the purposes of complying with the requirements.[156] The logistics of this credit program should be modeled from the Renewable Fuel Program. A credit generated should be valid to show compliance for twelve months as of the date of generation.[157] Any person unable to generate sufficient credits should carry a deficit into the following year wherein they must achieve compliance with the emissions goals for that year and generate or purchase more credits to offset their deficit.[158]

Unlike the Renewable Fuel Program, there should not be a required volume of tar oil in transportation fuel. The renewable fuel volume requirement was established in part to foster GHG emissions reductions.[159] Conversely, GHG emissions would increase if a certain volume of tar oil were required in transportation fuel.

Provisions that allow for modification of the lifecycle GHG limitations should resemble the modification provisions of the Renewable Fuel Program. The Administrator should make modifications to the lifecycle GHG limitations on tar oil when she determines such limitations are not commercially feasible.[160] Furthermore, the Administrator should be able to waive the emissions limitations in whole or in part on petition by one or more States or by any person subject to the program.[161] The Administer should base her decision on whether the limitation would severely harm the economy or environment of a State, region, or the country. Unlike the Renewable Fuel Program, the Administrator should not base her decision on whether there is an inadequate supply of complying tar oil, since applicable parties would not be subject to volume requirements.[162]

---

[156] *See* 42 U.S.C. § 7545(o)(5)(A)(i) (2007).

[157] *See* § 7545(o)(5)(C) (2007).

[158] *See* § 7545(o)(5)(D) (2007).

[159] 153 Cong. Rec. E2265, 199 (daily ed. Dec. 28, 2007) (statement of Rep. John D. Dingell), *available at* http://perma.cc/23JU-J7WG.

[160] *See* 42 U.S.C. § 7545(o)(4)(A) (2007).

[161] *See* § 7545(o)(7)(A)(i) (2007).

[162] *See* § 7545(o)(7)(A)(ii) (2007).

c. Challenge to Solution One: Impermissible Expropriation under NAFTA

Challenges to the proposed legislation may invoke Chapter 11 of the North American Free Trade Agreement ("NAFTA"). NAFTA was established to liberalize trade and ensure secure energy supplies between the U.S., Canada, and Mexico.[163] Chapter 11 covers claims by investors against a host Party[164] to the treaty.[165] Article 1110 provides remedies against Party governments when state action, including regulatory action, expropriates an investment of an investor of another Party, or when that action constitutes a measure equivalent to expropriation.[166] An investment can be an enterprise, a variety of interests in an enterprise, or tangible or intangible property acquired for business purposes.[167]

Expropriation occurs when a government action results in a compensable taking of an investment.[168]A regulation constitutes expropriation when it interferes with the use of property that deprives the owner, in whole or in part, the reasonably-to-be-expected economic benefit of the property.[169] Thus, a challenge might come from Canadian entities that have invested in business and/or property within the United States for the purposes of receiving imported tar oil.[170] An investor's access to a country's market may also constitute an intangible property interest.[171] Therefore, Canadian businesses may be able to challenge the proposed legislation based solely on burdensome restrictions on importing tar oil into the U.S. market. However, an investment has not been expropriated when the investor continues to export or import substantial quantitates of product, even though the regulatory regime has contributed to reduced profits.[172]

---

[163] *Id.*

[164] A "Party" refers to one of the three participating countries: U.S., Canada, or Mexico.

[165] Border Petrol, *supra* note 43, at 505.

[166] Continental Cap-And-Trade, *supra* note 103, at 423.

[167] North America Free Trade Agreement, U.S.-Can.-Mex., art. 1139 (Dec. 17, 1992), *available at* http://perma.cc/6FJ4-XCTH.

[168] Lucien J. Dhooge, *The North American Free Trade Agreement and The Environment: The Lessons of Metalclad Corporation v. United Mexican States*, 10 Minn. J. Global Trade 209, 253 (2001).

[169] *Id.*

[170] TransCanada Corporation, for example is the sole owner of the Keystone Pipeline system, which delivers tar oil to refineries within the United States. *Transcanada Becomes Sole Owner Of Keystone Pipeline System*, 236 Pipeline And Gas J., No. 8 (August 2009), http://perma.cc/MP2P-CRG2 (last visited Mar. 3, 2014).

[171] *Pope & Talbot, Inc. v. Government of Canada: Interim Award*, 23 Hastings Int'l & Comp. L. Rev. 455, 479 (2000).

[172] *Id.* at 481.

The extent to which a regulation must interfere with investment to be considered expropriation remains unclear.[173] In 1999, U.S.-based Ethyl Corporation claimed the Canadian government expropriated its business by banning the gasoline additive MMT.[174] The business of Ethyl Canada, Ethyl's subsidiary, was wholly lost, since its business consisted of importing MMT into Canada.[175] The case was settled before a NAFTA tribunal could rule on whether the government's actions amounted to expropriation. However, in 2002, a NAFTA tribunal did uphold an expropriation claim by S.D. Meyers, Inc., alleging "that its United States business of importing and treating Canadian toxic waste was harmed by a Canadian ban on export of PCB wastes."[176] Should expropriation claims be made against the United States due to restrictions implemented by the proposed legislation, they would likely fail. Limitations on lifecycle GHG emissions would not prevent access to the United States market to such an extent as to constitute a compensable taking. The aforementioned expropriation claims involved the Canadian government banning a certain export or import. The proposed legislation would not equate to a ban, since the Canadian tar oil industry could seek technology to limit the GHG emissions during extraction.

The proposed legislation is also encouraged by the North American Agreement on Environmental Cooperation ("NAAEC"), which supplements NAFTA for the purposes of strengthening and enforcing the development of environmental laws.[177] NAAEC recognizes the right of the each participating government "to establish its own levels of domestic environmental protection and environmental development policies and priorities, and to adopt or modify accordingly its environmental laws and regulations, each [government] shall ensure that its laws and regulations provide for high levels of environmental protection and shall strive to continue to improve those laws and regulations."[178]

---

[173] *Border Petrol*, *supra* note 43, at 506-507.

[174] Julie A. Solowaya, *Environmental Trade Barriers Under NAFTA: The MMT Fuel Additives Controversy*, 8 Minn. J. Global Trade 55, 55 (1999) [hereinafter *Environmental Trade Barriers Under NAFTA*].

[175] *Id.*

[176] *Canada's Role in the United States' Oil and Gas Supply*, *supra* note 49, at n. 142.

[177] *Border Petrol*, *supra* note 43, at 502.

[178] North American Agreement on Environmental Cooperation, U.S.-Can.-Mex., art. 3, 1993 (entered into force Jan. 1, 1994).

d. Solution Two: Direct EPA Regulation of Tar Oil

Bypassing the congressional decision-making processes may be a possible alternative for regulating lifecycle GHG emissions of tar oil. Since the authority for EPA to regulate these emissions on its own is questionable, this is not the preferred solution. However, § 211 could be interpreted to grant the Administrator the authority to regulate any fuel if it might reasonably be anticipated to endanger public welfare.[179]

Section 211(c) of the CAA gives the Administrator of the EPA the authority to regulate any fuel if, in the judgment of the Administrator, that fuel contributes to air pollution that may reasonably be anticipated to endanger the public welfare.[180] Tar oil would contribute to air pollution and endanger public welfare, since its extraction and production processes would contribute to climate change at a faster rate than that of conventional fuel.

Section 211(c) only allows the Administrator to control fuels after consideration of all relevant medical and scientific evidence, and consideration of other technical or economically feasible means of achieving the standards under § 202 of the CAA.[181] First, scientific evidence suggests that tar oil is particularly destructive in relation to conventional fuel due to the GHG emissions released during the extraction and production stages.[182] Second, § 202 imposes emissions standards for vehicles and engines.[183] Therefore, § 202 mechanisms would be ineffective, since the primary emissions at issue occur before tar oil is used in a vehicle.

Finally, the statute only allows the Administrator to control fuels after considering scientific and economic data.[184] Solvent technology that can significantly reduce emissions from tar oil extraction exists.[185] This technology is already being implemented by extraction companies to produce tar oil on a commercial scale. [186] Moreover, it is expected to improve project economics by increasing growth capital and reducing non-fuel operating costs.[187] Thus, GHG limitations are scientifically and economically attainable.[188]

---

[179] *See* 42 U.S.C. § 7545(c)(1) (2007).

[180] *Id.*

[181] 42 U.S.C. § 7547(c)(2)(A) (2007).

[182] *See infra* pp. 8-9.

[183] 42 U.S.C. § 7521 (2007).

[184] 42 U.S.C. § 7547(c)(2)(A) (2007).

[185] *See infra* pp. 7.

[186] *A Different Kind of Oil Sands*, Cenvous Energy, 6 (December 2013), *available at* https://perma.cc/DBU9-MRVT?type=pdf.

[187] *Id.* at 12.

[188] *GHG Emissions*, Oil Sands Today, http://perma.cc/4DDB-DLED (last visited Jan. 16, 2014).

e. Challenge to Solution Two: Lack of Authority

A challenge to the proposed regulation may be that EPA lacks the congressionally mandated authority to impose lifecycle GHG requirements on tar oil. EPA could justify its authority under § 211 by arguing for deference to its interpretation pursuant to *Chevron v. NRDC*.[189] Under *Chevron*, the court must ask (1) "whether Congress has directly spoken to the precise question at issue" and (2) if not, "whether the agency's answer is based on a permissible construction of the statute."[190] The court looks to the statutory language to answer the first question, and the legislative history and policy arguments to answer the second.[191]

To address the first question, the EPA could argue that Congress has not spoken to the precise question at issue, which is whether the EPA may regulate the lifecycle GHG emissions of tar oil. Indeed, the language of the provision is vague because it allows the Administrator to control "any fuel or fuel additive" that "in his judgment" contributes to air pollution and may endanger public welfare.[192] Congress's broad grant of authority seems to "enlarge, rather than to confine, the scope of the [agency's] power to regulate particular sources in order to effectuate the policies of the [act]."[193]

To satisfy the second part of the *Chevron* test, the EPA could argue that their interpretation is permissible by citing the legislative history of § 211(c) and policy arguments in favor of interpreting § 211(c) as allowing the proposed regulation. According to the Senate report, the "two basic reasons" for this provision are (1) "the combustion or evaporation of such fuel from any engine may produce an emission that is a direct endangerment to public health," and (2) "the fuel may have an adverse effect on the general welfare or on an emission control system or device."[194] Since the purpose of the proposed regulation would be to counteract the "adverse effect on general welfare" created by fuel produced from tar oil, it is consistent with the purpose of the statute.[195]

However, the Senate report also states that the "concern is with the effect of the actual emissions from the tailpipe,"[196] as opposed to emissions produced from fuel production. "EPA's regulation of fuel

[189] *See generally,* Chevron v. Natural Resources Defense Council, 467 U.S. 837 (1984).

[190] Chevron, 467 U.S. at 842-43.

[191] *Id.* at 859-66.

[192] 42 U.S.C. § 7545(c)(1) (2007).

[193] *See* Chevron, 467 U.S. at 842-43.

[194] S. Rep. No. 91-1196 at 33-34 (1970).

[195] *See* S. Rep. No. 91-1196 at 34 (1970).

[196] *See* S. Rep. No. 91-1196 at 34(1970).

additives has been devoted chiefly to lead,"[197] which causes serious health concerns when released during combustion and which causes damage to the catalytic converters in cars.[198] Nevertheless, other than regulations on lead, EPA has made little effort to control health or welfare effects of fuels under § 211(c).[199] Thus, there are few prior interpretations of the statute to use as a point of reference.[200]

The interpretation of § 211(c) is reasonable because such regulation would protect the public from the harmful effects of air pollution from GHGs. Since the vague language of the statute represents a gap left open by Congress, the challenge to the proposed regulation should fail under *Chevron*.[201]

V. Conclusion

Although tar oil contributes to climate change, it also provides a desirable route to both energy security and self-sufficiency. However, to avoid contributing to the changing climate more than necessary, the United States must also seek to mitigate the GHG emissions of tar oil. Climate change mitigation efforts are consistent with the U.S. policies found in the EISA and the NAAEC. Legislation that limits the GHG emissions produced during the lifecycle of tar oil would encourage a cleaner industry without eliminating the market for tar oil, especially when such legislation allows flexibility through a credit system. Furthermore, limitations on emissions for one particularly unsustainable industry are more likely to garner congressional support than sweeping climate change legislation like the Waxman-Markey bill. Such limitations would effectively address climate change, since seventy percent of oil in the United States is used for transportation,[202] an increasing proportion of which will come from tar oil.[203] The proposed solutions would ensure that environmental security for future generations will not be ignored in the pursuit of energy independence.

---

[197] *Registration and Regulation of Fuel Additives*, 1 Envtl. L. (West) § 3:32 (2013).

[198] Philip J. Landrigan, *The Worldwide Problem of Lead in Petrol*, Bulletin of the World Health Organization (2002), *available at* https://perma.cc/X55Q-ZFP3?type=pdf.

[199] Arnold W. Reitze, Jr., *The Regulation Of Fuels And Fuel Additives Under Section 211 Of The Clean Air Act*, 29 Tulsa L.J. 485, 498 (1994).

[200] *Id.*

[201] *See* Chevron, 467 U.S. at 866.

[202] *Petroleum*, INST. FOR ENERGY RESEARCH, http://perma.cc/SAF8-QNDC (last visited Apr. 8, 2014).

[203] *See Unconventional Bridges Over Troubled Water*, *supra* note 1, at 83.

2015 Animal and Natural Resource Law Case Review

Claire Corsey

Animal Legal Defense Fund v. LT Napa Partners, LLC

—Cal.Rptr.3d—, 2015 WL 1004423 (Cal. Ct. App. 2015)

Summary of the Facts

In 2004, the California state legislature banned the sale of foie gras, which is a delicacy made from the liver of a duck or goose fattened specifically for the creation of the dish. The ban was to go into effect in July 2012, and while the Animal Legal Defense Fund was pleased with its passage, Defendant Kenneth Frank—head chef at a Napa Restaurant called La Toque—was not. Frank had been publicly opposed to the ban during the stages of its passage. After implementation of the ban, ALDF remained suspicious that Frank's restaurant was still serving the now-illegal foie gras dish and hired an investigator to eat at La Toque three different times between September 2012 and March 2013. Each time ALDF's investigator ate at the restaurant, he requested foie gras and it was served without fail as part of the tasting menu he ordered; it was presented as a "gift" from the restaurant. Upon learning this information, ALDF urged the Napa authorities to penalize Defendant for his violation of the ban. When the city refused to prosecute the Defendant, ALDF brought the suit pursuant to California's Unfair Competition Law, since other nearby restaurants have ceased serving foie gras in compliance with the law. ALDF sought an injunction to prevent the Defendant from "furnishing, preparing, or serving foie gras in any form or manner whatsoever." The Defendants moved to strike ALDF's claim, saying that they lacked standing to bring such a claim, and that the restaurant never technically *sold* foie gras because it was a "gift" from the restaurant.

Summary of the Holding

The California Court held that ALDF's claim of unfair competition was valid, and that Defendant's sale of foie gras did in fact constitute a violation of California's ban. Defendant attempted to argue that ALDF lacked standing to bring the suit based on the California Unfair Competition Law (UCL). To have standing to bring a UCL, the plaintiff must show it suffered "economic injury" through Defendant's illegal and unfair foie gras sales. ALDF argues the money it spent investigating La Toque's sale of the dish as well as the money spent on trying to convince the city of Napa to prosecute Defendant is one such "economic injury." The court found this convincing since the ALDF "undertook the expenditures in response to, and to counteract, the effects of the defendant's alleged [misconduct]" when they tried to persuade the city of Napa to penalize Defendant prior to this suit. Therefore, the court found the ALDF had standing to bring the claim of UCL. In the second part of its analysis, the court remained unpersuaded by Defendant's argument that his restaurant did not violate the ban because it did not technically *sell* foie gras, but served it for free to customers who requested it. The court cited an earlier California case which defined a sale of alcohol as "any transaction whereby, for any consideration, title to alcoholic beverages is transferred from one person to another." Relying on this interpretation of the word "sale," the court here held that when ALDF's investigator paid for the tasting menu which included foie gras, La Toque indeed engaged in the sale of the unlawful delicacy.

People ex. Rel. Nonhuman Rights Project, Inc. v. Lavery
2014 WL 6802767 (N.Y. App. Div. 2014).

Summary of the Facts

This matter is on appeal from the New York Supreme Court regarding the legal status of a chimpanzee named Tommy. Respondent Lavery is keeping Tommy in a cage on his property, and Petitioners previously filed a writ of *habeas corpus* claiming Lavery was detaining Tommy unlawfully. The question here, as was the question at the trial level, is whether a chimp has the necessary characteristics and fulfills the requirements that entitle him to the protection of a *habeas* petition.

Summary of the Holding

The court here found that it was inappropriate to confer the protections and rights of a *habeas* petition onto a chimpanzee and denied Petitioner's claim, affirming the trial court.The court analyzes the term "person" under the common law meaning of the term because the Civil Practice Law and Rules of New York does not explicitly define it. The court remarks that non-human animals have never before been considered "persons" under either New York or federal law. Although no prior precedent exists supporting Petitioner's claim for treatment of animals as person, the court points out that the analysis does not end there. Since the *habeas* petition has "great flexibility and vague scope," the court mentions its increased use over time. Even this increased flexibility, however, does not afford protection to Tommy. The benefits of legal personhood could possibly extend to a chimpanzee, but a component of legal personhood is attached to the rights and duties of a person. The legal definition of a "person" can extend to an "entity…that is recognized by law as having the rights and duties [of] a human being." Ultimately, the appeals court concluded that because chimps cannot be held accountable by the judicial system and cannot bear any legal responsibilities, they are not appropriate recipients of the protections of a *habeas* petition.

Animal Legal Defense Fund v. Otter
1:14-CV-00104-BLW, 2014 WL 4388158 (D. Idaho 2014).

Summary of the Facts

In 2013, several members of Mercy for Animals—an animal rights group based in Los Angeles—captured undercover footage of five workers in an Idaho dairy facility abusing cows. While this particular dairy facility fired those responsible, a group called the Idaho Dairymen's Association (IDA) pushed back against the whistleblowers, who regularly obtain footage of this kind. IDA wrote and sponsored an Idaho law that criminalizes the capture of the sort of footage Mercy for Animals regularly obtains; anyone who causes an "interference with agricultural production" would now be criminally liable. The Animal Legal Defense Fund (ALDF) brought a claim against this law on First Amendment grounds, since this undercover surveillance is technically protected speech. ALDF additionally alleged a violation of the Equal Protection Clause of the Fourteenth Amendment. ALDF brought the suit against the state of Idaho, enjoining the Governor Butch Otter and alleging the unconstitutionality of this "ag-gag" bill. The State of Idaho brought a motion to dismiss ALDF's First and Fourteenth Amendment claims, and to dismiss ALDF's enjoinment of Governor Otter as a defendant.

Summary of the Holding

The court granted the State's motion to dismiss in part and denied it in part, yet it did not rule on the constitutionality of the statute. The State's motion was granted in part on the ground that Governor Otter is not a proper defendant against whom to bring this suit. While suits against state officials are permitted when a statute is suspected to be unconstitutional, plaintiffs are not permitted to hurl such lawsuits at random officials. The court held the state official chosen "must have some connection with the enforcement of the act," and that a general duty to uphold state statutes is not a strong enough connection for a suit like this to hold water. In denying part of the State's motion to dismiss, the court held that ALDF has valid claims on First and Fourteenth Amendment grounds. Since the law here threatens to restrict protected speech based on its content, the law could "manipulate the public debate through coercion rather than persuasion." A reviewing court, therefore, would need to find this law withstands the highest level of scrutiny in order for it to remain in harmony with the First Amendment. In terms of an Equal Protection violation, the court recognizes the law's possible "animus toward animal-rights activists," given the events leading up to the law's passage. The state would need to provide other legitimate, non-hostile reasons for passing the bill in order for it to survive the Fourteenth Amendment challenge. The court did not comment on whether these allegations of an animus were accurate, simply stating that ALDF's claims were appropriately lodged.

Chase v. State
—S.W.3d— 2014 WL 6478511 (Tex. Crim. App. 2014).

Summary of the Facts

This case is appealing the decision of a Texas appeals court. In September of 2009, Appellant Mr. Chase and his wife were walking their two dogs, one 10-year-old named Maka and the other a puppy. As the couple and the dogs were walking by a neighbor's house, two other dogs escaped from the backyard and raced at the group. One of the dogs, Zeus, attacked Maka, biting her neck and violently shaking her. As Appellant's wife took the puppy and fled the scene, Appellant tried to pull Zeus away from Maka, attempting to remove Zeus's fangs from Maka's neck. Another neighbor helped Appellant separate the dogs, and while the neighbor helped, the dog bit both the neighbor and Appellant. After taking Maka home, Appellant "dragged" Zeus by a rope around his collar back to Appellant's own house where he tied Zeus to his car. Appellant then proceeded to slash Zeus's throat with a knife, leading to Zeus's death. Because of this injury inflicted on the dog, Appellant was charged with cruelty to non-livestock animals under Texas law. The defense argued, however, that Appellant's behavior fell under an established exception to the Texas law that allows a witness to a dog attack to kill the attacking dog. Appellant testified that he was under the impression at the time of the incident that this exception to the anti-cruelty law was applicable. The jury did not find this convincing and returned a guilty verdict. The matter was appealed, and Appellant alleged the trial judge erred in failing to give the jury a defensive instruction based on the witness exception to the Texas law. The court of appeals found this persuasive, finding that the trial judge's refusal caused harm to Appellant; the lower decision was reversed and remanded. The State appeals.

Summary of the Holding

The Court of Criminal Appeals of Texas affirmed the court of appeals decision and held that the statute's exception—§ 822.013(a) of the Health and Safety code—did indeed provide Appellant with a defense against prosecution. In opposition of the appeals decision, the State raises three arguments as its grounds for review: § 822.013 is a civil provision that does not provide a defense for any criminal charges; § 1.03(b) of the state Penal Code prohibits the use of "a non-Penal-Code defense to a Penal-Code offense;" and that Appellant failed to preserve error. With regard to the State's third point, this court is unconvinced that Appellant failed to preserve error because Appellant's attorney attempted many times to convince the trial judge to allow the jury to hear the statutory defense of § 822.013(a). A failure to preserve error would have come if Appellant did not "let the trial judge know what he want[ed], why he thinks himself entitled to it, and to do so clearly enough for the judge to understand him." The third claim is rejected. The court here also rejects the State's contention that "no provision outside the Penal Code should ever be imported into the Penal Code." The court disagrees, and makes mention that the State is trying to stretch the meaning of Penal Code § 1.03 too far. Finally, the court addresses whether the language of the cruelty exception (§ 822.013(a)) demonstrates its nature as solely a civil statute. The State points to the word "damages" contained within the statute, and reminds the court that this word is only used in civil litigation. Looking to the plain language, legislative history, and the predecessor to the law, the court rules that § 822.013(a) does indeed provide a defense to criminal prosecution under the anti-cruelty statute.

Fracking Cases

Summary of the Facts	Summary of the Holding
Parr v. Aruba Petroleum: **5 Tex. J.V.R.A. 10:C1, 2014 WL 2964159** This case was the first fracking trial case to be heard in the United States. The Parr family alleged that Aruba Petroleum's hydraulic fracturing endeavors led to air pollution and emissions of hazardous gases because of its proximity to their 40 acre ranch in Texas. The family's exposure to Aruba's airborne gases and pollutants led to health concerns including asthma, ringing ears, headaches, and injuries to their pets and livestock. The family originally sought damages of $66 million from eight defendants, but the claim against Aruba Petroleum was the only claim that remained unsettled by the time of trial. The Parrs alleged that Aruba Petroleum intentionally created a private nuisance through this fracking activity. Aruba denied any liability.	The six-person jury in Dallas awarded the family $2.9 million in damages for physical pain and suffering, mental anguish, and a loss of market value of the family's property. Judge Mark Greenberg denied Aruba's subsequent pleas to overturn the jury's decision. Aruba Petroleum's appeal argued that the Parr family failed to produce evidence that proved Aruba's emissions caused their physical ailments, and the judge was not convinced. Judge Greenberg's decision was issued in a one-page opinion where he reiterated his confidence in the evidence the Parrs presented at trial.
Anglim v. Chesapeake Operating, Inc. **No. 2011-008256-1**, Tarrant County, Texas, 2013 This is another fracking case originating in Texas. Plaintiff Teri Anglim owns property in Fort Worth, and Defendant Chesapeake Operating Inc. began drilling on a piece of land behind Plaintiff's property. These wells, installed in August 2010, are located just 595 feet from Plaintiff's house and released substances into the air that could be bothersome to persons in the area. Plaintiff brings this suit alleging physical harm to her property by Defendant's contamination of air above the property ("foul and unpleasant odors and constant noises associated with Defendant's natural gas production activities" as listed in the amended complaint). Additionally, Plaintiff claimed emotional harm at the loss of enjoyment of her property and alleges Defendant's fracking activity stands as a private nuisance.	The jury in this case refused to grant an award to Plaintiff and found for the Defendant. This allegation—as was the allegation in Parr v. Aruba Petroleum—was that Chesapeake Operating Inc. caused a private nuisance to Plaintiff through its fracking activities. The main difference between this case and the Parr case can be seen in the two jury instructions. In this case, the jury was instructed to find Chesapeake guilty of a private nuisance only if Chesapeake's conduct "was abnormal and out of place in its surroundings," whereas Parr's jury was instructed to consider whether the actions of Aruba were "intentional." The standard of proof was higher for Plaintiff in this case.

Cerny, et. al v. Marathon Oil Corp.

No. 13-05-00118-CVK (Texas District Court-Karnes County 2014)

Summary of the Facts

Plaintiffs Michael, Myra, and Cameron Cerny leased the mineral rights on their property in Karnes City to Texas Crude Energy (which later became defendant MOEF). The agreement allowed Defendant to horizontally drill for oil and gas within three years and make use of the surface of Plaintiffs' land. Defendant drilled three wells in this new unit which yielded high royalties for Plaintiffs. In addition to the new wells, Defendant installed underground piping for the wells that redirected natural gas and crude oil could be handled offsite. The fracking fluid was also handled offsite rather than deposited into onsite frack pits (which is the typical method of "disposing" of such fluids). Plaintiffs brought this suit because they alleged Defendant's responsibility for their injuries, claiming negligence on the part of Defendant. Plaintiffs list a wide range of ailments, from headaches and rashes to bone and liver pain. Plaintiffs also claim Defendant's negligence led to structural damage to their home. Defendant has entered a motion for summary judgment to dismiss Plaintiffs' claims for a variety of reasons.

Summary of the Holding

The court sides with Defendant here, dismissing Plaintiffs' claims of negligence. The opinion referred to Plaintiffs' lengthy medical history prior to Defendant's drilling operations: Michael Cerny has been plagued with hypertension, anxiety, chronic pain in one of his knees, shoulder pains, and a variety of other ailments. All of these medical issues existed before Defendants' oil and gas operations on Plaintiffs' land. As required by Texas law, a party alleging medical damages due to an opposing party's negligent action must show their afflictions existed *before* the allegedly negligent party's actions. Therefore, the court dismissed Plaintiffs' allegations that Defendant was the cause of their medical issues. The second allegation made by the Plaintiffs is a plea for property damages supposedly caused by Defendant's drilling operation. The court quickly dismisses this claim as well. According to the opinion, Plaintiffs bought their house without having a proper inspection, and the house had neither doors nor plumbing when Plaintiffs purchased it. In regard to Plaintiffs' claim that fracking activity caused damage to the house's foundation, the court again points to damage that predated Defendant's involvement with Plaintiffs. Additionally, Plaintiffs did not present any expert evidence that linked Defendants to the geologic degradation of the ground on their property. Plaintiffs' claims are dismissed.

Tarrant Regional Water District v. Hermann et. al
—U.S.— (2013)

Summary of the Facts

Petitioner here is the Texas agency Tarrant Regional Water District that provides water to people in north-central Texas. Pursuant to a regional water rights agreement called the Red River Compact, water rights can be allocated to Oklahoma, Texas, Arkansas, and Louisiana from a specific basin. Petitioner tried to purchase water from Oklahoma and Oklahoma declined to sell it to them. Petitioner simultaneously filed a petition in federal court to enjoin the state of Oklahoma's Water Resource Board to sell Petitioner the water it wanted. Petitioner argued the Red River Compact pre-empted Oklahoma's law that prevents water sales to out-of-state buyers. Petitioner's claim was that the Oklahoma state law was in violation of the Commerce Clause because it discriminated against interstate commerce. The District Court and the Tenth Circuit both granted the Oklahoma Water Resource Board's motion for summary judgment in the prior proceedings, and the Supreme Court granted Petitioners writ of certiorari.

Summary of the Holding

The Supreme Court of the United States unanimously affirmed the decision of Tenth Circuit. The Court points out the flaws in Petitioner's argument that the Red River Compact pre-empts state law. The Court leans on the fact that the Compact was created with the implicit understanding that it would operate within the confines of each state's reigning law. In addition, the Court finds three things persuasive in proving cross-border rights were not intended to be conveyed to states in the Compact. First, there is a well-established principle that States won't give up their sovereign powers of water rights. The court says, "The sovereign States possess an 'absolute right to all their navigable waters and the soils under them for their own common use.'" Based on this overruling principle, any silence in a water compact should be interpreted as coinciding with this principle—state have control over their own water. Secondly, other similar compacts treat the subject of cross-border rights explicitly rather than ambiguously. It is customary practice to include clear text in such compacts explicitly allowing participant states to cross borders into the other states to get water. The absence of this provision in this case suggests "that cross-border rights were never intended to be part of the agreement." Thirdly, the nature of the course of dealings between the parties suggest that the state's right was intended to be preserved. Petitioner's offer to buy water from Oklahoma seems contrary to the idea that Petitioner would be entitled to this water via the compact. Based on the presence of these three persuasive reasons, the Supreme Court affirms the lower court's decision.

United States v. Reeves
2015 U.S. Dist. LEXIS 12951 (Feb. 2015)

Summary of the Facts

This matter is an appeal of a previous criminal case decided in 2012. Multiple members of the Reeves family—along with two corporations—were convicted of illegal oyster harvesting and distribution in the Delaware Bay in New Jersey. Thomas and Todd Reeves owned and operated an oyster dealership called Reeves Brothers that was investigated by New Jersey wildlife enforcement officers and the FDA for falsifying their records. There are limits pursuant to state law that oyster distributers and sellers must abide by, serving the purpose of natural resource conservation in the prevention of over-harvesting. The Reeves brothers and defendant Mark Bryan (owner of a company called Harbor House) attempted to bypass these limitations through a double-invoicing system that underreported the quantity of oysters harvested. In failing to make an accurate representation of weekly harvests, the Reeves brothers and Bryan violated New Jersey law. In addition to these violations, the defendants violated federal law when they intended to impede the FDA's investigation of their oyster dealings. At trial, the jury convicted the defendants of 5 counts of conspiring to engage in misconduct through the inaccurate representation of these oyster sales. One of the defendants, Renee Reeves, appeals her conviction in this case.

Summary of the Holding

Renee Reeves' motion for acquittal or a new trial were denied by the court. Renee's part in this conspiracy involved publishing false reports in coordination with the underreporting of the oyster harvesting totals. The court did not find Renee's arguments for relief persuasive, since her claims that she was not involved as much as necessary to be convicted of the conspiracy claims. The court focuses on Renee's knowledge of the financial benefit of the Reeves brothers' underreporting (which was found to be almost a million dollars) because of her marriage to Todd Reeves and her involvement in the day-to-day business activities. The court says, "there is ample evidence that this agreement to falsify the required state and federal oyster transaction records was manifested and that Renee Reeves was a member" by one month into the existence of the conspiracy. Some of the invoices were even written in Renee's own handwriting, two in particular were invoices for 56 bushels and 106 bushels with only the 56 bushel order showing up in the Reeves Brothers records. On another occasion, Renee attached a note to another Reeves invoice for 100 bushels saying, "We called in 100-bu, we had 135 bu." The court concludes that these instances could have led the jury to reasonably find that Renee knew she was creating false invoices of oyster transactions. This shows that even someone with a marginal involvement in such a conspiracy can still be subject to punishment for violation of natural resource laws.