Journal of Animal & Natural Resource Law

Michigan State University
College of Law

October 2017

Volume XIII

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 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 or are available on the web at: https://www.animallaw.info/policy/index-journal-animal-and-natural-resource-law.

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. XIII **2017**

JOURNAL OF ANIMAL &
NATURAL RESOURCE LAW

VOL. XIII 2017

PEER REVIEW COMMITTEE
2016-2017

Journal of Animal & Natural Resource Law

Vol. XIII **2017**

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. XIII **2017**

Table of Contents

ARTICLES

Strictly for the Birds: The Scope of Strict Liability Under the Migratory Bird Treaty Act

Max Birmingham

I. Introduction

The Federal Circuits have inconsistently applied the MBTA to commercial activities. Although some courts have done so by analogizing to the hunting provisions in the MBTA, these courts are actually just engaging in commercial protectionism. The aforementioned courts rely upon a narrow definition of "take" in order to limit the scope of the MBTA. The MBTA needs to be construed broadly to effectuate its underlying purpose. Without broad application of its provisions, bird populations will continue to decline as companies continue to decentralize, thereby allowing them to render reasonable foreseeability a nullity. Indeed, this has been the case under similar statutes. Although opponents may believe that placing the economic burden of protective measures on industry is too big a burden for them to bear, that is an issue for Congress, not for our courts.

The MBTA should be interpreted broadly. The MBTA was enacted with the purpose of protecting migratory birds from harm. To interpret the MBTA in a narrow scope is incongruent with the meaning and intent of the statute. A narrow reading of the MBTA would effectively render the statute toothless.

This argument proceeds as follows. Part I provides an introduction. Part II examines the purpose of the MBTA, which identifies why the statute should be interpreted broadly. Part III analyzes case law and how the Federal Circuits have interpreted the statute, and whether the interpretation has or has not been consistent with the legislative intent. Part IV analogizes interpretations of other animal protection statutes with how the MBTA should be interpreted. Part V discusses how the MBTA meets the required elements to be classified as a public welfare offense. Part VI identifies that strict liability statutes requires proximate cause, thereby rejecting the argument that a broad interpretation of the MBTA would lead to *reductio ab adsurdum*. Part VII concludes.

II. Underlying Purpose of the MBTA

a. History of the MBTA

During the early years of the twentieth century, hunters and poachers "killed migratory birds on a vast scale for profit; some massacred birds for the sheer hell of it."[1] Hunting grew so rapidly, and there was concern over the effect it would have on bird populations. The passenger pigeon, a once abundant bird species, became extinct when the last one died in 1914 at the Cincinnati Zoo.[2] In 1916, due to concerns over the possibility of extinction of other bird species, the United States entered into a treaty with the United Kingdom, acting on behalf of Canada.[3] Two years later, the MBTA was enacted.[4] While the MBTA was enacted due to the illegal trade of birds, which at the time was a lucrative endeavor, its purpose is to prevent against the decline of bird populations and to provide adequate protections for these species. If a commercial activity, whether bird hunting or oilfield services, is killing migratory birds the MBTA was enacted to prohibit said activity.

b. Legislative Intent

The legislative history of the statute explicitly states that the rest of the statute covers misdemeanors, and there is no scienter requirement, which means it is intended to be read with strict liability.[5] Sen. Reed described the MBTA as "absolutely prohibiting the killing of game anywhere under any circumstances."[6] In *United States v. Corbin Farm Service*, the court proclaimed "[t]he fact that Congress was primarily concerned with hunting does not, however, indicate that hunting was its sole concern."[7] Furthermore, while the legislative history of the MBTA is light, there is no legislative history that asserts the notion that the MBTA is intended to only apply to hunting and poaching.

---

[1] Larry M. Corcoran & Elinor Colbourn, *Shocked, Crushed and Poisoned: Criminal Enforcement in Non-Hunting Cases Under the Migratory Bird Treaties*, 77 Denv. U. L. Rev. 359, 359 (1999).

[2] Jennifer Price, Flight Maps: Adventures with Nature In Modern America 3, note 22 (Basic Books 1999).

[3] Convention Between United States and Great Britain for the Protection of Migratory Birds, Aug. 16, 1916, U.S.-U.K., 39 Stat. 1702.

[4] Migratory Bird Treaty Act, 16 U.S.C. §§ 703-712 (2000).

[5] See S. REP. NO. 99-445, at 15 (1986), reprinted in 1986 U.S.C.C.A.N. 6113, 6128 ("Nothing in this amendment [to create the MBTA felony offense] is intended to alter the 'strict liability' standard for misdemeanor prosecutions under 16 U.S.C. 707(a), a standard which has been upheld in many Federal court decisions.").

[6] *accord* 55 CONG.REC. 4399 (June 28, 1917).

[7] *United States v. Moon Lake Elec. Ass'n, Inc.*, 45 F.Supp. 2d 1070, 1079 ("To the extent *Mahler* relies on legislative history, it reads into the MBTA ambiguities that do not exist.")

In *United States v. Moon Lake Electric Ass'n,* the court states that the court in *Mahler v. United States Forest Serv.* misinterpreted the legislative history of the statute.[8] In *Mahler*, the court notes that the legislative history indicates the MBTA is intended to have strict liability but it does not "apply all forms of human activity, such as cutting a tree, mowing a hayfield, or flying a plane."[9] The *Moon Lake* court proclaims that "[a]s one can see, then, there is no clearly expressed legislative intent that the MBTA regulates only physical conduct associated with hunting or poaching."[10]

In 1986, the MBTA was amended to include the word "knowingly," but only in subsection (b), which makes it a felony to sell, barter, or offer protected birds. Moreover, the legislative history explicitly states that the addition of "knowingly" does not alter the strict liability that should be applied to the rest of the statute.[11]

In 1918, the Secretary of the State Robert Lansing authored a letter in which he advocated for the extension of the MBTA to include acts that affect habitat modification, as well as for the statute to be interpreted broadly due to an increase in hunters as well as developments in firearms.[12] If Secretary Lansing argued that the MBTA should be interpreted broadly due to the developments of the time, then it is reasonable to argue that developments, or commercial activities, that develop later on in time that take or kill migratory birds should be prohibited. One Senator proclaims that under the MBTA there is no intent requirement because it "absolutely prohibit[s] the killing of game anywhere under any circumstances."[13] Two Congressman debated if the MBTA extends to unintentional acts, using the scenario of an actor who "largely through inadvertence and without meaning anything wrong" kills a migratory bird.[14] In these types of situations, the *FMC Corp.*

---

[8] H.R. No. 65-243, at 2 (1918) (letter from Secretary of State Robert Lansing to the President) (". . . the extension of agriculture, and particularly the draining on a large scale of swamps and meadows, together with improved firearms and a vast increase in the number of sportsmen, have so altered conditions that comparatively few migratory game birds nest within our limits.").

[9] *Mahler v. United States Forest Serv.*, 927 F.Supp. 2d 1559, 1581 (S.D. Ind. 1996).

[10] *United States v. Moon Lake Elec. Ass'n, Inc.*, 45 F.Supp. 2d 1070, 1082.

[11] *Id.* at 1073.

[12] *Id.* at 1079 ("To the extent *Mahler* relies on legislative history, it reads into the MBTA ambiguities that do not exist.")

[13] 55 Cong. Rec. 4399 (June 28, 1917) (statement of Sen. Reed).

[14] Cong. Rec. 7455 (June 6, 1918) (statement of Rep. Huddleston) (If the Secretary … does not want you to do so, you will never kill another duck or any bird protected by this bill, whether it is a game bird or not. Therefore, it seems to me that we ought not to adopt the bill. It is too far reaching… . The bill provides that it shall be unlawful to take any bird or have in possession any part of a bird except in accordance with regulations adopted by the Secretary… . If he adopts such regulations, you cannot

court summed it up best: "[s]uch situations properly can be left to the sound discretion of prosecutors and the courts."

III. Current State of the Law

The crux of the split amongst the Federal Circuits in interpreting the MBTA is the definition of "take." Federal Circuits that have a broad interpretation of the MBTA hold that take applies to incidental and intentional acts, and holds actors that violate the statute strictly liable. The broad interpretation of the MBTA is consistent with legislative history: "The legislative history also suggests, however, that Congress intended the MBTA to regulate more than just hunting and poaching."[15] When Federal Circuits interpret the MBTA narrowly, they have not addressed reasonable foreseeability. This is critically important, because actors cannot be held strictly liable if it is to be found that it is not reasonably foreseeable that their actions would cause harm or damage.

a. Broad Interpretation

i. Second Circuit

The Second Circuit held that a corporation that engages in an activity that reasonably poses a threat to birds are liable under the MBTA if birds are taken. As hunters and poachers still pose a threat to birds[16], the broad interpretation of the MBTA allows the statute to be adapted to modern times by applying it to corporations.

In *United State v. FMC Corp.*[17], the defendant chemical manufacturer produced pesticides which contaminated water in a pond. The Second Circuit stated that FMC may not have been aware of the danger that the contamination posed to migratory birds. However, the court noted that FMC's several attempts at keeping migratory birds away from the pond indicate that FMC was aware of that birds were attracted to the pond.[18] The court reasoned that because "FMC engaged

kill a bird or have any part of a bird in your possession. That is all there is to that.); (56 Cong. Rec. 7454 (June 6, 1918) (statement of Rep. Mondell) (Gentlemen conjure up the idea that a bureaucracy will be created, and that every innocent boy who goes out to play upon the streets and breaks a bird's egg through accident is to be haled 500 miles away and punished as if he were committing an offense of the highest degree, and with all the rigors of the criminal law.).

[15] *Moon Lake*, 45 F. Supp. 2d at 1080. See, e.g., H.R. Rep. No. 65-243, at 2 (1918).

[16] Traci Watson, *Bird deaths from car crashes in millions*, USA Today (May 29, 2014, 11:13 AM), https://perma.cc/T79H-78X2 ("Hunters bagged a mere 19 million U.S. ducks and geese in 2012, according to federal statistics …").

[17] *U.S. v. FMC Corp.*, 572 F.2d 902, 908 (2nd Cir. 1978).

[18] *Id.* at 905.

in an activity involving the manufacture of a highly toxic chemical; and FMC failed to prevent this chemical from escaping into the pond and killing birds. This is sufficient to impose strict liability on FMC."[19]

If the Second Circuit applied a narrow interpretation, it would have found FMC not liable due to the argument that FMC was not engaged in hunting or poaching, and therefore did not have the intent to take migratory birds. This would be a rather inappropriate decision, considering the preventive and reactive measures taken by FMC regarding bird safety. Moreover, corporations would be given the greenlight to take birds, even if they are engaging in lawful activity, when the takings could be practically avoided.

ii. Tenth Circuit

FWS has held that it is not concerned with "innocent technical violations" as much as it as on repeat offenders. FWS has stated that it "focuses its enforcement efforts under the MBTA on industries or activities that chronically kill birds and has historically pursued criminal prosecution under the Act only after notifying an industry of its concerns regarding avian mortality, working with the industry to find solutions, and proactively educating industry about ways to avoid or minimize take of migratory birds."[20] The Tenth Circuit noted this in its opinion when it interpreted the MBTA broadly.

In *United States v. Apollo Energies, Inc.*, the Tenth Circuit found that the MBTA to be interpreted with strict liability.[21] In 2005, the U.S. Fish and Wildlife Service ("FWS") inspected the oilfield equipment of Apollo Energies and found "more than 300 dead birds in heater-treaters, 10 of which were identified as protected species under the MBTA."[22] As a result, in 2006, FWS sent letters to 36 companies, including Apollo Energies, regarding the potential danger that oilfield equipment posed to birds.[23] In 2007, the U.S. Fish and Wildlife Service ("FWS") inspected the equipment of two corporate actors, Apollo Energies and Walker, and found dead migratory birds inside both of their respective equipment.[24] In 2008, FWS found dead migratory birds inside the oilfield equipment of Apollo Energies and Walker.[25] The court upheld the charges against Apollo Energies and dismissed the charges in 2007 against Walker.[26]

---

[19] *Id.* at 908.

[20] Migratory Bird Permits; Programmatic Environmental Impact Statement, 80 Fed. Reg. 30034 (proposed May 26, 2015) (to be codified at 50 C.F.R. pt. 21).

[21] *U.S. v. Apollo Energies, Inc.*, 611 F.3d 679, 684 (10th Cir. 2010).

[22] *Id.* at 682.

[23] *Id.* at 682-83.

[24] *Id.*at 683.

[25] *Id.*

[26] *Id.* at 691.

The court's reasoning is primarily based upon reasonable foreseeability. The court stated "[w]hen the MBTA is stretched to criminalize predicate acts that could not have been reasonably foreseen to result in a proscribed effect on birds, the statute reaches its constitutional breaking point."[27]

b. Narrow Interpretation

i. Fifth Circuit

The MBTA is silent as to the *mens rea*, thereby inferring strict liability. The Fifth Circuit has misconstrued strict liability in its analysis with actor conduct in defining take. The Fifth Circuit held that the common-law meaning of take only includes intentional acts, which would require a *mens rea* of knowingly or intentionally.

In *United States v. CITGO Petroleum Corp.*, migratory birds were killed when they landed on top of the defendants' oilfield equipment.[28] The court held that the definition of take is limited to deliberate acts based upon the common law.[29] While the court holds that "Congress well knew how to expand "take" beyond its common-law origins to include accidental or indirect harm to animals."[30]

The Fifth Circuit acknowledges that the MBTA has strict liability, but avows a "rejection of the argument that strict liability can change the nature of the necessary illegal act."[31] If a statute has strict liability, it does not matter the actor's intent or conduct. The analysis is whether or not the actor committed the act. For example, a hunter and poacher are out and they intend to kill a bird not protected by the MBTA. The hunter and poacher mistake a bird to be one that is not protected by the MBTA, so they kill the migratory bird. The hunter and poacher would be guilty of violating the MBTA because they intended to kill the migratory bird. It does not matter that they thought the bird was not protected. The act itself, to kill the bird, was intentional. However, under the Fifth Circuit's reasoning, the hunter and poacher may not be liable because they did not intentionally act to kill a protected bird.[32]

---

[27] *Id.* at 690.

[28] 801 F.3d 477, 480 (5th Cir. 2015).

[29] *Id.* at 488-89.

[30] *Id.* at 490.

[31] *Id.* at 489.

[32] *Id*. at 488 ("[W]e agree with the Eighth and Ninth circuits that a "taking" *is limited to deliberate acts done directly and intentionally to migratory birds*.") (emphasis added).

ii. Eighth Circuit

The Supreme Court has held that, in regards to substantive-law, "[s]tare decisis is the preferred course because it promotes the evenhanded, predictable, and consistent development of legal principles, fosters reliance on judicial decisions, and contributes to the actual and perceived integrity of the judicial process."[33] The Eight Circuit has not followed *stare decisis* in its interpretation of the MBTA. After initially reading the MBTA broadly, the Eight Circuit read the statute narrowly, which may cause confusion. One legal scholar has argued that "the doctrine of stare decisis is tailor-made to further consistency and predictability—two attributes that are notoriously lacking in statutory interpretation doctrine."[34]

In *Newton County Wildlife Ass'n v. U.S. Dep't of Agriculture*, the Eight Circuit held that the definition of "take" under the MBTA only applies to hunters and poachers.[35] In *Newton County*, plaintiffs sought to enjoin defendants from timber harvesting, which would result in the deaths of migratory birds. The court surmises that "it would stretch this 1918 statute far beyond the bounds of reason to construe it as an absolute criminal prohibition on conduct, such as timber harvesting, that *indirectly* results in the death of migratory birds."[36]

The decision in *Newton County* is inapposite with a previous decision from the Eight Circuit. In a previous decision, the Eight Circuit held that the MBTA should be interpreted with strict liability. In *United States v. Manning*, the court held that "[i]t is not necessary to prove that a defendant violated the Migratory Bird Treaty Act with specific intent or guilty knowledge."[37]

The *Newton County* decision did not address how it distinguished its opinion from or why it was departing from *Manning*. Notwithstanding, the court exaggerated the scope of strict liability by claiming "absolute criminal prohibition on conduct" by not addressing proximate cause in conduct that is legal but nevertheless presents a reasonably foreseeable danger or threat.

---

[33] *Payne v. Tennessee*, 501 U.S. 808, 827 (1991).

[34] *United States v. CITGO Petroleum Corp.*, 801 F.3d at 490.

[35] *See* Sydney Foster, *Should Courts Give Stare Decisis Effect to Statutory Interpretation Methodology?*, 96 Geo. L.J. 1863, 1866 (2008).

[36] 113 F.3d 110, 115 (1997).

[37] *Id.*

iii. Ninth Circuit

The Ninth Circuit conflates hunting and poaching with intent. The Ninth Circuit's interpretation of the MBTA is that if an actor or actor's conduct is not hunting or poaching, then the actor cannot have the intent to take a bird. The Ninth Circuit's narrow interpretation is displayed when it opines "[t]he statute and regulations promulgated under it make no mention of habitat modification or destruction."[38]The MBTA states that it is 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."[39] The MBTA makes no mention of it being only applicable to hunting and poaching. Statutes, including the MBTA, are written in a manner to encapsulate various acts and conduct. It would be impracticable to list every type of act or conduct the MBTA is applicable to.

In *Seattle Audubon Soc. v. Evans*, two Audubon societies argued that destroying the habitat of a migratory bird constitutes a "taking" under the MBTA.[40] The Ninth Circuit held that logging is permissible since the MBTA is not applicable to "habitat modification or destruction."[41] The court came to this conclusion by holding that under the MBTA "take" means "physical conduct engaged in by hunters and poachers, conduct which was undoubtedly a concern at the time of the statute's enactment in 1918."[42]

From the Ninth Circuit's reasoning, actors that are engaged in hunting and poaching cannot be held liable under the MBTA because that was the main intent of the statute. This narrow interpretation creates a glaring loophole in the statute, and effectively gives a free pass to actors to take migratory birds, so long as they are not hunting or poaching.

IV. Interpretations of Similar Statutes

Other statutes concerning animal welfare have been interpreted broadly. One legal scholar, Aaron-Andrew P. Bruhl, has argued that courts should "heavily defer to agency interpretations."[43] In one statute, the Supreme Court utilized *Chevron* deference by analyzing the Secretary of the Interior's (the "Secretary") definition of "harm" and noted its relation to the definition of "take."

Bruhl further argues that courts should "hesitate before departing from views embraced by many of their peers at the same level of the

[38] *Seattle Audubon Soc. v. Evans*, 952 F.2d 297, 302 (9th Cir. 1991).
[39] 16 U.S.C. § 703(a).
[40] *Seattle Audubon Soc.* at 302.
[41] *Id.*
[42] *Seattle Audubon Soc.* at 302.
[43] *Id.*

judiciary."[44] This will create more consistent statutory interpretation from the courts. A Federal Circuit rejected the use of a narrow definition of "take" in a bankruptcy litigation case, and then applied a narrow definition to "take" in a case involving the MBTA.

If the MBTA were to be interpreted narrowly, the purpose of the statute, which is to protect birds, would be defeated. Courts that interpret the MBTA narrowly rely on the *mens rea* of intentional when defining "take." With recent cases, many of which involve equipment and machinery, the statute is frustrated since equipment and machinery are objects and are incapable of thought processes, or having a *mens rea*. A narrow reading of the MBTA is atypical of interpreting animal welfare statutes.

a. Endangered Species Act

In *Babbitt v. Sweet Home Chapter of Cmtys. for a Great Or.*, the U.S. Supreme Court ruled that the definition of "take" under the Endangered Species Act of 1973 ("ESA") includes deliberate and incidental conduct.[45] The Court cites three reasons for this determination: (1) the word harm is included in the statute; (2) the purpose of the statute provides the Secretary the powers to protect endangered species reasonably supports the Secretary's definition of "harm"; and (3) the Secretary is authorized to grant a permit for any *taking* otherwise prohibited by 16 U.S.C. § 1538(a)(1)(B) "if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity."

The word harm is not in the MBTA but there is a key phrase in the statute that is not present in the ESA. The phrase "it shall be unlawful at any time, by any means or in any manner" comes before pursue, hunt, take, capture, and kill, *inter alia*.[46] In *Babbitt*, the court notes that harm under the ESA is defined in the CFR. The Court notes that "the regulation's definition of "harm" is subservient to the phrase "an act which actually kills or injures wildlife."[47] In interpreting the MBTA, it may be inferred that the definition of "take" is subservient to the phrase "it shall be unlawful at any time, by any means or in any manner," which would indicate strict liability as it encompasses all acts and does not require intent.

---

[44] Aaron-Andrew P. Bruhl, *Hierarchy and Heterogeneity: How to Read a Statute in a Lower Court*, 97 Cornell L. Rev. 433, 494.

[45] *Babbitt v. Sweet Home Chapter of Cmtys. for a Great Or.*, 515 U.S. 687 (1995).

[46] 16 U.S.C. § 703(a) (2004) (Unless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, …).

[47] *Babbitt*, 515 U.S. at 734.

The Court adopted the Secretary's definition of harm because "Congress' clear expression of the ESA's broad purpose to protect endangered and threatened wildlife, the Secretary's definition of "harm" is reasonable."[48] The Fifth and Eight Circuits held that the word "take" is ambiguous in the MBTA.[49] In these instances, the aforementioned Federal Circuits should have applied *Chevron* deference to the definition of "take," akin to how the *Moon Lake* court did.[50] This will enable prosecutorial discretion the proper leeway to bring forth claims under the MBTA. In *United States v. Schultze*, the court held "an innocent technical violation on the part of any defendant can be taken care of by the imposition of a small or nominal fine."[51] Further, the *Mahler* court proclaimed "[p]rosecutorial discretion is a familiar and indispensable element of the criminal justice system."[52]

Under the MBTA, the Secretary is authorized to allow the taking of migratory birds that are under the treaties.[53] Please note that these

---

[48] *United States v. Moon Lake Elec. Ass'n, Inc.*, 45 F.Supp. 2d 1070, 1073 (D. Colo. 1999) (citing *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 844, 81 L. Ed. 2d 694, 104 S. Ct. 2778 (1984)).

[49] *Newton County Wildlife Ass'n v. U.S. Dep't of Agric.*, 113 F.3d 110, 115 (8th Cir. 1997); *United States v. CITGO Petroleum Corp.*, 801 F.3d 477, 488 (5th Cir. 2015).

[50] *Moon Lake Elec. Ass'n, Inc.* at 1073-74 ("While contemporaneous dictionary definitions of words in a statute are relevant, the existence of alternative dictionary definitions may themselves indicate that the statute is ambiguous. Only if statutory language is ambiguous do courts resort to legislative history as an interpretive aid.") ("The Secretary of the Department of the Interior ("Secretary"), whose definition is not challenged by Moon Lake, defines "taking" as to "pursue, hunt, shoot, wound, kill, trap, capture, or collect." 50 C.F.R. § 10.12. The MBTA, when combined with the Secretary's definition of "take," thus prohibits the following types of conduct: pursuing, hunting, capturing, killing, shooting, wounding, trapping, collecting, possessing, offering for sale, selling, offering to barter, bartering, offering to purchase, purchasing, delivering for shipment, shipping, exporting, importing, delivering for transportation, transporting, carrying, and receiving. Considering the ordinarily understood meaning of these words, only hunting, capturing, shooting, and trapping identify conduct that could be construed as solely the province of hunters and poachers. In contrast, pursuing, killing, wounding, collecting, possessing, offering for sale, selling, offering to barter, bartering, offering to purchase, purchasing, delivering for shipment, shipping, exporting, importing, delivering for transportation, transporting, carrying, and receiving all constitute acts that may be performed without exhibiting the physical conduct normally associated with hunting and poaching.").

[51] *United States v. Schultze*, 28 F. Supp. 234, 236 (W.D. Ky. 1939).

[52] *Mahler*, 927 F. Supp. at 1579.

[53] 16 U.S.C. § 704(a) (1998). [T]he Secretary of the Interior is authorized and directed, from time to time, having due regard to the zones of temperature and to the distribution, abundance, economic value, breeding habits, and times and lines of migratory flight of such birds, to determine when, to what extent, if at all, and by what means, it is compatible with the terms of the conventions to allow hunting, taking, capture, killing, possession, sale, purchase, shipment, transportation, carriage, or export of any such bird, or any part, nest, or egg thereof, and to adopt suitable regulations

authorizations are only allowed in regards to actions directed towards wildlife. FWS does not authorize takings of migratory birds through actions that are not directed towards wildlife, or incidental takings. In May 2015, FWS announced that it is considering a program that will allow incidental takings under the MBTA.[54] Since the MBTA and ESA both authorize takings, and the MBTA is considering expanding its scope of takings authorizations, it is reasonable to interpret the MBTA as currently not permitting incidental takings, and thus the statute should be read as strict liability.

b. Marine Mammal Protection Act

Under the Marine Mammal Protection Act ("MMPA"), the word take is defined as "harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal."[55] In *CITGO*, the Fifth Circuit observed that the inclusion of the word "harass" in the definition of take distinguishes it from the MBTA definition of take, and thus take under the MBTA should be defined under the common law.[56]

The Fifth Circuit has previously rejected using the common law definition of take: "[Defendants'] attempts to draw a distinction between the statute's language "obtain or use" and the common law definition's "taking." We reject such a formalistic distinction. The term "take" has many shades of meaning depending on the context."[57] Furthermore, in *Perrin v. United States*, the Supreme Court held that "unless otherwise defined, words will be interpreted as taking their ordinary, contemporary, common meaning" rather than the "narrow, common-law sense." With a ruling from the Supreme Court, as well as a previous ruling from the Fifth Circuit, we see that the *CITGO* decision broke tradition with its common law definition of take.

permitting and governing the same, in accordance with such determinations, which regulations shall become effective when approved by the President.

[54] Migratory Bird Permits; Programmatic Environmental Impact Statement, 80 Fed. Reg. 30032 (May 26, 2015).

[55] 16 U.S.C. § 1362(13) (2003).

[56] *United States v. CITGO Petroleum Corp.*, 801 F.3d 477, 490 (5th Cir. 2015) (The absence from the MBTA of terms like "harm" or "harass", or any other language signaling Congress's intent to modify the common law definition supports reading "take" to assume its common law meaning.").

[57] *In re Smith*, No. 00-21090, 2001 U.S. App. LEXIS 31147 (5th Cir. Apr. 12, 2001).

V. Public Welfare Offenses

Public welfare offenses do not require a *mens rea: "In construing such statutes, [the Court] ha[s] inferred from silence that Congress did not intend to require proof of mens rea to establish an offense."*[58] In *United States v. Engler*, the Third Circuit held that "[s] cienter is not an element of criminal liability under the Act's misdemeanor provisions."[59] Moreover, the violations of the MBTA are differentiated in the statute by the word "knowingly," in § 707(b), which is a felony, as compared to pursue, hunt, take, capture, and kill, *inter alia, in § 707(a) which is a* misdemeanor.

In *United States v. Morrisette, the U.S. Supreme Court distinguished two categories of criminal legislation: common law crime and "public welfare offenses."*[60] The Court defines public welfare offenses as those whose "offenses are not in the nature of positive aggressions or invasions, with which the common law so often dealt, but are in the nature of neglect where the law requires care, or inaction where it imposes a duty."[61]

Violations of the MBTA should be classified as public welfare offenses. The Tenth Circuit as well as the court in *United States v. Corbin Farm Service have held as such.*[62] The MBTA requires actors to be mindful of protected birds, or exercise reasonable care in not harming or killing them. In *Corbin Farm Service, the court held that "[i]f the defendants exercised reasonable care or if they were powerless to prevent the violation, then a very different question would be presented."*[63]

Furthermore, public welfare offenses are viewed as "regulatory offenses."[64] Regulatory offenses may be defined as "[r]ather than directly threatening the security of the state, as, for instance, the crime of burglary does, the commission of public welfare offenses impairs the operation of regulatory schemes that are essential to public order."[65] The MBTA protects migratory birds, and the statute was enacted due to public order concerns over the possibility of certain bird species becoming extinct.

---

[58] *Staples v. United States*, 511 U.S. 600, 606 (1994).

[59] *United States v. Engler*, 806 F.2d 425, 431 (3d Cir. 1986).

[60] Morissette v. United States, 72 S.Ct. 240, 246 (1952).

[61] *Id.* at 255.

[62] United States v. Apollo Energies, Inc., 611 F.3d 679, 688 (10th Cir.2010); United States v. Corbin Farm Service, 444 F.Supp. 510, 535 (E.D. Cal. 1978) ("the Supreme Court discussed the nature of what it termed "public welfare offenses": …).

[63] Corbin Farm Service, 444 F.Supp. at 535.

[64] United States v. Burwell, 690 F.3d 500, 521 (D.C. Cir. 2012).

[65] People v. Ellison, 144 P.3d 1034, 1038 (Colo. 2000).

The Supreme Court has held that public welfare offenses provide for "only light penalties such as fines or short jail sentences."[66] According to the MBTA, "any person, association, partnership, or *corporation*" that takes a migratory bird, or violates § 703(a) "shall be deemed guilty of a *misdemeanor* and upon conviction thereof shall be fined not more than $15,000 or be imprisoned not more than six months, or both."[67]

VI. Proximate Cause

Since public welfare offenses do not require a *mens rea*[68], courts may apply proximate cause, specifically a reasonable foreseeability test because it "facilitates rational risk spreading and correlates liability with the risks that the defendant should expect."[69] The harm defined under strict liability may have a narrow scope, but the scope of conduct may be broad enough to encapsulate conduct that crosses the harm threshold.[70]

When reading a statute with strict liability, the claimant must prove proximate causation which may be defined as "that which, in a natural and continuous sequence, unbroken by any efficient intervening cause, produces the injury and without which the accident could not have happened, if the injury be one which might be reasonably anticipated or foreseen as a natural consequence of the wrongful act."[71] In *United States v. ConocoPhillips Co., the court held that an actor engaged in commercial activity which results in the death of protected birds is not liable under the MBTA.*[72] The *Conoco defendants noted that in Apollo, the government provided notice about the issue of an actor's equipment killing protected birds, yet they did not receive any notice. Thus, the defendants argued they did not have proximate cause due to a lack of*

---

[66] Staples, 511 U.S. at 616.

[67] 16 U.S.C. § 707(a). (emphasis added).

[68] United States v. Cordoba-Hincapie, 825 F. Supp. 485, 494 (E.D.N.Y. 1993) ("Perhaps the most common exception to the *mens rea* principle has been in cases involving what are characterized as «public-welfare offenses.").

[69] John L. Diamond, *Dillon v. Legg Revisited: Toward a Unified Theory of Compensating Bystanders and Relatives for Intangible Injuries*, 35 Hastings L.J. 477, 500 (1984).

[70] Vernon Palmer, *A General Theory of The Inner Structure of Strict Liability: Common Law, Civil Law, and Comparative Law,* 62 Tulane L. Rev. 1303, 1317 (1988).

[71] Black's Law Dictionary 1225 (6th Ed. 1990).

[72] United States v. ConocoPhillips Co., 2011 U.S. Dist. LEXIS 114743 (D.N.D. 2011) ("[t]he information that has been submitted in these cases makes no allegation that reserve pits are themselves unlawful, that the reserve pits contained material that is prohibited by law, or that there is a statute or regulation in place that requires the defendants to net the reserve pits.")

"fair notice under the Due Process Clause."[73] However, the *Apollo court did not state that every actor needs to be given notice in order to show proximate cause.*[74] If several companies in a particular industry face litigation over a certain statute, it is reasonable for other competitors in the industry to take notice of the cases and make adjustments necessary to their standard operating procedures. ConocoPhillips is involved in oil companies, as the same industry as Apollo Energies and CITGO. There are also other cases involving oil companies charged with taking or killing birds with their oilfield equipment (*United States v. Union Texas Petroleum* and *United States v. Union Texas Petroleum).*[75] While the aforementioned cases went unreported, Union Texas Petroleum and Union Texas Petroleum each pleaded *nolo contendere* to the charges, which indicates that these actors understood the breadth and depth of the MBTA.

The *Apollo decision serves as notice to oil companies that equipment may pose an attraction to protected birds under the MBTA, and that preventive measures should be taken. Further, a study in 1990 addressed the issue of oilfield equipment taking or killing migratory birds.*[76] FWS worked directly with the oil companies to take preventive measures with the equipment to protect against taking or killing migratory birds, as well as provided a one year grace policy to do so.[77] FWS also held seminars and issued approximately one thousand letters to oil companies regarding the issue of equipment taking or killing migratory birds.[78]

Some have argued that proximate cause will provide the statute without limitation, and have cited the *reductio ad absurdum argument: "If the MBTA prohibits all acts or omissions that directly kill birds, where bird deaths are foreseeable, then all owners of big windows, communication towers, wind turbines, solar energy farms, cars, cats, and even church steeples may be found guilty of violating the MBTA."*[79] This premise, upon which the *reductio relies, is a false equivalence.*

In January 2017, FWS authorized permits for accidental eagle deaths due to collisions with communication towers, wind turbines,

---

[73] *Id.* at 8.

[74] *See* Apollo Energies, Inc., 611 F.3d 678, 691 (10th Cir. 2010).

[75] *United States v. Union Texas Petroleum*, No. 73-CR-127 (D. Colo., July 17, 1973); *United States v. Stuarco Oil*, No. 73-CR-129 (D. Colo., Aug. 17, 1973);

[76] Conrad A. Fjetland, *Possibilities for Expansion of the Migratory Bird Treaty Act for the Protection of Migratory Birds*, 40 Nat. Resources J. 47.

[77] *Id.* at 55.

[78] *Id.*

[79] *United States v. CITGO Petroleum Corp.*, 801 F.3d 477, 494 (5th Cir. 2015)

solar energy farms, and cars.[80] Wind turbines, solar energy farms, and cars are in motion, or are moving, when they have collisions with birds. Oilfield equipment is distinguished because it is innate. The oilfield equipment itself is not in motion. It is estimated that 6.8 million birds per year are killed from collisions with communication towers.[81] While communication towers are innate, akin to oilfield equipment, birds are being taken from what's inside the oilfield equipment.[82] Birds flying into communication towers have the purpose of a lawful activity, and preventing birds from flying into them cannot practicably be avoided. The same can be said for big windows and church steeples. Oilfield equipment owners and operators can take precautions to prevent bird deaths from birds flying into the oil by taking protective measures, such as safety nets. Cats are mammals with their own thought processes and wills. Oilfield equipment is machinery, and is not a living, breathing organism, much less have independent thought and will.

In regards to big windows, cars, cats and church steeples, proximate cause is not intended to give rise to "remote and derivative" consequences.[83] The Supreme Court has held that proximate cause "normally eliminates the *bizarre" and imposes liability when a "natural and probable consequence" occurs.*[84] Case law and the aforementioned work of FWS with oil companies evidences that oilfield equipment has a "natural and probable" consequence of taking migratory birds if certain precautions are not taken. There is no case law, nor known work of FWS with big windows, communication towers, wind turbines, solar energy farms, cars, cats, and even church steeples in regards to taking migratory birds.

---

[80] Laura Zuckerman, *U.S. to give 30-year wind farm permits; thousands of eagle deaths seen*, Reuters (Dec. 14, 2016), https://perma.cc/4629-UN9T; 50 C.F.R. § 13.21 (2017); 50 C.F.R. § 21 (2017).

[81] Wendy Koch, *Wind turbines kill fewer birds than do cats, cell towers*, USA Today (Sep. 15, 2014), https://perma.cc/Q8DC-MNL9.

[82] Conrad A. Fjetland, *Possibilities for Expansion of the Migratory Bird Treaty Act for the Protection of Migratory Birds*, 40 Nat. Resoureces J. 47, 51 ("The MBTA was first applied to activities beyond traditional hunting in the 1970s. In the states of Colorado and Utah concern grew about the loss of migratory birds in oil pits. Oil pits are sludge ponds for byproducts of oil production and, when uncovered, are death traps for migratory birds that land in them.").

[83] *New York v. Shore Realty Corp.*, 759 F.2d 1032, 1044, and n. 17 (CA2 1985).

[84] *Jerome B. Grubart, Inc. v.* Great Lakes Dredge & Dock Co., 513 U.S. 527, 536, 130 L. Ed. 2d 1024, 115 S. Ct. 1043 (1995) (emphasis added); *Milwaukee & St. Paul R. Co. v. Kellogg*, 94 U.S. 469, 475, 24 L. Ed. 256 (1877).

VII. Conclusion

To require a *mens rea*, or to limit the MBTA to only hunting and poaching, is a drastic misreading of the statute. The Fifth, Eight, and Ninth Circuits all held narrow interpretations of the statue, more specifically the word "take," and ruled in favor of corporate actors. The Fifth Circuit had a previous decision in which it stated that words, and specifically mentioned "take," should not be read narrowly. The Eight Circuit limited the scope of the MBTA to direct actions when a previous ruling from the Eight Circuit held that under the MBTA specific intent is not required, which would then encompass indirect acts as well as direct acts. The arguments that rely upon *reductio ad absurdum* arguments are a stretch to say the least. Actors engaged in commercial activities should take preventive measures if they have equipment in which migratory birds are taken or killed. To say that an activity other than hunting or poaching is an overreach of the MBTA is a façade of protecting business interests. This is not the purpose nor intent nor the plain language of the statute.

Are Horse No-slaughter Contracts "Lame"? Enforcing a No-Slaughter Contract as a Restrictive Covenant

Melissa Dumoulin

I. Introduction

In 2002, the Thoroughbred-racing world was shocked when Ferdinand, a 1986 Kentucky Derby winner who earned $3.7 million in his racing career, was slaughtered at the age of nineteen in Japan.[1] His remains were reportedly used as pet food.[2] His former groom described Ferdinand as "sweet" and "the gentlest horse you could imagine."[3] The champion's former jockey Bill Shoemaker said that what happened to Ferdinand "wouldn't have happened over here [in the United States]."[4] Horse slaughter ceased in the U.S. in 2007 after Congress discontinued funding for post mortem inspections on horse carcasses, effectively barring the slaughter of equines.[5] However, every year over 100,000 U.S. horses are shipped to slaughterhouses in Canada and Mexico.[6] In these facilities, horses are processed as meat for human consumption, pet food, and other products.[7]

Horses can end up at a slaughter plant for a multitude of reasons and some horse owners have tried to prevent a once loved pet from ending up in a slaughter plant. To prevent horses from going to slaughter, owners and rescue organizations are now adding a "no-slaughter" clause to the horse's sale contract.[8] The enforceability of a no-slaughter clause

---

[1] Bill Finley, *Horse Racing; 1986 Derby Winner was Slaughtered*, N.Y. Times, (Jul. 23, 2003), https://perma.cc/9SZ6-X3WS.

[2] *Id.*

[3] *Id.*

[4] *Id.*

[5] Barry Massey, *Horse Slaughter Blocked by Federal Law*, The Associated Press (Jan. 17, 2014, 9:29 PM), https://perma.cc/97ME-R954.

[6] Humane Society, The Facts About Horse Slaughter: Separate Fact from Fiction on the Issue of Slaughtering Horses for Food, (Nov. 6, 2015), https://perma.cc/8Q2Q-SZKN [hereinafter *Humane Society*].

[7] American Veterinary Medical Association, Unwanted Horses and Horse Slaughter FAQ, (Feb. 1, 2012), http://perma.cc/E35J-AGS5 [hereinafter AVMA].

[8] The Foundation for the Pure Spanish Horse, Example of an Anti-slaughter Contract, https://perma.cc/Y9C2-T7YZ (last visited Jun. 6, 2016) [hereinafter *Foundation*].

against a subsequent owner or third-party possessor is not clear because servitudes on personal property are uncommon.[9]

Part I of this article discusses why horse slaughter is distasteful to Americans and how the resulting de facto ban on horse slaughter in the U.S. simply moved the problem elsewhere. Part I further explains why horses are unique pets and keeping horses is unlike keeping other domestic animals. Additionally, placing a horse in a new home is sometimes difficult and there is little assurance for the previous owner that the horse is safe.

Part II explains the pending legislation aimed at banning the shipment of U.S. horses abroad and why this not the best solution. Due to the lack of legislation, horse owners try to protect horses from slaughter with right-of-first-refusal contracts. However, right-of-first-refusal contracts are not failsafe and a better way to bind successors is needed. Part II further discusses the recent use of no-slaughter contracts, how they are similar to real property servitudes.

Part III discusses how a no-slaughter clause could fulfill the elements of a real property servitude and bind third parties. Though servitudes are rarely applied to personal property, the *Nadell* case illustrates why courts might apply servitudes to horses. This section concludes with a summary of how can servitudes apply to no-slaughter contracts and if whether they would fulfill the owner's intent.

II. Part I

Americans do not use horses for food and Congress has effectively banned horse slaughter within the U.S. As a result of the horse slaughter ban, American horses are shipped to Mexico and Canada for slaughter. The expense of owing a horse and the fact that horses are ridden for sport creates unique challenges for an owner wanting to place a horse in a new home. Horses are expensive to own and need more space than the average pet. While several options exist for placing a horse, a horse is always at risk for slaughter.

a. Equine Slaughter in the United States and Abroad

Horsemeat in not consumed in the U.S. because the thought of eating someone's once beloved pet is unappealing to many Americans.[10] Unlike cattle or swine, horses in the U.S. are not produced for food,

[9] Glen O. Robinson, *Personal Property Servitudes,* 71 U. Chi. Law Rev. 1449, 1450-54 (2004).

[10] Brian Montopoli, *Why Don't We Eat Horses?,* CBS News, (Feb. 21, 2013, 12:27 PM), http://perma.cc/UT9V-69D8.

but are considered pets or companion animals.[11] Largely due to public protest and failed attempts at legislation,[12] Congress withdrew funding for the post-mortem inspection of slaughtered horses, forcing all U.S. equine slaughter plants to close down.[13] Now as a result of the U.S. equine slaughter plants closing, middlemen, referred to as "kill buyers," purchase horses from U.S. auctions and transport them to slaughterhouses in Canada and Mexico.[14] Consequently, horses endure horrific conditions during transport[15] to foreign slaughter plants, where they are killed in an inhumane[16]and unregulated manner.[17] Responsible horse owners feel a duty to protect a horse they own from slaughter, even if the owner later decides to sell the horse and no longer retains ownership rights.

b. Horses: Not a Traditional Pet

Horses are unwanted for numerous reasons, and unfortunately there is no clear solution to the problem of overpopulation.[18] Unwanted horses are those who are no longer useful or needed by the owner, or the owner can no longer or does not want to care for them.[19] While both dogs and cats are overpopulated in the U.S., horses pose a distinct problem because of the space and resources needed to keep a horse. Horses are considered a unique pet because unlike other domestic animals, people who keep horses do so to ride them, compete in equine sporting events,

[11] Humane Society, *supra* note 6.

[12] Animal Welfare Institute, Horse Slaughter, https://perma.cc/QBF9-QWZN (last visited Jun. 6, 2016).

[13] Massey, *supra* note 5.

[14] AVMA, *supra* note 7, at 11.

[15] Humane Society, Transport to Slaughter: The Brutal Truth Behind Horse Auctions and the Journey to Slaughter, https://perma.cc/23PC-VFLP (last visited Jun. 6, 2016).

[16] *Id.* In Mexico, horses are killed with a puntilla, a short knife that is stabbed into the animal's spinal cord rendering the horse immobile. The horse is still conscious, but is unable to move while it is dismembered. *Id.*

[17] AVMA, *supra* note 7, at 6. But, according to Dr. Temple Grandin an animal welfare expert, equine slaughter can be conducted in a humane manner with minor changes such as, non-slip floors, an obstructed view between the horse and the slaughter floor, and have experienced personal kill the horse using a penetrating captive bolt or by shooting it with a gun. Temple Grandin, *Answering Questions About Animal Welfare during Horse Slaughter,* 1-2 (Apr. 2012), https://perma.cc/4M6H-Y85K.

[18] 2009 Unwanted Horses Survey: *Creating Advocates for Responsible Ownership,* The Unwanted Horse Coalition 1, 6 (2009), https://perma.cc/4KDT-R4BX [hereinafter *Survey*].

[19] *Id.* at 12.

or keep them as companion animals.[20] Horses are further distinguished from other traditional American pets because a horse can live past the age of thirty and certainly beyond the time when they are useful as sport horses.[21] In the horse world, it is not uncommon for a horse to have multiple possessors over the course of its life. A horse's changing abilities, soundness issues, as well as the owner's ability and interest are factors that drive the transferability of horses.[22]

Horses are also an expensive hobby and require care that is significantly more costly than a dog or cat requires.[23] For instance, the cost of owning a large dog averages $1,906 per year,[24] while the cost of owning a horse for one year averages $7,060.[25] A 2009 survey conducted by the Unwanted Horse Coalition found that 81% of horse owners cite financial concerns as a reason horses become unwanted.[26] Other reasons include: the horse was too old, it is injured or sick, it became unmanageable, or the owner lost interest.[27] Once a horse becomes unwanted, the owner is faced with the challenge of placing the horse in a new home.

c. Finding a Home for an Unwanted Horse

Several options exist for an owner to find a new home for an unwanted horse and, sometimes, finding an appropriate home is not easy. The Humane Society of the United States outlines the options available for placing a horse in a new home. First, the current possessor can sell or give the horse to a new, private owner or lease the horse and maintain ownership rights.[28] Second, an owner can donate the horse to a

---

[20] *See* Own Responsibly: *Guidance for Current and Potential Horse Owners from the Unwanted Horse Coalition*, Unwanted Horse Coalition, 1,2, https://perma.cc/FM2U-EWGT (last visited Jun. 6, 2016).

[21] *How to Adopt or Buy a Horse*: What to know before making the life-long commitment, The Humane Society of the United States, 1, 2, https://perma.cc/4SPH-AXLE (last visited Jun. 6, 2016).

[22] Survey, *supra* note 18, at 6.

[23] Paul Sullivan, *Animal Lovers, Beware of Ownership Costs,* N.Y. Times (Nov. 26, 2010), https://perma.cc/ZU6X-DJG7.

[24] Mary Burch, How Much Does it Cost to Raise a Dog?, American Kennel Club (May 19, 2015), 1-2, http://perma.cc/Z9GR-JY98.

[25] Jennifer Williams Ph.D., *Costs of Getting and Owning a Horse*, Bluebonnet Equine Humane Society, https://perma.cc/Y4LB-JMX7 (last visited Jun. 6, 2016); *see supra* note 18, at 3-4. However, these numbers can vary dramatically depending on whether the horse is kept at home and requires minimal care or is boarded at a high-end facility. The costs are also dependent on whether the horse has numerous health or nutrition issues.

[26] Survey, *supra* note 18, at 12.

[27] *Id.* (noting this list is not exhaustive of the reasons horses become unwanted).

[28] *Relinquishing Your Horse: We've got humane options if you can no longer*

therapeutic riding facility, police unit, or riding program at a university, or can surrender the horse to a rescue facility.[29] Third, the owner can see if whether the breeder, if known, or previous owner is interested in buying or taking the horse back.[30] And finally, humane euthanasia can prevent a lifetime of suffering for an unwanted horse that might otherwise end up in an abusive situation.[31] Unfortunately, not all horses find an appropriate placement, despite an owner's best efforts, and those that do might not stay in the new home permanently.

The fact that annually more than 100,000 horses are shipped to foreign slaughterhouses appears to hold all horse owners in disrepute. Not all horses that are sent to slaughter are healthy or useful.[32] Many are old, sick, or lame, have severe behavioral problems, or are young and not broke to ride.[33] There are "useful" horses that are slaughtered simply because no one wants them or they were purchased by a kill buyer specifically for slaughter.[34] Nevertheless, countless responsible horse owners take tremendous measures to ensure a once beloved companion is placed in an appropriate, loving home. Owners screen potential buyers by requiring veterinarian, farrier, and trainer references; they interview friends and acquaintances and visit the property where the horse will live.[35] But not all people who keep horses are diligent or care where a horse goes after they sell it. Regrettably, some horses sent to slaughter were stolen or acquired by deceit with the sole purpose of resale to a kill buyer.

Owners sell or give horses away for many reasons, and concerned owners worry where a horse will end up after it is sold. Even if an appropriate home is found, the subsequent possessor may have to sell, or give away, the horse in the future. The subsequent possessor might not care as much about the horse's welfare as the previous owner did. Sometimes, shipping a horse to an auction is the only option available if an owner must immediately place the horse in a new situation. The downside of selling a horse at an auction is that there is no guarantee the horse will sell to a family as opposed to a kill buyer. The ability of a current owner to restrict the subsequent sale of a horse is necessary to prevent horse slaughter.

---

care for your horse, The Humane Society of the United States, 1 (Mar. 14, 2014), http://perma.cc/74SA-8MRE.

[29] *Id.*

[30] *Id.*

[31] *Id.*

[32] Humane, *supra* note 6, at 3; *Horse Slaughter Facts & FAQs,* Animal Welfare Institute, 1, 2, http://perma.cc/QBF9-QWZN (last visited Jun. 6, 2016).

[33] *See* AVMA, *supra* note 7, at 1-2; Humane, *supra* note 6, at 3.

[34] Humane, *supra* note 6, at 3.

[35] *Safe Options for Rehoming Your Horse,* Save a Forgotten Equine, 1,6, https://perma.cc/8GAA-UCPN (last visited Jun. 6, 2016).

III. Part II

Horses are considered companion animals and as a result, both horse owners and Congress have tried to stop horses from going to slaughter. Congress has proposed legislation that bans shipping horses abroad for the purpose of slaughter. Since horses are still at risk for slaughter, horse owners use contracts to try and deter or prohibit a subsequent owner from sending a horse to slaughter. While correctly drafted right-of-first-refusal contracts are enforceable, they are not enforceable against third parties. No-slaughter contracts are intended to bind third parties and operate similar to a real property covenant servitude.

a. Legislation

Congress introduced The Safeguard American Food Exports Act of 2015 (Exports Act) to prohibit the transport of equines to Mexico and Canada for the purpose of slaughter. Congress acknowledges that horses in America are not raised for food and are treated with drugs that are not safe for human consumption.[36] Because equines are not produced in the U.S. for food, there is no tracking system or regulation on what drugs horses receive. No one could possibly know what drugs a horse received its life, and eating meat treated with unknown drugs poses a severe health risk to humans who might consume contaminated meat. Under the proposed legislation, shipping equines for the purpose of slaughtering them for human consumption violates sections 512 and 409 of the Federal Food, Drug, and Cosmetic Act by exposing humans to a hazardous food source.[37] The Exports Act would certainty reduce the number of horses that are shipped to foreign slaughter plants.

Despite good intentions, the Exports Act probably cannot protect all U.S. equines from slaughter because the act only prohibits the transport of horses that are slaughtered for human consumption.[38] The Exports Act will not stop the slaughter of horses for other purposes, such as pet food and other products. In addition, the government has no way to know if a trailer load of horses are going to Mexico for use as pet food, or if whether the horses are slaughtered for human consumption.[39] Furthermore, some animal welfare groups are concerned that a prohibition on foreign transport of horses will result in more starved,

[36] The Safe Guard American Food Exports Act, H.R. 1942, 114th Cong. §2(1) (1st Sess. 2015).

[37] *Id.*

[38] *Id.* Additionally, the legislation is unlikely to pass and Govtrack.us gives the act a 9% chance of passing. Govtrack.us, H.R. 1942: Safeguard American Food Exports Act of 2015, https://perma.cc/A8L7-UNM3 (last visited Jun. 6, 2016).

[39] AVMA, *supra* note 7, at 11.

abused, and abandoned horses because unwanted horses will have nowhere to go.[40] If the Exports Act does pass, additional legislation may be required to deal with the problem of overpopulation.

b. Right-of-First-Refusal

Right-of-first-refusal contracts are used in the horse world to control the subsequent sale of a horse.[41] A right-of-first-refusal clause in a contract creates a stipulation that if the subsequent horse-possessor ever decides to resell the horse, he must first ask the previous owner if whether he wants to buy the horse back.[42] Right-of-first-refusal agreements are generally seen in real property transactions, and are utilized for goods.[43] Right-of-first-refusal clauses are enforceable if drafted correctly and are even sturdier when combined with liquidated damages clauses.[44]

However, right-of-first-refusal clauses do not provide enough protection to prevent a horse from going to slaughter. First, the previous owner might not have the resources, financial or otherwise, to take the horse back when the current possessor wants or needs to sell. Even with a right-of-first-refusal clause, a subsequent owner could still sell the horse to a kill buyer, despite the previous owner's best efforts. Second, if the previous owner loses contact with the subsequent possessor, he may never know if whether the horse was retained by the subsequent owner or sold without the previous owner's knowledge. Third, if the current possessor breaches the right-of-first-refusal contract and sells the horse to a third-party, the original, contracting owner has no claim against the third-party buyer and can only recover the monetary damages outlined in the contract.[45] Right-of-first-refusal contracts do have a deterrent effect, but will not stop a subsequent owner from selling a horse to a kill buyer.

The following case illustrates how, even if properly executed, right-of-first-refusal contracts can fail and how people deceitfully acquire horses to resell. In a shocking case from Kentucky, Judy Taylor

---

[40] *Id.* at 7, 10.

[41] Rachel Kosmal McCart Esq., *Rights of First Refusal: What You Need to Know*, The Horse, (Jan. 2015), https://perma.cc/N8KM-R8S3; Kara Pagliarulo, Esq., Right of First Refusal in Equine Sales Agreements, Equine Law Blog (Jan. 14, 2015) https://perma.cc/N6L6-8BBN.

[42] McCart, *supra* note 41; Pagliarulo, *supra* note 41.

[43] 3-11 Corbin on Contracts § 11.1 (2015). As Corbin points out, a right of first refusal is often misused as an option contract, but this use is "logically inaccurate [b]ecause they are not offers and create no power of acceptance." He says they are better categorized as "preemptive rights."

[44] McCart, *supra* note 41; Pagliarulo, *supra* note 41.

[45] McCart, *supra* note 41; Pagliarulo, *supra* note 41.

became disabled and could no longer properly care for her two horses P.J. and Poco.[46] Taylor ultimately decided to "free-lease" her two horses to Jeff and Lisa Burgess, with the stipulation that Taylor could visit the horses regularly and retain "control" over them.[47] In addition, Taylor specifically requested the horses be returned to her if the Burgesses could no longer keep them and Taylor did not transfer ownership.[48] But the Burgesses had other plans. A few days after receiving P.J. and Poco, the Burgesses sold both horses to a kill buyer for $1,000.[49] The Burgesses repeatedly lied to Taylor concerning the horses' whereabouts.[50] Later Taylor discovered that both horses were sold to a kill-buyer and slaughtered in Texas.[51] At trial, Lisa Burgess admitted that she planned all along to sell the horses to the kill-buyer.[52] Sadly, Taylor's good-faith attempt to place her horses in a safe and loving home resulted in the exact situation she was trying to prevent.

The facts in *Burgess* show that right-of-first-refusal contracts are not enough to protect a horse from slaughter. Aside from a deterrent effect, the contract does little more than help an owner recover money for a breach of contract. Even if Taylor found her horses alive the court would not enforce the right-of-first-refusal contract against the third-party. A no-slaughter clause might guarantee the return of a horse if the clause is enforceable.

c. No-Slaughter Clause

A no-slaughter clause is a contract that, in theory, prohibits a third-party possessor from selling or sending a horse to slaughter. As of today, no case law or statutes exist to verify that no-slaughter contracts are enforceable against third parties. Aside from licensing agreements attached to software, and restrictions imposed by a manufacturer of goods, there few instances where a court has upheld a restrictions on the future sale of personal property [53] Whether no-slaughter clauses are enforceable against a third-party is unclear, because, through the clause, the previous owner tries to control the future transfer of the horse. No-slaughter clauses are similar to restrictive covenants and equitable servitudes used in real property. Even if similarities between servitudes and no-slaughter clauses exist, historically, the courts are reluctant to

[46] *Burgess v. Taylor*, 44 S.W.3d 806, 809 (Ky. Ct. App. 2001).
[47] *Id.*
[48] *Id.*
[49] *Id.* at 810.
[50] *Id.* at 810-11.
[51] *Id.* at 810.
[52] *Id.* at 811.
[53] *See* Robinson, *supra* note 9, at 1451-53.

extend servitude concepts to personal property. If no-slaughter clauses are not enforceable against successors, then the clause does not fulfill the goal of the responsible owner who wants to ensure that the horse *never* goes to slaughter.

d. Covenants, Servitudes, and Real Property

Real covenants and equitable servitudes are affirmative or negative agreements concerning the use of land.[54] A real covenant is a contract enforceable at law that "benefits" and "burdens" the original contracting parties to the agreement[55] An equitable servitude is similar to a real covenant, but an equitable servitude is enforced in equity, binds successors to the agreement made between the original parties, and has fewer requirements than a real covenant.[56] The most notable difference between a covenant and a servitude is that a covenant only binds the original parties to the agreement and a servitude "runs with the land" and binds successors.[57] A covenant is considered a servitude if the original covenanter intends to bind successors to the agreement.[58] At common law, even if a covenant binds successors agreement is not called a servitude and is still referred to as a covenant.[59]

However, covenants and servitudes are so closely related that the Restatement Third of Property no longer distinguishes between real covenants and equitable servitudes and instead refers to both as a "servitude."[60] Because not all jurisdictions have adopted the restatements approach to servitudes, and because of the differences in the available remedies, the common law approach to covenants and servitudes is assumed for the purposes of this discussion.

Servitudes and covenants create an interest that runs with the land, so the interest is attached to the property and is automatically transferred with the property.[61]A negative covenant, also called a restrictive covenant, restricts or prohibits the successor from doing something with the land.[62] A covenant or servitude benefits and burdens land, so the duty to comply with the restriction is the burden and the original covenanter's right to enforce the restriction is the benefit.[63]

---

[54] Restatement (Third) of Prop.: Servitudes § 1.3 (Am. Law Inst. 2000).

[55] John G. Sprankling & Raymond R. Coletta, Property: A Contemporary Approach 702 (West 2nd ed. 2012).

[56] *Id.* at 714.

[57] Restatement (Third) of Prop.: Servitudes § 1.4 (2000).

[58] *Id.*

[59] Sprankling, *supra* note 56, at 713.

[60] Restatement (Third) of Prop.: Servitudes § 1.4 (2000).

[61] *Id*. at § 1.3.

[62] *Id.*

[63] Sprankling, *supra* note 56, at 702.

So, if an owner of land decides to sell his property but he wants to make sure a shopping mall built is never built there, the owner can create a restrictive covenant that automatically attaches to the land. The restriction prohibiting the building of a shopping mall binds not only the original covenanting parties, but also subsequent owners of the property. The original owner holds the benefit because he can sue any subsequent owner who builds a shopping mall on the property. Any subsequent owners of the land hold the burden because they cannot use the property to build a mall.

A restrictive covenant is enforced at law against successors in interest if the benefit holder intended to bind successors. The burden that attaches to the land is the restriction or prohibition and is enforced at law against successors if the following six requirements are met: the contract must comply with the statute of frauds; the parties to the original contract must intend to bind successors to the covenant; a subsequent purchaser for value must have actual, record, or inquiry notice of the restriction; the original contracting parties must have horizontal privity; the original contracting parties must have vertical privity; and the restrictive covenant must touch and concern the land by restricting the use of the land.[64] The remedy at law for breach of a restrictive covenant is monetary damages. If a monetary award will not remedy the damage caused by a breach of contract, then the injured party can seek an equitable remedy.[65]

When an injunction is the appropriate remedy for a breach or attempted breach of a restrictive covenant, the covenant is considered an equitable servitude.[66] Equitable remedies are only available when monetary damages will not make the plaintiff whole or are inappropriate for the situation.[67] Unlike a restrictive covenant, an equitable servitude does not require horizontal or vertical privity for enforcement against successors who have notice of the restriction.[68] Like restrictive covenants, equitable servitudes must satisfy the writing requirement of the statute of frauds.[69] Equitable servitudes require only three elements to bind successors in interest. First, the parties must intend that the servitude bind successors.[70] Second, the successor must have actual, inquiry, or record notice of the servitude.[71] Finally, the servitude must

[64] Sprankling, *supra* note 56, at 702, 713.
[65] *Id.* at 702.
[66] *Id.* at 713.
[67] *See id.*
[68] *Id.*
[69] *Id.*
[70] *Id.*
[71] *Id.*

restrict the holder's use of the property in some way.[72] Though the use of servitudes in real property transactions is commonplace, the application of servitudes in personal property transactions is not well established.[73]

e. Covenants, Servitudes and Personal Property

Despite the willingness of the law to uphold servitudes for real property, the courts do not readily accept the use of servitudes in personal property transactions.[74] Aside from patents, copyrights, and licensed software, the law is reluctant to extend the concept of servitudes to personal property.[75] If fact, some courts have ruled that restrictive covenants on personal property do not apply to third-party buyers whether or not the third-party had notice of the restriction.[76] However, there are a few instances when the courts upheld non-compete covenants and restrictions on the distribution of goods involving personal property.[77]

No case law exists where a court applied a restrictive covenant to a horse, but there is one case where the court upheld a restrictive covenant on fruit salad. In *Nadell & Co. v. Grasso*, a load of fruit salad in broken containers was sold to a distributer of damaged goods.[78] The transporter-seller initiated a contract that contained a restrictive covenant prohibiting the damaged-goods buyer from selling the fruit salad in the containers that bore the name of the manufacturer.[79] The damaged-goods buyer then sold the fruit salad to a distributor.[80] The distributor had actual notice of the agreement made between the transport company and the damaged goods buyer.[81] The distributor ignored the restriction and proceeded to sell the fruit salad in the containers that the contract prohibited.[82] The contract's affirmative covenant stipulated that the containers the fruit salad were in at the time must be returned to the transporter before sale, which created a negative stipulation that the fruit salad could not be sold in the broken containers.[83] The defendant claimed that equity cannot

---

[72] *See id.*

[73] *See generally* Zechariah Chaffee Jr., *The Music Goes Round and Round: Equitable Servitudes and Chattels,* 69 Harv. L. Rev. 1250, (1956); *See* Robinson, *supra* note 9, at 1451-55.

[74] *Id.*

[75] *See* Robinson, *supra* note 9, at 1451-55.

[76] *In re Consolidated Factors Corp.,* 46 F.2d 561, 563 (1931).

[77] *See* Robinson, *supra* note 9, at 1451-55.

[78] *Nadell & Co. v. Grasso,* 346 P.2d 505, 507 (Cal. Dist. Ct. App. 1959).

[79] *Id.*

[80] *Id.*

[81] *Id.* at 508.

[82] *Id.* at 507.

[83] *Id.*

prevent the breach of a negative covenant if the affirmative covenant is unenforceable.[84] The court agreed with the defendant's assertion and added that courts of equity cannot enforce specific performance when the "duty to be performed is a continuous one extending possibly over a long period of time. [i]n order that the performance may be effectual, it will necessarily require constant personal supervision and oversight by the court."[85] However, the court determined that the enforceability of specific performance was not at issue because the few remaining cases of fruit salad would be sold relatively soon.[86]

The court of appeals agreed with the trial court's finding that an enforceable equitable servitude was established on the goods.[87] The court also quoted Justice Augustus Hand in *In re Waterson, Berlin & Snyder Co*., "[O]ne who takes property with notice that it is to be used in a particular way receives it subject to something representing an equitable servitude."[88] Additionally, the court adopted Judge Hand's view on lack of privity between successors. Judge Hand wrote of successors in contract restrictions that "[t]he agreement on the part of the defendant's predecessor in title … related to the use of its property. . . and obligated all who might acquire that property with notice of the agreement."[89] Because the defendant agreed to and knew of the restriction on the sale of the fruit salad in the broken containers, the defendant was bound by the contract to change the containers before he sold them, even though he was not part of the original contract. Additionally, the court reasoned that the "good will" of the transporter's business was at stake if the distributor failed to comply with the restriction.[90]

Nadell indicates a willingness of the courts to enforce restrictive covenants on the distribution of personal property. In most cases when a restrictive covenant on personal property is upheld, the manufacturer of the goods created the restriction to combat the risk of harm to consumers or unfair competition.[91] In *Nadell*, it was the transport company that imposed the restriction on the sale of the fruit salad, not the manufacturer of the fruit salad. The holding in *Nadell*, is significant because the decision allowed the privity of contract created between the transporter and the damaged goods buyer to extend as a restrictive

---

[84] *Id.* at 509.

[85] *Id.* (quotiing *Poultry Producers of S. Calif., Inc. v. Barlow,* 208 P.93, 97 (Cal. 1922)).

[86] *Id.* at 509.

[87] *Id.* at 512.

[88] *Id.* at 510 (quoting 48 F.2d 704, 708 (2d Cir. 1931).

[89] *Id.* at 511 (quoting *Murphy v. Christian Press Ass'n Pub. Co.*, 38 A.D. 426, 429 (N.Y. 1899)).

[90] *Id.* at 510 (quoting *Max Factor & Co. v. Kunsman*, 55 P.2d 177, 181 (Cal. 1936)).

[91] *See* Robinson, *supra* note 9, at 1455-58.

covenant that bound the final distributor of the fruit salad. However, following the reasoning from *Nadell*, the court might not have extended the restriction much farther than the final distributor. The court agreed with the defendant that a court cannot continue to enforce a specific performance on property if the enforcement could not be performed in a single transaction and would extend over a long period of time.

The time limitation on the enforcement of specific performance is explained in *Pacific E.R. Co. v. Campbell-Johnston*, the court held that a court of equity would not enforce specific performance of a contract if the provisions called for a "succession" of acts or would require "continuous supervision and direction."[92] The court provided further explanation by specifying that contracts to "repair, build, construct works, to build or carry on railways, mines, quarries, and analogous undertakings" are not generally enforceable by courts of equity.[93] Nonetheless the decision in *Nadell* is significant because it established a situation in which a court in equity was willing to recognize and enforce a restrictive covenant on personal property, even though the manufacturer of the goods did not create the restrictive covenant. The result of *Nadell* shows that the courts are, at least in some instances, willing to extend the concept of servitudes to personal property.

IV. Part III

A horse owner who wants to enforce a no-slaughter contract can try to persuade the court to recognize the restrictive covenant on the horse. Horses are certainly not land, but it is possible for a restrictive covenant on a horse to meet both the requirements for a restrictive covenant and an equitable servitude, depending on the remedy sought. The next section explains how the elements of covenants and servitudes might apply to a no-slaughter clause.

a. Applying Restrictive Covenants to No-Slaughter Clauses

The first step in determining if whether a court could enforce a no-slaughter contract against successors is to determine if whether the clause is enforceable as either a restrictive covenant or as an equitable servitude, depending on the desired remedy. Satisfying the requirements

---

[92] *Pac. E.R. Co. v. Campbell-Johnston,* 94 P. 623, 625 (Cal. 1908).

[93] *Id.* at 626 (quoting Pomeroy, A Treatise on the Specific Performance of Contracts, as it Enforced by Courts of Equitable Jurisdiction, in the United States of America § 312 (New York, Banks & Bros. 1879)).

of a restrictive covenant and an equitable servitude is accomplished by complying with the statute of frauds and by meeting the elements for each agreement.[94] Finally, *Nadell* can address some of the arguments against enforcement of no-slaughter contracts.

As previously discussed the requirements for a restrictive covenant to bind successors are: compliance with the statute of frauds; intent to bind successors; touch and concern; notice; horizontal privity; and vertical privity.[95] The requirements for an equitable servitude to bind successors are: compliance with the statute of frauds; intent to bind successors; touch and concern; and notice.[96]

i. Statute of Frauds

Like contracts for the sale of land, a no-slaughter clause should satisfy the statute of frauds and be in writing. Under Uniform Commercial Code § 2-201, a contract for the sale of goods greater than $500 is enforceable only if the agreement is in writing and is signed by the contracting parties.[97] There are exceptions to the writing requirement,[98] but those exceptions are likely inapplicable for the sale of a horse. The resulting writing is considered the final agreement between the parties and cannot be contradicted by other oral agreements.[99] Therefore, to facilitate enforcement of a no-slaughter clause, the contracting parties should never rely on verbal agreements. Even if the horse is sold for less than $500, any contract made in regard to a horse should be preserved in writing and signed by both parties. Having the no-slaughter clause in writing proves that the subsequent owner had notice of the restriction on the horse and of the intent to bind successors.

ii. Intent to Bind

For the burden to run with the subsequent owners, the original parties to the contract must intend to bind successors. A properly drafted document should fulfill the intent to bind successors by clearly expressing the restriction placed upon the sale of the horse and the desire for successors to be bound by the agreement.

---

[94] Restatement (Third) of Prop.: Servitudes § 2.1 (2000); Sprankling, *supra* note 56, at 702, 713.

[95] Sprankling, *supra* note 56, at 702, 713.

[96] *Id.*

[97] UCC § 2-201 Am. Law. Inst. & Unif. Law Comm'n 2016).

[98] *Id.*

[99] *Id.*

iii. Notice

To be bound by the restriction, a subsequent purchaser for value must have notice of the restriction.[100] Notice can be satisfied by actual notice, record notice, or inquiry notice. [101] The notice requirement is an issue for a no-slaughter clause because unlike land, horses are not necessarily recorded and do not have deeds. Generally in real property transactions, notice is attached to a deed, otherwise recorded, or outlined in the rules of the homeowner's association. Additionally, a homebuyer can investigate before buying a house to determine if whether any restrictions exist.

Ensuring subsequent purchasers have notice of a servitude in the transfer of a horse is more difficult. While a seller could attach the notice to the horse's registration papers, not all horses are registered. Furthermore, even if a horse is registered there is no way to guarantee successors will transfer the papers with the horse. Identifying a horse simply by how it looks is extremely difficult, because many horses will have the same coat color or body style. Also, unlike real property, a horse is not stationary, and it is difficult to keep track of a horse, especially if it is transferred several times.

Microchipping and branding are the best way to permanently identify a horse. Neither method of identification is perfect, but both methods facilitate identification. Databases exist for microchips and for some brands; however, most of these databases are used for returning lost pets and not necessarily for providing notice of a restrictive covenant.[102] One horse rescue, Horse Aid, established a registry system that used either a brand unique to the rescue or a microchip.[103] The original goal of the rescue was to prevent horses that the rescue adopted out from being sold to slaughter.[104] Because the brand is associated only with a specific rescue, the organization hoped the brand would stop kill buyers from buying branded or micro-chipped horses, and the rescue could have the horses returned to them.

A similar registry that combined a brand or chip could serve to provide notice that the horse has a contract attached to it. Once a horse with a microchip or brand is identified, auction houses or kill buyers can contact the registry and provide notice to the original covenanting owner that a horse under contract is there. Additionally, the brand or microchip

---

[100] Sprankling, *supra* note 56, at 703.

[101] *Id.* at 73.

[102] *See* American Veterinary Medical Association, Microchipping of Animals FAQ (2016), https://perma.cc/6G3J-TRG2.

[103] Horse Aid(2004), https://perma.cc/SEW8-DZCG. The website has not been updated in sometime, so it is not clear if the registry or rescue is still operating.

[104] *Id.*

would provide notice to subsequent owners that there is a restriction on a particular horse. This type of database also could provide information to successors on restrictions of sale or other information about the horse and its previous owners.

Microchipping is considered a virtually painless and permanent form of identification.[105] A tiny microchip is placed under the skin.[106] Generally, the chip cannot be felt or seen and is difficult to remove. The downside of microchipping a horse for identification purposes is that the chips can migrate and may become difficult or impossible to find.[107] Additionally, microchips are only read with a handheld scanner. Because the chip is invisible, there is no way for someone to know a chip is there to read. Additionally, some scanners cannot read the chip number of all brands of microchips.[108] The scanner will alert the user that a chip is there, but the scanner cannot read the microchip number.[109]

Although branding a horse also raises concerns, branding is likely more effective than a microchip at providing notice to a successor because it is visible without a scanner. Branding is performed with either a hot branding iron or with liquid nitrogen to produce a "freeze brand."[110] A hot brand and a freeze brand results in either the hair of the animal growing back white or leaving a hairless scar.[111] In either case, the result is a permanent identification that is visible simply by looking at the animal. Farms that choose to brand horses have a shape or letter combination that is unique to their farm.[112] An owner who purchases a horse with a brand can look up the brand and find out who the breeder of the horse was.[113] Although branding is a great method for visual identification, branding is painful and not always successful, because the hair can grow back over the scar, concealing the brand.[114] However, a visible brand is more likely than a microchip to alert someone that the horse has a restriction, especially if the unique brand is associated with a registry set up for the purpose of cataloging horses with no-slaughter or other transfer restrictions.

Several possibilities exist for providing a horse's subsequent owner with notice of a servitude. Notice is actual if the subsequent owner

---

[105] Microchipping, *supra* note 103.

[106] *Id.*

[107] *Id.*

[108] *Id.*

[109] *Id.*

[110] Pete Gibbs et. al., The Texas A&M University System, Permanent Identification of Horses (1998), https://perma.cc/QP6B-GAXF.

[111] *Id.*

[112] *Id.*

[113] *Id.*

[114] *Id.*

acknowledges the restriction when he purchases the horse. A subsequent owner has record notice if the horse is purchased with breed registration papers, because the servitude can be attached to the registration. If a horse has a visual brand or known microchip, the subsequent owner has inquiry notice, especially if the brand is associated with a no-slaughter registry. If the successor looked up the brand or microchip, they would discover the servitude. An owner who wants to establish notice to successors should attach notice of the servitude to the horse's registration papers, then brand or microchip the horse, and register it with an appropriate registry.

Although it is possible to establish notice with respect to servitudes on horses, an equitable servitude is not enforceable in a court of equity if the successor is not a purchaser for value, even if the successor had notice of the restriction.[115] Horses who are old, cannot be ridden, or need to find a home quickly are often given away for free or well below the horse's actual resale value. For the no-slaughter clause to bind successors in equity, the successor must have purchased the animal for value. Nevertheless, if the successor had notice of the covenant, the restriction is enforceable at law, even if the successor was not a purchaser for value. The original covenanter is probably not seeking monetary damages when he created the servitude, and equity would give him the injunction he needs to prevent the sale of the horse to a slaughter plant. Since no-slaughter contracts have a better chance of enforcement in equity, horse owners may have to sell their horse for a reasonable fee, even if the fee discourages potential buyers.

iv. Horizontal Privity

To establish horizontal privity, when the original contracting parties entered into the no-slaughter contract, they must have shared some interest in the horse. Such interest is created in a seller-purchaser relationship. Horizontal privity exists only between the original contracting parties, despite subsequent owners who are bound by the restriction.[116] According to the Restatement of Property § 2.4, horizontal privity is no longer necessary for creating a servitude, however, not all courts have adopted the Restatement approach. Even in jurisdictions where horizontal privity is required for a restrictive covenant, horizontal privity is not required for enforcement of an equitable servitude.[117]

[115] Restatement (Third) of Prop.: Servitudes § 7.14.
[116] Sprankling, *supra* note 56, at 703.
[117] *Id.* at 713.

v. Vertical Privity

To bind a successor, a restrictive covenant must transfer the entire interest held by the original covenanter when he made the agreement.[118] Similar to horizontal privity, the Restatement Third of Property § 5.2, has questioned the need for vertical privity in all negative covenants. Even if vertical privity is required, it is unlikely applicable in enforcement of a no-slaughter clause. It is nearly impossible for the subsequent purchaser to acquire only a portion of the horse. The only conceivable circumstance in which this might happen is if multiple owners entered into the contract for the sale of the horse. Arguably, each person would only own a portion of the interest in the horse and not the entire interest originally contracted for. But, multiple-owner transactions for most horses are rare and raise issues outside the scope of this discussion. For the purposes of a single-owner no-slaughter clause, vertical privity is not required and thus is not necessary for the burden to run.

vi. Touch and Concern

To touch and concern land, a servitude is either affirmative and requires the owner to do something, or is negative and restricts use.[119] A no-slaughter contract prohibits a successor from selling the horse to a slaughterhouse. The restriction does not dictate the required the use of the horse, the restriction prohibits the successor from doing something with the horse. Both restrictive covenants and equitable servitudes require that the covenant restrict use or require the owner to do something. A no-slaughter clause can probably meet the requirements of a negative covenant because the clause prohibits the sale of the horse to a slaughterhouse and restricts the interest of the horse owner. The Restatement Third of Property § 3.2 eliminates the requirement that servitudes touch and concern land. However, not all jurisdictions have adopted this view.

b. Applying Nadell

By following the reasoning *Nadell,* a court can find a no-slaughter clause satisfies the requirements of a servitude and enforce the restriction against successors in interest. A majority of the other cases in which the courts have upheld servitudes on personal property involved restrictions imposed by a manufacturer of goods. *Nadell* is different from those cases because a manufacturer did not create the servitude;

[118] *Id.* at 703.
[119] *Id.*

the transport company created it. For a court to apply to apply the same reasoning to the transfer of a horse is not unreasonable. Following Judge Hand's recommendation, if the circumstances resemble a servitude, the court should enforce the contract as if the horse was real property. Thus, if a successor chooses to take property and has notice of a restriction associated with that property, he should be bound by the agreement.

Most horses are transferred multiple times during life and the commonplace transferability of horses is one reason why a court might not want to enforce a no-slaughter contract. In *Nadell*, the court acknowledged that equity cannot order specific performance if the nature of the restriction was continuous and would require the court to monitor multiple dealings over an extended period of time. Because horses can live thirty-plus years, a holder of the benefit might need to seek enforcement of the clause more than once during the horse's life. However, as the court in *Pacific E.R. Co. v. Campbell-Johnston* explained, the type of specific performance that requires continuous supervision are related to building or construction type projects. Even if the holder of the benefit sought enforcement against multiple successors in interest, each request for enforcement involves a case against a different possessor. Each time the court decided a case, they would be asked to decide an entirely different situation each time, and not one continuous matter.

The main problem that arises in enforcing no-slaughter clauses is the reluctance of the law to extend servitudes to personal property.[120] In fact, some courts have declined outright to recognize servitudes placed on personal property and, since the 1920s, only a handful of such cases have been upheld.[121] Acceptance of servitudes on personal property in the courts remains extremely slow, but over time the number of cases enforcing servitudes has slowly increased. So, it is not irrational to theorize that a court would enforce a no-slaughter clause if the agreement was properly drafted.

c. Enforcement as a Restrictive Covenant

A no-slaughter clause undoubtedly can meet the requirements of a restrictive covenant. The biggest hurdle the proponent of the covenant must overcome lies with the notice requirement. However, notice can be achieved by multiple means, and holder of the benefit can use more than one method to provide notice to successors. Besides a court's hesitance to enforce personal property servitudes, there are limited reasons why a court would choose not to enforce a no-slaughter contract.

[120] *In re Consolidated Factors Corp.,* 46 F.2d 561, 563 (S.D.N.Y. 1931).
[121] *Id.*

The real problem with a restrictive covenant is that contracts are not the best way for an owner to protect a horse from slaughter. If the holder of the benefit is seeking enforcement of a restrictive covenant, he seeks a remedy of monetary damages. And if the holder of the benefit is seeking a monetary remedy, then the horse has already probably made its way to the slaughterhouse. Additionally, the holder of the benefit would have to prove that the horse was actually sent to slaughter, and obtaining that kind of evidence is likely impossible. As the *Burgess* case showed some people go to great lengths to acquire a free horse to resell for a profit. If the purpose of a no-slaughter clause is to prevent a horse from going to slaughter, then a restrictive covenant may be little more than a deterrent.

d. Enforcement as an Equitable Servitude

Like a restrictive covenant, a no-slaughter clause can meet the requirements of an equitable servitude. Again, notice is probably the biggest hurdle to overcome, but not an impossible feat. An equitable servitude is probably the better option for preventing a horse from going to slaughter. Because an equitable servitude requires an equitable remedy, the holder of the benefit would seek an injunction. The injunction would prevent a successor from selling the horse to slaughter.

However, this remedy is only effective if the holder of the benefit knows in advance that the horse might be sold to slaughter. If the plaintiff in *Burgess* found her horses sooner, she could have sought relief from the court. But in her case, Taylor found out what happened to her horses too late. If recognized by the court, an equitable servitude could prevent a horse from going to slaughter, but an injunction fails as an infallible method of protecting a horse. Like a restrictive covenant, an equitable servitude might be enforced, but should never be relied upon as the only method to protect a horse. Unfortunately, no-slaughter contracts do not appear to have the clout horse owners think they do. The only way to guarantee a horse is never slaughtered is to keep the horse for the duration of its life.

V. Conclusion

Aside from law's reluctance to recognize servitudes on personal property, a no-slaughter clause can fulfill the requirements of a servitude. The main problem with applying a servitude to a horse is obtaining enforcement of the contract before the horse is sold to slaughter. The major differences between real property and a horse is that a horse is alive and can be difficult to keep track of. Unfortunately, because horses are difficult to track, an injunction to prevent a successor from selling a horse to slaughter might come too late. No-slaughter clauses are probably not the most effective way to protect a horse, but they maybe promise that a subsequent owner keeps his word and honors the contract.

Can't We Just Try Federalism? In Defense of a State-by-State Approach to Fracking

Zach Eddy

I. Introduction

In a pair of rulings issued on May 2, 2016, the Colorado Supreme Court invalidated local ordinances that had attempted to ban, or place a moratorium on, hydraulic fracturing operations within two Coloradan localities—the cities of Longmont and Fort Collins.[1] In both cases, the Colorado Supreme Court issued an opinion which held that the local ordinances involved matters of mixed state and local concern.[2] Because it was a matter of both state and local concern, the ordinances were invalidated on the basis of a form of implied preemption—operational conflict.[3]

Hydraulic fracturing is a process that has been highly politicized over the past number of years with both sides presenting compelling arguments for why the process should be encouraged or outlawed.[4] However, this paper is not meant to weigh the potential benefits and costs of continuing the practice of hydraulic fracturing; rather, it sets out to "confront a far narrower, albeit no less significant, legal question[:]"[5] the authority of a locality to regulate and/or ban oil and gas operations.

First, this paper will discuss the history of hydraulic fracturing in an attempt to identify why a state or locality may decide to encourage or ban the practice. Next, this paper will discuss the interplay of state and local authority, along with the various forms of preemption, so to build an understanding of the concepts discussed in the argument. Finally, the paper will summarize relevant cases and statutes related to this field so to compare them with the thesis presented.

The main contention concerning local authority to regulate fracking is as follows: State legislators and regulators are best equipped

---

[1] City of Longmont Colo. v. Colo. Oil & Gas Ass'n, 369 P.3d 573 (Colo. 2016); City of Fort Collins v. Colo. Oil & Gas Ass'n, 369 P.3d 586 (Colo. 2016).

[2] *See* Longmont, 369 P.3d at 581; Fort Collins, 369 P.3d at 593.

[3] *See* Longmont, 369 P.3d at 585; Fort Collins, 369 P.3d at 594.

[4] *E.g.*, Longmont, 369 P.3d at 576 ("As the briefing in this case shows, the virtues and vices of fracking are hotly contested. Proponents tout the economic advantages of extracting previously inaccessible oil, gas, and other hydrocarbons, while opponents warn of health risks and damage to the environment.").

[5] *Id.* at 577.

to deal with the issues associated with fracking; therefore, state laws should operate to preempt bans on fracking passed by localities in most instances. Furthermore, if a state decides—through its legislators or a constitutional amendment—to grant localities the authority to regulate fracking, it is permitted to do so because it should be the state which has authority in the first place. Finally, outright bans on fracking—like those passed by the legislature of Vermont and implemented by an environmental agency in New York—are completely acceptable, but these bans should only be instituted by state legislators or agencies.

a. Background and History of Hydraulic Fracturing

To discuss the authority of a locality to ban or regulate hydraulic fracturing, one must first understand a brief history of the process and how it differs from regular oil and natural gas operations, as it is not all oil and gas operations that most local governments seek to halt, only those which involve hydraulic fracturing. Oil and natural gas are hydrocarbons that "reside in the pore spaces between grains of rock … in the subsurface."[6] In certain geologic formations, oil and natural gas can flow freely from these reservoirs to oil and gas wells.[7] However, these "favorable" conditions do not exist everywhere, as there are certain geologic formations which house extraordinary amounts of oil and gas in "tight formations."[8] In a tight formation, oil and natural gas remain trapped in microscopic pore spaces inside the rocks.[9] Hydraulic fracturing is the proverbial key that unlocks the hydrocarbons from the tight formations.[10]

Hydraulic fracturing (or "fracking") is the process by which oil and natural gas companies extract hydrocarbons from wells that have already been drilled. Fracking involves the high-pressured injection of a chemical mixture into the ground which causes fissures in the rocks that contain the oil and gas, which, in turn, releases those hydrocarbons for extraction.[11] The exact makeup of the chemical mixture varies between oil and natural gas companies, but it is essentially made up of a combination of "mostly water and sand with some chemical additives."[12]

---

[6] *Hydraulic Fracturing Defined*, The Geological Society of America, https://perma.cc/TJM5-HPCT.

[7] *Id.*

[8] *Id.*

[9] *Id.*

[10] *Id.* ("Geologists have long known that large quantities of oil and natural gas occur in formations like these … Hydraulic fracturing can enhance the permeability of these rocks to a point were oil and gas can economically be extracted.").

[11] *Water and Hydraulic Fracturing: A White Paper From the American Water Works Association*, American Water Works Association 2 (2013), https://perma.cc/7U2X-JT5L.

[12] *Id.*

The makeup of the chemical mixture has been at the center of the debate for and against fracking for the past number of years.[13]

On March 17, 1949, the first commercial application of fracking was completed on a well outside Duncan, Oklahoma.[14] By the 1980s, the technology had been applied nearly one million times.[15] The science of fracking took a significant step forward in the 1990s with the development of horizontal drilling.[16] It is this major development that the companies within the United States are still using to extract more hydrocarbons from the ground than was ever thought possible just twenty years ago.[17]

b. The Benefits and Drawbacks of Fracking

The first main benefit of fracking is job growth in both the private and public sectors. According to the Council on Foreign Relations ("CFR"), between 2010 and 2012, the oil and gas operations industry created "169,000 jobs nationwide, growing at a rate about ten times that of overall U.S. employment."[18] The CFR stated, "[s]ince the early days of the shale boom in 2006, the four states with the highest rates of employment growth are the states with the highest shares of oil and gas employment."[19] Other studies show similar results,[20] and the U.S. Chamber of Commerce has predicted: "the extraction of 'unconventional' shale oil and gas through horizontal hydraulic fracturing—or fracking—has meant a job boom even in states that don't

---

[13] *Compare* Reynard Loki, *8 Dangerous Side Effects of Fracking That the Industry Doesn't Want You to Hear About*, Alternet (Apr. 28, 2015), https://perma.cc/48MY-CSFT, *with* Avner Vengosh, *Fracking Wastewater is Mostly Brines, Not Man-Made Fracking Fluids*, Phys.Org (Oct. 17, 2016), https://perma.cc/4KBR-M7L8.

[14] *Shooters—A "Fracking" History*, American Oil & Gas Historical Society, https://perma.cc/XM8L-576J.

[15] *Id.*

[16] *Hydraulic Fracturing's History and Role In Energy Development*, The Geological Society of America, https://perma.cc/U3UV-YHXX.

[17] *How Does Directional Drilling Work?*, Rigzone, https://perma.cc/57E7-EH4S ("One type of directional drilling, horizontal drilling, is used to drastically increase production. Here, a horizontal well is drilled across an oil and gas formation, *increasing production by as much as 20 times more* than that of its vertical counterpart. Horizontal drilling is any wellbore that exceeds 80 degrees, and it can even include more than a 90-degree angle (drilling upward).") (emphasis added).

[18] Stephen P.A. Brown & Mine K. Yucel, *The Shale Gas and Tight Oil Boom: U.S. States' Economic Gains and Vulnerabilities*, Council on Foreign Relations (Oct. 2013), https://perma.cc/62TD-EP2B.

[19] *Id.*

[20] *U.S. Fracking Boom Added 725,000 Jobs – Study*, Reuters (Nov. 6, 2015), https://perma.cc/KN6H-MDPQ ("A U.S. oil and gas drilling boom fueled by hydraulic fracturing technology added about 725,000 jobs nationwide between 2005 and 2012, blunting the impact of the financial crisis … .").

actually have shale deposits, with 1.7 million jobs already created and a total of 3.5 million projected by 2035."[21]

Another major economic benefit of fracking is the economic investment opportunities that the process brings to a state. Researchers in various states have measured the total economic impacts of fracking on their state economies. For example, in Ohio, researchers have estimated that—as of the fall of 2015—shale-related economic investments have totaled over $33.7 billion in that state alone.[22] Furthermore, an economic report completed by the University of Colorado-Boulder shows that oil and gas development in Colorado totaled $31.7 billion in the year 2014.[23] Other studies from other states with substantial oil and natural gas reserves show similar results.[24]

The potential health concerns, environmental concerns, and societal concerns of fracking are well-documented and numerous.[25] The National Resource Defense Counsel ("NRDC") has identified a number of "severe environmental impacts and public health threats" that result from fracking, including loud noises, bright lights, emission of smog from industrial equipment, and damage to local roadways.[26] Also, the NRDC has stated that potentially dangerous methane leaks, explosions, earthquakes, and chemically-laced wastewater polluting drinking water are all concerns that can result from the increased use of fracking in the United States.[27]

---

[21] Kari Lydersen, *U.S. Chamber's Fracking Job Boom: Behind the Numbers*, Midwest Energy News (Jan. 10, 2013), https://perma.cc/7TQN-LK4G.

[22] *In the Headlines: Shale Development Continues to Make Positive Impact on Ohio Economy*, Bricker & Eckler, Attorneys at Law (Nov. 10, 2015), https://perma.cc/AR45-S2PK.

[23] *See* Richard Wobbekind & Brian Lewandowski, *Oil and Gas Industry Economic and Fiscal Contributions in Colorado by County, 2014*, Business Research Division, Leeds School of Business, University of Colorado – Boulder 2 (Dec. 2015), https://perma.cc/C2N2-Z4X5.

[24] *See generally Executive Summary – Economic Impact of the Oil & Gas Industry on Oklahoma*, State Chamber of Oklahoma: Research Foundation, https://perma.cc/M7W4-CLFJ; *see also The Economic Benefits of Oil and Natural Gas Production: An Analysis of Effects on the United States and Major Energy-Producing States*, The Perryman Group (Aug. 2014), https://perma.cc/D38K-79EX.

[25] Joe Hoffman, *Potential Health and Environmental Effects of Hydrofracking in the Williston Basin, Montana*, https://perma.cc/N4SM-LFZB (identifying the following as risks/concerns of fracking: contamination of groundwater, methane pollution and its impact on climate change, air pollution impacts, exposure to toxic chemicals, blowouts due to gas explosion, waste disposal, large volume water use in water-deficient regions, fracking-induced earthquakes, workplace safety, and infrastructure degradation).

[26] Alexandra Zissu, *How to Tackle Fracking in Your Community: Stand Up to Oil and Natural Gas Companies Using this Three-Pronged Approach*, National Resources Defense Council (Jan. 27, 2016), https://perma.cc/2PD7-CRG2.

[27] *Id.*

II. State Government Authority vs. Locality Authority

Having explained the history and various drawbacks and benefits of fracking, this paper turns to the interplay between various levels of governmental authority.

a. The Federal Government and the Tenth Amendment

Although the federal government is a government of expansive power, its powers are express and enumerated.[28] Where the federal government lacks the authority to regulate an activity, the Tenth Amendment is recognized to fill in the gap.[29] The Tenth Amendment states: "The powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people."[30]

Because the power to regulate the operations of fracking (or more generally, the extraction of minerals) within the individual states is not enumerated in the Constitution, the federal government lacks the general authority to regulate oil and natural gas operations that occur within particular states. That is not to say that the federal government lacks any authority to regulate oil and gas operations,[31] but it is to say that for purposes of banning fracking operations within particular states, the power to do so most likely lies with state governments, or the people

[28] *See* United States v. Comstock, 560 U.S. 126, 133 (2010) ("Nearly 200 years ago, this Court stated that the Federal Government is acknowledged by all to be one of enumerated powers, which means that every law enacted by Congress must be based on one or more of those powers.") (citing McCulloch v. Maryland, 17 U.S. 316, 405 (1819); United States v. Morrison, 529 U.S. 598, 607 (2000)) (citations and quotation marks omitted).

[29] *See* Alden v. Maine, 527 U.S. 706, 713–14 (1999) ("The limited and enumerated powers granted to the Legislative, Executive, and Judicial Branches of the National Government, moreover, underscore the vital role reserved to the States by the constitutional design. Any doubt regarding the constitutional role of the States as sovereign entities is removed by the Tenth Amendment, which, like the other provisions of the Bill of Rights, was enacted to allay lingering concerns about the extent of the national power. The Amendment confirms the promise implicit in the original document … .") (citations omitted).

[30] U.S. Const. amend. X.

[31] *See* United States v. Darby, 312 U.S. 100, 124 (1941) ("There is nothing in the history of [the] adoption [of the Tenth Amendment] to suggest that it was more than declaratory of the relationship between the national and state governments as it had been established by the Constitution before the amendment … From the beginning and for many years the amendment has been construed as not depriving the national government of authority to resort to all means for the exercise of a granted power which are appropriate and plainly adapted to the permitted end.") (citations omitted).

of the state.[32] In fact, the federal government specifically removed regulation of fracking operations from the Department of Interior (and more specifically the Bureau of Land Management ("BLM")) in the Federal Policy Act of 2005 in what has come to be referred to as the "Halliburton Loophole."[33] The Act excluded from the term "underground injection," "the underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities."[34] Furthermore, in a recent order, the District of Wyoming held that the BLM lacked the statutory authority to regulate fracking on federal and Indian lands.[35]

b. Types of Local Authority (Dillon's Rule vs. Home Rule)

With fifty different states, there is likely to be at least fifty different approaches to local government authority.[36] The main question to answer when it comes to local government authority is the question: from where does the municipality derive its power? Although there is variety among the states on how to answer this fundamental question, there have been two main doctrines that have emerged which define a locality's power to regulate activities within their borders: Dillon's Rule and Home Rule.

"Dillon's Rule" has been the default rule within the United States since the late 1860s.[37] The doctrine finds its origin in Iowa Supreme Court Chief Justice Dillon's famous words in *Clinton v. Cedar Rapids and Missouri River Railroad Company*:[38]

---

[32] Honorable Jon D. Russell & Aaron Bostrom, *White Paper: Federalism, Dillon Rule, and Home Rule*, American City County Exchange 3 (Jan. 2016), https://perma.cc/Y9CH-9BPQ ("[T]he states retained their power in all areas and to the degree not enumerated or detailed. The Tenth Amendment of the Constitution reads, 'The powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people.' Therefore, while the federal government's powers consist of an enumerated few, state powers are both numerous and indefinite.").

[33] *Safety First, Fracking Second: Drilling for Natural Gas has Gotten Ahead of the Science Needed to Prove it Safe*, Scientific American (Nov. 1, 2011), https://perma.cc/34CE-XRT8 ("In 2005 Congress—at the behest of then Vice President Dick Cheney, a former CEO of gas driller Halliburton—exempted fracking from regulation under the Safe Water Drinking Act.").

[34] 42 U.S.C. § 300h(d)(1)(B)(ii).

[35] State of Wyoming v. United States Department of Interior, 2:15-cv-043-SWS, 2016 WL 3509415, *10 (D. Wyo. June 21, 2016) (holding that the Energy Policy Act of 2005 "indicates clearly that hydraulic fracturing is not subject to federal regulation unless it involves the use of diesel fuels").

[36] *See Local Government Authority*, National League of Cities, https://perma.cc/VFE8-S439.

[37] 1-21 Antieau on Local Government Law, Second Edition § 21.01 (2nd 2015).

[38] Clinton v. Cedar Rapids & M. R. R. Co., 24 Iowa 455, 475 (1868) (emphasis in original).

> The true view is this: Municipal corporations owe their origin to, and derive their powers and rights wholly from, the legislature. It breathes into them the breath of life, without which they cannot exist. As it creates, so it may destroy. If it may destroy, it may abridge and control. … We know of no limitation on this right so far as the corporations themselves are concerned. They are, so to phrase it, the mere tenants at *will* of the legislature.

As the doctrine evolved, it became clear that, under Dillon's Rule, "a municipal corporation possesses only those powers that are: (1) expressly granted by [the state], (2) necessarily or fairly implied in or incidental to the powers expressly granted, or (3) essential to the declared objects and purposes of the corporation, not simply convenient but indispensable."[39] Furthermore, "Any fair, reasonable doubt concerning the existence of the power is resolved by the courts against the corporation and the power is denied."[40]

Chief Justice Dillon's famous passage soon became the default rule by which courts at various levels defined a local government's authority. In fact, the Supreme Court later echoed Dillon's premise in 1907: "Municipal corporations are political subdivisions of the State, created as convenient agencies for exercising such of the governmental powers of the State as may be entrusted to them."[41] Nearly 150 years after Chief Justice Dillon's opinion in *Clinton v. Cedar Rapids*, eight states still apply Dillon's Rule to various types of local governments within their states.[42] Furthermore, in January of 2016, the American City County Exchange stated that "[t]hirty-one states apply the Dillon Rule or a combination of Dillon's Rule and Home Rule to local jurisdictions."[43]

"Home Rule" is the modern-day response to Dillon's Rule.[44] Home rule is the doctrine that assures "political subdivisions of the State the power of selfgovernment [sic] and freedom from interference, by the Legislature, in the exercise of that power."[45] Because Dillon's Rule used to be the prevailing rule in regards to a local government's authority,

---

[39] Waste Mgmt. Holdings v. Gilmore, 252 F.3d 316, 331 (4th Cir. 2001) (applying state law) (internal quotation marks omitted).

[40] *Id.* (quotation marks omitted).

[41] Hunter v. Pittsburgh, 207 U.S. 161, 178 (1907).

[42] Honorable Jon D. Russell & Aaron Bostrom, *supra* note 32, at 5 (identifying California, Colorado, Kansas, Louisiana, Alabama, Tennessee, Illinois, and Indiana as states that apply Dillon Rule to Certain Local Jurisdictions).

[43] *Id.* at 8.

[44] 1-21 Antieau on Local Government Law, Second Edition § 21.01 (2nd 2015).

[45] Baltimore v. Sitnick, 255 A.2d 376, 379 (Md. 1969).

it was through state constitutional amendments that municipalities first began to be vested with legislative home rule.[46] In 1875, Missouri became the first state to pass a Home Rule charter.[47] All in all, forty-four states have now adopted Home Rule in one form or another.[48] As stated above, states can apply both Home Rule and Dillon's Rule in their states at the same time, and in fact, most states do just that.[49]

One special form of Home Rule is *imperium in imperio*. This Home Rule is a type of legislative home rule that further entrusts local government's with broad inherent authority: "the doctrine of imperium in imperio home rule grants a broad but defined scope of power to local governments."[50] The scope of this form of home rule is very broad but limits a local government's home rule to matters that are deemed "municipal affairs."[51] Generally, municipal affairs include the authority to protect, or regulate for, the public health, safety, and welfare.[52] It follows, local ordinances passed by an *imperium in imperio* municipality supersede state statutes if the matter is "purely [of] local [or] municipal concern."[53] It is important to note, however, that "in manners of statewide concern state statutes supersede local charter provisions and ordinances of home rule cities."[54] Whether or not a local ordinance or state statute supersedes turns on the outcome of the preemption analysis.

c. Preemption of Local Authority by State Government

Generally, "If local legislation conflicts with state law, it is preempted."[55] "[A] legislature can preempt [local] authority and may do so either expressly or by implication."[56] Preemption is "[t]he principle (derived from the Supremacy Clause) that a federal law can supersede

[46] *See e.g.*, St. Louis v. W. Union Tel. Co., 149 U.S. 465, 467 (1893); *see also*, Oh. Const. art. XVIII, § 7 ("Any municipality may frame and adopt or amend a charter for its government and may … exercise thereunder all powers of local self-government.").

[47] Honorable Jon D. Russell & Aaron Bostrom, *supra* note 32, at 6.

[48] *Id.*

[49] See id. at 8 ("A state which is both a Home Rule state and a Dillon Rule state applies the Dillon Rule to matters or governmental units not accounted for in the constitutional amendment or statute which grants Home Rule. Thirty-one states apply the Dillon Rule or a combination of Dillon's Rule or Home Rule to local jurisdictions.")

[50] Jarit C. Polley, *Uncertainty for the Energy Industry: A Fractured Look at Home Rule*, 34 Energy L.J. 261, 272–73 (2013).

[51] *Id.* at 273.

[52] *Id.*

[53] Colo. Springs v. Indus. Com. of Colo., 749 P.2d 412, 416 (Colo. 1988).

[54] *Id.*

[55] Cal. Rifle & Pistol Ass'n v. City of W. Hollywood, 66 Cal. App. 4th 1302, 1310 (1998).

[56] Phantom of Clearwater, Inc. v. Pinellas Cty., 894 So. 2d 1011, 1018 (Fla. Dist. Ct. App. 2005).

or supplant any inconsistent state law or regulation."[57] Although initially developed as a concept of federal law, preemption doctrine applies in the same way to state and local governments as well.[58]

State law can preempt local ordinances through either "1. preemption by conflict, 2. express preemption, or 3. implied preemption."[59] These different types of preemption can have various names depending on the jurisdiction analyzing the issue, but the types of preemption are generally broken down into two categories: express preemption and implied preemption.[60] Implied preemption can further be divided into two different types: conflict preemption[61] and field preemption.[62]

i. Express Preemption

Express preemption of a local ordinance "occurs when a general State law expressly denies a local government the power to act on a specific issue or in a specific area."[63] The concept of express preemption has been said to "require[] a specific legislative statement; it cannot be implied or inferred."[64] In order to effectuate the express preemption of a local law, "the statute [must] contain specific language of preemption directed to the particular subject at issue."[65]

ii. Implied Field Preemption

Field preemption is the first type of implied preemption. Field preemption occurs when "legislative intent to preempt local laws is inferred from a comprehensive scheme of legislation."[66] The comprehensive scheme of legislation arises "where the state has occupied the field of prohibitory legislation on a particular subject, a municipality lacks authority to legislate with respect to it."[67]

---

[57] Black's Law Dictionary (10th ed. 2014).

[58] Hoffman Mining Co. v. Zoning Hearing Bd., 32 A.3d 587, 593–94 (Pa. 2011).

[59] Altadis U.S.A., Inc. v. Prince George's Cty., 65 A.3d 118, 120 (Md. 2013).

[60] Sarasota All. for Fair Elections, Inc. v. Browning, 28 So. 3d 880, 886 (Fla. 2010).

[61] Fross v. Cty. of Allegheny, 20 A.3d 1193, 1203 (Pa. 2011).

[62] Hoffman Mining Co., *supra* note 58, at 602.

[63] 1-22 Antieau on Local Government Law, Second Edition § 22.02 (2nd 2016).

[64] Lake Hamilton Lakeshore Owners Ass'n v. Neidlinger, 182 So. 3d 738, 742 (Fla. Dist. Ct. App. 2015).

[65] Santa Rosa Cty. v. Gulf Power Co., 635 So. 2d 96, 101 (Fla. Dist. Ct. App. 1994).

[66] Butler Cty. Dairy, L.L.C. v. Butler Cty., 827 N.W.2d 267, 287 (Neb. 2013) (internal quotation marks omitted).

[67] State ex rel. City of Alma v. Furnas Cty. Farms, 667 N.W.2d 512, 522 (Neb. 2003).

iii. Implied Conflict Preemption

Conflict preemption embodies "the self-evident principle that a municipal ordinance cannot be sustained to the extent that it is contradictory to, or inconsistent with, a state statute.[68] Local laws are preempted "when a right or benefit is expressly given by State law which has then been curtailed or taken away by the local law."[69] In other words, local laws are preempted "when a local law prohibits what a state law explicitly allows, or when a state law prohibits what a local law explicitly allows."[70] However, a local law need not be explicitly contradictory to a state statute to be preempted: "a local ordinance that contradicts, contravenes, or is inconsistent with a state statute is invalid.[71]

III. Notable Case Law on the Authority of Localities to Regulate Fracking

Having developed an understanding of the basic concepts of local authority, as opposed to state authority, this paper turns to summarizing the major state court decisions on this issue.

a. Robinson Tp. v. Commonwealth, 83 A.3d 901 (Pa. 2013)

In 2013, the Pennsylvania Supreme Court considered a number of challenges to several statutory provisions related to the exploration and exploitation of oil and natural gas in Pennsylvania.[72] The provisions purported to expressly preempt any local regulations already regulated under state law.[73]

At issue in *Robinson* was whether the Pennsylvania General Assembly could preempt city ordinances regarding fracking in the context of a special constitutional provision—the Environmental Rights Amendment ("ERA").[74] The Pennsylvania ERA states:

---

[68] Hoffman Mining Co., *supra* note 58, at 594 (internal quotation marks omitted).

[69] N.Y. State Assn. for Affordable Hous. v. Council of the City of N.Y., 33 N.Y.S.3d 202, 214 (App. Div. 2016).

[70] *Id.* at 215.

[71] Holt's Cigar Co. v. City of Phila., 10 A.3d 902, 907 (Pa. 2011).

[72] Robinson Twp. v. Commonwealth, 83 A.3d 901, 913 (Pa. 2013).

[73] *See* 58 Pa. Const. Stat. 3303 (2012) ("The Commonwealth by this section, preempts and supersedes the local regulation of oil and gas operations regulated by the environmental acts, as provided in this chapter.").

[74] *See* Robinson, 83 A.3d at 948–49.

> The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.[75]

This constitutional provision established protection of the environment as a fundamental right of the people of Pennsylvania.[76]

In a splintered decision, a plurality of the state supreme court held that the statutory provisions "transgressed [the General Assembly's] delegated police powers which, while broad and flexible, are nevertheless limited by constitutional commands, including the Environmental Rights Amendment."[77] The Court centered its opinion around the state constitution's environmental rights amendment and reasoned, "the General Assembly has no authority to remove a political subdivision's implicitly necessary authority to carry into effect its constitutional duties [of protecting the environment.]"[78] Central to the state supreme court's holding was the fact that the statutory provisions preempting local ordinances related to fracking disrupted regulations already put in place by municipalities pursuant to the ERA; essentially, the state could not force a municipality to disregard its already preexisting duties under the ERA.[79]

---

[75] *Id.* (citing Pa. Const. art. I, § 27).

[76] *See* Robinson, 83 A.3d at 947 ("Specifically, ours is a government in which the people have delegated general powers to the General Assembly, but with the express exception of certain fundamental rights reserved to the people in Article I of our Constitution.").

[77] *See id.* at 978 ("The Commonwealth, by the General Assembly, declares in Section 3303 that environmental obligations related to the oil and gas industries are of statewide concern and, on that basis, the Commonwealth purports to preempt the regulatory field to the exclusion of all local environmental legislation that might be perceived as affecting oil and gas operations. Act 13 thus commands municipalities to ignore their obligations under Article I, Section 27 and further directs municipalities to take affirmative actions to undo existing protections of the environment in their localities. The police power, broad as it may be, does not encompass such authority to so fundamentally disrupt these expectations respecting the environment.").

[78] *Id.* at 977.

[79] *See id.* (The municipalities affected by Act 13 all existed before that Act was adopted … To put it succinctly, our citizens buying homes and raising families in areas zoned residential had a reasonable expectation concerning the environment in which they were living, often for years or even decades. Act 13 fundamentally disrupted those expectations, and ordered local government to take measures to effect the new uses, irrespective of local concerns. The constitutional command respecting

b. Matter of Wallach v. Town of Dryden, 16 N.E.3d 1188 (N.Y. 2014)

In 2014, the New York Court of Appeals took up the issue of "whether towns may ban oil and gas production activities, including hydrofracking, within municipal boundaries through the adoption of local zoning laws."[80] The New York high court held 'yes,' reasoning that state oil and gas law "d[id] not preempt the home rule authority vested in municipalities to regulate land use."[81] The Court of Appeals performed a preemption analysis[82] and found that the plain language of the statutes did not preempt local action.[83]

The Court of Appeals then examined the statutory scheme.[84] Under this analysis, the Court also rejected arguments that implied field preemption could work to preempt the local bans on fracking.[85] Finally, the state high court looked to the legislative history of the statutes,[86] finding that "[n]othing in the legislative history undermines our view that the suppression clause does not interfere with local zoning laws regulating the permissible and prohibited uses of municipal land."[87] The Court concluded: Examination of "the plain language, statutory scheme and legislative history … leads us to conclude that the Towns appropriately acted within their home rule authority in adopting the challenged zoning laws. We can find no legislative intent, much less a requisite 'clear expression,' requiring the preemption of local land use regulations."[88]

---

the environment necessarily restrains legislative power with respect to political subdivisions that have acted upon their Article I, Section 27 responsibilities … .").

[80] Matter of Wallach v. Town of Dryden, 16 N.E.3d 1188, 1191 (N.Y. 2014).

[81] *Id.* at 1191–92.

[82] *See id.* at 1195 ("[A]s a political subdivision of the State, a town may not enact ordinances that conflict with the State Constitution or any general law. Under the preemption doctrine, a local law promulgated under a municipality's home rule authority must yield to an inconsistent state law as a consequence of 'the untrammeled primacy of the Legislature to act with respect to matters of State concern.' But we do not lightly presume preemption where the preeminent power of a locality to regulate land use is at stake. Rather, we will invalidate a zoning law only where there is a 'clear expression of legislative intent to preempt local control over land use[.]'") (internal citations omitted).

[83] *See id.* at 1198 ("In sum, the plain language of [the Act] does not support preemption with respect to the Towns' zoning laws.").

[84] *Id.* at 1198.

[85] *See id.* at 1199 ("[W]e perceive nothing in the various provisions of the OGSML indicating that the supersession clause was meant to be broader than required to preempt conflicting local laws directed at the technical operations of the industry.").

[86] *Id.* at 1200.

[87] *Id.* at 1201.

[88] *Id.*

c. State ex rel. Morrison v. Beck Energy Corp., 37 N.E.3d 128 (Ohio 2015)

In 2015, the Ohio Supreme Court took up the issue of "whether the Home Rule Amendment to the Ohio Constitution grants to the city of Munroe Falls the power to enforce its own permitting scheme atop the state system."[89] In that case, after Beck Energy Corporation received a permit for the purpose of drilling an oil and gas well within the corporate limits of Munroe Falls, the city attempted to "stop Beck Energy from drilling based on its own municipal ordinances."[90]

In controversy was Ohio Revised Code Chapter 1509,[91] which "centralizes regulatory authority in state government, entrusting a division of ODNR with 'sole and exclusive authority to regulate the permitting, location, and spacing of oil and gas wells and production operations' within Ohio (excepting certain activities regulated by federal laws)."[92] Also important in the statutory analysis was the fact that "R.C. 1509.02 expressly prohibits a local government from exercising those powers 'in a manner that discriminates against, unfairly impedes, or obstructs oil and gas activities and operations regulated under [R.C. Chapter 1509].'"[93]

The Court performed a conflict preemption analysis.[94] In the end, the state supreme court held, "the Home Rule Amendment to the Ohio Constitution, Article XVIII, Section 3, does not allow a municipality to discriminate against, unfairly impede, or obstruct oil and gas activities and production operations that the state has permitted under R.C. Chapter 1509."[95] The majority opinion also rejected a number of policy considerations and arguments presented by the municipality.[96] In

---

[89] State ex rel. Morrison v. Beck Energy Corp., N.E.3d 128, 131 (Ohio 2015).

[90] *Id.*

[91] *See id.* (The Court noted the following about R.C. Chapter 1509: "In 2004, the General Assembly amended that chapter to provide 'uniform statewide regulation' of oil and gas production within Ohio and to repeal 'all provisions of law that granted or alluded to the authority of local governments to adopt concurrent requirements with the state.'") (citing Legislative Service Commission Bill Analysis, Sub. H.B. No. 278 (2004); R.C. 1509.02, Sub. H.B. No. 278, 150 Ohio Laws, Part III, 4157).

[92] *Id.* at 131.

[93] *Id.* at 132.

[94] *See id.* at 133 ("The Home Rule Amendment does not, however, allow municipalities to exercise their police powers *in a manner that conflicts with general laws*. Therefore, a municipal ordinance must yield to a state statute if (1) the ordinance is an exercise of the police power, rather than of local selfgovernment, (2) the statute is a general law, and (3) the ordinance is in conflict with the statute.") (internal citations and quotation marks omitted) (emphasis added).

[95] *Id.* at 138.

[96] *See id.* at 137 ("The city presents a variety of policy reasons why local governments and the state should work together, with the state controlling the details

the end, the Court reasoned: "Article II, Section 36 vests the General Assembly with the power to pass laws providing for the 'regulation of methods of mining, weighing, measuring and marketing coal, oil, gas and all other minerals.' With the comprehensive regulatory scheme in R.C. Chapter 1509, the General Assembly has done exactly that."[97]

d. City of Longmont Colo. v. Colo. Oil & Gas Ass'n, 369 P.3d 573 (Colo. 2016); City of Fort Collins v. Colo. Oil & Gas Ass'n, 369 P.3d 586 (Colo. 2016)

In a pair of rulings issued on the same day, the Colorado Supreme Court invalidated local ordinances which had attempted to ban,[98] or place a moratorium on,[99] fracking. In the main opinion, *Longmont*,[100] the state supreme court identified the issue as "whether the City of Longmont's bans on fracking and the storage and disposal of fracking waste within its city limits are preempted by state law."[101] In the fall of 2012, residents of Longmont voted to add a ban on fracking to the municipality's charter.[102] One year later, in the fall of 2013, citizens of Fort Collins voted to place a moratorium on fracking operations, which was designed to prohibit "fracking or storing fracking waste in Fort Collins until 2018."[103] Both municipalities involved were home rule municipalities.[104]

---

of well construction and operations and the municipalities designating which land within their borders is available for those activities. This is no doubt an interesting policy question, but it is one for our elected representatives in the General Assembly, not the judiciary. … Rather, our holding is limited to the five municipal ordinances at issue in this case.").

[97] *Id.* at 137–38 (emphasis deleted) (quoting Ohio Const. art. II, § 36).

[98] City of Longmont Colo. v. Colo. Oil & Gas Ass'n, 369 P.3d 573 (Colo. 2016).

[99] City of Fort Collins v. Colo. Oil & Gas Ass'n, 369 P.3d 586 (Colo. 2016).

[100] In the other opinion issued by the Colorado Supreme Court that day, *Fort Collins*, the Court identified the issue there as "whether state law preempts Fort Collin's fracking moratorium." 369 P.3d at 589.

[101] Longmont, 369 P.3d at 577.

[102] *See id.*

[103] *See* Fort Collins, 369 P.3d at 589.

[104] *See* Longmont, 369 P.3d at 577; Fort Collins, 369 P.3d at 589; see also, Colo. Const. art. XX, § 6 ("The people of each city or town of this state … are hereby vested with, and they shall always have, power to make, amend, add to or replace the charter of said city or town, which shall be its organic law and extend to all its local and municipal matters. Such charter and the ordinances made pursuant thereto in such matters shall supersede within the territorial limits and other jurisdiction of said city or town any law of the state in conflict therewith.").

The state supreme court discussed, at length, the various levels of home rule authority and independence in the preemption context.[105] First, the Court noted: "To ensure home-rule cities this constitutionally-guaranteed independence from state control in their internal affairs, we have consistently said that *in matters of local concern*, a home-rule ordinance supersedes a conflicting state statute."[106] On the other hand, the Court noted: "In contrast, when a home-rule ordinance conflicts with state law in a matter of either *statewide* or *mixed state and local concern*, the state law supersedes that conflicting ordinance."[107] The Court identified operational conflict as the basis for analyzing the ban in *Longmont*.[108]

In both cases, the Colorado Supreme Court issued opinions which held that the local ordinances involved matters of mixed state and local concern[109] and, therefore, were invalidated because they were preempted on the basis of an operational conflict ("implied conflict preemption").[110] The Court concluded that "in its operational effect, [the ban], which bans both fracking and the storage and disposal of fracking waste within Longmont, materially impedes the application of state law … We therefore hold that state law preempts [the ban]."[111] Similar analysis and reasoning was used to strike down the moratorium as well.[112]

---

[105] *See* Longmont, 369 P.3d at 579–80.

[106] *Id.* at 579 (emphasis added).

[107] *Id.* (emphasis added).

[108] *See id.* at 583 ("For the sake of clarity and consistency, we will analyze an operational conflict by considering whether the effectuation of a local interest would materially impede or destroy a state interest, recognizing that a local ordinance that authorizes what state law forbids or that forbids what state law authorizes will necessarily satisfy this standard.").

[109] In *Longmont*, the state supreme court identified the test as follows: "To determine whether a regulatory matter is one of statewide, local, or mixed state and local concern, 'we weigh the relative interests of the state and the municipality in regulating the particular issue in the case,' making the determination on a case-by-case basis considering the totality of the circumstances. The pertinent factors that guide our inquiry include (1) the need for statewide uniformity of regulation, (2) the extraterritorial impact of the local regulation, (3) whether the state or local governments have traditionally regulated the matter, and (4) whether the Colorado Constitution specifically commits the matter to either state or local regulation." *Id.* at 580 (citations omitted).

[110] Longmont, 369 P.3d at 585; Fort Collins, 369 P.3d at 594.

[111] Longmont, 369 P.3d at 585.

[112] *See* Fort Collins, 369 P.3d at 594 ("[W]e conclude that Fort Collins's five-year moratorium on fracking and the storage of fracking waste within the city operationally conflicts with the application of the Oil and Gas Conservation Act and the rules and regulations promulgated pursuant thereto. We therefore hold that the Act preempts Fort Collins's moratorium.").

IV. Notable State Statutes/Policies Related to Preemption of Local Regulations of Fracking

State courts are not the only entities to have discussed the interplay between state and local authorities on the issue of fracking. As outlined below, state governments have weighed in as well.

a. Vt. Stat. Ann. tit. 29, § 571. Hydraulic fracturing; prohibition

In 2011, the Vermont legislature passed a ban on fracking in their state, and the bill became effective on May 16, 2012.[113] Subsection (a) of the law states that "no person may engage in hydraulic fracturing in the State."[114] Subsection (b) establishes that "no person within the State may collect, store, or treat wastewater from hydraulic fracturing."[115]

At first glance, the law appears to be an example of express preemption; however, upon a closer look, it is apparent that the law never actually states that any local ordinances are expressly preempted.[116] Therefore, the Vermont statute is an example of implied field preemption of potential local ordinances. By the plain language of the statute, the state legislature has regulated the area so pervasively that there is no room for local governmental authorities to regulate.

b. Findings Statement, Final Supplemental Generic Environment Impact Statement of the Oil, Gas and Solution Mining Regulatory Program

In 2015, the New York Department of Environmental Conservation concluded nearly a seven-year process[117] in which the Department assessed the environmental impacts of fracking within the State of New York.[118] After the process was complete, the Department concluded: "The Department's chosen alternative to prohibit high-volume hydraulic fracturing is the best alternative based on the balance between protection of the environment and public health and economic and social considerations."[119]

---

[113] *Vermont First State to Ban Fracking*, Cnn (May, 17, 2012), https://perma.cc/7AE8-4R5D; *see also*, Vt. Stat. Ann. tit. 29, § 571.

[114] Vt. Stat. Ann. tit. 29, § 571(a).

[115] *Id.* at § 571(b).

[116] *See id.* at § 571.

[117] *Findings Statement, Final Supplemental Generic Environment Impact Statement of the Oil, Gas and Solution Mining Regulatory Program*, at 42 (June 29, 2015), https://perma.cc/8JXT-FWVC.

[118] *See id.* ("In the end, there are no feasible or prudent alternatives that would adequately avoid or minimize adverse environmental impacts and that address the scientific uncertainties and risks to public health from this activity.")

[119] *Id.*

The conclusion of the Findings Statement operates to bar the state agency from issuing permits to oil and gas companies to operate in the state. As a result of the Findings Statement, this state policy operates to preempt any possible local legislation permitting oil and gas operations. This policy would also operate as field preemption, as did the Vermont ban, because the state has regulated the industry so pervasively that no local ordinances could operate to regulate oil and gas companies in New York State.

c. Tex. Nat. Res. Code § 81.0523

In May of 2015, the Texas legislature declared exclusive jurisdiction over the authority to ban fracking in that state. In subsection (b) of Section 81.0523 of the Texas Natural Resources Code, entitled "Exclusive Jurisdiction and Express Preemption," the Code states: "An oil and gas operation is subject to the exclusive jurisdiction of this state. Except as provided by Subsection (c), a municipality … may not enact or enforce an ordinance … that bans, limits, or otherwise regulates an oil and gas operation within the boundaries or extraterritorial jurisdiction of the municipality."[120] Subsection (c) provides for a number of areas in which a municipality may regulate oil and gas operations.[121]

This statute serves as a clear example of express preemption of a local government's authority over fracking by a state legislature.[122]

d. Okla. Stat. tit. 52, § 137.1

Also in May of 2015, the Oklahoma legislature—like its neighbor, Texas—passed a bill, which was signed into law, that claimed exclusive jurisdiction over the authority to ban fracking within that state. The law states: "A municipality … may enact reasonable ordinances … concerning road use, traffic, noise and odors incidental oil and gas operations within its boundaries, provided such ordinances, rules and regulations are not inconsistent with any regulation established by Title 52 of the Oklahoma Statutes or the Corporation Commission."[123] The Oklahoma statute goes on to allow for other reasonable regulations

[120] Tex. Nat. Res. Code § 81.0523(b).

[121] *See id.* at § 81.0523(c) ("The authority of a municipality or other political subdivision to regulate an oil and gas operation is expressly preempted, except that a municipality may enact, amend, or enforce an ordinance or other measure that: [identifying four instances in which a municipality may regulate oil and gas operations].").

[122] *See id.* ("The authority of a municipality or other political subdivision to regulate an oil and gas operation is expressly preempted … .").

[123] Okla. Stat. tit. 52, § 137.1.

for fencing and setbacks to protect health, safety and welfare, but it restrains localities from "effectively prohibit[ing] or ban[ning] any oil and gas operations."[124] Finally, the statute states, "All other regulations of oil and gas operations shall be subject to the exclusive jurisdiction of the Corporation Commission.[125]

Similar to the Texas state statute, the Oklahoma law expressly preempts any potential local ordinance that may attempt to ban oil and gas operations.[126]

V. The State is Best Equipped to Deal with the Issues Associated with Fracking; Therefore, State Laws Should Operate to Preempt Bans on Fracking Passed by Localities.

Finally, having discussed the history of fracking, the interplay between state and local governments in regulating fracking, and the various court decisions and statutes related to this area of law, this paper turns to the main thesis and two sub-theses associated with it.

a. It is the state government which should be vested with the authority to regulate fracking, and even if the local government claims some authority to regulate fracking, state law should preempt local bans on the practice.

There are three main premises that support a state government's authority to regulate fracking. The first is that it is the state government—through its constitution and the federal constitution—which possesses the inherent authority over the process of fracking in the first instance. The second main reason for a state government's authority over fracking is that local ordinances will be supplanted by some type of preemption because of a state statutory and/or regulatory scheme. The third main reason is that, from a pure public policy perspective, it is more desirable to have state authority over fracking operations than local authority.

i. Inherent State Authority to Regulate Fracking Reserved in the Tenth Amendment

State legislative bodies and administrative bodies should and, in most instances, do possess the authority to regulate fracking operations. By identifying that it is the state governments that have and retain

[124] *See id.*
[125] *Id.*
[126] *See id.*

control over the ability to regulate, or ban, fracking operations, it is implied that neither the federal government nor local governments have the power to pervasively regulate and/or ban fracking. The lack of federal government authority will be discussed here; the lack of local government authority will be discussed in the Dillon's Rule and Home Rule/preemption contexts.

First, the federal government does not—and should not—have the ability to ban fracking within the individual states. Recall, the Tenth Amendment reserves all powers, not expressly delegated to the federal government in the Constitution, to the states or to the people of the states.[127] The authority to regulate utilization of natural resources within a state was not a power delegated to the federal government in Articles I, II, or III of the Constitution. There is no doubt that federal legislators have certain sources of power to regulate natural resources.[128] But, as the Energy Policy Act of 2005 made clear, the federal Congress intended to withdraw regulatory authority over fracking.[129] Because the state does have the inherent authority under the Tenth Amendment, and the federal government has expressly removed regulation of all hydraulic fracturing operations except those involving the use of diesel fuels from its power, it is clear that the state government does have the inherent authority to regulate fracking, as opposed to the federal government.

ii. Dillon's Rule and the Lack of Local Government Authority to Regulate Fracking Generally

Local governments lack the authority to substantially regulate fracking—to the point of banning the practice—for two main reasons. The first main argument against a locality's authority to ban fracking operations is the concept of Dillon's Rule. The other main argument against a locality's authority to ban fracking operations is, even if the locality is a Home Rule locality, the local ordinances banning fracking will be preempted by state law, either expressly or through some form of implied preemption.

Dillon's Rule was the majority rule among the states for a number of years. The concept of Dillon's Rule can be summed up thusly: a substate government may engage in an activity only if it is specifically

[127] *See* U.S. Const. amend X.

[128] *See The Constitution and State Control of Natural Resources*, 64 Harv. L. Rev. 642, 652 (1951) ("Increasingly Congress has invaded the field of conservation of natural resources under its commerce, treaty, and spending powers … .").

[129] *See* State of Wyoming, 2016 WL 3509415, at *10 (holding that the Energy Policy Act of 2005 "indicates clearly that hydraulic fracturing is not subject to federal regulation unless it involves the use of diesel fuels").

sanctioned by the state government,[130] in that no local action could be undertaken without permission from the state legislature.[131] Not only does Dillon's Rule require the state government to specifically sanction a local government's authority to act, the way in which Dillon's Rule has been applied in practice makes the burden even more difficult for local governments to claim authority to ban a practice like fracking.[132]

Under any iteration of Dillon's Rule, it is clear that it is the state government, not the locality, that possesses authority to pervasively regulate—and ban—fracking operations because it is the state government (and its legislature) that has authority from the state constitution. Dillon's Rule allows for the state legislature to divvy up its power if it so desires. Consequently, the only way in which a local government can possess authority to ban fracking is by the state government granting it that authority.[133] Therefore, unless the state legislators—or the state constitution—grants the power to regulate fracking operations, Dillon's Rule instructs that local governments lack the authority to ban fracking. And, it is important to remember that, under Dillon's Rule, any ambiguity in resolving whether or not a state government has granted a locality the authority to regulate a certain area will be resolved in favor of the state government retaining authority to regulate.[134]

---

[130] *Local Government Authority*, *supra* note 37, at §21.01[2].

[131] *Id.*

[132] Under Dillon's Rule, "a municipal corporation possesses only those powers that are: (1) expressly granted by [the state], (2) necessarily or fairly implied in or incidental to the powers expressly granted, or (3) essential to the declared objects and purposes of the corporation, not simply convenient but indispensable." *Waste Mgmt. Holdings*, 252 F.3d at 331 (applying state law) (internal quotation marks omitted). Furthermore, "Any fair, reasonable doubt concerning the existence of the power is resolved by the courts against the corporation and the power is denied." *Id.* (quotation marks omitted).

[133] *See* Clinton, 24 Iowa at 475 (1868) ("The true view is this: Municipal corporations owe their origin to, and derive their powers and rights wholly from, the legislature. It breathes into them the breath of life, without which they cannot exist. As it creates, so it may destroy. If it may destroy, it may abridge and control. … We know of no limitation on this right so far as the corporations themselves are concerned. They are, so to phrase it, the mere tenants at *will* of the legislature.") (emphasis in original).

[134] *See Local Government Authority*, *supra* note 36 ("Dillon's Rule states that if there is a reasonable doubt whether a power has been conferred to a local government, then the power has not been conferred."); see also, Waste Mgmt. Holdings, 252 F.3d at 331. ("Any fair, reasonable doubt concerning the existence of the power is resolved by the courts against the corporation and the power is denied.") (applying state law) (internal quotation marks omitted).

iii. Preemption Will Cause Local Ordinances to be Supplanted, Even Under Home Rule

Home Rule is the "delegation of power from the state to its sub-units of governments (including counties, municipalities, towns or townships or villages)."[135] The exact extent of Home Rule authority granted to "local governments are defined state-by-state," and the Home Rule authority is normally "limited to specific fields, and subject to constant judicial interpretation."[136] The extent of Home Rule authority is at its most robust when the local government regulates a matter of purely local concern, causing the local law to supersede the conflicting state law.[137] If, however, the locality's law purports to regulate matters other than those of purely local concern, state law may preempt the local legislation.

First of all, issues related to fracking are not matters of purely local concern, so local regulations should not supersede state regulations. Because of the wide-reaching environmental concerns and economic benefits that fracking may bring a state,[138] the fate of fracking operations in a single city is not a matter of purely local concern, as the operation can bring many possible benefits and drawbacks to the state as a whole. With that being said, local regulations that attempt to ban fracking can stand only if the local regulation is not preempted by state law.

The first court to decide that state law preempts local ordinances designed to substantially burden or ban fracking operations was the Ohio Supreme Court's decision in *Beck Energy*. Recall in that case, the state supreme court held "that the Home Rule Amendment to the Ohio Constitution … does not allow a municipality to discriminate against, unfairly impede, or obstruct oil and gas activities and production operations that the state has permitted under R.C. Chapter 1509."[139] The decision was based on the fact that the local ordinances were preempted by state law on the basis of conflict preemption.[140]

---

[135] *Local Government Authority*, *supra* note 36.

[136] *Id.*

[137] *See* Colo. Springs, 749 P.2d at 416 (Colo. 1988).

[138] *See* Joe Hoffman, *supra* note 25; *U.S. Fracking Boom Added 725,000 Jobs – Study*, *supra* note 20.

[139] Beck Energy, 37 N.E.3d at 138.

[140] *See id.* at 135 ("The city's ordinances conflict with R.C. 1509.02 in two ways. First, they prohibit what R.C. 1509.02 allows: state licensed oil and gas production within Munroe Falls."); *id.* at 136–37 ("The city's ordinances create a second type of conflict with R.C.1509.02. … R.C. 1509.02 not only gives ODNR 'sole and exclusive authority to regulate the permitting, location, and spacing of oil and gas wells and production operations' within Ohio; it explicitly reserves for the state, to the exclusion of local governments, the right to regulate 'all aspects' of the

The Ohio Supreme Court correctly decided the *Beck Energy* case for two main reasons. First, the majority opinion explicitly acknowledged, but did not consider, the policy arguments for allowing municipal ordinances to work hand in hand with state laws and regulations.[141] Although a number of policy arguments may be put forward to allow more local control over fracking operations, the role of the judiciary is to interpret the law, not to choose what it believes the law should be.[142] Second, the state supreme court correctly struck the balance between a Home Rule city's authority under the state constitution and the comprehensive statutory scheme. As the majority opinion pointed out, "Under th[e] three-step [preemption] analysis, we conclude that the city's ordinances must yield to R.C. 1509.02."[143] When evaluating city ordinances that are in conflict with state law, elementary implied conflict preemption principles lead to the conclusion that the state law will preempt local ordinances, even in the context of Home Rule jurisdictions.

For similar reasons to *Beck Energy*, the Colorado Supreme Court also correctly decided the *Longmont* and *Fort Collins* cases. That state supreme court, like the Ohio Supreme Court, acknowledged the hotly contested nature of the fracking debate but did not decide the case on that basis.[144] Also, like the city at issue in the *Beck Energy* case, both of the cities at issue in the two decisions—City of Longmont and City of Fort Collins—were Home Rule municipalities.[145]

---

location, drilling, and operation of oil and gas wells, including 'permitting relating to those activities.'").

[141] *See id.* at 137 ("The city presents a variety of policy reasons why local governments and the state should work together, with the state controlling the details of well construction and operations and the municipalities designating which land within their borders is available for those activities. This is no doubt an interesting policy question, but it is one for our elected representatives in the General Assembly, not the judiciary.").

[142] *See* Marbury v. Madison, 5 U.S. 137, 177 (1803) ("It is emphatically the province and duty of the Judicial Department to say what the law is.").

[143] Beck Energy, 37 N.E.3d at 134.

[144] *See* Longmont, 369 P.3d at 576–77 ("As the briefing in this case shows, the virtues and vices of fracking are hotly contested. Proponents tout the economic advantages of extracting previously inaccessible oil, gas, and other hydrocarbons, while opponents warn of health risks and damage to the environment. We fully respect these competing views and do not question the sincerity and good faith beliefs of any of the parties now before us. This case, however, does not require us to weigh in on these differences of opinion, much less to try to resolve them. Rather, we must confront a far narrower, albeit no less significant, legal question, namely, whether the City of Longmont's bans on fracking and the storage and disposal of fracking waste within its city limits are preempted by state law.").

[145] *Id.* at 578; Fort Collins, 369 P.3d at 589.

The Colorado high court first took to explaining the different levels of authority that Home Rule municipalities have when regulating issues of local, statewide, or mixed local and statewide concern.[146] The determination that the continuation of fracking operations within the cities of Longmont and Fort Collins were matters of mixed local and state concern was no doubt the correct decision. As mentioned previously, the economic benefits, the hotly contested nature of the practice, and the environmental consequences all point to the practice of fracking being a matter of broader concern than just the regulation within a particular municipal city limit. Furthermore, the Colorado Supreme Court provided a four-factor balancing test to determine when regulatory matters are of mixed local and state concern that proved useful.[147] Of particular importance was "the need for statewide uniformity of regulation" and "the extraterritorial impact of the local regulation," as discussed above. As correctly decided by the Colorado Supreme Court, once these interests establish that these are matters of mixed local and state concern, any local ordinances that operate to conflict with state law will be preempted, even if the city is a Home Rule municipality under the state constitution.[148]

The Pennsylvania Supreme Court's decision in *Robinson* provides an example of a local ordinance superseding state laws, but the case was not wrongfully decided because it was based on an odd set of facts. In that case, the state supreme court concluded: "the General Assembly has no authority to remove a political subdivision's implicitly necessary authority to carry into effect its constitutional duties [of protecting the environment]" under the Pennsylvania Environmental Rights Amendment.[149] This is the key difference for why the *Robinson* case can be squarely distinguished from the reasoning and outcome of the *Beck Energy* and *Longmont/Fort Collins* decisions. If not for the special environmental protection duties granted to municipalities under the ERA, the decision would likely have come out the other way.[150]

---

[146] *See* Longmont, 369 P.3d at 578–81.

[147] *See id.* at 580 ("The pertinent factors that guide our inquiry include (1) the need for statewide uniformity of regulation, (2) the extraterritorial impact of the local regulation, (3) whether the state or local governments have traditionally regulated the matter, and (4) whether the Colorado Constitution specifically commits the matter to either state or local regulation.").

[148] *See id.* at 586.

[149] Robinson, 83 A.3d at 977.

[150] *See* Longmont, 369 P.3d at 586 ("In *Robinson Township*, 83 A.3d at 985, the Pennsylvania court struck down a state law prohibiting local regulation of oil and gas operations. In doing so, the court relied on a 'relatively rare' provision in the Pennsylvania Constitution, the Environmental Rights Amendment, which, in part, established the public trust doctrine. … The Colorado Constitution does not include a similar provision, and the citizen intervenors have not cited, nor have we seen, any applicable Colorado case law adopting the public trust doctrine in this state.").

While the *Robinson* holding can be excused based on the special environmental amendment to the state constitution at play there, the New York Court of Appeals decision in *Wallach*, on the other hand, was wrongfully decided. The Court of Appeals ruled that the New York state law at issue in that case did not preempt local bans based on a three-factor analysis.[151] But, this three-factor analysis was not applied correctly, and that is why that case was decided incorrectly. The Court of Appeals properly noted the following about the plain language: "because the text of a statutory provision is the clearest indicator of legislative intent this factor is *important*."[152] But, the decision clearly ignored the plain meaning of the statute at issue.[153]

The majority opinion avoided the "shall supersede all local laws or ordinances relating to the regulation" of oil and gas activities language by reasoning that the language preempted "only local laws that purport to regulate the actual operations of oil and gas activities, not zoning ordinances that restrict or prohibit certain land uses within town boundaries."[154] But, this contradicts the plain language of the statute because a zoning ordinance, which is designed to bring a halt to all fracking operations within a city, is exactly what the statute describes: a local law related to the regulation of the oil and gas industry. The local ordinance should have been preempted because of the plain language put forward by the legislature; therefore, the case was wrongfully decided. In fact, in the three cases to come after it in the Ohio and Colorado supreme courts, *Wallach* has only been looked upon favorably by a dissenting opinion in Ohio.[155] The *Wallach* decision has also been criticized in multiple scholarly articles as well.[156]

---

[151] *See* Wallach, 16 N.E.3d at 1196–1201 (identifying plain language, statutory scheme, and legislative history as factors to consider).

[152] *Id.* at 1196 (internal quotation marks and citations omitted) (emphasis added).

[153] The text of the statute at issue was as follows: "The provisions of this article *shall supersede all local laws or ordinances relating to the regulation of the oil, gas and solution mining industries*; but shall not supersede local government jurisdiction over local roads or the rights of local governments under the real property tax law." N.Y. Envtl. Conserv. Law § 23-0303(2) (emphasis added).

[154] Wallach, 16 N.E.3d at 1197.

[155] *See* Beck Energy, 37 N.E.3d at 145 (Lanzinger, J., dissenting) ([T]he New York Court of Appeals was asked to determine whether towns may ban or limit oil and gas production within their boundaries under their home-rule authority by adopting local zoning laws. The court concluded that the statewide Oil, Gas and Solution Mining Law ('OGSML') does not preempt the home-rule authority vested in municipalities to regulate land use. It is well worth examining the facts and circumstances of this case because it has many similarities to ours.") (citations omitted).

[156] *See e.g.*, Stephen Elkind, *Note: Preemption and Home-Rule: The Power of Local Governments to Ban or Burden Hydraulic Fracturing*, 11 Tex. J. Oil Gas & Energy L. 415, 428–30 (2016).

iv. Public Policy Arguments Point to Only State Governments Having the Authority to Ban Fracking as Desirable

The first public policy argument that supports state governments, as opposed to local governments, regulating fracking is that expertise about fracking operations will more than likely lie with the state legislators and agencies. Most, if not all, states have committees or subcommittees devoted entirely to energy and natural resources. These committees are designed to assess the energy policy of the state as a whole, hear testimony regarding various energy issues, and make energy policy proposals that could be adopted into law. Furthermore, most, if not all, states also have an administrative agency—or agencies—that deal with energy and natural resource issues. These agencies set forth the particular rules and regulations based upon the directives of the legislature. There is no doubt that the state legislators and administrative experts who work in certain areas every day, including dealing with the regulation of fracking operations, will be better equipped to deal with these issues than local government legislators.

Second, the interest in avoiding patchwork regulations across a state is also important. The Colorado Supreme Court discussed this interest in *Longmont*. The first reason why patchwork regulations prove to be undesirable is the fact that hydrocarbons thousands of feet below the surface of the Earth "do not conform to any jurisdictional patterns."[157] This would essentially render bans within city limits useless because the oil and gas can migrate in and out of city limits.[158] Also, inconsistent regulations of fracking would inhibit efficient energy production throughout the state, thereby causing massive inconsistencies in property values among different landowners.[159] In sum, when a state has decided to pursue a statewide policy for reasons it deems appropriate, localities should not be able to substantially impair that policy.

Finally, the fate of fracking in a state should be decided on as a whole by the people of the state, either through their legislators or referendum. By allowing the elected representatives of the state, or the people through referendum, to decide the outcome of certain practices in their state, it promotes fundamental principles of democracy and

---

[157] Longmont, 369 P.3d at 580.

[158] *See id.*

[159] *See id.* ("Moreover, such a ban could adversely impact the correlative rights of the owners of oil and gas interests in a common source or pool by exaggerating production in areas in which fracking is permitted while depressing production within Longmont's city limits. And Longmont's fracking ban could result in uneven and potentially wasteful production of oil and gas from pools that underlie Longmont but that extend beyond its city limits.").

federalism.[160] Moreover, allowing a state to determine the policy best for it when it comes to fracking will allow for try and error among approaches and for the states to learn from each other to better their system.[161]

b. If a state decides to grant localities the authority to regulate fracking, it is permitted to do so because it is the state which has authority in the first place.

When a state has inherent authority over the regulation of a practice, as shown above, it may decide how to regulate the practice. This authority can be delegated to local forms of government if the state so chooses, as long as the delegation of power to regulate does not violate any state constitutional provisions and/or duties requiring the state to regulate fracking operations. Though this approach should not be pursued for the various reasons listed above, it would nonetheless be permissible for a state—or its population—to choose to hand control of fracking operations over to local governments. This is not to say it could not be done, as the *Robinson* decision shows that local governments can be vested with inherent public trust powers, but to say that it should not be done because sound public policy instructs otherwise.

It would be wiser for states to forego handing all authority to regulate fracking operations to localities and instead allow for certain types of regulatory oversight by local governments, while expressly forbidding them to ban the practice. The states of Oklahoma and Texas have passed laws that provide for this type of power allocation. Each legislature explicitly allowed for certain types of regulatory oversight by localities but expressly denied that a locality has the authority to ban the practice. This approach is commendable because it still allows for localities to enact reasonable regulations regarding "aboveground activity related to an oil and gas operation,"[162] while expressly preempting any measure that "bans, limits, or otherwise regulates an oil and gas operation within … municipalit[ies] or political subdivision[s]."[163] Both levels of government then are able to regulate the operation how it sees fit, as long as it sticks to the statutory framework. This is a praiseworthy

[160] Honorable Jon D. Russell & Aaron Bostrom, *supra* note 32, at 4 ("Not only would state leaders care more about their state, but they would also possess more knowledge on local issues. In this way, the Founders envisioned that competent and invested leaders would more efficiently run their respective states and jurisdictions.").

[161] New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) ("It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.").

[162] Tex. Nat. Res. Code § 81.0523(c)(1).

[163] *Id.* at § 81.0523(b).

approach, as the purpose of reserving the right to ban fracking within a state is not about keeping power from a locality but instead merely reserving power in the state.

c. Outright bans on fracking—like those implemented in Vermont and New York—are completely acceptable but should only be pursued by state legislators.

Outright bans on fracking are permissible when pursued by state legislators, as in Vermont, or state agencies, as in New York. The purpose here is not to determine what is the correct decision for legislators because fracking has a number of positive impacts and negative consequences associated with it. The real purpose is to determine who has the authority to make that decision. And, because it is the state government which has the power to regulate the practice as it sees fit, it must also possess the unbridled power to halt the practice when it so determines.

State legislators and agency leaders should in most instances make the decision whether or not fracking should survive as a practice within their particular state, but it must not be forgotten that our elected representatives are put in place to attempt to effectuate the will of the people. If a state were to decide to ban or allow the practice, and the people of the state disagreed with that decision, it is always within the power of the people to vote those people out of government or pass a referendum, where applicable, to reverse a decision that the people believe to be flawed.

VII. Conclusion

To be sure, the hotly contested nature of the debate surrounding fracking operations seems to have no end in sight. The fate of the operations within particular states will no doubt continue to fill the headlines for years to come. But make no mistake, state governments are the appropriate entities to make those decisions, not the federal government nor the local governments. That is because it is the state government that is vested with the authority to regulate fracking in the first place, and the state government which has the ability to preempt local bans that attempt to contravene state law.

Moving forward, the federal and local levels of government should allow the states to decide the fate of the practice within their boundaries. Have no doubt, the fate of fracking in a state is an issue that many people care about, and hopefully, state legislators will come together to effectuate the will of the people who elected them.

International Trapping: The Need for International Humane Trapping Standards

Andrea Fogelsinger[1]

I. Introduction

Hunting animals by trapping has long been part of human history.[2] Nearly every country allows the trapping of animals for a number of reasons, which include, wildlife management, pest control, habitat protection, food, research, relocation, and fur.[3] However, inhumane trapping practices around the globe lead to undue and unnecessary animal suffering. To minimize the negative impacts of this market and trade, international regulations need to be imposed with the intent of preventing and minimizing the suffering of the animals targeted for their fur. While trapping seems to be an inescapable part of the relationship between humans and wildlife, the means that are used to trap animals need vast modifications and with the increase of globalization these standards need to occur on an international level. The European Leghold Trap Regulation (Leghold Trap Regulation) and the Agreement on International Humane Trapping Standards (AIHTS) are key components of this change, but these agreements have their limitations and need to be amended to properly safeguard wildlife against humans. This Note will explore the origins and methods of trapping while outlining the reasons that trapping standards need to be changed and suggesting possible solutions to affect change.

[1] J.D. Michigan State University College of Law

[2] Stuart R. Harrop, *The International Regulation of Animal Welfare and Conservation Issues Through Standards Dealing with the Trapping of Wild Mammals*, 12 J. Envtl. Law 12, §2.1 (2000).

[3] *Trapping Regulations*, We Are Fur, https://perma.cc/4CML-8ESZ (last visited Mar. 1, 2016).

II. Trapping: History

There is evidence that the first humans used animal materials for many purposes and ate the meat from various animals.[4] Lacking biological hunting tools, like teeth and claws, humans sought to develop methods for quick and clean kills.[5] Evidence has been found showing that, as early as the Bronze Age, traps were being used to capture animals.[6] Early hunters were motivated by survival to hunt. Most of these motivations have changed since trapping was first used. Early on, predators were a significant threat and early humans needed to control the populations of these predators.[7] However, this is obviously no longer a problem. Now, large predators need protection from humans because their populations have been so diminished by human activities.[8] Mammals were also hunted as the sole source of meat for food.[9] Additionally, Food is no longer primarily provided from hunting, but comes from domesticated herds that are slaughtered to provide food.[10] Finally, the bones, sinews, and fur from mammals were used for various purposes.[11] Especially in cold climates, fur-bearing animals were targeted for their pelts to be used for insulation by the comparatively naked humans.[12] Clearly, these motivations are no longer persuasive, but trapping still occurs.

The first Europeans to North America encountered sophisticated methods of trapping and snaring when they came across Native Americans.[13] By combining these methods with their own technology, Europeans developed early versions of the leghold trap in about the sixteenth century.[14] Shortly after this, humans began hunting certain mammals valued for their fur, both for insulation and fashion, creating the fur trade industry.[15]

---

[4] Harrop, *supra* note 1, §2.1.

[5] Harrop, *supra* note 1, §2.1.

[6] *Id.* (quoting W.J. Jordan, Poisons, Snares and Traps in L. Boyle, The RSPCA Book of British Mammals, London: Collins (1981) (where the interesting question of whether early man scavenged or hunted is analyzed)).

[7] *Id.*

[8] *Id.*

[9] *Id.*

[10] *Id.*

[11] Harrop, *supra* note 1, §2.1.

[12] *Id.*

[13] *Id.* §2.2.

[14] *Id.* (quoting Charnovitz, *The Moral Exception in Trade Policy*, Virginia J. of Intl. L. 38(4), 689-743 (1998).

[15] *Id.*

III. Trapping: Basic Facts and Disputes

Trapping animals was clearly an important survival technique of early humans and even today the trapping industry remains strong. Tens of millions of mammals are legally trapped each year around the globe.[16] This does not include the unknown number of illegally trapped animals or the varying amount of non-target animals that are killed or injured.[17] It is estimated that the annual trade of fur from the United Kingdom is between $400 and $500 million.[18] This does not include the amount of fur trade from the three main producers of wild fur: Russia, Canada, and the United States.[19]

Proponents of trapping assert that trapping is necessary for proper conservation.[20] For example, the International Fur Trade Federation states that most wild fur is obtained from wildlife management or conservation programs.[21] This would suggest that little trapping is done just for sport or profit. Additionally, the U.S. Association of Fish and Wildlife Agencies (AFWA) states that trapping is helpful to conservation efforts.[22] AFWA's website states that trapping that is regulated "is an important way for biologists to collect data about wildlife," which includes information about diseases that may affect humans.[23] AFWA also states that trapping assists threatened and endangered species by removing predatory threats and reducing habitat damage by certain species.[24] Additionally, relocating trapped animals can help restore balance to an ecosystem by bringing back a species that had disappeared from a certain area.[25]

Despite the asserted benefits to conservation, animal welfare organizations argue that trapping is harmful to wildlife.[26] Animal welfare organizations argue that trapping causes species to be endangered when the demand for the pelts rise beyond what the species can sustain.[27] The

---

[16] G. Lossa, C.D. Soulsbury & S. Harris, *Mammal Trapping: A Review of Animal Welfare Standard of Killing and Restraining Traps*, 16 Animal Welfare 335, 335 (2007).

[17] *Id.*

[18] Harrop, *supra* note 1, §2.2.

[19] Lesley A. Peterson, *Detailed Discussion of Fur Animals and Fur Production*, Animal Legal & Historical Center Part I § B (2010), https://perma.cc/ET4S-T989.

[20] *Id.*

[21] *Id.*

[22] *Id.*

[23] *Furbearer Management*, Association of Fish & Wildlife Agencies, https://perma.cc/7N2M-GZLW (last visited Mar. 1, 2016).

[24] *Id.*

[25] *Id.*

[26] Peterson, *supra* note 18, pt. I § B.

[27] *Id.*

organizations also allege that trapping can cause the spread of disease.[28] Healthy animals are more likely to be lured into traps because they do more hunting and are more mobile than the weak or sick animals.[29] By eliminating the healthy members of a species, the entire population could be put in even more danger when the sick and weak are no longer able to sustain the population.[30] Finally, animal welfare organizations argue that trapping can cause the overpopulation of non-target wildlife species.[31] By reducing the population of a particular species, the "delicate and complex balances that exist in nature" can be upset.[32]

While early trapping methods mainly focused on safe methods of trapping for humans and preserving meat and fur, attitudes have begun to change to put animal welfare higher on the priority list.[33] New trapping priorities include: (1) if a trap is designed to kill a mammal as quickly and cleanly as possible and (2) if a trap designed to restrain an animal the trap does not cause more behavioral and physiological suffering than necessary.[34]

IV. Trapping: Methods

Methods of trapping were selected to minimize the amount of damage to an animal pelt before sale.[35] With traps that are designed to restrain the animal, the meat of the animal would still be fresh when the trapper came to collect it and the pelt of the animal was preserved because the animal had some ability to fend off scavengers.[36]

Traps can be roughly categorized into two main categories: killing traps and restraining traps. The main concern with killing traps is the amount of time taken for the animal to stop suffering, time to unconsciousness, from the time the trap is triggered.[37] Restraining traps bring in other concerns, such as, the efficiency of the capture and selectivity of the trap.[38] Selectivity is an important concern with all traps and will be discussed in more detail later in this section.

---

[28] *Id.*
[29] *Id.*
[30] *See* Peterson, *supra* note 18, pt. I § B.
[31] *Id.*
[32] *Id.*
[33] Harrop, *supra* note 1, §2.3.
[34] *Id.*
[35] *Id.*
[36] *Id.*
[37] *Id.* §5.3.3.
[38] *Id.* §5.3.4.

a. Killing Traps

Killing traps are designed to render an animal unconscious within a certain time period and can be used on land or underwater.[39] These traps are widely used to catch various size species from rodents to lynxes.[40] Jaw traps, including the Conibear, and neck and body snares are common types of killing traps.[41] Killing traps are considered humane when the trap minimizes the amount of time between the springing of the trap and the time the animal reaches unconsciousness.[42] The next few subsections will discuss some specific types of killing traps. Some traps are more effective at killing an animal quickly while other traps cause slow and painful deaths.

i. Conibear Trap

Conibear traps use two rectangular frames that are triggered to slam shut on the body of the animal.[43] Typically, this trap is intended to crush the neck of the animal.[44] This type of trap was originally designed to kill the animal instantly, unlike leg hold traps, but it only functions correctly in very specific circumstances and with specific animals.[45]

ii. Neck Snares without Stop

Snares are wire loops used to catch an animal and the loop tightens around the animal's neck causing death.[46] Snares can fit into both the killing and restraining category. Snares that are meant to restrain have a stop that prevents the snare from tightening around the animal too much, preventing asphyxiation.[47] Snares that are designed to kill the animal can be self-locking or power snares.[48] Self-locking snares kill the animal by asphyxiation when the animal pulls against the snare tightening the wire.[49] Power snares use springs to tighten the wire noose

[39] Lossa et. al, *supra* note 15, at 335.

[40] *Id.* at 336.

[41] Dena M. Jones & Sheila Hughes Rodriguez, *Restricting the Use of Animal Traps in the United States: An Overview of Laws and Strategy*, 9 Animal L. 135, 136-37 (2003).

[42] Lossa et. al, *supra* note 15, at 336.

[43] *Types of Traps*, The Association for the Protection of Fur-Bearing Animals, https://perma.cc/C6KM-CNZ9 (last visited Mar. 1, 2016).

[44] Lossa et. al, *supra* note 15, at 336.

[45] *Types of Traps*, *supra* note 42.

[46] *Id.*

[47] Lossa et. al, *supra* note 15, at 339.

[48] *Id.* at 336.

[49] *Id.*

around the animal quickly, also killing by asphyxiation.[50] Animals that are caught in snares typically are slowly strangled to death rather than being killed quickly.[51]

iii. Underwater Set Traps

Under water traps, are more difficult to classify. While the intent of these traps may be to simply restrain, since these traps are set under water the animals often drown to death unless the trap is checked very frequently by the trapper.[52] What is even more troublesome is that the animals that are most likely to be caught in these traps, like the otter or beaver, are able to remain under water for extended periods of time and could suffer unnecessarily long.[53] For example otters can remain under water for up to twenty-two minutes, the beaver can dive for fifteen minutes, and the muskrat can dive for about twelve to seventeen minutes.[54] When struggling to get free from traps these times decrease due to the use of more oxygen, but death by drowning is still a painfully slow process.[55] The muskrat tends to lose consciousness after about four minutes of struggling, and the beaver can suffer for up to nine minutes before losing consciousness.[56]

b. Restraining Traps

Restraining traps are designed to hold the animal until the trapper comes to check the trap and kills or releases the animal.[57] Box traps, foot snares, and various types of steel-jaw leghold traps are common restraining traps.[58]

The purpose of these traps is to restrain the animal while not harming the animal and with minimum stress.[59] However, certain traps rarely work as effectively as they should. Box traps, foot snares, and various types of steel-jaw leghold traps are common types of restraining traps.[60]

While restraining traps are not designed to kill animals, damage to the tissues of the restrained limb, due to pressure from the trap, often

---

[50] *Id.*
[51] Peterson, *supra* note 18, pt. I § B.
[52] Harrop, *supra* note 1, §5.3.4.
[53] *Id.*
[54] Lossa et. al, *supra* note 15, at 338.
[55] *Id.* at 338.
[56] *Id.* at 336.
[57] *Id.* at 335.
[58] *Id.* at 339-40.
[59] *Id.* at 343.
[60] Jones, *supra* note 40, at 137.

result in the death of the animal after being released.[61] Additionally, the post-traumatic stress of capture and release can cause cardiac problems for the animals and lead to death.[62]

i. Iron Leghold Trap

Leg hold traps use a metal plate and a spring to activate curved jaws to hold the animal's leg and is anchored to the ground by a metal spike or secured to a tree.[63] This trap is favored by trappers because it ensures that the pelt remains unspoiled.[64] However, this trap also results in the animal being largely immobilized, limiting its ability to eat, care for its young, stay hydrated, and defend itself from predators.[65] Animals that get a limb caught in a leg-hold trap sometimes try to chew off their paws in an attempt to escape and, if successful, often die from the self-inflicted injury.[66]

Leghold trapping has been viewed as the "worst treatment of animals by humans" by subscribers to an animal rights publication.[67] Leghold traps are largely considered to be inhumane and the number of countries banning these traps continues to grow around the world.[68] Most studies show that a significant percentage of animals trapped in leghold traps suffer major injuries, further justifying the inhumane classification of these traps.[69] Studies also demonstrate that these traps reduce the survival rate of released animals, are more stressful to the animals than other trapping techniques, and have poor specificity.[70] Specificity of traps will be discussed in more detail later in this section.

ii. Box traps

Box traps are wire cages with doors that close and lock when the animal steps on the trigger.[71] The animal is usually enticed trough the opening by the use of bait.[72] The size and design of box traps vary depending on the species being targeted by the trapper.[73]

---

[61] Lossa et. al, *supra* note 15, at 344-46.

[62] *Id.* at 346.

[63] *Types of Traps*, *supra* note 42.

[64] *Id.*

[65] *Id.*

[66] Peterson, *supra* note 18, pt. I § B.

[67] Jones, *supra* note 40, at 136.

[68] Lossa et. al, *supra* note 15, at 345.

[69] *Id.*

[70] *Id.*

[71] *Trap Designs*, Conserve Wildlife, https://perma.cc/D8VE-LXLS (last visited Mar. 1, 2016).

[72] Lossa et. al, *supra* note 15, at 340.

[73] *Id.*

Box traps seem to be the best method of trapping because they cause the lowest number of injuries and appear to be least stressful to the animals.[74] Additionally, when used properly and checked regularly, the rate of mortality of non-target animals caught in these traps approaches zero.[75] The wounds suffered by animals tend to be less severe, skin abrasions and broken teeth, and even these injuries can be reduced with improved trap design.[76] Non-target species that are trapped are also able to be released without injury.[77] While Box traps are able to capture a large range of species, the box traps become bulky and unpractical for larger species, reducing a hunter's desire or ability to use such a trap.[78]

iii. Neck Snares with Stop and Limb Snares

Restraining snares can be separated into categories of neck snares with a stop and leghold snares.[79] Neck snares are vertically set wire loops that the head of the animal enters and then the wire tightens around the neck of the animal.[80] These traps must have a 'stop' to prevent the noose from becoming too tight and strangling the animal.[81] The problem with this snare is that the minimum diameter of the noose can only be set at one measurement and if an animal with a larger neck size is caught in the trap the 'stop' will not prevent the animal from being strangled to death.

Leghold snares are horizontally placed wire loops designed to tighten around an animal's leg to restrain it.[82] While leghold snares tend to have an acceptable effect on animal welfare and mortality of target species, non-target species do not experience the same effects and tend to have higher mortality rates.[83] Foot swelling caused by the tightening of the noose is also an issue with leghold snares.[84] Even temporary limping due to foot swelling can negatively impact the survival of an individual animal.[85]

---

[74] Lossa et. al, *supra* note 15, at 345.
[75] *Id.*
[76] *Id.*
[77] *Id.*
[78] *Id.*
[79] Lossa et. al, *supra* note 15, at 339.
[80] *Id.*
[81] *Id.*
[82] *Id.*
[83] *Id.* at 345.
[84] *Id.*
[85] *Id.*

c. Indiscriminate Nature of Traps: Trap Selectivity

As cruel of a method as traps are, they are also severely indiscriminate. This means that traps can injure or kill any animal that comes across one.[86] The selectivity of a trap is usually measured by a relation of the number of target animals caught and the number of non-target animals caught.[87] The selectivity of traps varies widely based on the type of trap. With killing traps most or all non-target animals are killed, but with restraining traps the mortality of non-targets animals ranges from zero to seventeen percent depending on the type of trap that is used.[88] The animals that are caught in traps by mistake are called "trash animals" because they have no economic value.[89] It is reported by trappers "that three to ten 'nontarget' animals … are caught in the trap for each intended victim."[90] Another source noted that the number of non-target animals caught for every target animal can be as high as eighteen.[91]

The concern about selectivity can take many forms from fellow hunters concerned about their own hunting dogs to conservation concerns. In the United States, those who pushed to end the use of the leghold trap were joined by fox and raccoon hunters because the hunters were concerned about their own dogs being caught in the indiscriminate traps.[92] Additionally, catching non-target animals can pose a serious threat to the conservation of that species.[93] Because traps are unable to distinguish between animals when the trap is triggered threatened and endangered species can be caught in the traps furthering the threat to that species.[94]

V. Current International Legal Atmosphere of Trapping and Humane Regulations

The history of animal trapping legislation is long and complex. It includes many pushes for reform, temporary success, repeals, and continued pushes.[95] However, there are two key pieces of legislation on the international level that must be discussed: The European Leghold Traps Regulation (Leghold Traps Regulation) and the Agreement on International Humane Trapping Standards (AIHTS).

[86] Peterson, *supra* note 18, pt. I § B.
[87] Lossa et. al, *supra* note 15, at 345.
[88] *Id.*
[89] Peterson, *supra* note 18, pt. I § B.
[90] *Id.*
[91] Lossa et. al, *supra* note 15, at 345.
[92] Jones, *supra* note 40, at 137-38.
[93] Lossa et. al, *supra* note 15, 345 (2007).
[94] *See id.* at 345.
[95] *See* Jones, *supra* note 40, at 137-38.

a. European Leghold Traps Regulation

In 1991, the European Union implemented the Leghold Traps Regulation.[96] The regulation prohibits the use of leghold traps within the European Community and also prohibits the introduction into the Community of pelts and manufactured goods of certain wild animal species originating in countries which catch the animals by means of leghold traps or trapping methods which do not meet international humane trapping standards.[97] Certain aspects of the Leghold Traps Regulation warrant mentioning.

The introduction of the Leghold Traps Regulation states that abolishing "leghold traps will have positive effect on conservation status of threatened or endangered species of wild fauna both within and out wide the Community."[98] Part of the purpose of the regulation is to protect species and avoid distortion of competition of external trade measures relating to fauna.[99] Specifically, listing species protection as part of the purpose of the regulation is a significant step in the promotion of animal welfare on the international stage. Additional provisions of the Leghold Traps Regulation state that steps should be taken to enable the prohibition of importation of furs of certain species when these furs originate in a country where leghold traps are still used.[100]

The Leghold Traps Regulation defines a leghold trap as a "device designed to restrain or capture an animal by means of jaws which close tightly upon one or more of the animal's limbs, thereby preventing withdrawal of the limb or limbs from the trap."[101] Interestingly, conibear traps, which are typically considered killing traps and would not be covered by this trap definition, may fall under this regulation because larger animals may only get a limb trapped in the conibear trap. In this instance, a conibear trap would meet the definition of a leghold trap as defined by the Leghold Traps Regulation.

The Regulation also has two lists: Annex I and Annex II. Annex I is a list of pelts of specific animal species the importation of which will be prohibited under the terms of the regulation.[102] Annex II is a list of other goods whose import will be prohibited under the terms of the regulation.[103]

---

[96] *Implementation of Humane Trapping Standard in the EU*, European Commission, https://perma.cc/5V4D-6GJF (last updated Mar. 4, 2016).

[97] *Id.*

[98] Council Regulation (EEC) No. 3254/91, Leghold Traps Regulation, 1991 O.J. (L 208) [hereinafter Leghold Traps Regulation].

[99] *Id.* pmbl.

[100] *Id.*

[101] *Id.* art. 1.

[102] Leghold Traps Regulation, *supra* note 97, Annex I.

[103] *Id.* Annex II.

The Leghold Traps Regulation has vast similarities to AIHTS, which will be discussed in more detail in the next section. These similarities include defining traps and a list of the pelts of specific animal species that will be regulated and a list of other products that will be subject to restrictions under AIHTS.[104] It is clear that this first regulation by the European Community had a vital impact on the beginnings of international humane trapping standards.

Despite the Leghold Traps Regulation being a significant step towards developing international humane trapping standards, the regulation was rendered partially inapplicable. This was due to the language of the regulation that would allow imports from countries that adopted "internationally agreed humane trapping standards."[105] However, these international standards were never developed, thus, the regulation could not be enforced.[106]

b. Agreement on International Humane Trapping Standards

The Agreement on International Humane Trapping Standards (AIHTS) is an agreement between the European Community, Canada, and the Russian Federation, attempting to establish international humane trapping standards.[107] AIHTS was concluded in 1997, but it took eleven years for it to enter into force.[108] The European Community ratified AIHTS in 1998, and Canada quickly followed suit in 1999.[109] AIHTS finally entered into force in 2008, when the Russian Federation ratified it.[110]

AIHTS was created and signed as a response to the failure to international humane trapping standards.[111] While AIHTS is labeled as international humane trapping standards, AIHTS is far from the truly global impact needed to improve welfare standards for trapped animals. AIHTS is an agreement between the European Union, Russia, and Canada, with the Agreed Minute partially bringing in the United States.[112] While these countries represent the largest fur producers, four parties are far from the 100 to 200 signatory parties that true international agreements have. For this agreement to truly be considered an international standard, more countries need to become signatories.

---

[104] *See* Leghold Traps Regulation, *supra* note 97; Council Decision 98/142/EC, Agreement on International Humane Trapping Standards, 1998 O.J. (L 42) [hereinafter AIHTS].

[105] Jones, *supra* note 40, at 155.

[106] *Id.*

[107] AIHTS, *supra* note 103, pmbl.

[108] *Implementation of Humane Trapping Standard in the EU*, *supra* note 95.

[109] *Id.*

[110] *Id.*

[111] Lossa et. al, *supra* note 15, at 346.

[112] Harrop, *supra* note 1, §5.5.

AIHTS took significant steps in actually developing a standard, providing definitions and adjusting requirements based on the type of trap.[113] AIHTS defines traps as mechanical devices that kill or restrain.[114] This is a much broader definition than that used by the Leghold Traps Regulation from the European Community, which only focuses on traps with jaws that snap shut. AHITS also defines humane trapping methods as "traps certified by competent authorities that are in conformity with the humane trapping standards."[115] The humane trapping standards are listed in Annex I of AIHTS.[116] The fact that humane standards were agreed upon by the signatory parties is a huge victory in this area because one attempt to find agreement on internationally humane trapping standards had already failed.[117] The standards have separate requirements for restraining traps and killing traps.[118] The standards a restraining trap must meet to be approved focus on the welfare of the animal, including the behavior of the animal and injuries sustained.[119] Some of the factors that are looked at include: if the animal has engaged in "self-directed biting leading to severe injury," excessive immobility, fracture, spinal cord injury, amputation, major skeletal muscle degeneration, and death.[120] The standards a killing trap must meet to be approved as humane focus on the amount of time is takes for the animal to reach "unconsciousness and insensibility."[121] AIHTS sets out specific time limits for an animal to reach unconsciousness in order for the trap to be approved.[122] The time limits range from forty-five seconds for the short-tailed weasel, 120 seconds for the marten species, and 300 seconds for all other species under AIHTS.[123] These standards address all the major concerns with various types of traps that were previously discussed in this Note. Criticisms of AIHTS will be discussed later, but this agreement is clearly a step in the right direction to prevent inhumane trapping practices.

Article 2 of the Agreement creates the objective to establish standards on humane trapping methods, improve communication and cooperation, and to "facilitate trade between the Parties."[124] While the sole objective of AIHTS is not the protection of animals, that is clearly

[113] *See* AIHTS, *supra* note 103.
[114] *Id.* art. 1.
[115] *Id.*
[116] *Id.*
[117] Lossa et. al, *supra* note 15, at 346.
[118] AIHTS, *supra* note 103, Annex I, pt. I.
[119] *Id.* Annex I, pt. I, paras. 2.2, 2.3.1, 2.3.2.
[120] *Id.* Annex I, pt. I, paras. 2.3.1, 2.3.2.
[121] *Id.* Annex I, pt. I, para. 3.2.1.
[122] *Id.* Annex I, pt. I, para. 3.2.2.
[123] *Id.*
[124] AIHTS, *supra* note 103, art. 2(a).

the effect of the agreement. Article 4 establishes obligations under other international agreements, stating that nothing in AIHTS affects "the rights and obligations of those Parties that are members of the World Trade Organization (WTO)," and that the rights and obligations of non-WTO members under bilateral agreements are not affected.[125] Without this article, the parties of AIHTS would open themselves up to disputes under the WTO if AIHTS were to interfere with rights established under the WTO. AIHTS is only intended to affect the signatory parties and Article 4 makes it clear that the intent is not to interfere with the WTO or other WTO-members. Article 7 of AIHTS establishes that Parties make a commitment to ensure that its authorities "establish appropriate processes for certifying traps in accordance with the Standards," as well as, ensuring that trapping methods within its territory conform to the standards, prohibit non-certified traps, and require certified traps to be identified by manufacturers.[126] This article attempts to ensure that AIHTS remains effective as future traps are created and used within the boundaries of the signatory parties.

Article 13 of AIHTS discusses the trade between the Parties of fur and fur products.[127] In this article, it states that without prejudice to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Parties may not "impose trade restrictive measures on fur and fur products originating from any other Party."[128] This was agreed to because the signing parties should have implemented humane standards, according to AIHTS, and there should be no reason for the parties to further restrict trade with fellow AIHTS parties. However, if one party is not in compliance with AIHTS, a dispute can be brought before the Arbitration Body as outlined in Annex III.[129] The decision by the Arbitration Body is binding.[130] Interestingly, Annex III does not set out guidelines or limits for the punishment of noncomplying parties.[131] In theory, the Arbitration Body could impose trade restrictions on a noncomplying party until that party comes back into compliance, even though one party is specifically prohibited from doing so. This provides the authority necessary to enforce compliance with the standards outlined by AIHTS.

Article 13 of AIHTS also permits Parties to request, at the point of importation, a certificate of origin that states the furs or fur products are from animals from the territory of any other Party with a reference to documentation of origin from the competent authorities.[132]

---

[125] *Id.* art. 4.
[126] *Id.* art. 7(a)-(d).
[127] *Id.* art. 13.
[128] *Id.*
[129] *Id.* Annex III.
[130] AIHTS, *supra* note 103, Annex III, art. 13.
[131] *Id.* Annex III.
[132] *Id.* art. 13.

Part Four of the first Annex to AIHTS, sets out the implementation schedule for implementing testing standards for traps and eliminating traps that are not found to be humane under the agreement.[133] For restraining traps, like the leghold trap, a party to AIHTS has three to five years after AIHTS enters into force to establish facilities to test how humane a trap is.[134] After the testing period, a party has three years to prohibit the use of traps that are found to not be humane according the standards of AIHTS.[135] While not perfect, AIHTS is a significant step forward to the development of truly international humane trapping standards.

i. Agreed Minute

HTS is an agreement between Russia, Canada and the European Community.[136] While the United States did not sign the initial agreement the European Community was intent on completing an agreement in the United States.[137] Finally, the United States and the European Community reached an agreement in what was called the Agreed Minute.[138] This agreement is largely similar to AIHTS in that the terms of the standards of determining whether traps comply with the provisions remain largely the same.[139] However, the Agree Minute does not provide for further research programs like AIHTS does.[140]

The Agreed Minute between the European Community and the United States recognizes that the United States sees that the standards in AIHTS provide "a common framework for implementation by its competent authorities."[141] The same provision also states that by its endorsement of the Agreed Minute, the United States does not "intend to alter the distribution of authority within the United States for regulation of the use of traps."[142] Many agencies, like the Association of Fish and Wildlife Agencies (AFWA), advocate for the use of trapping as a method of environmental conservation.[143] AFWA and state fish and

[133] *Id.* Annex I, pt. IV, paras. 4.2.1-4.2.2.

[134] *Id.* Annex I, pt. IV, para. 4.2.1.

[135] *Id.* Annex I, pt. IV, para. 4.2.2.

[136] Harrop, *supra* note 1, §5.5.

[137] *Id.*

[138] *Id.*

[139] *Id.*

[140] *Id.*

[141] International Agreement in the Form of an Agreed Minute on Humane Trapping Standards, U.S.-Eur., Aug. 7, 1998, O.J. (L129), para. 3 [hereinafter Agreed Minute].

[142] *Id.*

[143] *Furbearer Management*, Association of Fish & Wildlife Agencies, https://perma.cc/YPF4-7MDE (last visited Mar. 1, 2016).

wildlife agencies set practices or provide guidelines for trapping that must be followed within their jurisdiction.[144] While the United States signed the Agreed Minute, it has clearly stated that it has no intention of disrupting the authority of AFWA and similar agencies. The Agreed Minute also focuses on the welfare of the animal when determining if a trapping method is humane.[145] The factors that are considered when determining if a trap is humane are vastly similar to the factors looked at under AIHTS for restraining and killing traps.[146]

While AIHTS and the Agreed Minute are examples of definite progress towards international humane trapping standards, both agreements could be improved. For example, AIHTS does not address how the selectivity of traps should be improved.[147] AIHTS also failed to immediately ban, instead opting to phase out, leghold traps, which were already largely considered to be inhumane.[148] Additionally, there are arguments that AIHTS is not restrictive enough in its requirements for a trap to qualify as humane.[149] These criticisms will be discussed in more detail later in this Note.

VI. What is Humane Trapping?

In order for there to be an international humane trapping standard, it first must be determined what a humane trap is. Regardless of how the trap operates, the main goal is to kill an animal; either the trap kills the animal or the trap restrains the animal long enough for a hunter to come and kill the animal.

The Agreement on International Humane Trapping Standards (AIHTS), defines a humane trap as one "where the welfare of the animals concerned is maintained at a sufficient level."[150] The sufficient level mentioned is set out by specific parameters that will be discussed momentarily. AIHTS does recognize that there will be certain situations, especially with killing traps where "there will be a short period of time during which the level of welfare [of the trapped animal] may be poor."[151] Thus, a trap, even a killing trap, can be humane, if the suffering of the animal is reduced as much as is possible. AIHTS has set out helpful and specific parameters that could be implemented by an international humane trapping standard with a couple of modifications.

---

144 *See id.*

145 Agreed Minute, *supra* note 140, Annex, pt. I, para. 1.2.1.

146 *Id.* Annex, pt. I, paras. 2-3.

147 Harrop, *supra* note 1, §5.5.5.

148 *Id.*

149 Lossa et. al, *supra* note 15, at 347.

150 AIHTS, *supra* note 103, Annex I, pt. I, para. 1.3.1.

151 *Id.*

a. Humane Restraining Traps Guidelines

For a restraining trap to be humane, AIHTS looks at the welfare of the trapped animal.[152] A restraining trap is not intended to kill the trapped animals, but only to restrict the animal's movements so as to allow a human to "make direct contact with it."[153] Thus, the concern becomes the welfare of the animal until human contact.

i. Parameters

AIHTS sets out a list of behavior indicators that can point to poor welfare of an animal.[154] Two types of animal behavior show that the animal is in poor welfare: "(a) self-directed biting leading to severe injury (self-mutilation);"[155] and "(b) excessive immobility and unresponsiveness."[156] In addition to the prior indicators, the following paragraph in AIHTS contains an exhaustive list of other indicators that may point toward poor welfare of a trapped animal.[157] These indicators include, *inter alia*: fracture, spinal cord injury, major skeletal muscle degeneration, amputation, severe internal organ damage, and death.[158] A trap does not need to be free from all of these indicators to be considered humane. AIHTS states that at least eighty percent of trapped animals must show none of the indicators described above for the trap to be approved as humane under the agreement.[159]

ii. Improvements to be Made for an International Humane Trapping Standard

One of the areas that could be more directly addressed by AIHTS is how often hunters must check their restraining traps. A restraining trap may be deemed humane under AIHTS because the trap does not cause any indicators of poor welfare as discussed above. However, if a hunter does not check its restraining trap for several days the animal can suffer numerous health problems from starvation and lack of water. AIHTS could be improved by setting specific time parameters that a restraining trap must be checked within. For example, it could be required that a restraining trap be checked every seventy-two hours to prevent stress and unnecessary negative impacts on the animal's health. AIHTS

[152] *Id.* Annex I, pt. I, para. 2.2.1.
[153] *Id.* Annex I, pt. I, para. 2.1.
[154] *Id.* Annex I, pt. I, para. 2.3.
[155] *Id.* Annex I, pt. I, para. 2.3.1.
[156] *Id.*
[157] AIHTS, *supra* note 103, Annex I, pt. I, para. 2.3.2.
[158] *Id.*
[159] *Id.* Annex I, pt. I, para. 2.4.

partially attempts to address this by listing "major skeletal muscle degeneration,"[160] as an indicator of poor health, but a more direct and clear statement, like the given example, would better protect the welfare of trapped animals.

b. Humane Killing Traps Guidelines

While the parameters for a humane restraining trap focused on the welfare of animals, the parameters for a humane killing trap focus on the amount of time it takes for an animal to become unconscious after being trapped.[161] Unconsciousness is measured by checking the corneal (blink) and palpebral (startle) reflexes of the trapped animal.[162]

i. Parameters

Based on prior research, AIHTS has set out three specific time limits to unconsciousness of trapped animals.[163] For an ermine, a weasel-like creature, the time limit to unconsciousness is forty-five seconds.[164] For a marten, similar to an ermine, but larger, the time limit to unconsciousness is 120 seconds.[165] The time limit for any other species covered by AIHTS is 300 seconds.[166] This 300 second threshold may seem too long to some, but AIHTS notes that it aims to reduce this time limit to 180 seconds as more research is done.[167] Additionally, AIHTS notes that time limit requirements should be established on a species-by-species basis when sufficient data to determine such a time limit is available.[168] The threshold for a killing trap to be restrained is similar to that required of restraining traps. A killing trap will be considered humane if at least eighty percent of trapped animals reach unconsciousness within the time limits discussed above.[169] Additionally, trapped animals must remain unconscious until dead, not come in and out of consciousness, in order to be considered humane under the agreement.[170]

---

[160] *Id.* Annex I, pt. I, para. 2.3.2(f).

[161] *Id.* Annex I, pt. I, para. 3.2.1.

[162] *Id.* Annex I, pt. I, para. 3.2.2.

[163] AIHTS, *supra* note 103, Annex I, pt. I, para. 3.3.

[164] *Id.*

[165] *Id.*

[166] *Id.* AIHTS only applies to species specifically listed in the agreement, but more animals made be added as enough research is done to appropriately identify what conditions make a trap humane for that species. AIHTS, *supra* note 103, Annex I, pt. I, para. 4.1.

[167] AIHTS, *supra* note 103, Annex I, pt. I, para. 3.3.

[168] *Id.*

[169] *Id.*

[170] *Id.*

ii. Improvements to be made for an International Humane Trapping Standard

Even an eighty percent threshold on the time limit to unconsciousness for the trapped animal will still allow over one million animals to suffer beyond the accepted guidelines for a humane trap.[171] It is unreasonable to expect all killing traps to fit the parameters of AIHTS, but the standard could be raised to reduce the number of animals that suffer. Perhaps the focus could be redirected on the number of trapped animals that fall outside the humane parameters rather than a straight percentage. With a straight percentage system, as used by AIHTS, the number of animals that are allowed to suffer can increase or decrease depending on the aggregate number of animals that are trapped. This fluctuation can lead to traps being more humane in one year than in another year. A fixed number system would create a more consistent standard of a humane trap.

VII. Solutions to Reduce the Harm Inflicted on Animals by Trapping

The way to solve the problem of inhumane trapping is to develop more humane killing and restraining traps. Technology is certainly capable of doing this.[172] However, the increased costs and time needed to develop more humane traps will inevitably dissuade the production of these traps. Therefore, there must be some type of standard or regulation to require or encourage the development of more humane traps; and to truly protect animals the standard must be on an international level. Also, bringing attention to the harmful trapping methods and proper labeling requirements may reduce the purchasing of fur products, which could lead to a reduction in the amount of animals that are trapped.

a. International Agreements

As discussed several times previously, a far-reaching international agreement on humane trapping standards would be the most effective way to address the cruel methods of trapping currently used. Agreements like the Leghold Traps Regulation, AIHTS, and the Agreed Minute are great starting points for internationally humane trapping standards, but the limitations of these agreements and the few signatory parties prevent them from being truly effective. The next two sections look at the criticisms of the Leghold Traps Regulation and AIHTS to suggest possible changes to make these documents more effective.

---

[171] *See* Lossa et. al, *supra* note 15, at 347.

[172] *Id.* at 346.

i. Criticism and Suggested Changes of the Leghold Traps Regulation

While the Leghold Traps Regulation was important in opening the door for international humane trapping standards, the regulation was not properly implemented.[173] Proponents of trapping succeeded in adding an option that would allow import from countries that adopted "internationally agreed humane trapping standards."[174] The International Organisation for Standarisation (ISO) attempted to set out these standards, but negotiators were unable to define the word "humane" and no standard was created.[175] Without any "internationally agreed humane trapping standard," the Leghold Trap Regulation could not be enforced, and trapping continued as if there was no regulation.[176]

For the Leghold Traps Regulation to be truly effective there needs to be an agreement on internationally humane trapping standards. AIHTS has started the process of developing such a standard, but greater international involvement is required for the standards to be truly effective. Alternatively, the Leghold Traps Regulation could be made more effective by removing the option for adopting internationally agreed humane trapping standards. In this case, the primary intent of the regulation to prohibit the use of leghold traps within the European Community and also prohibit the introduction of such pelts to the European Community and manufactured goods of certain wild animal species originating in countries which catch the animals by means of leghold traps would be implemented more effectively.[177] Yet, this would only address the issue of inhumane trapping within the European Community and would unlikely reach the international level needed to truly protect wildlife, but this would be an improvement on having no standard at all.

ii. Criticism and Suggested Changes of AIHTS

AIHTS states that selectivity of a trap is important, but the standards do not try to measure this empirically.[178] As discussed earlier, the selectivity of traps is a significant issue.[179] If selectivity concerns were directly addressed by AIHTS, significant improvements could be made on humane trapping standards. While traps are fairly simple

[173] Jones, *supra* note 40, at 155.
[174] *Id.*
[175] *Id.*
[176] *Id.*
[177] *Implementation of Humane Trapping Standard in the EU*, *supra* note 95.
[178] Harrop, *supra* note 1, §5.5.5.
[179] Lossa et. al, *supra* note 15, at 345.

mechanisms, there are steps that can be taken to reduce the capture of non-target species. For example, trappers can learn the tracks of non-target animals, like domestic pets, deer, and badgers, and avoid setting traps where these tracks are present in great numbers.[180] Additionally, signs can be posted to alert others to the use of traps, which should reduce the capture of domestic pets.[181] It is also recommended that trappers avoid placing traps near fences containing livestock as the livestock may reach through or lean on the fence and get caught in the trap.[182] Learning the tracks of wildlife and setting traps only where the tracks of target species are found are excellent ways to protect non-target species of wildlife.[183] These guidelines should be addressed by AIHTS to improve the selectivity of traps and reduce death and injury to non-target species.

Additionally, AIHTS was criticized for not immediately banning the leghold trap, but opted to phase it out.[184] Leghold traps are already largely considered inhumane[185] and should have immediately been banned by AIHTS rather than phased out.

It is minimally estimated that 7.88 million animals (not including illegally trapped animals) addressed by AIHTS are trapped annually in Europe, Canada, Russia, and the United States.[186] Under AIHTS, traps are considered to be humane if in at least eighty percent of the 7.88 million animals trapped satisfy the indicators of welfare.[187] That still leaves twenty percent, over 1.5 million, of animals that are suffering unnecessarily at human hands.[188] Some believe that this number of suffering animals should be substantially reduced.[189] With over 1.5 million animals permitted to suffer unnecessarily under AHITS, there is significant room for AIHTS to be amended to reduce this number. As suggested previously, a fixed number system, rather than a percentage system could reduce the number of animals that suffer and provide a more consistent definition of a humane trap.

---

[180] Snaring in Scotland: A Practitioner's Guide, (Dec. 2012) *available at* https://perma.cc/YN3Z-5KB9.

[181] *Id.*

[182] *Id.*

[183] *Id.*

[184] Harrop, *supra* note 1, §5.5.5.

[185] Lossa et. al, *supra* note 15, at 345.

[186] *Id.* at 347.

[187] *Id.*

[188] *Id.*

[189] *Id.*

b. Greater Involvement of World Trade Organization

In the areas of health and the environment, the use of international standards is strongly preferred to avoid national standards that create non-tariff trade barriers.[190] The general preference for international standards suggests that the World Trade Organization (WTO) should take a more involved approach to providing guidelines and settling disputes on international fur trade. If the WTO were to take this approach perhaps AIHTS and the Leghold Traps Regulation would be deemed unnecessary, opponents of these regulations may see them repealed because international standards would render them unnecessary. In this case, both opponents and proponents of these agreements could be pleased. Opponents would be satisfied because the agreements would be gone and proponents would be pleased because there would finally be a truly international humane trapping standard. While banning certain traps and restricting others is important to reduce animal suffering, realistically, it may be necessary to exempt trapping that is "done to protect commercial crop and livestock operations" because business owners would likely oppose any regulation that interferes with their ability to protect their business.[191]

c. Calls to Action

Advocates of animal welfare have attempted to reduce trapping by attempting to place sale restrictions on products of animals caught in certain traps.[192] There is evidence that anti-fur campaigns can be successful. In the 1980s, such protests led to a decline in the use of fur in the fashion industry.[193] However, fur started making a comeback in the industry in the 1990s and in 2010 fur was being used by more designers than not.[194] These campaigns are often slow to be effective. Typically, all that is accomplished is that the activists gain awareness for the issue, but public policy is rarely changed.[195] However, gaining awareness may dissuade consumers from buying such animal products, which would decrease demand and eventually reduce the amount of animals that are trapped for their fur.

Awareness campaigns are easier now than they ever have been. Social media allows just about anyone to create a page advocating for their cause and it can reach millions of people around the globe. One

[190] Harrop, *supra* note 1, §4.2.
[191] Jones, *supra* note 40, at 140.
[192] *Id.* at 154.
[193] Lesley A. Peterson, *supra* note 18, pt. II.
[194] *Id.*
[195] Jones, *supra* note 40, at 155.

such campaign is #MakeFurHistory.[196] This campaign was started by The Montreal Society for the Prevention of Cruelty to Animals (SPCA) and The Association for the Protection of Fur-Bearing Animals (The Fur-Bearers) and is supported by the LUSH Cosmetics company.[197] The campaign is "aimed at raising awareness for consumers and the general public, as well as encouraging governments to get further involved in regulating the commercial fur trade."[198] The site encourages people to show their compassion by taking the "fur-free pledge."[199] The site also provides a link to a website with a list of fur-free designers and retailers.[200] While this campaign is primarily Canadian based, it shows how easy it can be to make your voice heard via the Internet. Despite the fact that these campaigns may be unlikely to change public policy, gaining awareness and reducing demand for furs can help reduce the amount of animals that are trapped.

There is some evidence that suggests these campaigns can have an impact on the fur market. Montreal, Canada was once considered the "fur capital of North America."[201] Foreign buyers would come to the city to buy pelts at auction.[202] It was estimated that about 200 fur manufacturers were in Montreal in the 1970s and 1980s.[203] Today, it is estimated that there are only forty fur manufacturers in the city.[204] The decline of the fur industry in the 1980s was attributed to three factors: manufacturing moving to China, the stock market plummeting, and the growth of the animal rights movement.[205] This suggests that campaigns like #MakeFurHistory can have an effect on the supply and demand of fur products. While the price of a mink pelt dropped from fifty dollars in the late 1980s to twenty dollars in 1992, a recent increase of demand from Russia and China drove the price up to $100 for a mink pelt just two years ago.[206] The struggling economies of Russia and China have reduced demand, but once these economies recover demand for fur products will increase and more animals will be subjected to the atrocities of trapping.[207] The animal rights movement has had an effect

[196] *About the Campaign*, #MakeFurHistory, https://perma.cc/UP4M-F3MY (last visited Mar. 1, 2016).

[197] *Id.*

[198] *Id.*

[199] *Id.*

[200] *Id.*

[201] Morgan Lowrie, *Montreal's Dwindling Furriers Still Practicing Trade Amid Changing Times*, Toronto Star (Mar. 2, 2016), https://perma.cc/9Z88-V36C.

[202] *Id.*

[203] *Id.*

[204] *Id.*

[205] *Id.*

[206] *Id.*

[207] Raul Tukker, *Low Fur Prices Mean Slim Profits for Yukon Trappers*, CBC News, (Feb. 24, 2016), https://perma.cc/8ABE-BUVA.

on trapping in the past.[208] If more campaigns, like #MakeFurHistory, start promoting awareness about the negative impacts of trapping, the demand for furs from trapping can be reduced again.

d. Labeling Products

The idea of labeling products is similar to the concept of raising awareness. If consumers are aware that animals were unnecessarily harmed in the production of the fur product they are considering purchasing, labeling might deter purchases of these products, subsequently reducing the demand for fur products and reducing the need to trap animals inhumanely.[209]

The Fur Products Labeling Act of the United States established certain labeling requirements of fur products.[210] This act deems a product is misbranded if the label is false or deceptive, or if the label contains misrepresentation or deception, or if the product is identified falsely or deceptively.[211]

The Fur Products Labeling Act has several specific requirements for the labels of fur products.[212] The label on the item must list the names of the animals that provided the fur clearly and legibly on the label.[213] If used fur is on the product, then this must be noted on the label.[214] "Used fur" is defined by the act as fur that "has been worn or used by" a previous consumer.[215] The label on a fur product must also note if the product contains "bleached, dyed, or otherwise artificially colored fur" and if the product contains scrap fur from the paws, ears, tails, or bellies of an animal.[216] Finally, the name of the person who manufactured the fur product and the country of origin of imported fur must be noted on the label.[217]

The Fur Products Labeling Act defined "fur product" as "any article of wearing apparel made in whole or in part of fur or used fur; except … such articles as the Commission shall exempt by reason of the relatively small quantity or value of the fur or used fur contained"

---

[208] Lowrie, *supra* note 200.

[209] Isaac P. Wakefield, *Drop Dead Stylish: Mitigating Environmental Impact of Fur Production Through Consumer Protection in the truth in Fur Labeling Act of 2010*, 19 Penn. St. Envtl. L. Rev. 267, 267-68 (2011).

[210] Fur Products Labeling Act of 1951, Pub. L. No. 82-110, 65 Stat. 175, § 4 (codified in scattered sections of 15 U.S.C.) [hereinafter Fur Products Labeling Act].

[211] *Id.* § 4(1).

[212] *Id.* § 4(2).

[213] *Id.* § 4(2)(A).

[214] *Id.* § 4(2)(B).

[215] *Id.* § 2(c).

[216] *Id.* § 4(2)(C-D).

[217] *Id.* § 4(2)(E-F).

in the apparel.[218] The Truth in Fur Labeling Act of 2010 of the United States amended the Fur Products Labeling Act by removing the previous exemption for certain articles of apparel from the requirements under the act due to the relatively small quantity or value of the fur in the apparel.[219] This amendment closed the previous loophole that had allowed multiple animal pelts to exist on a piece of clothing without a label.[220] Yet, these acts are only applicable in the United States.

A similar international system would be fairly simple to implement. An act similar to the Fur Products Labeling Act would need to be drafted and ratified by different countries. Presenting such an act to the United Nations would be an appropriate way to present this approach to the international community and to get such an act ratified. One issue that would need to be addressed is what names should be used to properly identify the animal products used on apparel. The Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) provides an easy framework to follow to address this concern. CITES is an international agreement to protect endangered species from over-exploitation by international trade.[221] With 181 signatory parties and numerous different languages spoken among the parties, a consensus had to be reached on how the species protected under the agreement would be referred to on the protective lists.[222] CITES uses the Latin name to refer to animals on its lists with the common names available in multiple languages under the Latin name.[223] The use of this same system would be ideal for international labeling requirements. Using Latin names to list animals reduces confusion and mistakes when translating the names into multiple languages.

Stricter labeling requirements may properly inform consumers and, hopefully, dissuade consumers from purchasing real fur, subsequently, lowering demand and trapping of animals. While unlabeled or mislabeled fur can make labels unreliable, the Humane Society of the United States created a guide to assist people in distinguishing real and faux fur.[224]

---

[218] *Id.* § 2(d).

[219] Truth in Fur Labeling Act of 2010, Pub. L. No. 111-313, 124 Stat. 3326, § 2 (codified as amended in scattered sections of 15 U.S.C.).

[220] Lesley A. Peterson, *supra* note 18, pt. IV § E.

[221] *What is CITES?*, CITES, https://perma.cc/HX7X-4R9U (last visited Mar. 1, 2016).

[222] *Id.*

[223] *Checklist of CITES Species*, CITES, https://perma.cc/6BDZ-B3AV (last visited Mar. 1, 2016).

[224] Peterson, *supra* note 18, pt. II § A.

VIII. Conclusion

While hunting animals by trapping has long been part of human history, this does not mean that inhumane methods of trapping animals should continue to be used.[225] International regulations need to be implemented with the intent of preventing and minimizing the suffering of the animals targeted for their fur to reduce the unnecessary suffering of animals at the hands of humans. The Leghold Traps Regulation and AIHTS have made significant progress in creating and implementing international humane trapping standards, but these agreements have their limitations and need to be amended to properly safeguard wildlife against humans. Trapping has long been a part of human culture around the world.[226] Even if the complete elimination of trapping is an unrealistic objective, it is possible to regulate traps to be as humane as possible.

[225] Harrop, *supra* note 1, §2.1.
[226] *Id.*

Science-Based Farmed Animal Welfare Laws for the U.S.

Kelly Levenda

I. Introduction

The U.S. is a nation of animal lovers, yet our laws do little to protect the animals who suffer the most: farmed animals. More than seventy-five percent of Americans are concerned about the welfare of farmed animals, and a large majority support enacting laws that protect them from cruel treatment.[1] An appropriate response to Americans' concerns about the well-being of farmed animals would be the legislation of scientifically-informed welfare laws. Welfare is a measure of an animal's physical and mental health.[2] Animals are in a state of good welfare if they are "healthy, comfortable, well nourished, safe, able to express innate behaviour, and … not suffering from unpleasant states such as pain, fear, and distress."[3] The U.S.'s animal welfare laws should be informed by scientific knowledge regarding animals' mental capacities. We are not protecting animal welfare if our laws allow those who farm animals to confine them and alter their bodies in ways that cause them pain and suffering.

In Part I, I will discuss why the U.S. does not rely on science when developing and enacting animal welfare laws. In Part II, I will present an overview of state and federal laws that protect farmed animals. In Part III, I will discuss farmed animals' capacity to feel pain, illustrated using common agricultural husbandry practices. In Part IV, I suggest how the U.S. can implement science-based animal welfare laws, using the European Union and New Zealand as guides.

---

[1] *Consumer Perceptions of Farm Animal Welfare*, Animal Welfare Inst., 1, 4 (last visited Apr. 20, 2017), https://perma.cc/EX2V-NRRX.

[2] *Good Practice Note: Improving Animal Welfare in Livestock Operations*, Int'l Fin. Corp., 3 (Dec. 2014), https://perma.cc/E8KH-47KS.

[3] *Id.*

II. Part I: Why Aren't U.S. Animal Welfare Laws Scientifically Informed?

a. Framework: Animals in a Human Legal System

Farmed animal welfare laws are not scientifically informed because animals are legally deemed property. The legal system is based on human interests because humans are "legal persons."[4] Animals are not seen as individuals worthy of legal personhood, and instead are deemed property under the law.[5] Because animals are legally defined as property, they are mostly denied the rights and consideration of interests given to legal persons.[6] The laws do not reflect the fact that farmed animals are sentient and complex individuals who have the capacity to feel pain and suffer.[7] It is difficult for the legal system to take into account the interests of farmed animals because they are property.[8]

But even within the property paradigm (without changing animals' status from property to legal person), it is possible for the legal system to take into account animals' interests and enact meaningful protections for them. Inconsideration of animals' interests is the result of a historical prejudice towards animals and ignorance of their capabilities that does not match what we know about animals today.[9] The current system is largely blind to farmed animals' actual behavior and scientifically verifiable capacities.[10] But I believe the U.S legal system can begin to acknowledge the capacities and interests of farmed animals, and I offer suggestions of how to accomplish this in Part IV.

b. Politics

The legal system has begun to open its eyes to the interests of some animals – companion animals. Every state in the U.S. has an anti-cruelty statute that prohibits the "unnecessary" or "unjustifiable" suffering of animals.[11] These laws mainly protect companion animals

---

[4] Encyclopedia of Animal Behavior 131 (Marc Bekoff ed., 2005).

[5] *See* Bruce A. Wagman, Sonia D. Waisman & Pamela D. Frasch, Animal Law: Cases and Materials 51 (4th ed. 2010)(A discussion of whether or not animals should remain property under the law is outside the scope of this paper).

[6] Encyclopedia of Animal Behavior, *supra* note 4, at 131.

[7] *Id.*

[8] *See* Wagman, Waisman & Frasch, *supra* note 5, at 51.

[9] Encyclopedia of Animal Behavior, *supra* note 4, at 131.

[10] *Id.*

[11] David J. Wolfson & Mariann Sullivan, *Foxes in the Hen House: Animals, Agribusiness and the Law: A Modern American Fable*, *in* Animal Rights: Current Debates and New Directions 205, 208-09 (Cass R. Sunstein & Martha C. Nussbaum eds., 2004).

from abuse. One would think that these laws would also protect farmed animals from "unnecessary" or "unjustifiable" suffering, but that is not always the case.[12] This is where the political power of the animal agriculture industry comes in to play. When individuals try to enact laws to protect farmed animals, this change in the status quo is often met with fierce opposition by the animal agriculture industry.[13] While the amount of legislation to protect animal welfare being proposed on the state and federal levels is increasing, most attempts to enact meaningful laws have been largely unsuccessful.[14] The animal agriculture industry is a powerful player, and exerts a strong influence over legal policy pertaining to farmed animals.[15] Even when farmed animals are provided protection by law, the industry creates loopholes to mostly avoid complying with the laws.[16] For example, the industry has lobbied for and persuaded most state legislatures to exempt "customary," "common," or "accepted" industry practices from anti-cruelty laws.[17] Some state laws even exempt farmed animals completely.[18]

c. Economics

Many in the animal agriculture industry emphasize the economic benefits of the industrial food system but do not often address the ethical issue of farmed animal welfare.[19] Americans prefer cheap food, so producers are driven to maintain low prices while increasing

[12] *See infra* Part III: State Anti-Cruelty Statutes.

[13] Jan Ladewig, *Welfare of Domestic Animals: Is it Possible to Keep Tthem Without Exploiting Them?*, 227 Landbauforschung Völkenrode Sonderheft [Land Surveyor Völkenrode Special Issue] 3, 3 (2002) (Ger.), https://perma.cc/76J7-KK89.

[14] C. C. Croney & S. T. Millman, *Board-Invited Review: The ethical and behavioral bases for farm animal welfare legislation*, 85 J. of Animal Sci. 556, 561 (2007), https://perma.cc/8B9A-8GJT.

[15] *See generally* Dana L. Hoag, Elizabeth Hornbrook, & Terry D. Van Doren, *Political and Economic Factors Affecting Agriculture PAC Contribution Strategies* (1997), https://perma.cc/2HW6-D57W (discussing the effect of political action committees and campaign contributions on political support for agricultural interests).

[16] Ladewig, *supra* note 11, at 3.

[17] Wolfson & Sullivan, *supra* note 11, at 212.

[18] *Id*.

[19] Croney & Millman, *supra* note 14, at 562 (Some in the animal agriculture industry are starting to address animal welfare). *See* Monica Eng, *Humane Society Files Complaint Against Smithfield Foods for Animal Welfare Claims*, Chicago Tribune, November 2, 2011, https://perma.cc/NN2T-YXFY; Organic Valley, *Animal Care*, https://perma.cc/D4GF-WQAS (last visited August 7, 2016); Smithfield, *Animal Care*, https://perma.cc/X77Z-WGFN, (last visited Sept. 1, 2016) (Some argue that this is misleading and these producers do not actually consider the capabilities and interests of farmed animals).

productivity and profitability.[20] These drivers result in larger farm size and increased confinement of farmed animals.[21]

Most producers are simply not willing to increase their costs and perhaps decrease their profits for higher standards of farmed animal welfare.[22] For example, egg producers in California opposed Proposition 2, which prohibited the confinement of egg-laying hens in battery cages, because the change would be too expensive.[23] In reality, raising egg-laying hens in a cage-free system results in a less than one cent per egg increase in cost.[24] Economic considerations make it hard for policymakers to change the status quo because they need to balance farmed animal welfare with what is economically feasible for the animal agriculture industry.[25]

III. Part II: Laws that Protect Farmed Animal Welfare

There are very few laws that protect the welfare of farmed animals. There is not a single federal law that governs the conditions in which farmed animals are raised. The federal laws that cover farmed animal treatment include the Humane Methods of Slaughter Act, the Poultry Products Inspection Act, and the Twenty Eight Hour Law. There are also federal regulations and inspections. The state laws that protect farmed animals are humane slaughter and transport laws, anti-cruelty statutes, and in some states, specific farmed animal protection laws. None of the state or federal laws are civilly enforceable.

a. The Humane Methods of Slaughter Act (HMSA)

The HMSA was enacted in 1958.[26] Congress found that slaughtering farmed animals in a humane manner is beneficial because it prevents needless animal suffering, promotes safer working conditions for those in the slaughter industry, and improves the quality of products made from animals.[27] The Act lists two methods of slaughter that are deemed to be humane.[28] The first method is for cattle, calves,

---

[20] David J. Mellor, Emily Patterson-Kane & Kevin J. Stafford, The Sciences of Animal Welfare 17 (2009).

[21] *Id*.

[22] Croney & Millman, *supra* note 14, at 562.

[23] Promar Int'l, Economic Impact on California of the Treatment of Farm Animals Act 1–2 (May 16, 2008), https://perma.cc/42D3-N4T8.

[24] Don Bell, *A Review of Recent Publications on Animal Welfare Issues for Table Egg Laying Hens* 4 (Jan. 11, 2006), https://perma.cc/HH9W-97WB.

[25] Croney & Millman, *supra* note 14, at 561.

[26] 7 U.S.C.A. § 1901 (West 2011).

[27] *Id*.

[28] *Id.* § 1902.

horses, mules, sheep, swine, and other "livestock," but not poultry.[29] It requires that "all animals are rendered insensible to pain by a single blow or gunshot or an electrical, chemical or other means that is rapid and effective, before being shackled, hoisted, thrown, cast, or cut."[30] The second method that is deemed to be humane (although it does not require the animal to be rendered insensible to pain) is "slaughtering in accordance with the ritual requirements of the Jewish faith or any other religious faith that prescribes a method of slaughter whereby the animal suffers loss of consciousness by anemia of the brain caused by the simultaneous and instantaneous severance of the carotid arteries with a sharp instrument and handling in connection with such slaughtering."[31] The Secretary of Agriculture was authorized and directed to conduct research to develop and determine methods of slaughter and handling of animals that "are practicable with reference to the speed and scope of slaughtering operations and humane with reference to other existing methods and then current scientific knowledge."[32]

The effectiveness of the HMSA is questionable. In 2001, Senator Robert Byrd stated, "evidence indicates that [cattle being rendered insensible to pain] is not always done…these animals are sometimes cut, skinned, and scalded alive while still able to feel pain."[33] Congress passed two resolutions (S. Con. Res. 45 and H.R. Con. Res. 175) stating that the Secretary of Agriculture should follow the law by tracking and reporting violations of the HMSA.[34] To help fully enforce the law, the United States Department of Agriculture (USDA) hired seventeen veterinarians to help supervise the U.S.'s more than two thousand slaughterhouses.[35]

The HMSA also speaks to practices involving animals who are nonambulatory (unable to walk, due to "broken appendages, severed tendons or ligaments, nerve paralysis, fractured vertebral column[s] or

---

[29] *Id.* § 1902(a).

[30] *Id*.

[31] *Id.* § 1902(b).

[32] *Id.* § 1904(a).

[33] 147 Cong. Rec. S7311-12 (2001); *See* Wagman, Waisman & Frasch, *supra* note 5, at 484. (Recent undercover investigations in slaughterhouses have shown animals who appear to be able to sense pain being slaughtered); James Nye, *Revealed: Shocking undercover video captures inhumane butchering of cattle at slaughterhouse for US burger chain*, The Daily Mail (Aug. 21, 2012, 20:44 EST), http://perma.cc/8SAU-NNQT. (In one video, a slaughterhouse worker states, "That one was definitely alive," as pigs are moved down a conveyor belt in slaughter and processing plant); Matt Ferner, *Undercover Video Appears To Show Pigs Conscious, Shaking In Pain As They Face Slaughterhouse Death*, Huffington Post (Nov. 11, 2015, 6:35 PM EST), http://perma.cc/6B43-FMFM.

[34] 147 Cong. Rec. S7311-12 (2001).

[35] *Id*.

metabolic conditions"), in a section that became effective in 2002.[36] The Secretary of Agriculture was required to investigate and submit a report to Congress on nonambulatory animals, including the scope of this issue, the causes, how to treat these animals humanely, and the problems in handling these animals.[37] The Secretary was also given the power to promulgate regulations necessary for "the humane treatment, handling, and disposition of nonambulatory [animals] by stockyards, market agencies, and dealers."[38]

The effectiveness of this section of the HMSA is also questionable. In 2008, the Humane Society of the United States released a video showing California slaughter plant workers "kicking [nonambulatory] cows, ramming them with the blades of a forklift, jabbing them in the eyes, applying painful electrical shocks and even torturing them with a hose and water in attempts to force sick or injured animals to walk to slaughter."[39] Due to the food safety risks of meat from nonambulatory animals entering the food supply, this video led to the largest meat recall in history of 143 million pounds.[40]

The Department of Agriculture, through the USDA's Food Safety and Inspection Service (FSIS), issued regulations of slaughter methods that are in accordance with the HMSA.[41] One regulation relates to the animals' environment, and requires livestock pens, driveways, and ramps to be free from sharp objects and unnecessary openings or loose boards where animals can be injured.[42] This regulation also requires animals who are suspected of being affected with a condition which could cause their carcass to be condemned (usually dying, disabled [nonambulatory], or diseased animals) be separated from the rest until the animal is inspected.[43] Another regulation speaks to the handling of

[36] U.S. Dep't of Agric. Food Safety & Inspection Serv.,, *Small & Very Small Plant Outreach*, (Oct. 7, 2014), https://perma.cc/NEA8-UWSV.

[37] 7 U.S.C.A. § 1907(a) (West 2011).

[38] *Id.* § 1907(b).

[39] Humane Soc'y of the U.S., *Rampant Animal Cruelty at California Slaughter Plant*, (Jan. 30, 2008), https://perma.cc/7HSM-V23G.

[40] Geoffrey S. Becker, *Nonambulatory Livestock and the Humane Methods of Slaughter Act*, 1 (Cong. Research Serv., Mar. 24, 2009), https://perma.cc/94V4-XHAG. (In response to this undercover video showing egregious abuse to nonambulatory cows, California strengthened its law relating to downed animals); Humane Soc'y of the U.S., *Rampant Animal Cruelty at California Slaughter Plant*, (Jan. 30, 2008), https://perma.cc/F37T-PTN2; Cal. Penal Code Ann. § 599(f) (West 2013) (The Supreme Court struck down the law holding that it was preempted by the Federal Meat Inspection Act); National Meat Association v. Harris, 132 S. Ct. 965, 975 (2012).

[41] Humane Slaughter Regulations, 9 C.F.R. § 313 (West 2011).

[42] *Id.* § 313.1(a).

[43] *Id.* § 313.1(c).

animals.[44] This regulation states that electric prods and other devices used to drive animals shall be used as little as possible to minimize injury to the animals.[45] Excessive use of these devices is prohibited, and electric prods should be used on the lowest effective voltage, which is not to exceed 50 volts AC.[46] Pipes and sharp objects that would cause unnecessary pain shall not be used to drive animals.[47] Disabled animals should be separated and placed in a covered pen.[48] Dragging conscious disabled animals is prohibited; however, they may be dragged if they are stunned.[49] Disabled animals can be moved on equipment suitable for such purposes while conscious.[50] Animals in holding pens shall have access to water at all times, have feed if held more than 24 hours; and animals held overnight shall have enough room to lie down.[51]

The humane slaughter regulations designate approved methods of slaughter, including the use of carbon dioxide gas, a captive bolt stunner, a firearm, and electrocution.[52] If using carbon dioxide gas, the gas shall produce "surgical anesthesia" in the sheep, calf, or pig (but can also be used to induce death in pigs) and shall anesthetize the animals in a quick and calm manner, with minimum discomfort to the animals.[53] Captive bolt stunners can be used on sheep, pigs, goats, calves, cows, horses and other equines, and shall produce "immediate unconsciousness" that lasts throughout the slaughter process, when the animal is shackled, has their throat slit, and is bled out.[54] The driving of animals to the stunning area and the stunning process shall be done with a minimum amount of discomfort to the animals.[55] The stunning area shall be designed to limit the movements of the animals, so the stunner operator can accurately stun the animal.[56] Sheep, pigs, goats, calves, cows, horses and other equines may be slaughtered using a firearm.[57] This process is very similar to the process of using a captive bolt stunner, therefore the regulations are the same.[58] An electrical current can be used to slaughter pigs, sheep, calves, cattle, and goats (and is usually

[44] *Id.* § 313.2.
[45] *Id.* § 313.2(b).
[46] *Id*.
[47] *Id*. § 313.2(c).
[48] *Id.* § 313.2(d)(1).
[49] *Id.* § 313.2(d)(2).
[50] *Id.* § 313.2(d)(3).
[51] *Id.* § 313.2(d)–(e).
[52] *Id.* § 313.5–313.30.
[53] *Id.* § 313.5(a)(1).
[54] *Id.* § 313.15.
[55] *Id.* § 313.15(a)(1)–(2).
[56] *Id.* § 313.15(b)(1)(iii).
[57] *Id.* § 313.16.
[58] *Id*.

used for birds also, although this is not stated in the regulations because they are not covered by the HMSA).[59] The regulations pertaining to the use of the electrical current are similar to the regulations pertaining to the other methods of slaughter. The animal needs to be in a state of "surgical anesthesia," which the regulation defines as "a state where the animal feels no painful sensation."[60]

One final regulation speaks of the protocol when an inspector observes inhumane handling or slaughter.[61] The inspector "shall inform the establishment operator of the incident and request that the operator take the necessary steps to prevent a recurrence."[62] If the operator does not take action, the inspector can essentially stop use of the part of the facility where the incident took place, allowing resumption when the inspector is satisfied by the assurance from the operator that there will not be a recurrence.[63]

Birds are not mentioned in the HMSA. In 2005, the FSIS issued a notice concerning birds, titled "Treatment of Live Poultry Before Slaughter."[64] The notice stated, "there is no specific federal humane handling and slaughter statute for poultry."[65] Therefore, birds are not protected by the HMSA. The USDA's rule excluding them from the HMSA has been challenged.[66] The court in *Levine* found that Congress intended to exclude poultry from the HMSA's definition of livestock.[67] One of the reasons the court made that finding is because in 1957, a year before the HMSA was passed; Congress enacted the Poultry Products Inspection Act, which provided "an elaborate system for the inspection, processing, and regulation of poultry and poultry products."[68]

---

[59] *Id.* § 313.30; Karen Davis, Prisoned Chickens Poisoned Eggs: An Inside Look at the Modern Poultry Industry, 113 (1st ed.1996).

[60] 9 C.F.R. § 313.30(a)(1) (West 2011).

[61] *Id.* § 313.50.

[62] *Id*.

[63] *Id*.

[64] Treatment of Live Poultry Before Slaughter, 70 Fed. Reg. 56,624 (Sept. 28, 2005).

[65] *Id*.

[66] Levine v. Conner, 540 F. Supp. 2d 1113 (N.D. Cal. 2008); Wagman, Waisman & Frasch, *supra* note 5, at 24.

[67] *Levine*, 540 F. Supp. 2d at 1117.

[68] *Id*.

b. The Poultry Products Inspection Act (PPIA)

The PPIA, enacted in 1957, regulates the processing and distribution of products made from birds.[69] The intent of the PPIA is to protect the health and welfare of consumers "by assuring that poultry products distributed to them are wholesome, not adulterated, and properly marked, labeled, and packaged."[70] The PPIA prohibits the "buying, selling, or transporting, in commerce, or importing, any dead, dying, disabled, or diseased poultry or parts of the carcasses of any poultry that died otherwise than by slaughter."[71] The PPIA does not regulate the treatment or slaughter of birds. The FSIS, which implements the PPIA, stated that humane methods of handling and slaughtering birds are of "high priority," even though there is no federal humane handling or slaughter statute that protects them.[72] FSIS is concerned with humane treatment of birds during handling and slaughter because abuse to the birds "may render the poultry product adulterated" and not acceptable for human consumption.[73]

The effectiveness of the PPIA is questionable. In 2015, the Animal Legal Defense Fund filed a complaint with the FSIS to request an investigation of a Tyson slaughter and processing plant for violations of the PPIA.[74] An undercover investigator who worked at the plant observed and recorded dead, dying, and injured birds being hung to be slaughtered, equipment malfunctions that resulted in the "routine death of numerous chickens, including a recurring conveyor belt breakdown killed between 400 and 600 chickens over the span of two days" and standard plant practices, such as its transport crate dumping quota, that caused dozens of birds to be suffocated on a daily basis.[75] The investigator also witnessed "live [chickens whothat] were placed in condemned bins with [dead] birds, employees failing to euthanize dying chickens before dumping them in drains", and, in a few instances, employees "deliberately [abusing] birds, by throwing or spiking them onto the ground or conveyor belts.[76]

---

[69] 21 U.S.C.A. § 451 (West 2011).

[70] *Id*.

[71] 21 U.S.C.A. § 460(b)(3) (West 2011).

[72] Treatment of Live Poultry Before Slaughter, 70 Fed. Reg. 56624, 56624–25 (Sept. 28, 2005).

[73] *Id*. at 56625.

[74] Letter from Kelsey Eberly, Litigation Fellow, Animal Legal Defense Fund, to Carl Mayes, Acting Assistant Adm'r, Office of Investigation, Enf't, and Audit, Food Safety and Inspection Serv. 1 (Sept. 14, 2015) https://perma.cc/BE82-N4JU.

[75] *Id.* at 2.

[76] *Id.* at 3.

c. The Twenty-Eight Hour Law

First enacted in 1873 and then amended in 1994, this law states that animals cannot be confined during transport across state lines for more than 28 hours without being unloaded for food, water, and rest.[77] Animals should be unloaded in a humane way into pens for at least five consecutive hours for feeding, water, and rest.[78] This law does not apply to animals transported in vehicles "in which the animals have food, water, space, and an opportunity for rest."[79] In 2006, the USDA responded to a petition for rulemaking submitted by the Humane Society of the United States, and stated that the Twenty-Eight Hour Law does not apply to chickens, who make up ninety percent of the farmed animals transported and slaughtered for food.[80] In 2006, the USDA also stated, for the first time, that farmed animals transported in trucks (not just those shipped by rail) were covered by the law.[81]

d. State Humane Slaughter Laws

Many states have laws that require the humane slaughter of farmed animals.[82] Most states require that the animal is "rendered insensible to pain" before being shackled and hoisted for slaughter.[83] Many also contain religious or ritual slaughter exceptions.[84] California is unique in that it requires some poultry, which includes "chickens, ducks, geese, turkeys, and all other fowls or birds whowhich are used for food or production purposes", be humanely slaughtered.[85] The law exempts "[s]pent hens" and "[s]mall game birds," who do not need to be slaughtered in accordance with the Humane Slaughter of Poultry law.[86]

---

[77] *Farmed Animals and the Law*, Animal Legal Defense Fund, https://perma.cc/NV4H-XJD8; 49 U.S.C.A. § 80502(a) (West 2011).

[78] 49 U.S.C.A. § 80502(b) (West 2011).

[79] 49 U.S.C.A. § 80502(c) (West 2011).

[80] Wagman, Waisman & Frasch, *supra* note 5, at 420.

[81] *Id*.

[82] Rebecca F. Wisch, *Table of State Humane Slaughter Laws*, https://perma.cc/KAC9-6924. These states include: Arizona, Colorado, Florida, Iowa, Illinois, Indiana, Kansas, Maryland, Maine, Michigan, Minnesota, New Hampshire, New Jersey, Ohio, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, and West Virginia.

[83] *Id*.

[84] *Id*.

[85] food & Agric. § 26554 (2016); Cal. Code Regs. tit. 3 §§ 1246–1246.15 (2012). The law does not apply to spent hens ("older chicken hens which are considered too unproductive to retain as egg layers"), and small game birds. *Id*. § 1246.1.

[86] Cal. Code Regs. tit. 3 § 1246 (2012). "Spent hens" are "older chicken hens [who] which are considered too unproductive to retain as egg layers," and "small game birds" are "pigeons, pheasants, silkies (Gallina lanigera), chukars, quail and

The Humane Slaughter of Poultry Law also has requirements that relate to the handling of poultry for slaughter.[87] The law requires that the cages used to transport the animals "be in good repair, free of … protrusions to avoid injury to the poultry," and be "of sufficient size to accommodate" them.[88] Poultry "shall be held in a location with adequate ventilation … and have protection from exposure to adverse weather conditions."[89]

Poultry need to be "stunned, rendered unconscious, or killed before bleeding."[90] Poultry Meat Inspectors need to be "trained in humane methods of handling poultry," and the "[s]laughter and handling of poultry shall be performed by operators in a proper and humane manner."[91] The law lists many approved humane methods of stunning and slaughter including: gassing, "[e]lectrical stunning, [e]lectrocution to cardiac arrest, [c]aptive bolt ([for] ostrich and rabbit only),]c]ervical dislocation,]c]arotid artery severance, [and] [d]ecapitation."[92] The law describes each approved method of stunning and slaughter, and sets out the protocol that should be followed after an incident of inhumane slaughter.[93] There is an exception for religious or ritualistic slaughter.[94]

e. State Humane Transport Laws

Many states have laws relating to the transport of farmed animals and require transport to be done in a humane manner.[95] Some laws apply to only a certain species (such as equines) and about half of the laws

other species of game birds of the same approximate size as those listed in this section. Cal. Code Regs. tit. 3 *Id*. § 1246.1(b)–(c) (2012).

[87] Cal. Code Regs. tit. 3*Id.* § 1246.2 (2012).

[88] *Id*. § 1246.2(a).

[89] *Id*. § 1246.2(c).

[90] *Id*. § 1246.2(d).

[91] *Id*. § 1246.2(f)–(g).

[92] Cal. Code Regs. tit. 3 § 1246.3(a) (2012).

[93] Cal. Code Regs. tit. 3 §§ 1246.4-1246.12, 1246.14 (2012).

[94] Cal. Code Regs. tit. 3*Id.* § 1246.15 (2012).

[95] Cal. Food &and Agric. Code §§ 16905-16909; Cal. Penal Code § 597o; Cal. Penal Code § 597x; Conn. Gen. Stat. Ann. § 53-249 (West 2012); Fla. Stat. Ann. § 828.14 (West 2012); 510; Ill. Comp. Stat. Ann. §§ 70/5,; 70/7,; 70/7.5 (West 2012); Mass. Ann. Laws.Gen. Laws Ann. ch. 272, § 81 (West 2012); Me. Rev. Stat. Ann. tit. 7, § 3981 (West 2012); mich. Comp. LawsPenal Code § 750.51; Minn. Stat. Ann. § 343.24 (West 2012); Miss. Code Ann. § 97-41-5 (West 2012); N.J. Stat. Ann. §§ 4:22-18,; 4:22-52 (West 2012); N.Y. Agric. &and Mkts. Law § 359; Ohio Rev. Code Ann. § 959.13 (West 2012); Or. Rev. Stat. § 167.335; 18 pa. Stat. and Cons. Stat. Ann. stat. ann. § 5511(e) (West 2012); 4 R.I. Gen. Laws §§ 4-1-7, 4-1-17; S.C. Code Ann. § 47-1-50 (West 2012); Wash. Rev. Code § 16.52.080; Wis. Stat. Ann. § 134.52 (West 2012); Vt. Stat. Ann. tit. 13, §§ 381-387 (West 2012); Va. Code Ann. § 3.1-796.69.3.2-6508 (West 2012).

set time limits on transport, which ranges from 24 to 36 hours.[96] The Nevada humane transport law specifically exempts farmed animals.[97]

Minnesota's Cruelty in Transportation Law, enacted in 1998, is one of the most thorough.[98] It requires those transporting live animals to provide suitable space for the animals to be able to stand up and lie down.[99] The law prohibits transporting animals with their "feet or legs tied together, or in any other cruel or inhumane manner," unless the transporter is the owner of the animal or an employee or agent of the owner, the animal weighs less than 250 pounds, "the tying is done in a humane manner and is necessary for the animal's safe transport," or the animal's legs are not tied for longer than half an hour.[100] The law requires that animals be unloaded "in a humane manner into properly equipped pens for rest, water, and feeding for a period of at least five consecutive hours" every 28 consecutive hours, but the transporter can confine livestock up to 36 consecutive hours, if the transporter submits a written request for an extension.[101]

Connecticut and Rhode Island have laws specifically pertaining to the transport of poultry.[102] The laws require any crate or container used for transporting poultry to be in "a sanitary condition" and "provide sufficient ventilation and warmth."[103] The laws also state that poultry in the container "shall receive such reasonable care as may be required to prevent unnecessary suffering."[104]

f. State Farmed Animal Protection Laws

A small number of states have laws that specifically outlaw abusive agricultural practices, such as the intensive confinement of pregnant pigs, egg-laying hens, and calves raised for veal, and force

[96] Cal. Food & Agric. Code §§ 16905-16909; Conn. Gen. Stat. Ann. § 53-249 (West 2012); Fla. Stat. Ann. § 828.14 (West 2012); 510 Ill. Comp. Stat. Ann. §§ 70/5, 70/7, 70/7.5 (West 2012); Mass. Gen. Laws Ann. ch. 272, § 81 (West 2012); Me. Rev. Stat. Ann. tit. 7, § 3981 (West 2012); mich. Comp. Laws § 750.51; Minn. Stat. Ann. § 343.24 (West 2012); N.Y. Agric. & Mkts. Law § 359; Ohio Rev. Code Ann. § 959.13 (West 2012); 4 R.I. Gen. Laws §§ 4-1-7, 4-1-17; Vt. Stat. Ann. tit. 13, §§ 381-387 (West 2012); Va. Code Ann. § 3.2-6508 (West 2012).

[97] Nev. Rev. Stat. Ann. §§ 574.190, 574.200(fc) (West 2012).

[98] Minn. Stat. Ann. § 343.24 (West 2012).

[99] *Id*. subd. 1(a).

[100] *Id*. subd. 1(b), subd. 2(a).

[101] *Id*. subd. 2(b).

[102] Conn. Gen. Stat. Ann. § 53-249 (West 2012); R.I. Gen. Laws Ann. § 4-1-7 (West 2012). The laws in note 96 may also apply to poultry.

[103] Conn. Gen. Stat. Ann. § 53-249 (West 2012); R.I. Gen. Laws Ann. § 4-1-7 (West 2012).

[104] Conn. Gen. Stat. Ann. § 53-249 (West 2012); R.I. Gen. Laws Ann. § 4-1-7 (West 2012).

feeding birds to enlarge their livers beyond their normal size to produce foie gras.[105] California's Prevention of Farm Animal Cruelty Act was enacted in 2008 and came into effect on January 1, 2015.[106] The law prohibits tethering or confining a farmed animal "for all or the majority of the day, in a manner that prevents such animal from: [l]ying down, standing up and fully extending his or her limbs; and [t]urning around freely."[107] This law applies to all farmed animals, but calves whothatare raised for veal, egg-laying hens, and pregnant pigs are specifically mentioned.[108] The law does not apply "[d]uring scientific or agricultural research[,] [d]uring examination, [t]esting, individual treatment or operation for veterinary purposes[,] [d]uring transportation, [d]uring rodeo exhibitions, state or county fair exhibitions, 4-H programs, and similar exhibitions[,] [d]uring the slaughter of [an animal covered by the California Humane Slaughter Law], [or] [t]o a pig during the seven-day period prior to the pig's expected date of giving birth."[109] Arizona, Colorado, Florida, Maine, and Oregon have similar laws that cover the intense confinement of calves raised for veal and/or pregnant pigs.[110]

Minnesota's Overworking or Mistreating Animals Law, last amended in 2010, states that "[n]o person shall overdrive, overload, torture, cruelly beat, neglect, or unjustifiably injure, maim, mutilate, or kill any animal, or cruelly work any animal when ithe is unfit for labor."[111] The law prohibits a person from depriving an animal of the necessary food, water, or shelter, keeping a "cow or other animal in any enclosure without providing wholesome exercise and change of air,"

---

[105] Ariz. Rev. Stat. Ann. § 13-2910.07 (West 2012); Cal. Health & Safety Code §§ 25980-25985; Cal. Health & Safety Code Ann. § 25990–25992 (West 2012); Colo. Rev. Stat. § 35-50.5-102; Fla. Const. art. X, § 21; 7 Me. Rev. Stat. Ann. § 4020 (West 2012); Or. Rev. Stat. § 600.150. At the time this paper was published, California had overturned the foie gras ban. Association des Éleveurs de Canards et d'Oies du Québec v. Harris, Case No. 12cv5735 (C.D. Cal. 2015). The Attorney General has appealed that ruling and it is expected that the ban will go back into effect. Animal Legal Defense Fund, *Duck, Duck, Goose: ALDF Takes on Foie Gras* (Feb. 4, 2015), https://perma.cc/TE5K-EB4E.

[106] Cal. Health & Safety Code Ann. § 25990–25992 (West 2012).

[107] *Id*. § 25990. Fully extending his or her limbs" is defined as "fully extending all limbs without touching the side of an enclosure, including, in the case of egg-laying hens, fully spreading both wings without touching the side of an enclosure or other egg-laying hens." Cal. Health & Safety Code Ann. § 25991(f) (West 2012). "Turning around freely" is defined as "turning in a complete circle without any impediment, including a tether, and without touching the side of an enclosure." *Id*. § 25991(i).

[108] *Id*. § 25991.

[109] Cal. Health & Safety Code Ann. *Id. § 25992* (West 2012).

[110] Ariz. Rev. Stat. Ann. § 13-2910.07 (West 2012); Colo. Rev. Stat. Ann. § 35-50.5-101–35-50.5-103 (West 2012); Fla. Const. art**.** 10 § 21 (West 2012); 7 Me. Rev. Stat. Ann. tit. X, § 4020 (2012); Or. Rev. Stat. § 600.150 (2012).

[111] Minn. Stat. Ann. § 343.21 subd. 1 (West 2012).

and instigating or furthering an act of cruelty to animals.[112] "Cruelty" is defined as "every act, omission, or neglect [that] causes or permits unnecessary or unjustifiable pain, suffering, or death."[113]

Nebraska is unique in that it has a Livestock Animal Welfare Act, which covers cattle, oxen, bison, equines, swine, sheep, goats, domesticated deer, poultry, emus, and ostriches.[114] The law, enacted in 2010, prohibits one from "intentionally, knowingly, or recklessly abandon[ing] or cruelly neglect[ing] a livestock animal."[115] The law requires employees who observe the abandonment, neglect, or cruel mistreatment of a farmed animal to report it.[116] It also prohibits indecency with a farmed animal, which is defined as sexual penetration, and tripping or roping the legs of equines or bovines.[117] If a person is convicted of "intentionally, knowingly, or recklessly abandon[ing] or cruelly neglect[ing] a [farmed] animal," the court may order the person "not to own or possess a livestock animal" for up to five years for a misdemeanor, and up to fifteen years for a felony.[118]

Wyoming's Protection of Livestock Animals law, enacted in 1895, and last amended in 2011, pertains to cruelty to farmed animals.[119] It requires those who confine livestock animals to give the animal "a sufficient quantity of wholesome food and water."[120] Under this law, "[a] ny peace officer, agent or officer of the board may lawfully interfere to prevent the perpetration of any act of cruelty upon any livestock animal in his presence."[121]

In 1996, New Jersey amended its state anti-cruelty law to decree that the New Jersey Department of Agriculture had authority over the care and welfare of farmed animals and directed the Department to promulgate regulations for standards of humane raising, keeping, and marketing of farmed animals.[122] After the Department promulgated the regulations, the New Jersey Society for the Prevention of Cruelty to Animals filed suit against the Department alleging that its promulgated

---

[112] *Id*. subd. 2–3, 7.

[113] Minn. Stat. Ann. § 343.20 subd. 3. (West 2012).

[114] Neb. Rev. Stat. Ann. § 54-902(3), (9) (West 2012).

[115] *Id*. § 54-903(1).

[116] *Id*. § 54-908(2).

[117] *Id*. § 54-904, 54-911, 54-912.

[118] *Id*. § 54-903(1), 54-909(1)–(2).

[119] Wyo. Stat. Ann. § 11-29-101–11-29-115 (West through 2016 Budget Sess.).

[120] *Id*. § 11-29-103(a).

[121] *Id*. § 11-29-106.

[122] N.J. SPCA v. N.J. Dep't of Agric., 196 N.J. 366, 370 (N.J. 2008). Similarly, Ohio has a Livestock Care Standards Board to establish "standards governing the care and well-being of livestock and poultry." Ohio Const. art. XIV, § 1(A) (West through 2015-2016 General Assemb.).

regulations were invalid because they were not "humane" standards.[123] While the majority of the regulations were found to be valid, the court invalidated the regulations that pertained to "routine husbandry practices" because there was no evidence that the practices were humane.[124] The court found regulations which pertained to castration, beak-trimming, and toe-trimming failed to set a humane standard because "there [wa] s no standard against which to judge whether a particular individual [wa]s 'knowledgeable' or whether a method [wa]s 'sanitary' in the context of an agricultural setting or whether the manner in which the procedure [wa]s being performed constitute[d] a 'way as to minimize pain.'"[125] The regulation pertaining to tail-docking was also invalidated by the court because there was evidence that the practice is inhumane.[126] The invalidated regulations were remanded to the agency for further consideration.[127] The court was clear in stating that its decision should not be understood to be a ban on any certain husbandry practice, it was only recognizing that the way in which certain regulations were defined was not humane.[128] **The statute has since been repealed.[129]**

g. State Anti-Cruelty Statutes

Besides state humane slaughter and transport laws, state criminal anti-cruelty statutes may govern the treatment of farmed animals.[130] The purpose of anti-cruelty statutes is to prohibit the "unnecessary" or "unjustifiable" suffering of animals.[131] There are many reasons why these statutes fail to protect farmed animals. Most of the laws are very general and only prohibit behavior; they do not require affirmative action, such as adequate space, light, ventilation, or exercise.[132] Today, over 99% of animals farmed for food in the U.S. are raised on factory

[123] *N.J. SPCA*, 196 N.J. at 370-71. The New Jersey SPCA could bring this claim because the Society was created by the New Jersey legislature to enforce all laws enacted to protect animals. N.J. Stat. Ann. § 4:22-1 (repealed 2006).

[124] *N.J. SPCA*, 196 N.J. at 399.

[125] *Id*. at 412.

[126] *Id*. at 405.

[127] Walt McCarter, *New Jersey Supreme Court Invalidates Certain Animal Welfare Regulations,* https://perma.cc/F8EM-8TYJ (last visited May 20, 2012).

[128] *N.J. SPCA,* 196 N.J. at 418.

[129] § 4:22-1 (West, repealed 2006).

[130] Wolfson & Sullivan, *supra* note 11 at 208-09.

[131] *Id*. at 209.

[132] *Id*. Some laws do require affirmative action, such as providing proper food, water, housing, or veterinary care. *See generally* Minn. Stat. Ann. § 343.21 subd. 2–3 (West through 2016 Reg. Sess.) (requiring food, water, shelter, exercise, and fresh air); Wyo. Stat. Ann. § 11-29-103(a) (West through 2016 Budget Sess.) (requiring sufficient and wholesome food and water).

farms, which intensively confine animals.[133] Pregnant pigs are kept in metal crates that are only slightly larger than their bodies.[134] The crates are so small that pigs cannot turn around or lie down comfortably.[135] Egg-laying hens are kept in battery cages, given only about sixty-seven to seventy-six square inches of space per hen (less than a standard sheet of paper).[136] Many farmed animals do not have access to the outdoors, and have no room to engage in natural behaviors.[137]

State anti-cruelty laws are rarely enforced because of the many difficulties with doing so.[138] There is no governmental administrative agency that protects farmed animal welfare, so there are no inspections of farms.[139] Instead, enforcement is left up to state and local law enforcement officers and prosecutors.[140] Prosecution for violations of the anti-cruelty statutes are rare, due to limited investigative and prosecutorial resources, and the fact that most violations occur behind closed doors.[141] For law enforcement officers to even be alerted of potential violations of the laws, someone from the farm (an employee or an undercover investigator) must report it.[142] Undercover investigations are currently being stifled by Ag-Gag laws, which criminalize whistleblowing in farms and slaughterhouses.[143] It seems unlikely that employees would report violations due to the strong possibility of encountering hostility and alienation from their employer and other employees.[144] There have also been many instances where employees

---

[133] *Farm Animal Welfare*, ASPCA, https://perma.cc/EN7H-6QHV (last visited July 27, 2016).

[134] Tom Philpott, *You Won't Believe What Pork Producers Do to Pregnant Pigs*, MOTHER JONES (July/August 2013), https://perma.cc/T65V-KZ23.

[135] *Id*.

[136] Bruce Friedrich, *The Cruelest of All Factory Farm Products: Eggs From Caged Hens*, THE HUFFINGTON POST (March 16, 2013), http://perma.cc/8K5Q-NT8D.

[137] ASPCA, *supra* note 133.

[138] Wolfson & Sullivan, *supra* note 11 at 209.

[139] *Id*. at 210.

[140] *Id*.

[141] *Id*. The Animal Legal Defense Fund has taken a creative strategy to make sure that those who harm animals are not let off the hook due to lack of prosecutorial resources. *Animal Cruelty Prosecutor Jake Kamins Takes on Oregon Animal Abuse*, ANIMAL LEGAL DEFENSE FUND, https://perma.cc/E8QP-KEK9 (last visited July 28, 2016.). Animal Legal Defense Fund has funded a dedicated, full-time animal cruelty prosecutor in Oregon who is available to handle animal abuse cases for any of the state's thirty-six district attorneys. *Id*.

[142] Wolfson & Sullivan, *supra* note 11 at 210.

[143] *Taking Ag-Gag to Court*, ANIMAL LEGAL DEFENSE FUND (Jan. 26, 2016), https://perma.cc/4WDF-U6MJ (last visited Jan. 26, 2016).

[144] Lilanthi Ravishankar, *Encouraging Internal Whistleblowing in Organizations*, MARKKULA CTR. FOR APPLIED ETHICS, (Feb. 4, 2003), https://perma.cc/YTE2-MHE4.

themselves were egregiously abusing the animals in their care.[145] When a law enforcement officer does want to inspect a farm for violations, it is very difficult to do so.[146] Because a farm is private property, he must first obtain a search warrant through showing probable cause that there is evidence of criminal activity on the farm.[147]

If the law is enforced, convictions are rare.[148] Many courts will not convict because the harm done to the animal was not "unnecessary," because it was done for food production.[149] For example, producers remove part of their chickens' beaks without anesthesia. A court would find that this is necessary for food production, because chickens with their beaks will peck others to death (when raised in intensive confinement as animals are on today's factory farms). Because anti-cruelty statutes are criminal laws, the burden of proof is beyond a reasonable doubt, which is a high threshold.[150] Another difficulty with obtaining a conviction is that the statutes require, and therefore the prosecution has to prove, a certain mental state of the defendant.[151] In the rare case of a conviction, fines are minimal.[152] For example, Maine's maximum fine is $2,500, Alabama and Delaware have a maximum fine of $1000, and Rhode Island's maximum fine is $500.[153]

The main reason anti-cruelty statutes fail to protect farmed animals is that the laws exempt abusive agricultural practices, and sometimes even farmed animals themselves.[154] Most states' anti-cruelty statutes exempt all "'accepted,' 'common,' 'customary,' or 'normal' farming practices."[155] Currently, only eleven states do not exempt commonly accepted animal husbandry practices or have an exemption for the slaughter of animals for food.[156] What constitutes a "customary" farming practice is not usually defined in the statute.[157] For states that have defined "customary," the definitions range from "normal activities, practices, and procedures that farmers adopt, use or engage in year

---

[145] Truth, Lies, & Videotape, The Animal Agriculture Alliance (on file with author.)

[146] Wolfson & Sullivan, *supra* note 11, at 210.

[147] *Id*.

[148] *Id*.

[149] *Id*. at 211.

[150] *Id*. at 209.

[151] *Id.*

[152] *Id*. at 210.

[153] *Id*.

[154] *Id*. at 212.

[155] *Id.*; Pamela D. Frasch, Stephan K. Otto, Kristen M. Olsen &Paul A. Ernest, *State Animal Anti-Cruelty Statutes: An Overview*, Animal L. Rev. 69, 77–78 (1999).

[156] These states are Alabama, California, Washington DC, Delaware, Hawaii, Massachusetts, Minnesota, New Hampshire, New York, Oklahoma, and Rhode Island.

[157] Wolfson & Sullivan, *supra* note 11, at 212-13.

after year in the production and preparation for market of poultry and livestock," to "whatever a 'college of agriculture or veterinary medicine' says it is."[158] Yet another state considers a practice to be "customary" if the majority of the animal agriculture industry does it.[159] Because legislatures define exempted customary practices as the practices farmers use, the laws essentially let the animal agriculture industry itself define what constitutes cruelty to animals.[160]

IV. Part III: Scientifically Verifiable Capacities of Farmed Animals

This paper will focus on the most commonly farmed land animals' (cows, pigs, sheep, and chickens) capacity to feel pain and suffer.[161] Pain is an unpleasant sensory and emotional response to a noxious stimulus that can damage the animal's tissues.[162] A painful experience affects an animal's behavior and should result in the animal learning to avoid what caused them pain.[163] The body responds to pain through protective responses, such as reflexively withdrawing, the desire to escape, inflammation, and cardiovascular responses.[164] It is impossible to directly measure animals' pain through their subjective experiences and emotions.[165] Therefore, to determine whether an experience is painful to an animal, scientists use both behavioral and physiological criteria.[166]

When using behavioral criteria to measure pain, researchers compare an animal's normal pain-free behavior to her abnormal behavior when she is exposed to a noxious stimulus to determine whether the stimulus is causing pain.[167] Abnormal behavior can consist of excessive vocalization, changes in posture or movement, a reduction in normal

[158] *Id*. at 213 (emphasis in original).

[159] *Id*.

[160] *Id.* at 215.

[161] Fish are also one of, if not the most, commonly killed animals for human consumption. Kelly Levenda, *Legislation to Protect the Welfare of Fish*, 20 Animal L. Rev. 119 (2013). As they too can feel pain and suffer, it is also important to enact scientifically informed laws to protect their welfare, but this is outside the scope of this paper. *See generally* Edward J. Branson, Fish Welfare (2008); Victoria Braithwaite, Do Fish Feel Pain? (Oxford Univ. Press 2010).

[162] Patrick. Bateson, *Assessment of Pain in Animals*, 42 Animal Behavior 827, 828 (1991); Lynne U. Sneddon & Michael J. Gentle, *Pain in Farm Animals*, 227 Landbauforschung Völkenrode Sonderheft [Land Surveyor Völkenrode Special Issue] 9, 9 (2002) (Ger.), https://perma.cc/F792-GB2T.

[163] Sneddon & Gentle, *supra* note 162, at 9.

[164] *Id*.

[165] *Id*.

[166] *Id*.

[167] *Id.*

behaviors like feeding, and stereotypical behaviors like pacing.[168] If an animal's behavior changes when exposed to a noxious stimulus, this is evidence that the stimulus is aversive and the animal is experiencing pain.[169] But because changes in an animal's behavior are not conclusive proof she is feeling pain, many researchers also measure physiological changes in the animal.[170] Physiological criteria that researchers monitor include heart rate, pupil diameter, skin tone, blood flow, and corticosteroid release.[171]

a. Common Husbandry Practices

I will use the potentially painful common husbandry practices animals are subjected to on farms to illustrate that science is not currently influencing farmed animal welfare laws. Most of the common husbandry practices are painful, yet still done to farmed animals all over the U.S. The common husbandry practices I will discuss are castration, tail docking, disbudding or dehorning (destruction of the horns), branding, beak trimming, and housing (intensive confinement).[172]

b. Castration

Cows, pigs, and sheep are commonly castrated on farms.[173] Studies have shown that castration is likely to be painful to animals.[174] There are three common ways that farmed animals are castrated. Either a rubber ring is placed at the top of the scrotum to kill the tissue and cause the testes to fall off; a clamp is used to crush the spermatic cord, so that it can no longer supply the scrotum; or the scrotum is cut open and the testes are removed by tearing, cutting, or twisting.[175] Castration has a "profound effect on…animal[] behavior." [176] Animals who have recently been castrated kick, roll, and stamp their feet more often. They are also more restless, vocalize at higher frequencies, stand abnormally, lie down more often, and suckle less.[177] After castration, there is an

[168] *Id.*
[169] *Id*.
[170] *Id*.
[171] *Id*. Some physiological changes also happen when an animal is stressed. *Id* at 9-10. To account for this, researchers measure the physiological responses when the animal has been given painkillers to be sure that the changes are the result of pain, not stress. *Id*.
[172] Sneddon & Gentle, *supra* note 162, at 10-11, 13, 15.
[173] *Id*.
[174] *Id*. at 11.
[175] *Id*. at 10.
[176] *Id*.
[177] *Id*. at 10-11.

increase in cortisol (commonly known as the "stress hormone.")[178] Castration can even lead to chronic pain, inflammation, and infection, with some animals exhibiting abnormal behaviors up to 41 days after castration.[179] Local anesthetic, which numbs the area, reduces these behavioral and physiological responses.[180] Therefore, because there are thebehavioral and physiological changes associated with castration, and these are reduced if an anesthetic is used, it is very likely that the procedure causes animals pain.

c. Tail Docking

Cows, pigs, and sheep raised for human consumption often have their tails docked (part or all of the tail is removed.)[181] Dairy producers' justification for docking cows' tails is to increase cow cleanliness and protect worker health, although the available data does not support these claims.[182] Farmers dock pigs' tails to prevent tail biting, but this does not treat the underlying causes of the behavior (one of which is the intensive confinement of the animals).[183] Sheep farmers dock their tails to increase cleanliness and prevent flystrike (a condition in which flies lay their eggs on the sheep, the maggots burrow into the sheep's flesh, and release ammonia which poisons the sheep.)[184]

Scientific studies have shown that tail docking is a painful procedure.[185] Tail docking is done using a rubber ring that kills the tail and causes it to fall off (similar to castration), an electric docking iron that cuts and cauterizes the tail, an emasculator that cuts and crushes

[178] Sneddon & Gentle, *supra* note 162, at 10.

[179] *Id*. at 11.

[180] *Id*.

[181] Am. Veterinary Med. Ass'n (AVMA), *Welfare Implications of Tail Docking in Lambs* 1, (July 15, 2014) [Hereinafter AVMA, Tail Docking in Lambs], https://perma.cc/2Y2L-KFWE; AVMA, *Welfare Implications of Tail Docking in Cattle* 1, (Aug. 29, 2014) [Hereinafter AVMA, *Tail Docking in Cattle*], https://perma.cc/F3Q8-K8PP; AVMA, *Welfare Implications of Teeth Clipping, Tail Docking, and Permanent Identification of Piglets* 1, (July 15, 2014) [Hereinafter AVMA, *Tail Docking in Piglets*], https://perma.cc/W5QC-KH3H. 1, (July 15, 2014) [Hereinafter AVMA, Tail Docking in Lambs], , (August 29, 2014) [hereinafter AVMA, Tail Docking in Cattle], , (Julys 15, 2014) [Hereinafter AVMA, Tail Docking in Piglets],

[182] Carolyn L. Stull, Michael A. Payne, Steven L. Berry, and Pamela J. Hullinger, *Evaluation of the scientific justification for tail docking in dairy cattle*, 220(9) J. Am. Veterinary Med. Ass'n 1298, 1302 (2002).CCarolyn LMMichael A.SSteven LPPamela J 1298,

[183] AVMA, Tail Docking in Piglets, *supra* note 181, 2-3.

[184] AVMA, Tail Docking in Lambs, *supra* note 181, at 1.

[185] *Id*.; AVMA, *Tail Docking in Cattle*, *supra* note 181, at 3-4; AVMA, *Tail Docking in Piglets*, *supra* note 181, at 1. Tail Docking in Cattle Tail Docking in Piglets

the tail, or a knife.[186] Calves react immediately after the rubber ring is placed on their tails.[187] They shake their tail, vocalize, look at and groomtheir tails, and are restless.[188] After their tail is docked, cows are less efficient at swatting away flies.[189] They flick their docked tails more and have a significantly greater number of flies (who bite them) on the rear portion of their body.[190] Calves also have increased cortisol levels after tail docking with an electric docking iron.[191]

Piglets who have their tails docked show behavioral and physiological responses indicating acute pain and stress.[192] They sit and scoot more, and their cortisol levels increase.[193] Pigs with docked tails may also develop a neuroma (a pinched nerve) which causes increased sensitivity to pain.[194]

Tail docking lambs causes them considerable discomfort and pain and is linked to increased incidence of rectal prolapse (a condition in which part of the large intestine is no longer attached inside the body, and sometimes protrudes out of the anus.)[195] Lambs whose tails have been docked are restless, stamp, kick, turn their heads, and vocalize.[196] Their cortisol levels also increase.[197]

Docking can lead to an infection, and cause long-lasting pain and inflammation.[198] Some animals behave abnormally up to 41 days after the procedure.[199] A local anesthetic and analgesic (painkiller) reduces these behavioral and physiological responses.[200]

---

[186] Susan Schoenian, *Small Ruminant Info Sheet*, University of Maryland, 1-2 (2007), https://perma.cc/B867-DTMW.

[187] Pamela Ruegg, *Tail Docking and Animal Welfare*, The Bovine Practitioner, 6 (2004), https://perma.cc/R44M-J894, The Bovine Practitioner,

[188] *Id*. at 6-7.

[189] *Id*. at 8.

[190] *Id*.

[191] *Id*. at 3.

[192] AVMA, *Tail Docking in Piglets*, *supra* note 181, at 2-3. Tail Docking and Piglets, 183181

[193] *Id*. at 2.

[194] *Id*. at 3.

[195] AVMA, *Tail Docking in Lambs*, *supra* note 181, at 1*;* J. Luther, *Causes, Prevention and Treatment of Rectal Prolapse in Sheep,* North Dakota State University, 1 (2008), https://perma.cc/AC8T-5L6U.Tail Docking in Lambs, North Dakota State University,

[196] AVMA, *Tail Docking in Lambs*, *supra* note 181, at 2.Tail Docking in Lambs

[197] *Id*.

[198] Sneddon & Gentle, *supra* note 162, at 11.

[199] *Id*.

[200] Sneddon & Gentle, *supra* note 162, at 11; AVMA, *Tail Docking in Piglets*, *supra* note 181, at 3; AVMA, *Tail Docking in Lambs*, *supra* note 181, at 2.Tail Docking and PigletsTail Docking in Lambs

d. Disbudding or Dehorning

Cows and sheep raised for consumption commonly have their horns or horn buds removed.[201] Disbudding is the destruction of the horn-producing cells of the horn buds in young animals.[202] This is done using a hot iron, caustic chemicals, cryosurgical tools to destroy the cells, or physically using a knife or scoop.[203] Dehorning is the removal of horns in adult animals and is done using a rubber ring, or a sharp tool, such as shears, a knife, a saw, or embryotomy wire (used to dismember a fetus in the womb).[204] When animals are being dehorned, they wag their tails, move their heads, trip, and rear.[205] After the procedure, animals rub and shake their heads, extend their necks, flick their ears and tail, and change body position often.[206] Animals who are dehorned using a rubber ring experience changes in attitude, gait, and posture, spend more time lying down, have decreased appetites, and poor wound healing.[207] Cortisol, adrenaline, and noradrenaline increase after the procedure.[208] Using a local anesthetic to numb the area reduces the animals' abnormal behaviors during the procedure and may also prevent the increase in cortisol.[209] Use of analgesics also significantly reduces abnormal behaviors and reduces the cortisol response.[210]

[201] *See generally* Fred M. Hopkins, James B. Neel, & F. David Kirkpatrick, *Dehorning Calves*, https://perma.cc/JY27-6JWS; D. G. Pugh & A.N. Baird, Sheep and Goat Medicine 14 (2d ed. 2012).A. 14

[202] AVMA, *Welfare Implications of Dehorning and Disbudding Cattle*, 1 (July 5, 2014) [Hereinafter AVMA, *Dehorning in Cattle*], https://perma.cc/98PM-LJ3W. 1, 1 (July 5, 2014) [Herinafter AVMA, Dehorning in Cattle],

[203] K.J. Stafford & D.J. Mellor, *Dehorning and disbudding distress and its alleviation in calves*, 169 The Veterinary J. 344-46 (Feb. 15, 2004), https://perma.cc/34RX-YEJ5; AVMA, *Dehorning in Cattle*, *supra* note 202, at 1.–49, 344–46)), http://www.sciencedirect.com/science/article/pii/S1090023304000486AVMA, Dehorning in Cattle

[204] AVMA, *Dehorning in Cattle*, *supra* note 202, at 2

[205] *Id.* at 3.

[206] *Id*.

[207] *Id*.

[208] *Id*. at 2-3.

[209] *Id*. at 4.

[210] *Id*. at 5.

e. Branding

Many farmers use branding as a means of identifying their animals.[211] Cows are commonly branded.[212] Branding is accomplished by injuring the animal's skin.[213] There are two widely used branding methods: hot iron branding and freeze branding. During hot iron branding, the farmer places a hot iron on the animal's skin to burn the skin, remove the hair, and create a permanent scar.[214] During freeze branding, a cold iron is applied to the animal's skin for twenty to ninety seconds to destroy the pigment in the animal's hair.[215] "Both methods cause prolonged tissue damage."[216] The American Veterinary Medical Association (AVMA) considers both forms of branding to be painful to animals.[217] During both types of branding, animals exert force against their restraints, move their heads quickly, and flick their tails.[218] However, they flick their tails, fall, and vocalize more during hot branding than freeze branding.[219] Adrenaline levelsEpinephrine concentrationsincrease during hot iron branding, and cortisol levels increase during both types of branding.[220]

f. Beak Trimming

Beak trimming is the removal of part of a bird's beak.[221] Chickens who are commercially raised for consumption routinely have their breaks trimmed to reduce pecking injuries, related deaths,

---

[211] Sneddon & Gentle, *supra* note 162, at 13. It is possible that there are less painful ways to identify animals, such as ear, back or tail tagging, ear notching, using neck chains, tattooing or painting, leg banding, and using electronic methods like microchips. AVMA, *Welfare Implications of Hot-Iron Branding and Its Alternatives*, 2 (April 4, 2011) [Hereinafter AVMA, *Hot-Iron Branding and Alternatives*], https://perma.cc/6JQ2-L8EH. 1, 2 (April 4, 2011) [Hereinafter AVMA, Hot-Iron Branding and Alternatives],

[212] Ryan Goodman, *Why Are Cattle Branded*, Agriculture Proud (June 13, 2012), https://perma.cc/5772-9B95.Ryan Goodman,Agriculture Proud

[213] AVMA, *Hot Iron Branding and Alternatives*, *supra* note 211, at 1AVMA,

[214] *Id*.

[215] Dave Lalman, Frank Bates, Ken Apple, *Freeze Branding Cattle,* 1, Oklahoma State University, https://perma.cc/JB8W-JLY4; Jane A. Parish and Justin Rhinehart, *Freeze Branding Beef Cattle,* 2 (2008), Mississippi State University, https://perma.cc/VU3G-TKZF.Dave Lalman, Frank Bates, Ken Apple, 1,, 1, Oklahoma State University, Jane A. Parish and Justin Rhinehart, Mississippi State University,

[216] Sneddon & Gentle, *supra* note 162, at 13.

[217] AVMA, *Hot-Iron Branding and Alternatives*,, *supra* note 211 at 1.

[218] *Id*. at 1-2.

[219] Sneddon & Gentle, *supra* note 142 at 13.

[220] AVMA, *Hot-Iron Branding and Alternatives*, *supra* note 211, at 1–2. AVMA,

[221] Sneddon & Gentle, *supra* note 162, at 13.

and cannibalism.[222] The AVMA states that beak trimming is an acutely painful procedure.[223] The common methods of beak trimming are using a (sometimes heated) blade or scissor-like tool to cut off part of the beak, or using an electric current or infrared light to damage the beak so that the tip falls off.[224] This procedure can lead to long-term pain in the stump of the beak and there is substantial evidence showing it can cause pinched nerves.[225] After beak trimming, birds show less beak "related behaviors such as preening, feeding, drinking and [environmental exploratory] pecking."[226] They also tuck their beak under their wing and spend more time resting.[227] These behavioral effects can last up to 3 months after beak trimming, which is more than the average life span on a farm for a chicken who is raised for consumption.[228]

g. Housing

Most farmed animals raised for consumption in the U.S. are raised in factory farms where they are intensively confined.[229] These cramped housing conditions cause them discomfort.[230] The housing practices that are under the most scrutiny are confining pregnant pigs in gestation crates and egg-laying hens in battery cages, and tethering veal calves.

Pigs kept in gestation crates are unable to behave naturally.[231] They cannot walk, adjust their posture, or engage in any normal social behaviors.[232] They may not even be able to lie down in the crate comfortably without touching the crate bars.[233] They act out repetitive behaviors, such as biting the crate bars and sham chewing (chewing

[222] Poultry Hub, *Beak trimming* (2016), https://perma.cc/T84L-W4QC; AVMA, *Welfare Implications of Beak Trimming*, 1 (February 7, 2010) [Hereinafter AVMA, *Beak Trimming*], https://perma.cc/XQ9F-8PEE, (2016), 1, 1 (February 7, 2010) [Hereinafter AVMA, Beak Trimming],https://www.avma.org/KB/Resources/LiteratureReviews/Documents/beak_trimming_bgnd.pdf

[223] AVMA, *Beak Trimming*, *supra* note 222 at 1. *Id*. *Id*. AVMA, Beak Trimming, *supra* note 222 at 1.

[224] *Id*. at 2-3.

[225] *Id*. at 1.

[226] *Id*. at 2. Birds who have their beaks trimmed also have higher rates of lice, which may be because their trimmed beaks are less effective at removing material from their feathers. *Id*.

[227] *Id*. at 1.

[228] *Id*. Broiler chickens are slaughtered at five to seven weeks of age. Animals Australia, *Broiler Chickens Fact Sheet*, https://perma.cc/LV7M-695S (last visited Apr. 20, 2017).

[229] *Farm Animal Welfare*, *supra* note 133.

[230] Sneddon & Gentle, *supra* note 162, at 15.

[231] Croney & Millman, *supra* note 14, at 560.

[232] *Id*.

[233] *Id*.

nothing).[234] It seems that lifelong confinement in crates leads to pigs experiencing frustration and boredom.[235] They develop pressure sores on their shoulders and often change position in attempt to alleviate the pressure.[236] Application of an analgesic reduces the frequency of position changes and can reduce pain.[237]

Many hens are kept confined in conventional (also widely known as battery) cages, which are wire enclosures with sloped floors housing seven to eight birds per cage.[238] A hen in this type of cage usually gets around sixty-seven square inches of space (less than a standard sheet of paper).[239] Hens kept in battery cages are not able to perform natural behaviors such as dust bathing, walking, foraging, nesting, or roosting.[240] Since hens are not given much space, it is difficult for them to flap their wings, stretch, shake their bodies, or wag their tails.[241] Hens can also injure their feet due to the sloped wire flooring or become trapped in between wires of the cage.[242]

Calves raised for veal are commonly kept tethered in individual stalls or pens.[243] In stalls, calves cannot rest or groom themselves normally, have limited movement and social contact, and cannot explore their environment.[244] Calves experience swollen knees, prolonged inactivity, and act out repetitive oral behaviors, such as licking or sucking objects.[245] When they are released into a larger area, they are more active which shows that they have a pent-up desire for exercise.[246]

Pregnant pigs, hens, and veal calves do not have their behavioral

---

[234] *Id*.

[235] *Id*.

[236] Sneddon & Gentle, *supra* note 162, at 15.

[237] *Id*.

[238] AVMA, *Welfare Implications of Laying Hen Housing* 1 (Jan. 26, 2012), https://perma.cc/F2S4-BFDN.

[239] Humane Soc'y of the U.S., *An HSUS Report: Welfare Issues with Furnished Cages for Egg-Laying Hens* 1, https://perma.cc/WA4M-LCDF (last visited Apr. 20, 2017).

[240] AVMA, *Welfare Implications of Laying Hen Housing*, *supra* note 238, at 1.

[241] *Id*.

[242] *Id*.

[243] AVMA, *Welfare Implications of Veal Calf Husbandry* 1 (Oct. 13, 2008), https://perma.cc/63ZQ-JY6W. In 2007, the Board of Directors of The American Veal Association adopted a resolution that recommended that the veal industry switch to group housing methods by December 31, 2017. Am. Veal Ass'n, *Resolution* (May 9, 2007), https://perma.cc/Z5TP-3QXR. Time will tell if the industry makes the switch.

[244] Angela Greter, and Léna Levison, *Calf in a Box: Individual Confinement Housing Used in Veal Production* 3, BC SPCA Farm Animal Welfare News (June 2012), https://perma.cc/FJ45-XA62.

[245] AVMA, *Welfare Implications of Veal Calf Husbandry*, *supra* note 243, at 1; Greter & Levison, *supra* note 244, at 3.

[246] AVMA, *Welfare Implications of Veal Calf Husbandry*, *supra* note 243, at 1-2.

needs met when they are raised in intense confinement.[247] Being raised in such restrictive environments prevents their normal social behavior, and makes them uncomfortable, frustrated, and bored.[248] The crates, cages, and stalls can also cause painful injuries to the animals, such as pressure sores, foot injuries, and swollen knees.[249]

V. Part IV: How Can The U.S. Implement Science-Based Animal Welfare Standards?

Current U.S. laws do not adequately protect farmed animal welfare. Many of the common agricultural practices animals are subjected to cause them pain and suffering. To adequately protect their welfare, policymakers should consider farmed animals' mental capacities and biological needs and enact scientifically informed laws. The Five Freedoms, created by the Brambell Committee of the U.K. Parliament in 1965, and updated in 1992 by the Farm Animal Welfare Council, explain this concept.[250] The main principle of the Five Freedoms is that animals kept by man should be free from unnecessary suffering.[251] The Five Freedoms include:

1. **Freedom from Hunger and Thirst**—by ready access to fresh water and a diet to maintain full health and vigour.
2. **Freedom from Discomfort**—by providing an appropriate environment including shelter and a comfortable resting area.
3. **Freedom from Pain, Injury or Disease**—by prevention or rapid diagnosis and treatment.
4. **Freedom to Express Normal Behaviour**—by providing sufficient space, proper facilities and company of the animal's own kind.
5. **Freedom from Fear and Distress**—by ensuring conditions and treatment which avoid mental suffering.[252]

---

[247] Croney & Millman, *supra* note 14, at 560.

[248] *Id*.

[249] Sneddon & Gentle, *supra* note 162, at 15; AVMA, *Welfare Implications of Laying Hen Housing*, *supra* note 238, at 1; AVMA, *Welfare Implications of Veal Calf Husbandry*, *supra* note 243, at 1.

[250] Pierre Mormède & Magali Hay, *Stress and welfare, a Psychoendocrine Perspective* 227 Landbauforschung Völkenrode Sonderheft [Land Surveyor Völkenrode Special Issue] 5, 5 (2002) (Ger.), https://perma.cc/665E-LXVE.

[251] Farm Animal Welfare Council, *Five Freedoms*, https://perma.cc/JN4C-DWZU (last modified Apr. 16, 2009).

[252] *Id*.

The principles of the Five Freedoms should be reflected in the U.S.'s farmed animal welfare laws. Farmers should be legally required to care for animals in ways that cause them the least discomfort, pain, injury, fear, and distress. This means that producers must use the least painful methods for common agricultural procedures (such as castration, tail docking, disbudding or dehorning, branding, and beak trimming) and use local anesthesia and analgesics when it can reduce pain.[253]

U.S. producers must also be legally required to house their animals in ways that cause them the least amount of discomfort, injury, and distress, and leave them free to express normal behavior. This means that farmers may not be able to raise pigs, hens, and veal calves in crates, battery cages, and stalls, as there is evidence that alternative housing methods result in improved animal welfare.[254] Raising animals in less intensive confinement may also make some of the common agricultural procedures unnecessary, such as tail docking and beak trimming.

a. Specific Examples

The European Union and New Zealand provide examples as to how the U.S. can implement science-based animal welfare standards.

i. European Union (EU)

The EU has laws pertaining to minimum standards for the protection of farmed animals' welfare during transport, stunning, and slaughter.[255] These laws cover any vertebrate animal "(including fish,

[253] Sneddon & Gentle, *supra* note 162, at 16. Local anesthetics and analgesics reduce pain during castration, tail docking, disbudding or dehorning, and beak trimming. *See supra* Part III: State Anti-Cruelty Statutes.

[254] Evidence strongly indicates that gestation crates cause pigs discomfort, stress, and injury. Voiceless, *Science & Sense: The Case for Abolishing Sow Stalls* 35, 37 (Jan. 2013), https://perma.cc/NW8P-NVFJ Group housing, where aggression is managed with environmental factors, can lead to better animal welfare than housing pigs in gestation crates. *Id*. For calves raised for veal, there is a greater potential to meet calves' welfare needs when they are raised in group housing instead of individual stalls. Greter & Levison, *supra* note 244, at 4.. Group housing increases social relationships, and reduces stress and abnormal behaviors. *Id*. Egg-laying hens raised in battery cages are restricted from performing any natural behaviors, such as dust bathing, walking, and foraging. AVMA, *Welfare Implications of Laying Hen Housing*, *supra* note 238, at 1-2. Hens also experience cage-related injuries, feather pecking, and cannibalism, which necessitates trimming of the hens' beaks. *Id*. at 2. Enriched cages provide perches, nest boxes, litter, and additional space and movement for each hen. *Id*. Cage-free systems provide increased behavioral opportunities, but hens may be more likely to experience disease and injury. *Id*. at 3.

[255] *See generally* Council Directive 98/58, 1998 O.J. (L 221) 23 (EC); Council Regulation (EC) No 1/2005, 2004 O.J. (L 3) 1 (EC); Commission Implementing

reptiles or amphibians) bred or kept for the production of food, wool, skin or fur or for other farming purposes."[256] The EU also has laws governing specific groups of animals, like calves, chickens raised for meat, and egg-laying hens.[257] For example, the EU prohibits the use of individual stalls for calves after the age of eight weeks and the use of non-enriched cages (battery cages) for egg-laying hens.[258] The EU's legislative framework is based on the Five Freedoms and its animal welfare policies are based on the best available scientific evidence.[259] The EU's Strategy for the Protection and Welfare of Animals laid the foundation for improving animal welfare standards from 2012 to 2015.[260]

Policymakers in the Commission of the European Communities (the Commission) believe that legislation relating to farmed animal welfare should be based on continuously evolving scientific knowledge, expertise, and practical experience.[261] The Commission supports research projects relating to farmed animal welfare.[262] For example, the projects the Commission completed during the years 2012 to 2015 include studies and reports on: the welfare of farmed fish during transport and slaughter, public animal welfare education, how to provide consumers information on the stunning of animals, how genetic selection impacts chickens used for meat, various slaughter methods for poultry, restraint of bovines, and the possibility of protections for fish during slaughter.[263]

Decision 2013/188/EU, 2013 O.J. (L 111) 107 (EU); Council Regulation 1099/2009, 2009 O.J. (L 303) 1 (EC).

[256] Council Directive 98/58, arts. 1(2)(d) & 2(1), 1998 O.J. (L 221) 23, 23 (EC).

[257] *See generally* Council Directive 2008/119, 2008 O.J. (L 10) 7 (EC); Council Directive 2007/43, 2007 O.J. (L182) 19 (EC); Council Directive 1999/74, 1999 O.J. (L 203) 53 (EC).

[258] *See generally* Council Directive 2008/119, 2008 O.J. (L 10) 7 (EC); Council Directive 2007/43, 2007 O.J. (L182) 19 (EC); Council Directive 1999/74, 1999 O.J. (L 203) 53 (EC).

[259] European Comm'n, *Animal Welfare*, https://perma.cc/7HRE-JBW4 (last visited Apr. 20, 2017; Comm'n of the European Cmtys., *Communication from the Commission to the European Parliament and the Council on a Community Action Plan on the Protection and Welfare of Animals 2006-2010* 4 (Jan. 23, 2006), https://perma.cc/SG4V-M8AG. The laws also take into account economic factors.

[260] European Comm'n, *EU Animal Welfare Strategy: 2012-2015* (2012), https://perma.cc/GU9N-H3BN.

[261] Comm'n of the European Cmtys., *Commission Working Document on a Community Action Plan on the Protection and Welfare of Animals 2006-2010* 3 (Jan. 23, 2006), https://perma.cc/R3SG-KC5X.

[262] *Id*. at 7.

[263] European Comm'n, *Communication from the Commission to the European Parliament and the Council and the European Economic and Social Committee on the European Union Strategy for the Protection and Welfare of Animals 2012-2015* 12 (Feb. 15, 2012), https://perma.cc/5UBK-84MF.

The Animal Health and Welfare Panel (AHAW) of the European Food Safety Authority (EFSA) provides independent scientific advice to the Commission.[264] AHAW's advice is focused on identifying methods to reduce animals' unnecessary pain and suffering and improve their welfare.[265] When providing advice, AHAW focuses on a number of welfare issues, including feeding and housing systems, husbandry practices, nutrition, and methods of transport, stunning, and slaughter.[266] In 2012, AHAW published a document on a standardized methodology for the government and farmers to use in the assessment of animal welfare.[267] Currently, AHAW is developing a set of scientifically measurable animal-based welfare indicators for each farmed animal species.[268] AHAW will use both the physical and mental state of the animals as indicators of their welfare.[269] These welfare indicators will then be used in conjunction with input factors (resource and management-based measures) to monitor animal welfare and ultimately decide on the conditions that are acceptable for each farmed animal species.[270]

AHAW has produced Scientific Opinions (recommendations for treatment) of dairy cows, pigs, and poultry who are raised for meat.[271] For example, in AHAW's Scientific Opinion on the use of animal-based measures to assess welfare in pigs, it recommends: pigs undergoing castration be anaesthetized during the procedure and analgesics be administered to prevent pain, farmers use measures other than tail-docking to control tail biting, and the use of loose-farrowing systems (instead of keeping mother pigs in farrowing crates).[272]

---

[264] European Food Safety Auth., *Animal Welfare*, https://perma.cc/G8RB-WCTW (last visited Feb. 1, 2013).

[265] *Id*.

[266] *Id*.

[267] European Food Safety Auth., *Guidance on Risk Assessment for Animal Welfare* (Feb. 15, 2012), https://perma.cc/CD6S-LQND.

[268] *Animal Welfare*, *supra* note 264.

[269] European Food Safety Auth., *Statement on the Use of Animal-Based Measures to Assess the Welfare of Animals* 6 (2012), https://perma.cc/F52R-DG9H.

[270] *Id*.

[271] European Food Safety Auth., *Scientific Opinion on the Use of Animal-Based Measures to Assess Welfare of Dairy Cows* (2012), https://perma.cc/HZC9-KECE; European Food Safety Auth., *Scientific Opinion on the Use of Animal-Based Measures to Assess Welfare in Pigs* (2012), https://perma.cc/B7CB-LNRQ; European Food Safety Auth., *Scientific Opinion on the Use of Animal-Based Measures to Assess Welfare of Broilers* (2012), https://perma.cc/JK35-3YFC.

[272] *Scientific Opinion on the Use of Animal-Based Measures to Assess Welfare in Pigs*, *supra* note 271, at 14 & 25. The EU banned gestation crates after the fourth week of pregnancy in 2013. Steve Werblow, *Gestation crates: News from the front lines*, PORK Network (Jan. 27, 2014), https://perma.cc/9FUY-5V4Q.

Although AHAW's Scientific Opinions do not have the force of law, some legislation has included animal-based welfare indictors: council directive 2007/43/EC laying down minimum rules for the protection of chickens kept for meat production and regulation (EC) number 1099/2009 on the protection of animals at the time of killing.[273] The animal-based welfare indictors in Scientific Opinions may also be used to complement prescriptive requirements in EU legislation.[274]

There has also been institutional development of animal welfare science in the EU. The University of London Royal Veterinary College's Animal Welfare Science and Ethics group was established in 2005.[275] The group researches and teaches on the subjects of animal welfare, animal behavior, and veterinary ethics and law.[276] The goal of the group is to minimize animals' pain and suffering, and maximize their positive experiences.[277] It uses scientific research on animal behavior, physiology, and pathology to make informed decisions effecting animal welfare, and helps farmers, slaughterhouses, food processors, policy makers, and industry bodies translate that research into practical application to raise animal welfare standards.[278] The group's current research projects include: dairy cow welfare; environment, welfare and production of pigs and poultry; perception, cognition and social behavior in chickens; stunning and dispatch of animals for slaughter; disease control and population management; and veterinary ethics and law.[279]

ii. New Zealand

New Zealand has a national science-based system for setting legal animal welfare standards.[280] It also has a practical strategy for progressing towards positive animal welfare developments so that there will be

[273] Council Directive 2007/43/EC of 28, 2007 O.J. (L 182) 19 (EC); Council Regulation 1099/2009, 2009 O.J. (L 301) 1 (EC).

[274] *Statement on the use of animal-based measures to assess the welfare of animals*, *supra* note 269, at 5.

[275] Royal Veterinary Coll., *RVC Animal Welfare Science and Ethics*, https://perma.cc/JY69-UNFG (last visited July 28, 2016.)

[276] *Id.*

[277] Royal Veterinary Coll., *About*, https://perma.cc/T49G-JX8W (last visited July 28, 2016.)

[278] *Id.*

[279] Royal Veterinary Coll., *Projects*, https://perma.cc/PS3Q-PWA7 (last visited July 28, 2016.)

[280] David J. Mellor, Angus Campbell, & David Bayvel, *New Zealand's Inclusive Science-Based System for Setting Animal Welfare Standards*, 113 Applied Animal Behaviour Sci. 313, 314 (2008).David J. Mellor, Angus Campbell, & David Bayvel, *New Zealand's inclusive science-based system for setting animal welfare standards* 314, 113 Applied Animal Behaviour Sci. 313 (2008) (available at https://www.researchgate.net/publication/239918434_New_Zealand's_inclusive_science-based_system_for_setting_animal_welfare_standards).

incremental improvements towards higher welfare standards.[281] This strategy allows for immediate improvement in animal welfare standards while giving time for more complex issues to be fleshed out and resolved.[282]

New Zealand's national law that covers farmed animal welfare is the Animal Welfare Act 1999 ("Welfare Act"), which focuses on neglect, cruelty, and duties to proactively care for animals.[283] The Welfare Act covers mammals, birds, reptiles, amphibians, bony or cartilaginous fish, octopi, squid, crabs, lobsters, crayfish, mammalian fetuses, avian and reptilian pre-hatched young that are in the last half of their development period, and marsupial pouch young.[284] Owners of animals must provide for their animal's physical, "health, and behavioral needs."[285] Animals must receive "proper and sufficient food … and water[,] adequate shelter[,] opportunity to display normal patterns of behavior[,] physical handling in a manner which minimi[z]es the likelihood of unreasonable or unnecessary pain or distress[, and] protection from, and rapid diagnosis of, any significant injury or disease. . . which, in each case, is appropriate to the species, environment, and circumstances of the animal."[286] The minimum standards of care for animals and recommended best practices are found in the Codes of Welfare, which have the force of law under the Welfare Act.[287]

The Ministry of Agriculture and Forestry and the Minister of Agriculture are responsible for regulations relating to animal welfare.[288] The National Animal Welfare Advisory Committee (NAWAC) provides guidance to the Minister on all welfare-related issues (not including the scientific use of animals) and develops the Codes of Welfare, which are then issued by the Minister for Primary Industries. [289] Science plays a major role in NAWAC's defining of animal welfare standards and recommendations for best practices.[290] NAWAC should consider "animal-based facets of nutritional, environmental, health, behaviour[]

---

[281] *Id.*

[282] *Id.*

[283] Animal Welfare Act 1999 (N.Z.), (available athttps://perma.cc/PM6A-6P76).

[284] Animal Welfare Act 1999, s 2(1)(a)–(c).

[285] Animal Welfare Act 1999, s 10.

[286] Animal Welfare Act 1999, s 4.

[287] Ministry for Primary Industries, *Codes of Welfare*, https://perma.cc/88M5-7UR6 (last visited Feb. 22, 2016).

[288] Mellor, Campbell, & Bayvel, *supra* note 280, at 314.

[289] *Id.* The National Animal Welfare Advisory Committee gives guidance on issues relating to the scientific use of animals. *Id.* The Codes of Welfare include the following: Circuses, Companion Cats, Dairy Cattle, Deer, Dogs, Goats, Horses and Donkeys, Layer Hens, Llamas and Alpacas, Meat Chickens, Ostriches and Emus, Painful Husbandry Procedures, Pigs, Rodeos, Sheep and Beef Cattle, Transport of Animals, and Zoos. Ministry for Primary Industries, *Codes of Welfare*, *supra* note 287.

[290] NAWAC Guideline 05: Role of science in setting animal welfare standards 1 (available athttps://perma.cc/DA5A-CLNV).

ral and cognitive/neural sciences."[291] NAWAC's membership is diverse, including animal welfare advocates, animal welfare scientists, livestock scientists, teachers, veterinarians, and animal agriculture industry stakeholders.[292]

There are also institutions in New Zealand that focus on animal welfare research. Massey University has an Animal Welfare Science and Bioethics Centre, formed in 1998, which focuses on "practical, science-based and ethical advice, education and solution[s] to animal welfare problems."[293] The Centre evaluates husbandry practices, prepares animal welfare codes, explores how to humanely assess pain in animals, and promotes the "Three Rs" (replacement, reduction, and refinement) in animal testing.[294] The University of Waikato has a Learning, Behaviour, and Welfare Research Unit which is aimed at "advancing the understanding of … animal behaviou[]r and seeks to improve animal welfare.[295] The Unit is currently working on hens' needs and preferences.[296] These institutions have provided valuable research that has helped set national animal welfare standards in New Zealand.[297] The institutions also develop education and scholarship in the science of animal welfare.[298]

New Zealand encourages society's input and participation in animal welfare developments.[299] A national animal welfare group, the Animal Behaviour and Welfare Consultative Committee, provides a "forum for information exchange between researchers, industry, government and non-governmental organi[z]ations ."[300] Its membership is diverse and meets twice a year to update members about events and trends and allow for discussion.[301] A political interest group, the All-Party Animal Welfare Liaison Group, was also created to educate the Parliament Members on the subject of animal welfare.[302]

---

[291] *Id.*

[292] Mellor, Campbell, & Bayvel, *supra* note 280, at 319.

[293] Massey University, *Animal Welfare Science and Bioethics Centre*, https://perma.cc/7SF4-2RGS (last visited Feb. 22, 2016); Massey University, *Background*, https://perma.cc/T3A9-9B36 (last visited Feb. 22, 2016).

[294] Massey University, *Key Attributes*, https://perma.cc/XL63-UWW3 (last visited Feb. 22, 2016); Massey University, *The New Zealand Three Rs Programme (NZ-3Rs Programme)*, https://perma.cc/H7TS-GBCP (last visited Feb. 22, 2016).

[295] The University of Waikato, *Learning, Behaviour, and Welfare Research Unit*, https://perma.cc/KN2Y-ZEVJ (last visited Feb. 22, 2016).

[296] *Id.*

[297] Mellor, Campbell, & Bayvel, *supra* note 280,*Id.* at 321.*Id.* at 321.

[298] *Id.*

[299] *Id.*

[300] Mellor, Campbell, & Bayvel, *supra* note 280, at 321; Ministry of Agriculture and Forestry, *Animal Welfare in New Zealand* 20 (2009) (available at https://perma.cc/FX7R-JE5F).

[301] Mellor, Campbell, & Bayvel, *supra* note 280, at 321.

[302] *Id.* This group operated for five years from 2001-2006. *Id.*

b. Suggestions for the U.S.

The U.S. could implement federal science-based animal welfare standards legislatively. There are two things that Congress could do: (1) extend the coverage of the HMSA to include chickens, fish, and all farmed animals who can feel pain, (2) pass a new federal Farmed Animal Welfare Act that embodies the Five Freedoms, or (3) pass piece-meal legislation relating to farmed animal welfare (on the state or federal level.).

Congress could easily amend the definition of animal in the HMSA to include chickens, turkeys, fish, and other animals who are farmed for consumption in the U.S. Congress could direct the Secretary of Agriculture and the USDA to determine whether any species not currently covered by the HMSA can feel pain. If they can, they should be protected under the HMSA. The Secretary of Agriculture would also be directed to promulgate rules relating to the humane slaughter of chickens, turkeys, fish, and other animals that are included under the amended HMSA.

Congress could also pass a Farmed Animal Welfare Act that embodies the Five Freedoms. Animals should be free from hunger, thirst, discomfort, pain, injury, disease, fear, and distress, and should be free to express normal behaviors.[303] The Farmed Animal Welfare Act's definition of animal should extend to all farmed animals who are capable of feeling pain, including cows, pigs, sheep, chickens, and fish.[304] Congress would give the Secretary of Agriculture and USDA's Animal and Plant Health Inspection Service (APHIS) the directive to issue regulations relating to the humane treatment of farmed animals under the new law.

The U.S. is currently completing scientific research to improve animal welfare through the USDA's Livestock Behavior Research Unit (LBRU).[305] The goal of the LBRU is to develop scientific measures of animal welfare.[306] The LBRU's work is grounded in sciences, including animal behavior, the physiology of stress, immunology, neurophysiology, and animal cognition.[307] The LBRU hopes to change existing practices to improve animal welfare.[308] Currently, the recommendations resulting

[303] *Five Freedoms*, *supra* note 251.

[304] Any animal farmed for food in the U.S. who has a scientifically verifiable capacity to feel pain would be covered under the Farmed Animal Welfare Act.

[305] USDA Agricultural Research Service, *Livestock Behavior Research Unit*, https://perma.cc/59BH-VH9G (last visited March 1, 2013).

[306] *Id.*

[307] *Id.*

[308] *Id.* The following are some of the animal welfare projects the LBRU is currently working on: "Reducing Animal Stress and the Incidence Or Prevalence of Human Pathogens Through Enhanced Gastrointestinal Microbial and Immune

from the LBRU's projects do not have the force of law. Under the new Farmed Animal Welfare Act, the USDA could give the LBRU's recommendations the force of law by promulgating regulations based on the recommendations. I suggest that the LBRU first look into the painful common husbandry practices referenced in Part III of this paper and make recommendations to reduce the pain caused by those practices.

The U.S could also obtain assistance doing the scientific legwork on which to base the Farmed Animal Welfare Act from the World Organization for Animal Health (OIE), of which the U.S. is a member, and the AVMA. The Secretary of Agriculture, the USDA, and the LBRU could work with the OIE to develop standards for animal welfare and humane slaughter. These standards of welfare would then be given the force of law through regulations promulgated by USDA.

The OIE's Animal Welfare Working Group, which includes representation from animal agriculture industries and non-profit organizations concerned with animal protection, develops standards to improve animal health and welfare.[309] The OIE considers that

---

Functions in Farm Animals[,] … Safeguarding Well-Being of Food Producing Animals[,] … A Novel Two-Step Procedure to Allow for Humane on-Farm Euthanasia[,] … A Novel Two-Step Procedure to Humanely Euthanize Piglets[,] … Thermal Perches As Cooling Devices for Reducing Heat Stress in Caged Laying Hens[,] … Evaluating the Welfare of Piglets after Weaning and Transport During Different Seasons, Using Conveyor Belt to Load and Unload Pigs to Reduce Stress and Improve Welfare of Pigs[,] … Managing Climate Change to Enhance Animal Welfare[,] … Probiotic, Bacillus Subtillis, Prevents Feather Pecking and Cannibalism in Laying Hens[,] … [and] The Role of Stress on Swine Welfare." USDA Agricultural Research Service, *Research Programs and Projects at this Location*, http://www.ars.usda.gov/research/projects_programs.htm?modecode=36-02-20-00 https://perma.cc/ELM9-L2R2 (last visited March 1, 2016).Reducing Animal Stress and the Incidence Or Prevalence of Human Pathogens Through Enhanced Gastrointestinal Microbial and Immune Functions in Farm Animals, Safeguarding Well-Being of Food Producing Animals, A Novel Two-Step Procedure to Allow for Humane on-Farm Euthanasia, A Novel Two-Step Procedure to Humanely Euthanize Piglets, Thermal Perches As Cooling Devices for Reducing Heat Stress in Caged Laying Hens, Evaluating the Welfare of Piglets after Weaning and Transport During Different Seasons, Using Conveyor Belt to Load and Unload Pigs to Reduce Stress and Improve Welfare of Pigs, Managing Climate Change to Enhance Animal Welfare, Probiotic, Bacillus Subtillis, Prevents Feather Pecking and Cannibalism in Laying Hens, and The Role of Stress on Swine Welfare. USDA Agricultural Research Service, *Research Programs and Projects at this Location*, http://www.ars.usda.gov/research/projects_programs.htm?modecode=36-02-20-00 (last visited March 1, 2016).

[309] The World Org. for Animal Health (OIE), *The OIE's objectives and achievements in animal welfare*, https://perma.cc/QDF7-LMFZ (last visited March 1, 2016); OIE, *Terrestrial Animal Health Code*, https://perma.cc/7M2N-JNUA (last visited March 1, 2016). The Working Group On Animal WelfareAnimal Welfare Working Group has included people from the International Dairy Federation, the International Meat Secretariat, the International Egg Commission, and the World Society for the Protection of Animals. Dr. Sarah Kahn & Dr. Mariela Varas, OIE

standards should be based on sound science and updates the standards regularly with new scientific findings.[310] The OIE has already developed recommendations for the following: the transport of animals by land, sea, and air, the slaughter of animals for human consumption, the killing of animals for disease control purposes, beef production systems, broiler chicken production systems, and the welfare of farmed fish (during transport, stunning and slaughter for human consumption, and killing for disease control purposes).[311] The OIE also established the World Animal Health and Welfare Fund, to promote animal welfare by implementing scientific research and training programs, organizing seminars, conferences, and workshops, producing informational media, and editing and distributing scientific publications.[312]

The Secretary of Agriculture, the USDA, and the LBRU could also develop standards of welfare and humane slaughter (for animals not currently covered by the HMSA) by working with the AVMA. The AVMA established the Animal Welfare Committee (AWC) in 1981.[313] The goal of the AWC is to "respond[] proactively and effectively to emerging [animal welfare] issues."[314] The AWC has a diverse membership, including industry specialists, specialized veterinarians, individuals from animal welfare organizations, and specialists in zoo and wildlife medicine.[315] The AWC is guided by animal welfare principles that are grounded in science and are very similar to the principles composing the Five Freedoms.[316] The relevant principles include:

ANIMAL WELFARE STANDARDS AND THE MULTILATERAL TRADE POLICY FRAMEWORK, https://perma.cc/QNN7-ZSNF.OIE, *The OIE's objectives and achievements in animal welfare*, http://www.oie.int/index.php?id=444 (last visited March 1, 2016); OIE, *Terrestrial Animal Health Code*, http://www.oie.int/en/international-standard-setting/terrestrial-code/ (last visited March 1, 2016). The Working Group On Animal Welfare has included people from the International Dairy Federation, the International Meat Secretariat, the International Egg

Commission, and the World Society for the Protection of Animals. Dr. Sarah Kahn & Dr. Mariela Varas, *OIE animal welfare standards and the multilateral trade policy framework*, http://www.oie.int/fileadmin/Home/eng/Animal_Welfare/docs/pdf/Others/Animal_welfare_and_Trade/A_WTO_Paper.pdf.

[310] OIE, *Animal welfare at a glance*, https://perma.cc/E5JV-HZHW (last visited March 1, 2016); OIE, *OIE's achievements in animal welfare*, https://perma.cc/XUR6-AELN (last visited March 1, 2016.)

[311] OIE, *OIE's Achievements in Animal Welfare*, https://perma.cc/HFN2-2JHP (last visited March 1, 2016).

[312] OIE, *World Animal Health & Welfare Fund of the OIE,* https://perma.cc/8Q4C-97PH.

[313] AVMA, THE VETERINARIAN'S ROLE IN ANIMAL WELFARE i, (2011) (available at https://perma.cc/K2EW-P4UV).*The Veterinarian's Role in Animal Welfare* i, (September 2011) (available at http://www.acaw.org/uploads/AVMA-VetsRoleInAW-20116.pdf).

[314] *Id.*

[315] *Id.*at 1-2.

[316] *Id.* at 1.

> [1.] Decisions regarding animal care, use, and welfare shall be made by balancing scientific knowledge and professional judgment with consideration of ethical and societal values.
>
> [2.] Animals must be provided water, food, proper handling, health care, and an environment appropriate to their care and use, with thoughtful consideration for their species-typical biology and behavior.
>
> [3.] Animals should be cared for in ways that minimize fear, pain, stress, and suffering.
>
> [4.] Procedures related to animal housing, management, care, and use should be continuously evaluated, and when indicated, refined or replaced. …
>
> [5.] Animals shall be treated with respect and dignity throughout their lives and, when necessary, provided a humane death.
>
> [6.] The veterinary profession shall continually strive to improve animal health and welfare through scientific research, education, collaboration, advocacy, and the development of legislation and regulations.[317]

The AVMA currently publishes science-based recommendations relating to common husbandry practices and the welfare of farmed animals.[318] The AVMA has produced recommendations related to the welfare implications of the following: beak trimming; castration in cattle, dehorning and disbudding cattle, electromobilization (paralyzing animals by use of electric current); foie gras production; hot-iron branding and its alternatives; induced molting of layer hens; laying hen housing; ovariectomy (spaying) in cattle; a primer on salmon basics; castration of pigs; teeth clipping, tail docking, and permanent identification of piglets, tail docking of cattle and lambs; use of electro-muscular disruptive devices (tasers) on animals; and veal calf husbandry.[319]

Alternatively, the U.S. could pass piecemeal science-based laws on the state or federal level pertaining to certain farmed animals or practices. An example of a bill which incorporated science-based standards is the Egg Products Inspection Act of 2012.[320] The bill "provide[d] a uniform national standard for the housing and treatment of egg-laying hens."[321] It garnered the support of animal protections

[317] *Id.*

[318] AVMA, *Animal Welfare Literature Reviews*, https://perma.cc/KD9A-LURW (last visited March 1, 2016).

[319] *Id.*

[320] H.R. 3798, 112th Cong. (2d Sess. 2012).

[321] *Id.*

groups, the egg industry, and animal welfare expertsscientists such as Temple Grandin, the American Association of Avian Pathologists, and the AVMA.[322] If the bill werewas enacted, it would have required these provisions: the replacement of conventional cages with "enriched colony housing systems that [would] provide all hens with nearly double the amount of space" (forty-eight to sixty-seven square inches to 124 to 144 square inches), producers to provide egg-laying hens "with environmental enrichment such as perches, nesting boxes, and scratching areas … [to] allow … [them] to express natural behaviors," and require producers to use euthanasia methods approved by the AVMA.[323] The law would have "prohibit[ed] excessive [amounts of] ammonia … in henhouses" and producers from removing feed or water to induce molting to extend their hens' laying cycles.[324] The drafters of the bill consulted a scientific advisory committee for recommendations for the bill.[325] For example, the committee looked at studies to determine the space requirement for hens.[326] The committee also assessed studies that looked at hens' preference for space under different conditions, and hens' behavior, health, and physiological measures of stress under different conditions.[327]

The U.S. should also encourage the institutional development of animal welfare science. This will give the public more input on animal welfare issues by giving students and researchers the opportunity to influence new farmed animal welfare laws through their scientific work. The iInstitutions should also develop education and scholarship in the science of animal welfare. There is evidence that animal welfare science is already somewhat developing in the U.S. The Animal Welfare Science Centre, a joint venture between the University of Melbourne, the South Australian Research and Development Institute, the University of Adelaide, and the Department of Economic Development, Jobs,

---

[322] Humane Soc'y of the U.S.HSUS, *Federal Bill Introduced to Improve Housing for Egg-Laying Hens and Provide Stable Future for Egg Farmers,* https://perma.cc/582V-XT3A (last visited March 1, 2016); Chad Gregory, *Egg bill is good for farmers, consumers and for egg-laying hens*, The Hill's Congress Blog (Feb. 15, 2013, 08:15 pm), https://perma.cc/WNR9-4UGT (last visited March 1, 2016).

[323] Humane Soc'y of the U.S.HSUS, *Federal Bill Introduced to Improve Housing for Egg-Laying Hens and Provide Stable Future for Egg Farmers, supra* note 322. The law also had labeling requirements: all egg cartons would be labelled with the method used to produce the eggs ("eggs from caged hens," "eggs from hens in enriched cages," "eggs from cage-free hens" or "eggs from free-range hens"). *Id.*

[324] *Id.*

[325] J.A. Mench & J.C. Swanson, Developing Science Based Animal Welfare Guidelines, J.A. Mench & J.C. Swanson, *Developing Science Based Animal Welfare Guidelines* 2 (available at https://perma.cc/DX9H-6SJT).

[326] *Id.*

[327] *Id.*

Transport and Resources in Victoria, has locations in Parkville, Victoria and Columbus, Ohio.[328] Ohio State University has a joint master's and Ph.D. program with the Animal Welfare Science Centre.[329] The mission of the Centre is to improve animal welfare by providing expert education, information, and advice on the subject.[330] Washington State University has a Center for the Study of Animal Well-Being, which is a collaborative effort between the university's College of Veterinary Medicine and Department of Animal Sciences.[331] Its goal is to create and disseminate new information that improves the well-being of animals.[332] The University of California-Davis has a Center for Animal Welfare and an International Animal Welfare Training Institute.[333] The Center for Animal Welfare is located in the Department of Animal Science, and its faculty and students study issues relating to animal welfare in order to develop practical methods to improve it.[334] The International Animal Welfare Training Institute has similar goals.[335] There is also an Animal Behavior and Welfare Group at Michigan State University that focuses on providing a scientific basis for animal welfare standards.[336] There is even a U.S. based peer reviewed journal on the subject of animal welfare science, *The Journal of Applied Animal Welfare Science.*[337] The Journal publishes "reports on practices that have demonstrably enhanced the welfare" of animals including wildlife, companion animals, and animals used in agriculture, entertainment, and research.[338]

---

[328] Animal Welfare Science Centre, *Contact AWSC*, https://perma.cc/6AR6-JAVF (last visited March 1, 2016).

[329] Ohio State University, *Graduate: Programs*, https://perma.cc/AS58-9UHL (last visited March 1, 2016).

[330] Animal Welfare Sci.ence Centre, *Our Vision & Mission,* https://perma.cc/DL8Q-67S6 (last visited March 1, 2016).

[331] Wash. State Univ. Coll. of Veterinary Med., Washington State University College of Veterinary Medicine, *Center for the Study of Animal Well-Being*, https://perma.cc/YDT2-6RS2 (last visited March 1, 2016).

[332] *Id.*

[333] Univ.ersity of California-Davis, *Center for Animal Welfare*, https://perma.cc/46AL-YACJhttp://animalwelfare.ucdavis.edu/ (last visited March 1, 2016); Univ.ersity of California-Davis Veterinary Medicine, *International Animal Welfare Training Institute*, https://perma.cc/4YJ9-9VRV (last visited March 1, 2016).

[334] University of California-Davis, *Center for Animal Welfare*, *supra* note 333.

[335] Univ.ersity of California-Davis Veterinary Medicine, *About International Animal Welfare Training Institute, Our Mission,* https://perma.cc/2H2U-M6N2 (last visited March 1, 2016).

[336] Mich. State Univ. Animal Behavior & Welfare Grp., *Animal Behavior and Welfare*, https://perma.cc/V5LX-A9EW (last visited March 1, 2016).Michigan State University Animal Behavior and Welfare Group, *About Us*, http://animalwelfare.msu.edu/animalwelfare/home (last visited March 1, 2016).

[337] Animals & Soc'y Inst., Animals and Society Institute, *The Journal of Applied Animal Welfare Science,* https://perma.cc/W7L7-LGV9 (last visited March 1, 2016).

[338] *Id.*

VI. Conclusion

Currently, state and federal laws in the U.S. do not adequately protect farmed animals. The animal agriculture industry can currently legally cause animals pain and suffering through common husbandry practices, such as castration, tail docking, disbudding or dehorning, branding, beak trimming, and intensive confinement. To effectively protect farmed animal welfare, the U.S. should follow the EU and New Zealand's lead and consider farmed animals' biological needs and mental capacities and enact laws that are based on the best available science. We are not a nation of animal lovers if we allow billions of animals raised for consumption to unnecessarily feel pain and suffer.

Putting Animal Welfare into the *Animal Welfare Act*

Bernard Rollin

The Animal Welfare Act was morally and conceptually flawed from its inception. The very title of this act eloquently attests to a foundational problem. Though one would expect from its name that its major concern was animal welfare, it was rather directed at reassuring the public that their pet animals would not be kidnapped and sold to research labs for experimentation, which was not in fact uncommon. (Rollin, 2006a) (One of my friends, the Dean of a veterinary college, owned a sign that declared that boys should bring dogs at a certain time to the back entrance of a medical school, "no questions asked."

Among the numerous flaws characterizing the Act were the following: it disavowed any concern with the design or conduct of research; the Act only covered those animals that the Secretary of Agriculture decided were used in research, resulting in the absurdity that the vast majority of animals used in research—rats and mice, as well as birds—were not included in the Act; though proper use of anesthesia and analgesia were required, it was left to the discretion of research facilities to determine if they were used. USDA inspectors enforcing the act paid detailed attention to how brooms were hung in a facility, but ignored the mitigation of pain, stress, and distress. Animals used in agricultural research, i.e. research aimed at the production of food and fiber, however invasive such research might be, were excluded from the Act by statute. I remember remarking to my students that the Act was reminiscent of a sex manual covering only the most trivial aspects of foreplay and ignoring the sex act itself.

Though I was well aware of the inadequacies in the Animal Welfare Act, I was not concerned about them until 1978. 1978 was a critical year for the development of my work in animal ethics. That was when I taught for the first time the world's first course in veterinary medical ethics at Colorado State University. Although I had spent over three years preparing for the class by talking to veterinary clinicians, spending numerous hours in the veterinary hospital, and even sitting in on courses for the veterinary students, I was ill—prepared for what I learned that semester.

The students informed me of a significant number of highly invasive and ultimately outrageous laboratory exercises they were forced to perform on animals. For example, in the third week of their

first year, each group of three students was required to feed a young cat cream and then do visceral surgery on the cat, though they had learned nothing about surgery yet, ostensibly to watch the transport of cream through the viscera. Furthermore, the procedure was performed with the use of a restraint drug, which had no visceral analgesic properties whatever. I in fact watched the lab, which not surprisingly turned out to be a horror show, with the animals vocalizing in pain, and the students being appalled and learning nothing. When I asked the professor who had created the lab the point of this exercise, he informed me that "it is to teach the students that they are in veterinary school now, and if they are soft, get the hell out early." Even though the demography of clients for veterinary services had shifted in the 1960s to companion animal owners away from agriculture, with owners at our veterinary cancer clinic spending more than $100,000 on treatment for their animals in 1980, brutalization of student sensitivities was the order of the day.

Even worse, the students later told me how they were taught surgery. Each small group of students was given a pound dog and required to perform *nine surgical procedures on the animal over the course of three weeks*. One older student urged me to visit the ward where the dogs were kept and to see for myself. I did so, and witnessed a horrendous, horrible scene that could have been drawn from a painting of hell by Hieronymus Bosch. The animals were crying and moaning, and had been provided with no pain relief, not even an aspirin! I later found out that such an approach to veterinary education was ubiquitous across all veterinary schools, and across human medical schools as well. I also found out that both human medical students and veterinary students were routinely forced to exsanguinate a dog in order to learn that if an organism loses all of its blood, it dies! Poisoning of animals was also a routine "educational" protocol. If a student refused to participate in these labs, they were thrown out of school. As a result of such procedures, many of the best students were culled and lost to the medical professions. And many students who did survive to this day feel that they suffered a black mark upon their soul. None of the aforementioned exercises were unlawful or violative of the Animal Welfare Act.

Outraged, I approached my co-teacher in veterinary ethics, a world-renowned experimental surgeon. He informed me that there was essentially no analgesia used in animal research and teaching, and also none used in veterinary practice, no matter how painful a procedure was conducted on the animals. Nor was it taught in the veterinary curriculum.

A cavalier attitude towards pain control was nothing new in veterinary medicine. In a prominent textbook of veterinary surgery published in 1906, the author, Merillat, complained that

> "In veterinary surgery, anesthesia has no history. It is used in a kind of desultory fashion that reflects no great credit to the present generation of veterinarians…. Many veterinarians of rather wide experience have never in a whole lifetime administered a general anesthetic. It reflects greatly to the credit of the canine specialist, however, that he alone has adopted anesthesia to any considerable extent…. Anesthesia in veterinary surgery today is a means of restraint and not an expedient to relieve pain. So long as an operation can be performed by forcible restraint… the thought of anesthesia does not enter into the proposition" (Merillat, 1906).

When I became involved with veterinary medicine, this was ironically called "bruticaine." There are in fact still veterinarians in the American West who castrate horses using forcible restraint or paralytic drugs. Many procedures on cattle, including branding, castration, and dehorning, are also done by force with no anesthesia or post- procedural pain control.

At about the same point in time, CSU had acquired a new veterinarian in charge of laboratory animals, who had extensive research experience in Britain, Canada, and the US. He confirmed what my surgeon colleague had told me, and also informed me that analgesia was virtually never used in animal research, regardless of how painful, and stressed the need for a law to rectify this intolerable situation. Nor was it used in veterinary practice or taught in veterinary schools. We naïvely formed an ad hoc group to draft legislation for the state of Colorado, which not surprisingly was roundly defeated in the Colorado legislature. Immediately thereafter, I received a telephone call from Colorado US Congressional Representative Pat Schroeder, who explained to us that such legislation needed to be federal, binding on all states, and not simply one, or else research would pack up and leave the regulated state and go elsewhere. She added that she would carry it forward as an amendment to the Animal Welfare Act.

Among other things, our law required the control of pain and distress in animals when such states resulted from experimentation or teaching, as well as a ban on multiple invasive uses of animals. In 1982, when I was defending our bill before Congress, I was called before Representative Henry Waxman's committee to defend our Amendment. Waxman informed me that the medical research community was vigorously opposed to any legislation constraining the use of animals in research, and also claimed to be using copious amounts of analgesia. When I protested that the latter was a lie, he told me that the burden of proof was on me to prove that.

It dawned on me that if there was indeed significant use of analgesia in research, there would be a literature documenting the protocols. I approached a friend of mine who was a librarian at the National Agricultural Library, and who had access to a very powerful computer, and asked him to do a literature search on "analgesia for laboratory animals." He called me back shortly thereafter to let me know that he had found *no papers whatsoever* on the subject! When I expanded the search to "analgesia for animals," two papers were found, one of which said "there ought to be papers," and the other said "there is virtually no knowledge of the subject." When I informed Waxman, he responded that I had indeed proven my point, and that the bill would move forward, which it did thanks to the Herculean and courageous efforts of people in Congress such as Doug Walgren, George Brown, Bob Dole, Pat Schroeder, John Melcher, and Mickey Leland, who eloquently demonstrated that courage and compassion transcend party lines.

After years of powerful opposition to the bill by virtually all pro-research groups (and after I was described in the *New England Journal of Medicine* as "an apologist for the lab trashers") (Visscher, 1982), the bill passed in 1985. Despite the fact that even then there was documentation in scientific literature that failure to control pain and distress skewed numerous experimental variables in animals, and thus control of these states were essential to good science, the medical research community remained steadfastly opposed to our legislation. Contrary to what we had written, Congress continued to exclude rats, mice, and birds, as well as animals used in agricultural research, from the protection of the law. However, a second law, namely the NIH Reauthorization Act, did encompass any animals used in research at an institution receiving federal funding. In many ways this law, which requires contractual adherence to the *Guide to the Care and Use of Laboratory Animals*, is stronger than the Animal Welfare Act, but is weakened by the absence of a regular enforcement method. On the other hand, failure to comply with the NIH law can result in the seizure of all federal funding to a research institution, far more intimidating to researchers than the fines mandated by the Animal Welfare Act.

We had also requested in our draft that accommodations—i.e. housing and husbandry—of all laboratory animals be designed to fit their *telos*, i.e. their psychological and biological needs and natures. Unfortunately this too was struck down by Congress, who instead mandated only "exercise for dogs" and living conditions for primates that "enhanced their psychological well- being." In my view, the maintenance of unnatural conditions for laboratory animals is the biggest lacuna In the Animal Welfare Act, both from an ethical and

scientific perspective, as a result of the significant stress engendered by non-congenial accommodations. As I have argued in a new book (Rollin, 2016), respect for *telos* is a fundamental component of animal welfare.

It is important to realize that the scientific community's unwillingness to control pain and distress, or even to see such control as an ethical issue, was partly rooted in what I have called *Scientific Ideology* in a book on science and ethics (Rollin, 2006b). For our purposes, what is relevant about that ideology was twofold: the claim that science has nothing to do with ethics—is "value-free"—and the related claim that scientists needed to be agnostic, indeed atheistic, about the existence of thoughts and feelings (including pain) in animals. (Recall that a consensus conference on the notion that animals had mental experience only occurred in 2012 at Cambridge!)

An amusing ramification of this belief took place when Dr. Robert Rissler, the APHIS veterinarian tasked with writing the regulations giving meaning to the law, told me that, as a veterinarian, he knew nothing of "enhancing the psychological well-being of primates." He approached the American Psychological Association, primate division, for assistance. He was assured in good ideological fashion that "there is no such thing." His response was priceless: "Well there will be after January 1, 1987 [the date the law goes into effect] whether you help me or not."

The other major feature of the 1985 Amendments to the law was the required creation of Institutional Animal Care and Use Committees to review protocols, and inspect research facilities for accord with the law. As one Australian sociologist put it to me, this was "enforced self-regulation." By mandating these committees, we hoped to make ethics and animal welfare part of the consciousness of scientists. This seems to work to some extent, though nowhere near as well as I had hoped.

Under the influence of the law, pain control (and to a much lesser extent control of distress) have assumed a new degree of prominence in animal research, biomedical education, and veterinary training and practice. Some five years ago, I was invited to a scientific conference in Italy to explain how we accomplished this. In preparation for my talk, I redid the literature search on analgesia that I had done in 1982 for Waxman. (This time, computer technology had progressed to the point where it could be done on my home computer.) *Mirabile dictu*, this time I found 12,000 papers! Unfortunately, as Larry Carbone has shown in recent research, actual *use of analgesia* is probably not as prominent as it appears to be. But there is no question that there has been a quantum leap in this area.

What are the fundamental inadequacies In the Animal Welfare Act and how should they be rectified and redressed?

> 1) First and foremost, as we have already mentioned, the Act needs to cover all animals used in research and education equally. The omission of the vast majority of animals so used is tragically farcical. As one scientist mentioned at a medical conference, "we look like idiots to the public when the majority of animals used in research are not animals according to the Animal Welfare Act." In 2002, a lobby group for the biomedical research establishment (NABR) convinced Sen. Jesse Helms of North Carolina to sponsor a rider to an unrelated bill stipulating that, in the eyes of Congress, rats and mice will never be considered animals. Such an absurdity cannot continue.
>
> 2) As we also mentioned, there is absolutely no morally or philosophically justified basis to the Animal Welfare Act. It is rather a crazy quilt of ad hoc stipulations addressing some unrelated issues with no sound and reasoned foundation. This is evident even in its name. The notion of animal welfare is an extremely complex concept which few people understand. Most animal welfare scientists see the concept as an empirical one. This is patently false. No matter how many resources one commands, it is conceptually impossible to build a "welfare meter" that would simply gathers facts showing the state of an animal's welfare. In fact, the concept of animal welfare is inextricably bound up with ethical valuational judgments; ***namely it stipulates what we owe animals and to what extent!***

To illustrate this, we can cite two competing and incompatible views of animal welfare that were in circulation in the late 1970s and early 1980s. The first definition can be found in a document called the CAST (Council of Agricultural Science and Technology) Report, first published by U.S. agricultural scientists in the early 1980's. (CAST, 1980) In defining animal welfare, it affirmed that the necessary and sufficient conditions for attributing positive welfare to an animal were represented by the animals' *productivity*. A productive animal enjoyed positive welfare; a non-productive animal enjoyed poor welfare. This notion

was fraught with many difficulties. Most importantly, productivity is an economic notion predicated of a whole operation; welfare is predicated of individual animals. An operation, such as caged laying hens may be quite profitable if the cages are severely overcrowded yet the individual hens do not enjoy good welfare.

In contrast, consider an alternative definition of animal welfare pressed forward by the British Farm Animal Welfare Council (FAWC). These animal advocates took a very different ethical stance on what we owe farm animals. Indeed the view of animal welfare articulated by the Farm Animal Welfare Council during the 1970's (even before the CAST Report) represents quite a different ethical view of what we owe animals, when it affirms that: "The welfare of an animal includes its physical and mental state and we consider that good animal welfare implies both fitness and a sense of well-being. Any animal kept by man, must at least, be protected from unnecessary suffering." This in turn is cashed out in the form of what FAWC called "the five freedoms":

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

Clearly, the two definitions contain very different notions of our moral obligation to animals. In a moment's reflection reveals that an appeal to science does not help us decide between these two definitions. The two definitions contain very different notions of our moral obligation to animals (and there is an indefinite number of other definitions). Which is correct, of course, cannot be decided by gathering facts or doing experiments—*indeed which ethical framework one adopts will in fact determine the shape of science studying animal welfare*.

> 3) As I said earlier, introducing the management of pain—indeed its recognition—into science by way of the 1985 amendments was a necessary and salubrious improvement in animal research in science. But assuring good welfare for animals used in research does not stop there. This suggests another way in which the Animal Welfare Act must be augmented. In a new book, I have argued that to respect an animal's welfare is to respect their psychological and biological natures—what Aristotle called their *telos*. In fact, meeting the needs and interests dictated by an animal's nature can be more important to the animal than physical pain. This concept is clearly dominant in emerging social thought about animal welfare; witness the multiple movements in society to eliminate high confinement (such as gestation crates for sows) from industrial agriculture; to eliminate zoos as prisons; to eliminate whale and elephant shows, etc. (Rollin, 2016)

A functional animal welfare act would mandate respect for *telos* both in housing and husbandry of laboratory animals. Violation of *telos* can be a greater concern to animals than physical pain—witness coyotes chewing their legs off to escape from traps, and chickens walking across an electrified grid to get to the outdoors.

Correlatively, there needs to be more detailed specification of details of the blanket term "distress" in a functional animal welfare act. For example, the emotional pain experienced by cows and calves attendant upon separation is a form of suffering not manageable by analgesia!

> 4) A fully functioning Animal Welfare Act would move towards destroying the Scientific Ideology that determines scientists' belief that science is value- free in general and in particular ethics -free. It could do so by mandating robust courses in science and ethics. (I have in fact myself taught such a course for over 15 years.) This would not only create a better situation for animals used in science, it would also help science greatly. The failure to articulate reasonable ethical questions growing out of scientific innovations inevitably leads to uninformed people raising pseudo-ethical issues that dominate public debate. An excellent example of this

> phenomenon occurred when the research community failed to initiate discussion around the cloning of Dolly the sheep. One week after Dolly was announced, three out of four Americans opined that such cloning "violated God's will" (CNN/Time Poll).
>
> 5) Animal care committees should have more public members and should have a say in what research is done, not only how it is done. After all, federally funded research is done with public money, and it is unseemly that those scientists with a vested interest in a particular approach to science should determine how that money is spent.

Given the ever-increasing amount of societal concern devoted to animal treatment across the globe, it would behoove the research community and the government to create a well- reasoned, well-thought-out legislative agenda regarding the treatment of animals. While such a task should be undertaken with regard to all animals humans use, such a process regarding animals used in science would be a good and reasonable place to start.

References

CNN/Time Poll. Most Americans Say Cloning is Wrong. March 1, 1997

Council for Agricultural Science and Technology (CAST), *Scientific Aspects of the Welfare of Food Animals*, Report #91, November 1981

Farm Animal Welfare Council, www.fawc.org.uk

L.A. Merillat (1906). *Principles of Veterinary Surgery*. Chicago: Alexander Eger

B.E. Rollin (2006a). The Regulation of Animal Research and the Emergence of Animal Ethics: A Conceptual History. *Theoretical Medicine and Bio*ethics 27: 285-204

B.E. Rollin (2006b). *Science and Ethics*. New York: Cambridge University Press

B.E. Rollin (2016). *A New Basis for Animal Ethics: Telos and Common Sense.* Columbia, Missouri: University of Missouri Press

M.B. Visscher (1982). Review of *Animal Rights and Human Morality*, by B.E. Rollin. *New England Journal of Medicine* 306: 1303-1304