Journal of Animal & Natural Resource Law

Michigan State University
College of Law

May 2012

Volume VIII

JOURNAL OF ANIMAL & NATURAL RESOURCE LAW

VOL. VIII 2012

EDITORIAL BOARD
2011-2012

Editor-in-Chief
CATHERINE E. TUCKER

Managing Editor
EBONIE B. FIELDS

Articles Editor
THOMAS KNOX

Executive Editor
ANDREW MOORE

Business Editor
THEODORE JOHNSON

Associate Editors

ANDREA BARRIOS
GRAHAM BOSWELL
CAITLIN BRATT
CAROLYN DILLARD
JENNIFER DOEHNE
ERIN FURMAN
ANDERS GILLIS
MICHAEL KELLEY
EDMUND LUGGEN
ERIK MONTGELAS
PATRICK OLIVER
COLIN POLACEK
OMAR RAZZACKI
VINCENT RIZZO
ASHLEE RUDNICK
TIFFANY THORNTON
ALLEN WOODWARD

Faculty Advisor
DAVID FAVRE

JOURNAL OF ANIMAL & NATURAL RESOURCE LAW

VOL. VIII 2012

PEER REVIEW COMMITTEE 2011-2012

TAIMIE L. BRYANT

DAVID CASSUTO

DAVID FAVRE, CHAIR

REBECCA J. HUSS

PETER SANKOFF

STEVEN M. WISE

The *Journal of Animal & Natural Resource Law* received generous support from Michigan State University College of Law. Without their generous support, the *Journal* would not have been able to publish and host its second speaker series. 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.

The *Journal of Animal & Natural Resource Law* is published annually by law students at ABA accredited law schools. Qualified candidates are encouraged to apply.

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, New York 14209.

The *Journal of Animal & Natural Resource Law* welcomes the submission of articles, book reviews, and notes & comments. Each manuscript must be double-spaced, in 12 point, Times New Roman; footnotes must be single spaced, 10 point, Times New Roman. Submissions should be sent to anilawj@msu.edu using Microsoft Word (or saved as "rich text format"). Submissions should conform closely to the 18th edition of *The Bluebook: A Uniform System of Citation*. Authors should provide photocopies of the title pages of all sources used and photocopies of the phrases and sentences quoted from the original sources. All articles contain a 2012 author copyright unless otherwise noted at beginning of article. Copyright © 2012 by the *Journal of Animal & Natural Resource Law*.

Journal of Animal & Natural Resource Law

Vol. VIII **2012**

Peer Review Committee

Taimie L. Bryant is Professor 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. He 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 the 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*. Her 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. He 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 in Australia. Peter 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 the Vermont Law School since 1990, and at the Harvard Law School, John Marshall Law School, and will begin teaching at the St. Thomas Law School. He has practiced animal protection law for twenty-five years

JOURNAL OF ANIMAL & NATURAL RESOURCE LAW

VOL. VIII 2012

TABLE OF CONTENTS

ARTICLES

HUMANS AND GREAT APES: A SEARCH FOR TRUTH AND ETHICAL PRINCIPLES

Barbara J. Gislason and Mercedes Meyer 1

The purpose of this article is to make some comparisons between humans and chimpanzees (common, bonobo), gorillas (western, eastern), and orangutans (Bornean, Sumatran), collectively known as the great apes, and consider how recent and future scientific developments might influence parallel developments of ethical principles. Specifically, the authors will review basic genetics, describe genetic similarities and differences, consider fundamental anatomy, bodily systems, brain function, and selected behavioral milestones, focusing on the work of primatologists Jane Goodall, Dian Fossey, and Sue Savage-Rumbaugh, as well as psychologist Penny Patterson.

After doing so, the authors will examine and challenge the ethical standards as they exist today and consider where science might lead us in our human ethical evolution, an evolution that reflects not only human interests, but values. The subjects of great ape-related moral concerns outside of the United States, prohibitions on their use in Spain, Great Britain, the Netherlands, Austria, New Zealand, and Australia, together with great ape-related proposed UN resolutions are outside of the scope of this paper.

Et Tu Lisa Jackson? An Economic Case for Why the EPA's Sweeping Environmental Regulatory Agenda Hurts Animal Welfare on Factory Farms

David E. Solan 27

Over the last several years, animal protection groups have increasingly partnered with environmentalists to ratchet up the environmental regulation of factory farms. This alliance has manifested itself in two primary ways: first, leading animal protection groups have supported the bold activism of Lisa Jackson, the Administrator of the EPA, in seeking to lasso factory farms into compliance with environmental laws; and second, these groups have engaged in a litigation strategy of suing factory farms under environmental statutes.

The Article aims to challenge the popular wisdom among the animal protection community that increased collaboration with the environmental movement confers mutual benefits. On the contrary, it seems misplaced to view Jackson as a champion of animal welfare, and misguided to view the environmental movement as a reliable ally. Upon closer inspection, it appears that the animal protection movement and the environmental movement have divergent interests, and Jackson's activism could in fact pose a great threat to animal welfare on factory farms.

The Article argues that each of the three major goals of the animal protection movement in the realm of the farmed animal industry may be undermined by increased environmental regulation. To the contrary, the EPA's activism could fail to change consumption patterns, lead to a reduction of animal welfare, and empower big factory farms at the expense of small farmers. Lastly, the Article concludes that a better approach would be for the animal protection movement to focus its fire on state-level laws and/or ballot initiatives that directly enhance animal welfare.

The Development of a Religious Animal Welfare Code and its Relevance for Contemporary Civil Laws

A.Z. Zivotofsky, J.M. Regenstein, D. Zivotofsky 65

Recently, many governments have introduced animal welfare standards that govern all aspects of animal welfare. While governmental authorities struggle to balance competing demands, Jewish law has included animal welfare standards for millennia. Religious regulations specify how an animal is to be treated on the farm and pre-slaughter, and the method of slaughtering. These standards precede the earliest civil code by centuries, and because Jewish law (*halacha*) has a long written record, it is possible to examine the development of these animal welfare standards. In this paper, we examine how the rabbis dealt with conflicting principles, competing interests, and advances in science and technology. Examples include hunting, raising veal, animal experimentation, and slaughter techniques. Because this system has withstood the vicissitudes of time, it will be suggested that this developmental process and structure may be of interest to those involved in crafting contemporary civil animal welfare legislation.

A Large Step – But Still a Long Way to Go Austrian Animal Welfare Legislation: An Overview

Regina Binder 91

The following article provides a short survey of the development, philosophical approach and basic characteristics of the Austrian animal welfare legislation. This article sets out to explore the beginning of legal animal protection in Austria in the middle of the 19th century and analyzes its structural changes in the course of the 20th century. The article then focuses on the new Federal animal welfare legislation in Austria, which went into effect in 2005. After characterizing major principles of the Austrian Animal Welfare Act, the main advantages and deficiencies of this law are sketched out. Although the Austrian Animal Welfare Act has been claimed to play a pioneering role in the development of animal welfare legislation, it is clear from the animal welfare point of view that there is still a long way to go until the (legal) protection of animals can be claimed to be satisfactory both theoretically and practically in Austria.

The WTO Tuna Labeling Decision and Animal Law

Thomas G. Kelch.. 121

> If one were looking for a likely culprit causing legal consternation for those interested in changing animal law for the benefit of animals, one would probably not begin by excoriating the WTO and the GATT Treaty. But that would be ignoring history. The WTO has previously published decisions that have jeopardized attempts by sovereign nations to protect animals. These decisions, the *Tuna Dolphin* decision and the *Shrimp/Turtle* decisions, relate to what are generally considered environmental laws aimed at protecting certain groups of animals. While the *Tuna/Dolphin* decisions were not formally adopted as GATT decisions, these decisions, along with *Shrimp/Turtle*, have had a considerable impact on interpretation of the GATT and the behavior of sovereign states regulating the protection of animals.

Management of the Atlantic Bluefin Tuna Fishery: An International Law Disaster

Nicholas Assenmacher 139

> This article will first describe the physical and population characteristics of the Atlantic bluefin tuna. It will then examine the causes and pressures, both economic and political, which have led to the decline of this fish species. The focus will then shift to an analysis of the current international law regime responsible for managing the Atlantic bluefin tuna, particularly the population in the Mediterranean. Finally, to prevent population collapse and encourage eventual recovery of fish species, further intervention of international law is needed. This intervention could come by way of a highly unlikely overhaul of the International Commission for the Conservation of Atlantic Tuna (ICCAT), the establishment of marine protected areas, or listing the Atlantic bluefin tuna as a species threatened with extinction under Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

REPORTING FROM THE FIELD

The Israel Adoption of Transportation Regulations for Poultry

Yossi Wolfson..171

Chickens raised for meat ("broilers") are one of the least protected groups of animals exploited by humans. There might be a role to the fact that their look, after losing the chick-appearance, generates less sentiments in humans relative to the sad, almost human, eyes of a calf. However, this report concludes that the cause is economic: the harms done to these animals are deeply inherent to the current chicken-meat industry. The egg industry can be profitable without cages, the veal industry without crates and the pig-meat industry without stalls. For the chicken-meat industry the fast growth, the disproportional body and the crowded shades are an economic must. This allows for very small compromises by the industry (and therefore by the state), compromises that would never substantially change the fate of the animals. This can explain why animal protection regulation in this area is weak if it at all exists. It also makes the issue highly problematic for animal protection advocates: if we cannot do anything substantial for the animals, isn›t the effort to regulate this field anything more than playing to the hands of the industry – shifting efforts from important issues and giving cruelty the seal of being «in accordance to the law»?

For the last eleven years, the author has been involved in the process of enactment of the Israeli regulations on the transport of poultry. In some respects, they are precedential. Whether they are an achievement that might further the cause of animal liberation has yet to be determined. It may be useful, however, to examine the regulations and the process of their drafting.

2011-2012 Case Law Review

Graham Boswell.. 179

Humans And Great Apes: A Search For Truth And Ethical Principles

Barbara J. Gislason[1] and Mercedes Meyer[2]

Introduction

The purpose of this section is to make some comparisons between humans and chimpanzees (common, bonobo), gorillas (western, eastern), and orangutans (Bornean, Sumatran), collectively known as the great apes, and consider how recent and future scientific developments might influence parallel developments of ethical principles. Specifically, we will review basic genetics, describe genetic similarities and differences, consider fundamental anatomy, bodily systems, brain function, and selected behavioral milestones, focusing on the work of primatologists Jane Goodall, Dian Fossey, and Sue Savage-Rumbaugh, as well as psychologist Penny Patterson.

After doing so, we will examine and challenge the ethical standards as they exist today and consider where science might lead us in our human ethical evolution, an evolution that reflects not only human interests, but values. The subjects of great ape-related moral concerns outside of the United States, prohibitions on their use in Spain, Great Britain, the Netherlands, Austria, New Zealand, and Australia, together with great ape-related proposed UN resolutions are outside of the scope of this paper.

---

[1] Barbara J. Gislason, who practices law in Minneapolis, MN, is the Chair of both this CLE program and the Intellectual Property Law Committee (IPLC) in the ABA Tort Trial and Insurance Practice Section (TIPS), founded and chaired the Animal Law Committee in TIPS, and is the co-chair of the American Bar Foundation Fellows in Minnesota. She would like to thank Peter Edwards, a University of Minnesota Law School student, for his contributions and work as her research assistant and overall editorial contribution to the conference.

[2] Mercedes Meyer, Ph.D., is a partner in the Intellectual Property Practice Group of the Washington, D.C. office of Drinker Biddle & Reath LLP, the co-author of *Patent Ethics – Prosecution* with David Hricik for Oxford University Press, and serves on the Board of Directors of the American Intellectual Property Law Association (AIPLA). She is the past chairperson of AIPLA's Women in IP Law Committee and past vice chairperson of the Biotechnology Committee. She is also a member of the TIPS IPLC and co-chair, together with Peter Reyes, of this CLE. The views expressed in the paper are those of the author only, and not those of Drinker Biddle or its clients.

Genetic Background

We will begin with basic genetics. Animals are composed of cells and within each cell are cytoplasm and a nucleus.[3] The nucleus is essentially the brain of the cell.[4] Within the nucleus of a cell are chromosomes,[5] within each cell of a human there are 23 pairs of chromosomes,[6] and within each cell of the great apes there are 24 pairs.[7] Each chromosome is a combination of Deoxyribonucleic Acid (DNA) and protein in a complex structure called chromatin.[8]

A breakthrough with regard to chromosomes occurred in 1953 when James Watson, Maurice Wilkins, and Francis Crick discovered that the chemical elements of DNA could be found on two intertwined strands that were chemically bound in a double helix.[9] They received the Nobel Prize for their discovery.[10]

The field of microbiology then evolved based upon the ideas that (1) information encoded in a segment of DNA is grouped into genes, (2) the information in genes is transmitted through a molecule called Ribonucleic Acid (RNA), and (3) RNA's structure directs the creation of the building blocks of the body—protein. Collectively, genes came to be known as the body's blueprint and the basic units of inheritance.[11]

The information encoded in DNA is found in the sequence of the bases that make up the DNA. A base is a repeating chemical unit in the DNA, which is also called a nucleotide.[12] There are four nucleotides in DNA: Adenine (A), Thymine (T), Cytosine (C), and Guanine (G).[13]

---

[3] *What Is a Cell?*, National Center for Biotechnology Information, http://www.ncbi.nlm.nih.gov/About/primer/genetics_cell.html (last updated Mar. 30, 2004).

[4] *See id*. (describing the nucleus as "A Cell's Center.").

[5] *Id*.

[6] Alec Knight et al., *DNA Sequences of Alu Elements Indicate a Recent Replacement of the Human Autosomal Genetic Complement*, 93 Proc. Nat'l Acad. Sci. U.S. 4360, 4360 (1996).

[7] *See* Joseph Hacia, *Genome of the Apes*, 17 Trends Genetics 637, 640 (2001) (stating that human cells contain one fewer chromosome than those of hominoid apes).

[8] Regina Bailey, *Chromatin Definition*, About.com: Biology, http://biology.about.com/od/geneticsglossary/g/chromatin.htm (last visited May 18, 2011).

[9] Professor A. Engström, Member, Staff of Professors of the Royal Caroline Inst., 1962 Nobel Prize Award Ceremony Speech, 3 Nobel Lectures Physiology or Med. 751, 752 (1964), *available at* http://nobelprize.org/nobel_prizes/medicine/laureates/1962/press.html.

[10] *Id*.

[11] Kaushalya Ratnayake, *Gene- The Basic Unit of Inheritance*, SimpleScience.Info (May 18, 2009) http://www.simplescience.info/index.php?option=com_content&task=view&id=175&Itemid=54.

[12] *Ass'n for Molecular Pathology v. U.S. PTO*, 702 F. Supp. 2d 181, 193–94 (S.D.N.Y. 2010).

[13] *Id*. at 193.

Because of DNA's double-helix structure, these bases are found in opposing pairs on the strand, and thus the length of a segment of DNA could identically be measured in bases or base pairs.[14]

When looking at genetic statistical information, the subjects of comparison are variable and could, for example, focus on the entire genome, numbers of chromosomes, genes, a single nucleotide polymorphism (SNP)[15] or short interspersed elements (SINEs).[16] Note further that the numbers and percentages used in projections and by researchers are far from fixed and that the presence of a gene does not mean it is being expressed.

Gene Sequencing and the Genome Projects

The Human Genome Project began in 1990[17] along with the goal of sequencing 3.2 billion base gene pairs. It was completed in 2003, and determined that human DNA contains approximately 25,000 genes, the protein-encoding portions of DNA.[18] The proportions of these genes that code for proteins only compose about 2% of the genome.[19]

With advances in genetic sequencing attributable to the Human Genome Project, the sequencing of chimpanzee genomes was much more efficient. The Chimpanzee Genome Project, completed in 2005,[20] revealed the genome-wide SNP divergence between humans and chimpanzees was only 1.23%.[21]

The single base nucleotide change between humans is estimated to be between 10 and 30 million, with 10 million common SNPs having been identified.[22] SNPs are not the only divergence in genomes that can be used to determine the relation of two species. SINEs are short strands of DNA (up to 500 base pairs) of identical sequences (neglecting slight mutations) that are found throughout an organism's genome.[23] *Alu*

---

[14] *See id*. at 193–94.

[15] Single nucleotide polymorphism is a term used to describe a difference in one nucleotide between two samples of DNA.

[16] *See infra* note 23 and accompanying text.

[17] *Id*. at 193.

[18] *Id*.

[19] *Understanding Genetics: How do Genes Work?*, Tech Museum, http://www.thetech.org/genetics/art02_how.php (last visited May 19, 2011).

[20] Chimpanzee Genome Project, http://chimpanzee-genome-project.co.tv/ (last visited May 19, 2011).

[21] The human genome is over 3 billion base pairs long. Knight, *supra* note 6, at 4360. 1.23% of this number is 36.7 million.

[22] *SNP and Genotyping Overview*, PerkinElmer, http://shop.perkinelmer.com/content/snps/genotyping.asp (last visited Mar. 26, 2012).

[23] Carles M. Rudin & Craig B. Thompson, *Transcriptional Activation of Short Interspersed Elements by DNA – Damaging Agents*, 30 Genes Chromosomes and Cancer 64, 64 (2001)

elements are an example of SINEs, and are found scattered throughout the genomes of humans and nonhuman primates,[24] and in fact make up about 10% of the human genome.[25] *Alu* elements spread throughout the genome by being transcribed into RNA, which may sometimes be reverse-transcribed back into DNA inside the cell, and inserted back into the genome in another location.[26] If an *Alu* element is inserted back into the genome under the proper conditions, that altered genome could be passed on to future generations.[27] This is also the case for any mutations that occur to previously existing *Alu* elements in an organism's genome.

Because of the nearly infinite improbability of the same exact *Alu* mutation or insertion occurring in two different organisms, an *Alu* mutation or insertion that is found in two organisms can be used by evolutionary biologists when determining an organism's common ancestors. Therefore, *Alu* similarities and differences between two organisms can help geneticists determine how recently those organisms diverged, and thus how related they are. *Alu* elements have been further divided into lineages/families based on their location in the genome and any mutations that have occurred in the *Alu* element, and those lineages/families have been divided into subfamilies based upon the same conditions.[28] The discovery of new subfamilies will help determine how closely related primates are based on how many subfamilies they share.[29]

For example, Abdel-Halim Salem et al., in a study of the *Alu* primate phylogeny lineage, the Ye lineage, discovered several subfamilies within *Alu* Ye. It was previously known that humans and chimpanzees were located in the same subfamily, but the discovery of other subfamilies in other primates suggests that the *Alu* Ye lineage appeared very early in the evolution of primates, which may suggest that primates are more closely related than previously expected.[30]

It is known that the number of chromosomes in humans and the great apes are not the same; 23 pairs in humans versus 24 in chimpanzees, and believed that two chromosome pairs were fused in the human.[31] The simplest way to think of this is instead of two boxes being side by side

---

[24] Abdel-Halim Salem et al., *Analysis of the Alu Ye Lineage*, BMC Evolutionary Biology, (Feb. 22, 2005) http://www.biomedcentral.com/1471-2148/5/18.
[25] *Id.*
[26] *Id.*
[27] An in-depth review of the conditions necessary for an *Alu* element insertion to be passed on to future generations is beyond the scope of this paper. The topic is likely to be covered in any modern college-level biology textbook that discusses genetics.
[28] *Id.*
[29] *Id.*
[30] See *id.* (stating that humans, bonobos, common chimps and gorillas are all in the *Alu* Ye5 subfamily).
[31] Hacia, *supra* note 7 at 640.

in a great ape, the two boxes combine to form a rectangle two boxes wide in the human. More precisely, each chromosome has markers called telomeres at each end and another divider, a centromere, near the middle.[32] The appearance of telomeres in the middle of a gene, together with centromeres on each side of these unusually placed telomeres, is evidence of fusion on what is called Human Chromosome 2.[33] The corresponding chromosomes in the chimpanzees, based upon a more recently used numbering system, are Chromosome 2A and Chromosome 2B. The fusion of these chromosomes most likely "occurred only a few million years ago."[34]

Currently, the above described chromosome 2 differences, which reflect a large-scale rearrangement, are thought to be important differences between humans and chimpanzees. According to the Chimpanzee Sequencing and Analysis Consortium, the most significant difference in our two genome sequences is genetic duplications, followed by what is called single base pair substitutions.[35] Other chromosomal differences have been discovered, with chromosomes 4, 8, 18, 19, and 21 showing the highest divergence (excluding sex chromosomes)[36] and with regard to constitutive heterochromatin,[37] a type of unusually repetitive DNA that is generally genetically inactive.[38]

Of particular interest to scientists is the forkhead box P2 (FOXP2) gene, thought to exist in all mammals, including songbirds, mice, reptiles, and fish.[39] When a human has a mutation of the FOXP2 gene, speech and language become incomprehensible, though I.Q. is not strongly affected.[40] The FOXP2 gene is referred to as the language gene. Although there is much to learn about FOXP2, it is believed to not only

---

[32] Phillip McClean, *Eukaryotic Chromosome Structure*, N.D. St. U (1997), http://www.ndsu.edu/pubweb/~mcclean/plsc431/eukarychrom/eukaryo3.htm.

[33] *See* J. W. IJdo et al., *Origin of Human Chromosome 2: An Ancestral Telomere-Telomere Fusion*, 88 Proceedings Nat'l Acad. Sci. U.S. Am. 9051, 9051 (1991) (describing the telomeres on chromosome 2 as unusually interstitial).

[34] *Id.*

[35] *See* Ze Cheng et al., *A Genome-wide Comparison of Recent Chimpanzee and Human Segmental Duplications*, 437 Nature 88, 88, 92 (2005) (describing segment duplications to be the most influential avenue of genetic variation in humans, but also highlighting the importance of single base pair substitutions).

[36] Ingo Ebersberger et al., *Genomewide Comparisons of DNA Sequences Between Humans and Chimpanzees*, 70 Am. J. Hum. Genetics 1490, 1495 (2002).

[37] Hildegard Kehrer-Sawatzki et al., *Molecular Characterization of the Pericentric Inversion That Causes Differences Between Chimpanzee Chromosome 19 and Human Chromosome 17*, 71 Am. J. Hum. Genetics 375, 376 (2002).

[38] McClean, *supra* note 32.

[39] James K. Rilling, *Neuroscientific Approaches and Applications Within Anthropology*, 51 Y.B. Physical Antrhopology 2, 16 (2008).

[40] Cecilia S. L. Lai et al., *A Forkhead-Domain Gene Is Mutated in a Severe Speech and Language Disorder*, 413 Nature 519, 522 (2001).

modulate the plasticity of neural circuits, including the development of the brain and lungs, but also to regulate other genes, including the CNTNAP2 gene, a gene associated with language impairment in humans.[41] Note that only two amino acid differences for the FOXP2 gene have been found between humans and chimpanzees, and of the two more that humans have, only one is unique to humans.[42]

Although more is currently known about humans than about chimpanzees, more is becoming known about how humans compare to other great apes. The Trust Sanger Institute did a gorilla genome sequence using one individual, and suggests that the gorilla is our closest relative after the two types of chimpanzees.[43] It is speculated that on the evolutionary tree, we departed from the gorilla 8 million years ago.[44] Even so, in some parts of the genome (up to 15%) of the gorilla genome may be more closely related to humans than the chimpanzee genome.[45]

Next, we will briefly consider the orangutan, a great ape who may have branched off the family tree 16-20 million years ago (Myr), compared to the chimpanzee at 4.5 to 6 Myr.[46] Two species of orangutans still exist.[47] In 2004, only 7,500 were left on the Southeast Asian islands of Sumatra, where they are subject to illegal pet trade and loss of habitat[48] while there were perhaps 50,000 on the island of

---

[41] Aline L. Petrin et al., *Identification of a Microdeletion at the 7q33-q35 Disrupting the CNTNAP2 Gene in a Brazilian Stuttering Case*, 152A Am. J. Med. Genetics 3164, 3170 (2010).

[42] Genevieve Konopka et al., *Human-Specific Transcriptional Regulation of CNS Development Genes by FOXP2*, 462 Nature 213, 213 (2009).

[43] *See* Linda Vigilant & Brenda Bradley, *Genetic Variation in Gorillas*, 64 Am. J. Primatology 161, 164, (2004) (suggesting that humans and chimpanzees diverged between 4.8 and 6.4 million years ago, and that gorillas and the human-chimpanzee common ancestor diverged earlier, between 6.3 and 8.5 million years ago).

[44] Morris Goodman et al., *Toward a Phylogenetic Classification of Primates Based Upon DNA Evidence Complemented by Fossil Evidence*, 9 Molecular Phylogenetics & Evolution 585, 594 (1998). *But see* Asger Hobolth et al., *Genomic Relationships and Speciation Times of Human, Chimpanzee, and Gorilla Inferred from a Coalescent Hidden Markov Model*, 3 PLoS Genetics 0294, 0298 (Feb. 2007) http://www.plosgenetics.org/article/info:doi/10.1371/journal.pgen.0030007 (suggesting that Gorillas may have diverged from chimps and humans as early as six million years ago).

[45] *Gorilla Genome – Data Download*, Wellcome Trust Sanger Institute, http://www.sanger.ac.uk/resources/downloads/gorilla/ (last visited June 6, 2011).

[46] Devin P. Locke et al., *Comparative and Demographic Analysis of Orangutan Genomes*, 469 Nature 529, 530 fig.1 (2004).

[47] *Id*. at 529.

[48] Press Release, Lee Poston, World Wildlife Found., Illegal Trade Devastates Sumatran Orangutan Population, TRAFFIC Report Says (Apr. 16, 2009) *available at* http://www.worldwildlife.org/who/media/press/2009/WWFPresitem12129.html.

Borneo.[49] Both species are on the World Conservation Union's Red List of Threatened Animals.[50]

A draft genome has been completed for a female Sumatran orangutan, as well as a "short read" based upon sequence data from five Sumatran and five Bornean genomes.[51] Based upon this limited research, it was estimated that, compared to humans, orangutans have fewer gene rearrangements, less segmental duplication, and less Alu retropositions, meaning fewer recent genetic insertions and genome structural stability.[52]

Orangutans have two major visual signaling proteins associated with the perception of the color blue.[53] Six genes fell within a glycolipid metabolism pathway associated with an enzyme deficiency resulting in the commonly inherited human lysosomal storage disorders.

Other past research on the subject of the commonality of full length retrotransposons L1 elements, which are a type of mobile protein that impact other elements,[54] reveal that a nucleotide sequence of L1Gg-1 in the gorilla is 98% identical to the L1.2 in humans, and that this represents our close relationship.[55]

Other research that is enhancing the ability to understand primates includes the Neanderthal Genome Project, where gene sequencing was based upon DNA from a primate that no longer lives. This project began in 2006 and project results were published in 2010. Among this project's findings were that the human and Neanderthal genome, with 4 billion base pairs, was comparable in size to the human genome.[56]

Utilizing the kind of research described above, as well as research related to X and Y chromosomes, the authors of McGraw Hill's textbook, the Living World, made this noteworthy comparison

---

[49] I. Singleton et al., *Orangutan population and Habitat Viability Assessment: Final Report,* ORANGUTAN FOUND. (Jan. 2004) *available at* http://www.cbsg.org/cbsg/workshopreports/23/orangutanphva04_final_report.pdf; E. Meifaard & S. Wich, *Putting Orangutan Population Trends Into Perspective*, 17 CURRENT BIOLOGY R540, R540 (2007).

[50] *Pongo abelli*, THE IUCN RED LIST, http://www.iucnredlist.org/apps/redlist/details/39780/0 (last visited June 4, 2011); *Pongo pygmaeus*, THE IUCN RED LIST, http://www.iucnredlist.org/apps/redlist/details/17975/0 (last visited June 4, 2011).

[51] Locke, *supra* note 46 at 529.

[52] *Id*. at 531, fig.2.

[53] C.L. Makino et al., *Recovering Regulates Light-Dependent Phosphodiesterase Activity in Retinal Rods*, 123 J. GEN. PHYSIOLOGY 729, 729 (2004).

[54] Haig H. Kazazian & John V. Moran, *The Impact of L1 Retrotransposons on the Human Genome*, 19 NATURE GENETICS 19, 19 (1998).

[55] R.J. DeBerardinis & H.H. Kazazian, *Full-length L1 Elements Have Arisen Recently in the Same 1-kb Region of the Gorilla and Human Genomes*, 47 J. MOL. EVOL. 292 (1998).

[56] Richard E. Green et al., *A Draft Sequence of The Neanderthal Genome*, 328 SCIENCE 710, 711 (2010).

in an essay entitled "The Y Chromosome—Men Really Are Different." More specifically, the author stated "Taking all these genes into account, geneticists conclude that men and women differ by 1 to 2% of their genomes—which is the same as the difference between a man and a male chimpanzee (or a woman and a female chimpanzee)."[57] If you extend this type of reasoning to the human bell shaped curve, complete with diseases, disorders, and old age, discerning the line for what makes us human, in objective terms, becomes very challenging indeed.

Comparative Anatomy of the Greater Ape Brain and the Human Brain

Next, we will leave the subject of genes and consider how humans and the great apes differ using a literal top down approach, beginning with the head. When you compare the head of a human to a great ape, both have two forward, binocular eyes that see color, a nose, and a mouth, with the humans having less hair than the great apes.

The humans also have a bigger brain, three times the size of a chimpanzee, with the brain itself further discussed below.[58] From an anatomical standpoint, the size of the brain impacts the safety of a human infant at birth, as there are challenges getting the head through the birth canal.[59] This birthing problem is unique to humans and some argue that humans are born a year premature.[60]

Another important component with regard to human brain development is that in some cases, the part of the brain associated with high intelligence and creativity, in the promoter region of what is called the neuregulin gene in humans, may also be related to Schizophrenia and other mental disorders. As research on the neuregulin 1 gene in humans proceeds, it will be interesting to learn more about the similarities and differences between humans and the great apes.[61] The great apes have a prolonged head,[62] which has advantages over the flatter face of a human. The most notable problem attributable to the flatter face genetic

---

[57] George B Johnson & Jonathon Losos, The Living World 275 (McGraw-Hill, 6th Ed. 2010).

[58] Daniel P. Buxhoeveden et al., *Morphological Differences Between Minicolumns in Human and Nonhuman Primate Cortex*, 115 Am. J. Physical Anthropology 361, 368 (2001).

[59] Charles D. Bluestone & J. Douglas Swarts, *Human Evolutionary History: Consequences for the Pathogenesis of Otitis Media*, 143 Otolaryngology — Head & Neck Surgery 739, 739–40 (2010).

[60] *Id*. at 740.

[61] Szabolcs Keri, *Genes for Psychosis and Creativity: A Promoter Polymorphism of the Neuregulin 1 Gene is Related to Creativity in People with High Intellectual Achievement*, 20 Psychol. Sci. 1070, 1070 (2009).

[62] Bluestone & Swarts, *supra* note 59 at 741.

difference is a mid-ear problem, particularly in infants and young children, and the related immune system difficulties.[63] Even so, because of this shape change, humans were able to develop a larynx necessary for human speech. The human teeth are somewhat differently shaped from those of its relatives, suggesting a possible causation for facial flattening in humans.[64] As humans developed the ability to cook their food, the shape of their teeth may have changed because of both ease of digestion and higher caloric density. This could have influenced the long-term growth of the brain, a calorie-demanding organ.[65] The cooking adaptation change could have lessened the need for a long, large oral cavity, which may have freed up space for the expanding brain.[66]

The brain of the human, from a macro perspective, is much like the brain of the chimpanzee. For example, the long held belief that humans have a larger frontal lobe relative to overall brain size than apes has now been debunked through MRI imaging techniques.[67] However, studying only the macroanatomical differences between primate brains has yielded limited results, as it does not take into account the different pathways between brain nerve cells, brain tissue structure, and the resulting relationships of areas of the brain.[68]

Another aspect of similarity between primates and humans is that large nonhumans with gyrencephalic brains[69] have a larger white to gray matter ratio, similar cerebral vasculature and also key modulators for what is called a "coagulation cascade."[70] There is a growing body of research on the appropriateness and necessity of using primates, a type of gyrencephalic organism, with regard to research on human stroke victims.[71] In discussing this topic, the scientists considered the possibility that "primates could potentially suffer on two distinct (but potentially parallel) levels: the lower level (emotional/physical) commonly associated with suffering in all sentient animals (including lower animals such as rodents) and a higher level (intellectual, abstract) that is generally associated with human-like thought."[72] There are contrasting studies regarding how humans and great apes compare on this higher level.[73]

---

[63] *Id*. at 742.

[64] *Id*. at 740–41.

[65] *See id*. (suggesting that the different dietary processing of cooked food resulted in change in tooth shape).

[66] *Id*.

[67] Buxhoeveden, *supra* note 58 at 361.

[68] *Id*.

[69] A gyrencephalic brain is a brain with folds and creases along the cortex (the outer layer) of the brain.

[70] Michael E. Sughrue et al., *Biological Considerations in Translational Research: Primate Stroke*, 9 Am. J. Bioethics 3, 4 (2009).

[71] *Id*. at 3.

[72] *Id*. at 5.

[73] *Id*. at 6.

Illustrative Studies on the Human and Primate Brain

Research from Buxhoeveden et al. has focused on the size and shape of brain minicolumns, and has proposed fundamental, organizational, and structural units of many areas of the brain which aid in the interface between cellular activity and overall brain function.[74] Brain columns (whether they be minicolumns or the macrocolumns with which they interface) are said to be physiological structures by which the brain organizes neurons, and their size can be measured using magnetic resonance imaging (MRI).[75] Further, because the interfacing of columns relates to column structure, it is suggested that changes in the morphology of columns will affect the functionality of the areas of the brain in which those columns are found.[76]

Buxhoeveden et al. used the cortical minicolumn[77] as essentially a template to compare minicolumn structures among primate species. In doing so, particular attention was paid to the area of the brain thought to be associated with language (the planum temporale) to explore why, given the contrary physical evidence to a proportionally larger frontal lobe resulted in human advances in language.[78] The subjects the study were nine human, eight chimpanzee, and seven rhesus monkey brains. Their key findings include that the cortical column width in human brains is significantly wider than chimpanzee and rhesus columns, whose widths are identical to each other's.[79] However, the study also found almost identical column depths between all primates.[80] Further, there is more cell-poor space on the periphery of minicolumns in humans than in chimpanzees or rhesus monkeys.[81]

Further, Buxhoeveden et al. note that although the human brain is three times the size of the chimpanzees, the cell columns are only twice as big.[82] Therefore, compared to the space they occupy, the columns of humans are smaller than those of a chimpanzee. The impact of this size differential is not yet known, but they postulate that a larger brain with the same amount of columns will still have more processing units,

---

[74] Buxhoevden et al., *supra* note 58 at 362.
[75] *Id.*
[76] *Id.*
[77] The cortex (i.e. cerebral cortex) of the brain is the outer portion of the brain encompassing 2/3 of the brain mass, and is where most complex brain activity is thought to take place. *See*, Regina Bailey, *Cerebral Cortex*, About.com, http://biology.about.com/od/anatomy/a/aa032505a.htm (last visited May 20, 2011). Therefore, cortical minicolumns are minicolumns occurring in the cerebral cortex.
[78] Buxhoeveden et al., *supra* note 58 at 361.
[79] *Id.* at 367.
[80] *Id.*
[81] *Id.* at 366–67.
[82] *Id.* at 368.

and thus the columns may run more efficiently.[83] Given the correlation of the planum temporale to language, and that (1) the columns in the human planum temporale are much wider and have cell-poor space; (2) the human columns are of a smaller size relative to the size of the brain, allowing more columns to be packed in and potentially function more efficiently; and (3) the organization of cells and pathways directly under the planum temporale differ between humans and other primates, the size, structure, and organization of minicolumns in the human brain may have a pivotal role in the advancement of human language.

The subject of these minicolumns was also explored in research by Casanova, et al., where they looked for differences that might explain Dyslexia, Autism and Down Syndrome, and their general conclusion was that the number, size, and materials of minicolumns lead to pathology.[84] For those with Dyslexia, there seem to be enlarged minicolumns, whereas for those with Autism, smaller and more minicolumns, and for those with Down Syndrome, a normal column but with the column reaching adult size too early.[85]

Another hypothesis that has been under scrutiny is related to how brain development influences what is called the Social Brain, with the ability to have quantitative and qualitative relationships with others. The idea is because sociability increases the cognitive load, or demand on neural circuits, there are limits on sociability without the bigger brain.[86] Dunbar and Schultz, employing new statistical techniques to test multiple hypotheses simultaneously, found evidence that body size, basil metabolism, and life history impact the co-evolution of both cortex and group size.[87]

Another important contribution is represented by the work of Paz-Yaacov et al., which focused on how adenosine-to-inosine RNA editing shapes transcription diversity in primates. Adenosine-to-inosine editing occurs after a segment of DNA is translated to an RNA adenosine complex.[88] The RNA is acted on by enzymes to resemble inosine, which is therefore read to code differently when translated to proteins.[89] The adenosine-to-inosine occurs mainly in brain tissue, and mainly within *Alu* elements, which do not code for proteins.[90] However,

---

[83] *Id.*

[84] Manuel F. Casanova et al., *Minicolumnar Pathology in Dyslexia*, 52 Annals of Neurology 108, 110 (2002).

[85] *Id.*

[86] R.I.M. Dunbar & Suzanne Shultz, *Understanding Primate Brain Evolution*, 362 Phil. Transactions Royal Soc'y 649, 649 (2007).

[87] *Id.*

[88] Nurit Paz-Yaacov et al., *Adenosine-to-Inosine RNA Editing Shapes Transcriptome Diversity in Primates*, 107 PNAS 12174, 12178 (2010).

[89] *Id.*

[90] *Id.*

Alu elements are extremely common near coding DNA sequences, and some adenosine-to-inosine editing, while infrequent, does occur on the resulting RNA of those nearby coding sequences.[91] Their results showed that, although humans and other primates have a similar number and level of homology and distribution of *Alu* elements, the humans in their small sample had more adenosine-to-inosine editing than chimpanzees.[92] Because adenosine-to-inosine editing occurs mainly in brain tissue, as stated above, Paz-Yaacov et al. suggested that their research could help explain the differential brain development between human and nonhuman primates.[93]

On the other hand, the Paz-Yaacov study showed that there was not a significant difference between the amount of editing in coding sequences between humans and chimpanzees as a group, and their closest ancestor.[94] This is, given the researchers' conclusion regarding RNA editing's role in brain development and the belief that the human brain is far more developed than the chimpanzees, unexpected. It may be possible; therefore, that protein coding-RNA editing is not responsible for brain development.[95] However, as Paz-Yaacov et al. claim, chimpanzees are now known to be capable of complex information exchange and social, cultural, emotional, and other language expression previously thought to be unique to humans.[96] Given the evidence that not much protein-coding-RNA editing has occurred in the human or chimp brain since their divergence, it is possible that our brains are more similar than previously thought.

Reflecting on the Brain

Next, we will briefly return to the subject of what is largely unknown. To what extent is there a lack of functional difference between one or more of the great apes and humans that does not fit within the bell-shaped curve for one reason or another? Consider human reproductive technology concerning what genes prospective parents want to, and may be able to, select and why this is controversial from many perspectives, including from disability, biodiversity, and eugenics perspectives. Also consider how, from a purely objective perspective, high functioning great apes that have at least some sign language capability might compare to young children or humans impacted by certain genetic mutations, including those that impact speech and language limitations.

---

[91] *Id*.
[92] *Id*. at 12178–79.
[93] *Id*.
[94] *Id*. at 12178.
[95] *Id*.
[96] *Id*.

Now, consider the research findings by Buxhoeveden et al. that human minicolumns have more width than other primates. Since then, a preliminary study by Casanova et al.[97] shows that the minicolumn widths for humans with autism are narrower too, and they have less peripheral neuropil space, which has been thought inhibit local neuron dendrite projections.[98] Neuron dendrites are, very simply stated, branches of the neuron itself that receive electrochemical information.

There are two ways to react to the possibility that the great ape human relatives look different than humans do and they may have gifts that humans do not, and vice versa. First, humans can open their minds to the possibility that there is other sentient life on this planet and be proud that the great apes are more than expected. The other is to believe that humans are diminished by the comparison. Thus, one of the challenges humans face, again, is to separate human interests and beliefs from what could be the truth.

Additional Comparison of Great Apes and Humans

There are several functional anatomical differences between great apes and humans. The spinal cord for the human comes from below the skull, and the great apes from behind the skull.[99] The great apes, who have grasping fingers and toes with one opposable digit, and who have longer arms than humans, are able to walk on all fours and have considerably greater upper body strength than humans. Great apes have a C curve spine (rather than an S curve seen in humans), a pelvis that is long and narrow (rather than the human bowl shaped pelvis),[100] a femur arching out (instead of arching in), and grasping toes, one of which splays sideways (rather than no splaying). Great apes and humans both lack tails.

Koko

A discussion of the relationship of humans to great apes would not be complete without a discussion of a gorilla named Koko. It is believed that Koko, well known for expressing herself in signs of the American Sign Language, did not see her first sign until she was

[97] It is of note that Manuel Casanova was a member of the Buxhoeveden et al. study, and that Daniel Buxhoeveden was a member of the Casanova et al. study.
[98] Casanova, *supra* note 84.
[99] *Human Characteristics: Walking Upright*, Smithsonian Nat'l Museum of Natural History, http://humanorigins.si.edu/human-characteristics/walking (last visited May 20, 2011).
[100] *Classification of Humans DB*, ehumanbiofield, http://ehumanbiofield.wikispaces.com/Classification+of+Humans+DB (last visited May 20, 2011).

one year old.[101] Now she can use nouns, pronouns, adjectives, verbs, prepositions, and also has some ability to communicate in the negative, "can't" or through an interrogatory, "Who you?"[102] It is claimed that she developed signs for "bite," "tickle," and "stethoscope."[103] On batteries of standardized children's IQ tests given to her over a few years, her IQ ranged between 65 and 95, and her mental age was found to be 4.8 years when she was 5.5 years old.[104] As she became able to understand a few thousand words of both American Sign Language and English, there is evidence she was able to read simple words and numbers.[105] When researcher Dr. Penny Patterson showed Koko a mirror and asked, "Who is that?" Koko responded, "Think me there."[106]

The story of Koko does not represent the controlled experiments and methodology preferred by scientists and Koko's use of American Sign Language signs may not be considered evidence of language by linguists like Noam Chomsky.[107] However, a question posed by author Eugene Linden may be relevant: whether our scientific approaches are "actually obscuring our understanding of how animals think."[108] He points out that by framing animal intelligence through human cognition; we may be "missing whole different worlds of thinking and communicating."[109]

Orangutans

Orangutans are Asia's largest primates and in the wild, weigh up to 200 pounds. Their throat pouches function to extend their calls in the jungle.[110] They live 35 to 45 years in the wild, have a slow reproduction

---

[101] Steven M. Wise, Drawing the Line: Science and the Case for Animal Rights, 215 (Perseus Books, 2002).
[102] *Id*. at 214.
[103] *Id*. at 216.
[104] Francine G.P. Patterson & Ronald H. Cohn, *Language Acquisition By a Lowland Gorilla- Koko's 1st 10 Years of Vocabulary Development*, 41 Word- J. Int'l Linguistic Association 97, 116 (1990); Francine Patterson & Eugene Linden, The Education of Koko 124–28 (Holt, Rinehart and Winston, 5th ed. 1981).
[105] Wise, *supra* note 101 at 216.
[106] *Id*. at 222.
[107] William Grimes, review of The First Word: The Search for the Origins of Language, N.Y. Times, (Aug. 1, 2007) http://www.nytimes.com/2007/08/01/books/01grim.html.
108 Eugene Linden, The Octopus and the Orangutan: New Tales of Animal Intrigue, Intelligence and Ingenuity, 7-8 (Plume, 2003).
[109] *Id*. at 226–27.
[110] *Great Apes and Other Primates*, Smithsonian National Zoological Park, http://nationalzoo.si.edu/Animals/Primates/Facts/FactSheets/Orangutans/default.cfm (last visited June 4, 2011).

rate (every eight years), a tree dwelling lifestyle, conserve energy, create and use tools, exhibit a complex social structure and display cultural learning.[111]

They have fine motor control over their lips and tongue, but cannot anatomically form vowels and consonants. According to linguist Philip Lieberman, the control of the lips, tongue and larynx are requisites for complex mental processes, an ability that the orangutan lacks.[112]

There is evidence that these individuals have the ability to focus and concentrate for extended periods of time, including the ability to execute a series of tasks to extract desired palm tree food. Humans share 99% of their genes with chimpanzees, but only 98% with orangutans.[113]

There remains speculation that, even if chimpanzees share more genes with humans, the orangutans share more significant genes.[114] It is not known whether the many claims regarding similarities between humans and orangutan behaviors are due to our evolutionary closeness, or if human and orangutan similar behaviors are a result of what it called convergent evolution, where there are similar adaptations in unrelated animals.[115] Also, to the extent that humans are not the same as orangutans, big questions exist about how we search for intelligence in other species, and whether humans have it right as they posit cross species standards for self awareness, theory of the mind, and metacognition.[116] How will we be able to identity intelligent life on another planet, or even in our vast oceans?

Consider the orangutan named Fu Manchu, who was made an honorary member of the American Association of Locksmiths.[117] This followed Fu Manchu's design and use of a wire tool to undo a latching mechanism on a door at the Omaha Zoo and break out three separate times.[118] The tool was concealed in his mouth.[119]

Groundbreaking Studies of Chimpanzees

Next, we will focus on what has been learned about chimpanzees in the wild, thanks to the efforts of Jane Goodall. She was born on April 3,

---

[111] C.P. Van Schaik et al., *Orangutan cultures and the evolution of material culture*. 299 Science 102, 102 (2003).
[112] Linden, *supra* note 108 at 193.
[113] *Id*. at 97.
[114] *Id*.
[115] *Id*. at 98.
[116] *Id*. at 227.
[117] *Id*. at 8.
[118] *Id*.
[119] *Id*. at 9.

1934 in London, England.[120] In 1957, while visiting Africa, Goodall met anthropologist and paleontologist Dr. Louis Leakey,[121] whose son, Jonny Leakey, later found the ape-like skull of an individual that was later described as Australopithecus robustus, and became known as the "Nutcracker Man."[122] According to Goodall, Louis Leakey "reasoned that any behavior common to chimpanzees and humans today might well have been present in the ape-like humanlike common ancestor which we shared"[123] and he facilitated Goodall's field research in Gombe with wild chimpanzees.

Louis had heard of sightings of chimpanzees on the eastern shore of Lake Tanganyika and was interested in a field study. The main western knowledge about chimpanzees at this time was limited to observations made by psychologists Wolfgang Kohler and Robert Yerkes chimpanzees in the London Zoo.[124]

There were no guidelines as to how to do a field study on wild chimpanzees that were perceived as strong and dangerous.[125] When Leakey, who had already employed Goodall, finally addressed the subject of her doing the field study, he gave her his views on characteristics the chosen researcher would have. They included being open minded and not biased by scientific theory and having a passion for learning and animals, great patience, and endurance away from civilization.[126]

Without formal training in science, Goodall arrived in Gombe in 1960, and it took her a year before she could approach most of the wild chimpanzees closer than one hundred yards.[127] Her first important and groundbreaking observation occurred when she saw a chimpanzee she called David Greybeard not only use a tool, but demonstrate some skill for tool making.[128] Leakey's response was "Ah! We must now redefine man, redefine tool, or accept chimpanzees as human!"[129] By naming the chimpanzees like David Grey-beard as individuals, Goodall was unaware that her doing went against the practice of objectively numbered one's subjects in compliance with the ethological discipline of the early 1960s.[130]

---

[120] JANE GOODALL, REASON FOR HOPE: A SPIRITUAL JOURNEY 2, 5 (Soko Publ'ns., 1999).
[121] *Id*. at 4, 44.
[122] *Id*. at 46.
[123] *Id*. at 53.
[124] *Id*. at 56.
[125] *Id*. at 53.
[126] *Id*. at 55.
[127] *Id*. at 55, 65.
[128] *Id*. at 66.
[129] *Id*. at 67.
[130] *Id*. at 74.

Goodall came to describe the chimpanzees as having vivid personalities and humanlike emotions, contrary to the views of the scientists, philosophers and theologians of her time.[131] Other field observations Goodall made included that the chimpanzees' communication repertoire included kissing, embracing, tickling, and evidence of empathy,[132] as well as assaults,[133] even lengthy wars.[134]

And finally, she made another observation, in the context of books being published like Paul Ehrlich's The Population Bomb and increasing human conflicts spilling over into the chimpanzee habitat.[135] She foresaw that, as wilderness areas and species disappear, "the complex web of life, the biodiversity of the world's ecosystems, would be destroyed. The inevitable outcome would be human extinction."[136] In more recent years Goodall founded the Jane Goodall Institute's Roots & Shoots program, which enlists students of all ages to be a part of the solution,[137] and fashioned what she calls the Ten Trusts in how to get there.

Another groundbreaker was Dian Fossey, who has become well known, in part, because of a film called *Gorillas in the Mist*. Before her untimely death in 1985, she studied gorilla populations in the mountains of Rwanda. Much of her work, as this film reflects, was related to the protection of the gorillas and the prevention of poaching. She was acutely aware that gorillas needed to be isolated from humans because of their immune systems and therefore promoted conservation over tourism.

Sue Savage-Rumbaugh, who was born in 1946, is a primatologist who has just earned the distinction of being in the *2011 Time Magazine 100* as one of the most influential people in the world. In residence with the Great Ape Trust in Iowa, Savage-Rumbaugh is recognized for doing pioneering research, some of it controversial, in what she called a bi-species environment where cultures are shared. Images of her work are readily available on You Tube.[138] There, one can observe a bonobo, familiar with the use of pictograms, using chalk on the floor to mimic the image or hear Savage-Rumbaugh comment that apes can understand spoken human language, but humans cannot understand theirs.[139]

---

[131] *Id.*

[132] *Id.* at 76–77.

[133] *Id.* at 116.

[134] *Id.* at 117–18.

[135] *Id.* at 196.

[136] *Id.*

[137] Jane Goodall & Marc Bekoff, The Ten Trusts: What We Must Do to Care for the Animals We Love (Harper, 2002).

[138] *Dr. Sue Savage-Rumbaugh*, Great Ape Trust, http://www.greatapetrust.org/science/scientists-biographies/sue-savage-rumbaugh (last visited May 20, 2011).

[139] *Sue Savage-Rumbaugh Discusses Great Ape Trust's Potential*, YouTube, http://www.youtube.com/watch?v=YRjaqlqzeeA, (July 25, 2007). *See also Susan-Savage Rumbaugh: Apes That Write, Start Fires, and Play Pac-Man*, YouTube, http://www.youtube.com/watch?v=a8nDJaH-fVE, (May 17, 2007).

In this YouTube footage, one can observe a bonobo walking bipedally. Then, one can see Savage-Rumbaugh give rambling verbal instructions to a familiar bonobo in the jungle about building a fire, finding the lighter, and putting the fire out with water, which the individual follows. Or, one can see a bonobo trying out various instruments, including a piano, and then a bonobo engaged in tool-making utilizing rocks. Savage-Rumbaugh, herself, describes their ability for self-recognition in the mirror, and that, perhaps to the discomfort of some, bonobos are highly sexual and can use their sexuality as a means of communication, much like humans might.

Where Should Ethics Come in?

Before proceeding to an ethical analysis, it is worthwhile to engage in a brief departure from the above analysis with regard to the subject of intelligent life. We have focused on how the great apes compare to humans, utilizing anatomical, genetic, neurological, and behavioral approaches together with more selective criteria like sex, disease, and disorders. We appreciate, with the fast pace of scientific discoveries and growing knowledge, that the great apes are indeed our closest relatives and though they may look and act differently than we do, they are our own kind.

It is fair to ask that, if the human ethical universe expands regarding these close vertebrate relatives, whether we have learned a lesson that is revelatory about the limitations of modern science in understanding and valuing the entire animal kingdom. We leave this discussion with a brief salute to an invertebrate cephalopod, the octopus.

Let us take a brief look at this invertebrate's neuron organization, then share a few observations. The giant Pacific octopus brain has been described as being the size of three walnuts with "the equivalent of another few walnuts in neurons outside the brain in its arms."[140] The octopus tentacles have three-fifths of the animal's neurons, as if each tentacle has a separate brain[141] causing the octopus to become the subject of research regarding distributive intelligence.[142]

The octopus, with its ability to dramatically change its shape and color, and thereby change its appearance twenty times a minute, can imitate the appearance of other sea life as a type of camouflage.[143]

---

[140] *See* Roger T. Hanlon & John B Messenger, Cephalopod Behavior 27 (Cambridge Univ. Press paperback ed. 1998).
[141] *Id*. at 35.
[142] *Id*.
[143] *Id*. at 24.

According to demonstrations conducted by National Geographic, the octopus even has the ability to learn and navigate complex mazes.[144] A ten-foot wide octopus, counting tentacles, went missing from the Houston Aquarium and was later found inside a two-inch wide pipe.[145] Other research shows various octopuses are found to have personalities.[146] How will science now apply Morgan's Canon, which cautions humans to seek explanations that imply less mental ability,[147] as evidence for more mental ability grows?[148]

Based upon the above, the research to understand the invertebrate octopus challenges humans about the meaning of brains, neurons, and sentient life. We continue on the journey of understanding, appreciating, and even respecting gifts differing in the animal kingdom, and as well as developing ideas about whether human ethics should be restrictive or expansive.

Ethical Perspectives

This portion of the paper will assess the potential interplay of patent ethics, bioethics, and neuroethics on humans and other animals, with particular consideration on the Great Apes. It will establish that patent ethics relate to conduct in dealing with the U.S. Patent and Trademark Office (USPTO) and are separate from bioethics and neuroethics, which arise from more philosophical origins.

Patent Ethics

Patent ethics as set forth in 37 C.F.R. Part 10 generally track the old Model Code of Ethics.[149] These ethical rules are guidelines for practitioners (patent agents and attorneys) to abide by when conducting business before the U.S. Patent and Trademark Office (USPTO), just as the various Model Rules of Ethics control an attorney's actions in state jurisdictions. Their promulgation stems first from statutes as passed by Congress, then rules as promulgated and administered under the Administrative Procedures Act.

---

[144] *See Octopus Glides Though Plastic Maze*, National Geographic News, (Jan. 16, 2007) http://news.nationalgeographic.com/news/2007/01/070116-octopus-video.html.
[145] Hanlon & Messenger, *supra* note 140 at 25.
[146] *See* Jennifer A. Mather & Roland C. Anderson, *Personalities of Octopuses (Octopus rubescens)*, 107 J. Comparative Psychology 336, 339 (1993).
[147] Hanlon & Messenger, *supra* note 140 at 11–12.
[148] *Chimps "Mourn" Nine-Year-Old's Death?*, National Geographic, (May 13, 2011) http://video.nationalgeographic.com/video/player/news/animals-news/zambia-chimpanzee-death-reaction-vin.html.
[149] David Hricik et al., Patent Ethics – Prosecution 1 (Oxford Univ. Press, 2009).

The primary purpose of the ethics rules is to regulate practitioner, agency, and even administrative judge behavior to conform to a certain minimum level and certainly to avoid acts that sink to the level of unclean hands or inequitable conduct in achieving an action before the agency.

Every person substantively involved in patent prosecution owes a duty of good faith to the examiner and the Office.[150] That duty is often referred to as "the duty of candor." A breach of the duty can have several consequences. A breach of the duty of candor constitutes a violation of applicable ethical rules. It can also serve as a foundation for inequitable conduct, which is an equitable defense to patent infringement.[151] Generally, the duty of candor serves to provide a framework of submitting information most relevant to the patentability of the claims in a patent application in order to determine whether an invention is novel and non-obvious over what is known.

Thus, the USPTO ethics rules do not serve to control or define anything with respect to ethical treatment of humans or animals, which will be clearer when one looks at the various bioethical and neuroethical objectives. However, under patent law, claiming person could not claim a patent on a human.[152] Thus, even though human beings are not patentable, someone could claim a patent on "isolated" human cells. The statutes that apply here are directed to what can constitute "patentable subject matter" not to whether the patent is morally acceptable to members of society.

While humans beings, genetically modified or otherwise, would not constitute statutory subject matter, animals in the United States, generally in the form of transgenic animals, can constitute statutory patentable subject matter under 35 U.S.C. § 101. Section 101 is quite broad given that "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title."

However, whether a non-human animal is patentable or not does not raise an issue under patent ethics when one considers the rights conferred by a patent. Specifically, a patent confers the negative right to prevent others from making, using, or selling the subject matter of one's

---

[150] 37 C.F.R. § 1.56 (2000).

[151] 35 U.S.C. § 282(1) (2003).

[152] Manual of Patent Examination Procedure (MPEP) § 2105. ("If the broadest reasonable interpretation of the claimed invention as a whole encompasses a human being, then a rejection under 35 U.S.C. 101 must be made indicating that the claimed invention is directed to non-statutory subject matter. Furthermore, the claimed invention must be examined with regard to all issues pertinent to patentability, and any applicable rejections under 35 U.S.C. §§ 102, 103, or 112 must also be made.")

invention without one's authorization.[153] However, one clearly does not have to obtain a patent in order to make a transgenic animal. Moreover, one does not have to obtain a patent to make human stem cells, to create a human-primate chimera, or do any other scientific endeavor. Thus, the patent laws and rules govern obtaining valid patents and do not delve into the ethical questions raised by the subject matter of those inventions.

Bioethics

Bioethics is the study of ethical issues raised by controversial advances in biology and medicine. Bioethicists are concerned with the ethical questions that arise in the relationships among life sciences, biotechnology, medicine, politics, law, and philosophy. Bioethical theories impact both animals and humans. With respect to human experimentation, the guidelines that exist today stem in large part from the Nuremberg Code[154] as a result of the human experimentation that occurred in Nazi Germany before and during World War II. The Nuremberg Code required: (1) free and voluntary consent for human experimentation, (2) no experimentation if death is the probable or anticipated result, and (3) the avoidance of unnecessary suffering, physiological or physical.[155]

From that evolved the Helsinki Declaration which promulgated seven factors to govern human experimentation:

1) human experimentation should always be conducted according to sound scientific principles;
2) the design of the experimentation should be set in advance and a protocol filed with an independent body;
3) experimentation should be conducted only by scientifically trained people;
4) the risk must be proportionate to the benefit;
5) concern for the subject should prevail over scientific concerns;
6) the effect on the integrity, privacy and psychology of the subject should be minimized; and
7) the subjects must be advised of the procedure's alternatives and risks and experimentation should only occur once informed consent is obtained.[156]

[153] 35 U.S.C. § 271.

[154] Nuremberg Code was actually not an international code, but rather the judgment of the Allied military tribunal trying Nazi doctors for their experimentation on human beings in the concentration camps. Arthur B. Lafrance, *Bioethics and Animal Experimentation*, 2 ANIMAL L. 157 (1996).

[155] *Id.*

[156] *Id.*

With respect to animals, the differences in applications of these principles would at least be (1) no requirement for consent; (2) the balancing of the individual participants' interests versus society's interest; (3) the risk of death; and (4) perhaps the components of privacy and perhaps integrity. Regarding the fourth component, with respect to the Great Apes, there seems to be an increasing gray area of whether these animals have privacy and integrity, perhaps as best characterized by Koko the lowland gorilla.[157]

However, despite the framework of these ethical objectives, continued violation against humans persists, let alone against animals. This includes the Tuskegee Syphilis project which lasted from 1932 to 1972, well after a cure for syphilis had been identified.[158]

More recently, the rights of humans has expanded into a debate of rights for animals, especially for the Great Apes. In the United States, the only major federal law governing the treatment of captive nonfarm animals is the Animal Welfare Act.[159] Farm animals are separately governed by the Humane Methods of Livestock Slaughter Act, which is run by the U.S. Department of Agriculture, and arguably largely irrelevant.[160] Spain became the first country in 2008 to extend rights to great apes in accordance with the Great Ape Project proposal. Currently, non-human primates can be used in animal research, especially in the area of antibody technology in order to test the safety and efficacy of new antibody drugs.[161] According to Prescott's guidelines, care must be demonstrated when selecting animals for experimentation:

When an experiment has to be performed, the choice of species shall be carefully considered and, where necessary, explained to the authority. In a choice of between experiments, those which use the minimum number of animals, involve animals with the lowest degree of neurophysiological sensitivity, cause the least pain, suffering, distress or lasting harm and which are most likely to provide satisfactory results shall be selected.[162]

---

[157] *See, e.g.*, *Koko (gorilla)*, Wikipedia, (last visited June 6, 2011) http://en.wikipedia.org/wiki/Koko_(Gorilla).

[158] *Tuskegee Syphilis Experiment*, Wikipedia, (last visited June 6, 2011) http://en.wikipedia.org/wiki/Tuskegee_syphilis_experiment.

[159] 7 U.S.C. §§ 2131-59 (2000 & Supp. IV 2004).

[160] Ellen P. Goodman, *Book Review: Animal Ethics and The Law* 79 Temple L. Rev. 1291, 1308 (2007) (critiquing A Review of Animal Rights: Current Debates and New Directions (Cass R. Sunstein & Martha C. Nussbaum eds., Oxford Univ. Press 2004)).

[161] *See, e.g.*, Michael E. Sughrue et al., *Bioethical Considerations in Translational Research: Primate Stroke*, 9 Am. J. Bioethcs 3–12 (2009); M.J. Prescott, *Ethics of Primate Use*, 5 Adv. Sci. Res. 11–22, 16 (2010) (discussing the use of cynomolgus monkeys as generally the only relevant animal model for preclinical safety studies).

[162] M.J. Prescott, *Ethics of Primate Use*, 5 Adv. Sci. Res. 11–22, 13 (2010).

However, for some of these studies there may not be an animal alternative, given the nature of the drug. Therefore even when guidelines are scrupulously followed, the drug may not permit using a non-primate.

Neuroethics

Turning from bioethics, we look at neuroethics, a subgenus of bioethics. Neuroethics pertains to neuroscience and neurology and the medical control of the mind. Neuroethics was first picked up by mass media when William Saffire coined it in July 2001.[163] Neuroethics is also a spin-off of ELSI, the ethical, legal, and social implications of genetics.[164] Unlike for ELSI, there has been little governmental support for neuroethics.[165] Neuroethics appears to consist of three branches of research: (1) the ethical issues raised in the process of neuroscience research; (2) how human brains make "ethical" decisions; and (3) how existing or plausible discoveries and technologies in neuroscience are likely to affect societies including their laws.[166] Thus, the focus of neuroethics to date is human centered and deals with definitions of what constitutes normalcy in neurobiology. Neuroethics can be further broken down into four areas: (1) consequences of improved prediction of mental illness; (2) the possibility of using neuroscience techniques to determine a person's competence; (3) mind reading in order to determine lying; and (4) brain enhancement through neuroscience technologies.[167] It is these issues that relate to the concerns and philosophical debates of neuroethics and bioethics alike. The laws as they stand today generally are used only as a reaction to bad event in order to promulgate some framework in which society can operate.

Recently, laws governing privacy have been promulgated; especially medical privacy arising from the human genome project and the ability to determine if a patient has a certain propensity for a disease, in order to protect patients from loss of insurance or improper access to their medical history. For example, genetic tests can be performed on patients suspected of having Huntington's disease (HD), which is a progressive and deadly neurological disorder that has a 1-in-2 chance of being transmitted to one's progeny. Many with the disease do not want the public, or sometimes even their own family, from knowing whether they have the disease. The same or similar laws should considered for restricting access to such neurological testing as positron emission

---

[163] Henry T. Greely, *Neuroethics and ELSI: Similarities and Differences*, 7 MINN. J.L. SCI. & TECH. 599, 605 (2005–2006).
[164] *See Id*.
[165] *Id*. at 609.
[166] *Id*. at 613–14.
[167] *Id*. at 614.

tomography (PET), single photon emission tomography (SPECT) and magnetic resonance imaging (MRI) These types of testing can provide information on the normalcy of a patient's brain.

The issue of neuro-enhancement either through cellular or genetic manipulation or through chemical manipulation also will become more of an issue as our understanding of neurobiology evolves. Already compounds such as caffeine, alcohol, Prozac®, Ritalin®, Provigil®, and other drugs are taken to impact brain function in humans and other animals in a variety of different ways. They may be taken not just by humans who are considered "ill" or "not normal," but also by "normal" humans in order to enhance their abilities. For example, the military may use certain stimulants in order to permit soldiers to maintain a longer period of wakefulness and alertness. Ultimately, this require us to reassess how we define "normal" versus "diseased", or "normal" versus "enhanced" conditions. For example, many people with dyslexia or attention deficit hyperactivity disorder (ADHD) go on to successful careers because that "abnormal condition" provides talents that "normal" people purportedly lack.

However, the ethical frameworks of today in turn will be shaped and modified by society's demands given stresses on the Commons and expectations of certain behaviors within the Commons.[168] Just like with sustainable development, there is an increasing need for sustainable medicine and a means of supporting the populace in need thereof. For example, the increased diagnosis of various conditions such as ADHD and attention deficit disorder (ADD) have resulted in a huge increase in the use of drugs such a Ritalin® to control behavior in a classroom setting in order to control the commons of the classroom. One could expect that, similar to controlling domesticated animals to better manipulate them for our needs, it does not seem to be a far leap to control prisoners for their safety or the safety of their guards.

Ethical frameworks will have to be put in place to better prevent individuals from subjecting humans or animals to unethical actions, including control from the perspective of neurobiology and neuromedicine.

[168] The tragedy of the commons is a dilemma arising from the situation in which multiple individuals, acting independently and rationally consulting their own self-interest, will ultimately deplete a shared limited resource, even when it is clear that it is not in anyone's long-term interest for this to happen. This dilemma was first described in an influential article titled "The Tragedy of the Commons," written by Garrett Hardin and first published in the journal *Science* in 1968. *See generally* Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243 (1968).

Given this backdrop of the Tragedy of the Commons from the perspective of the Commons for both humans and great apes, here are some questions to consider:

1) Can a human being ever lose their status as a human being? Consider an anencephalic baby that lacks any means of having or developing sentience. Would an anencephalic infant lack the status of being a human merely because it lacked the ability to have a sense of self? Or would a bonobo, lowland Gorilla, or chimpanzee having language ability be considered more human on a humanness scale than an anencephalic human infant?
2) Or does being a human derive from having a complete set of chromosomes? What about a human that has Turner's Disease, or the lack of two X chromosomes? Or, how many human genes would a great ape have to have before the great ape becomes a human?
3) Is controlling a domesticated animal to purportedly improve its life any worse than controlling a human to improve his/her ability to learn in the classroom or function in their job?
4) What boundary of human control needs to be crossed to trigger ethical concerns? Is the boundary based upon the environment or the need of the Commons? Could the boundary change or move over time or with changing needs of the Commons?
5) If a scientist transferred human stem cells into the brain of a great ape to create a human-animal chimera, would such chimeras have a different matrix of rights than normal apes? Than normal humans?[169]

Based upon our search for truth and ethical principles, the purpose of this paper is ultimately to challenge current thinking and to gain more careful consideration of this important contemporary issue. It is worth exploring whether progressions in ethical thought should parallel progressions in science.

[169] *See* Greely, *supra* note 163 at 622. George Bush tried to prevent this through the Human Chimera Prohibition Act of 2005.

Et Tu Lisa Jackson? An Economic Case for Why the EPA's Sweeping Environmental Regulatory Agenda Hurts Animal Welfare on Factory Farms

David E. Solan[1]

I. Introduction

After repeated defeats by the agriculture lobby over the past decade, and faced with the fact that the farmed animal industry is exempt from the major animal protection laws, it is understandable why the animal protection movement[2] has sought to ally itself with the environmental movement to ratchet up the environmental regulation of factory farms.[3] Illustrating the growing trust and partnership between

---

[1] J.D. 2011, Tulane University Law School; B.A. 2008, cum laude, Bucknell University. Special thanks to my friends and family for all their support, and especially to Danielle Solan for her insightful comments.

[2] This Article tends to use the term "animal protection" instead of "animal rights" or "animal welfare." The term "animal protection" is more neutral than the others, and this approach allows one to avoid semantic quibbles and to sidestep the important, but largely irrelevant debate related to the spectrum of ideologies and movements at play. Since all of the relevant groups generally support increased legal protection for animals, "animal protection" is an appropriate term. For a brief discussion of the split between mainstream and radical groups, *see* Part IV. A. 1, *infra*.

[3] *See e.g.,* Press Release,
Humane Soc'y of the United States, Broad Coal. Petitions EPA to Regulate Ammonia Gas Pollution from Factory Farms (Apr. 6, 2011), *available at* http://www.humanesociety.org/news/press_releases/2011/04/ammonia_epa_04062011.html [hereinafter, "Humane Society Press Release, Ammonia"]; Press Release, Humane Soc'y of the United States, Senate Defeats Resolution to Block Climate Change Action (June 10, 2010), *available at* http://www.humanesociety.org/news/press_releases/2010/06/senate_upholds_climate_authority_061010.html; Press Release, Humane Soc'y of the United States, Coal. Asks EPA to Regulate Greenhouse Gases, Other Toxic Air Pollutants from Factory Farms (Sept. 21, 2009), *available at* http://www.humanesociety.org/news/press_releases/2009/09/coalition_asks_epa_to_regulate_air_pollution_from_factory_farms_sm_092109.html [hereinafter, "Humane Society Press Release, Greenhouse Gases"]; Press Release, Humane Soc'y of the United States, The Humane Society Commends EPA for Key Step to Address Global Warming (Apr. 17, 2009), *available at* http://www.humanesociety.org/news/press_releases/2009/04/hsus_commends_epa_global_warming_step_041709.html [hereinafter, "Humane Society Press Release, Global Warming"]; Press Release, Humane Soc'y of the United States, Groups Challenge Bush Admin's Factory Farm Exemption (Jan. 15, 2009), *available at* http://www.humanesociety.org/news/press_

animal protection supporters and environmentalists, common cause has been found on the leading environmental issues of the day, such as global warming, Concentrated Animal Feeding Operation (CAFO) standards, and waste generated by factory farms.[4] For example, the Humane Society of the United States ("Humane Society"), the largest animal protection organization in the country, has allied itself with environmental groups on many occasions in the fight against pollution from factory farms.[5] Wayne Pacelle, the CEO of the Humane Society, has endorsed this alliance, stating "We would be foolish and silly not to unite with people in . . . the environmental community . . . to try to challenge corporate agriculture."[6]

The alliance between the animal protection movement and environmental movement has manifested itself in two primary ways: first, leading animal protection groups have supported the bold activism of Lisa Jackson, the Administrator of the Environmental Protection Agency (EPA), in seeking to lasso factory farms into compliance with

---

releases/2009/01/emissions_exemption_011509.html [hereinafter, Humane Society Press Release, "Farm Exemption"]; Press Release, Humane Soc'y of the United States, Cal. Residents Announce Legal Action Concerning Toxic Air Violations at Egg Farm (July 24, 2008), *available at* http://www.humanesociety.org/news/press_releases/2008/07/olivera_egg_suit_072408.html [hereinafter "Human Society Press Release, Air Violations at Egg Farm"]; Victories by the Animal Legal Defense Fund, http://www.aldf.org/article.php?list=type&type=87 (last visited Aug. 15, 2011) (describing the success of Proposition 2, a ballot initiative in California to ban certain animal confinement practices, and stating that the measure was "endorsed by ALDF[-] hundreds of animal protection organizations… [and] environmental groups."); Farm Sanctuary Press Release, Ohioans for Humane Farms Petitions to Put Measure on November Ballot Protecting Animal Welfare, Food Safety, Family Farmers and the Env't (2010), *available at* http://www.farmsanctuary.org/mediacenter/2010/pr_ohio2-1.html (describing how a ballot measure to adopt regulations on cruel treatment of farmed animals was supported by a broad coalition of groups, including Humane Society, Farm Sanctuary, and the Ohio Sierra Club); De Anna Hill, *Combating Animal Cruelty with Environmental Law Tactics*, 4 J. Animal L. 19, 25 (2008) (noting that both environmental groups and animal protection groups have used environmental laws to sue CAFO).

[4] *See, e.g.,* Humane Society Press Release, Greenhouse Gases, *supra* note 3; Humane Society Press Release, Farm Exemption, *supra* note 3; Humane Society Press Release, Global Warming, *supra* note 3.

[5] *See, e.g.,* Humane Society Press Release, Greenhouse Gases, *supra* note 3; Humane Society Press Release, Farm Exemption, *supra* note 3; Humane Society Press Release, Global Warming, *supra* note 3.

[6] *See* Wayne Pacelle Quotes, http://activistcash.com/biography_quotes.cfm/b/3366-wayne-pacelle (last visited August 15, 2011). Admittedly, this quote comes from an arm of the Center for Consumer Freedom, a group hostile to the Humane Society.

environmental statutes;[7] and second, these groups have engaged in a litigation strategy of suing factory farms under environmental laws.[8] Jackson may yet prove the hope that animal protection supporters have been waiting for; she has embarked on a sweeping regulatory agenda that promises to increase regulatory costs on factory farms.[9] Against the backdrop of repeated failures to convince legislatures to improve the welfare of farmed animals, it is easy to view the aggressive moves taken by Jackson against the farmed animal industry as a sign of progress.[10] Now that Jackson has waged a no-holds-barred battle against factory farms promising to rope them under stringent regulation, the hope is that she will become a savior to the stagnant animal protection cause and use her control to advance the currently pitiful welfare of farmed animals. Such hopes have congealed into a conventional wisdom that environmentalism and its cause are perfectly aligned with animal rights and its cause. Indeed, it seems that the Humane Society has thrown its weight behind the entire sweeping regulatory agenda of the EPA.

The wider animal protection community has cheered on the formation of this alliance, viewing it as a natural partnership between like-minded progressive movements, whose members often consider themselves supporters of both causes.[11] Indeed, this partnership has

---

[7] *See, e.g*., Humane Society Press Release, Greenhouse Gases, *supra* note 3 (noting that Humane Society joined a coalition of groups asking the EPA to regulate GHGs); Humane Society Press Release, Ammonia, *supra* note 3 (stating that Humane Society joined with environmental groups to petition the EPA to make an "endangerment finding" for ammonia gas under the Clean Air Act).

[8] *See generally* De Anna Hill, *supra* note 3, at 24 (describing how animal protection groups have attempted to use four environmental statutes in court, including the Clean Air Act, Clean Water Act, Migratory Bird Treaty Act, and National Environmental Policy Act).

[9] *See, e.g.,* Rural America Solutions Group Forum on "The EPA's Assault on Rural America: How New Regulation and Proposed Legislation are Stifling Job Creation and Economic Growth" Before the H. Comm. on Natural Resources, 111th Cong. (2010) (statement of Wilmer Stoneman III).

[10] *See, e.g*., Humane Society, Global Warming, *supra* note 3. For example, Wayne Pacelle praised Jackson's efforts to regulate greenhouse gases under the Clean Air Act, stating "'We are so appreciative that the EPA, under Lisa Jackson's new and strong leadership, is at long last moving forward to address the enormous threats posed by climate change.'" *Id.*

[11] *See e.g*., Peter Singer, Animal Liberation 8 (2d ed. 1990) ("If a being suffers there can be no moral justification for refusing to take that suffering into consideration. No matter what the nature of the being, the principle of equality requires that its suffering be counted equally with the like suffering ... of any other being."); Christopher D. Stone, *Should Trees Have Standing? Toward Legal Rights for Natural Objects*, 45 S. Cal. L. Rev. 450, 450 (1972) ("Originally each man had regard only for himself and those of a very narrow circle about him; later... 'his sympathies became more tender and widely diffused, extending... finally to the lower animals."') (quoting Charles Darwin, Descent of Man 119-21 (2d ed. 1874))).

appeared to receive a uniformly positive reception within the animal protection community, as evidenced by its prominent place in leading animal rights conferences,[12] the glowing praise it has won from prominent animal rights intellectuals,[13] and the encouraging treatment accorded by several law review articles.[14]

However, there is scant evidence that any animals have benefitted from this alliance. In fact, some articles that are generally supportive of this approach offer strong reservations of its potential benefits to animals.[15] Likewise, it is perhaps misplaced to view Jackson as a champion of animal welfare, and misguided to view the environmental movement as a true ally. On the contrary, many items on the EPA's agenda, such as the regulation of CAFOs' ammonia emissions, do not promise a clear benefit for farmed animals.[16] Worse, Jackson's activism could pose a great threat to animal welfare on factory farms; and

---

[12] *See, e.g.*, Program, 18th Annual Conference at Lewis & Clark, Using Environmental Laws to Crack Down on Animal Agriculture, http://law.lclark.edu/student_groups/student_animal_legal_defense_fund/animal_law_conference/2010/program/; Conference Agenda for the 2010 Animal Law Conference, http://www.aldf.org/section.php?id=156 (last visited Aug. 15, 2011) (detailing a panel called "Charting a Course for the Protection of Farmed Animals: Legal and Economic Approaches," with a panelist from the Environmental Law Institute).

[13] *See, e.g.*, 18th Annual Conference at Lewis & Clark, Using Environmental Laws to Crack Down on Animal Agriculture, http://law.lclark.edu/student_groups/student_animal_legal_defense_fund/animal_law_conference/2010/program/ (providing podcast of this discussion). For example, Kathy Hessler, professor of law and clinic director of the Center for Animal Law Studies at Lewis & Clark Law School, has enthusiastically called for climate change advocates and animal protection advocates to get together and combine their energies.

[14] *See e.g.*, Anastasia S. Stathopoulos, *You Are What Your Food Eats: How Regulation of Factory Farm Conditions Could Improve Human Health and Animal Welfare Alike*, 13 N.Y.U. J. Legis. & Pub. Pol'y 407 (2010); Lars Johnson, *Pushing NEPA's Boundaries: Using NEPA To Improve the Relationship Between Animal Law and Environmental Law*, 17 N.Y.U. Envtl. L.J. 1367 (2009); Hill, *supra* note 3; Cecilia Isaacs-Blundin, Esq., *Why Manure May Be the Farm Animal Advocate's Best Friend: Using Environmental Statutes to Access Factory Farms*, 2 J. Animal L. & Ethics 173 (2007); Danielle J. Diamond, *Illinois' Failure To Regulate Concentrated Animal Feeding Operations in Accordance with the Federal Clean Water Act*, 11 Drake J. Agric. L. 185 (2006); Erin Morrow, *Agri-Environmentalism: A Farm Bill for 2007*, 38 Tex. Tech L. Rev. 345 (2006). *But see*, Megan A. Senatori, *The Second Revolution: The Diverging Paths of Animal Activism and Environmental Law*, 8 Wis. Envtl. L.J. 31 (2002) (comparing the two movements).

[15] *See e.g.*, Hill, *supra* note 3 ("Environmental law is feasible to use in litigation pertaining to animal cruelty, but the remedies ultimately may not be beneficial to the movement against animal cruelty.").

[16] *See* Humane Society Press Release, Ammonia, *supra* note 3 (noting the Humane Society's support for new ammonia regulations on factory farms). In justifying its support for new ammonia regulations, the Humane Society did not point to any direct benefit to farmed animals, but rather made a general statement that confinement of animals in tiny cages is cruel. *Id.*

consequently, the interests of the environmental movement may not be so closely aligned with the interests of the animal protection movement as it might appear.

This Article aims to challenge the popular wisdom among the animal protection community that increased collaboration with the environmental movement presents a win-win scenario that confers mutual political benefits and gives them a tactical advantage over the farmed animal industry.[17] These sentiments, though well-intentioned, overlook the fact that in many cases enhanced environmental regulations do not benefit animal welfare. In the area of factory farming, a largely unregulated industry, just the opposite may be true. Indeed, the animal rights and environmental movements may be competitors for political capital in a zero-sum game. Contrary to popular wisdom, this Article will argue that the EPA's sweeping environmental regulations may actually hurt animal welfare on factory farms.

Part II will provide some background on the plight of farmed animals on factory farms and the degree of animal welfare regulation of the animal agriculture industry. Part III will explore the nascent alliance between animal protection groups and environmentalists, and will detail the two primary ways in which this alliance has manifested itself—namely, the support for the EPA's bold activism in ratcheting up environmental regulations of factory farms, and the litigation strategy of suing factory farms under environmental laws. Part IV will explore the three primary goals that animal protection groups hope to accomplish regarding factory farms, and will detail the reasons that animal protection groups have given for supporting increased environmental regulation of the farmed animal industry.

Part V will argue that each of the three major goals of the animal protection movement in the realm of industrial agriculture—namely, (1) to increase the cost of animal products, leading consumers to change consumption patterns and producers to decrease production levels, (2) to improve the lives of farmed animals, and (3) to help small farmers and hurt big factory farms—may be undermined by increased environmental regulation. To the contrary, the EPA's activism could fail to change consumption patterns, lead to a reduction of animal welfare, and empower big factory farms at the expense of small farmers. This Part contends that the incoming regulatory assault from the EPA—promising to increase the cost of doing business for the farmed animal industry—and the nascent alliance with the environmental movement are not the good thing that animal protection supporters claim, and here is why: in this unregulated industry, the costs of increased environmental regulations may translate to worse treatment of animals.

---

[17] *See e.g.,* Isaacs-Blundin, Esq., *supra* note 14 (discussing the benefits of using environmental statutes to advance the welfare of farmed animals).

Part VI suggests that a better approach for the animal protection movement would be to target state-level laws and/or ballot initiatives that directly enhance animal welfare. Finally, Part VII concludes by urging the animal protection movement to abandon its misguided embrace of an alliance with the environmental movement, while there is still time to mitigate the damage.

II. Background on the State of Factory Farm Regulation Regarding Animal Welfare

This Part will describe the animal welfare laws on the books at the federal and state level as they pertain to farmed animals. First, this Part will discuss how the treatment of animals on factory farms is largely unregulated, noting that voluntary industry standards are the primary constraint on how the farmed animal industry can treat its animals—that is to say, they can do what they want without fearing legal consequences. Second, this Part will detail the lack of transparency in the world of animal welfare enforcement.

A. The Rapid Rise of Anti-Cruelty Laws

Animal cruelty laws have grown vigorously over the past thirty years, sweeping the nation on a tidal wave of public support. The animal protection movement has won a series of small victories through ballot initiatives, court rulings, and progressive legislation.[18]

These victories have come at both the federal and state levels. At the federal level, Congress has passed more than eighty animal protection statutes over the past five decades, such as the Animal Welfare Act (AWA).[19] At the state level, although animal cruelty laws have a long history dating back hundreds of years, such laws have only

[18] *See* Jonathan R. Lovvorn, *Animal Law in Action: The Law, Public Perception, and the Limits of Animal Rights Theory as a Basis for Legal Reform*, 12 Animal L. 133, 144-47 (2006) (discussing recent efforts to enact federal and state animal welfare legislation, as well as efforts in the courts); Kristen Hinman, *The Humane Society's Battle with Farmers Began Right Here in Florida*, Broward Palm Beach New Times, Apr. 15, 2010, http://www.browardpalmbeach.com/2010-04-15/news/the-humane-society-s-battle-with-farmers-began-right-here-in-florida/ (describing one of the first ballot initiative victories, in Florida).

[19] *See* Michael J. Ritter, *Standing in the Way of Animal Welfare: A Reconsideration of the Zone-of-Interest "Gloss" on the Administrative Procedures Act*, 29 Rev. Litig. 951, 952 (2010) (citing Henry Cohen, Brief Summaries of Federal Animal Protection Statutes, CRS Report for Congress, http://digital.library.unt.edu/govdocs/crs/permalink/meta-crs-529:1).

gained traction since the 1960s.[20] Today, every state has an animal cruelty statute on the books, though these laws vary in what actions constitute "cruelty," the level of punishment offered, and how "animal" is defined.[21] In addition to animal cruelty laws, states have passed a plethora of statutes restricting animal fighting, puppy mills, and Internet hunting.[22] However, instead of granting legal rights to animals, these laws have tended to only protect animals from needless suffering.[23]

Nevertheless, the animal protection community is right to take pride in its many hard-fought victories, as it has succeeded in bringing the animal rights cause into the mainstream.[24] For example, the Humane Society has reported that 2009 was a milestone year for the cause of animal welfare on the state level, as evidenced by the 121 new animal protection laws enacted in state legislatures, setting a new record and

---

[20] For example, in 1641 the Massachusetts colony enacted the "Body of Liberties," which forbid "any tirrany or crueltie towards any bruite creature which are usuallie kept for man's use." *See* Emma Ricaurte, *Son of Sam and Dog of Sam: Regulating Depictions of Animal Cruelty Through the Use of Criminal Anti-Profit Statutes*, 16 Animal L. 171, 177 (2009); *see generally,* Gerald Carson, Men, Beasts and Gods: A History of Cruelty and Kindness to Animals 71 (1972); David Favre & Vivien Tsang, *The Development of Anti-Cruelty Laws During the 1800s*, 1 Det. C.L. Rev. 1 (1993). Likewise, in 1822 Maine adopted a law that provided "if any person shall cruelly beat any horse or cattle . . . he shall be punished" by both a fine and a month in jail. *See* Ricaurte, *supra* at 177, n.33 (noting that Maine's anti-cruelty law reflected other laws of that period in that it only applied to commercial animals and not to domestic animals, such as dogs); Favre & Tsang, *supra*, at 8-9 (citing Me. Laws ch. IV, § 7 (1822)).

[21] *See* Ricaurte, *supra* note 20, at 177; *United States v. Stevens*, 533 F.3d 218, 223 n.4 (3d Cir. 2008) (listing the animal cruelty laws in all fifty states); *Animal Abuse and Neglect*, http://www.humanesociety.org/issues/abuse_neglect/ (last visited May 15, 2011) (noting that forty seven states treat some types of animal abuse as felonies); Rebecca F. Wisch, *Overview of State Cruelty Laws* http://www.animallaw.info/topics/tabbed%20topic%20page/spuscruelty.htm (last visited May 15, 2011) ("[T]he term "animal" can be as broad under statutes to include "all living creatures" or as narrow to include only "vertebrates or mammals.").

[22] *See* Ritter, *supra* note 19, at 952 (citing figures on state legislation). Given this sweeping change in anti-cruelty laws, it is no surprise that the legal community's interest in animal law has grown dramatically. *Id.* at n.2 (noting a tenfold increase in law school offerings since 2000, the growth of law journals dedicated exclusively to animal law, and the founding of animal law sections in state animal rights associations in 16 states).

[23] *See* Ritter, *supra* note 19 at 952-53 (noting that the legal system has been the focus of efforts to advance animal rights given that the law has historically considered animals to be property), 954 (detailing lawful efforts to foster change, such as lobbying legislatures, civil disobedience, boycotts, demonstrations, and radical efforts to force change, including criminal acts of "'vandalism, property destruction, and animal theft'").

[24] *See* Adam Cohen, *Can Animal Rights Go Too Far?*, Time, July 14, 2010, http://www.time.com/time/nation/article/0,8599,2003682,00.html ("[A]nimal rights has moved further into the mainstream.").

surpassing the previous record number of 93 new laws set the previous year.[25] But the celebration of this milestone must have tasted bittersweet, for the big villains in the modern story about animal abuse—the corporations profiting from the animal agriculture industry—have so far escaped justice and legal reprobation.

B. Description of Animal Welfare on Factory Farms

For a movement reeling from a string of defeats at the hands of the farmed animal industry and unable to gain any traction, these achievements provided a welcome relief. Yet, the fact remains that over 9.5 billion animals are slaughtered every year for the sake of food production, and their lives are nasty, brutish, and short.[26] The ghastly treatment of animals on factory farms has been well-documented elsewhere.[27] In brief, the Humane Society has identified the six worst practices in the farmed animal industry as including (i) the long-distance transport of animals without food or protection from temperature extremes; (ii) the electric stunning of birds before slaughter without rendering them insensible to pain; (iii) the confinement of ninety five percent of egg-laying hens in small battery cages; (iv) the unnaturally fast growth of birds; (v) the forced feeding of geese for foie gras; and (vi) the confinement of pregnant pigs in gestation crates, so small that the pigs cannot even turn around.[28]

---

[25] *See 2009: A Record-Breaking Year of State Victories*, The Human Society of the United States, (Dec. 15, 2009), http://www.humanesociety.org/about/departments/legislation/state_leg_victories.html [hereinafter "Humane Society, Record-Breaking Year"].

[26] *See* Stathopoulos, *supra* note 14, at 412 (listing the standard industry practice of extreme confinement of animals).

[27] *See e.g*., David N. Cassuto, Bred Meat: *The Cultural Foundation of the Factory Farm*, 70-Wtr Law & Contemp. Probs. 59, 64 (2007) ("Egg producers must be female, so all male chicks are destroyed shortly after birth. . .") *Id*. at nn. 20-11; ("Debeaking involves using a hot blade to slice off the beak of a young chick. This procedure involves no anesthesia and is quite painful. . . . Forced molting involves the abrupt withdrawal of food. The sudden starvation "shocks the hen" and shuts down reproduction. The post-molten period results in high reproduction."); Michael C. Appleby, Long Distance Transport and Welfare of Farm Animals (CAB Int'l 2008); David Kirby, Animal Factory: The Looming Threat of Industrial Pig, Dairy, and Poultry (St. Martin's Press 2010); Barbara O'Brien, *Animal Welfare Reform and the Magic Bullet: The Use and Abuse of Subtherapeutic Doses of Antibiotics in Livestock*, 67 U. Colo. L. Rev. 407 (1996); David J. Wolfson, Beyond the Law: Agribusiness and the Systemic Abuse of Animals Raised for Food or Food Production (Farm Sanctuary, Inc. 1999).

[28] *The Dirty Six: The Worst Practices in Agribusiness*, Humane Society, (last updated Dec. 2, 2009), http://www.hsus.org/farm_ animals/factory_farms/the_dirty_six.html (last visited May 15, 2011); *Cruelty Investigations & Actions*, http://www.farmsanctuary.org/adopt/index_cruelty.htm (last visited May 11, 2011); T*he Truth Hurts by Farm Sanctuary*, http://www.factoryfarming.com (last visited May 15, 2011).

C. Regulation of Animal Welfare on Factory Farms

1. Largely Unregulated

Perhaps one of the reasons why animal protection groups have been so eager to find allies in its struggle to reign in the worst abuses of factory farms is that, in striking contrast to the many victories the animal protection cause has won in passing anti-cruelty laws across the nation, the powerful agri-business lobby has been able to stifle any meaningful reforms at the federal level designed to improve animal welfare.[29] The most notable aspect of federal laws regarding the welfare of farmed animals is that they are largely irrelevant.[30] Neither of the two pertinent federal statutes, the Humane Slaughter Act (HSA) and the Twenty-Eight Hour Law, afford meaningful protection to farmed animals.[31]

Why has success in advancing animal welfare eluded its supporters on the national level? The answer is that formidable interests stand in the way of the enactment of laws to protect farmed animals from abuse. The lobbying efforts of animal protection groups have been hopelessly outgunned by the powerful and well-funded agri-business lobby, which has been remarkably successful in marshaling legislative support for keeping itself largely unregulated.[32] This discrepancy in power politics has spelled doom for any meaningful animal welfare reforms at the national level.[33] Alas, the factory farm industry remains the elusive white whale; its thick skin has repelled every spear thrown by the animal protection movement. Unable to make any progress on the federal level, animal protection supporters did not give up, but rather started searching intently for alternatives and allies.

Although domestic anti-cruelty laws have been passed governing individual citizens' treatment of animals, they contain large exceptions and generally exempt the production of animals as food.[34]

---

[29] *See generally* David J. Wolfson & Mariann Sullivan, *Foxes in the Henhouse - Animals, Agribusiness, and the Law: A Modern American Fable, in* ANIMAL RIGHTS: CURRENT DEBATES AND NEW DIRECTIONS (Cass R. Sunstein & Martha C. Nussbaum eds., Oxford U. Press 2004); Colin Kreuziger, *Dismembering the Meat Industry Piece by Piece: The Value of Federalism*, 23 LAW & INEQ. 363, 363 (2005).

[30] *See* Wolfson & Sullivan, *supra* note 29, at 207 (discussing the perplexing lack of federal involvement in animal agriculture regulation), 207-08 (noting that while two federal laws govern some aspects of animal welfare—the Humane Slaughter Act and the Twenty-Eight Hour Law—both are toothless for a variety of reasons).

[31] *Id*. at 207-09.

[32] *See id*., at 207; Frank B. Cross, *The Judiciary and Public Choice*, 50 HASTINGS L.J. 355, 363 (1999) ("The costs of lobbying Congress may be well beyond the capacity of the average individual or small group, and effective lobbying may exceed the resources of broad-based public interest groups.").

[33] *See* Kreuziger, *supra* note 29, at 398.

[34] *See* Wolfson & Sullivan, *supra* note 29, at 210-11, 224.

However, since the vast majority of animals are used in the production of food, anti-cruelty laws are actually quite narrow in scope.[35] Thus, the farmed animal industry has been able to propagate large-scale abuse without regulation or reprimand, a cruel irony considering the nearly unfathomable suffering of many farmed animals.[36]

Instead, the farmed animal industry's treatment of animals is largely governed by voluntary guidelines promulgated by each industry.[37] Moreover, some restaurant chains have instituted voluntary supplier guidelines for animal welfare, monitored by an audit program overseen by a third-party verifier.[38] However, animal protection groups have criticized these standards for not adequately preventing cruelty to animals and for being purely voluntary, thereby failing to act as a sufficient constraint on behavior.[39] In addition, these standards are criticized for failing to improve animal well-being—for example, by failing to address concerns related to freedom of movement, close confinement, and slaughter practices.[40]

Notably, there is a trend towards greater regulation at the state level, but these advances have come almost exclusively through ballot initiatives, and only in states where this is an option.[41]

---

[35] *See* Cass R. Sunstein, *Introduction: What Are Animal Rights?*, *in* ANIMAL RIGHTS: CURRENT DEBATES AND NEW DIRECTIONS (Cass R. Sunstein & Martha C. Nussbaum eds., Oxford U. Press 2004) (noting that such laws also generally exempt the use of animals for medical or scientific purposes); Wolfson & Sullivan, *supra* note 29, at 210-11 ("Through a contrast of laws in the United States and Europe, one gains a true appreciation of the extent to which legislatures in the United States have abdicated their responsibilities.").

[36] *See e.g.*, Cassuto, *Bred Meat*, *supra* note 27, at 64 (describing the practices of debeaking, molting, etc.).

[37] *See* Wolfson & Sullivan, *supra* note 29, at n.75. For example, the United Egg Producers (UEP) issued guidelines in 1999 relating to the conditions for egg-laying hens. The UEP guidelines seemed to modestly enhance the welfare of these hens by, among other things, increasing cage space per hen. *Id.*

[38] *Id.*

[39] *Id.* at 224.

[40] *See Commission on Industrial Farm Animal Production, Final Report: Putting Meat on the Table: Industrial Farm Animal Production in America 1* (2009), *available at* http://www.ncifap.org/.

[41] *See e.g., A Landmark Day for Animals from Coast to Coast!* PETA (Nov. 11, 2008), http://www.peta.org/b/thepetafiles/archive/2008/11/05/a-landmark-day-for-animals-from-coast-to-coast.aspx (marking the passage of Proposition 2 in California by a large margin that "will ban some of the worst cruelty to animals who are raised for food in that state: keeping egg-laying chickens in battery cages so small that they can't spread their wings, keeping veal calves in crates for their entire miserable short lives, and keeping pregnant pigs in crates that are so small that they can't take a step forward or backward or turn around"); Hinman, *supra* note 18 (tracing the Humane Society's "state-by-state offensive" to convince voters to change the industry practices of factory farms, as opposed to going through the legislative process, and noting how

2. Lack of Transparency

The problematic features of the current legal system governing animal welfare—namely, a lack of meaningful regulations and widespread cruel practices—are exacerbated by a general lack of transparency. Although some firms have agreed to put real-time videos in their factories, most factory farms are enshrouded in a cloud of secrecy.[42] Finally, a trend has developed in many states to restrict the taking of pictures or videos of farming areas.[43]

III. The Alliance Between Animal Protection Groups and Environmentalists

The ascension of Lisa Jackson, a tough new cop on the environmental beat, coincided with a growing interest within the animal protection community to seek out creative ways to break through the persistent inaction in Congress, manifesting in two forms: (1) support for the bold activism of Lisa Jackson and (2) the pursuit of a litigation strategy involving suing factory farms under environmental laws.[44] This Part will first trace the bold campaign of the EPA, under Jackson's leadership, to increase the environmental regulation of industrial agriculture. Then, this Part will discuss the established litigation strategy of animal protection groups to sue under environmental laws.

A. Support for the EPA's Increased Environmental Regulation of Industrial Agriculture

In 2008, a new hope for animal welfare arose from the storm-battered city of New Orleans, embodied by Lisa Jackson, the bold new leader of the EPA, to crack down on the evils of the farmed animal industry. Like the abandoned puppies the Humane Society has sworn to protect, the animal protection movement has virtually no federal laws to

---

this was successful in Florida to ban gestation crates for pigs). Part VI, *infra*, will argue that these campaigns are more beneficial to animal welfare than suing under environmental laws.

[42] *See* Helena Bottemiller, *Q&A with Temple Grandin*, Food Safety News, June 22, 2010, http://www.foodsafetynews.com/2010/06/qa-with-temple-grandin/ (describing as a rare exception the example of Cargill, which has put video auditing in all their pork and beef plants).

[43] *See e.g.*, Katie Sanders, *Sen. Jim Norman Scales Back Bill that Inadvertently Criminalized Farm Photography*, Times/Herald Tallahassee Bureau, Mar. 22, 2011, http://www.tampabay.com/news/business/agriculture/sen-jim-norman-scales-back-bill-that-inadvertently-criminalized-farm/1158811.

[44] *See* Humane Society Press Release, Global Warming, *supra* note 3.

shelter it from the storms; so when the word went around that Jackson was taking the fight to factory farms, ears started perking up within the animal protection community.

Many in the animal protection movement cheered on Jackson as she braved the fierce political headwinds and pressed forward with an ambitious regulatory agenda to reign in the environmental degradation generated on factory farms.[45] She is perceived as the standard bearer in a great common cause: regulating the farmed animal industry that has thus far breezily swatted away animal rights activists like harmless flies in the contest of political influence with Congress.[46] Under the helm of Jackson, the EPA has aggressively sought to regulate the environmental damage wrought by factory farms by issuing or proposing to issue stringent regulations promising to impose significant regulatory costs on the agriculture industry.[47]

Specifically, Jackson has raised the stakes with a half-dozen actions that could potentially impose substantial burdens on the farmed animal industry, including dust regulation,[48] efforts to abolish the phosphorus index,[49] reporting requirements under the Comprehensive

---

[45] *See* John M. Broder, *House Republicans Take E.P.A. Chief to Task*, N.Y. Times, Feb. 9 2011, http://www.nytimes.com/2011/02/10/science/earth/10emissions.html.

[46] *See* Kreuziger, *supra* note 29, at 363.

[47] *See e.g.,* Claudia Copeland, *Animal Waste and Water Quality: EPA's Response to the Waterkeeper Alliance Court Decision on Regulation of CAFOs*, Congressional Research Service, Feb. 17, 2010, http://www.lclark.edu/live/files/6696-epas-response-to-waterkeeper-copeland-crs-2010 (discussing regulations pursuant to the Clean Water Act and the Waterkeeper Alliance decision) [hereinafter "Copeland, Animal Waste"]; Claudia Copeland, *Air Quality Issues and Animal Agriculture: A Primer*, Congressional Research Service, Nov. 24, 2009 http://www.lclark.edu/live/files/6698-air-quality-copeland-crs-2009.

[48] *See e.g.*, Gabriel Nelson, *Pre-emptive Attacks on Dust Rules Draw Rebuke From EPA*, N.Y. Times, Feb. 25, 2011, http://www.nytimes.com/gwire/2011/02/25/25greenwire-pre-emptive-attacks-on-dust-rules-draw-rebuke-66421.html (discussing a draft version of a new policy memo to regulate coarse particles, which critics say could double or triple the number of areas that violate the standard); Henry J. Reske, *Obama's EPA Moves to Regulate Dust*, NewsMax, May 23, 2011, http://www.newsmax.com/InsideCover/epa-dust-farmers-regulation/2011/05/23/id/397445 (describing a letter written from over 100 members of Congress to Lisa Jackson, noting that if "implemented, the proposed standards could subject farmers, livestock producers, and industry to burdensome regulations which could result in fines amounting to $37,500 a day for violations.").

[49] *See* Press Release, *NCBA Defends Cattle Ranchers During Forum on EPA Regulations* (2010), http://growinggeorgia.com/animalag/824-ncba-defends-cattle-ranchers-during-forum-on-epa-regulations (describing the irate testimony of a representative of the National Cattlemen's Beef Association regarding a potential move by the EPA to eliminate the phosphorous index). The phosphorous index "is a tool used by cattle producers to assess the appropriateness of applying manure to land near our waters." *Id*. Although currently the phosphorus index is different in every state, the ranchers are concerned that the Obama Administration is developing a burdensome national standard. *Id*.

Environmental Response, Compensation, and Liability Act (CERCLA) and the Emergency Planning and Community Right-to-Know Act (EPCRA),[50] and CAFO regulation under the Clean Water Act.[51] Additionally, the EPA has taken action to put the Chesapeake Bay region on a "pollution diet" and restrict the area's high nutrient pollution levels that have created a "dead zone" underneath the bay.[52] Finally, the EPA is currently considering a petition to regulate ammonia emissions from CAFOs under the Clean Air Act.[53] All of these regulations promise to reach deep into the pockets of big agriculture. However, there is one potential action that singularly strikes fear into the hearts of the farmed animal industry: greenhouse gas regulations.[54]

The EPA has laid the groundwork to regulate greenhouse gas (GHG) emissions that contribute to climate change under the Clean

---

[50] *See* Rural America Solutions Group Forum on *The EPA's Assault on Rural America: How New Regulations and Proposed Legislation Are Stifling Job Creation and Economic Growth* Before the H. Comm. on Natural Resources, 111th Cong. (2010) (testimony of Wilmer Stoneman III).

[51] *See id*. However, the EPA's ability to regulate discharges from CAFOs was dealt a serious blow in March of 2011 when the United States Court of Appeals for the Fifth Circuit ruled that the EPA exceeded its authority by issuing regulations that required CAFOs to apply for a National Pollutant Discharge Elimination System (NPDES) permit.

The Circuit Court also struck down the 2008 Rule's imposition of liability upon CAFOs for failing to apply for a permit – regardless of whether they discharged pollutants to federally regulated waters. *See* Alexander M. Bullock & Stewart D. Fried, *Fifth Circuit Vacates Portions of EPA's CAFO Rule Non-Discharging CAFOs Have No Duty to Apply for NPDES Permits* (2011), http://www.kilpatricktownsend.com/en/Knowledge_Center/Alerts_and_Podcasts/Legal_Alerts/2011/03/Fifth_Circuit_Vacates_Portions_of_EPAs_CAFO_Rule_NonDischarging.aspx. Although this case represents a big victory for large pork and poultry producers, the language of the opinion did leave some room for enforcement actions against "discharges" of dust, feathers, etc. issued from ventilation fans in CAFO barns. *Id*.

[52] *See e.g.*, Darryl Fears, *Alarming 'Dead Zone' Grows in the Chesapeake*, Wash. Post, July 24, 2011, http://www.washingtonpost.com/national/health-science/alarming-dead-zone-grows-in-the-chesapeake/2011/07/20/gIQABRmKXI_story.html (noting that the "dead zone" now extends to over a third of the bay);
Victor Zapana, *EPA's Katherine Antos a 'Mastermind' In Effort To Cut Chesapeake Bay Pollution*, Wash. Post, July 20, 2011, http://www.washingtonpost.com/local/epas-katherine-antos-a-mastermind-in-effort-to-cut-chesapeake-bay-pollution/2011/06/14/gIQAAM6eQI_story.html; John Fritze, *Cardin Leads Fight Over Pesticides*, Baltimore Sun, July 3, 2011, http://www.baltimoresun.com/news/maryland/bs-md-cardin-pesticide-20110703,0,7017010.story.

[53] Humane Society Press Release, Ammonia, *supra* note 3.

[54] *See Horror Flicks Can't Hold a Candle to Greenhouse Gas Regulations by the American Farm Bureau* (2010), http://www.fb.org/index.php?fuseaction=newsroom.agendafocus&year=2010&file=ag05-2010.html.

Air Act.[55] In May 2010, the EPA issued the final GHG Tailoring Rule, which did a number of things. First, the EPA sought to phase-in GHG regulations incrementally, establishing thresholds for GHG emissions that require permits under the Prevention of Significant Deterioration (PSD) rules and Title V.[56] Second, the EPA chose to temporarily leave small emitters alone, and provided that sources emitting less than 50,000 tons of GHGs per year are not required to obtain GHG permits before 2016.[57] Although the EPA has not yet imposed GHG regulations on the agriculture industry, it has commenced certain monitoring and reporting requirements that tend to indicate the agency is laying the groundwork to regulate them in the near future. For example, the EPA has taken some preliminary steps towards regulating nonpoint source pollution,[58] and has begun to monitor the waste products from factory farms.[59]

The farmed animal industry is a big emitter of GHGs, so the industry would have a lot to lose by the imposition of stringent climate change regulations. Specifically, the Food and Agriculture Organization (FAO) of the United Nations (UN) has reported that the animal agriculture sector is responsible for approximately 18% of greenhouse gas (GHG) emissions.[60] Consequently, should the EPA decide to impose regulations

---

[55] *See* Kyle H. Landis-Marinello, *The Environmental Effects of Cruelty to Agricultural Animals*, 106 Mich. L. Rev. First Impressions 147, 147 (2008). These regulations were preceded by two distinct findings regarding whether GHGs pose a threat to human health, and the issuance of these findings triggered the regulation of GHGs under the Clean Air Act. *See* Environmental Protection Agency, Fact Sheet, *Clean Air Act Permitting for Greenhouse Gas Emissions – Final Rules*, Environmental Protection Agency, http://www.epa.gov/NSR/ghgdocs/20101223factsheet.pdf [hereinafter "Fact Sheet, Clean Air Act"].

[56] *See* Environmental Protection Agency, Fact Sheet, *Tailoring Rule, Environmental Protection Agency*, http://www.epa.gov/NSR/ghgdocs/20101223factsheet.pdf (explaining that without the Tailoring Rule everyone fall under the new GHG regulations).

[57] *See* Fact Sheet, Clean Air Act, *supra* note 55.

[58] *See* David N. Cassuto, *Some Preliminary Steps Toward Regulating Nonpoint Source Pollution* (2010), http://animalblawg.wordpress.com/2010/08/30/some-preliminary-steps-toward-regulating-nonpoint-source-pollution/ [hereinafter "Cassuto, Preliminary Steps"].

[59] *See* Sindya N. Bhanoo, *Tougher E.P.A. Action on Factory Farms*, N.Y. Times, May 28, 2010, http://green.blogs.nytimes.com/2010/05/28/tougher-e-p-a-action-on-factory-farms/.

[60] *See An Humane Society Report: The Impact of Animal Agriculture on Global Warming and Climate Change*, http://www.humanesociety.org/assets/pdfs/farm/Humane Society-the-impact-of-animal-agriculture-on-global-warming-and-climate-change.pdf (last visited Aug. 15, 2011) [hereinafter, "Humane Society Report, Impact"]; *see also* Copeland, Air Quality, *supra* note 47; Kyle H. Landis-Marinello, *The Environmental Effects of Cruelty to Agricultural Animals*, 106 Mich. L. Rev. First Impressions 147 (2008); Annise Maguire, *Shifting the Paradigm: Broadening Our Understanding of Agriculture and Its Impact on Climate Change*, 33-Spg Environs Envtl. L. & Pol'y J. 275 (2010).

of GHG emissions, the agriculture industry would undoubtedly shoulder a large portion of the burden.

It is small wonder that the EPA's bold regulatory campaign has greatly alarmed the powerful agriculture industry and has made more than a few enemies in Congress.[61] Members of the agri-business industry have taken to issuing dire statements—for example, one representative of the Virginia Farm Bureau Federation stated in a congressional hearing that "[t]he EPA proposals are overwhelming to farmers and ranchers, and they are creating a cascade of costly requirements that are likely to drive individual farmers to the tipping point."[62]

In spite of this alarmist rhetoric, or perhaps because of it, the animal protection community has generally cheered on the EPA's efforts to regulate the agriculture industry.[63] In addition to strongly supporting the EPA's aggressive regulatory campaign, animal protection groups have built alliances with environmental groups by joining petitions requesting that the EPA expand its environmental regulation of factory farms.[64] For example, the Humane Society recently partnered with the Sierra Club to petition the EPA to begin regulating ammonia emissions from CAFOs.[65]

---

[61] On February 9th, Lisa Jackson— the new Obama appointed administrator of the Environmental Protection Agency (EPA)—was summoned to the Republican-led House Energy and Commerce Committee to field questions about the EPA's recent activism in attempting to regulate greenhouse gas (GHG) emissions via the Clean Air Act. *See* Broder, *supra* note 45. House Republicans were understandably piqued that Jackson had dared to challenge their allies in the oil industry, and put her under fire for seeking to end the excessive permissions granted to corporate energy interests during the late Bush years. *See* Landis-Marinello, *supra* note 55, at 147. Although Jackson ended up upstaging the congressmen and winning the day, the newly empowered GOP may yet have the last laugh if they succeed in legislating broad reductions in the EPA's powers— not to mention its budget. *See* Broder, *supra* note 45. But the GOP not only seeks to slash EPA enforcement funding, it also seeks take away the EPA's authority to regulate greenhouse gases under the Clean Air Act. *Id*.

[62] *See* Testimony of Wilmer Stoneman, *supra* note 51.

[63] *See, e.g*., Humane Society, Global Warming, *supra* note 3 (noting that Wayne Pacelle praised Jackson's efforts to regulate greenhouse gas emissions).

[64] *See* Humane Society Press Release, Greenhouse Gases, *supra* note 3.

[65] *See* Humane Society Press Release, Ammonia, *supra* note 3. The coalition of 20 national, state, and local organizations consisted of a diverse set of environmental protection, public health, and rural economies and communities. *Id*. Notably, the Humane Society appeared to be the only animal protection organization among the group, perhaps with the exception of the Socially Responsible Agricultural Project, which opposes factory farms partly based on concerns over animal health. *See* About Factory Farms by the Socially Responsible Agricultural Project, http://www.sraproject.org/factoryfarms/ (last visited May 5, 2011) [hereinafter "About Factory Farms"].

B. Litigation Strategy of Suing Factory Farms Under Environmental Laws

The second way that animal protection groups have allied themselves with environmentalists is by engaging in a litigation strategy of suing factory farms under environmental laws.[66] For example, the Humane Society has collaborated with leading environmental groups to enforce existing environmental laws, thereby taking an active watchdog role over factory farms' compliance with such laws.[67] This strategy accords with one of the primary goals of the animal protection movement in the realm of the farmed animal industry: to force the farmed animal industry to pay the "hidden costs" (or externalities) of producing billions of animals for slaughter and consumption every year.[68]

For example, in March 2007, the Humane Society sued the Hudson Valley Foie Gras farm for violating the Clean Water Act.[69] Forcing this company to comply with the Clean Water Act would require it to obtain a permit, and as a condition of granting such a permit, the EPA may demand a reduction in waste produced at the facility.[70] However, the particular abhorrent practice in question—the painful force-feeding of ducks—would not be impacted, and therefore it is not clear what benefit, if any, would accrue to the ducks.[71] One is left with the conclusion that although environmental law can help animal protection groups get into court, "the remedies ultimately may not be beneficial to the movement against animal cruelty."[72]

[66] *See e.g.*, Isaacs-Blundin, *supra* note 14.
[67] *See* Humane Society Press Release, Greenhouse Gases, *supra* note 3.
[68] *See e.g.*, *An Humane Society Report: The Impact of Industrialized Animal Agriculture on the Environment*, http://www.humanesociety.org/assets/pdfs/farm/Humane Society-the-impact-of-industrialized-animal-agriculture-on-the-environment.pdf (last visited Aug. 15, 2011) [hereinafter, "Humane Society Report, Impact"]; *An Humane Society Fact Sheet Animal Agriculture & Climate Change*, http://www.humanesociety.org/assets/pdfs/farm/Humane Society-fact-sheet-on-climate-change-and-animal-agriculture.pdf (last visited Aug. 15, 2011) [hereinafter, "Humane Society Fact Sheet, Climate Change"]; David N. Cassuto, *Part 2 of the Brazilian Odyssey*, animalblawg.wordpress.com, *available at* http://animalblawg.wordpress.com/2010/09/06/part-2-of-the-brazilian-odyssey/ (Sept. 6, 2010) [hereinafter, "Cassuto, Brazilian Odyssey"] ("Having the price of animal products reflect the true costs of their production would have the salutary effects of educating people as to the impacts of what they eat while also driving down consumption.").
[69] *See* Hill, *supra* note 3, at 28. These ducks are forced-fed large amounts of food with the purpose of abnormally expanding their liver, which makes for a tasty dish. *Id.*
[70] *Id.* at 29.
[71] *Id.*
[72] *Id*, at 39.

IV. Why Do Animal Protection Groups Support Increased Environmental Regulation of Industrial Agriculture?

This Part first discusses the split between mainstream animal protection groups and more radical animal protection groups. Then, this Part explores the three primary goals that animal protection groups hope to accomplish regarding factory farms. Finally, this Part details the reasons that animal protection groups give for supporting increased environmental regulation of industrial agriculture.

A. What Are the Goals of Animal Protection Groups Regarding Industrial Agriculture?

1. Big Split Between Mainstream/Moderate Groups and Radical Groups

As a threshold matter, the animal protection movement is comprised of a spectrum of ideologies, with various factions disagreeing on goals and tactics. For purposes of this Article, it is necessary to define the goals of the animal protection movement in order to analyze whether such goals are achieved by certain strategies—for example, the support for increased environmental regulation on a national level.[73] Thus, it is necessary to define these goals clearly. As a general matter, radical groups have less credibility because their views are not widely shared and their goals tend to be unrealistic.[74] Thus, it is more useful

---

[73] For a good discussion of the arguments of animal rights supporters and their animal welfare counterparts, *see generally* Gary L. Francione, The Animal Rights Debate: Abolition Or Regulation (Columbia Univ. Press 2010); Tom Regan, The Case for Animal Rights (Univ. of Cal. Press 2004); Gary L. Francione, Rain Without Thunder: The Ideology of the Animal Rights Movement (Temple Univ. Press 2006).

[74] People of the Ethical Treatment of Animals (PETA) is the largest animal rights (as opposed to welfare) organization in the United States, with more than two million members, and yearly revenues of $35,282,146. *See* Charity Navigator, *People for the Ethical Treatment of Animals*, http://www.charitynavigator.org/index.cfm?bay=search.summary&orgid=4314 (last visited Aug. 15, 2011). However, PETA directly advocates the abolition of animal agriculture and promotes switching to veganism. *Id.; See e.g.*, *Activists Share Anti-Agriculture Agenda at Conferences* (2010), *available at* http://www.cattlenetwork.com/templates/newsarchive.html?sid=cn&cid=1209376 (quoting Bruce Friedrich, with PETA, who stated "The point at which society moves towards our views is a point where we are significantly closer to the vegan world that we are all working toward."); *Animals Used for Food*, http://www.peta.org/issues/animals-used-for-food/default2.aspx (last visited Aug. 15, 2011). This means PETA is less committed to working within the system to effect change than more mainstream groups like the Humane Society, and therefore its tactics are more oriented towards public relations campaigns, and less towards the type of litigation strategy discussed in this Article. As a result, they are less relevant to the tactical alliance with environmental groups.

to analyze the goals of mainstream animal welfare groups that seek to reform animal agriculture by working within the system to effect change.[75] Among these, the Humane Society is the powerhouse and dwarfs the others in revenues, net assets, and political influence.[76] As a result, this Article tends to focus on the positions of Humane Society as representing the mainstream animal welfare movement.

2. Goals of Mainstream Animal Protection Groups

This Part will discuss the goals of mainstream animal protection groups.[77] At the highest level of abstraction, mainstream animal protection groups would like to help farmed animals by improving their welfare and reducing the amount of animals that are slaughtered every year for food.[78] These broad aspirations are promoted by three narrower (and interrelated) goals, including: (1) to increase the cost of animal products, leading consumers to change consumption patterns and producers to decrease production levels,[79] (2) to improve the lives

---

[75] Such animal welfare organizations that target factory farms include Farm Sanctuary, Animal Legal Defense Fund, Animal Welfare Institute, Humane Society of the United States, Humane Farming Association, and In Defense of Animals.

[76] The Humane Society of the United States has eleven million members, $101,681,180 of revenues (in 2009), and $160,511,563 in net assets. *See* The Humane Society of the United States by Charity Navigator, http://www.charitynavigator.org/index.cfm?bay=search.summary&orgid=3848 (last visited Aug. 15, 2011); About Us, http://www.humanesociety.org/about/ (last visited May. 15, 2011). In comparison, the second best funded organization focusing on farmed animal welfare is Farm Sanctuary with $6,254,245 of revenues in 2009. *See* Farm Sanctuary by Charity Navigator, http://www.charitynavigator.org/index.cfm?bay=search.summary&orgid=5391 (last visited Aug. 15, 2011).

[77] Part V, *supra*, will analyze whether these goals of mainstream animal protection groups are achieved by supporting increased environmental regulation of factory farms.

[78] *See generally*, Gene Baur, Farm Sanctuary Changing Hearts and Minds About Animals and Food (Touchstone 2008); Kreuziger, *supra* note 29; Jim Mason & Peter Singer, Animal Factories: What Agribusiness is Doing to the Family Farm, the Environment and Your Health (Harmony Bks. 1990); Bernard E. Rollin et al, The Well-Being of Farm Animals Challenges and Solutions (G. John Benson & Bernard E. Rollin, eds., Blackwell Publ'g Ltd. 2004); Wolfson & Sullivan, *supra* note 29.

[79] Wayne Pacelle has often written in support of changing consumer behaviors towards a plant-based diet. *See e.g.*, Carla Hall, *Career Ark of an Animal Defender*, La Times, July 19, 2008, http://articles.latimes.com/2008/jul/19/local/me-pacelle19/3 ("It's really about human behavior and less about the animals. Animals for the most part just need to be left alone"). He has stated: "The science is clear that a diet that is primarily plant-based is better for our personal health, and it's obviously better for animals and the environment. . . . If we are going to succeed in reducing the consumption of animal products, we have to have alternatives that excite the palate and tempt the skeptical." Wayne Pacelle, *Hitting the Spot with Healthy and Humane Foods* (2009), http://Humane Society.typepad.com/wayne/2009/10/tal-ronnen.html. A key part of this strategy is to make factory farms pay the "hidden costs" (or externalities) of their

of farmed animals,[80] and (3) to help small farmers and hurt big factory farms.[81]

First, mainstream animal protection supporters seek to increase the cost of animal products as a means of spurring a chain of events leading to a net decrease in the production of meat for consumption—that is, fewer animals raised and slaughtered for food.[82] They argue that the true cost of meat is much higher than the prices consumers pay at the grocery store; myriad government policies serve to subsidize the farmed animal industry either directly, in the form of subsidies,[83] or indirectly, through a lax regulatory environment that permits factory farms to avoid paying for the negative externalities generated by the production process—for example, the environmental harms generated from CAFOs.[84] A better approach, they argue, would be to force producers and consumers to internalize the hidden costs associated with the farmed animal industry, not least being the suffering and slaughter of billions of farmed animals.[85]

---

operations including environmental harms. *See e.g.*, Humane Society Report, Impact, *supra* note 68; Humane Society Fact Sheet, Climate Change, *supra* note 68; Cassuto, Brazilian Odyssey, *supra* note 68. The goal of decreasing meat consumption is well documented. *See e.g.*, Elizabeth Bennett, *Powerful Final Day at the Second World Conference on Bioethics and Animal Rights*, (2010), http://animalblawg.wordpress.com/2010/08/30/powerful-final-day-at-the-second-world-conference-on-bioethics-and-animal-rights/ ("David Favre followed by speaking about the practical political hurtles associated with decreasing meat consumption, citing the uproar in response to the suggestion of meatless days, but pointing out that a meat tax may work.").

[80] *See e.g.*, Farm Animal Protection, http://www.humanesociety.org/issues/campaigns/factory_farming/ (Aug. 15, 2011) (describing the Humane Society's mission as "[w]orking to reduce the suffering of animals raised for meat, eggs and milk."); Kim W. Stallwood et al., Speaking Out for Animals: True Stories About Real People Who Rescue Animals 78 (Kim W. Stallwood, ed., Lantern Books 2001) (quoting Pacelle, who described the mission of Humane Society as follows: "We want to create a humane society that takes into account the interests of animals and that eliminates the gratuitous harm by humans.").

[81] *See e.g.*, *Factory Farming in America: The True Cost of Animal Agribusiness for Rural Communities, Public Health, Families, Farmers, the Environment, and Animals* http://www.humanesociety.org/assets/pdfs/farm/Humane Society-factory-farming-in-america-the-true-cost-of-animal-agribusiness.pdf (last visited Aug. 15, 2011) (championing the virtues of family farms). Pacelle's predecessor, Paul Irwin, called for "a return to the traditional practices of conscientious family farmers, who cared for their animals and their land." Book Review of *The Bond*, Animal People Online, May 17, 2011, http://www.animalpeoplenews.org/anp/2011/05/17/books-the-bond-by-wayne-pacelle/.

[82] *See e.g.,* Hall, *supra* note 79; Pacelle, *supra* note 79; Bennett, *supra* note 79; Humane Society Report, Impact, *supra* note 68; Humane Society Fact Sheet, Climate Change, *supra* note 68; Cassuto, Brazilian Odyssey, *supra* note 68.

[83] See e.g., Jennifer Hoffpauir, *The Environmental Impact of Commodity Subsidies: NEPA and the Farm Bill*, 20 Fordham Envtl. L. Rev. 233 (2009).

[84] *See* Copeland, *supra* note 47.

[85] *See e.g.,* Stathopoulos, *supra* note 14, at 411-12.

The narrow goal of raising prices of animal products is thought to promote the larger goal of decreasing the overall production of meat. The idea is that increased costs of production will be passed down to the consumer. Faced with higher meat prices, consumers will tend to shift their consumption patterns away from meat. This decrease in consumer demand will lead producers to decrease production.

Second, mainstream animal protection groups seek to nudge the farmed animal industry towards more humane farming methods.[86] For example, the Humane Society maintains that it does not seek to end animal agriculture entirely, but merely to end the most cruel practices.[87] Third, animal protection groups seek to support humane family farms and small producers, while only opposing the big factory farms, which engage in inhumane farming practices.[88] They argue that industrial farming has harmed rural communities and diminished their quality of life.[89]

Finally, a few words must be said about distinguishing overarching goals from narrower goals, and means from ends. To be sure, at the highest level of abstraction, these three goals merely serve larger ones; increasing the cost of meat is not an end in itself, but rather is a means to achieve the larger goal of reducing the number of animals that are slaughtered for food. However, these three primary goals of animal protection groups are conceptually distinct because they often work at cross-purposes. For example, increasing the cost of meat itself may hurt small farmers insofar as they are less able to absorb the increased cost of production than larger factory farms (unless, of course, small farmers receive regulatory relief from such burdens). Likewise, eliminating some abusive practices—for example, close confinement crates—may harm small farmers to the extent that they cannot afford the substantial investment in new equipment to comply with the new regulations. Also, small farms as well as big factory farms engage in abusive practices.[90]

---

[86] *See e.g.,* Farm Animal Protection, http://www.humanesociety.org/issues/campaigns/factory_farming/ (Aug. 15, 2011) (listing the Humane Society's mission as "[w]orking to reduce the suffering of animals raised for meat, eggs and milk."); Stallwood, *supra* note 80 (interviewing Pacelle).

[87] *See e.g.,* Farm Animal Protection, http://www.humanesociety.org/issues/campaigns/factory_farming/ (Aug. 15, 2011) (noting the Humane Society's mission is to "reduce the suffering of [farm] animals.").

[88] *See* Humane Society Press Release, *Air Violations at Egg Farm*, *supra* note 3.

[89] *See e.g.,* Factory Farming in America, *supra* note 81.
http://www.humanesociety.org/assets/pdfs/farm/Humane Society-factory-farming-in-america-the-true-cost-of-animal-agribusiness.pdf (last visited Aug. 15, 2011).

[90] There is a vigorous debate about the extent to which factory farms are worse for animals than small farmers. *See e.g.*,, Helena Bottemiller, *Q&A with Temple Grandin*, Food Safety News, June 22, 2010, http://www.foodsafetynews.com/2010/06/qa-with-temple-grandin/ (interviewing Temple Grandin, an animal welfare expert). According to Temple Grandin, the worst atrocities are unlikely to occur in "most of the big plants

B. Why Do Animal Protection Groups Say That Increasing Environmental Regulation Serves These Goals?

Over the last several years, mainstream animal protection groups have supported increased environmental regulation of industrial agriculture, cheered Jackson's bold activism, and partnered with environmentalists to ramp up the environmental regulation of factory farms.[91] When animal protection groups give reasons for applying this strategy, they rarely assert that these actions will directly result in better treatment for animals on factory farms.[92] But rather, these groups seem to support expanding the environmental regulations of factory farms on the theory that farmed animals will benefit indirectly, or that, such a strategy generally advances the cause of animal welfare by hurting their tormentors—the farmed animal industry.

In a recent example, the Humane Society of the United States (Humane Society) united with several prominent environmental groups—such as the Sierra Club, Waterkeeper Alliance, and Northwest Environmental Defense Center—to petition the EPA to start regulating ammonia emissions from CAFOs.[93] Ammonia emissions can endanger human health and welfare by causing respiratory health problems.[94] In addition to these adverse health effects, the petition asserted that ammonia from factory farms diminishes the people's quality of life and pollutes the waterways.[95] The goals of the environmental groups petitioning the EPA were clear and direct: the environment cannot afford exempting factory farms from the Clean Air Act standards that govern

---

that are audited by McDonald's and places like that." *Id*. To the contrary, "the little local places that are not being audited" concern her the most. *Id*. This Article makes no attempt to advance this debate. Suffice to say, mainstream animal protection groups strongly believe that small farmers are better for animals, and this Article explores whether their goals are achieved by certain tactics—namely, forming alliances with environmental groups.

[91] *See* n. 11-13, and accompanying text.

[92] *See*, *e.g.,* Humane Society Press Release, Ammonia, *supra* note 3.

[93] *Id*. The coalition of twenty national, state, and local organizations consisted of a diverse set of environmental protection, public health, and rural economies and communities. Id. Notably, the Humane Society appeared to be the only animal protection organization among the group, perhaps with the exception of the Socially Responsible Agricultural Project, which opposes factory farms partly based on concerns over animal health. *See* About Factory Farms, *supra* note 65.

[94] *See* Humane Society Press Release, Ammonia, *supra* note 3 (pointing out that the EPA itself has documented the adverse health effects of ammonia pollution, and stating that citizens living close to CAFOs have suffered from this type of pollution).

[95] *Id.* (quoting Environmental Integrity Project Attorney Tarah Heinzen). Although factory farms are the largest source of ammonia emissions, for decades the EPA has declined to regulate the air emissions from CAFOs. Humane Society Press Release, Ammonia, *supra* note 3.

other major polluters.[96] But why did animal protection groups join the petition? What do ammonia regulations have to do with the animal-welfare-centered mission of the Humane Society?[97]

Jonathan Lovvorn, Chief Counsel for the Humane Society, attempted to link these direct environmental benefits with the indirect outcome of advancing animal welfare on factory farms, stating that "'[c]onfining hundreds of thousands of animals in tiny cages at a single location is not only unconscionably cruel to farmed animals, but also destroys local communities, harms wildlife, and pollutes the natural environment.'"[98]

However, it strongly appears that the link between federal ammonia regulations and improving animal welfare is quite attenuated. To be sure, the connection comes into focus when one considers the argument that ammonia pollution from factory farms is exacerbated by the common industry practice of confining hundreds of thousands of animals in small cages at a few large facilities.[99] This practice concentrates the pollution from factory farms animals, a problem that is presumably diminished on small farms because animals are permitted to roam over larger distances fewer animals are raised for food. In other words, it is possible that potential ammonia regulations might compel factory farms to limit the concentration of animals at a given facility—for example, leading to a "free range" industry norm. At best, however, this is a tenuous connection and it is not at all clear that potential EPA ammonia regulations would take the form of forcing factory farms to scale back their operations, as opposed to implementing new technology, for example.

Defenders of the farmed animal industry warned that this "dangerous petition . . . should be taken seriously" because it poses "mortal threat" to CAFO operators.[100] Thus, another tactical benefit of this strategy becomes apparent: these regulations terrify the farmed animal industry. Since factory farms are the sworn enemy of animal protection groups, it would make sense to try to hurt them. But does hurting the farmed animal industry necessarily improve the welfare of farmed animals?

---

[96] *Id.*

[97] *See* About Us by the Humane Society, *available at* http://www.humanesociety.org/about/ (last visited Aug. 15, 2011) (stating its mission is "to celebrate animals and to confront cruelty").

[98] *See* Humane Society Press Release, Ammonia, *supra* note 3.

[99] *See* About Factory Farms, *supra* note 92 (describing the petition).

[100] *See* Gary H. Baise, *CAFO Ammonia Emissions Blamed for Infant Deaths!*, www.farmweeknow.com (2011), *available at* http://www.farmweeknow.com/blogs.aspx/printversion/epa/faces/hostile/ag/congressmen/2222.

V. Increased Environmental Regulation of Industrial Agriculture May Hurt Animal Welfare

It appears that animal protection groups desire to punish factory farms, and believe that no harm will come to the farmed animals in the process. This assumption may be wrong, and to the contrary, there is good reason to believe that this strategy of supporting increased environmental regulation may hurt, more than help, animal welfare on factory farms. If so, the partnership between the animal protection movement and the environmental movement is misguided and should be abandoned. This Part will examine these arguments in relation to the three defined goals of mainstream animal protection groups.

This Part argues that each of the three major goals of the animal protection movement in the realm of industrial agriculture—namely, (1) to increase the cost of animal products, leading consumers to change consumption patterns and producers to decrease production levels, (2) to improve the lives of farmed animals, and (3) to help small farmers and hurt big factory farms—may be undermined by increased environmental regulation. To the contrary, the EPA's activism could result in a lack of change in consumption patterns, the reduction of animal welfare, and the empowerment of big factory farms. This Part contends that the animal protection movement's support for the EPA's incoming regulatory assault on the farmed animal industry, promising to increase regulatory costs for factory farms, and its alliance with the environmental movement are misguided policies because the costs of increased environmental regulations may translate to worse treatment of animals.

To begin, there is no proof that these legislative strategies benefit animals.[101] Supporters of this strategy largely rely on the fact that the farmed animal industry is a common enemy to both animal welfare and the environment.[102] True, but is the enemy of my enemy necessarily my friend? To be sure, the ecosystem and the environment stand to benefit when animal protection groups sue to enforce environmental laws, but how do the animals benefit? So far, animal protection groups have not made a strong case that farmed animals stand to benefit from this strategy, instead they have made only vague claims that farmed animals indirectly benefit.[103] To the contrary, my thesis is that expanded environmental regulation of the farmed animal industry may actually undermine the welfare of farmed animals. In fact, animal protection

[101] *See* Hill, *supra* note 3 (expressing some skepticism that suing under environmental laws is effective in promoting animal welfare).

[102] *See e.g.,* Humane Society Fact Sheet, Climate Change, *supra* note 68; Landis-Marinello, *supra* note 60; Humane Society Report, Impact, *supra* note 60.

[103] *See* Humane Society Press Release, Ammonia, *supra* note 3.

groups could be totally wrong and unwittingly undermining their own movement by contributing to the suffering of farmed animals.

On the other hand, it is clear that this strategy generates a number of secondary benefits. First, suing under environmental laws may permit animal protection litigators to overcome the daunting obstacle that is the Court's standing jurisprudence, and also to expand available causes of action.[104] Second, once animal protection litigators get entry into the courthouse, discovery requests can be a useful source of information that otherwise would not be available. Third, a high-profile lawsuit can capture the public's attention and gain sympathy for the plight of animals, which advances the cause. To be sure, this seems to cut against my arguments that animal protection groups are making a mistake by suing under environmental laws, because even if increased regulatory costs leads to diminished treatment of animals on factory farms, these secondary benefits still accrue to the animal protection movement.[105] However, if this potential harm to farmed animals gives one pause, it seems unlikely that the entire strategy can be justified solely by secondary benefits. Notably, a leading animal rights advocate, Mariann Sullivan, conceded that if the thesis of this Article were proven on a large scale, she would be forced to reconsider her strategy of suing factory farms under environmental laws.[106]

A. Failure of Increased Prices To Change Consumer Behavior

The first goal of mainstream animal protection groups is to increase the cost of animal products, leading consumers to change consumption patterns and producers to decrease production levels.[107]

---

[104] *See e.g.,* Delcianna J. Winders, *Confronting Barriers to the Courtroom for Animal Advocates*, 13 Animal L. 1, 6 (2006) (tracing the numerous obstacles that the standing doctrine presents to animal protection groups and proposing ways that these hurdles may be overcome); Cussuto et al., Legal Standing, *supra* note 58, at 69-71 (informational-injury claims); Sunstein, Standing, *supra* note 58, at 1366 (proposing to create a private right of action under the AWA).

[105] At this point, it would be a matter of conducting a cost/benefit analysis of whether the harm to farmed animals is outweighed by the benefits involved with punishing the factory farms. Finally, even if the benefits of this strategy are great and the costs are relatively small—by assuming for the sake of argument that factory farms are highly unlikely to shortchange animal welfare in response to higher regulatory costs—it would be prudent for animal protection groups to at least acknowledge the risk they are taking. And if there is a reasonable probability that this strategy could contribute to even more suffering of farmed animals, should not the burden of proof that this strategy actually benefits animals rest on those advocating it?

[106] *See* Interview with Mariann Sullivan, President, Our Hen House, in New Orleans, La. (Apr. 15, 2011).

[107] *See e.g.,* An Humane Society Report: The Impact of Industrialized Animal Agriculture on the Environment, http://www.humanesociety.org/assets/pdfs/farm/Humane Society-

The problem with achieving this goal through expanded environmental regulation is that it relies on a long causal chain, of at least four steps. First, increased environmental regulation must increase the cost of production for animal products. Second, these increased costs must be passed on to consumers. Third, the increase in the market price of animal products must be significant enough to force consumers to change consumption habits away from meat towards green foods. Fourth, the decrease in consumer demand for animal products must lead producers to decrease production. The problem here is that if any one particular step proves shaky and flawed, the whole foundation must collapse like a house of cards.

The first link in the causal chain is that increased environmental regulation must increase the cost of production for animal products. Among the various links, this one is the least problematic. Increasing the costs of animal products is an express goal of animal protection groups.[108] Moreover, judging from their public statements, the agri-business industry clearly believes that the EPA's regulatory agenda will dramatically increase their cost of production.[109] Undoubtedly, this alarmist rhetoric exaggerates the potential costs at stake, but if there is even a kernel of truth behind them, the EPA's regulatory agenda promises to significantly raise costs.[110]

The second link in the causal chain is that increased regulatory compliance costs must be passed on to consumers. Should producers fail to pass on such increased costs to consumers, then consumers will not have a greater incentive to shift their consumption habits towards green alternatives.[111] Leaders of the farmed animal industry claim that they cannot pass on higher costs of production to consumers.[112]

---

the-impact-of-industrialized-animal-agriculture-on-the-environment.pdf (last visited Aug. 15, 2011).

[108] *See e.g.,* Hall, *supra* note 79; Pacelle, *supra* note 79; Bennett, *supra* note 79; Humane Society Report, Impact, *supra* note 68; Humane Society Fact Sheet, Climate Change, *supra* note 68; Cassuto, Brazilian Odyssey, *supra* note 68.

[109] *See e.g.,* Rural America Solutions Group Forum on "The EPA's Assault on Rural America: How New Regulations and Proposed Legislation Are Stifling Job Creation and Economic Growth" Before the H. Comm. on Natural Resources, 111th Cong. (2010) (testimony of Wilmer Stoneman III); Horror Flicks Can't Hold a Candle to Greenhouse Gas Regulations by the American Farm Bureau (2010), http://www.fb.org/index.php?fuseaction=newsroom.agendafocus&year=2010&file=ag05-2010.html.

[110] Obtaining hard data on the costs of potential EPA regulations of factory farms is elusive because many of these regulations are not yet enacted, but rather are still working their way through the administrative process.

[111] On the other hand, if increased costs are not passed on to consumers, then in all likelihood the firms are absorbing more expenses, and their profits should decline. Insofar as one views hurting the profits of the farmed animal industry as an end in itself, independent of whether the welfare of farmed animals is improved in the process, this may be a good thing.

[112] *See e.g., Fuel Costs Go Beyond Sticker Shock for Farmers and Ranchers*, FBNEWS.ORG, Apr. 4, 2011, http://www.fb.org/newsroom/fbn/2011/FBN_04-04-11.pdf.

Don Shawcroft, the Colorado Farm Bureau President, testified before Congress that farmers and ranchers "cannot simply pass higher expenses along to their customers" in the context of high fuel prices.[113]

Taking this statement well salted, in what general circumstances are costs passed on to consumers, and in what circumstances are they not passed on, but borne by the firm, either through reduced profits or by cutting costs in other areas? In other words, how are market shocks transmitted through the various stages of the supply chain?

Generally speaking, whether firms are able to pass on increased costs "depends both on competitive conditions and the sensitivity of consumer demand to prices."[114] In particular, there tends to be imperfect price transmission in agriculture markets, such that "a price reduction at the farm level is only slowly, and possibly not fully, transmitted through the supply chain."[115] In contrast, "price increases at the farm level are thought to be passed more quickly on to the final consumer."[116] This imperfect price transmission is widely believed to be the product of market power and oligopolistic behavior.[117]

Based on the available economic data, can we predict whether the cost of expanded environmental regulations of factory farms would be passed on to the consumer? The literature on the subject of price transmission in agriculture offers inconclusive results.[118] One reason why there are few hard answers in this field of research is that it is difficult to understand "the increasingly complicated relationships among prices along the supply chain and the underlying behavior of agents."[119] Thus, this Article makes no attempt to offer a definitive conclusion on whether expanded environmental compliance costs would likely be passed on to

---

[113] *Id.*

[114] *The Expert Group on Market-based Measures, International Maritime Organization*, Assessment of the Economic Impact of Market-Based Measures 13 (2010), http://www.imo.org/OurWork/Environment/PollutionPrevention/AirPollution/Documents/VividEconomicsIMOFinalReport.pdf.

[115] *See* Vavra, P. and B. K. Goodwin, *Analysis of Price Transmission Along the Food Chain*, OECD Food, Agriculture and Fisheries Working Papers, No. 3, OECD Publishing (2005).

[116] *Id.*

[117] *Id.*

[118] For example, one study undertook an exhaustive review of the literature of competition in the meatpacking industry. After 179 pages of analysis, this study concluded that the literature failed to demonstrate that the meatpacking industry is not competitive. The study then noted that "It is equally important to emphasize that failure to show conclusively that the industry is not competitive is not, by any means, evidence that it is competitive in the sense of price-taking behavior." *See* Dale G. Anderson & Azzeddine M. Azzam, *Assessing Competition In Meatpacking: Economic History, Theory, and Evidence*, USDA GIPSA-RR 96-6 (1996), http://archive.gipsa.usda.gov/pubs/packers/rr96-6.pdf.

[119] *See* Vavra, *supra* note 114.

the consumer. For present purposes, it is enough to identify the difficult economic puzzles that need to be solved in order for animal protection groups to justify their strategy of supporting increased environmental regulation of the farmed animal industry.

Third, the resulting increase in the market price of animal products must be significant enough to force consumers to change their consumption patterns away from meat and towards green foods. In other words, even if the costs of complying with new environmental regulations are passed on to the consumer, is that really going to make a dent in consumer demand? The basic law of demand holds that there is an inverse relation between the price charged and quantity demanded.[120] To make green foods competitive with animal products, how much would the cost of the latter need to rise in order to compel consumers to substitute away from these products?[121]

The answer would generally depend on the elasticity of demand for various farm animal products. To take one example, it seems that egg consumption in the United States tends to be relatively unresponsive to price changes, meaning that the elasticity of demand is high.[122] According to one study, a price increase of 40% of the cost of eggs in California would likely reduce egg consumption by less than 10%.[123] As a result, even a considerable increase in the costs of eggs would only marginally reduce egg consumption.[124] Therefore, for animal protection groups to make a significant impact in consumer demand for eggs in California, the price of eggs must be raised two or even threefold.

The conventional wisdom among animal protection groups seems to be that increased costs will lead to a decline in consumer demand. However, it is not clear whether this conventional wisdom would prove true in practice. It is also at least plausible that some factory farm managers will respond to increased regulatory costs by cutting corners on animal treatment.

---

[120] Richard A. Posner, Economic Analysis of Law (7th ed., Aspen Publishers, 2007).

[121] One could expect such a change in consumer demand to decrease the amount of animals slaughtered on factory farms. By way of analogy, governments often attempt to levy so-called "sin" taxes, such as the very heavy tax in most countries on cigarettes. *See* Posner, *supra* note 121, at 5. These taxes have substantially increased the price of these goods have and reduced their consumption. *Id*. Noted economist Gary Becker cited studies estimating that for every 10% increase in the retail price of cigarettes from higher taxes cuts, smoking levels dropped by about 4% after the first year, and up to 7% in following years. *Id*.

[122] *See* D. A. Sumner et al., *Economic and Market Issues on the Sustainability of Egg Production in the United States: Analysis of Alternative Production Systems*, Poultry Science, Apr. 1, 2010, http://www.poultryscience.org/docs/PS_822.pdf.

[123] *Id*.

[124] *Id*.

B. In This Largely Unregulated Industry, There Is Too Great a Risk That Crushing Environmental Regulation Will Lead to Diminished Treatment of Farmed Animals on Factory Farms

The second goal of animal protection groups regarding factory farms is to improve the welfare of farmed animals by eliminating the most abusive industry practices.[125] However, the absence of meaningful legal constraints in this largely unregulated industry means that there are no/few legal barriers to cutting corners on animal welfare in response to increased regulatory costs. In other words, the feeble patchwork of regulations governing the welfare of farmed animals is not sufficient to constrain firm behavior and ensure that expanding environmental compliance costs will not result in reduced animal welfare. It is at least plausible that firms will respond in this manner, especially considering that it is a legal course of action, it is technically possible to reduce animal welfare even further, and neither social nor market pressures are likely to constrain firm behavior.

1. Legal Constraints: the Animal Agricultural Industry Is Largely Unregulated

Since the farmed animal industry is largely unregulated, there are few legal barriers to reducing animal welfare in response to higher regulatory costs. If the thesis of this Article is true, that expanded environmental regulation harms animal welfare on factory farms—then the strategy of animal protection groups—namely, to expand the regulatory burdens on the farmed animal industry—may in fact lead to more suffering. These groups should at least acknowledge that such a risk exists, if not decide to change course.

While there are some trends towards greater regulation of farmed animal welfare on the state level, such regulation exists in only a handful of states. In contrast, the voluntary regimes in place in most states leave a lot of discretion in the hands of firm managers in how to treat their animals. Not surprisingly, this voluntary approach does not appear to reliably constrain firm behavior, nor result in a uniformity of treatment. Some facilities treat their animals "atrociously bad," while others do not.[126]

Given that the EPA's pending environmental regulations would surely apply to all states, whether they have animal welfare regulations

---

[125] *See e.g.*, Farm Animal Protection, http://www.humanesociety.org/issues/campaigns/factory_farming/ (Aug. 15, 2011) (noting the Humane Society's mission is to "reduce the suffering of [farm] animals.").

[126] *See* Bottemiller, *supra* note 42 (interviewing Temple Grandin).

or not, one could posit that increased regulatory costs are more likely to be borne by animals in states with regulations on farmed animal welfare than in states without such protections. In the absence of a minimum legal standard of treatment for farmed animals, the only remaining constraints on firm behavior are those of a non-legal variety, such as technical barriers, social/moral influences, and market-based pressures. To make matters worse, many of the states with the greatest meat production have the most lax state animal welfare laws.[127]

Applying conventional economic theory, how can we expect a typical factory farm operator to react to increased regulatory costs? According to conventional economic theory, "man is a rational utility maximizer" in his economic affairs as well as all areas of life.[128] Moreover, people respond to incentives and will alter their behavior to maximize utility in response to changing conditions.[129] Thus, if a factory farm operator's costs of doing business significantly increase due to higher environmental regulation, it is reasonable to expect him to react by cutting costs to stay in business or maintain profit levels. For example, if a manager's choice is between squeezing more profit out of the chickens he owns, which after all are his own property, or going out of business, which option is this manager more likely to choose? Clearly, he will tend to choose to reduce animal welfare since this option is not proscribed, unless there are technical barriers to doing so, or his moral sentiments outweigh the quest for profits, or market forces are a sufficient constraint.

Conversely, insofar as state-level animal welfare regulations are currently in place, increased environmental compliance costs are more likely to be passed on to consumers than borne by animals because state law has prescribed minimum standards of treatment for farmed animals.[130] Having such regulations in place removes the legal option of cutting corners on animal welfare as a firm responds to increasing costs. True, having such regulations in place will not guarantee that firms will comply with them, especially if these standards are not enforced. However, one could expect that such standards would at least reduce the incentive for firms to cut corners on animal welfare.

---

[127] *See* Pew Commission on Industrial Farm Animal Production, Final Report: Putting Meat on the Table: Industrial Farm Animal Production in America (2009), http://www.ncifap.org/bin/e/j/PCIFAPFin.pdf.

[128] *See* Posner, *supra* note 120.

[129] *Id.*

[130] Interestingly, there is a trend towards increasing regulation on the state level, as animal protection groups have won victories through ballot initiatives in several states that have garnered popular support. This is the better approach because without a floor level of treatment, these unintended consequences are in play.

In conclusion, animal protection groups cannot depend on legal constraints—that is, the fear of criminal punishment or civil penalties—to motivate the behavior of factory farm operators in most states without animal welfare protections, and therefore there is a risk that their strategy may have the unintended consequence of reducing animal welfare.

2. Technical Barriers

Is it feasible for factory farm managers to diminish the treatment of animals any more than they do now? Generally speaking, in response to economic pressure—whether it be from regulatory burdens, competition, or a slumping economy—firms often react by cutting costs, taking shortcuts, and otherwise trying to stay afloat within the applicable legal constraints. For example, in the context of labor-management relations, in good times unions may negotiate for generous benefits, but in bad times management often seeks to slash the wages, hours, and benefits of its employees. Compensation of workers becomes an attractive means of cutting costs, partly because alternative means of cutting costs involving diminishing the health and/or safety of workers are proscribed. Likewise, in response to economic pressures, one can expect the farmed animal industry to react by trying to cut costs. The key difference, however, is that reducing the welfare of animals is a legal option in this largely unregulated industry.

The conventional wisdom among animal protection groups is that the animals are treated so terribly now that they cannot be treated any worse.[131] They assert that the production process in factory farms has evolved in such a way that the farmed animal industry has already maximized the efficiency out of these animals.[132]

Taken a step further, one could argue that it is reasonable to assume that factory farmers are currently maximizing their economic interest as rational actors; conversely, they are not currently acting economically irrationally--for example, by spending more money on treating animals than they need to. For example, a trade group, the Animal Agriculture Alliance, has pointed out that the broiler chicken industry has an economic motive to care about the physical well-being of animals because only healthy animals can be utilized for human food.[133] Therefore, it would not make economic sense for the broiler industry to cut corners by starving their chickens because that would reduce their market value.

---

[131] *See* Cassuto, *supra* note 27, at 70 ("The common denominator [for all factory farm operations] is an almost single-minded focus on economic yield.").
[132] *Id.*
[133] *See* Agriculture's Commitment to Animal Well-Being by the Animal Agriculture Alliance, http://www.animalagalliance.org/images/ag_insert/Pew/Animal_Welfare.pdf (last visited Aug. 15, 2011).

To be sure, the farmed animal industry is geared towards maximizing the efficiency of their "inputs" in the production process.[134] However, this conclusion cannot be generalized to say that it would always be economically irrational for factory farms to further diminish the treatment of animals. For example, noted animal welfare expert Temple Grandin has emphasized that the degree of animal welfare on factory farms depends a great deal on "the attitude of the manager."[135] Specifically, Grandin has found in her experience working with the meat industry that the fate of animal welfare often comes down to the attitude of top management.[136] Managers who do not care about animal welfare tend to "cut[] corners on methods, cut[] corners on materials, and the way they treat animals [is] atrociously bad."[137] Conversely, managers who do care about animal welfare tend to treat their animals better.[138] Therefore, it is wrong to argue that factory farm managers cannot treat farmed animals any worse; experience shows that they can and frequently do treat animals "atrociously bad," depending on the whims of top management.

In what particular ways can one expect factory farms to reduce animal welfare? In the spectrum of industry practices thought of as abusive, certain practices could be altered resulting in worse animal treatment, more so than others. One category of abusive practices is inherently connected with the type of equipment used. Another category, however, involves more managerial discretion.

As to the former, certain abusive practices are related to the type of equipment used on a given farm.[139] The purchase of equipment on a large scale requires a substantial investment, and likewise purchasing new equipment is expensive. Since the purchase of new equipment may be prohibitively expensive in the short term, one could expect that abuses related to the type of equipment used is not likely to change in response to incremental shifts in a firm's regulatory burden. For example, assuming that some farms provide more cage space for hens than

---

[134] *See* Cassuto, *supra* note 26, at 70.

[135] *See* Bottemiller, *supra* note 42 ("The thing I have found about little plants, they're either really good or really bad. There's like no middle road. It's so dependent on the attitude of the manager. . . . It gets down to the top person caring. It's the attitude. It's gotta start with top management.").

[136] *Id.*

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

[138] *Id.*

[139] *See* Stathopoulos, *supra* note 13, at 412 ("Three common industry practices that present the most extreme cases of confinement are the gestation crate, the veal crate, and battery cages. Gestation crates are metal stalls with concrete floors that are used to confine pregnant pigs. . . . Veal crates are small wooden crates used to confine young calves and similarly restrict their ability to move. Battery cages are wire cages used to confine egg-laying hens that are stacked on top of one another.").

economic efficiency dictates, one could expect firms to keep the current system in place in the face of expanded environmental compliance costs because purchasing new cages with less space is expensive. Thus, it is not likely that much diminishment of animal welfare would spring from these investment intensive sources.

As to the latter—that is, those industry practices involving more managerial discretion, it is more likely that factory farm managers could cut corners on animal treatment. Bill Weida, an Agricultural Economist, has stated emphatically that the farmed animal industry can make life even more hellish for farmed animals.[140]

To the extent that factory farms have taken voluntary measures to improve animal welfare in response to public pressure in states where the agriculture industry is unregulated, these advances for animal welfare can be reversed. For example, according to the voluntary industry standards of the United Egg Producers, the practice of forced molting is being phased out.[141] Likewise, one of the country's largest pork producers, Smithfield Foods, has instituted a gestation crate phase out.[142] Both of these voluntary measures appear to have sacrificed some efficiency in the production process, and the companies complying with such voluntary measures may decide to change course in response to expanded environmental compliance costs. In conclusion, it is likely that many factory farms have the technical capacity to decrease animal welfare in response to higher regulatory costs.

3. Social Constraints

Neither should animal protection groups rely on social norms to prevent factory farm managers from cutting corners on animal welfare in response to increased regulatory costs. According to renowned economist Richard Posner, people are not motivated by ethical beliefs unless the right thing is aligned with their self-interest.[143] With respect to the farmed animal industry, the profit motive is king; the entire animal-

---

[140] Interview with Bill Weida, Tulane Environmental Law Summit, New Orleans La. (Apr. 10, 2011).

[141] Forced molting refers to the practice of restricting the feed of laying hens at regular intervals for the purpose of encouraging egg laying. *See Frequently Asked Questions about the Pew Commission on Industrial Farm Animal Production* (2009), http://www.ncifap.org/bin/c/w/Frequently_Asked_Questions_updated_2.pdf.

[142] *Lawsuit Against California Pig Farm Dropped as Company Announces End to Abusive Breeding Practices* (2008), http://www.aldf.org/article.php?id=506.

[143] Richard A. Posner, *Social Norms, Social Meaning, and Economic Analysis of Law: A Comment*, 27 J. LEGAL STUD. 553, 560 (1998) ("I do not think that knowledge of what is morally right is motivational in any serious sense for anyone except a handful of saints.").

production process "results from a legal and regulatory environment designed to facilitate animal-based wealth acquisition."[144]

The animals-as-property framework has dominated popular culture for many years, and certainly is true within the farmed animal industry. Under this framework, animals are viewed as mere commodities, and social norms cannot be relied on to constrain firm behavior. Professor David Cassuto has put it nicely, stating:

> [t]he animal-production process results from a legal and regulatory environment designed to facilitate animal-based wealth acquisition. . . . Factory-farm conditions vary depending on the species and the desired product. The common denominator, however, is an almost single-minded focus on economic yield. Chickens, for example, might be "broilers" or egg producers. The nature of their confinement and length of their life depends on their designated function.[145]

Therefore, it is reasonable to expect that the profit motive would outweigh any social norm to treat animals well on factory farms.[146] In contrast, there is a general sense that small farmers tend to care more about the welfare of the animals in their care.[147]

4. Market Forces

Having established that reducing animal welfare in response to expanded environmental compliance costs is a legal option, technically possible, and unlikely to be constrained by moral pressure, the only constraint remaining relates to market pressure. Chief among market forces that may influence agri-business managers is consumer demand.[148]

The farmed animal industry is highly responsive to consumer demand, which is illustrated by the decision of McDonald's to purchase cage-free eggs in Europe, but not in the United States. In April of 2010 the board of directors of McDonalds issued a recommendation to its shareholders to oppose voting for a proposal to require that five percent of the company's egg purchases in the United States be from cage-free

---

[144] *See* Cassuto, Bred Meat, *supra* note 27, at 70.

[145] *Id.*

[146] One might ask: if social norms play no role in the decisions of factory farmers, why have they taken voluntary steps in some cases to improve animal welfare in response to public pressure? The motivations of the industry are based on a variety of factors. Importantly, however, many of the voluntary industry actions of late appear to have been motivated by a fear of ballot initiatives promoted by the Humane Society.

[147] *See* Bottemiller, *supra* not 42

[148] *See* Posner, *supra* note 120, at 4.

sources.[149] What is interesting about this story is that a big disparity exists between McDonald's policies in in Europe and in the United States; in Europe, McDonald's had committed itself to purchasing one hundred percent cage-free eggs by 2010 for all of its European restaurants.[150] A McDonald's spokesperson attributed this disparity to the presence of high consumer demand for cage-free eggs in Europe, but not in the United States.[151]

True, to some extent the farmed animal industry is influenced by a fear of bad publicity. However, this influence is clearly limited on a macro-scale, since the shocking abuses on factory farms have been well-documented and publicized, yet many such practices remain in place.[152] There is some evidence that consumer preferences have changed after heightened media attention.[153] However, only limited research has been conducted to date.[154]

Furthermore, so far as these companies are motivated by a fear of negative publicity, such fears are diminished by the general lack of transparency in the farmed animal industry.[155] Thus, there is a smaller likelihood in the farmed animal industry than in other industries that firms can conduct their operations in secret without fear of public scrutiny.

In summary, animal protection groups tend to assume that increased costs of complying with environmental regulations will be passed on to consumers without any harm accruing to the farmed animals. However, this may not be the case for four reasons: the treatment of animals on factory farms is largely unregulated, it is technically possible for to further reduce animal welfare, and neither

---

[149] Leora Broydo Vestel, *McDonald's Board Opposes Cage-Free Eggs for U.S.*, NY Times, April 13, 2010, http://green.blogs.nytimes.com/2010/04/13/mcdonalds-parries-on-cage-free-eggs/.
[150] *Id.*
[151] *Id.*
[152] Numerous exposés have raised public awareness of the welfare of farmed animals. However, one could argue that the failure to take animal interests into account represents a market failure insofar as it represents information asymmetries, but more likely the consumer is willfully ignorant of the suffering of animals in the production of food.
[153] *See* Glynn Tonsor, *Connecting Livestock Producers With Economic Research*, Jan. 2011 ("The authors found increased media attention to have significant direct impacts in reducing pork and poultry demand.").
[154] *See id.* (noting that only 6 of the 24 relevant studies on what production practices the public desires involved U.S. residents. Tonsor concludes by stating that "without additional insights regarding consumer preferences . . . the industry is forced to make critical decisions such as what production practices to support or discourage without sufficient information." *Id.*
[155] *See e.g.,* Sanders, *supra* note 43 (discussing state bill to criminalized farm photography).

social nor market constraints appear likely to foreclose this legal option to firm managers as a means of cutting costs in response to expanded environmental compliance burdens.

C. EPA Regulations May Empower Big Factory Farms and Hurt Small Farmers

The third goal of the animal protection movement is to fight factory farms while promoting small farmers.[156] Animal protection groups tend to assume that big factory farms are worse for animal welfare.[157] To the extent small farmers are not exempt from EPA environmental regulations, they would also be subject to increased environmental compliance costs.[158] However, small farmers are less able than factory farms to absorb increased regulatory costs.[159] As a result, many small farmers may be driven out of business, leading to greater market share for factory farms, and greater consolidation of the animal agriculture industry, an outcome that would be contrary to the stated goals of animal protection groups. In contrast, direct regulation of animal welfare on the state level arguably helps family farmers by leveling the playing field.[160] Such regulations serve to neutralize some

---

[156] *See e.g., Factory Farming in America: The True Cost of Animal Agribusiness for Rural Communities, Public Health, Families, Farmers, the Environment, and Animals* http://www.humanesociety.org/assets/pdfs/farm/Humane Society-factory-farming-in-america-the-true-cost-of-animal-agribusiness.pdf (last visited Aug. 15, 2011) (championing the virtues of family farms); Book Review of The Bond, ANIMAL PEOPLE ONLINE, May 17, 2011, http://www.animalpeoplenews.org/anp/2011/05/17/books-the-bond-by-wayne-pacelle/ (noting that Paul Irwin, former CEO of the Humane Society, called for "a return to the traditional practices of conscientious family farmers, who cared for their animals and their land.").

[157] For some commentary on the debate on whether small farmers are better for animal welfare, *see supra* note 90.

[158] *See* Sara Wyant, *EPA Agrees To Hunt for Livestock Operations That May Be Violating Clean Water Rules* (2010), http://www.agri-pulse.com/20100527S1_EPA.asp.

[159] *See* ROBERT A. HOPPE & DAVID E. BANKER, UNITED STATES DEPARTMENT OF AGRICULTURE, STRUCTURE AND FINANCES OF U.S. FARMS: FAMILY FARM REPORT, 2010 EDITION (2010), http://www.ers.usda.gov/publications/eib66/ ("Most U.S. farms—98 percent in 2007—are family operations, and even the largest farms are predominantly family run. Large-scale family farms and nonfamily farms account for 12 percent of U.S farms but 84 percent of the value of production. In contrast, small family farms make up most of the U.S. farm count but produce a modest share of farm output. Small farms are less profitable than large-scale farms, on average, and their operator households tend to rely on off-farm income for their livelihood. Generally speaking, farm operator households cannot be characterized as low-income when both farm and off-farm income are considered.").

[160] *See* Gail Shepherd, *Two Florida Farmers Opt Out of Animal Rights Battles*, BROWARD PALM BEACH NEW TIMES, Apr. 13, 2010, http://blogs.browardpalmbeach.com/juice/2010/04/two_florida_farmers_opt_out_of.php ("The Humane Society's

of the efficiency advantages of larger factory farms by making them adopt less efficient (but more humane) practices.

In summary, factory farms exist in a cut-throat, profit-driven industry, which generates enormous pressure to compete. In the farmed animal industry, where animal welfare is largely unregulated, we cannot be confident that such increased environmental compliance costs will necessarily be passed on to consumers. Instead, it is plausible that such costs will be partly borne by the animals. Since the strategy of animal protection groups to expand the environmental regulation of factory farms may lead to these dire unintended consequences, should the animal protection movement err on the side of caution, and abandon its alliance with the environmental movement?

VI. Better Approach: Stick With Promoting Ballot Initiatives

This Article argues that the strategy of animal protection groups to seek expanded environmental regulation of factory farms is misguided because it fails to recognize the risk that the costs of compliance may partly be borne by the farmed animals. The missing link in this strategy is the absence of state laws establishing a minimum floor of treatment for farmed animals. Until such standards are established in the states where most of the country's farmed animals are produced, it may be unwise for animal protection groups to seek to increase the regulatory burdens on factory farms.

Instead, a better approach would involve the animal protection movement focusing its fire on state-level laws and/or ballot initiatives that directly enhance animal welfare. Over the past decade, the animal protection movement has won a series of victories such ballot initiatives.[161] This approach has proven to be the only successful way that animal protection groups have managed to strengthen animal welfare regulations at the state level, and only in states where ballot initiatives are available.[162]

Paul Shapiro contends that the Florida amendment may have 'helped provide an environment in which family farms can flourish.'").

[161] *See* Lovvorn, *supra* note 18, at 144-47 (discussing recent efforts to enact federal and state animal welfare legislation, as well as efforts in the courts); Kristen Hinman, *The Humane Society's Battle with Farmers Began Right Here in Florida*, Broward Palm Beach New Times, Apr. 15, 2010, http://www.browardpalmbeach.com/2010-04-15/news/the-humane-society-s-battle-with-farmers-began-right-here-in-florida (describing one of the first ballot initiative victories, in Florida).

[162] *See e.g., A Landmark Day for Animals from Coast to Coast!*, (2008) http://www.peta.org/b/thepetafiles/archive/2008/11/05/a-landmark-day-for-animals-from-coast-to-coast.aspx (marking the passage of Proposition 2 in California by a large margin

In such states, animal protection groups have supported ballot initiatives to restrict some of the worst abuses of factory farms.[163] This approach has enabled animal protection groups to sidestep state legislatures, which are often subject to the influence of the agri-business industry,[164] and make their appeal directly to the people, who often voice support for animal welfare reforms in public opinion polls.[165]

VII. Conclusion

The animal protection movement has adopted a strategy of allying itself with the environmental movement to increase the environmental regulation of factory farms. However, this approach carries potentially devastating unintended consequences—namely, it risks generating even more suffering of animals on factory farms.

Animal protection groups should not seek to expand the environmental regulations of animal agriculture in the absence of laws that establish minimum standards of treatment because there is too great a risk that factory farm managers may shortchange the welfare of animals as agri-businesses cope with higher regulatory costs. Instead, a better approach would involve animal protection groups focusing their fire on state-level ballot initiatives to directly enhance animal welfare on factory farms, an approach that has demonstrated some promise.

It is incumbent on the leaders of the animal protection movement to consider whether farmed animals stand to benefit from their general strategy of forming alliances with environmental groups, and their particular strategy of supporting the EPA's regulatory assault on the agri-business industry and pursuing a litigation strategy of suing factory farms under environmental laws.

---

that "will ban some of the worst cruelty to animals who are raised for food in that state: keeping egg-laying chickens in battery cages so small that they can't spread their wings, keeping veal calves in crates for their entire miserable short lives, and keeping pregnant pigs in crates that are so small that they can't take a step forward or backward or turn around"); Hinman, *supra* note 18 (tracing the Humane Society's "state-by-state offensive" to convince voters to change the industry practices of factory farms, as opposed to going through the legislative process, and noting how this was successful in Florida to ban gestation crates for pigs). Part VI, *infra*, will argue that these campaigns are more beneficial to animal welfare than suing under environmental laws.

[163] *See* Lovvorn, *supra* note 18, at 144-47 (discussing recent efforts for federal and state animal welfare legislation, as well as efforts in the courts).

[164] *See* Kreuziger, *supra* note 29, at 363.

[165] *See* Lovvorn, *supra* note 18, at 142-43, 148 (2006) (discussing "the gap between public opinion and public policy" for farmed animals).

As for the former, animal rights leaders must consider whether the two movements have irreconcilably divergent interests, such that an immediate change of course is required for the sake of minimizing risks to farmed animals. As for the latter, this approach has not been demonstrated to advance animal welfare, and actually the opposite outcome is more likely to occur. Since many of the highly burdensome regulations on the EPA's agenda are not finalized, but rather are still working their way through the administrative process, there may still be time to change course and try to influence the outcome of the EPA's review process in the other direction, so as to minimize the serious risk that many factory farm managers will decide to shortchange animal welfare in response to crushing regulatory costs. It is not too late.

The Development of a Religious Animal Welfare Code and its Relevance for Contemporary Civil Laws

A.Z. Zivotofsky,[1] J. M. Regenstein,[2] D. Zivotofsky[3]

I. Introduction

In recent years many governments, the United Nations through the OIE (the World Organization for Animal Health) and in some countries businesses selling to consumers, e.g., foodservice and retail stores, have introduced animal welfare standards that govern many aspects of meat production from the farm to the slaughterhouse and beyond.[4] Additional animal welfare legislation governs many other aspects of animal care and use, including the use and care of animals used in research, banning or regulation of bull, cock, and dog fights, the regulation of hunting, and rules dealing with veterinary practices. These types of regulations are difficult to formulate for a variety of reasons including the difficulty of knowing what is truly best for an animal, what causes the animal discomfort or pain, whether it is perceived as pain or also includes suffering, of which the latter may only exist in a limited number of animal species, and how much such stress is tolerable and desirable for a particular animal species. These concerns then need to be weighed and balanced against the costs and benefits to humans.

While modern governmental and business authorities struggle to balance competing demands in this relatively new arena for them, religious laws, notably those of Judaism, have included animal welfare standards for millennia. During the many centuries when concern for an animal's pain and suffering never occurred to the vast majority of civil legislative bodies, Jewish religious authorities were refining their age-old regulations that govern all aspects of human-animal interaction for adherents of the Jewish faith. Furthermore, while modern research and legislative activities address all phases of an animal's life, including, rearing, transport, and handling, in our opinion such research and legislation spend a disproportionate amount of time and money analyzing, legislating, and focusing on the final seconds of the animal's life, while the Jewish welfare codes discussed herein are equally relevant to the animal's entire life and address not only acute physical pain but all types of potential suffering.

[1] Gonda Brain Research Center, Bar Ilan University, Ramat Gan, Israel

[2] Department of Food Science, Cornell University, Ithaca, NY 14853-7201

[3] Private practice veterinarian, Jerusalem, Israel

[4] Patricia A. Curtis, Guide to Food Laws and Regulations (1st ed., Blackwell Publishing 2005).

For people of the Jewish faith, the method of slaughtering animals for food is an important religious component that has been precisely defined in the legal codes for over 2000 years, starting with Hebrew Scriptures. Additional ancient rules, although more loosely defined than those found in the scriptures themselves, have always governed human-animal interaction for Jews. They regulate how the animals are treated even with casual encounters, but also deal with how they are handled on the farm and pre-slaughter, as well as in other circumstances. These standards preceded the earliest civil codes by centuries, and because Jewish law (*Halacha*) has a long, fairly complete written record, we propose that it may be useful for those developing animal welfare standards in modern democratic societies to examine how the animal welfare standards within Judaism developed, with an emphasis on the system of checks and balances that has been developed and permitting slow changes that are much less disruptive, not necessarily the specific laws.

The goal of this paper is *not* to frame a modern critical comparison of religious and civil animal welfare codes, but rather to present in some detail Jewish religious animal welfare regulations in the context of the larger picture of Jewish law and then to suggest that this successful, ancient, internally-consistent, slowly evolving system that remains venerated to this day that has withstood the vicissitudes of time, may be able to serve as a model for contemporary legislation. We do not intend to compare the religious Jewish regulations with any specific civil codes to show how each affects animal welfare, but rather to explain the structure of the Jewish codes with respect to animal welfare. Through showing its development and presenting various aspects of the system, it will become clear that through the generations and continuing today, it is a system that has served animal welfare for the better, while retaining the buy-in from those affected by these rules. It has taught the Jewish people and the world the importance of taking animal welfare into consideration during decision making and has guaranteed proper treatment of animals in many varied circumstances. Having stood the test of time as a system that introduces responsibility on the part of man towards the animal kingdom in can serve as a prototype of an animal welfare system development.

This paper presents to the animal welfare community the Jewish regulations regarding a broad range of animal welfare situations. This system of law and how it works are little know to the community of animal welfare experts, and yet as a system that for millennium was concerned with animal welfare when the rest of the world was not, it should be of interest. Furthermore, it explains how the *halachik* system might serve, in certain regards, as a model for decision-making and legislation in democratic societies, and this too should make it of interest to the general animal welfare community.

II. Development of Halacha (Jewish religious law)

There are, of course, significant differences between a religious code and secular laws that will be highlighted further on. Nonetheless, because both are legal systems they can be used to illuminate one another. To understand the similarities and differences with secular law, and the various components of *Halacha* (Jewish law), it is useful to understand something about its development. *Halacha* follows a diffuse authority paradigm. This stands in sharp contrast with, for example, the Roman Catholic Church, which has a highly centralized and rationalized organization and a well-defined hierarchal structure culminating at the top of the governance pyramid with a Pope. Over millenia, the structure became increasingly centralized culminating with the declaration of Papal Infallibility in 1870.[5] Judaism currently has no such structure and developed its laws in a more diffuse and democratic manner. This has been especially true during the 2000 years of the Jewish Diaspora, i.e., the time after the Jews left Israel in 70 CE (Common Era) following the Roman destruction of the second Temple in Jerusalem. Prior to that time in Israel there had been centralized governing bodies such as the *Anshei Knesset Hagdolah* ("The Men of the Great Assembly")[6] and the Great *Sanhedrin,* (the Supreme Court of 71 Justices that convened in the Temple compound in Jerusalem). Their rulings were accepted as binding on the Jewish community at that time.

As an aside, the rules for a capital punishment case during this period are interesting and show how these bodies took into account human behavior. If all the jurors voted that the person was guilty, the person was set free. Unless the jury was rigged or bribed, there is no way that the entire court of 23 or 71 people would reach the same conclusion.

For the last 2000 years there has not been one authoritative body or individual law authority even in a single country, much less across the many countries that Jews were scattered across over time. Thus new questions are often confronted by multiple legal scholars at different times and in different places, but eventually, a single or several (sometimes conflicting) consensus positions are reached over time and this is then taken as the authoritative law. Note that conflicting views are permitted and religious leaders then are required to make judgments appropriate for their own community and consistent with their own philosophies.

Religious law is often structured around a question (Sheilah) and an answer (Teshuva, responsum). Sometimes these are hypothetical questions that the rabbis themselves ask and proceed to answer, but in many other cases they are real questions that arose in the course of Jews

---

[5] It was defined dogmatically in the First Vatican Council of 1870.

[6] This was an assembly of 120 scribes, sages, and prophets who lived and functioned from the end of the Biblical prophets to the destruction of the Second Temple in Jerusalem in 70 CE. They promulgated decrees, codified law, and authored liturgy.

living in many different places under often very different circumstances. Answers to these religious questions are always based on precedents that include specific laws, and broader principles, and values. *Halacha* has developed over the course of the last two millennia across much of the globe without any centralized authority and in periods of poor communication, so the same question may be answered differently in different places even at the same time. But because the more important responsa were written down, later scholars were then both aware of the precedents and forced to come to terms with the differences. The existence of these common principles has insured that the product of this seemingly stochastic system is actually over time well structured, internally consistent in that rules have essentially been the same for the entire period, and once a sufficient agreement is reached it is widely accepted.

One of the features of this system is deference to the older decisions. New is not valued as the best, and respect of the wisdom of the ancients remains a factor in decision making.

The starting point for discussing most laws is the Jewish written Bible. Particularly, the first five books of Moses (Torah), which are maintained in the form of a parchment scroll in the religious houses of worship (temples and synagogues). They are read in part every week so that the entire document is completed in one Hebrew year (lunar year with a solar adjustment).[7] However, the material contained in the Torah is never the basis for a final determination of *Halacha* because it is considered to be only half of the information required for understanding the issues. Jewish tradition maintains that together with the Written Law, Moses was given an Oral Law, which was finally committed to writing between the 2nd and 6th centuries CE, first as the Mishnah, a simple exposition of the oral law as it existed, and then as the Talmud and associated works, which incorporated the Mishnah, but expanded on it by recording the views of early decisors and has since been supplemented with additional discussion by subsequent decisors. The Babylonian Talmud is normally published as a 2700 page encyclopedic work of Jewish law and lore that was completed in Babylonia approximately 1500 years ago and has been the focus of Jewish religious study and the source of Jewish law ever since. It acquired almost canonical status such that no discussion of any aspect of Jewish law can begin without citing the relevant Talmudic passages. Because of this, innumerable commentaries have been composed discussing the Talmud and many of these are printed right on the pages of the Talmud in what the modern reader would recognize as the earliest form of a hyper-text link (see

---

[7] For a short description of the Jewish calendar, *See* Ari Zivotofsky, *What's the Truth About ... Coinciding Birthdays*, Jewish Action, 56-59 (Mar. 13, 2007) *available at:* http://www.ou.org/jewish_action/03/2007/whats_the_truth_about_coinciding_birthdays/

Figure 1 to understand the variety and complexity of information that a single page of text includes). Thus, Judaism both recognized and celebrated the difference of opinions and the need to credit individual rabbis with their contributions to the body of law. This document, despite a wealth of detail, does not necessarily dictate a solution.

The development of *Halacha* continued with the writings of: 1) commentaries on the Talmud, 2) newer codes of law, and 3) the responsa literature, which consists of answers to specific questions written by rabbis over the centuries. An example of the most significant modern code of law is the 16th century *Shulchan Aruch*, which, owing to its near universal acceptance, has developed a similar structure of commentaries to that found in the Talmud. It has the text of the original document surrounded by commentaries similar to that found around the Talmud (see Figure 2 which illustrates the similarities of texts written over a thousand years apart).

While all three genres of legal developments are ongoing, it is this final genre of the responsa literature that is the primary means of modern development, refinement, and clarification of *Halacha* today. Questions of religious law can be asked of any rabbi, but when a new or complex question arises, a local rabbi will often pose the question to other rabbis who have become recognized for their legal knowledge and piety. The responses of important rabbis are then collected and published as collections of responsa of such a rabbi. The responsa literature exemplifies an important aspect of the modern nature of *Halacha* – it is dynamic yet heavily precedent oriented system. A responsa is similar in its role within Jewish law as "case law" is to most secular legal systems, i.e., it reviews the previous legal rulings and applies these rulings to the specific case before the court. A decisor ("*Posek*"), will typically extensively examine earlier sources in search of analogous circumstances, starting with cites of relevant Talmudic passages, and often will quote from both early Talmudic commentaries and from the major codes. Many modern rabbis will also rely on the responsa literature of the last few hundred years.

It should be noted that within the religious legal process there are both legislative and interpretative activities. The legislative component was primarily based on the revelation of the Divine law and the additional edicts found in the Talmud. Post-Talmud there was very little overt legislation. The major interpretive phase occurred during the period when the Talmudic rabbis interpreted the Divine law, followed by the post-Talmudic commentators, codifiers, and decisors, who interpreted both the Talmud and the earlier post-Talmudic authorities. The Talmud and the codifiers as mentioned earlier often preserved minority opinions in addition to the accepted position, and in printing these works multiple, divergent commentators are printed side-by-

side, all attesting to a unique respect in Jewish religious documents for conflicting opinions. This interpretative work is on-going to this day and gives Jewish law the continuity and evolution that allows it to remain relevant and vibrant in modern times without disrespecting the past.

III. Laws related to animal welfare

Within *Halacha* there are three types of laws that are relevant to animal welfare. 1) Specific, narrow laws that apply or govern particular cases, 2) general provisions that can be applied in situations where there is no specific rule, and 3) instances where there is no specific law and where the general principles do not apply, yet when asked, the decisor will instruct the individual to act in a particular manner that can be termed "*lifnei me'shurat hadin*," beyond the letter of the law. This third category leads to the extension of the general provisions to areas where the general principles have not technically been legislated to apply.

Many examples of specific, often narrow, laws of animal welfare can be found in the text of the Hebrew Scriptures, a work sacred to the other Abrahamic religions as well.[8] These specific laws include such rules as: the obligation to lighten the load of a beast of burden;[9] that domesticated animals must be given rest on the Sabbath;[10] the prohibition for a farmer to plow with an ox and ass together;[11] and the requirement that an ox may not be muzzled while it threshes grain.[12] Additional examples can be found in post-Biblical sources such as the Talmudic dictum that one is obligated to feed one's animals before sitting down to one's own meal.[13] Other examples of specific animal-welfare laws relate to the Jewish method of slaughter known as *shechita*. These laws include the regulations that: the slaughter must be done with a perfectly smooth and straight knife, the knife be at least twice the length of the neck of the animal to be slaughtered, that the knife be inspected before and after each animal, and the cutting be done in a continuous, uninterrupted back and forth motion.[14]

All of the above rules results in procedures that are very specific, well-defined laws that govern very narrow circumstances. This is the type of law typically promulgated by legislative bodies. It is easy to require a particular action when dealing with a narrowly defined circumstance.

---

[8] This includes the obvious three: Judaism, Christianity, and Islam, but also many subsets and splinter groups such as Samaritans and Karaites.

[9] *Exodus* 23:5; *Deuteronomy* 22:4.

[10] *Exodus* 23:12.

[11] *Deuteronomy* 22:10.

[12] *Deuteronomy* 25:4.

[13] TB, *Berachot* 41a.

[14] *See Shulchan Aruch*, *Yore Deah* 1-29.

Halacha also contains more general provisions and principles. Regarding animal welfare, the most significant general principle as previously discussed is called "*tza'ar ba'alei chaim*," i.e., the concern for the suffering of living beings, which essentially states: thou shalt not cause unnecessary pain to an animal. This definition is not stated explicitly, but via its application by the later religious authorities it becomes clear that this is how it was understood. By necessary pain it meant that if there is a human need that cannot be fulfilled by any means other than via a method that results in pain to the animal it may be permissible. Examples will be discussed below.

Most Talmudic commentators assume that this principle is of Biblical origin. This determination carries important ramifications. Within Judaism there are two broad sources of law. There are Mitzvot D'Oraita: Commandments from the Torah. Some of these are clear, explicit commands in the text of the Torah (thou shalt not murder, you shall write words of Torah on the doorposts of your house, you may not slaughter an animal, and its young on the same day), others are more implicit (the commandment to recite grace after meals, which is inferred from a verse), and some can only be ascertained by deductive reasoning. In addition to the laws that come directly from Torah, there are laws that were enacted by the rabbis. These are referred to as Mitzvot D'rabbanan.

These rabbinic laws are still referred to as commandments and are considered to be binding as Torah laws. Examples include lighting a menorah on Chanukah and the public reading from the Torah every Monday and Thursday. While both Torah laws and rabbinic laws are binding, there are significant differences in their application. The first important difference regards precedence. When a conflict arises between two laws, the biblical takes precedence over the D'rabbanan. Thus, for example, Chanukah lights may not be kindled on the Sabbath. A second important difference relates to cases of doubt (in Hebrew: safek). When a doubt arises in the performance of a d'oraita, the law follows the strict position (in Hebrew: machmir), while if there is a question in a matter that is D'rabbanan, the lenient position (in Hebrew: makil) is followed. Only explicit animal welfare rules are explicitly found in the Bible, not the general principle of "tza'ar ba'alei chaim." It is thus an important question to know if this principle is treated as being implied in the Bible, or is a mere rabbinic enactment. Most of the codifiers treat it as the former, giving it significantly more clout.[15]

This standing enables concerns for animal welfare to supersede rabbinic enactments. There is a very broad category of rabbinic restrictions on the Shabbat known as muktzeh, which limits the use

[15] *See TB Bava Metzia* 32-33.

and movement of non-shabbat related items. Nonetheless, the Talmud[16] instructs that when muktzeh comes in conflict with an animal welfare concern, Tzaar Ba'alei Chaim takes precedence and overrides muktzeh. The rabbis waived the rabbinical prohibition because of concern for Tzaar Ba'alei Chaim. This Talmudic statement was later codified by the most important codes of law.[17] This law then served as the basis for a similar decision. The Talmud, as a means to close a loop hole whereby Jews would have non-Jews perform actions forbidden to Jews on the Sabbath, prohibited this. Nonetheless, this rabbinic prohibition is waived in the face of animal welfare concerns, which is a biblical issue.[18]

> Tza'ar ba'alei chaim proscribes most types of pain, including psychological pain, imposed on animals. The principle is not unlimited and includes the important limitation that pain may be caused to animals if it serves an important human need. The balance between the degree of pain and the significance of the human benefit must be carefully evaluated by the religious decisor in each circumstance to determine the permissibility of an action.
>
> While some contemporary welfarists view the permissibility of causing animal pain for human needs as too permissive, it is in actuality merely codifying a position that most ethicists who deal with animal issues accept; except for the fringe groups that equate animals with humans, such as attempting to give them legal standing in court. That position recognizes that there are instances when human needs trump an animal's pain. The difference in conclusions, when they exist, result from the debate of how to balance between what is deemed a human "need" and how much pain is tolerable.
>
> Finally, according to the rules of Jewish textual interpretations, a general law does not override a specific law.

Before proceeding to discuss these principles further, it is important to mention a fundamental difference between Jewish and secular ethics. This difference was articulated well by Rabbi Lord Immanuel Jakobovits, former chief rabbi of the British Empire and founder of the modern discipline of Jewish Medical Ethics, when he stated:

> Secular medical ethics seeks to turn ethical guidelines or rules of conscience into law, into legislation or codes of conduct. Ethical

[16] *TB Shabbat* 128b.
[17] *Maimonides*, Laws of Shabbat 25:26; *Shulchan Aruch, Orach Chaim* 305:19.
[18] *Shulchan Aruch*, O.C. 305:20.

> insights or judgments are gradually being distilled into legislative measure or professional rules. In the secular realm, the law is the product of moral intuition or consensus. Jewish medical ethics operate in reverse. Out of legal verdicts presented as law in legislation or rulings we distill the ethical guidelines and principles responsible for the legal judgments. Jewish medical ethics *derives* from legislation; it does not *lead* to legislation or at least not commonly so. For us, the legislative rulings have been given as *Halachah*, or legal norms, and we then have to extrapolate or enucleate the ethical rules and moral principles from them.[19]

This difference is an important aspect of this paper and the possible usefulness for secular authorities to familiarize themselves with Jewish ethical or legal structures. Most religions work uses a variation of ongoing interpretation of usually broad, and only occasionally highly specific, dictates.

This is very germane to the general rule of "*tza'ar ba'alei chaim*." The Talmudic sages examined the commandments found in the Bible, and as noted above, there are many specific laws that show a concern for animal welfare. From both the *gestalt*, and from the number of specific cases, they derived that the Bible was teaching a general rule as well as the more specific rule that one may not inflict avoidable pain to animals. As will be described below, unavoidable pain is difficult to precisely define but refers to pain incurred in a human "need" that cannot be fulfilled any other way. Acting as legislators and interpreters, the sages took the cue and ran with it, expounding and expanding upon a general ethical value of not harming living beings. Note that neither here nor later in the discussion is there a discussion of "animal rights". *Tza'ar ba'alei chaim* and the specific laws all address obligations that have been placed on each human in their dealings with animals rather than "rights" granted to the animal. Currently, most secular laws and modern animal welfare systems operate in this mode also, although recent efforts by some people have attempted to extend some legal rights to animals by urging that "surrogates," i.e., humans enter the legal system on the animal's behalf. There is no basis in Jewish law for such an approach.

In general, a secular body cannot legislate general principles, although in modern practice the specifics in the law may be more vague than the legislators had wished when it comes time for the regulators (the executive branch of government) to write the full details of the application of the law. This vagueness in the original law, often the product of the legislative compromises, then often leads to legal disputes

---

[19] Jakobovits I (1990) *in* Fred ROSNER, Medicine and Jewish Law, 1-18 (Jason Aronson ed. 2005) (The role of Jewish medical ethics in shaping legislation)

in the area of regulatory law, i.e., do the detailed regulations capture the intent of the legislative body consistent with all other laws relating to the topic. As Rabbi Jakobovits stated, in secular systems, principles are generally distilled down to narrow laws that can be legislated and are enforceable by the executive branch of government and are subject to judicial review. The degree of judicial review varies with the different secular jurisdiction, with the U.S. Supreme Court having taken upon itself the full right of judicial review early in its history. This was never challenged and is now an assumption of U.S. law, and although not directly grounded in a clear mandate from the U.S. Constitution it has been accepted by all who participate in the U.S. legal system. This actually closely parallels what happens in Jewish law, i.e., over time the acceptance by consensus of the law defines the law.

A secular legal system must suffice with those two types of laws: specific, narrow regulations and general principles. *Halacha, because it comes out of a different relationship between the law and the governed, i.e., a voluntary religious system,* can go one step further and incorporate a concept known as "*lifnim mishurat hadin*," literally past the line of the law, i.e., acting above and beyond the demands of the law. Rabbi Yisrael Isserlin (1390-1460, who was born in Germany, fled to Italy, and eventually settled in Austria) was asked the following. Goose feathers are easy to collect after they are shed or when they are ready to fall off (i.e., when a bird is "molting," which birds generally do once a year). But, the bird's feathers are softer when they are not fully developed and are still tightly attached to the skin. Plucking such feathers seems to cause great pain to the goose. The question is whether it is permitted by *halacha* to pluck those feathers?

In a short response,[20] Rabbi Isserlin starts by citing six Talmudic sources to demonstrate that even if a relatively minor human benefit accrues, the pain to the animal is permitted. Thus, this plucking, according to the letter of the law might be permitted. There is no specific prohibition and the general rule of *tza'ar ba'alei chaim* is not applicable. However, he then adds the critical additional point: Even though it is not technically prohibited, it is cruel and therefore people abstain from it. Based on a Talmudic source,[21] he shows that it is possible to even be punished by Heaven for a permitted act that is nonetheless cruel. Thus, his ruling creates limitations on engaging in excessive cruelty to animals with the excuse that it serves human need, i.e., that includes a higher bar to the issue of need. This is just the type of reasoned ethical thought that might be useful in modern times. Note: ethics as a discipline requires the application of reason to specific problems. People rarely disagree about

[20] *Terumat haDeshen* 2:105.

[21] TB *Bava Metzia* 85a.

the operation of rational arguments. Rather, people disagree over how specific needs, how to assess the assumptions, and how the assumptions are valued, protected, or contrasted with respect to competing needs or concerns.

An interesting postscript is that the 17th century Rabbi Shabbatai ha-Kohen *Aruch*[22] records in his commentary on the *Shulchan,* a tradition that the questions in Rabbi Isserlin's *Terumat HaDeshen* were actually written by Rabbi Isserlin himself and were not posed by others. If true, this implies that Rabbi Isserlin specifically wanted to teach this point about acting beyond the letter of the law to avoid cruel behavior.

IV. Specific Applications

In the last several centuries, technological and scientific advancements along with urbanization and industrialization have raised new questions in the realm of animal welfare that both secular society and religious communities have had to deal with. At this point, this paper will further explore some of these questions to see how these issues were dealt with by rabbinic authorities, and to trace the development of the contemporary state of Jewish animal welfare principles. This includes how the rabbis in recent centuries have dealt with conflicting principles, competing interests, and advances in science and technology.

A. Hunting

For millennia, humans lived off the success of hunting. Their prey provided food, clothing, fuel, writing surfaces, and many other needs. Hunting was and still is essential for human survival in certain areas. But hunting was also always a sport. Probably the first person in post-Biblical Jewish history to be noted as being a masterful hunter was the much vilified Herod. Josephus describes him as "a most excellent hunter, in which sport he generally had great success owing to his skill in riding, for in one day he once killed forty wild beasts."[23] Jews in general viewed hunting as cruel and "un-Jewish." The Talmud[24] understands the first verse in Psalms:

> Blessed is the man who does not walk in the counsel of the wicked nor stand in the path of sinners nor sits in the seat of mockers, as referring to one who avoids participating in the hunt. The 11th century Talmudic commentator Rashi explained that it was

[22] *Shach*, Yoreh De'ah 196:20.
[23] Josephus, Wars, I, xxi, 13.
[24] TB *Avodah Zara* 18b.

> talking about hunting of wild animals with the assistance of dogs and their entire intent is for sport and fun. This understanding of Rashi was later codified in the primary Ashkenazi code.[25]

In the 13th century the leading rabbinic figure Rabbi Meir of Rothenburg stated that "he who hunts game with dogs, as non-Jews do, will not participate in the joy of the [messianic feast of the] Leviathan."[26] With urbanization and the development of firearms, the sport of hunting evolved as an activity that was no longer tied to basic human needs. In the late 18th century Rabbi Yechezkel Landau (Prague, 1713-1793) was asked by a Jew with a large estate whether he was permitted to hunt using a "fire stick." Rabbi Landau responded with a four part answer.[27] He analyzes the legal aspect by citing Talmudic sources that as long as there is human benefit there is technically no prohibition of *tza'ar ba'alei chaim*. He also ruled that there is no problem of "*bal tashchit*", wanton destruction of property, i.e., a strong Jewish prohibition against waste as long as the hunted food was used for food and the carcass was not wasted. Thus, legally hunting should be permitted. But, Rabbi Landau then includes extra-legal issues. Hunting is dangerous and Judaism discourages unnecessary risk-taking by humans, and thus hunting should be avoided. However, if it is part of a person's livelihood, then some risk taking is permitted – one may be a fireman, construction worker, or astronaut, for example. From these three sections one sees that it is technically permitted, although ill-advised because of the inherent risk, but to earn a living it would be permitted. But, his final supra-legal argument overturns everything. Rabbi Landau writes that there is something repulsive about the whole enterprise, i.e., that it is simply cruel. It is morally repulsive to the extent that he says he was shocked that a Jew would ask such a question. Hunting was something typically associated in the minds of medieval Jews with the Biblical Esau and Nimrod and with their non-Jewish neighbors. It was extremely rare for Jews to hunt, although isolated examples can be found.[28] Thus, Rabbi Landau was surprised at the query and his conclusion is that if one needs to hunt to support himself he may, but as sport it is prohibited, and it is ideally not desirable as an occupation or as a way to procure food and should be avoided if at all possible. Thus, today most decisors do not permit hunting by a Jew.

---

[25] *Rema*, Shulchan Aruch, Orach Chaim 316:2.

[26] Rabbi Meir of Rothenburg, Shu"t number 27

[27] *Tshuvot Noda Biyehuda* YD 2:10; *Cf.* J. Reischer, *Shvut Yaakov* 2:63.

[28] Israel Abrahams, Jewish Life in the Middle Ages, 375-77 (Meridian Books, Inc. 1958).

B. Bullfighting

A question that has been discussed in previous centuries was again taken up by one of this generation's leading rabbinic authorities and a former Chief Rabbi of Israel, Rabbi Ovadia Yosef (b. 1920). In a responsum[29] he discusses the permissibility of attending a bullfight. He characterizes the institution of bullfighting as "a culture of sinful and cruel people;" the opposite of what Judaism hopes to instill. He cites several Talmudic passages that demonstrate that *tza'ar ba'alei chaim* is a Biblical principle that even overrides certain other laws. Certainly, the treatment the bull receives is prohibited as an obvious form of unnecessary cruelty. There is no human benefit (other than base entertainment) and thus there seems little room to permit even minor suffering. Furthermore, even merely attending such an event, he rules, is prohibited because it strengthens the hands of sinners. Then moving into extra-legal territory, he notes that exposure to acts of cruelty, such as bullfighting, erodes one's compassionate nature and implants within a person a sense of accepting cruelty. Therefore, Rabbi Yosef rules that it is prohibited to attend bullfights and requests that this ruling be widely disseminated to others.

Not all rabbis prohibited all animal sports. The 15th century German rabbi Israel Bruna, one of the greatest Talmudic authorities of his time and one of the primary sources of Ashkenazik halacha, was asked for his position on observing hose races.[30] He ruled permissively and explained that the one asking the question was interested in attending not for pleasure but for the purpose of becoming proficient in equine practices in order to enhance his business and to use horses for the legitimate purpose of protection. He added that he is not so sure he would rule similarly were the question in regard to attending jousting events.

C. Pre-slaughter Stunning

An important topic to discuss with respect to animal welfare is the issue of pre-slaughter stunning of animals.[31] Many animal rights and veterinary societies advocate for pre-slaughter stunning (although it should be noted that there are serious animal welfare concerns

[29] *Teshuvot Yechaveh Da'at* 3:66

[30] *Teshuvot Mahari Bruna,* 71.

[31] Note that this paper is not about pre-slaughter stunning, and this section is not intended to be a thorough treatment of the subject. There is much more to say about the scientific evidence, both pro and con for stunning systems (mechanical, electrical and gas) that lead to unconsciousness, but this paper is not the place for that. The goal here is to present some of the development of the Jewish position and the evidence upon which it is based.

associated with stunning[32]) and yet there is unanimity among Jewish religious authorities that all forms of pre-slaughter stunning are disqualified under Jewish religious law. This has led some people to erroneously conclude that kosher slaughtered (*shechita*) animals which become unconscious through a throat cut may suffer more than when slaughtered with prior stunning; a position vociferously challenged by rabbinic authorities and shechita advocates. As has been shown in this paper, good animal welfare is a fundamental concept in Judaism. This seems puzzling to some people who see an apparent contradiction in a system that mandates both concern for animals and slaughter via shechita. Scientific evidence, including field studies, shows that the question of the advantage of unconsciousness using various modern stunning systems over obtaining unconsciousness by a throat cut and rapid bleeding remains debatable and in addition, the success or failure of any of these slaughter systems may be species and context dependent, i.e., depend on variables not directly related to the act of slaughter; which can be controlled or modified to improve the quality of the slaughter, a goal that all systems of slaughter need to embrace.

Judaism continues to emphasize the importance of a high standard of animal welfare and of excellence in the actual practices used by the slaughter man during slaughter, and Jews therefore do not see any contradiction between their concern for animals and their slaughtering via shechita to induce unconsciousness. It is therefore important to understand how the decision not to make animals unconscious using other stunning systems at slaughter was reached and what measures of welfare are used to assure that unnecessary pain does not occur to these animals.

Two important factors need to be considered and were taken into account by rabbinic authorities when studying this question: 1) that there is ample evidence to suggest that *shechita* is a method of slaughter that when done correctly, is consistent with animal welfare concerns. It is generally agreed that measuring pain and suffering in animals still remains an inexact science, but there is scientific research that shows that *shechita,* when done properly, can be a humane method;[33] and 2) that most of the details specifying how *shechita* is to be done fall within the first category of law – specific laws – and thus a general principle

---

[32] Ari Z. Zivotofsky & Rael D. Strous, *A Perspective on the Electrical Stunning of Animals: Are there Lessons to be Learned from Human Electro-Convulsive Therapy (ECT)?* 90 Meat Science 956 (Nov. 28, 2011)

[33] Temple Grandin & Joe M. Regenstein, *Religious Slaughter and Animal Welfare: A Discussion for Meat Scientists*, Meat Focus International, Mar. 1994, at 115-123; S.D. Rosen, *Physiological Insights into Shechita*. The Veterinary Record, June 12, 2004, at 759-65; Ari Z. Zivotofsky, *Government Regulations of Shechita (Jewish Religious Slaughter) in the 21st Century: Are They Ethical?*, 24 J. Agri. and Envtl. Ethics 1 (2011).

such as "*tza'ar ba'alei chaim*" cannot override the specifics of *shechita*, which according to many decisors are violated by the use of the other pre-slaughter methods to obtain unconsciousness, i.e., mechanical, electrical, or gas systems. However, these were not the sole reasons for not accepting these systems and the responsa literature dealing with the issue extends to literally hundreds of pages. A recent essay by Shafi et al[34] addresses this issue from a scientific and technical perspective. It should be noted that studies attempting to measure and then discuss objective measures of an animal's physical pain will not be addressed here as this is outside the scope of this discussion, although it is an extremely important issue and often poorly done. The specific measures are not relevant to the arguments being developed in this paper. Furthermore, it needs to be emphasized that the specific laws of *shechita* for the most part only define the actual slaughter and is not necessarily synonymous with all that transpires within a kosher slaughter facility. Many of the pre-handling aspects of the slaughter are flexible and should conform to current best modern animal welfare practices standards.

The *halachik* aspects of other slaughter systems to obtain unconsciousness have been dealt with by a number of 20th century authorities. One of the most thorough treatments is the 1953 responsa by Rabbi Yitzchak Yaakov Weiss (1902-1989) in his 9-volume monumental work *Minchat Yitzchak*.[35] Rabbi Weiss was originally Hungarian. For 20 years he headed a rabbinical court in England, and then retired to head one of the most significant rabbinical courts in Jerusalem. He is frequently cited today in all areas of Jewish jurisprudence. His responsum about stunning is a dense work (five pages of writing similar to those seen in Figure 3) that is packed with citations and precedents and is meticulously argued. Herein, only a few of the salient points will be presented. His starting point is that the prohibition of *tza'ar baalei chayim* is Biblical (d'oraisa) in nature and, thus, must always be taken into consideration. Because of that, other systems of stunning, if they indeed minimize animal suffering, should be given a fair hearing. *Halacha* must always be based on precedent and may not be created at the whim of the decisor, no matter how great a *halachic* authority he may be. Thus, Rabbi Weiss sifts through the Talmud for precedent and finds two relevant discussions. The Talmud discusses medicinally-induced sleep as well as drugging convicts before execution. Rabbi Weiss argues that *tza'ar baalei chayim* is such an important principle that if these drugs were known at the time, as they apparently were and if pre-slaughter stunning systems were permissible, and then the sages

[34] S. Shafi, S.D Rosen, J.M. Regenstein, & E. Clay, *Comparing Kosher, Halal and Secular Practices for the Slaughter of Mammals*, *An Essay for Consumers*. RMC Proceedings, (last accessed Mar. 26, 2012) *available at* www.meatscience.org/Page.aspx?ID=3014

[35] *Minchat Yitzchak* 2:27.

of the Talmud would have mandated it. And yet there is no suggestion in the Talmud or later sources that required or permitted the administration of these drugs to animals prior to slaughter.

He further finds a Talmudic account where a form of stunning of animals did occur. The story is told regarding Yochanan the High Priest who officiated in the Temple in Jerusalem during the first century BCE and who put a stop to a short-lived practice of what was essentially captive bolt stunning of bulls before they were slaughtered as a sacrifice. He was concerned that such a procedure can lead to the animal being a *treifa*.[36] Even though it might theoretically be possible to examine the animal after death and determine if it is indeed a *treifa*, Jewish law does not institute new practices that would then necessitate that the animal be given a post-mortem exam before it would be permitted for consumption. Rabbi Weiss argues that this is true regarding stunning systems because these systems may lead to a *treifa* that is not acceptable to institute a procedure that prohibits the animal from being acceptable until and unless it is properly inspected.

> Rabbi Weiss invokes another *halachic* category as well. For an animal to be permitted, it must die from the *shechita* and not prior to it, even if the "prior" is only moments before.[37] An animal that is very sickly is termed a "*mesukenet,*" and although it may be slaughtered, it must be definitively determined that it did not die even moments before the cut. Rabbi Weiss suggests that stunning systems cause the animal to be classified as a "*mesukenet*," with its attendant regulations. However, he argues that it is a *mesukenet* for which the usual "test" to determine if the animal is still alive prior to *shechita* would not be efficacious. As an additional problem, he further suggests a range of possible *treifas* that could be created through the process that cannot be readily observed, even with a post-slaughter inspection of the animal. In conclusion, after an exhausting discussion, Rabbi Weiss strongly forbids stunning systems for obtaining unconsciousness.[38]

---

[36] A *treifa* is an animal with any of a group of serious physical defects that render it not fit for consumption under the kosher laws.

[37] It should be noted that there are several stunning techniques employed in non-kosher slaughter, each of which has its own issues. Captive bolt stunning almost certainly results in a *treifa*. Some forms of captive bolt, electrical, and gas stunning are termed as reversible, i.e., they are not intended to kill the animal but rather to induce a temporary loss of consciousness. Rabbi Weiss's concern is that even "reversible" stunning techniques not infrequently do lead to death, and there is no way of ascertaining post-slaughter in which animals this death occurred.

[38] A small number of kosher slaughter plants do a post-slaughter stun of the animal. This too is controversial and has been criticized by the decisors. The halachic issues related to it will not be dealt with in this paper.

D. Veal Production

Another recent issue that has been addressed by rabbinic authorities is the permissibility of eating veal. Rabbi Moshe Feinstein (1895-1986), arguably the most significant *halachic* authority in the US in the late 20th century, discusses this issue in his responsa *Shu"t Igrot Moshe*.[39] He raises several potential issues. Meat and milk that are cooked together are prohibited not only for consumption, but a Jew may not derive any benefit from such a mixture. If that is the primary feed of the veal calf, Rabbi Feinstein suggests the possibility that the resulting meat would be prohibited because of the feed. He also cites veterinary reports of higher incidences of lung disease that would result in a large number of *treifas* in veal calves, a number that might be so high as to prohibit their kosher slaughter. Finally, he raises the question of how the animal was raised and if that violates the principle of *tza'ar ba'alei chaim*. He was quite familiar with the rule that *tza'ar ba'alei chaim* is not an issue if there is human benefit, but he argues that not everything that anyone decides is beneficial to him is significant enough to override *tza'ar ba'alei chaim*. And the benefit of this soft white meat that some people enjoy is not important enough, so that if the agricultural conditions and slaughter results are as described to him, then veal is prohibited because of *tza'ar ba'alei chaim*. Improvements in veal production have led some rabbis since then to rule differently, and even one of his main disciples (Rabbi Yisroel Belsky) currently permits veal as there are significantly better conditions both on the farm and at time of slaughter than that which existed when Rabbi Feinstein ruled on the issue.

E. Animal Experimentation

A final area that has received considerable attention in recent decades but that has actually been discussed in rabbinic literature for several hundred years is animal experimentation, such as that used for the testing of new drugs. Rabbi Eliezer Waldenberg (1915-2006), a leading Israeli *halachic* medical ethicist, dealt with this in his multi-volume responsa in a responsum penned in 1978.[40] After citing the relevant precedents, he unequivocally permitted medical animal experimentation, even if it causes pain to the animal, because of the overriding human need. He made a point of stating that it was not even considered "pious" to refrain from animal testing.

---

[39] *Even Ha'ezer* IV:92.

[40] *Tzitz Eliezer* 14:68.

As noted above in the description of "tza'ar ba'alei chaim," significant human benefit can trump the prohibition of "tza'ar ba'alei chaim." These two factors must always be balanced against each other by a knowledgeable rabbinic decisor to determine if the human gain is significant enough to warrant causing the animal pain. This is, of course, *the* pivotal point. To our great chagrin, we have not found any points of general guidance to suggest how this should be done. What is generally done is that the rabbi who is asked the questions compares the current question as best he can to previous questions and then uses his own ethical compass to reach a conclusion. As seen, Rabbi Feinstein believed that the "benefits" of veal were insufficient, while Rabbi Waldenberg viewed the acquisition of medical knowledge as reason to permit some animal pain. But sometimes they will clearly state that they are ruling with no precedent. Thus Rabbi Waldenberg added at the end of his responsa that it was clear to him that the experiment must nonetheless be done in such a manner as to minimize the pain e.g. via local anesthesia. Rabbi Moshe Feinstein, in a different responsum[41] dealing with killing flies, says that while it is permissible, it should preferably not be done by hand because that can lead to developing a cruel nature. He observes that although he has not seen this mentioned anywhere else, it seems proper to him.

V. Developing a Sensitivity

Jewish law at times limits permitted activities to develop sensitivity towards animal suffering. Judaism permits the eating of meat and hence the slaughtering of animals for food. There are times when such consumption is even encouraged, such as on holidays. This does not negate the fact that one must always be cognizant of the fact that to acquire the meat, an animal's life was taken. There is an obligation found in the Bible[42] to cover the blood of every fowl and wild animal slaughtered. This can be viewed as a symbolic burial of the animal. The carcass of the slaughtered animal can obviously not be buried – it was slaughtered to be eaten – but as a reminder that a life was taken, the Bible specifically instructs the slaughterer to provide the animal with a symbolic burial.

Another example of this can be found in the timing of the slaughter. It is prohibited to kill an animal on the Sabbath. However, to provide fresh meat on the holidays, such as Passover and Tabernacles (Sukkot), in an era before refrigeration, it is permitted to slaughter for food on the holidays. Interestingly, the question then arose about slaughtering on Rosh Hashanah. This question was not raised until the

[41] Igrot Moshe, Choshen Mishpat 2:47.
[42] *Leviticus* 17:13; TB Hullin ch. 6; Maimonides, Sefer Hamtzvot 187.

early 19th century when Rabbi Yehuda Assad provided an interesting analysis of it. He suggests that all shechita should be prohibited because of tza'ar ba'alei chaim and is only permitted because the Torah explicitly permits it. However, on Rosh Hashanah, a day on which all Jews are pleading for mercy in front of the Divine tribunal, it is inappropriate to slaughter an animal. It is clear that according to the letter of the law, it is not prohibited, but as with Terumat haDeshen's responsum dealing with goose feathers, the practice *lifnim mishurat hadin* is not to slaughter on Rosh Hashanah. Rabbi Assad says that he then checked with the local shochet who confirmed that indeed the widespread custom among shochtim is not to slaughter on Rosh Hashanah so as not to injure any living being. Several decades later, Rabbi Hillel Posek[43] reiterated that the custom is not to slaughter on Rosh Hashanah but that by law it is permitted and therefore, in hot places where it was dangerous to eat day old meat, slaughtering may be done on Rosh Hashnah.

Sensitivity to animals is so central a theme in the rabbinic mindset that it was seen as a pre-condition for leaders of the Jewish people. The quintessential Jewish leader was Moses and the Talmud and midrashic literature contains many descriptions of his character traits.[44] Despite there being ample discussions of what qualities Moses possessed that led God to choose him as the leader, the Midrash and the Zohar added one more story and give an additional reason for Moses' selection. The midrash states:

> "The Lord tests the righteous" (Pa. 11:-1-5). . . . How does He test them? Through the way they tend sheep. He tested David in this way and found him a good shepherd. . . . Said the Holy One, blessed is He: Let him who knows how to tend sheep come and tend My people. … He tested Moses in the very same way. Our Masters related? Once when our Teacher Moses - peace to him - was tending Jethro's flocks in the wilderness, a kid ran away, and he pursued it until it reached a shady spot, where a water hole came in view and the kid stopped to drink. When Moses came up to it, he said, "I did not know that you ran away because of thirst; you must he exhausted." So he put it on his shoulder and walked beck. Said the Holy One, blessed is He, to him, "you are indeed compassionate to care for the flock belonging to a mortal with such tenderness; therefore you will tend My flock." When ewes lamb, the shepherd gathers the new-born lambs in his bosom lest they weary or overtire, and tenderly carries

43 Hillel Omer, 291.

44 Ari Zivotofsky, *The Leadership Qualities of Moses Judaism*, Business Library 258-69 (Summer, 1994) *available at* http://findarticles.com/p/articles/mi_m0411/is_n3_v43/ai_16348284/

> them after their mother. So must a Jewish leader lead his people tenderly, with compassion, not with cruelty … So was Moses indeed a faithful shepherd, and the Holy One, blessed is He, saw that he was fit to tend Israel, exactly in the same way that he tended the flock, caring for the rams and the ewes in accordance with their respective needs."[45]

None of this has any hint in the biblical text itself. Why did the early rabbis see a need to include these legends? Had Moses not already proven himself worthy and caring? The answer can be found in another midrash that states: "God does not give greatness to a person until he tests him with a small thing and then he elevates him to greatness… David was tested with sheep … and so too Moses was tested with sheep…and God took him as the shepherd of Israel."[46] Other texts add Jacob, Ezekiel, and Amos, as leaders that were vetted as shepherds. It is almost as if the midrash is saying that God uses animal welfare as a test for His leaders' leadership qualifications. Only if the individual displays sufficient regard to the animals' wellbeing does God then elevate the person to leading His people.

VI. Discussion

We have focused on the development of the Jewish rules regarding animal welfare. We think that it is important for framers of any legal system to be familiar with other legal systems, including secular legislators being informed about an ancient religious system, despite the significant differences between a religious and a secular system.

The three-tiered system of Jewish laws provides for a great deal of flexibility. There are specific laws that are the basics, the foundation, and are inviolable. No general principle can override them and they are obligations incumbent on all Jews. Because a religion such as Judaism has no formal mechanism in modern times to create new legislation, these specific laws alone would be insufficient. The existence of general principles is, thus, very useful. As has been seen, these can be used by later authorities to tackle new questions. A secular system has the advantage that new legislation is possible, albeit often a slow process. Thus, these systems also avail themselves of general principles that are interpretable by a court system without the recourse to a legislative body.

Because of the major differences between a secular and religious system, the three legs of the tripartite system are applicable, although less so, to a secular system. In a religious system there is a Divine

---

[45] *Exodus Rabbah* 2:2; Zohar on *Exodus* 2:21a.

[46] *Exodus Rabbah* 2:3.

element to the law and thus a decisor can introduce a *lifnim mishurat hadin* argument and reasonably expect it to be voluntarily adhered to. He can even suggest an element of Divine punishment for non-adherence. In a civil system this is not true and, thus, this final element is less transferable to a secular system, although an appeal to secular ethics can lead to wide acceptance of ethical principles that are nonetheless not enforceable in a secular court of law.

There are other significant differences between religious and secular systems. The most obvious is the origin of the laws, both general and specific; in the former they are viewed as having a Divine nature in addition to their human component, while secular systems are normally considered to be totally of human origin. Although, an appeal to a Divine authority may be included as a part of the legal documents. This leads immediately to another important difference - enforceability of the laws. In the Jewish religious system, there is presently no court system recognized by governing secular authorities, the adherents believe in Divine retribution and, thus, there is in essence an honor system for the enforcement on Earth. While in the latter legal system, only laws that are fully transparent with violations that are both detectable and able to be monitored can be enforced, so that only those types of laws are worth promulgating. It should be noted that both in Israel and elsewhere, including the US, there are Jewish religious courts known as beit din. These courts deal primarily with family and monetary law. They do not deal with issues such as tza'ar ba'alei chaim.

A less obvious but important distinction is the ability to inculcate a culture's values from a young age, something that by its very nature is more easily done in a religious setting in which rituals can be used to impart values. Within Jewish religious practice, there are several traditions that serve to teach even very young child the obligation to be kind to animals. Every year when in the annual cycle of publicly reading the entire Torah, the first five books of the Bible, the section dealing with manna is reached, children are taught to feed the birds as a reward for the birds helping Moses out of a bind related to manna. Moses had relayed God's instruction that the Jews should gather the heavenly manna for 6 days, but on the Sabbath none would appear. There is a rabbinic tradition that in order to mock Moses and make him out as a liar, two people, Datan and Aviram, went out on Friday night and spread some manna. In the morning they said to the people to go out and see that indeed there was fresh manna. When they went out they found nothing because the birds had eaten the manna which Datan and Aviram had put out. Similarly, when studying the Torah portion dealing with not eating *treifa*, an animal unfit due to certain blemishes,[47] the Bible says to

[47] *See* Ari Zivotofsky, *What's the Truth About…Glatt Kosher*, Jewish Action, (Winter 1999) http://www.ou.org/publications/ja/5760winter/legal-ease.pdf

feed the *treifa* to the dogs.[48] The children are taught that this is a reward to the dogs for not barking at the Israelites as they departed Egypt.[49]

A story such as that told by Rabbi Weismandl[50] can only be the result of ingrained training to avoid *tza'ar ba'alei chaim* from a young age. He describes Isaac Rosensweig, a Talmudic scholar who earned his living raising chickens, who was being taken with his entire family on a train to the death camps by the Nazis. He pleaded with the Nazis to please go to his house and give food and water to the chickens, which had not received any food or water all day. The Nazis merely laughed at him. Suddenly, he saw his friend Moshe Tziltz who had still not been deported and Rosensweig screamed to him "*tza'ar ba'alei chaim* is a Biblical obligation – give food and water to the chickens!" The concern by Rosensweig for the chickens was not because they were his chickens, but because he knew he would never see them again. It was because he had been inculcated with that value from his earliest days. And he knew that if he couched it in *halachik* terms Tziltz would be more likely to comply with this request since it must have been difficult to do under the circumstances.

VII. Conclusion

Civil authorities are today engaged in writing animal welfare codes. Judaism contains a millennia old system that includes animal welfare regulations whose development is well-documented. Some of key elements of the halachik decision making process that are worth noting are its ability to address new issues based on time-tested precedent of its tripartite system of laws. The *halachic* system has effectively responded to new situations as they arise. *Halacha*'s tripartite, currently non-legislative, system of jurisprudence has evolved to effectively address current issues and is widely accepted by those who practice Orthodox Judaism. This system can serve as a model for civil authorities. The differences between a religious and secular system are significant and must be kept in mind and decrease to a certain extent the transferability of the *halachic* system, but do not negate it as an intellectual model to improve the quality of modern secular laws and regulations. Specific laws need to be well defined and cover common cases. They must also be able to provide guidance for later use in interpreting general rule(s). General rule(s) can then be enacted that must be broad enough to cover unanticipated issues.

---

[48] *Exodus* 22:30.

[49] *Exodus* 11:7.

[50] Chaim Michael Weissmandl, Min Hamaitzar 32 (Jerusalem 1960)

A Large Step – But Still a Long Way to Go Austrian Animal Welfare Legislation: An Overview

Regina Binder[1]

1. Introduction

It is generally acknowledged that, apart from the United Kingdom, Sweden and Norway, the German speaking countries (Austria, Germany and Switzerland) have a particularly strong tradition of animal welfare both in moral attitude and in legislation. Consequently, animal welfare provisions in these countries are often cited as a model.

The following article provides a short survey of the development, philosophical approach and basic characteristics of the Austrian animal welfare legislation. This article sets out to explore the beginning of legal animal protection in Austria in the middle of the 19th century and analyzes its structural changes in the course of the 20th century. The article then focuses on the new Federal animal welfare legislation in Austria, which went into effect in 2005. After characterizing major principles of the Austrian Animal Welfare Act, the main advantages and deficiencies of this law are sketched out. Although the Austrian Animal Welfare Act has been claimed to play a pioneering role in the development of animal welfare legislation, it is clear from the animal welfare point of view that there is still a long way to go until the (legal) protection of animals can be claimed to be satisfactory both theoretically and practically in Austria.

2. Short History and General Characteristics of the Austrian Animal Protection Legislation

Austria, as most of the European countries, has adopted the tradition of Civil Law, which is characterized by a particularly strong and lasting influence of Roman Law. Within this kind of legal system, judicial decisions are not acknowledged as a source of law but, by method of deduction, are derived from legislation.[2]

---

[1] Regina Binder, Dr.iur. Dr.phil. Since 2002, Dr. Binder has served as the head of the department for animal welfare and veterinary law at the University of Veterinary Medicine in Vienna. During this period, she has also given numerous lectures and produced numerous publications dealing with Austrian animal welfare and animal experimentation law.

[2] *E.g.*, Mary Ann Glendon et al., Comparative Legal Traditions 17 (3d ed. Thomson & West 2008)

2.1. Historical Development and Philosophical Background

2.1.1. Step 1: From Indirect Towards Direct Animal Protection

Throughout the 19th and the early 20th centuries animal protection provisions in Austria have been aimed at the protection of public order and morality, thus adopting a purely anthropocentric approach. An imperial decree dating from 1846 banned cruelty against animals only if it was committed in public and aroused public nuisance.[3] Therefore the target of protection was not the abused animal, but man society (concept of indirect animal protection).

Only at the end of the first quarter of the 20th century, the first legal provision to safeguard the animal itself was passed in Austria; in 1925 an administrative law went into effect, protecting animals from being "*wickedly abused, brutally mistreated or ruthlessly overworked*."[4] From then on, animal protection legislation was characterized by ethically motivated provisions that aimed at the protection of animals as living creatures, who are able to experience not only well-being, but also pain, suffering, and distress (concept of direct animal protection). Philosophically, the paradigmatic shift from anthropocentric (indirect) to ethical (direct) animal welfare can be traced back to Jeremy Bentham, pointing out that it is not a creature's cognitive abilities, but its capacity for suffering that makes it worthy of moral and legal protection.[5]

After World War II, the German Animal Protection Act from 1933, the so-called *Reichs-Tierschutzgesetz*,[6] which had been set into force in Austria in 1939, was abolished.[7] Due to the Austrian Constitution, both legislative and executive power in the domain of animal protection rested with the nine states (*Laender*).[8] The first series

---

[3] *Hofkanzleidekret* nr. 42996, Jan. 8th, 1846.

[4] In the German original Art. VIII Abs. 1 lit. e) *Einführungsgesetz zu den Verwaltungsverfahrensgesetzen (EGVG)* 1925 has the following wording: *„[...] strafbar ist, wer ein Tier boshaft quält, roh misshandelt oder rücksichtslos überanstrengt*."

[5] Jeremy Bentham, An Introduction To The Principles of Morals and Legislation 235f (Oxford: Clarendon Press 1789) (1828) ("[T]he question is not, Can they *reason*?, nor Can they *talk?* but, Can they *suffer?*").

[6] *Reichstierschutzgesetz*, [Reich Animal Protection Law], Nov. 24, 1933, Reichsgesetzblatt [RGBl.] at I S. 987 (Ger.). Paradoxically the rather progressive *Reichs-Tierschutzgesetz* contained many regulations, which later on were to serve as a model for modern animal protection legislation.

[7] *Verfassungsgesetz vom 1. Mai 1945 über die Wiederherstellung des Rechtslebens in Österreich (Rechts-Überleitungsgesetz - R-ÜG*), STAATSGESETZBLATT [StGBl.] nr. 6/1945 [Transition of Legislation Act].

[8] Art. 15 *Bundes-Verfassungsgesetz (B-VG*) [Austrian Constitutional Law].

of animal protection acts were passed in the late 1940's and early 1950's, containing little more than penal clauses for cruelty against animals.[9] For nearly half a century, issues of animal protection were regulated by ten[10] animal protection acts in Austria.

2.1.2. Step 2: From National to International Level: Animal Welfare Legislation of the Council of Europe and within the European Union

In the course of progressing cooperation among European countries, animal welfare issues started to gain importance in the context of international law since the late 1960's. Starting in 1968, the Council of Europe issued a number of conventions dealing with welfare issues, such as animal experimentation, husbandry, slaughter and transport, but also defining welfare requirements for pets (e.g. regulations on defect breeding in dogs and cats). Additionally, expert-working groups have formulated recommendations for the keeping of diverse farm animal species.[11] It has been, however, the single states choice to adopt these contractual regulations.

When the idea of political integration became more powerful, the European Union ("EU") also started to issue minimum standards for the keeping of farm and lab animals, which, in contrast to the conventions drafted by the Council of Europe, are obligatory for each member of the

[9] Burgenländisches Tierschutzgesetz [LGBl] [ANIMAL WELFARE ACT OF BurgenlAND] Dec. 20, 1990 (State Law Gazette) No. 1990/86, "as amended, LGBl 2002/80" (Austria);-Kärntner Tierschutz- und Tierhaltungsgesetz [LGBl] [Carinthian Animal Welfare and Animal Husbandry Act] (State Law Gazette) No. 1996/77, "as amended, LGBl 2002/22" (Austria); Niederösterreichisches Tierschutzgesetz [LGBl] [Lower Austrian Animal WELFARE ACT] (State Law Gazette) No. 50/1986, "as amended, LGBl 2002/62" (Austria); Oberösterreichisches Tierschutzgesetz [LGBl] [Upper Austrian Animal WELFARE ACT] Dec. 29, 1995 (State Law Gazette) No. 1995/118, "as amended, LGBl 2002/84" (Austria); Salzburger Tierschutzgesetz [LGBl] [Salzburg Animal Welfare Act] Sept. 7, 1999 (State Law Gazette) No. 1999/86, "as amended, LGBl 2003/123" (Austria); Salzburger Nutztierschutzgesetz [LGBl] [Salzburg Animal WELFARE Act] (State Law Gazette) No. 1997/76, "as amended, LGBl 2003/124" (Austria); Steiermärkisches Tierschutz- und Tierhaltegesetz [LGBL] [Styrian Animal Welfare and Animal Husbandry Law] (State Law Gazette) No. 2002/106, (Austria); Tiroler Tierschutzgesetz [LGBl] [Tyrol Animal WELFARE Act] (State Law Gazette) No. 2002/86, (Austria); Vorarlberger Tierschutzgesetz [LGBl] [Vorarlberger Animal Welfare Act] (State Law Gazette) No. 2002/50 (Austria); Wiener Tierschutz- und Tierhaltegesetz [LGBl] [Viennese Animal WELFARE and Animal Husbandry ACT] Sept. 23, 1987 (State Law Gazette) No. 1987/39, "as amended, LGBl 2002/32" (Austria).

[10] *Cf.* footnote 11.

[11] *Cf.* Annex 1. (for the most important conventions related to animal welfare).

EU.[12] Similar to the old animal protection laws of the 19th century, the directives and regulations of the EU do not primarily aim at protecting the animals' wellbeing but rather at safeguarding human interests; initially by establishing the same competitive conditions within the Common Market.[13] Other important anthropocentric motives for safeguarding health and welfare of farm animals are consumer protection ("from stable to table") and product safety, which play an eminent role in the European Union's legislature.

2.1.3. Step 3: From Anti-Cruelty Towards Animal Welfare Legislation

In the second half of the 20th century animal protection legislation, originally restricted to the prohibition of anti-cruelty, developed towards animal welfare legislation. This newer style of regulation created ample sets of technical requirements for the housing, handling and management of various animal species, with the intent to guarantee minimum conditions for animals' well-being.[14] Thus the Austrian states issued a second series of animal welfare acts in the course of the 1980's. By the end of the 1990's animal welfare issues in Austria were regulated by ten animal welfare acts,[15] which were specified by nearly forty statutes.

---

[12] *Cf.* Mike Radford, Animal Welfare law in Britain. Regulations and Responsibilities 141 (Oxford University Press) (2001); *Cf.* Annex 2 (for the most important directives and regulations of the European Union).

[13] Since 1999, however, the Union's attitude towards the concern of animal welfare has, if only theoretically, been altered when the value of animal welfare was for the first time enshrined in an annex to the Treaty of Amsterdam. The current version of Art. 13 of the Treaty on the Functioning of the European Union (TFEU), Mar. 30, 2010, 2010 O.J. (C 83) 47 , has the following wording:

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

[14] The paradigmatic change from anti-cruelty regulations towards a set of obligations intended to guarantee a minimum welfare standard is being regarded as a direct consequence of the Brambell Committee's report, createdin response to R. Harrison's book "Animal Maschines"; *see also*. Mike Radford, Animal Welfare Law in Britain 264 (2001).

[15] In the state of Salzburg two animal welfare acts were passed, one "general" (*Salzburger Tierschutzgesetz*[Animal Welfare Act] 1999, Landesgesetzblatt No. 25/1999) and one applying to animals kept for farming purposes (*Salzburger Nutztierschutzgesetz* [Farm Animal Welfare Act] 1997, Landesgesetzblatt No. 22/1997).

This confusing and rather inconsistent legal situation was increasingly criticized, especially by animal welfare organisations who had been demanding a modern Federal Animal Welfare Act for more than two decades. During the 1990's the Austrian states still tried to defeat the claim for a federal animal welfare legislation and tried to harmonize their animal welfare acts and statutes by ratifying agreements.[16] These agreements, however, were never sufficiently implemented.

When Austria became a member of the European Union in 1995 it was obliged to adapt its legislation to EU-law, which was difficult within the domain of animal welfare. In 1996 a referendum initiated by animal welfare NGOs had been carried out in Austria and was supported by nearly 460,000 citizens. Due to the difficulties connected with the transformation of EU-directives into the legislations of the nine Austrian states, the political parties finally accepted the idea of a Federal Animal Welfare Act. The act was drafted in 2003-04, adopted by the Austrian Parliament in the spring of 2004 and finally became effective on January 1st, 2005.

In addition to the Austrian Animal Welfare Act, a number of issues relevant to the human-animal-relationship are still being regulated in other laws, both on a federal and state level (cf. table 1)

[16] The so-called agreements referred to in *Bundes-Verfassungsgesetz* [B-VG] [Constitution] BGBl No. 1/1930, art. 15a.

Table 1: Main Sources of Animal Law in Austria

Issue	Law / Clause	Legislative power
Animal welfare	Diverse EU-Directives[1] Animal Welfare Act and corresponding statutes[2]	Federal / EU
Animal transportation	Council Regulation (EC) No 1/2005[3] Act on Animal Transportation[4]	Federal / EU
Animal experimentation	Directive 2010/63/EU[5] Act on Animal Experiments[6]	Federal / EU
Animal health regulations	Act on Animal Epidemics	Federal / EU
Prohibition of cruelty against animals (felony)	§ 222 StGB[7] (Penal Code)	Federal
Status of animals in civil law	§ 285a ABGB[8] (Civil Code)	Federal
Security police regulations on the keeping of animals[9]	9 laws on Security Police Affairs	States
Hunting	9 laws on hunting	States
Fishing	9 laws on fishing	States
Breeding of farm animals	9 laws on breeding	States
Protection of endangered species and the natural environment	Directive 92/43/EEC[10] 9 laws on the protection of endangered species and the natural environment	States / EU

2.2 General Characteristics of the Austrian Animal Welfare Legislation

The Federal Austrian Animal Welfare Act[17] ("AWA"), which replaced the nine Austrian provincial animal welfare acts in 2005, is similar to the German and Swiss animal welfare acts and characterized mainly by the following principles:

2.2.1. The Making of the AWA and Its Development Since 2005

After being blocked for many years, the discussion on a thorough revision of the Austrian animal welfare legislation was stimulated in November 2002, when the Federal Chancellor made it a pre-election

[17] Tierschutzgesetz [TSchG] Bundesgesetzblatt I [BGBl I]No. 118/2004 as last amended by BundesgesEtZBLATT I [BGBl I] No. 80/2010 (Austria) (at http://www.vetmeduni.ac.at/tierschutzrecht/).

promise to pass a Federal Animal Welfare Act and was vigorously supported by an influential daily newspaper. Thus, in 2002-2003, the climate for a renewal of animal welfare legislation was quite favorable, on a political as well as a societal level. At that time, animal welfare was a topical issue, being discussed openly and on a rather broad level. Within this setting it was possible to negotiate regulations that were to be regarded as substantial progress in legal animal welfare, specifically the AWA's respectively corresponding statutes in their original versions banned unenriched battery cages[18] for laying hens starting with 1 January 2009[19] and prohibited the dehorning of goats,[20] a practice that is an extremely painful process. With regard to pets and wild animal species, it was forbidden to keep cats and dogs in pet shops for the purpose of selling[21] and it was forbidden to keep and use wild animals in circuses and similar facilities.[22] Another advance relating to wild animal species was the ban of a rather bizarre tradition practiced in a

---

[18] This only applies to unenriched battery cages within the meaning of Art. 5 of the Directive 1999/74/EG. So called "enriched" cage systems for laying hens (Art. 6 of the Directive 1999/74/EG, which do notunderly a ban on the EU-level),may be used in Austria for a period of 15 years after their initial start-up, if they had been erected before January 1, 2005.

[19] Thus, the use of unenriched cage systems was banned in Austria three years before the EU instituted ban.

[20] *Cf.* Bundesgesetzblatt II [BGBl II] No. 485/2004 annex 4 (Austria). This is the 1st statute of animal husbandry in its original version. (). After intensive lobbying of goat farmers, the intervention was declared legal for a period of 4 years in 2006 (BGBl II No. 530). During this time, the Institute of Animal Husbandry and Animal Welfare of the University for Veterinary Medicine Vienna conducted a scientific study on whether it is possible to effectively keep larger groups of horned milk goats. .. Although the results of this study showed that it is possible to keep horned goats under proper conditions, the competent ministers intended to prolong the legitimacy of dehorning an additional four years.

[21] Änderung des Tierschutzgestzes [Animal Welfare Act] Bundesgesetzblatt I [BGBl I] [Federal Law Journal] No. 35/2008 (Austria) § 44 [hereinafter *AWA*]. According to the original version of the AWA § 31 (5), it was forbidden to keep dogs and cats in pet shops for the purpose of selling them. Although the Constitutional Court had approved of the conformity of this restraint in the light of the Austrian constitutional law in 2007 that prohibition was overruled after intense lobbying by BGBl. I no. 35/2008.

[22] *See AWA supra* note 27 § 27(1). Already in 2005 the ban was questioned as by a circus entrepreneur, who tried to bring a charge against Austria at the Court of Justice of the European Union for violating the principle of free movement of services granted by Art. 56 of the Treaty on the Functioning of the European Union, 30.3.2010, Official Journal of the European Union C 83/47. After obtaining the opinion of the Austrian government the European Commission, however, refrained from invoking the Court of Justice of the EU. In 2011 the compliance of § 27 subpara. 1 AWA with the Austrian constitutional law was examined by the Constitutional Court which finally ruled that the legal prohibition does not violate constitutionally granted rights of circus entrepreneurs, Constitutional Court *[Verfassungsgerichtshof, VfGH],* G 74/11-10, V 63/11-10, Dec. 1st 2011).

small region of the state of Upper Austria ("*Salzkammergut*"), namely the catching of specific species of song birds[23] with the intention to exhibit them and award a price for the birds looking and singing best. In the spring following the exhibition season, the birds are returned to the wild. Since the catching and exhibiting presumably causes pain, suffering, and distress to the birds their fitness typically declines during captivity. This tradition of bird catching had been criticized by animal welfare NGOs for a considerable time. Eventually, the new Austrian animal welfare legislation seemingly put an end to the capturing of singing birds, because on statutory level it was forbidden to exhibit animals taken from the wild.[24]

Further cornerstones of the AWA were the installation of the function of an "*Animal Welfare Ombudsman*"[25] on provincial level, the introduction of an advisory board for animal welfare issues ("Animal Welfare Council"),[26] and the government's obligation to report on the development of animal welfare issues every two years.[27]

Last, but not least, according to AWA § 18(6), a test procedure was to be established in order to guarantee that newly invented husbandry systems (e.g. enriched cage systems for laying hens, new types of perforated floors) can be placed on the marked only after they have been determined to comply with the legal requirements of the AWA by an expert body.. Section 18 mandates that husbandry systems and devices already in trade as well as pet keeping devices, (e.g. cages, running wheels for rodents) may be tested voluntarily:

> § 18 Stable design and accommodation systems
>
> 6) To increase information for animal keepers on the legal provisions and to facilitate implementation, a compulsory administrative approval procedure shall be instituted for new types of serially manufactured stable systems and

[23] Examples of these song birds are: European goldfinch (*Carduelis carduelis*), Eurasian siskin (*Carduelis spinus*), Eurasian bullfinch (*Pyrrhula pyrrhula*) and common crossbill (*Loxia curvirostra*).

[24] *See* AWA *supra* note 27 § 2(2) (defining the protection and use of animals for events) (original version, BGBl. II no. 493/2004).

[25] *See* AWA *supra* note 27 § 41; *see also infra* part3.3.

[26] *See* AWA *supra* note 27 § 42. In line with the original version of AWA § 42(2), the *Animal Welfare Council* ("*Tierschutzrat*") had consisted of 12 members, representing animal welfare sciences, the competent ministries, and stakeholders. When it became obvious that the council was not automatically supporting politically desired decisions, its composition was changed two times, each time increasingly weakening the council.

[27] *See*AWA *supra* note 27 § 42(2).

> new types of technical equipment for keeping animals. The Federal Minister for Health is authorized to issue a statute on the labeling of serially manufactured keeping equipment and stable systems as well as of pet accommodation and pet accessories complying with the requirements of the subject Federal Law. As far as animals for farm purposes are concerned such regulation requires the assent of the Federal Minister for Agriculture and Forestry, Environment and Water Management. [28]

Although the importance of this provision was specifically emphasized in the law-making process and a similar test procedure has been effectively administered in Switzerland since the 1980's, AWA § 18(6) was amended two times since 2005,[29] but was effectuated just recently.[30]

Soon after the reform of the animal welfare legislation had been finished, political and media interest in animal welfare issues seemed to decline. Amendments to the AWA and the corresponding statutes were again negotiated within small circles of policy-makers and representatives of animal welfare interests and even the AWA-based *Animal Welfare Council* were more or less excluded from the decision-finding. It is self-evident that this kind of law-making process is unsuitable to advance animal welfare legislation, as "a balancing of interests will only be possible in a network which is open and conflictual, whereas a closed and consensual policy community will benefit only those who have a privileged position within it."[31]

Thus, it is not really surprising that much of the progresses that had been reached by 2005, has since then been alleviated or even suspended. Although the Constitutional Court had approved of the conformity of AWA § 31(5) (ban of selling cats and dogs in pet shops) in the light of the Austrian constitutional law in 2007, the provision was suspended after intense lobbying by the Federal Economic Chamber in 2008.[32]

With regard to farm animals, changes for the worse have been most severe. Although the results of a study on the necessity to dehorn

---

[28] *See* AWA *supra* note 27 § 42(6) (original version).

[29] *See* AWA *supra* note 27 § 18(6)-(11).

[30] Statute on the establishment of an office for the evaluation and labeling of serially manufactured husbandry systems [Verordnung über die Einrichtung einer Fachstele für tiergerechte Haltung und Tierschutz zur Bewertung und Kennzeichnung serienmässig hergestellter Haltungssysteme und Stalleinrichtungen sowie Heintierunterkünften und Heimtierzubehör) FACHSTELLEN-/HALTUNGSSYSTEME-VERORDNUNG], BGBL. II no. 63/2012.

[31] Robert. Garner, Political Animals: Animal Protection Politics in Britain and the United States 231 (1998).

[32] *See* AWA *supra* note 27.

milk goats[33] showed, that – under proper housing and management conditions – it is possible to keep horned goats in a cost-effective way, the competent ministers recently prolonged the legitimacy of dehorning for a further four years period.[34] Moreover, in 2008 a regulation was introduced into the AWA, allowing existing farm animal facilities to fall short of the minimum requirements by an extent up to 10%.[35]

With regards to bird catching, the statute provision mentioned above had to be suspended because of a verdict coming out of the Constitutional Court, that ruled ruling the federal legislator would have been obliged to consider the Upper Austrian statute on the protection of endangered species, which explicitly allows the catching and keeping of specific species of song birds for traditional exhibition of these animals.[36]

2.2.2. Ethical Approach

Just like any modern animal protection act, the AWA has adopted an ethical approach. Thus, animals are legally protected because of their genuine moral standing, which is basically irrespective of their utility for humans.[37] This intention of the AWA is expressed by the term 'fellow creature'[38] (*Mitgeschöpf*), indicating that animals are sentient beings whose interests have to be adequately considered for moral (non-anthropocentric) reasons.[39]

The ethical approach of the AWA is primarily, but not solely, pathocentric. One of the main objectives of the Austrian AWA is to

---

[33] *See* supra note 24.

[34] *1. Tierhaltungsverordnung*[1st statute on animal husbandry], BGBl. II no. 485/2004, as amended by BGBl. II no. 61/2012.

[35] Cf. AWA *supra* note 27 § 44 ¶ 5a

[36] Cf. § 11 of the Upper Austrian statute for the protection of endangered species, LGBl. no. 73/2003. http://www.ris.bka.gv.at/Dokument.wxe?Abfrage=LrOO&Dokumentnummer=LOO40004701&ResultFunctionToken=90f2e020-081e-43a5-bc12-c877090eb1b7&Position=1&Kundmachungsorgan=LGBl.+Nr.&Index=&Titel=&Gesetzesnummer=&VonArtikel=&BisArtikel=&VonParagraf=&BisParagraf=&VonAnlage=&BisAnlage=&Typ=&Kundmachungsnummer=73%2f2003&Unterzeichnungsdatum=&FassungVom=12.04.2012&NormabschnittnummerKombination=Und&ImRisSeit=Undefined&ResultPageSize=100&Suchworte=

[37] See AWA, *supra* note 27 § 1; For further details see R. Binder, H. Grimm and E. Schmied (2009): Ethical principles for the use of animals in Austrian legislation, 123ff.

[38] *Allgemeines Bürgerliches Gesetzbuch* [*ABGB*] [Civil Code] Bundesgesetzblatt I [BGBl] No. 118/2002, as amended, §285a (Austria); With regard to the animals' status within the Austrian legal system it should be noted that the acknowledgement of animals as fellow creatures (sentient beings) complies with § 285a of the Austrian Civil Code (*ABGB*), ruling that animals are not objects, although they are legally treated like objects if there are no specific regulations relating to animals (amendment of the ABGB in 1989).

[39] *Cf.* § 1 AWA.

avoid the infliction of unnecessary pain, suffering and distress to animals respectively to minimize the extent of harm, if its infliction is regarded as legally justified.[40] On the other hand, the AWA lays down basic requirements that are to safeguard the wellbeing of animals living in human custody. Both kinds of clauses – prohibitive rules and requirements for the housing, handling and management of animals – show that animals are regarded as entities able to experience negative as well as positive feelings.

An entirely pathocentric approach does, however, fail, if the human perspective is too limited to prove either the sentience of specific entities (e.g. insects, molluscs) or if it is impossible to substantiate that something done to an animal is harmful in itself. From an entirely pathocentric perspective it could indeed be possible to argue that mutant laying hens born without eyesight are better off than their seeing conspecifics, because light, among other factors, seems to encourage feather picking and cannibalism. In order to cover that "blind spot" of pathocentrism it is therefore necessary to introduce an additional argument into animal welfare legislation, which is biocentric in nature. Thus the pathocentric terms of "pain", "suffering", "distress" and "heavy fear" are being supplemented by the concept of "injury"[41], which in the context of animal welfare legislation means, that an animal's physic or psychic condition is impaired in comparison either to its previous state or to the biological standard type by some kind of human intervention. In contrast to pathocentric terms, which implies the sentience of the harmed entity, regarding the concept of "injury" it is irrelevant if the victim is (proved to be) sentient or not. Thus, pulling out a fly's leg doubtlessly injures the animal, regardless if or in which way it perceives the handicap as harmful.

Finally it is an important progress in legislation[42] and the judiciary[43] that animal welfare is considered as a widely acknowledged public interest, which must be taken into account when balancing animal interests against human interests. Thus the ethical approach of the modern animal welfare concept in general and of the Austrian AWA in particular is being complemented by anthropocentric arguments.

---

[40] TIERSCHUTZGESETZ [ANIMAL PROTECTION ACT] BUNDESGESETZBLATT I [BGBL I] [FEDERAL LAW JOURNAL] No. 118/2004 as amended § 5 (Austria); According to AWA § 5, it is "prohibited to inflict unjustified pain, suffering or injury on an animal or expose it to heavy fear."

[41] *See* AWA, *supra* note 27§ 5.

[42] Materials to the draft of the AWA, 2. http://www.parlament.gv.at/PAKT/VHG/XXII/I/I_00446/fname_018212.pdf

[43] *Verfassungsgerichtshof* [*VfGH*] [Constitutional Court], Dec. 17, 1998, ERKENNTNISSE UND BESCHLUSSE DES VERFASSUNGSGERICHTSHOFES [VFSLG] No. 15394/1998, (Austria); Verfassungsgerichtshof [VfGH] [Constitutional Court] 12 July 2005, ERKENNTNISSE UND BESCHLUSSE DES VERFASSUNGSGERICHTSHOFES [VFSLG] NO. G 73/05 (Austria).

2.2.3. From Insect to Mammal: Broad Scope of Application

The prohibitive clauses of the AWA, i.e. first of all § 5 (anti-cruelty clause) and § 6 (prohibition of killing), apply to all the species of the animal kingdom, including invertebrates. Other parts of the AWA, mainly the obligations of the animal's owner (§ 12) and the requirements for housing, handling and management (§§ 13 ff.) apply to all species of vertebrates and moreover to two groups of invertebrates, namely cephalopods and decapods, who are scientifically proven to have highly developed cognitive abilities as well as the capacity for suffering.[44]

Despite its rather broad "personal" scope, the Austrian AWA does not cover specific categories of animal use, such as animal transportation, animal experimentation and the practice of hunting and fishing.[45] As to hunting and fishing, according to the Austrian Constitution, the legislative competence rests with the states. It is important to note, however, that only the *practicing* of hunting and fishing is exempt from the AWA, whereas the keeping and training of hunting dogs (as well as of other animals used to support hunters) is covered by the AWA; thus the ban of tail docking and the prohibition of specific devices (e.g. electric collars) also apply to dogs bred and used for the purpose of hunting.

2.2.4. Specifying the AWA: Statutes

The AWA only provides a rough framework of rules and is specified by ten statutes,[46] regulating issues such as the minimum standards for the housing, handling and management of diverse animal species, requirements for specific facilities (e.g. shelters, pet shops, circuses, events with animals), regulations on slaughtering animals and on animal welfare inspections (cf. list of statutes in table 2).

---

[44] *See* AWA, *supra* note 27§§ 12-13; See also *Opinion of the European Food Safety Authority on 'Aspects of the biology and welfare of animals used for experimental and other scientific purposes*,' EFSA-Q-2004-105 at 32.; J.A. Mather , *Animal Suffering: An Invertebrate Perspective*, 2 Journal of Applied Animal Welfare Sci. 151, 155 (2001) (Can.).

[45] *See*. *supra* Table 1.

[46] In the Austrian legal system, statutes are pieces of legislation, passed by the competent federal minister(s) on the basis of a specific law; the statutes based on the AWA are federal statutes and therefore apply uniformly in the whole Austrian territory.

Table 2: List of Statutes Specifying the AWA

AWA clause	Issue	Statute	Competent federal minister
§ 5/5 nr. 2	Training of police dogs and dogs of military forces	Diensthunde-Ausbildungsverordnung [Diensthunde-AusbV][Statute on the training of police and military dogs] BGBl.[11] II no. 494/2004.	BMH in accordance with BMI and BMLV
§ 18/6, 9	Evaluation and labeling of new types of serially manufactures husbandry systems	Fachstellen-/Haltungssysteme-Verordnung [Statute on Establishing an office for the evaluation and labeling of serially manufactured husbandry systems], BGBl. II no. 63/2012	BMH
§ 24/1 nr. 1	Minimum requirements for the keeping of animal species regularly used for farming purposes*	1. Tierhaltungsverordnung [1st statute on animal husbandry] BGBl. II no. 485/2004, as amended by BGBl. II no. 61/2012 .	BMH in accordance with BMLFUW
§ 24/1 nr. 2	Minimum requirements for the keeping of other vertebrate species*	2. Tierhaltungsverordnung [2nd statute on animal husbandry] BGBl. II no. 486/2004, as amended by BGBl. II no. 384/2007.	BMH
§ 24/1 nr. 2	General requirements for the welfare-based training of dogs	Verordnung hinsichtlich näherer Bestimmungen über die tierschutz-konforme Ausbildung von Hunden [Statute on requirements for the training of dogs complying with welfare regulations], BGBl. no. 56/2012	BMH
§ 26/2	Zoos	Zoo-Verordnung [Statute on zoos] BGBl. II no. 491/2004, as amended by BGBl. II no. 30/2006.	BMG
§ 27/2	Circuses, varieties and similar facilities	Tierschutz-Zirkusverordnung [TSch-ZirkV][Statute on the welfare of animals in circuses, varieties and similar facilities] BGBl. II no. 489/2004.	BMH
§ 28/2	Using of animals in the course of events	Tierschutz-Veranstaltungs-verordnung [TSch-VeranstV][Statute on the welfare of animals used in the course of events] BGBl. II no. 493/2004, as amended by BGBl. II no. 70/2008.	BMH
§ 29/4	Minimum requirements for animal shelters	Tierheimverordnung [THV] [Statute on animal shelters] BGBl. II no. 490/2004	BMH

AWA clause	Issue	Statute	Competent federal minister
§ 31/3	Minimum requirements for the keeping of animals in commercial facilities	Tierhaltungs-Gewerbeverordnung [TH-GewV] [Statute on animals kept in commercial facilities] BGBl. II no. 487/2004, as amended by BGBl. II no. 29/2006	BMH in accordance with BMWFJ
§ 32/6	Slaughter and killing of animals	Tierschutz-Schlachtverordnung [Statute on the protection of animals at the time of slaughter]BGBl. II no. 488/2004, as amended by BGBl. II no. 31/2006	BMH partly in accordance with BMLFUW
§ 35/3	Animal welfare inspections	Tierschutz-Kontrollverordnung [TSchKV] [Statute on animal welfare inspections] BGBl. II no. 492/2004, as amended by BGBl. II no. 5/2008	BMH in accordance with BMLFUW*

* The 1st statute on animal husbandry covers minimum standards for the housing of equines, cattle, sheep, goats, pigs, poultry, rabbits, lamas, ostriches, and carp and trout kept in aquaculture

** The 2nd statute on animal husbandry lays down minimum standards for the housing of a wide range of domestic and wild animal species kept as pets or in zoos (e.g. dogs, cats, rodents; birds, reptiles, amphibians, and fish).

Abbreviations:

BMH	Federal Minister of Health
BMI	Federal Ministry of Internal Affairs
BMLFUW	Federal Ministry of Agriculture, Forestry, Environment and Water Management
BMLV	Federal Ministry of Defense and Sports
BMWFJ	Federal Ministry of Economy, Family and Youth

Given the hierarchical structure of the legal system, a statute must not lay down provisions that contradict the basic regulations of the law that serve as its basis, i.e. the minimum requirements for the housing, handling an management of farm animals defined by the 1st statute on animal husbandry are required by definition to comply with the AWA framework, especially with § 13 subpara. 2, determining that different aspects of animal behavior must be appropriate to the specific needs of the particular species.[47]

2.2.5. Scientifically Based Welfare Legislation

Within the last decades, animal welfare has been developing from a primarily emotional value of individuals or particular social groups towards a public interest, broadly based on scientific knowledge.

[47] See *infra* Part 3.2.

Today it is a consensus among all the groups of relevant stakeholders that animal welfare must not solely rely on ethical arguments, but, rather, have to be based upon scientific knowledge about the species-specific needs of animals. Also, according to the AWA, animal welfare regulations must be based upon a profound understanding of the animals' needs. Consequently, one of the most important provisions of the Austrian AWA, § 13 subpar. 2, explicitly refers to physiological and ethological needs of animals when defining the general requirements for the housing, handling and management.[48]

Moreover, the minister(s) responsible for passing the statutes on the basis of the AWA[49] are obliged to consider recent scientific knowledge when drafting or amending one of the statutes.[50] The following examples, drawn from rather different kinds of animal use, demonstrate, however, that this requirement does not quite work as it should:

Killing of Lobsters: According to the statute on the protection of animals at the time of slaughter, it is compulsory to kill decapods by emerging the live animals into boiling water[51] because this method was formerly believed to be humane. Recent scientific studies have, however, not only proven that decapods are sentient animals,[52] implying that this killing method causes a considerable degree of pain and suffering. When the *Animal Welfare Council* found out that a newly invented electric device to stun and kill decapods humanely (*Crusta Stun*®), had been placed on the market, it recommended the Minister to make the use of such a device for the killing of decapods compulsory or at least permissible by amending the statute. Regardless of the statute, no such regulation regarding the killing method of lobsters has been passed.

Dehorning of Calves: Another important issue is the dehorning of calves, which may be performed without anaesthesia and analgesia if firstly, the animal is under two weeks of age and secondly, a specific

---

[48] See *infra* Part 3.2.

[49] *See supra* Table 2.

[50] *See* AWA, *supra* note 27. According to a number of AWA provisions, scientific knowledge must be considered at the statutory level: cf. e.g. § 26(2) (zoos), § 27(2) (circuses, varieties and similar facilities, § 28(3) (using of animals in the course of events, e.g. for exhibitions), § 29(4) (shelters), § 31(3) (keeping of animals in commercial facilities, e.g. pet shops), § 32(6) (slaughtering and killing of animals). It must be mentioned, however, that regarding the minimum standards for husbandry, handling and management this obligation is weakened by AWA § 24(1), obliging the competent ministers to consider the economic consequences of the regulations on statute level.

[51] *Tierschutz-Schlachtverordnung* [Statute on the protection of animals at the time of slaughter], BUNDESGESETZBLATT [BGBl.] II no. 488/2004, as amended by BGBl. II no. 31/2006, annex G, nr. 5.

[52] J.A. MATHER (2001): Animal Suffering: An Invertebrate perspective. Journal of Applied Animal Welfare Science, 2 (2), 155.

type of fuel rod[53] is used. As this regulation had caused a lot of protest in 2005, the University of Veterinary Medicine Vienna (Institute of Animal Husbandry and Animal Welfare) was assigned to carry out a study in 2006, which came to the conclusion that dehorning by means of a fuel rod is a highly painful procedure and should, in calves of any age and irrespective of the type of fuel rod, only be performed after administering effective anesthesia and analgesia. In the following years, the necessary amendment of the 1st statute on animal husbandry has been repeatedly recommended by the *Animal Welfare Council* without success.

2.2.6. Enforcement of Animal Welfare Legislation by Local Authorities

Although legislative power in animal welfare issues was passed on from the states to the federal level in 2005, law enforcement power has remained with the provinces.[54] Thus, this is the first instance the AWA is enforced by local administrative authorities.[55] In the case of an appeal, the decision is reviewed by similar court like bodies.[56] These appellate opinions may, in a third review, be revised by the Higher Administrative Court or by the Constitutional Court.[57]

On the federal level, the Ministry of Health, who is also in charge of all the veterinary issues, is the competent department. Therefore the statutes that specify the framework of the AWA are drafted and passed by the Minister of Health, who, , in most cases, has to act consensually with another minister For example, the 1st statute on animal husbandry, , which determined minimum requirements for the housing of animal species used for farming purposes, can only be amended in with the approvalof the Minister of Agriculture, Forestry, Environment and Water Management.[58]

---

[53] According to annex 2 of the 1st statute on animal husbandry, the device used for the thermal dehorning of calves must have an exact thermostat combined with a timer. *1. Tierhaltungsverordnung* [1st statute on animal husbandry] [BGBl II] No. 485/2004 (Austria); Anlage 1 MINDESTANFORDERUNGEN FÜR DIE HALTUNG VON RINDERN [Minimum Requirements for the Husbandry of Cattle], § 2.8 EINGRIFFE [Procedures] (Austria).

[54] *Bundes-Verfassungsgesetz* [*B-VG*] [Constitution] [BGB] No. 1/1930 (Austria), as last amended by BundesgesEtzbLATT I [BGBl I] No. 118/2004 (Austria). Bundes-Verfassungsgesetz [B-VG] [Constitution] BGBl I No. 1/1930, as last amended by BundesgesEtZbLATT I [BGBl. I] No. 118/2004, art 11, ¶ 8 (Austria).

[55] German: *Bezirksverwaltungsbehörden*.

[56] German: *Unabhängige Verwaltungssenate*.

[57] *Court for Administrative Affairs and Constitutional Court;* German*: Verwaltungs- und Verfassungsgerichtshof*.

[58] See *infra* Table 2.

3. Major Advantages of the Austrian Animal Welfare Act

3.1. Prohibition of Killing – Protection of Animal Life

According to AWA § 1 the intent is to safeguard not only the well-being but also the life of animals: "This Federal Act aims at the protection of life and well-being of animals based on man's special responsibility for the animal as a fellow-creature." Basically, this general principle applies to all species and groups of animals, even to farm animals. But what does this mean within the system of law and in everyday life?

First of all, it is important to consider a second clause of the AWA, namely § 6 (1), which determines that the killing of an animal is only permitted if there is a "sensible reason" for doing so. This requirement of justifying the killing of an animal leads to the following three consequences: (1) Animals must not be killed arbitrarily; (2) With regard to large groups of animals (e.g. farm animals) a justifying reason for killing is indirectly assumed by the AWA; (3) The "sensible reason" for the killing of other animals (especially pets) has to be assessed in each single instance, balancing animal welfare interests against human interests. While most animal welfare acts are limited to the protection of the *quality* of animals' lives (minimum requirements to safeguard well-being i.e. freedom of unjustified pain, suffering, and distress), the preservation of animal life, as such *quantity* of life, is a privilege typically reserved for humans, however is a specific feature of the Austrian and German[59] Animal Welfare Acts.

When exploring prong (1) further, it is important to consider that the protection of an animal life from being arbitrarily ended is (theoretically) in fact a progressthat should not be underestimated. The legal protection of animal life distinctly protects animals against inanimate objects (objects in the sense of the law), thus supporting the claim that animals should – de lege ferenda – be legally acknowledged as a category sui generis, ranging between persons on the one end of the spectrum and objects on the other.[60] In this sense animal welfare regulations count among the provisions mentioned in § 285a of the Austrian Civil Code:[61] "Animals are not objects; they are protected by

---

[59] *See* Tierschutzgesetz [German Animal Protection Law] May 18, 2008, BGBl. S. 1206, 1313 §§ 1, 17 No. 1, as amended by BGBl. I S. 1934 (Ger.).(,. I).

[60] David Favre, Animal Law. Welfare, Interests, and rights 36 (2008). David Favre convincingly argues that animals should be considered a seperate category of property ("living property").The category of living property is easily distinguished from the other property categories as physical, moveable living objects – not human – that have an inherent self interest in their continued well-being and existence

[61] Allgemeines Bürgerliches Gesetzbuch [ABGB] [Civil Code] Bundesgesetzblatt I [BGBl I] No. 179/1988, as amended § 285a (Austria).

specific legal provisions. Regulations applying to objects pertain to animals only as far as there are no special provisions."

Prong (2) demonstrates, however, that, *practically speaking*, a wide range of animals (especially farm animals and animals regarded as pests) are more or less exempt from the protection of unlawful killing, because, with regard to these groups of animals, the justification ("sensible reason") for killing is being generally assumed by the legislator. So, if a farm animal is killed for a purpose listed in AWA § 4(6), (i.e. to be used as food or other animal products), its killing would be automatically regarded as justified.[62] Even so, it must be questioned if the (mass) production of meat (and other animal products) can really be defined as "sensible,"[63] considering societal (health politics, global hunger) and ecological (climate protection) problems. Moreover, with regard to animal welfare, it is admittedly paradoxical to protect animal life legally, although it is accepted, that farm animals live only up to 2% of their natural life span in systems of factory farming.[64]

Whereas AWA § 6(1), with regard to farm animals, is only relevant in rather uncommon instances (e.g. if a farm animal is killed wantonly without the intention to use it in accordance with its legally prescribed purpose); it has far reaching implications for the killing of pets. Thus it is widely, if not yet generally, acknowledged that the only sensible reason to kill a pet is a sufficient medical reason. The same applies to wild animals kept in human custody, either privately or in zoos. Therefore, it is basically forbidden to euthanize an animal because it has became old or inconvenient. It would also be unjustified to kill unwanted puppies; tiger cubs; dogs, who should be trained for hunting, but turn out to be afraid of gunshots; or cats who do not meet a specific breeding standard. Finally, it is also regarded as illegal to kill (largely) healthy animals living in shelters.

---

[62] Similarly, the killing of pest animals is permitted under the the AWA if it is indispensable and carried out properly.

[63] *See* The Meat Crises. Developing More Sustainable Production and Consumption (Joyce D'Silva & John Webster eds., 2010) . London, Washington D.C., Earthscan 2010; K.-H. Erb et al. (2009); *Eating the Planet: Feeding and fuelling the world sustainably, fairly and humanely– a scoping study*, Social Ecology Vienna (Karl-Heinz Erb et al eds., 2009), *available at* http://www.ciwf.org.uk/includes/documents/cm_docs/2009/e/eating_the_planet_full_report_nov_2009.pdf; *Implications of Global Trends in Eating Habits for Climate Change, Health and Natural Resources*, European Parliament: Science and Technology Options Assessment (STOA) (IP/A/STOA/IC/2008-180), *available at* http://www.ceasc.com?Images/Content/2432 final report.pdf; S. Friel, A.D. Dangour, T. Garnett, K. Lock, Z. Chalabi, I. Roberts, A. Butler, C.D. Butler, J. Waage, A.J. McMichael and A. Haines (2009): Public health benefits of strategies to reduce greenhouse-gas emission: Food and agriculture, The Lancet 2009, 374/9706, 2016-2025; T. Garnett (2009): Livestock-related greenhouse gas emission: impacts and options for policy makers. Environmental Science and Policy 2009 (12), 491-503.

[64] Salim M. Ali, Fleisch aus der Perspektive der Welternährung, 137 (2010)

If a pet falls ill or is injured, the owner is basically obliged by the AWA to provide proper veterinary care: 'Section 15 states: Any animal which appears to be ill or injured must be cared for appropriately without delay, and, whenever required, veterinary advice must be sought." Therefore it is legally not justified to euthanize ill or injured pets, if they can, from a medical point of view, be cured with reasonable expenditure.

3.2. General Requirements for Animal Husbandry

As mentioned above, the AWA provides general principles for animal husbandry, which apply to all species of animals addressed by the second part of the AWA[65] and is basically independent from the purpose the animals serve. This framework, defined by AWA § 13, was taken from the Swiss Animal Protection legislation and is to be considered as rather progressive:

§ 13 Principles governing the keeping of animals

1) No animal shall be kept unless it can reasonably be expected, on the basis of its genotype or phenotype, that it can be kept according to the state of the art of scientific knowledge without detrimental effect on its well-being.
2) Who keeps an animal shall ensure that the space, freedom of movement, condition of the ground, structural equipment of buildings and facilities in which they are housed, the climate, in particular light and temperature, care and food, as well as the possibility for social contacts in consideration of the species, age and degree of domestication of the animals corresponds to their physiologic and ethologic needs.
3) Animals are to be kept in a way their physical functions and their behaviour are not disturbed and their ability to adapt is not overstrained.

AWA § 13(1) refers to animal species which are *a priori* unfit to live (under specific conditions) in human custody. With regard to the old Animal Welfare Act of the province of Vorarlberg, the Higher Administrative Court ruled in 2002 that ostriches are not fit to live in alpine regions and must, therefore, not be kept in the state of Vorarlberg.[66]

---

[65] i.e. vertebrates, cephalopods and decapods. *See* AWA *supra* note 27 § 3(2).
[66] *Verwaltungsgerichtshof* [VfGH] [Administrative Court], Dec. 21, 2001, No.. 98/02/0304 (Austria), at Jusline http://www.jusline.at/index.php?cpid=77cc2619465c939cd4189c33216b2d0c&feed=48620 (Austria) *translated by* http://www.translate.google.com.

Section 13(2) of the AWA should guarantee that husbandry systems are widely appropriate for the species living within these facilities. It therefore defines a series of parameters, which have to comply with the species' biological requirements. In line with § 13(3) animals must be housed under conditions they can cope with on physiological as well as on ethological level, which means that housing and management conditions must not cause illness or behavioral disorders in the animals.

As already mentioned a central aspect of the AWA is the importance of scientific knowledge about the animals' behavioral needs, which is regarded as a basis for generating further regulations (statutes) as well as for interpreting existing rules. A closer exploration of the AWA-based statutes, however, shows that many regulations do not comply with the requirements defined by § 13 of the AWA. This is especially true for the first statute on animal husbandry, which lays down minimum standards for the housing and management of farm animal species. Recently, a rather controversial debate has been going on in Austria whether the fixation of sows in farrowing crates, which is allowed by the mentioned statute before giving birth, during lactation and in insemination facilities,[67] is compatible with the framework of § 13(2) and (3) of the AWA. According to the last amendment to the relevant statute crating will be reduced to the first few days of the piglets' life after a transition period of 21 years.[68]

3.3. Animal Protection Ombudsman (Tierschutzombudsmann)

Although the quality and standard of modern animal welfare regulations have in many ways been continually improving over the last decades, the deficient enforcement, or even the lack thereof, is still one of the main problems in ameliorating the non-human animals' position in human society. There are various reasons for the insufficient implementation of legal animal welfare provisions by the competent authorities and courts. One of the greatest weaknesses of animal welfare legislation is the fact that usually there is no means to represent the animals' interests in the course of a lawsuit. Therefore, one of the demands of the 1996 referendum was to install qualified "animal advocates," who would be entitled to represent legally protected animal welfare interests in the course of administrative and criminal proceedings.

Despite the fact that the instrument of an "animal advocate" was strongly opposed in the process of lawmaking, the political parties agreed

---

[67] *1. Tierhaltungsverordnung* [First Statute on Animal Husbandry] BGBl. II No. 485/2004, as amended by [BGBl II] Nr. 530/2006 § 3.3 (Austria).

[68] *1. Tierhaltungsverordnung* [First Animal Regulation] BGBl. II No. 485/2004, as amended by [BGBl II] Nr. 61/2012 § 3.3 (Austria).

to install an *Animal Welfare Ombudsman* in each state. The *Ombudsman*, who of course has no executive power, is appointed by the governments of the states. His or her tasks are defined by § 41 of the AWA:

> § 41 Animal welfare ombudsman
>
> 1) Each state shall appoint an animal welfare ombudsman.
> 2) Only such persons can be appointed animal welfare ombudsman, who have completed the studies of veterinary medicine, zoology or agricultural sciences or comparable studies and have undergone additional training in the field of animal protection. The term of office of the animal welfare ombudsman shall be five years, reappointment is admissible.
> 3) The duty of the animal welfare ombudsman is to represent the interests of animal welfare.
> 4) The animal welfare ombudsman shall have the status of a party in administrative proceedings, including administrative penal proceedings,[69] and to request any relevant information. The authorities shall assist the animal welfare ombudsman in exercising his duties.
> 5) (Constitutional provision) The animal welfare ombudsman is not subject to any instructions in exercising his duties.
> 6) The animal welfare ombudsman shall report to the government of the state on his activities.
> 7) During his term of office, the animal welfare ombudsman must not exercise any activities which are incompatible with his duties or which are suitable to give the impression of being biased.
> 8) The term of office of the animal welfare ombudsman terminates upon its expiry, by resignation or by justified removal from his office.

Basically, the installation of the *Animal Welfare Ombudsman* is to be regarded as a positive development in Austrian animal welfare legislation. He or she is entitled to officially represent animal welfare interests[70] and – most importantly – has the status of a party in administrative proceedings under the regime of the AWA.[71] On the other hand, the *Animal Welfare Ombudsman's* capacities are seriously delimited in more than one ways. Firstly, he or she is not entitled to file an appeal to the Courts of Public Law. Secondly, the *Animal Welfare Ombudsman's* jurisdiction is restricted to the regime of the AWA and,

---

[69] Language was added by amendment BGBl. I no. 54/2007.
[70] *See* AWA *supra* note 27 § 41(3).
[71] *See* AWA *supra* note 27 § 41(4).

therefore, does neither cover proceedings filed under to the Animal Experimentation Act nor under the Animal Transportation Act. Last, but not least, prosecutions of felonies according to § 222 of the Penal Code are excluded from the *Animal Welfare Ombudsman's* scope of duties.

Moreover, according to § 41(2) of the AWA, jurists are not admitted to the function of the *Animal Welfare Ombudsman*,[72] although a profound knowledge of the legal system, which can only be acquired by a professional training, would be an essential precondition to perform the *Animal Welfare Ombudsman's* tasks efficiently.

Each *Animal Welfare Ombudsman* is appointed for a period of five years,[73] which is regarded as another weakness of § 41 of the AWA. Although professional independence is granted to the *Ombudsman* by a constitutional clause,[74] any person who intends to hold the function for more than one period will factually depend on the goodwill of influential political forces on province level.

4. Major deficiencies of the Austrian Animal Welfare Act

Apart from some welfare-friendly and progressive regulations in the AWA there are several deficiencies distinctly compromising its high aspiration.

4.1. Minimal Welfare Standards for Farm Animals

As mentioned above, the minimum requirements for animal husbandry (e.g. space within housing facilities, access to fenced spaces outside buildings, floor conditions, etc.) often do not meet the ambitious requirements laid down by § 13(1) and (2) of the AWA. This is, of course, especially true for animal species used for farming purposes.

In the early 1990's, when Austria's membership in the EU was discussed and already prepared on the political level, it was anticipated from an animal protection point of view, that joining the EU would deteriorate Austrian animal welfare standard, which had developed in a society with relatively small structured agricultural enterprises. At that time, politicians declared that the opposite would be case because better domestic welfare regulations would improve the quality of food products, thus strengthening Austria's market position as "Europe's delicacies shop": "The 'delicacies shop' Austria spoils you with typical regional specialties and wants to convince with taste and quality.

[72] Currently all of the nine persons appointed *Animal Welfare Ombudsman* are veterinarians; the deputy of the Viennese *Animal Welfare Ombudsman* is a biologist.
[73] *See* AWA *supra* note 27 § 41(2).
[74] *See* AWA *supra* note 27 § 41(5).

Sustainably produced, high-quality food is an indispensable prerequisite for improving the market position of Austrian agriculture in Austria and abroad."[75] Now, more than a decade later, the stakeholders of agriculture question any national regulations above the minimum standard of the EU directives because they are regarded as a competitive disadvantage for Austrian farmers.

One example for the inconsistencies between the AWA and the corresponding statutes, the legitimacy of housing sows in farrowing crates, has already been mentioned.[76] Although AWA § 13(2) states that animals must be granted freedom of movement, according to the 1st statute on animal husbandry sows may be housed in small stalls, thus rendered nearly immobile during a considerable span of their lifetime. Pigs and cattle used for fattening may be housed on perforated floors although AWA § 13(2) states, that ground conditions must be appropriate to the species' ethological needs. Although the permanent tethering of cattle is basically illegal according to AWA § 16(4),[77] it is allowed on the statutory level to tether cows permanently under very general conditions,[78] practically overruling the basic principle determined by the AWA. Also, the minimum space defined for the housing of goats is so scarce, that a proper management is practically rendered impossible. Another contradiction is that many of the most painful surgical procedures in farm animals (e.g. dehorning of calves, castration of male piglets) may be carried out without administering anaesthesia and analgesia, which would be inconceivable to perform on pets.

Finally, apart from a few exceptions (e.g. ban of unenriched battery cages for laying hens), the transitional periods within the domain of farm animals are much longer than in other areas of animal keeping. Depending on the animal species, on the relevant EU-regulations and on the old animal welfare legislation of the particular state transition periods may last as long as 1.1.2020.[79]

---

[75] Available at http://land.lebensministerium.at/article/articleview/70292/1/1375
[76] *See supra* Part 3.2.
[77] This regulation determines that cows must basically be granted freedom to move about (e.g. exercise pen, cow-run, pasture) during a minimum period of 90 days annually.
[78] According to the relevant regulations of the 1st statute on animal husbandry (section 2.2. of annex 2 – minimum requirements for the housing and management of cows) the permanent tethering is permitted if: (1) There are no suitable cow runs or pastures available, (2) The construction or layout of the facility does not allow for a cow-run, or (3) It would be unsafe to allow the animals to move about freely.
[79] *See* AWA *supra* note 27 § 44((5)(4). In contrast, the transitional periods lasted one year for private animal keepers (until 1.1.2006),five years for commercial enterprises (e.g. pet shops) and shelters (until 1.1.2010), and ten years for zoos(until 1.1.2015).

4.2. Inefficient Enforcement of Welfare Provisions

In Austria, like in many other countries, enforcement of animal welfare regulations is widely regarded as insufficient. One of the reasons for this deficiency lies within the legal application of the laws. On the one hand the AWA, as well as the corresponding statutes, make use of a great number of exceptions, thus overruling basic principles. Moreover the wording of many clauses is lacking precision and a high number of rather vague terms are used, opening up a considerable range of discretion to the judiciary. The balancing of animal versus human interests is an integrative part of many regulations, but, apart from the *Animal Welfare Ombudsman,* there is no institutionalized mechanism that could guarantee that welfare interests are considered appropriately.

On the other hand the AWA provides insufficient monitoring activities, which again is especially true within the farm animal sector. Here, AWA § 35(4) and § 4(1) of the corresponding statute[80] determine, that every year 2% of the conventionally operating farms have to be controlled by the competent authority. The individual farms are picked with the help of a computer system based on risk assessment. It is, consequentially, possible within this setting that specific farms are not subject to official animal welfare inspections for a period as long as 25 years.

If a violation of animal welfare provisions is reported, authorities are often reluctant to prosecute it with the appropriate seriousness and especially hesitate to take away animals from their owners through the use of the immediate executive power.[81] If crimes or even felonies (under § 222 of the Penal Code) are litigated, they often are not pursued (either for formal reasons or lack of evidence) or the offenders end up with rather low fines.

Depending on the kind of offense, the fines under the regime of the AWA can theoretically come up to 7,500 Euros respectively 3,570 Euros,[82] but are practically never given. In a very recent case, when a farmer had been sentenced to a fine amounting to 44 Euros for having permanently tethered a calf. Even though on appeal the *Animal Welfare Ombudsman* argued to increase the fine, the fine was reduced to 30 Euros.[83]

In this context it is important to note, that AWA § 5 bans animal cruelty on the level of administrative criminal law whereas animal cruelty as a felony is being penalized by § 222 of the Criminal Code:

---

[80] German Title of Staute [German Abbreviation if available] TIERSCHUTZ-KONTROLLVERORDNUNG [Statute on the Inspection of Animal Welfare Regulations] Bundesgesetzblatt II [BGBl. II] No. 492/2004, as amended by BGBl. II No. 5/2008 (Austria).

[81] *See* AWA *supra* note 27 § 37.

[82] *See* AWA *supra* note 27 § 38(1), (2). In case of repeated violations, the maximum limit is doubled.

[83] *Unabhängiger Verwaltungssenat* of the state of Styria, 25.10.2011.

§ 222 Cruelty to animals

1) A person who
   1. cruelly abuses an animal or inflicts unnecessary torments on an animal,
   2. abandons or leaves an animal although it is incapable to live in the outdoors, or
   3. with the purpose to inflict torments sets an animal on another animal

shall be sentenced with punished with imprisonment up to one year or with a fine up to 360 per diem rates.

2) The same sentence shall be applied to a person who during transportation neglects the supply of several animals with food or water, even if he acts negligently.
3) The same sentence shall be applied to a person who wantonly kills a vertebrate animal.

Penal Code § 222 only applies to felonies committed maliciously. Offenders may be punished with higher sentences[84] and even lead to imprisonment up to one year. Criminal statistics, however, show that the number of sentences under Penal Code § 222 have been cut in half since 1975 and have been steadily declining since 2002, when the possibility of extra-judicial settlements was introduced.[85]

4.3. Animal Welfare Lacking Constitutional Coverage

One of the most serious shortcomings of Austrian animal welfare legislation is the lack of a constitutional clause safeguarding the value of animal welfare. In this respect Germany serves as a model, having introduced the "*Staatszielbestimmung Tierschutz*" in the Constitution ("*Grundgesetz*") in 2002. According to Article 20a of the German Constitution, legislation as well as law enforcement are obliged to consider the value of animal welfare. This obligation is an important and vital precondition for strengthening animal welfare interests in the process of law making as well as in jurisdiction.

Although in the Austrian referendum of 1996, a constitutional clause to safeguard animal welfare, was demanded and even discussed

[84] In line with § 222 Penal Code the financial penalty may come up to 360 daily rates, ranging between a minimum of 2 Euros and a maximum of 327 Euros. The number of daily rates depends on the extent of guilt, the amount on the economic situation of the sentenced person.
[85] Strafprozessordnung [StPO] [Code of Criminal Procedure] § 198.

later on in a parliamentary committee and installed to prepare a reform of the Austrian constitutional law, the legislator has up to now strongly refused to enact such a regulation. Therefore, constitutionally guaranteed rights most often conflict with animal welfare interests, like the protection of property rights, freedom of science, liberty of art and free exercise of religion. These constitutional rights can easily and automatically override animal welfare interests because on the level of the constitution it is simply impossible to balance animal welfare against human interests.

5. Conclusion

The article has shown that animal welfare legislation, within a comparatively short span of time, has experienced two paradigmatic changes. On the one hand it developed from regulations aiming solely to protect anthropocentric interests (concept of *indirect animal protection*) to set of principles intending to safeguard the genuine interests of animals out of ethical considerations (concept of *direct animal protection*). In Austrian and Germany even animal life is protected by the animal welfare acts; although with regard to large groups of animals the protection of life is largely irrelevant, the basic obligation to justify the killing of an animal shows, that animal life is no longer regarded as arbitrarily disposable.

On the other hand, animal *protection* acts, originally restricted to the prohibition of cruelty inflicted on animals, have extended to an ample set of scientifically based technical requirements (animal *welfare* acts), intending to safeguard the well-being of animals living in human custody.

However, the implementation of modern animal welfare principles faces serious problems, mainly because interests in animal welfare are not sufficiently represented in the process of legislation and jurisdiction. Thus, returning to Austrian animal welfare legislation, the AWA – at least in its original version of 2005 – in many respects may be regarded as a corner stone in the development of legal animal welfare. Some of the improvements reached by the original version of the AWA have, however, been weakened or even abolished since 2005. The most serious shortcoming of legal animal welfare in Austria is the lack of a constitutional clause allowing animal welfare interests to be considered appropriately in legislation as well as in jurisdiction.

Annex 1

Conventions of the Council of Europe: Subject matter Protection of Animals

No.	Title	Opening for ratification	Entry into force
065	European Convention for the Protection of Animals during International Transport	13/12/1968	20/2/1971
087	European Convention for the Protection of Animals kept for Farming Purposes	10/3/1976	10/9/1978
102	European Convention for the Protection of Animals for Slaughter	10/5/1979	11/6/1982
103	Additional Protocol to the European Convention for the Protection of Animals during International Transport	10/5/1979	7/11/1989
104	Convention on the Conservation of European Wildlife and Natural Habitats	19/9/1979	1/6/1982
123	European Convention for the Protection of Vertebrate Animals used for Experimental and other Scientific Purposes	18/3/1986	1/1/1991
125	European Convention for the Protection of Pet Animals	13/11/1987	1/5/1992
145	Protocol of Amendment to the European Convention for the Protection of Animals kept for Farming Purposes	6/2/1992	
170	Protocol of Amendment to the European Convention for the Protection of Vertebrate Animals used for Experimental and other Scientific Purposes	22/6/1998	2/12/2005
193	European Convention for the Protection of Animals during International Transport (Revised)	6/11/2003	14/3/2006

Annex 2

Directives and Regulations of the European Union Relating to Animal Welfare

Council Directive 92/43, regarding the conservation of natural habitats and of wild fauna and flora, O.J. (L 206) 7-50 (EEC) Regarding the conservation

Council Directive 98/58, concerning the protection of animals kept for farming purposes, O.J. (L 221) 23-27 (EC).

> Council Directive 1999/74, laying down minimum standards for the protection of laying hens, O.J. (L203) 53-57 (EC)
>
> Council Directive 1999/22, relating to the keeping of wild animals in zoos, O.J. (L 94) 24-26 (EC).
>
> Commission Regulation 1/2005, of 22 December 2004 on the protection of animals during transport and related operations and amending Directives, 64/432/EEC, 93/19/EC, and Regulation (EC) No 1255/97, O.J. (L 3) 1-44 (EC).

Council Directive 2007/43, art. 12.7, O.J. (L182) 19-28 (EC). Lays down minimum rules for the protection of chickens kept for meat production.

Council Directive 2008/119, laying down minimum standards for the protection of calves, O.J. (L10) 7-13 (EC)

Council Directive 2008/120, laying down minimum standards for the protection of pigs, O.J. (L47) 5-13 (EC).

> Council Regulation 1099/2009, on the protection of animals at the time of killing, O.J. (L303) 1-30 (EC)..

Directive 2010/63/EU, of the European Parliament and of the Council of 22 September 2010 on the protection of animals used for scientific purposes, O.J. (L 276) 33-79.

Katie: not sure about reference and placement for these footnotes:

[1] Seeinfra a*nn*ex 1.
[2] S*ee infra* Table 2.
[3] Council Regulation 1/2005, on the protection of animals during transport and related operations and amending O.J. (L 003)(EC); see also Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97).
[4] Tiertransportgesetz [Animal Transportation Act] 2007, Bundesgesetzblatt I [BGBl I] No. 54/2007 (Austria).
[5] Directive 2010/63, of the European Parliament and of the Council of 22 September 2010 on the Protection of Animals Used for Scientific Purposes.
[6] Tierversuchsgesetz [Animal Experiments Act] 1989, Bundesgesetzblatt [BGBl] No. 501/1989 as amended by Bendesgesetzblatt [BGBl I] No. 169/1999. Animal experimentation carried out within federal institutions(i.e. within universities) was regarded as a federal legislative affair as early as 1974, when the first Act on Animal Experimentation was passed. The 1989 act served as a renewal of the 1974 legislation.
[7] Strafgesetzbuch *[StGb]*[Penal Code] Bundesgesetzblatt I [BGBl I]No. 60/1974, as last amended by BundesgestZblatt I [BGBl I] No. 66/2011 (Austria); cf. infra Part 4.2.
[8] A*llgemeines Bürgerliches Gesetzbuch [ABGB] [Civil Code] No*. 946/1811, as last amended by BundesgesEtZbLATT I [BGBl I] No. 58/2010 (Austria).
[9] Regulations on the protection of human-beings from (potentially) dangerous animals (e.g. obligatory use of muzzles and leashes for dogs, special requirements for keeping dog breeds regarded as dangerous, requirements or bans for the keeping of dangerous or venomous animal species).
[10] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L. 206, 22.7, p. 7), http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31992L0043:EN:HTML.
[11] Bundesgesetzblatt II [BGBl II] No. 530/2006 (Austria) (Federal Law Gazette)

The WTO Tuna Labeling Decision and Animal Law

Thomas G. Kelch[1]

The Problem

If one were looking for a likely culprit causing legal consternation for those interested in changing animal law for the benefit of animals, one would probably not begin by excoriating the WTO and the GATT Treaty. But that would be ignoring history. The WTO has previously published decisions that have jeopardized attempts by sovereign nations to protect animals. These decisions, the *Tuna Dolphin* decision and the *Shrimp/Turtle* decisions,[2] relate to what are generally considered environmental laws aimed at protecting certain groups of animals. While the *Tuna/Dolphin* decisions were not formally adopted as GATT decisions, these decisions, along with *Shrimp/Turtle*, have had a considerable impact on interpretation of the GATT and the behavior of sovereign states regulating the protection of animals.

In particular, the *Tuna/Dolphin* decisions, involving a U.S. regulation that ultimately resulted in an embargo against importation into the U.S. of Mexican tuna due to the failure of the Mexican tuna fleet to take steps to protect dolphins, applied the notorious "process or production method" rule to Article III:4 of the GATT treaty and effectively determined that countries cannot regulate under this article the methods by which products are created. What can be regulated is the "product" itself; effectively the physical instantiation of the product.[3] These decisions also decried the extraterritorial effect of U.S. efforts to protect dolphins as an inappropriate attempt to "impose" the U.S. environmental regulatory scheme on foreign countries.[4] While the *Shrimp/Turtle* WTO decision, involving a U.S. law resulting in bans on the importation of shrimp from countries not using certain shrimp fishing technology to protect against killing sea turtles, can be seen as tempering the *Tuna/Dolphin* decisions, particularly in regard to application of the Article XX exceptions of GATT, the cumulative effect of this WTO and

---

[1] Thomas G. Kelch is a Professor of Law at Whittier Law School. The author would like to thank David Favre for inviting him to write this article.

[2] Panel Report, *United States—Restrictions on Imports of Tuna* DS21/R—39S/155 (Sept. 3, 1991); Panel Report, *United States—Restrictions on Imports of Tuna,* DS29/R (June 16, 1994); Appellate Body Report, *United States—Import Prohibition of Certain Shrimp and Shrimp Products*, ¶ 3, WT/DS58/AB/R (Oct. 12, 1998).

[3] Thomas G. Kelch, Globalization and Animal Law 252 (Ross Buckley & Andreas Ziegler eds., 2011).

[4] *Id*. at 258-61.

GATT jurisprudence is to at least chill the efforts of countries to enact and enforce laws aimed at protecting animals, both from environmental and general animal protection perspectives.[5]

Consternation in the animal protection community over WTO decisions is likely to continue after the recent decision in *United States – Measures Concerning the Importations, Marketing and Sale of Tuna and Tuna Products* ("*Tuna Labeling"*).[6] In *Tuna Labeling* the "dolphin-safe" labeling scheme of the U.S. embodied in the Dolphin Protection Consumer Information Act (the "DPCIA") was found to violate the Agreement on Technical Barriers to Trade (the "TBT"), an agreement that is a part of the WTO regulatory structure.

The Dispute and the Panel Resolution

Introduction

In what is, as a practical matter, round three of the journey of the WTO and GATT into the animal world, Mexico asked for a Panel to hear their dispute with the U.S. concerning the DPCIA. The dispute resulted from the inability of the Mexican fishing fleet to label and sell its tuna products in the U.S. under a "dolphin-safe" label under the DPCIA. This was a consequence of the fact that the Mexican fleet performs most of its tuna fishing by taking advantage of the natural association of dolphins and tuna in the eastern tropical Pacific Ocean (the "ETP"). This natural association is exploited by the Mexican fleet by intentionally setting purse seine nets on dolphins for the purpose of capturing the tuna swimming below the dolphins. This type of fishing practice has resulted in mass killings of dolphins and the decline of dolphin populations in the ETP.

- The DPCIA is a labeling law that attacks this problem by providing, among other things, that it is illegal for sellers of tuna products to label their tuna products as "dolphin safe" if the products were caught:[7]By driftnet fishing on the high seas.[8]

---

[5] *Id.* at 268-70.

[6] Panel Report, *United States – Measures Concerning the Importations, Marketing and Sale of Tuna and Tuna Products*, WT/DS381R (2011) (hereinafter *Tuna Labeling*). At the time of this writing, this decision is on appeal and it is expected that an Appellate Body Decision will be forthcoming by May 16, 2012. *United States - Measures Concerning The Importation, Marketing And Sale Of Tuna And Tuna Products*, *Communication from the Appellate Body,* WT/DS381/12 (2012).

[7] *Id.* ¶¶ 2.3, 2.10, 2.11- 2.13: The labeling scheme of the Dolphin Protection Consumer Information Act (hereinafter the "DPCIA") is set forth at 16 U.S.C. § 1385(d)(1)-(3) (1999).

[8] *Id.* ¶ 2.3

- Outside the ETP by use of purse seine nets:
  - o In an area where there is association of dolphins and tuna, unless there is a certification by the Captain of the fishing vessel that the tuna was caught without intentionally setting on dolphins and that no dolphins were seriously injured or killed when the tuna were captured.[9]
  - o In other geographic areas, that no setting upon dolphins was performed.[10]
- In the ETP, unless there was no setting on dolphins and the Captain of the vessel and an observer on that vessel certify that no dolphins were seriously injured or killed in the fishing operations in which the tuna was captured.[11]
- In other geographic areas identified as having significant and regular dolphin mortality, unless the Captain and an observer certify that no dolphins were seriously injured or killed in the operations in which the tuna were captured. (Note that no fishery outside the ETP has been found to be in this category.)[12]

Since the Mexican fleet fishes primarily by setting on dolphins in the ETP, it cannot, for tuna products caught in this way, use the U.S. dolphin-safe label.

In addition to the DPCIA itself, there are also detailed regulations relating to these tuna labeling rules in the Code of Federal Regulations ("Regulations").[13] In addition, there is a case relating to this labeling scheme, *Earth Island Institute v. Hogarth*, which vacated as arbitrary, capricious, and an abuse of discretion a finding of the U.S. Secretary of Commerce that there was no significant adverse effect of setting on dolphins in the ETP. [14] This finding by the Secretary of Commerce had effectively caused the "no setting on dolphins rule" to be lifted for tuna caught in the ETP.[15] The *Hogarth* case caused a return to the rule requiring that for the "dolphin safe" label to go on tuna caught in the ETP there could be no setting on dolphins.[16]

The labeling rules under the DPCIA prescribe a specified "dolphin safe" mark.[17] Any other label concerning the "dolphin safe" issue can be used only if no dolphins were seriously injured or killed

---

[9] *Id.*
[10] *Id.*
[11] *Id.*
[12] *Id.*
[13] Dolphin-Safe Labeling Standards, 50 C.F.R. § 216.91.
[14] Earth Island Inst. v. Hogarth, 494 F.3d 757, 770 (9th Cir. 2007).
[15] *Tuna Labeling, supra* note 5 ¶ 2.19.
[16] *Id.* ¶¶ 2.19, 2.20.
[17] *Id.* ¶¶ 2.27-2.30.

when the tuna in question was caught, there is a tracking system and verification program for compliance with "dolphin safe" requirements comparable to that used under the DPCIA, and the label otherwise complies with labeling, advertising, and marketing laws.[18] Mexico was not able to qualify under this provision for dolphin-safe labeling.

Mexico's fishing fleet does, however, operate consistently with the Agreement on the International Dolphin Conservation Program ("AIDCP"). The AIDCP is an international agreement, to which the U.S. and Mexico are signatories, that has a "dolphin safe" labeling scheme allowing setting on dolphins in the ETP, but requires a certification that there was no dolphin mortality or serious injury in the catching of the tuna in question.[19]

It is the three measures, the DPCIA, the Regulations, and *Hogarth*, which were challenged by Mexico in *Tuna Labeling*. Procedurally, the Panel found it appropriate to analyze these three measures as a single measure.[20]

Claims under TBT 2.1

Mexico claimed that the U.S. scheme violated Articles I:1 and III:4 of the GATT 1994 and Articles 2.1, 2.2, and 2.4 of the Agreement on Technical Barriers to Trade (the "TBT").[21] The Panel began its analysis by concluding that the claims of Mexico under the TBT should be considered first because the TBT provisions were more detailed and specific provisions addressing the issues in the case than the GATT provisions under which Mexico made claims.[22] The first substantive issue reached by the Panel was whether the measures of the U.S. were "technical regulations" since each of the TBT provisions under which Mexico made claims, Articles 2.1, 2.2 and 2.4 of the TBT, deal with "technical regulations."[23] It found that to be a technical regulation three elements had to exist:[24]

- "[T]he measure applies to an identifiable product or group of products"
- "[I]t lays down one or more characteristics of the product" and
- "[C]ompliance with the product characteristics is mandatory"

[18] *Id.* ¶¶ 2.27-2.30.
[19] *Id.* ¶¶ 2.34-2.41.
[20] *Tuna Labeling, supra note 5* ¶¶ 7.16-7.26.
[21] *Id.* ¶ 3.1.
[22] *Id.* ¶¶ 7.35-7.47.
[23] Technical Barriers to Trade Agreement, arts. 2.1, 2.2, 2.4 (1994) (hereinafter "TBT").
[24] *Tuna Labeling, supra note* 5,. ¶ 7.53.

Technical regulations are to be distinguished from "standards", which are also regulated in the TBT, by the fact that "standards" are non-mandatory.[25]

The last element, the mandatory nature of the labeling provisions, was the most contentious issue in determining if the U.S. measures were technical regulations. Addressing this problem the Panel found that the labeling provisions were indeed mandatory because:

> In sum, we consider that compliance with product characteristics or their related production methods or processes is "mandatory" within the meaning of Annex 1.1, if the document in which they are contained has the effect of regulating in a legally binding or compulsory fashion the characteristics at issue, and if it thus *prescribes* or *imposes* in a *binding* or *compulsory* fashion that certain product *must* or *must not* possess certain characteristics, terminology, symbols, packaging, marking or labels or that it *must* or *must not* be produced by using certain processes and production methods. By contrast, compliance with the characteristics or other features laid out in the document would not be "mandatory" if compliance with them was discretionary or "voluntary".[26]

Under this rubric, the Panel found that the measures were technical regulations because they prescribe in a binding way the conditions under which the "dolphin safe" label can be used.[27] Moreover, the Panel found that the fact that it is possible to sell the product without the label does not in itself make the measure non-mandatory.[28]

This is not to say, however, that *any* labeling scheme that prescribes product characteristics will be considered "mandatory" and thus, a technical regulation according to the Panel. This is so for a number of reasons. First, the tuna labeling measures are binding as a matter of U.S. law.[29] Second, they constitute the *only means* by which a seller can label tuna relating to the dolphin safety of the way the tuna was caught.[30] As a result, the Panel found the U.S. labeling measure to essentially be an exclusive and mandatory standard for tuna/dolphin labeling and, thus, a technical regulation under the TBT.[31]

---

[25] *Id*. Annex 1.1, 1.2, ¶¶ 7.102-7.112.
[26] *Id*. ¶ 7.111 (emphasis in original).
[27] *Id*. 7.101, 7.113-7.145
[28] *Id*. ¶ 7.137.
[29] *Id*. ¶ 7.142.
[30] *Id*. ¶ 7.143.
[31] *Id*. ¶ 7.144.

This conclusion is not an obvious one. Indeed, one member of the Panel wrote separately on this issue, disagreeing with the conclusion that the U.S. measures were technical regulations. In this opinion it is argued that the fact that a voluntary labeling scheme sets standards that must be met to use a label, does not make the labeling system "mandatory".[32] In support of this position it is noted that tuna can be sold in the U.S. that does not have the "dolphin safe" label.[33] Thus, compliance with the labeling scheme is not mandatory for sellers of tuna in the U.S. Further, the dissenting Panel member argued that a major problem with the view of the other Panel members is that the majority view "would leave no space for voluntary labeling schemes as standards [as opposed to technical regulations]."[34] This point carries considerable weight. What labeling scheme does not have some sort of mandatory requirements for using the label?

Moreover, notwithstanding the arguments of the majority of the Panel, it is hard to see how the U.S. scheme prescribes mandatory characteristics for a product when importers are not required to have the label. The rigors of the labeling requirements are only mandatory if a party sells tuna labeled as "dolphin-safe," only then must they meet the mandate of the labeling scheme. Compliance with the labeling scheme is not required to sell tuna in the U.S.; non-dolphin-safe tuna can be sold in U.S. markets. So there does seem to be considerable merit in the dissenting Panel member's views. And this issue is, perhaps, likely to be one of the most controversial in the Panel decision.

Having made this argument, however, the dissenting Panel member went along with the rest of the Panel decision. The remaining Panel analysis begins with consideration of claims under TBT Article 2.1. Article 2.1 states: "Members shall ensure that in respect of technical regulations, products imported from the territory of any Member shall be accorded treatment no less favourable than that accorded to like products of national origin and to like products originating in any other country."[35] This provision contains language and intent similar to that of the "National Treatment" obligations of Article III of the GATT;[36] it demands that foreign products be treated at least as well as domestic products in relation to technical regulations.

Substantively, the Panel found that a violation of TBT Article 2.1 exists if:[37]

---

[32] *Id.* ¶ 7.151.
[33] *Id.* ¶ 7.161.
[34] *Id.* ¶ 7.151
[35] TBT, supra note 23, art. 2.1.
[36] General Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Art. III:4 (1994).
[37] *Tuna* Labeling, *supra* note 5, ¶ 7.209.

- The measure is a technical regulation and
- Products of another country are afforded less favorable treatment than "like" products of national origin or of other countries.

Having found the U.S. measures to be a technical regulation, the Panel needed only to determine if there was less favorable treatment of like Mexican products to resolve the TBT Article 2.1 claim by Mexico.

The Panel began this analysis by determining whether the tuna products sought to be imported into the U.S. by Mexico for which the "dolphin-safe" label was not available were "like" the tuna products that met the labeling requirement. In answering this question, the Panel used what is becoming a well-worn analogy of "likeness" as an accordion—the idea that the concept of "likeness" can expand and retract like an accordion—it can have different meanings in different provisions and contexts.[38] Notwithstanding this fact, the Panel found that in this context the concept of "likeness" can be informed by the interpretation of this same language in Article III:4.[39] In determining the meaning of "likeness" under Article 2.1, the Panel also found it important that this provision is meant to prevent measures that create "unnecessary obstacles to trade" and to preserve competitive opportunities for products of all countries.[40] More specifically, the Panel found that the following four factors are to be reviewed in determining "likeness":[41]

- The physical properties of the products
- The extent to which the products serve the same end uses
- The extent to which consumers perceive the products as the same, that is, "the extent to which consumers perceive and treat the products as alternative means of performing particular functions … to serve a particular want or need" and
- The international tariff classification of the products.

The Panel found each of these factors to clearly favor likeness in this case, except that the Panel recognized that consumers have preferences concerning tuna products and, in particular, "dolphin safe" products, that might be argued to indicate that the Mexican products are not like those meeting the U.S. dolphin-safe rules.[42] Notwithstanding this problem, the Panel found the products to be "like:"

---

[38] *Id.* ¶ 7.221; Kelch, *supra* note 2 at 245-48.
[39] *Tuna Labeling*, *supra* note 5 ¶¶ 7.223- 7.226.
[40] *Id.* ¶ 7.225.
[41] *Id.* ¶ 7.235.
[42] *Id.* ¶ 7.249.

> [h]owever, we are not persuaded that, in the circumstances of this case, a consideration of US consumer preferences relating to the dolphin-safe status of tuna products should lead us to modify our conclusion with respect to the likeness of US and Mexican tuna products and tuna products originating in any other country.[43]

Having found the products involved in the dispute to be "like products", the next issue was to determine the meaning of "less favorable treatment" under Article 2.1 of the TBT. To accomplish this, the Panel looked first at the meaning of this term under Article III:4 of the GATT.[44] In this vein, the Panel recognizes that "less favorable treatment" under Article III:4 does not mean that distinctions can never be made between "like" products.[45]

The Panel then found that access to the "dolphin-safe" label did constitute an advantage in the U.S. market.[46] So the question then becomes—is Mexico disadvantaged due to the U.S. labeling requirements? To answer this question it was necessary to analyze the geographic areas in which the Mexican fleet fishes and the fishing methods used by the fleet.[47] This is the case since the dolphin-safe label is not available for those fishing in the ETP by setting on dolphins under the U.S. measures.[48] The Mexican fleet fishes primarily in the ETP and typically uses the setting on dolphins method of fishing.[49] Given these facts, does the U.S. regulatory scheme particularly disadvantage the Mexican fishing fleet? This question is answered by the Panel by correctly noting that all fleets that use or might use the ETP fishery are equally affected by this regulation; it does not particularly disadvantage Mexico.[50] In addition, the Panel noted that different countries' fishing fleets responded to the U.S. "dolphin-safe" regulation in various ways.[51] The U.S. fleet stopped setting on dolphins in the ETP.[52] The Mexican fleet, on the other hand, determined to keep setting on dolphins, but did so under the AIDCP requirements, apparently thinking that meeting these requirements would ultimately be accepted as meeting U.S. "dolphin-safe" regulations.[53] But the *Hogarth* case caused this not to

[43] *Id*.
[44] *Id*. ¶¶ 7.270-7.276.
[45] *Id*. ¶ 7.276.
[46] *Id*. ¶ 7.287.
[47] *Id*. ¶ 7.304-7.334.
[48] *Id*. ¶ 2.3
[49] *Id*. ¶ 7.308.
[50] *Id*. ¶¶ 7.310-7.311
[51] *Id*. ¶¶ 7.312-7.334
[52] *Id*. ¶ 7.327.
[53] *Id*. at ¶¶ 7.331-7.334.

happen.[54] So ultimately, the differences in treatment of Mexican tuna in this respect was a result of choices made by the Mexican fishing industry, not the result of the U.S. measures themselves.[55]

Mexico also claimed that it was provided less favorable treatment by the U.S. regulations than other countries because the Mexican fleet would be forced to incur substantial costs, perhaps more than other countries, to change its fishing methods or to fish in areas outside of the ETP.[56] The Panel concluded that this did not constitute less favorable treatment, stating:

> [I]t is possible that a regulation, by setting out certain requirements that must be complied with, would affect different operators on the market differently, depending on a range of factors such as their geographical circumstances, their existing practices or their technical capabilities … However, the existence of such differences does not necessarily imply, in our view, that the measures at issue discriminate against products of certain origins in violation of Article 2.1 of the TBT Agreement.[57]

The Panel also rejected the argument that there was *de facto* discrimination based on the objective of the U.S. to encourage other countries' fleets to change their fishing methods, saying that the same incentive to change fishing methods applied to all fleets, not just to Mexico and, thus, was not less favorable treatment for Mexico or any other country.[58] Having disposed of these arguments, the Panel concluded that there was no less favorable treatment of Mexico under Article 2.1 of the TBT and any disadvantage suffered by Mexico was not related to the foreign origin of the tuna products:[59]

> That these measures may, through the operation of origin-neutral regulatory categories, have a detrimental impact on certain imports does not, in our view, necessarily imply that the measures afford less favourable treatment to such imported products within the meaning of Article 2.1. We acknowledge, in this respect, that different products of various origins may be affected differently by a measure that lays down certain product characteristics with which compliance is mandatory. However, as observed above, what matters for the purposes of determining whether there is a violation of Article 2.1 is not

[54] *Id*. at ¶ 7.332.
[55] *Id*.
[56] *Id*. at ¶ 7.344.
[57] *Id*. at ¶ 7.345.
[58] *Id*. at ¶¶ 7.369-7.373.
[59] *Id*. at ¶¶ 7.374-7.378.

> only the existence of some adverse impact on some imported products, but whether the group of imported products is placed at a disadvantage, in this respect, *compared to* the groups of like domestic and imported products originating in any other country …. [O]n the basis of the elements presented to us in these proceedings, it appears to us that the impact of the US dolphin-safe provisions on different operators on the market and on tuna products of various origins depends on a number of factors that are not related to the nationality of the product, but to the fishing and purchasing practices, geographical location, relative integration of different segments of production, and economic and marketing choices. In this context, any particular adverse impact felt by Mexican tuna products on the US market is, in our view, primarily the result of "factors or circumstances unrelated to the foreign origin of the product", including the choices made by Mexico's own fishing fleet and canners.][60]

Claims under TBT 2.2

Having disposed of Article 2.1 of the TBT, the Panel went on to consider the arguments of Mexico relating to Article 2.2 of the TBT which states:

> Members shall ensure that technical regulations are not prepared, adopted or applied with a view to or with the effect of creating unnecessary obstacles to international trade. For this purpose, technical regulations shall not be more trade-restrictive than necessary to fulfill a legitimate objective, taking account of the risks non-fulfillment would create. Such legitimate objectives are, *inter alia:* national security requirements; the prevention of deceptive practices; protection of human health or safety, animal or plant life or health, or the environment. In assessing such risks, relevant elements of consideration are, *inter alia:* available scientific and technical information, related processing technology or intended end-uses of products.[61]

Analyzing TBT Article 2.2, the Panel found that a technical regulation must have the following characteristics to meet the rigors of this provision:[62]

---

[60] *Id.* ¶¶ 7.375, 7.378 (emphasis in original).
[61] TBT, supra note 23, art. 2.2.
[62] *Tuna Labeling, supra note* 5,. ¶ 7.387.

- The technical regulation must pursue a legitimate objective and
- Must not be more trade restrictive than necessary to meet the objective.

In this regard, the U.S. asserted a number of objectives behind the dolphin safe labeling rules.[63] The first was ensuring that the public is not misled about whether tuna products have been harvested in a way that adversely affects dolphins.[64] The second objective was protecting dolphins by seeing to it that the U.S. market is not used to encourage fishing practices that adversely affect dolphins.[65] Reviewing these asserted objectives, the Panel agreed that these were, in fact, the objectives being pursued by the U.S.[66]

The Panel then moved on to consider whether these objectives were legitimate. Considering whether these objectives fit within any of the legitimate objectives listed in TBT Article 2.2, it was found that the first objective of the U.S. fit within the legitimate objective of "prevention of deceptive practices" and the second to fell within the legitimate objective of protecting "animal or plant life or health."[67] In considering these issues, the Panel states something of import to animal protection here:

> The protection of dolphins may be understood as intended to protect animal life or health or the environment. In this respect, a measure that aims at the protection of animal life or health need not, in our view, be directed exclusively to endangered or depleted species or populations, to be legitimate … We therefore read these terms as allowing Members to pursue policies that aim at also protecting individual animals or species whose sustainability as a group is not threatened.[68]

This is a significant statement since the previous WTO and GATT cases dealing with animal issues can all be seen, as can the *Tuna Labeling* case, as environmental cases dealing with the protection of species of animals that are threatened or endangered. The WTO is now recognizing that it is a legitimate objective of member states to protect not only endangered or threatened animals with their regulations, but also to protect individual animals or species that are not endangered or threatened.

---

[63] *Id*. ¶¶ 7.394-7.399.
[64] *Id*.
[65] *Id*.
[66] *Id*. at ¶ 7.425.
[67] *Id*. at ¶ 7.437.
[68] *Id*. ¶ 7.437.

This is important since it can be interpreted as stating that regulation of concerns relating to animals in agriculture, experimentation and entertainment can be legitimate objectives under the TBT and other agreements. This is so since groups of animals, other than those threatened as a species, can be proper subjects of member state regulations. Further, the statement goes further to say that protecting individual animals from harm can also be a legitimate subject of regulation.[69] So this at least appears to be a signal that regulation of animal issues in a sense much more general than protection of the environment or endangered species is a legitimate objective of member states under the WTO umbrella.

Having determined that objectives of the U.S. in its measures were legitimate ones under the TBT, the Panel goes on to consider whether the scheme is more trade restrictive than necessary. Under this standard, trade restrictiveness is only allowed to the extent:

> necessary to the achievement of the objective … where it would be possible to achieve the same objective through a less trade restrictive measure, then the measure at issue would be in violation of Article 2.2, because it would be more trade restrictive than necessary to achieve the same objective."[70]

This idea is supported by interpretations of Article XX of GATT using the term "necessary."[71] But there is a difference. The necessity concept under the TBT is applied to the "necessity" of the trade restrictiveness of the measure not the "necessity" of the measure to reach the objective of the member state as is the case under GATT Article XX. [72] To determine necessity under TBT Article 2.2, it must be determined that the trade restrictiveness of the measure us required to fulfill legitimate objectives at the level of protection of those objectives chosen by the Member.[73] Ultimately, to assess whether a measure is more trade restrictive than necessary, one must determine whether there is a less restrictive measure that is "reasonably available, that would achieve the challenged measure's objective at the same level [of protection]."[74]

The issue then came down to whether Mexico could propose a reasonably available and less restrictive alternative that would achieve each of the objectives at the level of protection set by the U.S. The first objective is not to mislead the public about whether tuna products have

---

[69] *Id.* ¶ 7.437.
[70] *Id.* ¶ 7.456.
[71] *Id.* ¶ 7.457.
[72] *Id.* ¶ 7.460.
[73] *Id.* ¶ 7.460.
[74] *Id.* ¶ 7.465.

been harvested in a way that adversely affects dolphins.[75] In this regard, the U.S. asserted that there are adverse impacts to setting on dolphins beyond the killing of dolphins; the latter being the main talisman of the AIDCP rule that the Mexican fleet follows.[76] These impacts include separating mother dolphins from young dolphins, causing starvation or predation on these young dolphins and the fact that the chase itself may otherwise tire and injure dolphins.[77] As a result, the U.S. rule disallowing the "dolphin-safe" label on tuna caught by setting on dolphins serves the objective of not misleading consumers regarding whether the tuna was caught in a way that harms dolphins.[78]

But, the Panel also found that methods of tuna fishing allowed under the U.S. rules adversely affect dolphins.[79] And tuna caught in this manner can get the dolphin-safe label.[80] This type of tuna includes tuna caught outside of the ETP, where it is not necessary to certify that there were no dolphins killed in the fishing operations.[81] Indeed, the requirement of no dolphin kill applies only in the ETP and not outside this area under the U.S. measures.[82] So, according to the Panel, consumers could be misled under the U.S. labeling requirements to believe that no dolphins were killed in fishing for a tuna product when, in fact, killing of dolphins could occur respecting "dolphin-safe" tuna caught outside the ETP.[83]

The less restrictive alternative proposed by Mexico was to allow the use of both the present U.S. label and the AIDCP dolphin-safe label that requires fleets setting upon dolphins to catch tuna to follow certain rules and requires a certification that no dolphins were killed or seriously injured in the fishing operation.[84] The Panel found that this was a less trade restrictive alternative than the present U.S. measures and that this alternative served the objective of not misleading U.S. consumers.[85] In making this determination, the Panel states that allowing the use of the present U.S. label as well as the AIDCP dolphin-safe label, "would be at least as apt [as present U.S. regulations] to contribute to the objective of insuring that consumers are not misled about whether tuna has been caught in a manner that adversely affects dolphins."[86]

---

[75] *Id*. ¶ 7.401.
[76] *Id*. ¶¶ 7.496-7.499.
[77] *Id*.
[78] *Id*. ¶¶ 7.504-7.505.
[79] *Id*. ¶¶ 7.517-7.531.
[80] *Id*. ¶¶ 7.532-7.545.
[81] *Id*. ¶¶ 7.546-7.564.
[82] *Id*. ¶ 7.560.
[83] *Id*. ¶ 7.564.
[84] *Id*. ¶¶ 7.565-7.578.
[85] *Id*. ¶¶ 7.496-7.499.
[86] *Id*. ¶ 7.577.

The Panel then went on to perform a similar analysis concerning the U.S. goal of protecting dolphins. It found that the U.S. measure did contribute to protecting dolphins by ensuring that the US market does not encourage fishing practices that may kill or injure dolphins within the ETP.[87] With respect to other fishing techniques permitted under the U.S. labeling law used outside of the ETP , however, the Panel found that the U.S. measures do not contribute to the protection of dolphins since they allow fishing techniques other than setting upon dolphins without requiring certification that no dolphins were killed in these fishing operations.[88] Based on these facts and despite the U.S. arguments that allowing setting on dolphins in the ETP may have unobserved adverse effects on dolphins, the Panel again concluded that the alternative proposed by Mexico of allowing the sale of tuna in the U.S. under the present labeling scheme as well as the AIDCP labeling scheme is a less trade restrictive method of obtaining the U.S. goal of dolphin protection than the present measures of the U.S.[89] In coming to this conclusion, the Panel states:

> In these conditions, we are not persuaded that allowing compliance with the AIDCP requirements to be advertised in addition to the existing US standard would lead to a lower level of protection than is currently provided under the US dolphin-safe provisions. As established above, in some cases, the risks arising from setting on dolphins under controlled circumstances may be lower than the risks arising from other fishing techniques applied without controlling for dolphin mortality.[90]

So ultimately the Panel found that the U.S. dolphin-safe labeling regulation violated TBT 2.2 since the stated objectives of the U.S. measures could be obtained by a less trade restrictive alternative, that of allowing use of both the present U.S. labeling system and the AIDCP labeling rules.[91]

Claims under TBT 2.4

The last main substantive claim considered by the Panel was Mexico's allegation that the U.S. measures violated Article 2.4 of the TBT which states:

---

[87] *Id*. ¶ 7.599.
[88] *Id*. ¶¶ 7.590- 7.599.
[89] *Id*. at ¶¶ 7.601-7.623.
[90] *Id*. at ¶ 7.615.
[91] *Id*. ¶ 7.620.

> Where technical regulations are required and relevant international standards exist or their completion is imminent, Members shall use them, or the relevant parts of them, as a basis for their technical regulations except when such international standards or relevant parts would be an ineffective or inappropriate means for the fulfillment of the legitimate objectives pursued, for instance because of fundamental climatic or geographical factors or fundamental technological problems.[92]

The Panel identifies three elements that must be examined to determine if a violation of TBT Article 2.4 has occurred:[93]

- The "[e]xistence or imminent completion of a relevant international standard".
- Has this standard been used as a foundation for the technical regulation?
- Is the standard "an ineffective or inappropriate means" for fulfillment of the objectives pursued?

On the first question, it was found that the AIDCP "dolphin-safe" provisions are international standards. In finding this to be the case, the Panel determined that these provisions were: (1) a standard, (2) created by an "international standards organization" and (3) made available to the public.[94] On the second question the Panel found that the U.S. had not used this international standard and pointed to a formal statement of this fact in the *Hogarth* case.[95]

It was on the question of whether the standard was "an ineffective or inappropriate means" to reach the goals of the U.S. that the Panel found the position of Mexico to be wanting.[96] The Panel found that the AIDCP standard would not be effective in reaching all of the objectives of the U.S., in particular the goals of informing consumers that dolphins were chased in catching the tuna and that there are possible adverse consequences on dolphins of this practice.[97] As a result, the AIDCP standard was found to be an ineffective means of reaching this objective of the U.S.[98] The U.S., as noted earlier, also had the goal of protecting dolphins by not allowing the US market to be used to encourage fishing

[92] TBT, supra note 23, art. 2.4.
[93] *Tuna Labeling, supra note* 5, at ¶ 7.627.
[94] *Id*. ¶¶ 7.661-7.707.
[95] *Id*. ¶¶ 7.711-7.716.
[96] *Id*. ¶ 7.740.
[97] *Id*. ¶¶ 7.729-7.731.
[98] *Id*.

fleets to fish in a manner that has adverse effects on dolphins.[99] The Panel found the AIDCP standard was ineffective in obtaining this goal since it does not address the problem of the unobserved effects caused by chasing dolphins to catch tuna.[100] Having found that use of the AIDCP standard was an ineffective and inappropriate means to reach these U.S. objectives, there was no violation by the U.S. of TBT Article 2.4.[101]

Recall that Mexico also made a number of claims of violations of provisions of the GATT.[102] The Panel declined to go on to consider the issues raised by Mexico under GATT based on principles of judicial economy.[103] The Panel exercised judicial economy in these circumstances since it determined that it had had sufficiently resolved the dispute through its rulings on the TBT issues and had addressed all aspects of Mexico's claims in these rulings.[104]

Conclusions

Here we have another WTO decision that is not likely to please either those concerned with environmental or animal protection issues. Under this decision, a labeling scheme propounded by the U.S. that intended to provide consumers with information to allow them to purchase tuna captured in a dolphin-safe manner has been found in violation of TBT Article 2.2. As a result, Mexico will be permitted to use the AIDCP dolphin safe labeling scheme in the U.S. even though the tuna caught by the Mexican fleet will, for the most part, have been caught by the method of setting on dolphins which is thought by the U.S. to be injurious to dolphins. Given that Mexico succeeded in convincing the Panel that the U.S. measures allowed labeling of some tuna products as "dolphin-safe," even though the fishing methods for the tuna may have killed dolphins, while the measures did not allow the label to be applied to Mexican tuna caught in the ETP where there was certification that no killing of dolphins occurred, perhaps the result is not surprising. One must wonder precisely why the U.S. regulations were structured in this way.

The most glaring problem with the decision, however, may be how the Panel viewed the definition of a "technical regulation." It is difficult under this decision to see why any labeling scheme will not now be considered a technical regulation subject to the rules relating to such regulations. And these regulations are different from those applied to "standards" under the TBT, the other category of rules treated by the TBT.

---

[99] *Id.* ¶¶ 7.394-7.399.
[100] *Id.* ¶¶ 7.736-7.740.
[101] *Id.* ¶¶ 7.721-7.740.
[102] *Id.* ¶ 7.741.
[103] *Id.* ¶¶ 7.741-7.748.
[104] *Id.*

Consumer labeling is one mechanism by which consumers can make choices relating animal treatment issues and, indeed, the "dolphin-safe" label is one that nearly all consumers have come to demand. It is unclear what the impact of this ruling will be on consumer behavior. Will the U.S. and AIDCP labeling schemes be able to peaceful coexist in the marketplace or will they just cause consumers to tune out both labeling mechanisms in frustration about what these different labels mean? Only time will answer this question.

Perhaps more disturbing, however, is the fact that one frequently used mechanism for trying affect change in the treatment of animals is to allow consumers to choose products that are at least somewhat friendlier to animals than other products. The EU has used a labeling scheme to some good effect in its egg labeling scheme with data showing that consumers, in at least Britain, have altered their behavior since the beginning of the egg labeling scheme in that country, moving toward purchasing eggs produced under non-intensive farming methods. [105] Moreover, the EU is discussing widening animal welfare labeling as a means of attacking animal treatment issues.[106] Now, however, the EU and other countries considering new labeling schemes will have to be wary of possibly ending up on the wrong side of a WTO technical regulation decision as did the U.S.

But there is at least one note of optimism that can be extracted from the *Tuna Labeling* decision. The Panel did make clear that regulations can appropriately be created consistent with WTO strictures that provide for regulation of the treatment of individual animals and groups of animals that are not threatened or endangered. So perhaps the opening of this door will instigate advances in animal protection in international trade.

---

[105] Kelch, *supra* note 2 at 109-13.

[106] *Id. See also Opinion of the European Economic and Social Committee on Animal Welfare – Labeling* European Economic and Social Committee, , NAT/342 (2007); *see also Animal Welfare Labeling: Commission Report Launches In-Depth Political Debate*, European Commission, http://ec.europa.eu/food/animal/welfare/farm/labelling_en.htm (last visited Nov. 14, 2011).

Management of the Atlantic Bluefin Tuna Fishery: An International Law Disaster

Nicholas Assenmacher[1]

I. Introduction

Mankind, throughout its history, has depended on and greatly exploited the rich marine resources found in Earth's vast oceans. However, over the past century an exponentially increasing human population and the resulting market pressure has led to an ever increasing demand for these resources, such as fish, to satisfy man's insatiable appetite. Fishing has also become an integral part of the economies of many States. The result is an ongoing, unsustainable harvest of much of the world's marine resources. Today, the demand for the resource, combined with unsustainable practices, has caused the population of the critically endangered Atlantic bluefin tuna to teeter on the brink of collapse.[2]

This paper will first describe the physical and population characteristics of the Atlantic bluefin tuna. It will then examine the causes and pressures, both economic and political, which have led to the decline of this fish species. The focus will then shift to an analysis of the current international law regime responsible for managing the Atlantic bluefin tuna, particularly the population in the Mediterranean. Finally, to prevent population collapse and encourage eventual recovery of fish species, further intervention of international law is needed. This intervention could come by way of a highly unlikely overhaul of the International Commission for the Conservation of Atlantic Tuna (ICCAT), the establishment of marine protected areas, or listing the Atlantic bluefin tuna as a species threatened with extinction under Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).[3]

---

[1] Nicholas Assenmacher earned a B.A. from the University of Michigan in 2006, majoring in the Program in the Environment, with a focus on environmental law and policy. In 2011, Mr. Assenmacher graduated *cum laude* from Michigan State University College of Law, where he also served as President of the Environmental Law Society. Currently, Mr. Assenmacher works as an associate at a law firm in metro Detroit.

[2] The IUCN Red List of Threatened Species, http://www.iucnredlist.org/apps/redlist/details/21864/0 (last visited Nov. 30, 2010).

[3] Convention on International Trade in Endangered Species of Wild Fauna and Flora, http://www.cites.org/eng/disc/what.php (last visited Apr. 30, 2012).

(A) Meet the Atlantic Bluefin Tuna

Imagine a silvery, streamlined, ocean-going predator, capable of reaching speeds of up to forty-three miles per hour, lengths of up to fifteen feet, and weights of over 1500 pounds.[4] While the first image to pop into one's head might be that of the ocean's most famous predator, the shark, these physical characteristics actually fit the description of the Atlantic bluefin tuna, *Thunnus thynnus*. Unfortunately, due to the fishing pressure of the past four decades, fish reaching the sizes described above are extremely rare to find today, and the average size of Atlantic bluefin tuna has been in decline. Today, the average Atlantic bluefin tuna now measures only six to seven feet in length and weighs 550 pounds.[5]

This aerodynamically shaped fish thrives in the cold, open waters of the Atlantic Ocean. It commonly dives to depths of 500 to 1000 feet in search of its prey.[6] Like many predators, it is an opportunistic feeder and thus its prey can be just about anything from jellyfish, octopus, crabs, and sponges to fish and crustaceans.[7] There are eight species of tuna in the genus *Thunnus*, six of which are primary species in fish markets: albacore, bigeye, Pacific bluefin, the southern bluefin, yellowfin, and the Atlantic bluefin.[8] The Pacific bluefin, southern bluefin, and Atlantic bluefin are all critically threatened according to the International Union for Conservation of Nature and Natural Resources (IUCN) Red List of Threatened Species.[9]

(B) Population Characteristics

The Atlantic bluefin tuna is a highly migratory fish species, traveling great distances, sometimes over a thousand miles, as it migrates to and from its foraging and spawning grounds.[10] Scientists now say that

---

[4] National Geographic, http://animals.nationalgeographic.com/animals/fish/bluefin-tuna/ (last visited Apr. 30, 2012); FishBase, *Thunnus thynnus*, http://www.fishbase.org/summary/Thunnus-thynnus.html (last visited Apr. 30, 2012).

[5] National Geographic, http://animals.nationalgeographic.com/animals/fish/bluefin-tuna/ (last visited Nov. 30, 2010).

[6] Barbara A. Block, et. al. *Migratory Movements, Depth Preferences, and Thermal Biology of Atlantic Bluefin Tuna*, 293 Science, Aug. 17, 2001, at 1310.

[7] Int'l Comm'n for the Conservation of Atl. Tunas (ICCAT), Standing Comm. on Research & Statistics (SCRS) , Executive Summary BFT 75 (2010), http://www.iccat.int/Documents/SCRS/ExecSum/BFT_EN.pdf.

[8] FishBase, *Fish Identification*, http://www.fishbase.org/identification/SpeciesList.php?genus=Thunnus.

[9] IUCN Red List, http://www.iucnredlist.org/ (last visited Nov. 30, 2010).

[10] NOAA FishWatch, Western Atlantic Bluefin Tuna: About The Species, http://www.fishwatch.gov/seafood_profiles/species/tuna/species_pages/atl_bluefin_tuna.htm (last visited Apr. 30, 2012).

there are actually two distinct Atlantic bluefin tuna populations in the Atlantic Ocean.[11] While adults of these two populations may intermingle as they hunt for food in the north-central Atlantic during the summer/fall feeding period, they do not interbreed since in the spring, adults from the two populations return to their respective spawning grounds, which lay thousands of miles apart.[12] One such population is on the eastern seaboard, whose spawning grounds lay in the Mediterranean Sea.[13] The other population is in the western Atlantic, along the coast of North America, and these fish congregate in the Gulf of Mexico to spawn.[14]

Besides spawning grounds, there are also other differences between the two distinct populations of Atlantic blue fin tuna. While it is a somewhat slow growing fish in general, Atlantic Bluefin tuna in the eastern Atlantic grow and reach sexual maturity at a much faster rate compared to those in the western Atlantic.[15] Atlantic Bluefin Tuna from the Gulf of Mexico reach maturity at around eight years of age at a weight of over 300 pounds, whereas those from the Mediterranean take only four years to mature at a weight around 55 pounds.[16] This also affects the longevity of the fish, as the eastern Atlantic bluefin tuna may only live for up to twenty years whereas the bluefin tuna in the western Atlantic have a lifespan of thirty-two years.[17]

The highly migratory nature of the Atlantic bluefin tuna leads to problems in managing and conserving the fish. They cross many international boundaries and also travel into areas which are under the jurisdiction of no State. This means that management of the species requires the cooperation of many States as well as international agreements and regional planning structures. Unfortunately for the Atlantic bluefin tuna, obtaining international cooperation and agreements is often a difficult and time consuming process, and enforcement is often lacking as well.

---

[11] Block, et al, *Electronic Tagging & Population Structure of Atlantic Bluefin Tuna*, 434 Nature, Apr. 28, 2005, at 1121-27.

[12] Steven L. H. Teo, et. al., *Annual migrations, Diving Behavior, & Thermal Biology of Atlantic Bluefin Tuna, Thunnus thynnus, on Gulf of Mexico Breeding Grounds*, 151(1) Marine Biology, Mar. 2007, at 2, *available at* http://coastwatch.pfel.noaa.gov/xfer/topp2/Teo_etal_ABFT_breeding.pdf.

[13] *Id*.

[14] *Id*.

[15] Large Pelagics Research Center, Research: Bluefin Tuna, http://www.tunalab.org/bluefin_tuna.htm (last visited Apr. 30, 2012).

[16] ICCAT, Report of the 2008 Atlantic Bluefin Stock Assessment Session 4 (2008) *available at* http://www.iccat.int/Documents/Meetings/Docs/2008_BFT_STOCK_ASSESS_REP.pdf [hereinafter *2008 Assessment*].

[17] *Id*.

(C) Role in the Ecosystem

The Atlantic bluefin tuna is an apex predator in its marine ecosystem.[18] As such, it sits at the top of the food chain and plays a vital ecological role by maintaining the population balance of numerous prey species. Many species in an ecosystem are linked to one another through the foodweb. The absence of a key species has the potential to dramatically shift the population dynamics of species within an ecosystem and eventually alter the ecosystem itself.[19] Species higher up on the food chain oftentimes can help control populations of those species that are lower down on the food chain. These species, in turn, control the numbers of species on the bottom of the food chain, who might, for example, depend on vegetation or coral and would likely overgraze if not kept in check.[20]

Predation is needed to prevent the carrying capacity of the ecosystem from being surpassed.[21] For example, if the Atlantic bluefin tuna is completely, or effectively, removed from the ecosystem by overfishing, the population of one of its prey fish might greatly increase due to the lack of predation.[22] The overabundance of this fish could then cause a dramatic decrease in a crustacean population that it preys on.[23] This decrease could in turn lead to an explosion of vegetative growth, which was previously kept in check by feeding crustacean.[24] This in turn could have its own unforeseen effects. This is just my own imagined illustrative example, but the point is that, eventually, an entire ecosystem could be permanently altered and populations of some marine species could collapse.[25]

The foregoing example demonstrates the importance of any one species in an ecosystem, and shows why biological diversity should be valued and protected. The removal of just one species, especially an apex predator like the Atlantic bluefin tuna, may cause unwanted and unforeseen consequences. Eventually, this may result in negative impacts on other species, irreparable harm to the ecosystem, and economic harm to those who depend on marine resources.

---

[18] W. J. Overholtz, *Estimates of Consumption of Atlantic Herring* (*Clupea harengus*) *by Bluefin Tuna* (*Thunnus thynnus*) *During 1970–2002*, *J. Northw. 36 Atl.. Fish. Sci., 2006, at 55-63*.

[19] Oregon State University. *Loss Of Top Predators Causing Surge In Smaller Predators, Ecosystem Collapse*, ScienceDaily, Oct. 4, 2009, http://www.sciencedaily.com / releases/2009/10/091001164102.htm.

[20] *Id*.

[21] Garcia, et. al., *The Ecosystem Approach to Fisheries*, FAO Fisheries Technical Paper No. 443, 2003, at 9-12.

[22] *Id*.

[23] *Id*.

[24] *Id*.

[25] Garcia, *supra* note 20.

(D) On the Verge of Population Collapse

Over the past four decades, the stocks of the Atlantic bluefin tuna have declined dramatically and continue to do so. Under the management of the International Commission for the Conservation of Tunas (ICCAT), the adult population of the fish has declined by seventy-four percent in the eastern Atlantic and eighty-two percent in the western.[26] Even more discouraging is the fact that most of the decline (sixty-one percent) of the eastern population has occurred just in the past ten years.

Furthermore, the spawning stock biomass of the Atlantic bluefin tuna has declined rapidly in the last several years while fishing mortality increased rapidly, especially for large individuals over eight years old which had a three to four fold increase since 2000.[27] In fact, the recent spawning stock biomass from 2003 to 2007 is less than forty percent of the highest estimated levels (1970-1974 or 1955-1959 depending on the analysis).[28] Clearly, such a trend is unsustainable and the population of the Atlantic bluefin tuna is on the verge of collapse.

(E) A Classic Case of the Tragedy of the Commons

In 1968, Garrett Hardin wrote about the “tragedy of the commons” to describe the situation where each person using a common resource maximizes his own best interest against the best interest of the collective group and to the detriment of the common resource.[29] Each farmer is incentivized to keep adding cows to his herd and graze them on the common pasture; this is because each farmer enjoys the full benefit of adding his own cow to the pasture, while any negative effects to the common pasture is divided equally amongst the group.[30] If the farmer does not add a cow, other farmers will and he may lose out on feed for his cows. However, the problem is that each farmer comes to the same conclusion. Eventually the pasture reaches its maximum carrying capacity, but the cycle continues until the pasture is overgrazed and destroyed to the detriment of all.[31] However, if the farmers had come together and agreed to limit the number of cows they put on the pasture,

---

[26] Proposal to include Atlantic Bluefin Tuna (Thunnus thynnus (Linnaeus, 1758)) on Appendix I of CITES in accordance with Article II 1 of the Convention 1 (Oct. 2009), *available at* http://www.cites.org/common/cop/15/raw_props/E-15%20Prop-MC%20T%20thynnus.pdf [hereinafter *CITES Proposal*].

[27] *Id*. at 13.

[28] *Id*.

[29] Garrett Hardin, *The Tragedy of the Commons*, 162 Science, Dec. 13, 1968, at 1243-48.

[30] *Id*.

[31] *Id*.

each farmer could have continued to use the common pasture forever. Each farmer maximizes short term economic gain at the expense of long term viability of the pasture.[32]

Hardin's analogy demonstrates the need for cooperation in managing common resources and sustainable use. While Hardin used the example of a farm pasture, "the tragedy of the commons also provides a framework for understanding the growth of the Atlantic bluefin tuna fishery, the decrease in the number of Atlantic bluefin tuna, and the failure of the government to manage the fishery effectively."[33] Without proper management and oversight, the overfishing of Atlantic bluefin tuna is like the overgrazing of the pasture grass. Fishing of the Atlantic bluefin tuna has already surpassed its maximum sustainable yield and the resource is heading towards collapse.

II. Overfishing & Unsustainable Use of the Resource

"A threat to marine biodiversity, overfishing refers to the practice of commercial and non-commercial fishing which depletes a fishery by catching so many adult fish that not enough remain to breed and replenish the population."[34] It affects, not only the targeted species of fish, but also affects by-catch species, which are accidentally or unintentionally caught. More importantly, entire marine ecosystems can be thrown out of balance and put into jeopardy of collapse when certain key species in an ecosystem are reduced.[35] The overfishing of the Atlantic bluefin tuna, as an apex predator, could have just such an affect.

Marine life in the oceans today is faced many threats to its existence: pollution, global warming, coastal development, loss of key species, fewer reproductive adults, and other environmental factors.[36] However, the leading cause of decline for the Atlantic bluefin tuna is overfishing. Consumer demand fuels the overfishing of the species. The world's fishing markets, particularly those in Japan, further encourage the blatant overfishing which persists in the fishing industry.

---

[32] *Id.*

[33] Patrick A. Nickler, *A Tragedy of the Commons in Coastal Fisheries: Contending Prescriptions for Conservation, and the Case of the Atlantic Bluefin Tuna*, 26 B.C. Envtl. Aff. L. Rev. 549, 550 (Spring 1999).

[34] Udy Bell, *Overfishing: A Threat to Marine Biology*, XLI:2 UN Chronicle 17, 17 (2004).

[35] *See* A. Charlotte De Fontaubert et al., *Biodiversity in the Seas: Implementing the Convention on Biological Diversity in Marine and Coastal Habitats*, 10 Geo. Int'l Envtl. L. Rev. 753, 762 (1998).

[36] Ashley Lillian Erickson, *Out of Stock: Strengthening International Fishery Regulations to Achieve a Healthier Ocean,* 34 N.C.J. Int'l L. & Com. Reg. 281, 285 (Fall 2008).

In addition, modern day fishing techniques are highly efficient and often indiscriminate in the age and type of fish they catch. Illegal, unreported, and unregulated fishing (IUU) is also another major factor. However, the leading reason for overexploitation of the Atlantic bluefin tuna stocks, and perhaps the most egregious, is the failure of ICCAT, the regulatory body in charge of managing the fish, to responsibly manage the taking of legal stocks.

(A) Consumer Demand & Market Pressures

The Atlantic bluefin tuna is perhaps the perfect fish to the human palate. The flesh of the Atlantic bluefin tuna is pink to dark red, which many people find attractive, compared to the white flesh of most other fish. Perhaps its biggest draw though is its fatty underbelly, which helps the fish survive in the cool and, more often, cold water temperatures of its environment.[37] This fatty underbelly has delicious, buttery taste and desirable for use in sushi and, as a result, the bluefin tuna is a highly prized food fish in fish markets around the world.[38] It is a delicacy in restaurants, and an order of sushi using Atlantic bluefin tuna, often listed as *toro* in menus, can cost more than twenty dollars at higher end restaurants for just a few bites of the fish.[39]

The bluefin tuna, and its fatty underbelly, are particularly highly valued in the sashimi (raw fish) markets in Japan. (Sashimi can later be added with rice and vinegar to create sushi.) Japan's insatiable hunger for seafood, and bluefin tuna in particular, continues to be one of the biggest driving forces in the global fish markets.[40] In fact, in 2001, an auction at the Tsukiji fish market in Tokyo, Japan set the record for the price paid for a single giant blue fin tuna where a 444 pound fish sold for $220,000, or about $500 per pound.[41] Another recent auction in Japan in January of 2010 sold a 513 pound bluefin tuna for $177,000.[42]

[37] *More Bluefin Tuna Are Sold Than Reported Caught*, EcoHearth, Nov. 21, 2011, http://ecohearth.com/component/content/article/1727-more-bluefin-tuna-are-sold-than-reported-caught.html.

[38] *A World Without Tuna?*, The Week, Dec. 3, 2009, http://theweek.com/article/index/103657/a-world-without-tuna.

[39] Relax News, *Japan to Fight Global Trade Ban on Atlantic Bluefin Tuna*, The Independent, Mar. 11, 2010, http://www.independent.co.uk/life-style/food-and-drink/japan-to-fight-global-trade-ban-on-atlantic-bluefin-tuna-1919764.html.

[40] AFP, *China, Japan, US Top List of World Seafood Consumers: Study*, The Independent , Sept. 23, 2010, http://www.independent.co.uk/life-style/food-and-drink/china-japan-us-top-list-of-world-seafood-consumers-study-2087368.html.

[41] Shino Yuasa, *Giant Tuna Fetches $177,000 At Japan Fish Auction*, The Huffington Post, Jan. 5, 2010, http://www.huffingtonpost.com/2010/01/05/giant-tuna-fetches-177000_n_411988.html.

[42] *Id*.

Japan also holds the title for the biggest consumer of Atlantic bluefin tuna; consuming nearly eighty percent of the world's catch.[43] However, sashimi-grade tuna is also sent to many other countries as well, notably Canada, the United States, Hong Kong, and Korea.[44]

Japan's unsustainable hunger for marine resources, and its staunch opposition to any efforts to curb its behavior, may be a product of both its culture and traditions.[45] Surrounded by the bounty of the vast ocean, Japan historically has been a sea-faring nation with strong traditions in fishing.[46] Today, many Japanese people are still heavily reliant on the fishing industry, not only for jobs, but also as a source of food.[47] As a comparatively small, mountainous island with many inhabitants, it simply does not have the room to allow for extensive agriculture, which could replace much of its seafood diet.[48] Even if other food options were readily available, the country's traditional dependency on fishing seems to have been engrained into its culture, and cultural change can be hard to come by.[49] Thus, it is difficult to convince Japan to make a change in its consumer demand, even in the face of collapsing fish stocks, because it means a cultural change would have to take place as well.

As the aforementioned paragraphs demonstrate, market pressure is clearly helping to drive the Atlantic bluefin tuna to the brink of extinction. The fish spurs on a lucrative business, estimated at $7.2 billion US a year.[50] Consumer demand is continually increasing not only due to population growth, but also due to a growing middle class and an increasing perception of luxury associated with buying expensive Atlantic bluefin tuna.[51] As a result of this demand and the ever shrinking bluefin tuna fishery, the price per pound fetched at markets continues to

[43] David Jolly & John Broder, *U.N. Rejects Export Ban on Atlantic Bluefin Tuna*, N.Y. Times, Mar. 18, 2010, at A8.
[44] **Henrylito D. Tacio**, *Popular Tuna are Over-Fished, in Danger of Extinction*, Gaia Discovery, Dec. 11, 2009, http://www.gaiadiscovery.com/marine-life-latest/popular-tuna-are-over-fished-in-danger-of-extinction.html.
[45] Paul Greenberg, *Tuna's End*, N.Y. Times, June 22, 2010, at MM28.
[46] Nobuyuki Yagi, *Draft Country Note On Fisheries Management Systems -- Japan*, at 1, available at http://www.oecd.org/dataoecd/10/46/34429748.pdf.
47 Carl-Christian Schmidt, *Fisheries & Japan: A Case of Multiple Roles?*, OECD, Feb. 13, 2003, at 3, available at http://www.oecd.org/dataoecd/43/62/2507622.pdf.
[48] New World Encyclopedia, Japan, http://www.newworldencyclopedia.org/entry/japan (last visited April 30, 2012).
[49] *Tuna's End, supra* note 44.
[50] Jeremy Hance, *ICCAT Fails to Protect Critically Endangered Tuna–Again*, Mongabay.com, Nov. 15, 2009, http://news.mongabay.com/2009/1115-hance_iccat.html.
[51] Stefano B. Longo, *Global Sushi: The Political Economy of the Mediterranean Bluefin Tuna Fishery In The Modern Era*, XVII(2) Amer. Sociological Ass'n 403-427 (2011).

rise astronomically.[52] This encourages the fishing industry, both legal and illegal, to catch even more fish. Thus, an unsustainable cycle of supply and demand continues to perpetuate itself in an attempt to satisfy the insatiable appetite of consumers, leaving the Atlantic bluefin tuna on the verge of population collapse.

(B) Fishing Practices & Methods

The Atlantic bluefin tuna has been a favorite target of fishermen for thousands of years, but until the past century, man's ability to fish the ocean was fairly limited due to technology, and thus man's affect on fish stocks was negligible.[53] However, thanks to technological advances and new fishing techniques, especially in the past couple of decades, humans are much more efficient at catching fish like the Atlantic bluefin tuna and, as a result, have a more devastating impact on the fish's population. Two of the most noteworthy (and notorious) advancements are the use of "longlines" to catch the bluefin tuna, and the use of purse seiners, which net the bluefin tuna to be raised on "tuna farms."

(i) Longline Fishing

Longline fishing is a commercial fishing technique used in the fishing of many different types of fish. It began to see a lot of use in the catching of bluefin tuna in the 1960s and 1970s with the explosion in demand for bluefin tuna in the Japanese fish markets.[54] It consists of a main fishing line, usually monofilament so fish cannot see it, held afloat throughout its length by buoys, and can be as short as one mile or as long as fifty miles.[55] Then, extending from the main line at intervals, are secondary lines with barbed hooks at the ends. The number of hooks can be in the hundreds or thousands, and the hooks can be set so as to hang near the surface, towards the ocean's floor, or at varying depths in between.[56] The hooks are then baited with the favorite food of the target species. Boats, called long liners, take the longlines out to sea and

[52] Eric Reker, *Mediterranean Tuna Fisheries: Policies and Implications of Unsustainable Harvesting*, 14 The Current 1, 3-4 (Fall 2010).
[53] Wendy Zukerman, *Deep Sea Fishing for Tuna Began 42,000 Years Ago*, NewScientist, Nov. 24, 2011, http://www.newscientist.com/article/dn21213-deep-sea-fishing-for-tuna-began-42000-years-ago.html.
[54] Jean-Marc Fromentin & Joseph E. Powers, *Atlantic Bluefin Tuna: Population Dynamics, Ecology, Fisheries & Management*, 6(4) Fish and Fisheries 281, 306 (Dec. 2005).
[55] Monterey Bay Aquarium, http://www.montereybayaquarium.org/cr/cr_seafoodwatch/sfw_gear.aspx (last visited Nov. 14, 2010).
[56] FAO Fisheries & Aquaculture Dept., http://www.fao.org/fishery/fishtech/1010/en (last visited Nov. 14, 2010).

can either anchor them, drag them, or set them adrift for up to a day and then retrieve them along with their catch.[57]

Longlining is a highly efficient, and legal, method for commercial fisherman to catch fish such as the Atlantic bluefin tuna, but it is also controversial. Longlines are notorious for their incidental by-catch; they often hook or ensnare seabirds, sea turtles, sharks, and other non-target fish.[58] In regards to the Atlantic bluefin tuna, the problem is that longlines are too efficient. They are able to comb large areas at the same time with thousands of baited, barbed hooks.[59] They can also cover varying levels of the water table at the same time.[60] Without regulation on the number of hooks and length of longlines, large numbers of fish can be wiped out and too few of the fish are left to sustainably reproduce. In addition, longlines indiscriminately catch all sizes of fish.[61] Even if a regulatory body like ICCAT set a size or age limit on the Atlantic bluefin tuna, longlines have difficulty in stopping undersized and juvenile fish from getting hooked. Instead, a fishing boat might comply with size regulations by just throwing the hooked fish back overboard, likely already dead from the experience.

With stringent regulation, longlining can be a more preferable practice than gillnetting, trawling, dredging, and seining due to the environmental impacts of those methods. However, longlines appear to be rarely regulated, let alone stringently.[62] In addition, longlining's ability to efficiently cover large areas of water at different depths and indiscriminately catch fish of all sizes and maturity, likely makes it an unsustainable practice under any amount of regulation.

(ii) Purse Seiners & Tuna Farming

Purse Seines and tuna farms are one of the biggest culprits in overfishing, mostly in the Mediterranean. In recent years, more than eighty-five percent of the total bluefin catch in the Mediterranean was made by purse seines, and most of this catch was then kept in farms.[63] Purse seines are nets with rings along the bottom that are laid out around a school of fish. A rope or wire runs through the rings and, when

[57] Ginny Goblirsch & Steve Theberge, *Long-Liners*, Oregon Sea Grant, 2003, available at http://seagrant.oregonstate.edu/sites/default/files/sgpubs/onlinepubs/g03010.pdf.
[58] FAO, *supra* note 55.
[59] *Id*.
[60] *Id*.
[61] *Id*.
[62] Dave Bard, *Campaign Backgrounder: Switching Gears to Protect Ocean Wildlife*, The PEW Charitable Trust, Mar. 5, 2012, http://www.pewenvironment.org/newsroom/fact-sheets/switching-gears-to-protect-ocean-wildlife-85899374369.
[63] *2008 Assessment*, *supra* note 15, at 18.

tightened, it draws the rings close together, forming a "purse" or basket that traps the fish.[64] It, in effect, prevents fish from swimming down to escape after the net has as encircled them. Boats which use these nets are called purse seiners, and they are very effective in catching fish that school near the surface such as the Atlantic bluefin tuna.[65] Often spotter planes or helicopters are used to spot and help direct the purse seiners around schools of Atlantic bluefin tuna, even though the use of such spotter planes is prohibited by ICCAT.[66]

The bluefin tuna caught by these purse seiners are not always immediately harvested and sent to markets. Instead, many of these wild fish are taken to holding pens in tuna farms offshore for a period of months while they are fattened for market.[67] Farming capacity in the Mediterranean in 2008 was around 64,000 tons of fish which was a capacity excess of more than 32,000 tons, twice as much allowed by the 2008 Total Allowable Catch set by ICCAT.[68] Estimates of fleet size indicate that there is sufficient active fishing capacity to fully supply these farms to their limits as well.[69] Only after reaching a certain size are they then shot and butchered for sushi and tuna steak markets in world markets, mostly Japan, the United States, and Europe.[70]

Besides the obvious problem of contributing to overfishing by removing individuals from the population, this fishing practice is also harmful because it takes fish out of the population before they have had a chance to reproduce and replenish the species. It also robs the population of their genetic material. "The booming capture-based farming activities that started in the Mediterranean . . . in 1996 have exacerbated fishing pressure over the East Atlantic stock, to the point that sixty-one percent of the spawning biomass has disappeared in the last 10 years."[71] This reduction in reproductive biomass due to purse seining and tuna farming is a major contributing factor to the decline in the Atlantic bluefin tuna population.

---

[64] *Monterey Bay Aquarium*, *supra* note 54.

[65] FAO Fisheries & Aquaculture Dept., http://www.fao.org/fishery/vesseltype/140/en (last visited Nov. 14, 2010).

[66] Stefania Campogianni, *Illegal Italian Spotter Planes Caught Hunting Down Mediterranean Bluefin Tuna*, WWF, June 5, 2008, http://wwf.panda.org/?uNewsID=136141.

[67] *CITES Proposal*, *supra* note 25, at 2.

[68] *Id*. at 15.

[69] *Id*. at 2.

[70] Kate Willson & Marina Walker Guevara, *Fishing Nations Approve Overhaul of Bluefin Tuna Tracking System*, ICIJ, Nov. 20, 2011, http://www.icij.org/project/looting-seas-i/fishing-nations-approve-overhaul-bluefin-tuna-tracking-system.

[71] *Id*.

(C) Fishing Subsidies

Another major factor contributing to overfishing is certain government fishing subsidies to industry that encourage overfishing.[72] For many sea-faring States, the commercial fishing industry greatly contributes to the gross national product of their economies.[73] Hoping to increase their country's fishing production, and thereby their economies, some of these States issue government-funded subsidies to the commercial fishing industry. While not all fishing subsidies encourage overfishing, many do. Many of these subsidies are:

> effort enhancing subsidies . . . [which have the effect of] undermining natural market forces in fisheries . . . . Rather than subsidizing the industry in such a way as to encourage fisheries to maintain a sustainable fish population, 'these subsidies encourage 'excess effort and capacity and [undermine] the sustainability of resources in the fisheries sector.'[74]

Subsidies can come in the form of fuel discounts, supports for wages and fish prices, purchases of new equipment, and construction of storage and processing plants.[75] The United States, for instance, was subsidizing approximately $250 million worth of fuel taxes a year for commercial fishing vessels in 2005.[76] The U.S. fuel discounts represent just a portion of its total fishing subsidies, and other countries subsidize even greater amounts. The New York Times reported in 2007 the biggest provider of fisheries subsidizer was Japan with about $5.3 billion a year, followed by the EU and China with $3.1 billion each; India, $2.4 billion; Russia,

---

[72] Christopher D. Stone, *Too Many Fishing Boats, Too Few Fish: Can Trade Laws Trim Subsidies and Restore the Balance in Global Fisheries?*, 24 ECOLOGY L.Q. 505, 514 (1997) (Since the industry is the beneficiary of public subsidies, it "lowers private costs at public expense, [and, thus, increases] the investment in fishing beyond the level that market signals would warrant").

[73] The World Bank, FAO, & WorldFish Center, THE HIDDEN HARVESTS: THE GLOBAL CONTRIBUTION OF CAPTURE FISHERIES (June 2010) *available at* http://siteresources.worldbank.org/EXTARD/Resources/336681-1224775570533/TheHiddenHarvest-sConferenceEdition.pdf.

[74] Derek J. Dostal, *Global Fisheries Subsidies: Will the WTO Reel in Effective Regulations?*, 9336 U. PA. J. INT'L ECON. L. 815, 825 (Winter 2005) (quoting Margaret Borman, *Can Governments Encourage a Reduced Fish Harvest to Allow Global Stocks to Regenerate Their Numbers?*, 15 J. ENVTL. L. & LITIG. 127, 137 n.11 (2000)).

[75] Stone, *supra* note 34, at 515.

[76] Margaret Borman, *Can Governments Encourage a Reduced Fish Harvest to Allow Global Stocks to Regenerate Their Numbers?*, 15 J. ENVTL. L. & LITIG. 127, 137-38 (2000).

$1.9 billion; Brazil, $1.3 billion, and the U.S. with $1.2 billion.[77] The World Bank estimates that total global fisheries subsidies are somewhere in the range of $14 to $20 billion.[78] While developed countries spend the most on fishing subsides, these subsides can be even more critical for coastal developing countries, where the commercial fishing industry is more integral to their economy.[79]

The U.S. and the EU have both at times made proposals to the World Trade Organization to reduce or eliminate subsidies that contribute to overfishing.[80] Generally, fishing industries in every country repeatedly oppose any such proposals. Japan has also led a number of States in opposing these proposals as well as proposing alternate, less restrictive ones.[81] However, unless those subsidies that encourage overfishing are eliminated, recovery of the Atlantic bluefin tuna fishing stocks will be impossible as such subsidies undermine sustainable fishing. These subsidies contribute to overfishing and fleet overcapacity by distorting natural market dynamics.[82] Subsidies keep fishermen in the market when normal market forces would have driven them out, and moreover subsidies encourage more entrants into the industry.[83] Subsidies can also artificially lower the price that consumers pay, increase the price that fishermen receive, or reduce the costs of operation for the fishing industry.[84]

(D) Illegal, Unreported, & Unregulated Fishing

Illegal, unreported, and unregulated fishing (IUU) contributes greatly to the rapidly declining fish stocks of the Atlantic bluefin tuna. Not only are large numbers of fish taken out of the population illegally, but it also undermines ICCAT's ability to accurately assess fish stocks and set quotas. ICCAT reported that the declared catch in 2006 was about 30,650 tons for the East Atlantic and Mediterranean, of which about 23,100 tons were declared for the Mediterranean.[85] Their scientists also estimated that illegal fishing in the Mediterranean added about thirty percent onto the official catch figures.[86] However, an assessment

---

[77] John Zarocostas, *U.S. Calls For Cuts In Fishing Subsidies*, N.Y. Times, May 1, 2007, http://www.nytimes.com/2007/05/01/world/americas/01iht-usfish.4.5521465.html.
[78] Dostal, *supra* note 73, at 825.
[79] Dostal, *supra* note 73, at 820.
[80] Zarocostas, *supra* note 38; Dostal, *supra* note 35, at 828-30.
[81] Dostal, *supra* note 73, at 832-33.
[82] *Id*. at 815-16.
[83] *Id*. at 835.
[84] *Id*. at 826, 835.
[85] *2008 Assessment*, *supra* note 15, at 8.
[86] Richard Black, *EU Condemned On Tuna Mockery*, BBC News, Nov. 25, 2008, http://news.bbc.co.uk/2/hi/science/nature/7746965.stm.

by WWF and Greenpeace, later confirmed Advanced Tuna Ranching Technologies (ATRT), estimated total catches of bluefin tuna in the east Atlantic and the Mediterranean at an even greater number, 58,681 tons for the year 2006.[87] Either way, these figures show that many catches of Atlantic bluefin tunas are taken illegally and go unreported.

A major problem with the declared catch and estimated actual catch numbers given above is that the declared catch numbers already far exceed the quotas set by ICCAT; the additional unreported catches, therefore, represent an even greater overindulgence past the legal quotas. Fault not only lies with the fishing industry, but also with the States who control them. In 2006, Japan admitted to catching one-third more bluefin tuna than it was allowed under its international quota.[88] Until better enforcement and reporting methods are in place, IUU will continue to plague the Atlantic bluefin tuna and hamper efforts to stabilize its population.

(E) ICCAT's Failure to Set Sustainable Quotas

Perhaps the biggest cause of overfishing of the Atlantic bluefin tuna is the failure of ICCAT to set meaningful quotas to achieve sustainable harvest levels. ICCAT, which is discussed more in depth in the next section, is the regional governing body created by international agreement, which is responsible for managing Atlantic bluefin stocks. Fish caught according to quotas set by ICCAT are legal, but due to political pressure from fishing industry advocates and certain parties to the convention quotas are set at levels far exceeding the sustainable harvest for Atlantic bluefin tuna.[89]

One of the most egregious failures of ICCAT is its failure, or, more precisely, refusal, to heed the advice of its own scientists, who in past years have recommended very low quotas and more recently a complete ban on fishing for Atlantic bluefin tuna. ICCAT repeatedly sets quotas at levels it decides are sustainable to satisfy certain member-States, while ignoring its own science to the contrary. For example, in 2009, ICCAT set the total allowable catch (TAC) at 22,000 tons, despite the fact that its own scientists had recommended a TAC in the range of

---

[87] *2008 Assessment*, *supra* note 15, at 11.

[88] Blaine Harden, *Japan's Sacred Bluefin, Loved Too Much*, Wash. Post (Foreign Service), Nov. 11, 2007, at A1.

[89] Charles Clover, *Bluefin Tuna: Call for Boycott After Quotas Set Higher Than Scientists Recommend*, The Telegraph, Nov. 25, 2008 http://www.telegraph.co.uk/earth/3518091/Bluefin-tuna-Call-for-boycott-after-quotas-set-higher-than-scientists-recommend.html.

8,500 to 15,000 tons, warning that the fishery was at risk of collapsing.[90] A proposal led by the U.S. suggested the adoption of quotas at levels recommended by the scientists as well as a seasonal closure during the spawning months of May and June, which the scientists also recommend.[91] However, the higher quotas pushed by Japan, the EU, and other member-States were adopted instead.[92]

For 2010, ICCAT reduced the quota to 13,500 tons, committed to a science-based catch level for 2011 to 2013 with a sixty percent probability of rebuilding the stock to healthy levels by 2023, and put in place a purse seine fishing closure for thirty days during the spawning period .[93] However, these efforts are not enough create a sustainable fishery, especially when considering that catches from IUU fishing may be adding thirty percent or more to the total catch.[94] ICCAT's own scientists have urged that a complete ban is necessary after estimating that the Atlantic bluefin tuna's biomass is less than fifteen percent of its original stock before the era of industrial fishing.[95]

III. Current Regulatory Regime

(A) United Nations Convention On The Law Of The Seas

The 1958 Geneva Convention on the Law of the Sea recognized a long standing international principal that every nation enjoyed the freedom of fishing on the high seas, without being subject to the jurisdiction of any other State.[96] In exercising their freedom, States were to take "reasonable regard" for the interests of other States.[97] However, after years of conflicts over the ocean's resources between States exercising their "freedoms", a new comprehensive, rather than framework, agreement was reached in 1982 called the United Nations Convention on the Law of the Sea (UNCLOS).[98] The agreement

[90] Press Release, Nat'l Oceanic & Atmospheric Admin., NOAA Issues Statement on ICCAT Annual Meeting (Nov. 16, 2009), http://www.noaanews.noaa.gov/stories2009/20091116_iccat.html (last visited Nov. 30, 2010) [hereinafter *NOAA Statement*]; *CITES Proposal*, *supra* note 25, at 3.
[91] *Id*.
[92] *Bluefin Tuna, supra* note 88.
[93] *NOAA Statement, supra* note 89.
[94] Francesca Ottolenghi, *Capture-Based Aquaculture of Bluefin Tuna* , FAO Fisheries Technical Paper 508, Rome, FAO 169, 181 (2008) *available at* ftp://ftp.fao.org/docrep/fao/011/i0254e/i0254e08.pdf.
[95] Hance, *supra* note 49.
[96] Geneva Convention on the High Seas art. 2, Apr. 29, 1958, 450 U.N.T.S. 11, 82.
[97] *Id*.
98 United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397 [hereinafter *UNCLOS*].

resolved the long-debated issue over who had jurisdiction over areas of the world's oceans, and it greatly reduced the amount of area once considered to be the high seas.[99] It became known as the "constitution of the oceans" for the way it divided the ocean into different jurisdictional zones and gave States different rights depending on the zone.[100]

UNCLOS divided areas of the ocean into four major categories; jurisdiction of these areas depended on the category in which they fell. The zones are the territorial sea, the exclusive economic zone (EEZ), the continental shelf, and the high seas.[101] The first category gives coastal States exclusive sovereignty over the twelve nautical miles of ocean extending from their shore.[102] Within this area, the laws and regulations of the coastal State apply to anyone wanting to utilize the resources in this area, and other nations only have the right of innocent passage.[103]

A very promising change, in terms of conservation, made by UNCLOS was the creation of the second category of ocean area called the Exclusive Economic Zone (EEZ), which gives coastal States sovereignty and jurisdiction for 200 miles extending from their shore.[104] In total, about thirty-six percent of the ocean falls into EEZs.[105] However, in return for this grant of sovereignty, States are to provide for the conservation and management of the marine resources in the EEZ.[106] Previously, the ocean resources in these areas would have been subject to a tragedy of the commons, as the freedom of fishing of the high seas was the established principal.[107] Now, each coastal State determines the "allowable catch of the living resources in its [EEZ]," and ensures "that the maintenance of the living resources in the [EEZ] is not endangered by over-exploitation[.]"[108] The coastal State can then decide to harvest the whole allowable catch itself or allow other States to harvest any remaining amounts of allowable catch.[109] Since over ninety percent of the world's fish stocks are located within EEZs, they have the potential to create a system for carefully managed and sustainable use of these

---

[99] Division for Ocean Affairs & the Law of the Sea, *The United Nations Convention on the Law of the Sea (A Historical Perspective)*, 1998, http://www.un.org/Depts/los/convention_agreements/convention_historical_perspective.htm#Historical%20Perspective.

[100] Erickson, *supra* note 35, at 293.

[101] *UNCLOS*, *supra* note 97, at art. 2, 56, 77, 86.

[102] *UNCLOS*, *supra* note 97, at art. 3.

[103] *Id*. at art. 17, 21.

[104] *UNCLOS*, *supra* note 97, at art. 57.

[105] Job Van Steenis, *Pirates as Poachers: International Fisheries Law and the Bluefin Tuna,* 29 Cap. U.L. Rev. 659, 660 (2002).

[106] *UNCLOS*, *supra* note 97, at art. 61.

[107] Erickson, *supra* note 35.

[108] *UNCLOS*, *supra* note 97, at art. 61.

[109] *Id*. at art. 62.

living resources.[110] However, many EEZ's belong to developing States which may lack the financial or technological ability to determine a total allowable catch, lack the power to enforce its laws or sovereignty, or plainly lack the political desire to manage these zones sustainably.[111]

A third area of ocean jurisdiction grants coastal States the sovereignty over the natural resources of its continental shelf.[112] Only marine resources which are on the seabed would fall into a State's jurisdiction in this category, while the waters above the seabed and the living resources therein are considered high seas; unless, that is, the continental shelf area overlaps with the coastal State's EEZ, which it often does.[113]

The fourth category is the high seas and consists of the areas of ocean beyond the EEZs.[114] Here, the freedom of fishing doctrine still applies, but to a more limited extent than before.[115] For instance, States are to create certain rules for their nationals to follow regarding the conservation of marine resources on the high seas.[116] In addition, States have a duty to cooperate with each other in the conservation and management of marine resources on the high seas, which may include regional fishery management.[117]

(B) Straddling and Highly Migratory Fish Stocks Agreement

The 1995 United Nations Agreement for the Implementation of the Provisions of UNCLOS Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, otherwise known as the United Nations Fish Stocks Agreement (UNFSA), further defined some of the general obligations that UNCLOS had established. In addition to the jurisdictional zones used for managing marine resources under UNCLOS, the UNFSA used a species specific approach whereby it created special rules for certain groups of species.[118]

---

[110] Steenis, *supra* note 104, at 660.

[111] S.N. Nandan, *The Exclusive Economic Zone: A Historical Perspective*. FAO Essays in Memory of Jean Carroz. The Law and the Sea (1987) *available at* http://www.fao.org/docrep/s5280T/s5280t0p.htm#the%20exclusive%20economic%20zone:%20a%20historical%20perspective.

[112] *UNCLOS, supra* note 97, at art. 77.

[113] *UNCLOS, supra* note 97, at art. 77.

[114] *Id*. at art. 86.

[115] *Id*. at art. 87

[116] *Id*. at art. 117.

[117] *Id*. at art. 118.

[118] *See generally* United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks: Agreement for the Implementation of the United Nations Convention on the Law of the Sea of 10 December 1982, Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, Aug. 4, 1995, 34 I.L.M. 1542 [hereinafter *UNFSA*].

The two species groups are "Straddling Stocks" and "Highly Migratory Species."[119] A special agreement was needed for these groups of species because of the scientific management and jurisdictional problems that highly migratory fish, like the Atlantic bluefin tuna, present.

Straddling Stocks are fish populations that are located in a coastal State's EEZ as well as an adjacent area of the high seas.[120] The UNFSA requires that coastal States and States fishing on the high seas "adopt measures to ensure the long-term sustainability of straddling stocks and highly migratory fish stocks and promote the objective of their optimum utilization . . . ."[121] This provides an instrument for gaining cooperation from distant water flagships of non-member States who normally would be out of the coastal State's jurisdiction and could undermine the management of Straddling Stocks.

Highly Migratory Species (HMS) are species like the Atlantic bluefin tuna which travel great distances and cross many of UNCLOS's jurisdictional zones.[122] Coastal States and other States fishing for HMS are to ensure "conservation and promot[e] the objective of optimum utilization of such species throughout the region, both within and beyond the [EEZ]" either through direct cooperation or by establishing organizations.[123]

Under UNFSA, States must establish Regional Fisheries Management Organizations (RFMOs), if one is needed, to manage fisheries of straddling stocks and highly migratory fish.[124] In theory, by using an RFMO, States cooperate to build, manage, and enforce sustainable fisheries, no matter which jurisdictional zone of the ocean.[125] In addition, States wanting to fish straddling or highly migratory fish stocks governed by an RFMO must either join the organization or at the least follow its rules for the taking of the fish.[126] Unfortunately, as the decline of the Atlantic bluefin tuna demonstrates, some RFMOs are vulnerable to political pressure from its member States to manage its fishery in unsustainable ways.

---

[119] *Id.*

[120] UN Atlas of the Ocean, *Straddling Stocks*, http://www.oceansatlas.org/servlet/CDSServlet?status=ND0xOTk0MSZjdG5faW5mb192aWV3X3NpemU9Y3RuX2luZm9fdmlld19mdWxsJjY9ZW4mMzM9KiYzNz1rb3M~ (last visited Nov. 10, 2010).

[121] *UNFSA*, *supra* note 117, at art. 5.

[122] OECD, Glossary of Statistical Terms, *Highly Migratory Fish Species or Stocks*, http://stats.oecd.org/glossary/detail.asp?ID=1233 (last visited Nov. 10, 2010).

[123] *UNCLOS, supra* note 97, at art. 64.

[124] *UNFSA*, supra note 117, at art. 9.

[125] Erickson, *supra* note 35, at 296.

[126] *Id.*

(C) The International Convention for the Conservation of Atlantic Tunas

The International Convention for the Conservation of Atlantic Tunas was held in 1966 in Rio de Janeiro, Brazil to address concerns over the dwindling stocks of the Atlantic bluefin tuna.[127] From that convention was created the International Commission for the Conservation of the Atlantic Tuna (ICCAT), the intergovernmental organization now responsible for conserving and managing the Atlantic bluefin tuna fishery.[128] ICCAT manages the Atlantic bluefin tuna fishery as two separate stocks, one in the western Atlantic and one in the eastern Atlantic.[129] Its duty is to carry out the objectives of the convention, which basically is the cooperation between States "in maintaining the populations of [tunas] at levels which will permit the maximum sustainable catch for food and other purposes . . . ."[130] However, ICCAT has been criticized for years for poorly managing the Atlantic bluefin tuna fishery towards the brink of collapse, by disregarding science and giving into pressure to set quotas at unsustainable levels.[131] In fact, Environmentalists often call the organization the International Conspiracy to Catch All Tunas.[132]

ICCAT predates the Straddling Stocks Fish Agreement and, thus, was not created under that treaty, but it is a regional fishery management organization in charge of managing a highly migratory fish.[133] However, ICCAT lacks some of the regulatory and enforcement powers that RFMOs have under UNFSA. For instance, if a member State disagrees with conservations measures taken by ICCAT, that State merely has to object within sixty days and the State will not be bound by the ICCAT restrictions.[134] Moreover, it is difficult for ICCAT to enforce its recommendations against non-member States since the convention

---

[127] *See generally* International Convention for the Conservation of Atlantic Tunas, May 14, 1966, 673 U.N.T.S. 63 [hereinafter *ICCAT Treaty*]. Note: The convention and the commission that it created both use the acronym ICCAT and so, to avoid confusion, I will refer to the convention itself as ICCAT Treaty.

[128] *Id*.

[129] *CITES Proposal*, *supra* note 25, at 9.

[130] *ICCAT Treaty, supra* note 126, at pmbl.

[131] Krista Mahr, *Bad News for Bluefin Tuna Keeps on Coming*, Time, Nov. 19, 2010, http://ecocentric.blogs.time.com/2010/11/19/bad-news-for-bluefin-tuna-keeps-on-coming/

[132] Richard Black, *Last Rights for a Marine Marvel*, BBC News, Oct. 17, 2007, http://news.bbc.co.uk/2/hi/science/nature/7040011.stm.

[133] Elizabeth DeLone, *Improving the Management of the Atlantic Tuna: The Duty to Strengthen the ICCAT in Light of the 1995 Straddling Stocks Agreement,* 6 N.Y.U. Envtl. L.J. 656, 667 (1998).

[134] *ICCAT Treaty*, *supra* note 126, at art. VIII(3).

language makes it only binding to Contracting Parties.[135] So far, only twenty-three States have signed onto ICCAT for the Atlantic bluefin tuna.[136] In response, ICCAT enacted the Action Plan to Ensure the Effectiveness of the Conservation Program for the Atlantic Bluefin Tuna, which allowed it to use "multilateral trade measures," such as import bans, "against nonmember parties who act in ways that compromise the conservation and management objectives of ICCAT."[137] However, enforcement still remains a problem for ICCAT.

The Standing Committee on Research and Statistics (SCRS) is a committee within ICCAT that is responsible for convening scientific research on the health of the Atlantic bluefin tuna fishery.[138] It then reports it findings to the commission and makes quota and other conservation recommendations to the commission (ICCAT).[139] A major difficulty that SCRS has is that member States are required to report statistical and scientific information to SCRS, but often fail to supply the information.[140] The commission is comprised of three delegates from each of the Contracting Parties and decisions of the Commission shall be taken by a majority of the Contracting Parties, each having one vote.[141] After hearing from the SCRS, the commission may, on the basis of scientific evidence, make its own recommendations, which go into effect for Contracting Parties after six months.[142] The commission does not have to follow the advice of its own scientific committee, and, as mentioned before, members can get out of complying with recommendations by noticing their objections.

IV. Solutions to the Atlantic Bluefin Tuna's Problems

(A) Overhaul of ICCAT

The organization responsible for managing the population of the Atlantic bluefin tuna bears the biggest bulk of responsibility for the current status of the fish. In fact, a 2008 independent performance

[135] United Nations, Part 1: Information on ICCAT Compliance with Article 10 of UNFSA, 4, *available at* http://www.un.org/Depts/los/convention_agreements/reviewconf/ICCAT_submission.pdf
[136] ICCAT, Panel Membership, Doc. No. GEN-004B /2009 1 (Mar. 11, 2010), http://www.iccat.int/Documents/Commission/panel_members.pdf.
[137] Nickler, *supra* note 32, at 558.
[138] *ICCAT Treaty, supra* note 126, *at* 17, Annex II, rule 13.
[139] *Id*.
[140] Id. at art. IX.; G.D. Hurry et al, Report Of The Independent Performance Review Of ICCAT 3 (2008), http://www.iccat.int/Documents/Other/PERFORM_%20REV_TRI_LINGUAL.pdf.
[141] *ICCAT Treaty, supra* note 126, at art. III(2)-(3).
[142] *Id*. at art. VIII.

review commissioned by ICCAT acknowledged that the management of the Atlantic bluefin tuna fishery is widely regarded as an "international disgrace."[143] Thus, the most obvious way to prevent the decline of the Atlantic bluefin tuna is to hold ICCAT accountable for its failures by ensuring that its decisions are based on science, not politics, and that its conservation measures are enforced on both member and nonmember parties alike.

(i) Science Over Politics

The first item in the long list of changes needed to occur within ICCAT is that ICCAT must base the adoption of its conservation measures in science and statistics rather than politics. Over the years, the SCRS has consistently recommended quotas, based on scientific and statistical findings on the status of the fish stocks, which are much lower than the quotas ultimately established by ICCAT.[144] In 2009, the SCRS even recommended that a moratorium be placed on fishing for Atlantic bluefin tuna to allow the stock time to recover.[145] The SCRS, as well as many environmental organizations, have repeatedly warned ICCAT that the population is on the verge of collapse.[146] However, ICCAT continues to be plagued by the political pressure from certain countries and industry interests, who are more concerned with short term economic gain rather than long term sustainability of the fish stock.

One way to ensure ICCAT's good faith efforts to heed sound scientific recommendations is allowing more openness and transparency within ICCAT. Article XI of the Convention provides that the Commission may invite international organization and any non-member Government which is a member of the UN to send observers to its meetings.[147] However, the convention does not provide for the participation of NGOs and other non-members at its meetings.[148] The Commission later adopted guidelines for granting non-voting, observer status to NGOS, but the independent review of ICCAT found that there is a tendency to hold close door meetings, the participation fee discourages attendance, and also if 1/3 of the parties object in writing the

---

[143] G.D. Hurry et al, Report Of The Independent Performance Review Of ICCAT 2(2008), http://www.iccat.int/Documents/Other/PERFORM_%20REV_TRI_LINGUAL.pdf [hereinafter *Performance Review*].
[144] *CITES Proposal*, *supra* note 25, at 3.
[145] *Id*.
[146] Timothy Hurst, *Bluefin Tuna Get No Help from International Community*, Ecopolitology, November 27, 2010, http://ecopolitology.org/2010/11/27/bluefin-tuna-gets-no-help-from-international-community/
[147] *ICCAT Treaty*, *supra* note 126, at art. 11.
[148] *ICCAT Treaty, supra* note 126, at 17, Annex II, rule 5.

NGO will not be allowed to attend.[149] The Commission needs to change these rules. It must allow concerned citizens, independent scientist, and NGO's to attend meetings and carefully scrutinize the policies adopted by ICCAT. These groups can further contribute to the science behind fishery allocations and policy decisions being made. They can also act as a deterrent against recommendations which fail to properly conserve the Atlantic bluefin tuna by bringing media attention to ICCAT policies.

Secondly, the Contracting Parties need to move away from the fishing allocation language of the treaty which says "may… make recommendations designed to maintain the populations of tuna and tuna-like species in the Convention area at levels which will permit the maximum sustainable catch."[150] This non-binding and ambiguous language has allowed ICCAT to adopt unsustainable quotas. Instead, the commission needs to adopt a new, binding standard for determining catch which requires the consideration of the factors recommended for RFMOs in Article 11 of the United Nations Fish Stocks Agreement (UNFSA).[151] Some of these factors are:

> (a) the status of the stocks and the existing level of fishing effort in the fishery; (b) the respective interests, fishing patterns and fishing practice of new and existing members; (c) the respective contributions of new and existing members to conservation and management of the stocks, to the collection and provision of accurate data and to the conduct of scientific research on the stocks; (d) the needs of coastal fishing communities which are dependent mainly on fishing for the stocks; (e) the needs of coastal States whose economies are overwhelmingly dependent on the exploitation of living marine resources; and (f) the interest of developing States from the region in whose areas of national jurisdiction the stocks also occur.[152]

ICCAT's own science shows that the population of the Atlantic bluefin tuna is on the verge of collapse, and some groups argue that possibly no amount of harvest is currently sustainable.[153] A binding standard for allocating catch based on science and consideration of the factors listed above would leave ICCAT with no choice but to place a ban on fishing until the stocks recover.

---

[149] *Performance Review*, *supra* note 142, at 29.
[150] *ICCAT Treaty*, *supra* note 126, at pmbl.
[151] *UNFSA*, *supra* note 117, at art. 11.
[152] *Id*.
[153] *2008 Assessment, supra* note 15; *Performance Review*, *supra* note 142; *Tuna's End, supra* note 44.

Further, when making recommendations for the management of the fish stock, ICCAT should follow the precautionary principle. This principle has been widely used in many environmental treaties in the past few decades including the 1992 Rio Declaration, the United Nations Convention on Biological Diversity (UNCBD), and the UNFSA.[154] The precautionary principle states that States shall be more cautious when information is uncertain, unreliable, or inadequate, and that the absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation measures.[155] This principle was not used in the Convention that controls ICCAT, but ICCAT should adopt this approach when making management decisions for the Atlantic bluefin tuna. For example, much uncertainty exists as to the amount of IUU catch of Atlantic bluefin tuna. ICCAT has been known to use lower IUU catch estimates as compared to studies from some environmental groups and other independent organizations, and then ICCAT uses these more conservative estimates in calculating its quotas.[156] The precautionary approach, on the other hand, would have ICCAT err on the side of caution, and would result in lower quotas or even a ban on fishing, given the uncertainty of the amount of IUU catch. This approach seems even more reasonable since many of its own members contribute to the inadequacy of the information that the SCRS uses to make recommendations to ICCAT.

Finally, ICCAT needs to start seriously considering the negative impacts that current fishing techniques are having on the fish stocks, and accordingly, it should make rules to restrict or ban their use. The method of catching fish with purse seines and raising them in farms should be completely banned, or at the very least banned within the spawning areas. The fish are vulnerable as they school in preparation for breeding and should not be taken out of the population before they get that chance. Size or age limits should be instituted as well and longline fishing should be required to use larger hooks to discourage smaller, immature fish from being caught. In addition, ICCAT needs to address the issue of the overcapacity of the fishing fleet. The amount of boats fishing for Atlantic bluefin tuna needs to be reduced as it leads to overfishing, and ICCAT should require its members to remove those fishing subsidies which contribute to overcapacity.

---

[154] *See generally* Report of the United Nations Conference on Environment and Development, Annex I, Rio Declaration on Environment and Development, June 3-14, 1992; Convention on Biological Diversity, June 5, 1992, 1760 U.N.T.S. 30619; *UNFSA*, *supra* note 117.

[155] *UNFSA*, *supra* note 117, at art. 6.

[156] *EU Condemned On Tuna Mockery, supra* note 85; *2008 Assessment*, *supra* note 15, at 11.

(ii) Enforcement Against Member & Nonmember Parties

Second on the list for changes to ICCAT is that Contracting Parties need to comply with the convention's requirements and ICCAT must enforce its recommendations on them. The 2008 independent review of ICCAT found that its "failure to meet its objectives is due in large part to the lack of compliance by many of its CPCs."[157] For example, the SCRS makes its recommendations to ICCAT based on scientific and statistical information it gathers from member countries, who are required to submit the information.[158] However, Contracting Parties "consistently failed to provide timely and accurate data and to implement monitoring, control and surveillance (MCS) arrangements on nationals and national companies."[159] It is difficult for SCRS to provide good scientific and statistical analysis of the Atlantic bluefin tuna population for use in making recommendations to ICCAT when it has to work with inadequate or missing information. Moreover, as mentioned earlier, many member States consistently take more catch than they are allotted under the quotas.[160] Even though the Convention provides that Contracting Parties can just object to recommendations set by ICCAT and set their own quotas, they have not needed to because they can simply not follow the recommendations without having to worry about any meaningful repercussions by ICCAT.[161]

Article XI (3) of the Convention only provides that the member parties should set up "a system of international enforcement."[162] ICCAT has adopted some policies over the years in an attempt to bring both members and nonmembers into compliance. The Bluefin Tuna Statistical Document Program tracks the trade of frozen bluefin tuna by requiring certain documentation to accompany tuna imported to member countries.[163] Because member States are the biggest importers of tuna, this does help encourages nonmember parties to comply with ICCAT's recommendations.[164] The Bluefin Tuna Action Plan allows for the use of trade sanctions for members who are identified for not "taking measures or exercising effective control to ensure compliance with ICCAT conservation and management measures by the vessels flying their flag" and non-members similarly are identified based

[157] *Performance Review*, *supra* note 142, at 2.
[158] *ICCAT Treaty*, *supra* note 126, at art. IX.
[159] *Performance Review*, *supra* note 142, at 2.
[160] *CITES Proposal, supra* note 25, at 27.
[161] Christopher J. Carr, *The Ecosystem Approach: New Departures for Land and Water: Fisheries Management: Recent Developments in Compliance and Enforcement for International Fisheries*, 24 Ecology L.Q. 847, 856 (1997).
[162] *ICCAT Treaty*, *supra* note 126, at art. XI(3).
[163] Deirdre Warner-Kramer, *Control Begins at Home: Tackling Flags of Convenience and IUU Fishing*, 34 Golden Gate U.L. Rev. 497, 512 (Spring 2004).
[164] *Id*. at 512-13.

on their obligation not to "undermine the effectiveness of ICCAT... measures."[165] Finally, ICCAT reduces the quota of any contracting party for the following year by the full amount over which exceeds its annual quota; for exceeding two years in a row, the reduction can be for at least 125% of the exceeded amount.[166]

However, even with these programs, it is clear that ICCAT has failed to either bring its own members into consistent compliance or reign in the amount of IUU catch. To ensure compliance, ICCAT needs to somehow implement a meaningful enforcement mechanism for its rules. The 2008 independent review of ICCAT recommended that it "develop a strict penalty regime that either has the capacity to suspend member countries that systematically break ICCAT regulations or can apply significant financial penalties for breaches."[167] These harsher punishments would help deter noncompliance. The current system of reducing next year's quota by the amount of the current year's excess does not really deter the noncompliant party from just exceeding the quota again the following year. In addition, the use of trade sanctions appears to be an extreme last resort that ICCAT seems hesitant to use. However, significant financial penalties, which take away some of the economic gain of both the legal catch and the ill gotten gains, may serve as a deterrent effect. Suspending member countries would also send a clear message that ICCAT is serious about its rules.

Undoubtedly, convincing ICCAT member States to vote for harsher penalties for their own violations will be a hard sell. Moreover, international enforcement mechanisms always raise concerns over State sovereignty and jurisdiction, and some States may use these issues to prevent ICCAT from adopting any kind of enforcement mechanism that actually has any teeth. Moreover, convincing ICCAT to increase its transparency and also make decisions based on the consideration of scientific factors rather than political ones may be a lost cause, especially given its failure to set sustainable quotas in the face of a decades-long fish stock decline. Unfortunately, an overhaul of ICCAT's enforcement mechanisms and decision making policies is very unlikely given the lack of political will shown by the Contracting Parties. Perhaps the best solution for saving the Atlantic bluefin tuna involves taking away authority for managing the stocks from ICCAT and instead placing the fish stocks under the umbrella of some other international mechanism.

---

[165] ICCAT, Resolution by ICCAT Concerning Trade Measures 1 (2003), http://www.iccat.es/Documents/Recs/Recs2003/2003-15-e.pdf; Warner-Kramer, *supra* note 81, at 517.

[166] Recommendation by ICCAT Regarding Compliance in the Bluefin Tuna and North Atlantic Swordfish Fisheries, Report of the Meeting of the Compliance Committee 1 (1996), http://www.iccat.int/Documents/Recs/compendiopdf-e/1996-14-e.pdf.

[167] *Performance Review*, *supra* note 142, at 87.

(B) Marine Protect Areas

Another possible approach to reversing the decline of the Atlantic bluefin tuna and returning the fish stocks to a population which can be sustainably harvested is the use of Marine Protected Areas (MPAs).[168] MPAs are basically areas of the ocean which are set aside by law and provide varying degrees of protection to the marine resources within from some uses.[169] The most protective type of MPA is a marine reserve, whose restrictions include: "(1) no fishing; (2) no removal of anything; (3) no human disturbance; (4) people must be encouraged to learn from the reserve, within the limits enumerated above; and (5) the above listed rules must be permanent."[170] While MPAs are a useful tool for protecting fish stocks and other marine resources, currently only about one percent of the world's oceans are in MPAs and other reserves.[171] Moreover, only about .01 percent of the world's oceans are actually closed to fishing.[172]

The Atlantic bluefin tuna could greatly benefit from a system of MPAs. This is especially true if the fish's Mediterranean Sea and Gulf of Mexico spawning grounds were protected and made off limits to fishing, particularly from fishing techniques like longlining and purse seining. The grouping of the fish in these areas as they spawn makes them particularly vulnerable, and it is imperative to protect the fish during this time to ensure that the fish are not caught before they are able to reproduce and replenish the stock. In addition, not only would it protect the fish itself, but it would also likely help protect the entire marine ecosystem, thus, preserving other fish stocks and marine animals and helping maintain the natural balance of biodiversity in the ocean.

Closing the spawning grounds of the Atlantic bluefin tuna to fishing is not a new concept, but it is one that is met with much resistance. ICCAT, under the authority given to it by the Convention, could close the fish's spawning grounds to fishing.[173] In fact, the SCRS of ICCAT recommended that the spawning grounds in the Mediterranean Sea be closed to fishing in 2006, and has repeatedly made this recommendation since then.[174] In addition, an immediate closure of all Atlantic bluefin tuna

[168] Jessica D'Ardenne, *A Hybrid Marine Protection System as a Model for the Marine Conservation Efforts of the United States*, 20 Colo. J. Int'l Envtl. L. & Pol'y 99, 100 (Fall 2008).
[169] Robin Kundis Craig, *Protecting International Marine Biodiversity: International Treaties And National Systems Of Marine Protected Areas*, 20 J. Land Use & Envtl. Law 333, 360 (Spring 2005).
[170] D'Ardenne, *supra* note 167, at 106.
[171] Craig, *supra* note 97, at 360.
[172] Kennedy Warne, *Blue Haven*, Nat'l Geographic, Apr. 2007, at 70, 81.
[173] *ICCAT Treaty, supra* note 126.
[174] ICCAT, SCRS, Report for the Biennial Period, 2006-07, Part 1, Vol. 2 (2007). http://www.iccat.int/Documents/BienRep/REP_EN_06-07_I_2.pdf.

spawning grounds during the spawning season was also recommended by an independent review of ICCAT in 2008.[175] So far, ICCAT has refused to heed any such recommendations. This is due to the political pressure of member States whose economies greatly depend on fishing, especially Japan, which is biggest consumer of Atlantic bluefin tuna.[176] However, even if ICCAT did enact such a measure to create an MPA for the fish, enforcement issues may still arise due to the nonbinding effect of the convention on nonmember States.

Despite ICCAT's current lack of political will to designate MPAs for the Atlantic bluefin tuna, other avenues for their creation exist. An individual country has the authority to set up a MPA in its respective EEZ under UNCLOS.[177] Coastal States whose EEZ makes up part of the spawning grounds of the fish could set side these critical areas and protect it from fishing. The more States that do this, the better the effect would be since a larger area would be preserved. However, individual efforts to set up MPAs, while praiseworthy, may not be enough in the long term effort to protect the species because the fish will cross jurisdictional boundaries during their migration. In addition, spawning areas in the high seas zone could still go unprotected since individual countries may lack the authority to establish MPAs in the high seas.[178] Finally, many coastal States lack the means or motivation to designate protected areas in their EEZs and enforce any such restrictions.

Another international mechanism that might prove useful in setting up a system of MPAs for the Atlantic bluefin tuna is the 1992 United Nations Convention on Biological Diversity (CBD). It states that the parties "shall, as far as possible and as appropriate, establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity."[179] In addition, a meeting of the CBD Conference of the Parties in 1995 resulted in the parties agreeing that, among other things, they should focus on "ensuring the sustainable use of coastal and marine living resources" and "establishing marine and coastal protected areas."[180] While the CBD is soft-law, or in other words, non-binding, such agreements lay down principles that can be used as a framework for binding agreements in the future. Parties may also sometimes feel compelled to adhere to the obligations of non-binding agreements due to pressure from the international community.

---

[175] *Performance Review*, *supra* note 142, at 62.

[176] *See generally China, Japan, US Top List, supra* note 39; *Tuna's End, supra* note 44; Schmidt, *supra* note 46.

[177] *UNCLOS*, *supra* note 97 at art. 57-61.

[178] *UNCLOS*, *supra* note 97, at 86,87, 117, 118.

[179] Convention on Biological Diversity art. 8(a), June 5, 1992, 1760 U.N.T.S. 30619.

[180] Charlotte De Fontaubert, et. al., *Achieving* Sustainable *Fisheries: Implementing the New International Legal Regime*, 2003, 12 (2003).

With the goals listed above in mind, the parties to the CBD should take it upon themselves to establish MPAs for the Atlantic bluefin tuna in its spawning grounds by using the CBD as a framework for a new binding agreement. The parties, in good faith, should live up to the commitments to biodiversity that they made under the CBD. The treaty making process, however, is very time consuming, expensive, and often parties are unable to reach a successful agreement at the end of negotiations. Nonetheless, an agreement may be possible if enough political pressure is mounted from consumers, nongovernmental organizations, and States favoring the establishment of MPAs.

Marine protected areas and marine reserves work successfully in promoting recovery of previously exploited species by generally increasing biomass and population density of species that would otherwise be heavily fished without the protection of the reserves.[181] Enacting a system of MPAs in the spawning grounds for the Atlantic bluefin tuna could help prevent the collapse of its population. Despite the limitations in their jurisdictional reach, individual Coastal States should continue to set up national MPAs in their exclusive economic zones where it overlaps with the Atlantic bluefin tuna's spawning area. In addition, if ICCAT lacks the political fortitude to establish such closed areas to fishing, perhaps the CBD and its 1995 goals could be used to lay the groundwork for marine protected areas for the Atlantic bluefin tuna.

(C) Convention on the International Trade of Endangered Species

Ultimately, the best solution, both practically and logically, for preventing the collapse of the Atlantic bluefin population is the induction of the species onto the Appendix I list of the Convention on the International Trade of Endangered Species (CITES). Effective in 1975, CITES is an international treaty which aims to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species.[182] Currently, there are 175 member countries to the treaty, and roughly 5,000 animals and 28,000 plants species are protected under it from overexploitation through international trade.[183] Placing the Atlantic bluefin tuna under the umbrella of CITES framework would essentially ban all commercial trade of the fish; hopefully, this would allow stocks time to recover to sustainable levels, and allow for sustainable harvest in the future.

[181] D'Ardenne, *supra* note 167, at 110.

[182] CITES, What is CITES?, http://www.cites.org/eng/disc/what.shtml (last visited Nov. 14, 2010).

[183] CITES, The CITES Species, http://www.cites.org/eng/disc/species.shtml (last visited Nov. 14, 2010).

(i) CITES Framework

CITES controls only the trans-boundary movement of specimens, but since most Atlantic bluefin tuna is imported to markets in developed countries, most of the tuna catch would be regulated. Species are classified into three listings.[184] The Appendix I listing is the most protective and is for critically endangered species.[185] It requires both an import permit from the country to which the specimen is being brought and an export permit from the source country, each of which has been approved by each country's Scientific and Management Authorities.[186] The Appendix II listing, which is slightly less protective, is for species likely to become endangered and requires only an export permit from the Management Authority of the origin country.[187] Finally, the Appendix III listing is the least restrictive and is for species that are not necessarily endangered.[188] Instead, they are listed by an individual nation and require an export from that country's Management Authority.[189] Trade of a marine species additionally requires an "Introduction from the Sea" certificate from a Scientific Authority stating that the transported species was taken from a marine environment and will not be detrimental to the species.[190]

Unlike many other treaties, CITES has a strong enforcement provision. It first requires that member countries enact criminal laws that punish trans-boundary movement of listed species without a permit.[191] The Secretariat then investigates claims of non-compliance and will examine the domestic regulations of the accused member.[192] Where a member's national legislation is determined to be deficient, a certain amount of time is given to the member to bring itself into compliance with CITES. If noncompliance continues, the Secretariat can go before the standing committee and request a trade embargo against the member State, which must be accepted by all CITES member.[193]

---

[184] *What is CITES, supra* note 181; CITES, How CITES Works, http://www.cites.org/eng/disc/how.php (last visited Nov.14, 2010.); *CITES Proposal, supra* note 25.

[185] CITES, How CITES Works, http://www.cites.org/eng/disc/how.php (last visited Nov. 14, 2010.)

[186] *Id.*

[187] *Id.*

[188] *Id.*

[189] *Id.*

[190] Alana R. Rubin, Animal Legal & Historical Center, *Rock the Boat: The Plight of the Southern Bluefin Tuna*, (2007), http://www.animallaw.info/articles/ddusbluefintuna.htm.

[191] *Id.*

[192] *Id.*

[193] *Id.*

(ii) Appendix I Listing for the Atlantic Blue Fin Tuna

The Atlantic bluefin tuna needs the highest level of protection under CITES and, thus, should be listed under Appendix I since its current population status is "past the stage where an Appendix II listing would be sufficient."[194] In order to be listed, it must first be nominated by a member State and then requires a 2/3 vote at a Conference of the Parties.[195] If listed, even the biggest consumer of the fish, Japan, would be subject to the ban. However, listing of the Atlantic bluefin tuna in CITES has met with much resistance from Japan and other tuna hungry nations. In fact, Monaco recently nominated the fish for Appendix I listing, but it was defeated in March of 2010.[196] The nomination was strongly supported by the United States, but by a vote of 68 against to 20 for, with 30 abstentions, the nomination failed.[197] Unfortunately, Japan was able to rally many fishing nations against the proposal, who feared the listing would hurt their commercial fishing industries.[198] In defense of its opposition, Japan questioned the scientific evidence regarding the extent of the Atlantic bluefin tuna's decline and also maintained that ICCAT, not CITES, was the proper authority for regulation.[199] For a future nomination to be successful, a strong coalition of States, citizens, scientists, consumer groups, NGOs, and other groups will be needed to put pressure on member States to vote for listing. An increasing political pressure may help sway some States to vote for the listing. However, consumer demand remains the biggest piece of puzzle. If consumers would drastically reduce their demand for the endangered tuna, countries would be more willing to accept a ban on the species since the market would become less profitable.

Even if the political will existed to successfully get a 2/3 vote, the treaty allows parties to make reservations for an individual species when it objects to a listing.[200] This weakness in the treaty could be a potential problem if the Atlantic bluefin tuna is eventually listed since Japan could make a reservation for itself and then set its own quotas for catching the fish. In fact, Japan has done this for some other marine

---

[194] *CITES Proposal*, *supra* note 15, at 4.
[195] Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, art. XV [hereinafter *CITES Convention*.]
[196] Jolly & Broder, *supra* note 42.
[197] *Id*.
[198] Richard Black, *Bluefin Tuna Ban Proposal Meets Rejection*, BBC NEWS, Mar. 18, 2010, http://news.bbc.co.uk/2/hi/8574775.stm.
[199] David Jolly, *Japan to Reject Ban by U.N. on Fishing for Bluefin*, N.Y. TIMES, Feb. 20, 2010, at B8; Blaine Harden, *Allies out of Tune on Tuna*, WASH. POST, Mar. 6, 2010, at A11.
[200] *CITES Convention*, *supra* note 194, at art. XXIII.

animals in CITES, including certain whales, dolphins, and sharks.[201] Media attention and political pressure would help deter a country like Japan from making a reservation. It would be very difficult for it to stand alone and try to "defend the indefensible–the right to drive a species to the brink of extinction, in order to eat unlimited amounts of tuna *sashimi*."[202] However, once again, the best way to discourage a reservation from being made is a shift in consumer behavior, especially in the Japanese markets, which would decrease the incentive for Japan to take such an action.

Finally, one last concern with this approach is that, undoubtedly, some illegal black market trade of Atlantic bluefin tuna will inevitably occur. The fishing industry lends itself to difficulties in regulating trade since the taking occurs out to sea and checking permits for each fish arriving off a vessel would require a lot of resources. However, illegal fishing of the Atlantic bluefin tuna already occurs on a large scale and in the open. While illegal taking of the fish might still occur under a CITES, it would happen on a much smaller scale than it does now. Also, illegal catches would not systematically go unpunished by the regulatory system when such illegal catches are brought to light.

V. Conclusion

As with most environmental crises facing the world today, settling on only one solution is not the best approach to fixing the problem. The international crisis currently looming over the Atlantic bluefin tuna fishery is no different. All possible avenues of protection for the Atlantic bluefin tuna should be pursued. This may include an overhaul of ICCAT, development of a system of marine protected reserves, or a listing of the Atlantic bluefin tuna on Appendix I of CITES. All of these approaches require a drastic change in the political will of the international community in order to work. States must put the long term sustainability of the fish ahead of their own short term economic gain. However, the biggest change that needs to occur starts at the consumer level. Consumer demand for tuna products around the world, especially in the sushi-crazed fish markets of Japan, must be radically altered in order for States and the fishing industry to protect and conserve rather than catch and serve. The one approach the international community cannot afford to take is to continue to do nothing and stay with the status quo. The Atlantic bluefin tuna stands at the brink of population collapse and possible extinction; the international community must rise to the occasion and take international action to protect the Atlantic bluefin tuna.

---

[201] CITES, Reservations Entered by Parties in Effect From 23 June, 2010, http://www.cites.org/eng/app/reserve_index.shtml (last visited Nov. 14, 2010).

[202] Rubin, *supra* note 189, Sec. IV, para. B.

Reporting from the Field: The Israel Adoption of Transportation Regulations for Poultry

Yossi Wolfson[1]

I. Introduction

Chickens raised for meat ("broilers") are one of the least protected groups of animals exploited by humans. There might be a role to the fact that their look, after losing the chick-appearance, generates less sentiments in humans relative to the sad, almost human, eyes of a calf. However, my guess is that the cause is economic: the harms done to these animals are deeply inherent to the current chicken-meat industry. The egg industry can be profitable without cages, the veal industry without crates and the pig-meat industry without stalls. For the chicken-meat industry the fast growth, the disproportional body and the crowded shades are an economic must. This allows for very small compromises by the industry (and therefore by the state), compromises that would never substantially change the fate of the animals. This can explain why animal protection regulation in this area is weak if it at all exists. It also makes the issue highly problematic for animal protection advocates: if we cannot do anything substantial for the animals, isn't the effort to regulate this field anything more than playing to the hands of the industry – shifting efforts from important issues and giving cruelty the seal of being "in accordance to the law"?

For the last eleven years I have been involved in the process of enactment of the Israeli regulations on the transport of poultry[2]. The regulations were recently approved of. In some aspects they are precedential. Whether they are an achievement that might further the cause of animal liberation has yet to be determined. It may be useful, though, to offer a glimpse of the regulations and the process of their drafting.

---

[1] Yossi Wolfson is an Israeli lawyer and an animal liberation activist. He was one of the founders of *Anonymous for Animal Rights*, worked for *Hamoked – Center for the Defense of the Individual*, and currently coordinates the field of animals in Agriculture in *Let the Animals Live*. He has been involved in both human rights and animal protection litigation in the Israeli courts.

[2] These regulations are formally known as "The Prevention of Cruelty to Animals Regulations" (Defense of Animals) (Transport of Poultry), 2011.

II. The transport of chickens

When talking about the transport of chickens, the main journey of concern is the one from farm to slaughter. For the chickens, this last journey is a combination of harms, or "stressors". In scientific literature one can find lists of stressors that include: handling by humans at the times of loading and unloading; being held upside-down (and by one leg only) during loading; movement restrictions in the transport cages; disruption of social structures; vibration, acceleration and motion during the journey; noise; wind; novelty; crowded conditions; temperature and moisture changes; food and water deprivation; dehydration; physical trauma and injuries. One of the main stressors is the micro-climate that develops within the truck's cargo area during the journey. Each one of the chickens produces heat and moisture – chickens cool themselves by panting. While the truck's movement causes some air movement within the cargo, this is not uniform, and some areas become very hot and moist. In winter, the chickens in the outer cages might suffer from cold, while those in the middle cages will suffer from heat stress[3].

The percentage of chickens found dead on arrival at the slaughterhouse indicate the degree of suffering. In European publications, this ranged in average cases between 0.02% and 0.42%[4]. Reports from industrial slaughterhouses in Israel revealed about 1% dead on arrival. Translate this to absolute numbers, and you will get millions of animals that die during the journey from stress-related reasons.

The transport from farm to slaughter is a unique stage in the meat production process for another reason: this is the only stage when the live chickens are exposed to the eyes of the public. Road passengers are appalled by the sight of the crowded, pathetic birds on the trucks. Many try to avoid these trucks and the trail of feathers they leave behind. This personal experience may be a basis for a change of attitude towards chickens and towards the consumption of their meat.

---

[3] For scientific reviews of stressors related to transportation of poultry see: Freeman B.M. (1984) "Transportation of Poultry" World's Poultry Science Association Journal 40:19-30; Mitchell M.A & Kettlewell P.J. (1994) "Road Transportation of broiler Chickens: Induction of Physiological Stress" World's Poultry Science Association Journal 50: 57-59; Duggan J.A. (1996) "Behavioural Responses of Poultry to Transport Stimuli" in: Executive Briefing on Poultry Transport (Silsoe Research Institute, 17.1.1996); Gregory N.G. (1994) "Pathology and Handling of Poultry at the Slaughterhouse" World's Poultry Science Association Journal 50: 66-67. See also the chapter on poultry in: European Food Safety Authrity, The Welfare of Animals During Transport – Scientific Report of the Scientific Panel on Animal Health and Welfare (adopted on March 30th 2004).

[4] Knowels T.G., Broom D.M. (1990) "The Handling and Transport of Broilers and Spent Hens" Applied Animal Behaviour Science 28: 75-91.

III. The committee and the drafting process

The Israeli Animal Protection Law is quite general, and leaves most of the work to the secondary legislator – the Minister of Agriculture. Regulations proposed by the Minister need the approval of the Parliamentary Committee on Education before they become law.

In February 2000, the Director of the Veterinary Services appointed a committee to draft regulations on the transport of animals under the Animal Protection Act. I was appointed to chair the committee. The appointment of an animal liberationist to chair the committee raised fury within the chicken-industry, which declared a boycott against the committee. It took many efforts from the Director of the Veterinary Services to convince the industry to cooperate.

In March 2001, the committee submitted its report. From then on, the draft regulations went through a series of reviews – some in the form of long negotiation sessions in the Ministry offices between industry representatives and animal protection organizations. From review to review the provisions of the regulations dwindled. The provision that the chickens should be able to stand upright in the cages, for example, was one of the first to be taken out: As the height of the trucks is limited by law, this meant that each transport would require many more trucks – a substantial economic burden. Other changes included allowing longer journeys, allowing small plastic cages (that workers tend to throw) – and most importantly: omission of a provision requiring mechanical ventilation on the trucks.

IV. The regulations

The regulations apply only to poultry transported as part of agricultural production. Other regulations apply to the transport of the same animals if they are raised for other purposes (such as for hobby or for petting zoos). Though I refer here mostly to chickens, which are by far the largest category that the regulations apply to, the regulations apply also to turkeys, ducks, geese and quails.

Though they bear little resemblance to the first draft, the approved regulations do include some important clauses. An important feature of the regulations is the definition of the journey time: a journey starts when the first bird is loaded into the transport cages (but in imported birds the journey is defined as starting when the birds arrive at the port). It ends when the last bird is unloaded – which in journeys to slaughterhouses is also the time the last bird is killed. While this definition is sound and was recommended by EU professionals[5], EU law adopted it only in 2005, and as we shall see, doesn't apply it to poultry.

---

[5] *See* Report of the Working Group "Transport of Farm Animals and Pets" of the Scientific Veterinary Committee, Section Animal Welfare (Brussels. 30.4.1992) (EU).

The maximum duration of a journey is an important issue. Scientific literature shows drastic rise in mortality after 5 hours of transport (including loading and unloading)[6]. As to hunger and thirst: after 2 hours of food deprivation there are already physiological signs of stress[7], and after 6 hours, liver glycogen drops. After 8 hours of water deprivation there are symptoms of dehydration[8]. The lengths of chicken transport in Israel tend to be quite short, but they increase as the slaughter industry becomes more integrated. The main cause for long journeys, though, is long waiting times in the slaughterhouses: Birds are usually caught and loaded at night, brought to the slaughterhouse in the early morning, and are slaughtered gradually during the day. Birds that are still alive at the end of the work-day, might have to wait in the cages for the next day.

The regulations set a general rule of 6 hours maximum journey time for birds destined to slaughter (8 hours in other circumstances). In journeys taken during summer between 10am and 5pm, the maximum duration is 4 hours. These durations are quite similar to those that were recommended by the EU Scientific Veterinary Committee back in 1992[9]. However, these maximum durations have exceptions: the regulations allow additional waiting time of up to one hour in the loading point and up to 8 hours in the destination (6 hours in summer). This additional time is granted only if certain conditions exist in the place where the birds are held: shading, protection from rain, cooling, noise-prevention, and most importantly: air movement through the cages. The additional time at the destination is calculated from the moment of arrival – not just added to the standard 6 hours. As most birds arrive at the destination long before the end of the standard 6 hours, total journey times will only seldom reach the theoretical maximum of 15 hours. The rules on maximum journey durations are completed by a provision that the transport should be continuous, and without stops.

This may be compared to the EU Regulations[10]. The Regulations do not stipulate maximum journey duration. However, they prohibit food and water deprivation, save on journeys lasting less than 12 hours,

---

[6] Warris P.D. , Bevis E.A., Brown S.N., Edwards J.E. (1992) "Longer Journeys to Processing Plants are Associated with Higher Mortality in Broiler Chickens" British Poultry Science 33: 201-206.

[7] Kannan G., Mench J.A. (1996) "Influence of Different Handling Methods and Crating Periods on Plasma Corticosterone Concentrations in Broilers" British Poultry Science 37: 21-31.

[8] Report of the Working Group "Transport of Farm Animals and Pets" of the Scientific Veterinary Committee, Section Animal Welfare (Brussels. 30.4.1992) (EU).

[9] *Id.*

[10] Council Regulation (EC) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97.

disregarding loading and unloading time. In practice, that would mean that the maximum journey time is 12 hours, not including the time of loading and unloading.

Long journeys affect the birds, *inter alia* because they involve food and water deprivation. Here, the time between loading and unloading does not cover the full time of deprivation. The Israeli regulations provide that the birds must be fed up to 6 hours before the start of the journey and have access to water until one hour before the start of the journey.

An important aspect of any transport law is the definition of animals unfit to travel. The regulations stipulate that sick animals are unfit to travel unless their "illness or injury are light and do not affect their welfare during transport". While in "broilers" at the age of slaughter morbidity is inherently high, it is still not clear how this provision will be applied. A more clear-cut provision bans the transport of birds destined for killing, save for slaughter for human consumption. This, in fact, is a ban on transport of "spent hens", that should be killed on-farm, without the hassle of transport. The weak bones of such hens make them highly susceptible to bone breakage.

There are some rules regarding the actual loading and unloading of the birds. These include a prohibition on holding more than three birds in each hand or holding the bird from the head, neck, wing or tail. The cages should be brought as close as possible to the birds. A person holding a bird may not loosen his hold when the bird is more than 40 cm. above ground.

A series of rules apply to the transport cages, insuring that they are safe. While small plastic cages that are prone to be thrown were not banned, there is a provision against cages whose walls are too high for the workers to easily place the birds on the cage's floor. While there are no concrete numbers regarding the loading densities, the regulations require that all birds can simultaneously lie down on the cage floor.

As to environmental conditions, the regulations prohibit transporting dangerous substances on the same vehicle as birds. In case of rain, they require a cover above the birds (but not on the sides – that would obstruct natural ventilation). There are also some general words on reasonably avoiding sharp acceleration, shakes, sudden breaks and defective roads.

Ventilation, as mentioned, is a crucial issue in the transport of chickens for slaughter, and the only solution (apart of avoiding transport) is mechanical ventilation. Mechanical ventilation systems for such transports have been developed for commercial use. The regulations fail to address the issue. There are requirements for waiting areas (if the birds are to be held longer than the standard maximum time) – but these, too, lack specific quantitative provisions (such as the volume of

air-change per hour). Regarding the vehicle, the only provision is that if there is no mechanical ventilation, openings in the sides of the vehicle should allow for free air-movement for the birds transported. Easy to write, but as mentioned, scientific research proved that this would never happen under natural ventilation. Transport of day-old chicks, though, requires air conditioning.

On the procedural level, transports must be accompanied by an attendant who participated in an approved training course. A transport-document must be filled for each transport, including details on the departure place and destination, number and type of birds, the birds' owner, the driver and his/her employer or contractor, the vehicle, the journey time and the mortality during the journey. Mortality rate of over 3% triggers a report to the animal welfare officer at the Ministry of Agriculture.

An important provision requires the owner of a farm or of a slaughterhouse to inspect transports made for their sake or on their behalf, and to do all they can to prevent violation. For the first time in Israeli animal welfare law, corporation functionaries are also accountable to acts done by workers of the corporation (unless they prove that they did all they can to inspect the workers and prevent violations). Violation of the substantive provisions of the regulations carries a maximum penalty of 6 months imprisonment. Violation of the procedural provisions of the regulations carries a fine.

V. Are the regulations an achievement?

While the regulations lack in many aspects, I was quite satisfied by their adoption, and so were other activists. They do set some important precedents. However, we kept our satisfaction within the walls of our homes and offices. In press releases we stressed that no regulations whatsoever can prevent the severe suffering inherent to industrial transport of chickens. We highlighted the suffering of these young birds, that under natural conditions would have spent their night beneath the wings of their mother-chickens and not in crowded cages stacked on a truck. We used the opportunity to publish some gross footage of chicken transport that the media had not been interested in previously. We suggested vegetarianism as a real solution.

This being done, the efforts to enact these regulations do make an interesting test case regarding legislative reforms concerning the conditions in which animals are being exploited. One can persuasively argue that some birds will suffer a little less due to these regulations. But do such regulations serve the end of animal liberation? This, too, should not be instantly counted off. Human rights, just as well,

developed gradually through series of reforms. On the other hand, such regulations may be used by the industry to legitimize their actions and to anesthetize public conscience. This outcome is not necessary, and I have mentioned the tactics we used to prevent it. However, it is almost undisputable that we would have been more effective using our time and resources for other campaigns, such as promoting plant-based diets, challenging advertizing practices of the meat industry or making it pay for the environmental and health harms it is responsible for. To be clear: most energy did go to such campaigns. But still, at the end of this eleven-year journey, shouldn't we have taken another road?

CASE LAW REVIEW

GRAHAM BOSWELL

Nat'l Meat Ass'n v. Harris 132 S. Ct. 965 (2012)	
SUMMARY OF THE FACTS	**SUMMARY OF THE HOLDING**
In 2008, the Humane Society of the United States released an undercover video showing workers at a slaughterhouse in California dragging, kicking, and electroshocking sick and disabled cows in an effort to move them. This video led the Federal Government to institute the largest beef recall in U.S. history in order to prevent consumption of meat from diseased animals. The video also prompted the California legislature to strengthen a pre-existing statute governing the treatment of nonambulatory animals and to apply that statute to slaughterhouses regulated under the Federal Meat Inspection Act (FMIA). FMIA regulates a broad range of activities at slaughterhouses to ensure the safety of the meat and the humane handling of animals. FSIS, which administers FMIA, has an inspection procedure of animals that begins with an "ante-mortem" inspection of each animal brought to a slaughterhouse. If a nonambulatory animal is found to suffer from a particularly severe disease or condition, it is classified as "U.S. Condemned" and killed apart from the slaughtering house where food is produced. Following slaughter there is a "post-mortem" inspection of which parts of the suspect animal's carcass may be processed for food for humans. As amended, California law, §599f of the state penal code, tightened regulations regarding the treatment of nonambulatory animals. Petitioner sued to enjoin enforcement of §599f arguing that FMIA preempts the application of state law. The District court agreed; the Ninth Circuit reversed.	The Supreme Court of the United States reversed the Ninth Circuit, finding that FMIA expressly preempts §599f's application against federally inspected swine slaughterhouses. The Court reasoned that FMIA's preemption clause sweeps widely, preventing a State from imposing any additional or different requirements that fall with FMIA's scope. In addition, the Court found that Section 599f imposes additional or different requirements such that under federal law a slaughterhouse may take one course of action in handling a nonambulatory pig, but under state law, the slaughterhouse must take another. This created an express conflict in which federal law controls. The Respondent's argument that §599f(a) could escape preemption because that provisions applies no matter when or where a purchase takes place failed because there is no foundation for it in the record and, even if there was, FMIA's preemptions clause expressly focuses on "premises, facilities, and operations." FMIA, the Court concluded, regulates slaughterhouses' handling and treatment of nonambulatory pigs from the moment of their delivery through the end of the meat production process. California's §599f, however, endeavors to regulate the same thing, at the same time, in the same place except by imposing different requirements. Therefore, the Supreme Court held that FMIA expressly preempts the California law.

Montana v. Wyoming 131 S. Ct. 1765 (2011)	
Summary of the Facts	**Summary of the Holding**
This case arose out of a dispute between Montana and Wyoming over the Yellowstone River Compact. Wyoming users switched from flood to sprinkler irrigation, which increases crop consumption of water and decreases the volume of runoff and seepage returning to the river system. Montana alleged that Wyoming breached Article V(A) of the Compact by allowing its pre-1950 water appropriators to increase their net water consumption by improving the efficiency of their irrigation systems by switching to sprinkler irrigation. Montana was granted leave to file a bill of compliant against Wyoming for breach of the Compact. Montana alleged that the sprinklers reduced the amount of wastewater returned to the river, thus depriving Montana's downstream pre-1950 appropriators of water to which they are entitled. Wyoming filed a motion to dismiss the complaint. A Special Master was appointed. The Special Master filed a First Interim Report determining that Montana's allegation fails to state a claim because more efficient irrigation systems are permissible under the Compact so long as the conserved water is used to irrigate the same acreage watered in 1950. Montana has filed an exception.	Article V(A) of the Yellowstone River Compact ratified by Montana, Wyoming, and North Dakota provides that appropriative rights to beneficial uses of the water of the Yellowstone River System existing in each signatory State as of January 1, 1950, shall continue to be enjoyed under the laws governing the acquisition and use of the water under the doctrine of appropriation. The doctrine of appropriation provides that rights to water for irrigation are perfected and enforced in order of seniority, starting with the first person to divert water from a natural stream and apply it to a "beneficial use." Once perfected, that water right is senior to any junior appropriator's rights and may be fulfilled entirely before the junior appropriators acquire any water. Under a no-injury rule, junior users may prevent senior users from enlarging their rights to the detriment of the junior users. The Supreme Court found that a change in irrigation method does not run afoul of the no-injury rule in Montana and Wyoming. Therefore, an appropriator may increase his consumption by changing to a more water-intensive crop so long as he makes no change in acreage irrigated or amount of water diverted. The Court reasoned under the doctrine of recapture that treating irrigation efficiency improvements is within the original appropriative right. Thus, the sprinklers were different mechanisms for increasing the volume of water available to crops without changing the amount of diversion. The Court held that Wyoming did not breach the Compact.

Franks v. Salazar 816 F. Supp. 2d 49 (D.D.C. 2011)	
Summary of the Facts	**Summary of the Holding**
The six Plaintiffs in this case each shot and killed at least one elephant in Mozambique between 2000 and 2006. With the help of a group called the Conservation Force, they applied for a permit to import their sport-hunted trophies in to the United States. The United States Fish and Wild Life Service (FWS) did not act on these requests for several years. To grant a permit application, the FWS must find that import would be for purposes that are not detrimental to the survival of the species and would serve to enhance the survival of the species. The FWS sent Mozambique Officials requests regarding the status of the country's elephant population. The FWS found their responses to be superficial and lacking in specific detail and scientific support. The FWS concluded that it did not have sufficient information to determine whether Mozambique had an elephant management plan, an accurate estimate of its elephant population, or the resources to control illegal pouching. The FWS apologized for the delay in responding to plaintiffs' requests when it ultimately denied the applications in July 2006. The FWS explained that after repeated attempts to obtain information from Mozambique regarding the benefits of sport hunting, it was unable to make the required enhancement and non-detrimental findings. The plaintiffs sued for declaratory and injunctive relief, seeking judicial review of the denial of their import permit applications.	The district court denied plaintiffs' motion for summary judgment and granted defendants' cross-motion for summary judgment. The court found moot the plaintiffs' deprivation of due process claim as there was no longer any relief the court could grant since the FWS had finished processing the plaintiffs' permit applications, giving the plaintiffs their specific relief. Second, the FWS did not promulgate new "rules" requiring formal public notice and comment in its denial of permit applications; but rather, it was an adjudication because, as the court said, rules have legal consequences only for the future; thus, this claim fails as a matter of law. The final argument advanced by the plaintiffs was that the denial of the permit was arbitrary and capricious. This claim failed because the court found that the FWS considered the relevant statutory and regulatory factors. The FWS considered whether the sport hunting at issue was part of a biologically based sustainable-use management plan that is designed to eliminate over-utilization of the species in Mozambique. There was insufficient information to conclude as such after analyzing each factor. Thus, Mozambique's lack of sufficient resources to protect and manage elephants weighed against finding non-detriment and enhancement, entitling the defendants' cross-motion for summary judgment.

Tilikum v. Sea World Parks & Entm't, Inc.

No. 11cv2476 JM(WMC), 2012 U.S. Dist. LEXIS 15258 (S.D. Cal. Feb. 8, 2012)

Summary of the Facts	Summary of the Holding
The Plaintiffs are members of the Orcinus or "killer whale" species of the dolphin family. The Plaintiffs, composed of five orca whales named Tilikum, Katina, Corky, Kasatka, and Ulises, were acting by their Next Friends, composed of the People for Ethical Treatment of Animals, in this suit. The Plaintiffs filed a complaint for declaratory and injunctive relief, seeking a declaration that the five named wild-captured orcas are being held by the Defendants, Sea World Parks & Entertainment, Inc. and Sea World, LLC, (collectively "Sea World") in violation of Section One of the Thirteenth Amendment to the Constitution of the United States, which prohibits slavery and involuntary servitude. The Defendant was allegedly holding the Plaintiffs captive at their entertainment facilities in Orlando, Florida and San Diego, California. The Defendant moved to dismiss the complaint pursuant to Rule 12(b)(1) and Rule 12(b)(6) of the Federal Rules of Civil Procedure.	This was an issue of first impression before the court and there were no authorities applying the Thirteenth Amendment to non-persons. Next Friends alleged that confinement of the orcas in barren concrete tanks negatively impacts them in many ways, including suppression of Plaintiffs' cultural traditions and deprives them of the ability to make conscious choices and of the environmental enrichment required to stimulate Plaintiffs mentally and physically for their well-being. The Next Friends also asked the court to find that the specific acts of domination, exploitation, and coercion to which the orcas are subjected are repugnant to the Thirteenth Amendment. The Defendants argued that Plaintiffs lacked Article III standing to bring the action. The court concluded that the Thirteenth Amendment only applies to "humans" and therefore afforded no redress for Plaintiffs' grievances. The court reasoned that the only reasonable interpretation of the Thirteenth Amendment's plain language is that it applies to persons, and not to non-persons such as orcas. Both historic and contemporary sources revealed that the terms "slavery" and "involuntary servitude" refer only to persons. For the reasons stated above, the court dismissed the action with prejudice for lack of subject matter jurisdiction.

State v. Huguelet

No. 299379, 2011 Mich. App. LEXIS 1790 (Mich. Ct. App. Oct. 13, 2011)

Summary of the Facts	Summary of the Holding
Law enforcement personal responded to a report of possible animal neglect and observed several horses that appeared to be underfed. The Defendant was present and cooperated with the officers and agreed to have a veterinarian come out to the property to check the animals. The veterinarian had to euthanize two animals after discovering septic lines in their mouths. The veterinarian advised the defendant to get more feed for the horses in which the defendant did. The next day animal control visited the property again at the request of the veterinarian. The officer described the animals as "skinny" and "in very bad shape." A warrant was obtained and the animal control officer seized the horses. Due to their poor condition, four horses had to be euthanized. The remaining horses were taken away. The defendant was charged with one count of animal abandonment or cruelty involving more than 10 animals pursuant to MCL 750.50(4)(d). Following a four-day trial, the defendant was convicted of the lesser-included offense of abandonment or cruelty involving four to nine animals under MCL 750.50(4)(c). The defendant was sentenced to serve 36 months probation, as well as 90 days in jail, the latter being suspended pending a successful completion of probation. On appeal, defendant claims he is entitled to a new trial because the jury was not provided with specific unanimity instruction and ineffective assistance of counsel.	On appeal, the Court of Appeals affirmed. The court found that defendant's trial counsel affirmatively approved the instructions provided to the jury, thereby waiving the defendant's first claim. As to the ineffective assistance of counsel claim, the court stated that the defendant must show that the trial counsel's failure to request a specific unanimity instruction was objectively unreasonable and that such failure resulted in prejudice. The requirement for a specific unanimity instruction is evidence of alternative acts that are mutually distinct or there is reason to believe the jurors would be confused about the factual basis of the defendant's guilt. On appeal, the defendant alleges that the prosecution had two distinct theories. First, underfed horses showed that defendant failed to provide adequate care, violating MCL 750.50(2)(a). Second, that evidence of overgrown hooves, as an alternative, showed that defendant negligently allowed the animals to suffer in violation of 750.50(2)(f). However, the court found that the jury was provided with one theory of continuous neglect involving both insufficient food and insufficient veterinary care. The court reasoned that a series of acts comprising one conceptual group does not trigger a need for a unanimity instruction. Also, the two subsections at issue are substantively indistinguishable and when a statute lists alternative means of committing an offense, jury unanimity is not required with regard to the alternate theory. Thus, the trial counsels failure to request a specific unanimity instruction was not objectively unreasonable.

Simpson v. Dep't of Fish & Wildlife 255 P.3d 565 (Or. Ct. App. 2011)	
Summary of the Facts	**Summary of the Holding**
The Petitioners in this case own game ranches in Oregon. On those ranches, the petitioners hold in captivity and have a property interest in elk, fallow deer, ibex, bison, water buffalo, Barbary sheep, and Russian boars. These animals were purchased from licensed holders in Oregon, legally imported from out of state, or born in captivity in petitioner's facilities in Oregon. Most of petitioners' animals are defined by administrative rule as "wildlife." Oregon statute ORS 498.002(1) provides, in part, that wildlife is the property of the state. The petitioners sought a declaratory ruling from the Oregon Department of Fish and Wildlife (ODFW) as to whether their animals are the property of the state under ORS 498.002(1). The ODFW ruled that the state does now have any proprietary or possessory interest in petitioners' animals. Seeking judicial review, the petitioners argued that the presiding ODFW officer erred in failing to declare that their animals are the property of the state and that the ODFW's ruling as to the state's interest in their animals is not supported by ORS 498.002(1).	The court agreed with ODFW finding that petitioners' position that the presiding officer erred is premised on a misunderstanding of the term "property" in ORS 498.002(1). A simple "yes" or "no" answer to whether the petitioners' animals are property of the state would be devoid of useful substance the appellate court found. To determine what "property" means under Oregon statute the court turned to the words of the statute in context and to the legislative history and other interpretive aids. The pre-existing common-law and statutory framework in which ORS 498.002(1) was enacted indicates that "property" is not intended to convey that that state has exclusive and perpetual ownership rights in wildlife. Looking to case law, the court found repeated reiteration that that the state's sovereign title to animals ferae naturae is not a proprietary interest. Also, when ORS 498.002 was enacted as part of an overhaul of the wildlife laws, the court found that the legislative history confirmed that the legislature did not intend a substantive change in the understanding of the state's property interest in wildlife. The intent of the drafters was merely to simplify the language, not alter the substance of the law. Thus, the court held that the term "property" continues to mean that the state's property interest is sovereign and not a proprietary possessory interest that amounts to ownership or control. Therefore, the court found that the petitioners' animals are the "property of the state," and the state does not own petitioners' animals in the common sense of "ownership."

Otey Mesa Prop., L.P. v. U.S. Dep't of the Interior

646 F.3d 914 (D.C. Cir. 2011)

Summary of the Facts	Summary of the Holding
The case concerns the San Diego fairy shrimp, an aquatic animal found in southern California. They are the size of an ant with a life span of about 30 days, and they live in "vernal pools" that are typically large puddles or small seasonal ponds that form during the winter and then dry out as summer approaches. If the shrimp lay eggs, those eggs can lie dormant in the bottom of a dry pool for months or years. When the pool refills again, the eggs can hatch. In 1997, the Fish and Wildlife Service (FWS) listed the San Diego fairy shrimp as an endangered species under the Endangered Species Act. The Act authorizes the FWS to designate property as a "critical habitat" for the endangered species if the property was "occupied" by the species when it was listed as endangered. The plaintiffs are companies that own land along the California-Mexico border. In 2007, the FWS listed 143 acres of the plaintiffs' property as critical habitat under the Endangered Species Act for the San Diego fairy shrimp. This designation came about after a 2001 sighting by the FWS of four ant-sized San Diego fairy shrimp in a dirt rut on a road on the plaintiffs' 143-acre property. During the notice and comment period, plaintiffs submitted letters objecting to the designation. In 2008, the plaintiffs sued to challenge the designation of their property as critical habitat. The District Court granted summary judgment to the FWS. The plaintiffs appealed.	On appeal, the appellate court reversed. The court found several factors taken together that point to a lack of substantial evidence for the FWS's determination that plaintiffs' property was "occupied" by the San Diego shrimp farm in 1997. First, the FWS surveyors identified the San Diego shrimp on plaintiffs' property only in one location. Second, after the one survey that found the shrimp, surveyors searched plaintiffs' property six more times in 2001, each to no avail. The court said that failure to observe any San Diego fairy shrimp in later surveys on plaintiffs' property is in tension with the suggestion that the property was "occupied" by the San Diego fairy shrimp in 2001. Third, the court noted, was that the lone sighting in this case was in 2001, but the relevant date for purposes of the designation was 1997. The court said that critical habitat designation includes specific areas within the geographical area occupied by the species, at the time it is listed. The court went on to say that the San Diego fairy shrimp was listed in 1997, but the FWS provided no evidence of sightings on plaintiffs land in 1997. The court found the FWS explanation of why a sighting in 2001 meant that the San Diego fairy shrimp occupied plaintiffs' land in 1997, at best, was strained. Therefore, the court reversed the District Court's grant of summary judgment and directed the District Court to vacate the FWS designation of plaintiffs' property as a critical habitat for the San Diego fairy shrimp.

People v. Riazati 195 Cal. App. 4th 514 (Cal. Ct. App. 2011)	
Summary of the Facts	**Summary of the Holding**
The defendant, Manuchehr Riazati, accumulated more than 90 animals at his residence. An animal control officer responded to a complaint by the defendant's neighbor, regarding an aggressive dog on his roof that was trying to jump down and possibly attack people when they walked by. The officer, after talking with the defendant observed dogs without tags, random junk items in his house and yard, and a noticeable odor of feces and urine. Looking into his house, the officer noticed an unresponsive chicken with his head against a door, along with numerous rabbits, and guinea pigs; she also heard birds some of which were flying through vertical blinds. The officer checked on the animals' welfare and found that she was standing on soiled hay and feces with over 20 rabbits around her, 30 birds, most that were caged. The room had a very strong odor of feces and urine, and the sharp scent of ammonia associated with urine, which caused her eye's to water. Also, the birdseed was covered in feces, and the water in the cages was brownish green. The officer explained the violations she observed, advised him how to improve the conditions of the animals, and issued him a notice of complaint for inadequate food, inadequate water, inadequate ventilation, and inadequate sanitation. After returning multiple times and with no improvement in conditions, a search warrant was obtained to seize the animals. The defendant was convicted of two counts of felony animal neglect and four counts of misdemeanor animal neglect. He appealed asserting error.	The defendant contended that the lower court prejudicially erred and violated his rights to due process and a fair trail by instructing the jury that he could be found guilty of animal neglect if his acts or omissions created a high risk of great bodily injury to an animal under his care, which reduced the prosecutions burden of proof. The court concluded that defendant was barred under the doctrine of invited error from challenging the instructions on the elements of the offense of animal neglect and the definition of gross negligence given by the trial court because his request for those instructions were the result of a deliberate tactical choice at trial. The court found evidence sufficient to support all six of defendant's animal neglect convictions. There was substantial evidence that the animals under his care were in a thin and dehydrated condition due to a shortage of food, water, shelter, and protection from the weather. As such, a reasonable trier of fact could find beyond a reasonable doubt that defendant's acts and omissions recklessly created a high risk of great bodily injury to animals. The judgment was affirmed.

Tieman v. Grinsteiner

No. 300265, 2011 Mich. App. LEXIS 1922 (Mich. Ct. App. Oct. 27, 2011)

Summary of the Facts	Summary of the Holding
Plaintiff drove his vehicle up the driveway to the defendant's farm, intending to purchase straw. When the plaintiff pulled into the driveway, defendant's two dogs ran to the vehicle while barking. The defendant was not home. Plaintiff got out of his vehicle. One of the defendant's dogs, an Australian Shepherd, bit plaintiff on his side, causing the plaintiff to promptly turn his body and get back into his vehicle. In the process, plaintiff allegedly injured his knee. Plaintiff sought treatment for the dog bite but the actual wound from the bite was not severe. Plaintiff intended to have his knee treated. During that month, plaintiff was working with a router; he placed all his weight on the router when his knee gave out, causing the router to severe two of his fingers. The plaintiff filed a complaint alleging that defendant was liable for his dog's actions and that defendant knew that his dog had a propensity to bite and was therefore liable because he allowed the plaintiff to enter his property. The defendant sought summary disposition. The trial court held that defendant was entitled to summary disposition on each count because plaintiff was properly classified as a trespasser and because defendant did not know that his dog had a propensity to bite. The plaintiff appealed and asserted that summary disposition was improper regarding each count of his first amended complaint.	The court of appeals affirmed. The court found, pursuant to MCL 287.351(1), that a dog's owner is liable when a dog, without provocation, bites a person who is lawfully present on private property. However, there was no allegation that plaintiff was present on defendant's property to perform a duty imposed upon him. The plaintiff argued that he was a licensee and that because the defendant failed to post a sign in the driveway warning potential entrants, he acquiesced to known and customary use of the property by the public. The court said that defendant did not derive a benefit from plaintiff's benefit, did not explicitly invite him onto the property and was wholly unaware that plaintiff would be in his driveway thus summary disposition was proper on this claim. The plaintiff then asserted that defendant should be liable for his dog bite injuries. In order to be liable for dog bite injuries, a plaintiff must show that the owner of the animal had scienter, or knowledge, of the dog's "abnormally dangerous propensities." The court found that there was no allegation that defendant's dog had previously bit anybody. The plaintiff cited no case in support of his theories. Therefore, there was no evidence demonstrating a dangerously propensity "unique to the particular animal" to satisfy the requisite burden. The court affirmed finding no genuine issue of material fact relating to the claim. Summary disposition was properly granted on all claims.