

FARM-ANIMAL WELFARE, LEGISLATION, AND TRADE

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I

INTRODUCTION

Farm animals represent ninety-eight percent of the animals raised and killed in the country. Around ten billion farm animals will be raised and killed in the United States this year—one million slaughtered per hour.¹ Since World War II, the welfare of these animals has been impaired by intensive breeding, confinement in high-density housing, and painful surgeries performed without anesthesia. The United States has among the weakest farm-animal-welfare standards in the developed world. Although improvements in farm-animal welfare are economically feasible, nations and states enacting protective regulation are threatened by competition with cheaper, non-compliant imports. Although recognition in trade agreements and restrictions on sale could help to protect animal welfare, they may rarely be politically feasible. Campaigns directed at consumers and retailers are likely to be more cost-effective than production-related regulations in improving animal welfare and are also compatible with abolitionist objectives.

Part II of this article will discuss the current treatment of animals and the difference in public perception of animal welfare and reality. Part III will discuss the current legal protections for animals in both the United States and the European Union, and Part IV will discuss potential methods for welfare improvements including industry, consumer, trade, and retailer-based reforms.

II

THE TREATMENT OF FARM ANIMALS

In contrast to the bucolic farms portrayed in storybooks, most farm animals in the United States are raised on “factory farms”—large industrial facilities

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1. David J. Wolfson & Mariann Sullivan, *Foxes in the Hen House: Animals, Agribusiness, and the Law: A Modern American Fable*, in *ANIMAL RIGHTS: CURRENT DEBATES AND NEW DIRECTIONS* 205, 206 (Cass R. Sunstein & Martha C. Nussbaum eds., 2004).

typically housing thousands of animals indoors at high densities. Although factory farms may be economically efficient in producing meat, eggs, and milk at low cost, they significantly impair animal welfare. Most Americans are unaware of the abuse that factory-farmed animals endure, but they disapprove of it once they are made aware and support government regulation to outlaw the most abusive farming practices.

A. The Scope of the Farm-Animal Issue

Farm animals represent ninety-eight percent of the animals raised and killed in the United States.² Compared to farm animals, the number of animals hunted, kept as companions, used in labs, reared for the fur industry, raced, and used in zoos and circuses is insignificant.³ The “animal-welfare issue” is thus numerically reducible to the “farm-animal-welfare issue.” Moreover, because birds and fish represent ninety-nine percent of all farm animals killed and ninety-five percent of all farm-animal life-years, animal welfare is further reducible to the welfare of these farmed species. The following table provides estimates of the number of farm animals slaughtered in 2003 in the United States and the corresponding number of life-years for each animal.

Table 1: Farm animal lives and life-years, U.S., 2003

	Killer per year (millions) ^{4,5}	Percent of all killed	Lifespan (years)	Life-years per year (millions)	Percent of all life-years	Kg food per life-year
Broiler, chickens ⁶	8,680	84	0.12	1,042	30	10
Farmed fish ⁷	909	9	2.0	1,818	52	0.15
Turkeys ⁸	274	3	0.3	84	2	21
Egg-laying	259	3	1.3	337	10	19

2. *Id.* at 206–07.

3. *Id.*

4. U.S. DEP'T AGRIC., LIVESTOCK TRACK RECORDS SEPT. 2004 (2004), available at <http://usda.mannlib.cornell.edu/reports/nassr/livestock/pls-bb/lvst0904.txt>.

5. U.S. DEP'T AGRIC., LIVESTOCK SLAUGHTER 2003 SUMMARY (2004), available at <http://usda.mannlib.cornell.edu/reports/nassr/livestock/pls-bban/lisan0304.txt>.

6. U.S. DEP'T AGRIC., POULTRY SLAUGHTER 2003 ANNUAL SUMMARY (2004), available at <http://usda.mannlib.cornell.edu/reports/nassr/poultry/ppy-bban/pslaan04.txt>.

7. DAVID HARVEY, U.S. DEP'T AGRIC., AQUACULTURE OUTLOOK 2006 (2006), available at <http://usda.mannlib.cornell.edu/usda/current/LDP-AQS/LDP-AQS-10-05-2006.pdf>.

8. U.S. DEP'T AGRIC., TURKEYS RAISED 2004 (2004), available at <http://usda.mannlib.cornell.edu/reports/nassr/poultry/pth-bbt/tuky0104.txt>.

chickens ⁹						
Broiler breeders	46	0.4	1.3	61	2	—
Hogs ¹⁰	101	1	0.6	59	2	116
Beef cows	36	0.4	2.5	89	2	100
Dairy cows	9	0.1	5.0	45	1	4,500
Breeding sows	1	0.01	5.0	6	0.2	—
Veal calves	1	0.01	0.27	0.3	0.01	267
Total	10,320	100		3,524	100	

Estimated from USDA slaughter and inventory statistics; “fish” includes the only fish for which inventory numbers are available: catfish, which represent around eighty-five percent of farmed fish sold.

B. The History of Factory Farming

After World War II, several technologies were introduced to animal farming to reduce production costs: modern genetics to breed more productive animals; protein-dense nutrition to maximize meat, egg, and milk production; Concentrated Animal Feeding Operations (CAFOs)¹¹—housing animals

9. U.S. DEP'T AGRIC., CHICKEN AND EGGS 2003 SUMMARY (2004), available at <http://usda.mannlib.cornell.edu/reports/nassr/poultry/pec-bbl/lyegan04.txt>.

10. U.S. DEP'T AGRIC., U.S. HOG BREEDING HERD STRUCTURE 3 (2002), available at <http://usda.mannlib.cornell.edu/reports/nassr/livestock/hog-herd/spehog02.pdf>.

11. The term “Concentrated Animal Feeding Operation” is an Environmental Protection Agency (EPA) term, created for purposes of water-pollution regulation. EPA defines CAFO as

a. New and existing operations which stable or confine and feed or maintain for a total of 45 days or more in any 12-month period more than the numbers of animals specified [e.g. 30,000 to 100,000 laying hens or broilers depending on the manure handling systems, 55,000 turkeys, 700 mature dairy cattle]

b. New and existing operations which discharge pollutants into navigable waters either through a man-made ditch, flushing system, or other similar man-made device, or directly into waters of the United States, and which stable or confine and feed or maintain for a total of 45 days or more in any 12-month period

Provided, however, that no animal feeding operation is a concentrated animal feeding operation as defined above if such animal feeding operation discharges only in the event of a 25-year, 24-hour storm event.

ENVTL. PROT. AGENCY, WATER ENFORCEMENT BRANCH, CONCENTRATED ANIMAL FEEDING OPERATIONS (2006), available at <http://www.epa.gov/earth1r6/6en/w/cafo/cafodef.htm>. Although CAFO has a specific legal definition unrelated to animal welfare, it is a term used by those interested in animal welfare to indicate a facility in which at least a certain number of animals are confined. Animal advocates consider CAFOs “factory farms.” Therefore, when referring to a specific entity or a group of specific entities or sites that intensively confine animals, animal advocates often use “CAFO” as a term synonymous with “factory farm.” See, e.g., The Grace Factory Farm Project, Guide to Confronting a

indoors at high densities in barren environments to reduce land and labor costs; and vaccines, antibiotics, and vitamin D to prevent diseases that emerge with unnatural diets and intensive confinement in CAFOs. The combination of these technologies has been called “factory farming.”¹²

Factory farming has succeeded in reducing the costs of meat, eggs, and milk, but it has also impaired the welfare of farm animals. For centuries, producers had used less-intensive systems that allowed farm animals to express many normal behaviors in natural group sizes. In these extensive systems, animal health, welfare, and productivity were effectively linked. It was in the economic interest of producers to care for their animals. The effects of technology on animal-farming practices broke this link:

As long as this contract of “we take care of the animals, they will take care of us” obtained, society needed no additional ethic or laws, save prohibition of cruelty to animals, for self-interest was the greatest stimulus for proper animal treatment No traditional husbandry agriculturalist would have put 100,000 chickens in 1 building, for all would have died in weeks.

Technology broke this ancient contract when it allowed us to put animals into environments and uses that didn’t impair their productivity but harmed their well-being. We could now put square pegs into round holes and suppress with technological fixes the loss of revenue. Because of antibiotics, vaccines, air handling systems, et cetera, we could raise 100,000 chickens in 1 building or pigs in crates.¹³

With the introduction of drugs and modern genetics to animal agriculture, the link between production and good husbandry was severed. Production diseases like liver abscesses, mastitis, ascites, lameness, and uterine prolapse emerged in overbred and overworked animals.¹⁴ These and a proliferation of other serious problems for animal welfare were caused by such “efforts to achieve earlier and faster growth, greater production per individual, efficient feed conversion and partitioning, and increased prolificacy.”¹⁵

C. The Current Status of Animal Welfare

Animal agribusiness representatives often assert that it is in the economic interest of producers to protect animals’ welfare, as unhappy animals are unproductive. For instance, a vice president of the National Pork Producers Council claimed, “farmers treat their animals well because that’s just good business.”¹⁶ There are some instances in which this is true, but many in which it is not. When animal welfare competes with economics, economics usually wins:

CAFO (2006), <http://www.factoryfarm.org/guide/> (listing ways to combat the start of a CAFO). Although not identical, the two terms will be used interchangeably in this article.

12. See Gary Francione, *Animals—Property or Persons?*, in ANIMAL RIGHTS: CURRENT DEBATES AND NEW DIRECTIONS, *supra* note 1, at 108, 209 (noting the definition of “factory farming”).

13. Bernard E. Rollin, *An Ethicist’s Commentary on Animal Rights Versus Welfare*, 43 CAN. VETERINARY J. 913, 913 (2002).

14. Donald Broom, *Does Present Legislation Help Animal Welfare?*, in SUSTAINABLE ANIMAL PRODUCTION § 2.7 (2000), available at <http://agriculture.de/acms1/conf6/ws5alegisl.htm>.

15. *Id.*

16. Marc Kaufman, *In Pig Farming, Growing Concern Raising Sows in Crates Is Questioned*, WASH. POST, June 18, 2001, at A1.

it can be cheaper for producers to accept losses due to disease and mortality than to prevent those losses. As two poultry scientists asked, “Is it more profitable to grow the biggest bird and have increased mortality due to heart attacks, ascites [another illness caused by fast growth] and leg problems or should birds be grown slower so that birds are smaller, but have fewer heart, lung and skeletal problems?”¹⁷ The researchers answer that it takes only “simple calculations” to find “it is better to get the weight and ignore the mortality.”¹⁸ Indeed, because the animals themselves are less expensive than other inputs, “[It is] more economically efficient to put a greater number of birds into each cage, accepting lower productivity per bird but greater productivity per cage . . . Chickens are cheap, cages are expensive.”¹⁹ In other words, there is no longer a connection between animal welfare and efficiency:

It is now generally agreed that good productivity and health are not necessarily indicators of good welfare. . . . Productivity . . . is often measured at the level of the unit (e.g. number of eggs or egg mass per hen-housed), and individual animals may be in a comparatively poor state of welfare even though productivity within the unit may be high.²⁰

Moreover, when animals are no longer productive—that is, when animals are sick, injured, or “spent”—there is no economic incentive for producers to care for them. It is typically cheaper to let these animals die than to provide treatment. Most farm animals receive no individual veterinary attention during their lives. In the United States, there are only 220 veterinarians responsible for the care of more than nine billion farm animals.²¹

The changes in farm animal production have created a number of welfare problems on the farm, during transport, and during slaughter. Contrary to the image of Old MacDonald’s Farm, ninety-nine percent of U.S. farm animals never spend time outdoors;²² they spend their entire lives overcrowded with tens of thousands of other animals, living in their own manure, in barren sheds. Most farm animals cannot engage in natural behaviors such as foraging, perching, nesting, rooting, and mating, and many are not even able to turn around or fully stretch their limbs.

17. G. Tom Tabler & A.M. Mendenhall, *Broiler Nutrition, Feed Intake and Grower Economics*, 5 AVIAN ADVICE 8, 9 (Winter 2003).

18. *Id.*

19. BERNARD ROLLIN, FARM ANIMAL WELFARE 119 (1995).

20. Joy Mench, *The Welfare of Poultry in Modern Production Systems*, 4 POULTRY SCI. REV. 107, 112 (1992).

21. Press Release, Nat’l Institute for Animal Agric., Vet Schools to Re-shape Curricula to Meet 21st Century Challenges (Apr. 11, 2005), available at http://animalagriculture.org/headline/2005NR/NR_2005Osburn.htm.

22. Personal correspondence with Bill Roenigk, Vice President of National Chicken Council (Feb. 23, 2004) (on file with author); Allan Rahn, *An Economic Perspective on the United Egg Producers’ Animal Husbandry Guidelines for U.S. Egg Laying Flocks* 1 (Nov. 26, 2002), available at <http://www.msu.edu/user/rahn/Publications/MWPF02Paper.pdf> (revised paper originally presented to the Midwest Poultry Federation Convention on Mar. 21, 2002).

These conditions and the welfare problems they cause are discussed at length elsewhere;²³ this article instead briefly describes four farming practices common in the United States that are widely believed to significantly impair animal welfare: the overbreeding of birds, the caging of hens, the crating of pregnant sows, and the tethering or crating of calves raised for veal.

In the United States, almost nine billion chickens, known as broilers, are raised for meat, and more than 270 million turkeys are reared and slaughtered each year.²⁴ Virtually all these birds are members of fast-growing breeds produced by a handful of breeding companies. Broilers now reach market weight in seven weeks—around one-third the time it took fifty years ago.²⁵ Turkeys now reach market weight in four months—about half the time it took fifty years ago.²⁶

The birds' rapid growth contributes to a number of welfare problems, including skeletal, respiratory, and cardiovascular disease, as well as chronic hunger in breeding stock.²⁷ Between one-third and one-half of birds suffer from leg deformities, and one-quarter are believed to suffer chronic pain.²⁸ Because of the vast number of broilers and turkeys raised each year, fast growth has been called, "in both magnitude and severity, the single most severe, systematic example of man's inhumanity to another sentient animal."²⁹

Egg-laying hens face their own set of inhumane practices. Around ninety-five percent of the approximately 350 million egg-laying hens in the United States are housed in barren wire cages known as "battery cages."³⁰ Battery cages are known to contribute to a number of welfare problems: they typically afford

23. See, e.g., Rollin *supra* note 19; THE WELL-BEING OF FARM ANIMALS: CHALLENGES AND SOLUTIONS (G. John Benson & Bernard Rollin eds., 2004); MEASURING AND AUDITING BROILER WELFARE (Claire Weeks & Andrew Butterworth eds., 2004); WELFARE OF THE LAYING HEN (G.C. Perry ed., 2004); SCIENTIFIC COMM. ON ANIMAL HEALTH AND ANIMAL WELFARE, THE WELFARE OF CHICKENS KEPT FOR MEAT PRODUCTION (BROILERS) (2000), available at http://ec.europa.eu/food/fs/sc/scah/out39_en.pdf; SCIENTIFIC VETERINARY COMM., THE WELFARE OF INTENSIVELY KEPT PIGS (1997), available at http://europa.eu.int/comm/food/fs/sc/oldcomm4/out17_en.pdf [hereinafter SVC 1997]; SCIENTIFIC VETERINARY COMM., THE WELFARE OF LAYING HENS (1996), available at http://europa.eu.int/comm/food/fs/sc/oldcomm4/out33_en.pdf [hereinafter SVC 1996]; SCIENTIFIC VETERINARY COMM., REPORT ON THE WELFARE OF CALVES (1995), available at http://europa.eu.int/comm/food/fs/sc/oldcomm4/out35_en.pdf [hereinafter SVC 1995].

24. AM. MEAT INST., FACT SHEET: OVERVIEW OF U.S. MEAT AND POULTRY PRODUCTION AND CONSUMPTION 1 (2004), available at http://meatami.com/content/presscenter/factsheets_Infokits/FactSheetMeatProductionandConsumption.pdf.

25. Gerald Havenstein et al., *Growth, Livability, and Feed Conversion of 1957 Versus 2001 Broilers When Fed Representative 1957 and 2001 Broiler Diets*, 82 POULTRY SCI. 1500, 1506–07 (2003).

26. Peter Ferket, *Tom Weights Up Seven Percent*, WATT POULTRY USA, July 2004, at 32, 34.

27. SCIENTIFIC COMM. ON ANIMAL HEALTH AND ANIMAL WELFARE, *supra* note 23, at 80; I.J.H. Duncan, *Welfare Problems of Poultry, in THE WELL-BEING OF FARM ANIMALS, supra* note 23; J. Mench, *Lameness, in MEASURING AND AUDITING BROILER WELFARE 3* (Claire Weeks & Andrew Butterworth eds., 2004).

28. HUMANE SOC'Y OF THE U.S., THE WELFARE OF ANIMALS IN THE BROILER CHICKEN INDUSTRY 1 (2005), http://www.hsus.org/web-files/PDF/farm/welfare_broiler.pdf.

29. JOHN WEBSTER, ANIMAL WELFARE: A COOL EYE TOWARDS EDEN 156 (1994).

30. U.S. DEP'T AGRIC. NAT'L AGRIC. STATISTICS SERV., CHICKENS AND EGGS 3 (2005), <http://usda.mannlib.cornell.edu/reports/nassr/poultry/pec-bb/2005/ckeg0105.pdf>; Rahn, *supra* note 22.

less than half a square foot of area per hen, preventing the birds from stretching their wings; they contribute to bone weakness and fractures during depopulation; and they are barren, preventing hens from natural behaviors such as nesting, perching, or dustbathing.³¹

By the end of their two laying cycles, most birds are physically wrecked from a lay-rate ten times higher than natural.³² Between eighty and ninety percent suffer from osteoporosis by the time they are considered “spent,” and one-quarter suffer one or more bone fractures.³³ In its 1996 report, the European Commission’s Scientific Veterinary Committee (SVC) condemned the battery cage, concluding, “It is clear that because of its small size and its barrenness, the battery cage as used at present has inherent severe disadvantages for the welfare of hens.”³⁴

In the United States, six million breeding sows are maintained in commercial production, making up ten percent of the U.S. pig population.³⁵ When pregnant, sixty to seventy percent of these sows are kept in barren, individual, concrete-floored stalls, called gestation crates, measuring seven feet long by two feet wide—too small for sows to turn around.³⁶ Nearly all of a sow’s sixteen-week pregnancy is spent in the crate; immobilizing sows decreases the costs of labor and extra feeding equipment.³⁷

In its review, the European Union’s SVC concluded, “Since overall welfare appears to be better when sows are not confined throughout gestation, sows should preferably be kept in groups.”³⁸ The report notes that when sows are housed in groups rather than in crates,

sows have more exercise, more control over their environment, more opportunity for normal social interactions, and better potential for the provision of opportunities to root or manipulate materials. . . . As a consequence, group-housed sows show less abnormality of bone and muscle development, much less abnormal behaviour, less likelihood of extreme physiological responses, less of the urinary tract infections associated with inactivity, and better cardiovascular fitness.³⁹

31. Duncan, *supra* note 27.

32. HUMANE SOC’Y OF THE U.S., AN HSUS REPORT: WELFARE ISSUES WITH SELECTIVE BREEDING FOR PRODUCTION IN EGG-LAYING HENS 1 (2006), available at http://www.hsus.org/web-files/PDF/farm/welfiss_breeding_egg.pdf.

33. A. Bruce Webster, *Welfare Implications of Avian Osteoporosis*, 83 POULTRY SCI. 184, 188 (2004).

34. SVC 1996, *supra* note 23, at 109.

35. U.S. DEP’T AGRIC., LIVESTOCK TRACK RECORDS 10 (2004), available at <http://usda.mannlib.cornell.edu/reports/nassr/livestock/pls-bb/lvst0904.txt>; U.S. DEP’T AGRIC., U.S. HOG BREEDING HERD STRUCTURE 3 (2002), available at <http://usda.mannlib.cornell.edu/reports/nassr/livestock/hog-herd/spehog02.pdf>.

36. John McGlone, *The Crate*, in PROCEEDINGS: SYMPOSIUM ON SWINE HOUSING AND WELL-BEING 35, 35 (June 5, 2002), available at http://www.ces.purdue.edu/pork/sowhousing/swine_02.pdf; J.L. Barnett et al., *A Review of the Welfare Issues for Sows and Piglets in Relation to Housing*, 52 AUSTL. J. AGRIC. RES. 1, 1 (2001).

37. SVC 1997, *supra* note 23, at 115–25 (noting the increased labor and equipment costs associated with changing current pig housing).

38. *Id.* at 145.

39. *Id.*

Calves raised for veal are typically tethered by the neck or confined in individual stalls, or both; the stalls are so small that the calves cannot turn around during their entire sixteen to eighteen week lives.⁴⁰ Immobilizing calves reduces labor and housing costs and prevents muscle development, making the resulting meat a pale color, preferred by some consumers.⁴¹

Veal crates have been widely criticized on animal-welfare grounds, although it is unlikely they are worse than gestation crates or battery cages. The European Union's SVC concluded,

The welfare of calves is very poor when they are kept in small individual pens with insufficient room for comfortably lying, no direct social contact and no bedding or other material to manipulate. . . . In order to provide an environment which is adequate for exercise, exploration and free social interaction, calves should be kept in groups.⁴²

Aquaculture is the fastest-growing segment of animal agriculture.⁴³ Around thirty-two percent of all food fish, by weight, are now farmed.⁴⁴ Farmed fish suffer from welfare problems caused by high stocking densities and poor water quality, leading to average mortality rates of thirty-five percent.⁴⁵ Because little is known about these welfare problems and practical solutions, they are excluded from this discussion.

Reports and even pictures do not sufficiently describe the conditions in which most U.S. farm animals live and die. It is best to visit a factory farm for oneself or watch footage filmed in one to fully comprehend the price farm animals pay for the efficiencies of meat, egg, and milk production.⁴⁶

40. SVC 1995, *supra* note 23, at 28–29.

41. *Id.* at 81, 84.

42. *Id.* at 97–98.

43. Food and Agric. Org. of the U.N., *The State of World Fisheries and Aquaculture 2004*, Part I, in *WORLD REV. OF FISHERIES AND AQUACULTURE* (2004), available at http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/007/y5600e/y5600e04.htm.

44. *Id.* at tbl.1.

45. See generally Tore Håstein et al., *Science-Based Assessment of Welfare: Aquatic Animals*, 24 *REVUE SCI. ET TECHNIQUE* 529 (2005), available at <http://www.oie.int/eng/publicat/RT/2402/PDF/hastein529-547.pdf> (noting the problems with aquatic farming); Tore Håstein, *Animal Welfare Issues Relating to Aquaculture*, in *PROCEEDINGS OF THE GLOBAL CONFERENCE ON ANIMAL WELFARE: AN OIE INITIATIVE* (World Organization for Animal Health, Paris, Fr.), Feb. 23–25, 2004, at 219, 220–21, available at http://www.oie.int/eng/Welfare_2004/proceedings.pdf (explaining the different stresses placed on fish); Philip Lymbery, *Compassion in World Farming Trust*, in *TOO DEEP: THE WELFARE OF INTENSIVELY FARMED FISH* (2002), available at http://www.ciwf.org/publications/reports/in_too_deep_2001.pdf; DAVID L. HEIKES, UNIV. ARK AT PINE BLUFF AQUACULTURE FISHERIES CTR., *CATFISH YIELD VERIFICATION TRIALS: FINAL RESULTS* (1997), available at http://www.uaex.edu/aquaculture/verification/catfish_verification/1993_1996/final_report.htm.

46. See, e.g., *Compassion Over Killing*, TryVeg.com, Video Room, <http://www.tryveg.com/cfi/video/> (providing a selection of video footage from investigations of various types of factory farms) (last visited Mar. 15, 2007).

D. Public Perception of Animal Welfare versus Reality

Although most Americans appear to be largely ignorant about factory farming, they believe farm animals should receive more legal protection.⁴⁷ The majority of Americans object to standard agricultural practices—but only after they are told what those practices are. A 2003 nationwide Zogby poll found that eighty-two percent of respondents believed there “should be effective laws that protect farm animals against cruelty and abuse,” seventy-two percent agreed “government inspectors should inspect farms to ensure laws to protect animals from cruelty are being followed,” and sixty-eight percent found it “unacceptable” that farm animals are not protected by any federal laws while being raised on the farm.⁴⁸ An earlier poll found that eighty-six percent of adults consider the crowding of hens in commercial egg production to be “unacceptable.”⁴⁹ A 1995 poll by Caravan Opinion Research Corporation found that approximately ninety percent of respondents disapproved of the standard practices of confining veal calves, pigs, and hens.⁵⁰ Despite the seemingly overwhelming disapproval of standard U.S. farm practices, the 2003 Zogby poll found that seventy-one percent of respondents believe that “in general, farm animals are fairly treated in the United States.”⁵¹

The situation is markedly different in Europe, where a 2005 survey found a majority of consumers believe “insufficient weight is given to farm animal welfare” and rate the current welfare of poultry as “bad.”⁵² The survey also found the proportion of adults who have visited animal farms is highest in Scandinavia—more than nine out of ten—which has the world’s strongest farm animal regulations.⁵³ This casts doubt on a claim sometimes made by U.S. agribusiness that animal-welfare concerns are the product of urban ignorance about agriculture. On the contrary, the data suggest a correlation between ignorance of animal agriculture and complacency about animal welfare.⁵⁴

47. See, e.g., AM. MEAT INST., LAYING OUT THE FACTS 3 (2004), available at <http://www.meatami.com/Content/PressCenter/AnimalCarePresentations/Head.pdf> (indicating that about half of the consumer population has low knowledge of animal care practices—an additional twenty-eight percent have “medium” knowledge—and about half consider animal care “important” when choosing products to consume).

48. ZOGBY INT’L, NATIONWIDE VIEWS ON THE TREATMENT OF FARM ANIMALS 6, 9 (Oct. 22, 2003), available at <http://animalwelfareadvocacy.org/externals/AWT%20final%20%20poll%20report%2010-22.pdf>.

49. Compassion Over Killing, Zogby Poll on American Attitudes Toward the Egg Industry, <http://www.isecruelty.com/poll.php> (last visited Feb. 19, 2007).

50. Joy Mench & Janice Swanson, *Animal Welfare: Consumer Viewpoints*, in U. CAL. POULTRY SYMP. & EGG PROCESSING WORKSHOPS 1, 3 (2000), available at <http://animalscience.ucdavis.edu/avian/swanson.pdf>.

51. ZOGBY INT’L, *supra* note 48, at 6.

52. EUR. COMM’N, ATTITUDES OF CONSUMERS TOWARDS THE WELFARE OF FARMED ANIMALS (2005), available at http://ec.europa.eu/food/animal/welfare/euro_barometer25_volA_en.xls.

53. *Id.*

54. See *id.* (presenting statistics showing both complacency and ignorance among Europeans regarding animal-welfare issues).

III

THE LEGAL LANDSCAPE

In contrast to the European Union, the United States has few laws and limited enforcement mechanisms to protect farm animals from abuse. Historically, farm animal welfare has not been a priority for U.S. animal-protection organizations; and a strong American agriculture lobby, coupled with low public awareness of farming practices, has led to little political pressure for regulation.

A. Farm Animal Legislation in the United States

In the United States, farming and animal welfare are governed by only two federal laws:⁵⁵ the Humane Methods of Slaughter Act (HMSA), enacted in 1958,⁵⁶ and the Twenty-Eight Hour Law, enacted in 1877.⁵⁷ Perhaps the most famous federal animal-protection law and certainly the most ambitious attempt Congress has made to protect animals is the Animal Welfare Act (AWA).⁵⁸ But the AWA does not apply to farm animals except when they are used for “research, testing, and teaching”⁵⁹—essentially making it blind to ninety-eight percent of all animals killed each year⁶⁰ and inapplicable to farming and animal welfare. Although both the HMSA and the Twenty-Eight Hour Law purport to offer protection to farm animals, in practice they do very little.

HMSA requires that farm animals be “rendered insensible to pain” prior to slaughter.⁶¹ However, the U.S. Department of Agriculture (USDA), the federal agency authorized to enforce the HMSA,⁶² does not include farmed birds or fish under its protections,⁶³ an issue currently under legal challenge.⁶⁴ Thus, the

55. There are over fifty federal laws in place that protect animals in some capacity, the most common of which protect species from environmental degradation or the health and safety aspects of animal products. See Cass R. Sunstein, *A Tribute to Kenneth L. Karst: Standing for Animals (with Notes on Animal Rights)*, 47 UCLA L. REV. 1333, 1334 (2000). However, the HMSA and the Twenty-Eight Hour law are the only two that directly affect farm production.

56. 7 U.S.C. §§ 1901–07 (2000).

57. 49 U.S.C. § 80502 (2000).

58. 7 U.S.C. §§ 2131–2156 (2000); see Sunstein, *supra* note 55, at 1334 (“[T]he most prominent [animal protection law] is the Animal Welfare Act (AWA), which contains a wide range of safeguards against cruelty and mistreatment, and which creates an incipient bill of rights for animals. If vigorously enforced, the AWA, alongside other enactments at the state and federal levels, would prevent a wide range of abusive practices.”).

59. 9 C.F.R. § 1.1 (2006).

60. See Wolfson & Sullivan, *supra* note 1, at 206 (noting that ninety-eight percent of all animals are raised for food).

61. 7 U.S.C. § 1902(a) (2000).

62. U.S. DEP’T AGRIC., KEY FACTS: HUMANE SLAUGHTER (2001), available at http://www.fsis.usda.gov/Fact_Sheets/Key_Facts_Humane_Slaughter/index.asp (“The Food Safety and Inspection Service (FSIS) is the Agency within USDA responsible for ensuring compliance with the Humane Methods of Slaughter Act.”).

63. HMSA applies only to “livestock.” 7 U.S.C. § 1902(a) (2000). It specifically does not apply to poultry. Treatment of Live Poultry Before Slaughter, 70 Fed. Reg. 56,624, 56,624–25 (Sept. 28, 2005) (“The HMSA of 1978 (7 U.S.C. § 1901 *et seq.*) requires that humane methods be used for handling and slaughtering livestock but does not include comparable provisions concerning the handling and

HMSA protects only one percent of farm animals from being slaughtered while fully conscious.

Similarly, until this year, the Twenty-Eight Hour Law was effectively a nullity for the protection of farm animals. Its text requires that animals not be transported for more than twenty-eight hours without being unloaded for at least five hours of rest, watering, and feeding.⁶⁵ But the USDA, the enforcement mechanism for this law, as well, chose not to include trucks—the means by which approximately ninety-five percent of all farm animals are transported—as a “vehicle” to be included under the law’s provisions.⁶⁶ As a result, farm animals legally could be—and sometimes were—transported for more than thirty-six hours without rest, water, or food.⁶⁷ In 2006, however, in response to a petition filed by several animal groups challenging USDA’s exclusion of trucks,⁶⁸ the USDA promulgated a letter stating unequivocally, “[w]e agree that the plain meaning of the statutory term ‘vehicle’ in the Twenty-Eight Hour law includes trucks.”⁶⁹

As a reversal of a decades-old policy, the USDA decision on the Twenty-Eight Hour Law is a significant victory. But three omissions will limit its impact. First, USDA interprets the Twenty-Eight Hour Law to exclude poultry.⁷⁰ This exempts ninety-eight percent of farm animals from protection *ex ante*. Second, the law has rarely been enforced. There are no known cases of a Twenty-Eight

slaughter of poultry [T]here is no specific federal humane handling and slaughter statute for poultry.”).

64. See Press Release, Humane Soc’y of the U.S., Still A Jungle Out There: The HSUS takes USDA to Court to Ensure a Humane End for Birds (Nov. 21, 2005), *available at* http://www.hsus.org/farm/news/ournews/still_a_jungle_out_there.html (explaining the current legal challenges).

65. 49 U.S.C. § 80502 (2000).

66. 60 Fed. Reg. 48,362, 48,365 (Sept. 19, 1995) (“The Twenty-Eight Hour Law does not apply to transport by truck.”). See generally 9 C.F.R. §§ 89.1–89.5 (2006) (implementing the Twenty-Eight Hour Law through USDA regulations); Wolfson & Sullivan, *supra* note 1, at 208 (noting the impact of the law).

67. See Wolfson & Sullivan, *supra* note 1, at 208 (noting these conditions); see also COMPASSION OVER KILLING, COK INVESTIGATION EXPOSES FARMED ANIMAL SUFFERING DURING INTERSTATE TRANSPORT (July 2005), *available at* <http://www.cok.net/feat/usti.php> (publishing the results of an investigation of numerous occasions of animals being transported for more than twenty-eight hours.).

68. The Humane Society of the U.S., Farm Sanctuary, Compassion Over Killing, and Animals’ Angels filed a petition for rulemaking with the USDA on October 4, 2005, requesting application of the law to truck transport to prevent animal suffering. The petition is available at HUMANE SOC’Y OF THE U.S., PETITION BEFORE THE UNITED STATES DEPARTMENT OF AGRICULTURE (2005), *available at* <http://www.hsus.org/web-files/PDF/farm/28hr-petition-Mon-Oct-3.pdf>.

69. Letter from W. Ron DeHaven, USDA Administrator, APHIS, to Peter Brandt, Humane Soc’y of the U.S. (Sept. 22, 2006) (on file with author).

70. Philip Brasher, *USDA Says Rule on Livestock Applies to Trucks*, DES MOINES REG., Sept. 29, 2006, at 1D, *available at* <http://desmoinesregister.com/apps/pbcs.dll/article?AID=/20060929/BUSINESS/01/609290384/1029/BUSINESS>; see also *Clay v. New York Cent. R.R. Co.*, 231 N.Y.S. 424, 428 (App. Div. 1928) (“[T]he [Twenty-Eight Hour Law] does not apply. Its provisions are confined to the transportation of animals in these words: ‘cattle, sheep, swine, or other animals.’ It does not apply to poultry; birds are not animals.”); 9 C.F.R. § 89.1(a) (setting out feeding and recommendations by species under the Twenty-Eight Hour Law, with no mention of poultry).

Hour Law violation since 1960,⁷¹ but a recent letter from the USDA to Humane Society of the United States (HSUS) states that the agency “continues to conduct investigations of alleged violations of the Twenty-Eight Hour Law and it is currently investigating a shipment of breeding pigs from Canada to Mexico,”⁷² indicating a potential revival of the Law’s enforcement. Third, even if a conviction were achieved under the Twenty-Eight Hour Law, the penalty is “at least \$100 but not more than \$500 for each violation.”⁷³ Violations are calculated not per animal or per owner of the animals, but by shipment.⁷⁴ These petty sums of money are inadequate to act as a deterrent to multi-billion dollar industries.

Even more remarkable than the exceptions to existing federal legislation is the absence of *any* federal law protecting the welfare of farm animals while on the farm. As far as the federal government is concerned, any husbandry act or omission is legal. State anti-cruelty statutes may provide some protection for farm animals, but most states have exempted “customary” farming practices,⁷⁵ no matter how abusive they may be under an objective definition of “cruelty.” The remaining state statutes often restrict coverage of their cruelty laws to “unnecessary” cruelty; injuring animals in order to produce food may not be considered unnecessary.⁷⁶ These exemptions mean that farm animals do not receive the legal protection we afford other animals. Acts that are criminal when performed on dogs or cats can be legally performed on farm animals.⁷⁷

71. *See* S. Pac. Transp. Co. v. Commissioner, 75 T.C. 497, 654 (1980) (referring to Twenty-Eight Hour violations in 1960 and 1961).

72. Letter from DeHaven, *supra* note 69.

73. 49 U.S.C. § 80502(d) (2000).

74. *See* Baltimore & Ohio Sw. R.R. Co. v. United States, 220 U.S. 94, 104–06 (1911) (noting that the violation is calculated by shipment).

75. Wolfson & Sullivan, *supra* note 1, at 212–16. Approximately thirty states have “customary,” “common,” or “normal” farming-practices exemptions in their state anti-cruelty codes, about twenty-five of which exempt all of these practices, and two states—South Carolina, S.C. CODE ANN. § 47-1-40(C) (2005), and Louisiana, LA. REV. STAT. ANN. § 14:102.1(D) (2006)—exempt birds of any kind from coverage in their cruelty statutes, regardless of the type of treatment they receive. *See also* David J. Wolfson, *McLibel*, 5 ANIMAL L. 21, 38–39 (1999) (explaining state statutes).

76. Wolfson & Sullivan, *supra* note 1, at 209; Wolfson, *supra* note 75, at 38–39.

77. *See, e.g.* People v. Youngblood, 109 Cal. Rptr. 2d 776, 777–79 (Cal. Ct. App. 2001) (upholding conviction of defendant for felony animal cruelty for keeping ninety-two cats in a seven-and-a-half-foot by eleven-foot trailer because it was determined to be cruel to provide such inadequate space for each cat). Compare *Youngblood* with the widespread practice of confining laying hens in battery cages. In *Youngblood*, each cat was given approximately 129 square inches. *Id.* Caged laying hens, which produce the ninety-eight percent of eggs consumed in this country, are given an average of fifty-nine square inches of space each. COMPASSION OVER KILLING, A COK REPORT, ANIMAL SUFFERING IN THE EGG INDUSTRY 1 (2006), available at <http://www.cok.net/images/pdf/COKLayerReport.pdf>. Because this practice is common—in fact nearly ubiquitous in the egg industry—it would be exempted under these laws. *See* Elisea v. State, 777 N.E. 2d 46, 47–48 (Ind. Ct. App. 2003) (upholding a conviction of defendant for cropping a dog’s ears with no anesthesia). Compare *Elisea* with the standard practice of ear notching, tail docking, castration, and tooth cutting in piglets, all without anesthesia. People for the Ethical Treatment of Animals, Pigs on Factory Farms, http://www.goveg.com/factoryFarming_pigs_farms.asp (last visited Nov. 11, 2006). Again, as a common practice, this would be exempt under these statutes.

Much discussion of state cruelty statutes' potential extension to protecting farm animals is conjecture because, in forty-nine states, animal cruelty laws are strictly criminal and therefore can only be enforced by criminal prosecutors who choose to do so.⁷⁸ Due to prosecutorial reluctance to bring animal-cruelty cases, courts have rarely, if ever, had the chance to test the validity of the exemptions. Some states have procedural provisions that would allow limited private access to the courts for alleged cruelty violations, but all require the prosecutor to assent to and complete the process.⁷⁹

Thus, as long as it is sufficiently common, virtually any farming practice, no matter how painful to animals, may be legal in most of the United States.⁸⁰ Even if a practice is thought to be illegal, there may never be an opportunity for it to be challenged because procedural avenues for doing so are unavailable.

There are, however, some signs of improvement. Animal-protection groups have begun to litigate under existing laws to increase protection for farm animals and thus test the limits of available laws and procedural avenues. Some notable successes include assisting prosecutors, with or without the help of humane officers, to bring criminal charges against farm employees or management;⁸¹ using false-advertising laws to restrict misleading animal-welfare

78. The fiftieth state is North Carolina, which has a civil equivalent, N.C. GEN. STAT. § 19A-1-19A-4 (2006), to its criminal cruelty law, N.C. GEN. STAT. § 14-360 (2006). The civil enforcement statute provides standing to any person or organization. N.C. GEN. STAT. § 19A-2. However, it has never been applied in the farming context, likely due at least in part to available exemptions. N.C. GEN. STAT. § 19A-1.1 ("Lawful activities conducted for purposes of biomedical research or training or for purposes of production of livestock, poultry, or aquatic species Lawful activities conducted for the primary purpose of providing food for human or animal consumption."). It is unclear what "lawful," "purpose," and "primary purpose" mean, and, therefore, it is unclear exactly how broad the exemption is, which may be partly responsible for its lack of use thus far to protect farm animals.

79. These include private parties bringing filings or complaints before courts or attorneys general or acting as private prosecutors. *See, e.g.*, MICH. COMP. LAWS § 767.3 (2006) (allowing judges to hear material evidence from private persons); Ky. RCr. R. 6.04 (2006) (allowing private citizens to bring complaints to the attorney general); 18 PA. CONS. STAT. § 9331 (2006) (allowing private prosecutors). Most promisingly, registered humane officers are allowed limited police powers and the ability to file charges in some states.

80. *See* Wolfson & Sullivan, *supra* note 1, at 212-16 (explaining state-level exemptions for customary farming practices).

81. *See, e.g.*, Humane Soc'y of the U.S., *Moark Must Pay \$100,000 and Overhaul Its Spent Hen Procedures to Settle Animal Cruelty Charges* (Oct. 25, 2005), http://www.hsus.org/farm/news/ournews/Moark_settles_case.html (discussing criminal cruelty charges filed by HSUS in collaboration with the local prosecutor against a regional manager at an egg-factory company, MOARK, and two subcontractors for dumping live hens in a dumpster); Gretchen Parker, *Prosecutors Halt Complaint, Dismiss Perdue Animal Cruelty Charge*, ASSOCIATED PRESS, Feb. 3, 2005, available at <http://www.wboc.com/Global/story.asp?S=2901591> (noting that criminal charges were filed against a Perdue factory farm as a result of an animal-rights group's investigation and collaboration with the local state's attorney and sheriff, but they were later dismissed); PETA, *Belcross Farms Investigation*, <http://www.goveg.com/belcross.asp> (last visited Sept. 26, 2006) (discussing an investigation of Belcross Farm); PETA, *Seaboard Farms Investigation*, <http://www.goveg.com/seaboard.asp> (last visited Feb. 23, 2007) (discussing the Seaboard Farms investigation); Compassion Over Killing, *New COK Investigation Leads to Criminal Charges of Animal Cruelty*, <http://www.cok.net/feat/paefi.php> (last visited Nov. 17, 2005) (noting thirty-five counts of criminal cruelty that were filed each against owner of the egg-factory-farm company, Esbenshade Farms, and against the manager of the egg-factory-farm facility through coordination with a Humane Officer; the case is likely to be ruled on in mid-April, 2007); PETA, *Pig Abusers Charged with Felony Cruelty to Animals at Seaboard Farms, Inc.*, Summer

claims made on animal products;⁸² becoming humane officers so as to access the quasi-police powers granted by some state laws;⁸³ and working to expand the legal standing for animal advocacy, generally,⁸⁴ and farm animal advocacy, in particular.⁸⁵

Legislatively, some of the most notable farm-animal protections include a 2002 ballot initiative in Florida, effective in 2008, that outlaws the use of gestation crates for pigs⁸⁶ and a 2004 California law, effective in 2012, that bans the forced feeding of ducks and geese for *pate de foie gras* in the state, as well as the sale of the product.⁸⁷ Additionally, in 2006, Chicago's City Council passed a

2001, <http://www.peta.org/about/victoryItem.asp?VictoryID=87> (discussing the successful investigation of pig factory farms and finding extreme cruelty, causing the court to bring felony animal-cruelty indictments against two separate sets of pig-factory-farm employees for two separate incidents on two separate farms—Belcross farms in 1999 and Seaboard farms in 2001; these mark the first and second time felony cruelty charges were brought against factory-farm employees); PETA, *Wisconsin Farmer is Charged with 75 Misdemeanors for Neglect*, Summer 2003, <http://www.peta.org/about/victoryItem.asp?VictoryID=107> (discussing how PETA worked with a local district attorney to bring criminal misdemeanor charges arising from the starvation of one hundred sheep, lambs, and cows).

82. See, e.g., Compassion Over Killing, "Animal Care Certified" Eggs (2005), <http://www.cok.net/camp/acc/> (reporting that Compassion Over Killing filed a petition prompting the Better Business Bureau (BBB) to rule that the United Egg Producers' (UEP) use of the "Animal Care Certified" logo was misleading; after a BBB ruling favorable to COK and support from the Federal Trade Commission (FTC), UEP discontinued the label); *Egg Industry to Drop Logo*, ASSOCIATED PRESS, THE EXAMINER, Sept. 21, 2006, available at http://www.examiner.com/a-302139~Egg_Industry_to_Drop_Logo.html (describing the recent settlement agreement in which the egg industry was required to pay \$100,000 for costs and attorneys' fees and in which it agreed to permanently remove the "Animal Care Certified" label); PETA, *PETA's Lawsuit Forces KFC to Stop Lying About Conditions for Chickens*, Fall 2003, <http://www.peta.org/about/victoryItem.asp?VictoryID=110> (discussing how PETA entered into a settlement with KFC resulting in KFC removing certain misleading animal welfare claims from its website). See generally Carter J. Dillard, *False Advertising, Animals, and Ethical Consumption*, 10 ANIMAL L. 24 (2004) (discussing arguments against denying moral rights to animals); Donna Mo, Comment, *Unhappy Cows and Unfair Competition: Using Unfair Competition Laws to Fight Farm Animal Abuse*, 52 UCLA L. REV. 1313 (2005) (discussing using unfair competition laws to fight animal abuse).

83. See generally Los Angeles Humane Soc'y, Bureau of Humane Law Enforcement (BHLE), Cases, <http://www.bhle.org/cases.html> (last visited Nov. 18, 2006) (explaining recent cases of humane officers in California; BHLE certifies and trains humane officers in California as part of its animal-advocacy agenda. Note, however, that the BHLE recently lost its certification, and is currently no longer in operation).

84. E.g., *Animal Legal Def. Fund, Inc. v. Glickman*, 943 F. Supp. 44, 54–55 (D.D.C. 1996) (finding that zoo visitors have standing based on their "aesthetic benefit from seeing the animals treated humanely" and corresponding "aesthetic injury" from witnessing their mistreatment), *aff'd en banc*, 154 F.3d 426 (D.C. Cir. 1998), *rev'd on other grounds*, 204 F.3d 229 (D.C. Cir. 2000). Although *Glickman* was filed under the Animal Welfare Act, it is a significant advance in the standing doctrine and may have applicability elsewhere.

85. A recent decision in the U.S. District Court for the Northern District of California granted standing to individual poultry consumers as part of a suit brought by HSUS and the East Bay Animal Advocates challenging the lack of regulation of poultry slaughter. Press Release, Humane Soc'y of the U.S., Judge Clears Way for HSUS Lawsuit Challenging Inhumane Poultry Slaughter (Sept. 8, 2006), available at http://www.hsus.org/farm/news/ournews/judge_clears_hsus_hmsa_suit.html.

86. Jerry W. Jackson, *Florida's Pig Amendment Puts Pressure on Farmers*, ORLANDO SENTINEL, Nov. 9, 2002, at C1, available at http://www.citizenreviewonline.org/nov_2002/floridas_pig.htm.

87. CAL. HEALTH & SAFETY CODE §§ 25980–87 (2006); see also Tamiko Thomas, *California Decides to Permanently Pull Foie Gras off the Menu*, Oct. 8, 2004, available at http://www.hsus.org/farm/news/ournews/california_bans_foie_gras.html.

measure, effective immediately, prohibiting the sale of *foie gras* in the city.⁸⁸ Legislation to ban particular animal-farming practices is pending in several other states including Illinois, Delaware, Massachusetts, New Jersey, and Oregon.⁸⁹ These legislative advances evidence efforts, though small-scale and in their early stages, that are similarly promising to litigation and legal-advocacy efforts.

B. Farm-Animal Legislation in Europe

The legal protection given to farm animals is much stronger in Europe, where most countries have banned several of the practices still common in the United States.⁹⁰ In 1976, the member states of the Council of Europe signed the European Convention for the Protection of Animals Kept for Farming Purposes.⁹¹ The Convention requires that all farm animals be provided with care in a manner “appropriate to their physiological and ethological needs.”⁹²

Between 1991 and 1999, the European Union—now comprised of twenty-five countries—adopted laws that set minimum standards for farm-animal husbandry. In 1991, the European Union established minimum standards for veal calves that prohibit the use of tethers and require units built since 1994 to provide enough room for animals to turn around.⁹³ A 1997 amendment, effective in 2007, prohibits the confinement of calves in individual pens after eight weeks of age, unless required by a veterinarian.⁹⁴

In 1999, minimum standards were established for laying hens that prohibit the construction of new barren⁹⁵ battery cages, and the use of existing barren battery cages from 2012.⁹⁶ Most European Union countries will allow the use of

88. Fran Spielman, *Phooey! Mayor Scoffs at Council Ban on Foie Gras: Alderman Defends Vote on ‘Inhumane’ Delicacy*, CHICAGO SUN-TIMES, Apr. 26, 2006, at 3.

89. See generally Farm Sanctuary, Pending Legislation, <http://www.farmsanctuary.org/campaign/legislation.htm> (last visited June 19, 2006) (listing pending legislation in various states).

90. See generally Jessica Braunschweig-Norris, Note, *U.S. Egg Industry—Not All It’s Cracked Up to Be for the Welfare of the Laying Hen: A Comparative Look at the United States and European Union Welfare Laws*, 10 DRAKE J. AGRIC. L. 511 (2005) (explaining the general differences in animal-welfare laws in the U.S. and E.U.).

91. Convention for the Protection of Animals Kept for Farming Purposes, Oct. 3, 1976, Europ. T.S. 87.

92. *Id.* at art. III.

93. Council Directive 91/629, 1991 O.J. (L 34) 1, 3–4 (EC), available at http://europa.eu/eur-lex/en/consleg/pdf/1991/en_1991L0629_do_001.pdf. Existing units had to conform by 2003. *Id.* at art. III.

94. Council Directive 92/2, 1997 O.J. (L 25) 24, 24–25 (EC), available at http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=en&numdoc=31997L0002&model=guichett.

95. “Barren” batteries of cages are those without such “furnishing” as perches, scratching devices, nest boxes, and a litter area for dustbathing. SVC 1996, *supra* note 23, at 103–04.

96. Council Directive 1999/74, 1999 O.J. (L203) 1, 5 (EC), available at http://europa.eu/eur-lex/en/consleg/pdf/1999/en_1999L0074_do_001.pdf.

furnished cages although animal protection organizations are challenging this exception.⁹⁷

A 2001 amendment to regulations on pig welfare prohibits the use of tethers, the use of new gestation crates from 2003, and the use of existing crates from 2013.⁹⁸ Minimum floor-space requirements by weight are also specified for rearing pigs.⁹⁹ In addition to husbandry standards, E.U. law also places restrictions on slaughter and transport, and requires that all operators involved in farm-animal production be given training on animal welfare.¹⁰⁰

Some European countries have adopted more stringent regulations. The United Kingdom passed legislation banning the veal crate beginning in 1990 and the gestation crate from 1999.¹⁰¹ In Switzerland and Denmark, sows can be kept in gestation crates only during “servicing,” when they are mounted by boars.¹⁰² Sweden requires litter bedding for pigs.¹⁰³ Sweden and Finland have already banned conventional battery cages.¹⁰⁴ Germany and Austria’s ban of battery cages becomes effective in 2007 and 2009, respectively, and they have outlawed all cages beginning in 2012 and 2020, respectively.¹⁰⁵ Switzerland has effectively prohibited the use of all cages—not through an outright ban, but by requiring provisions that are impractical in cages.¹⁰⁶

Although genetics is arguably the most important determinant of farm-animal welfare, there is little regulation of breeding in Europe. E.U. regulations on broiler chickens proposed in 2005 have drawn attention to the problem of fast growth, but do not require any change in genetics.¹⁰⁷

Table 2 provides a summary and overview of disallowed farming practices, by country.

97. PETER STEVENSON, COMPASSION IN WORLD FARMING, EUROPEAN UNION LAW ON THE WELFARE OF FARM ANIMALS 12 (2004), available at http://www.ciwf.org.uk/publications/reports/EU_Law_2004.pdf.

98. Commission Directive 2001/93, 2001 O.J.(L 316), 36, 36–38 (EU), available at http://eur-lex.europa.eu/pri/en/oj/dat/2001/l_316/l_31620011201en00360038.pdf.

99. *Id.*

100. Vincenzo Caporale et al., *Global Perspectives on Animal Welfare: Europe*, 24 REVUE SCI. ET TECHNIQUE 567, 570–72 (2005), available at <http://www.oie.int/eng/publicat/rt/2402/PDF/caporale567-577.pdf>.

101. CLARE DRUCE & PHILIP LYMBERY, OUTLAWED IN EUROPE (2002), http://www.ari-online.org/pages/europe_7_vealcrating.html (last visited Dec. 28, 2006).

102. JOEK ROEX & MARA MIELE, FARM ANIMAL WELFARE CONCERNS 118–20 (2005).

103. *Id.*

104. *Id.* at 120–21.

105. *Id.*

106. HEINZPETER STUDER, UNITED POULTRY CONCERNS, HOW SWITZERLAND GOT RID OF BATTERY CAGES 25 (2001), available at http://www.upc-online.org/battery_hens/SwissHens.pdf (explaining the various ways of preventing cages such as requiring government inspection and regulation of any new poultry house).

107. PROPOSAL FOR A COUNCIL DIRECTIVE LAYING DOWN MINIMUM RULES FOR THE PROTECTION OF CHICKENS KEPT FOR MEAT PRODUCTION (2005), available at http://ec.europa.eu/food/animal/welfare/farm/proposal_EN.pdf.

Table 2

Country ¹⁰⁹	Practice ¹⁰⁸									
	D	PS	GC	ST	VC	VT	BC ¹¹⁰	FC	BT	C
U.S. ¹¹¹										
U.K. ¹¹²	X	X	X	X	X	X	2012		2011	
Sweden ¹¹³	X	X	X	X	X	X	X		X	
Netherlands ¹¹⁴	X	X	2008	X	2007	X	2012			
Denmark	X	X	2013	X	2007	X	2012			
Germany	X	X	2013	X	2007	X	2009	2012		
Finland	X	X	2006	X	2007	X	X		X	
Other E.U.	X	X	2013	X	2007	X	2012			
Switzerland ¹¹⁵	X			X	X	X	X	X		2009
Norway	X	X	X	X	X	X	2012		X	X

C. Why Has the United States Fallen Behind Europe?

The legal protection of farm animals in Europe can be credited to Europe's long history of animal-protection outreach and educational campaigns, public awareness of farming practices, and investment in animal-welfare research. It is also likely that Europe's weaker agricultural lobby and smaller export market have permitted greater regulation.

The British population was already sensitive to animal-welfare issues when Ruth Harrison's 1964 exposé of industrial animal farming, *Animal Machines*, was published in the United Kingdom. The public outcry following the book compelled the British government to organize The Brambell Committee to review industrial farming practices and to recommend reforms. The Committee's report led to the Agriculture (Miscellaneous Provisions) Act in 1968 and to the formation of the Farm Animal Welfare Council (FAWC), whose reports and concept of "The Five Freedoms" have had international

108. D: density and housing limits; PS: humane poultry slaughter (except in religious slaughter); GC: gestation crates, ST: sow tethers, VC: veal crates, VT: veal tethers; BC: battery cages; FC: furnished cages; BT: beak trimming; C: castration without anesthesia.

109. DRUCE & LYMBERY, *supra* note 101.

110. Michael Appleby, *The EU Ban on Battery Cages: History and Prospects*, in STATE OF THE ANIMALS II 159 (Deborah J. Salem & Andrew N. Rowan eds., 2003).

111. See ROEX & MIELE, *supra* note 102, at 117 (noting the various protections in the E.U. and that none such exist in the U.S.).

112. PETER STEVENSON, COMPASSION IN WORLD FARMING, EUROPEAN UNION LAW ON THE WELFARE OF FARM ANIMALS (2004), available at http://www.ciwf.org.uk/publications/reports/EU_Law_2004.pdf.

113. David Blandford et al., *Potential Implications of Animal Welfare Concerns and Public Policies*, in GLOBAL GOOD TRADE AND CONSUMER DEMAND FOR QUALITY (2002).

114. Personal correspondence, Martin Balluch (Apr. 14, 2006) (on file with author).

115. SWISS FEDERAL COUNCIL, ANIMAL WELFARE ORDINANCE (2001), available at http://www.bvet.admin.ch/tierschutz/index.html?lang=en&download=02926_en.pdf.

impact.¹¹⁶ The Five Freedoms are now expressed in various animal-welfare recommendations, codes, and legislation in Europe, North America, and Australasia, as well as in the World Animal Health Organization's *Office International des Epizooties* (OIE) guiding principles.¹¹⁷

The United States has historically lagged behind Europe in animal protection. Animal-protection NGOs first appeared in the United States forty years after they appeared in the United Kingdom¹¹⁸ Much of the complacency in the United States towards factory farming may be due to the American public's ignorance about farming conditions and practices. It may be due as well to the focus of American NGOs on laboratory animals, rather than on farm-animal welfare, on which European animal-protection NGOs have focused much of their public outreach in the last twenty years.¹¹⁹

The number of animal-welfare studies published in North America has historically been a small fraction of the number published in Europe.¹²⁰ By one estimate, only five percent of U.S. university agriculture programs include a course on animal welfare.¹²¹ By contrast, as part of its Welfare Quality Project, the European Union awarded thirty-nine institutes and universities twenty million dollars to develop on-farm monitoring systems and public policies to improve animal welfare in 2004, alone.¹²²

The European Commission is advised by a scientific advisory committee, the Scientific Committee on Animal Health and Welfare (SCAHAW), formerly the Scientific Veterinary Committee, composed of nineteen scientists active in the field of animal health and animal welfare. SCAHAW's reports are among the most authoritative documents that exist on farm-animal welfare and have

116. The Five Freedoms are:

- Freedom from hunger and thirst—by ready access to fresh water and a diet to maintain full health and vigor;
- Freedom from discomfort—by providing an appropriate environment including shelter and a comfortable resting area;
- Freedom from pain, injury or disease—by prevention or rapid diagnosis and treatment;
- Freedom to express normal behaviour—by providing sufficient space, proper facilities and company of the animal's own kind; and
- Freedom from fear and distress—by ensuring conditions and treatment which avoid mental suffering.

OFFICE INTERNATIONAL DES EPIZOOTIES (OIE), ANIMAL HEALTH CODE 2006 § 3.7.1.1, *available at* http://oie.int/eng/Normes/mcode/en_chapitre_3.7.1.htm.

117. *See, e.g.*, OFFICE INTERNATIONAL DES EPIZOOTIES (OIE), ANIMAL HEALTH CODE 2006 § 3.7.1.1, *available at* http://oie.int/eng/Normes/mcode/en_chapitre_3.7.1.htm (listing the five freedoms as part of the Animal Health Code).

118. ANDREW ROWAN ET AL., TUFTS CTR. FOR ANIMALS & PUB. POL'Y, FARM ANIMAL WELFARE: THE FOCUS OF ANIMAL PROTECTION IN THE USA IN THE 21ST CENTURY 7–9 (1999).

119. *See also a Part of Creation*, ECONOMIST, Aug. 19, 1995, at 19 (detailing farm-animal activism in Britain).

120. ROWAN ET AL., *supra* note 118, at 6.

121. David Wilkins et al., *Animal Welfare: The Role of Non-Governmental Organisations*, 24 REVUE SCI. ET TECHNIQUE 625, 632 (2005), *available at* <http://www.oie.int/eng/publicat/RT/2402/PDF/wilkins625-638.pdf>.

122. Caporale et al., *supra* note 100, at 574.

served as the basis for the E.U.'s farm animal legislation.¹²³ There is no comparable body with a legislative mandate in the United States although the USDA has had an internal, ad hoc committee on animal welfare.

Non-governmental scientific associations in North America have also lagged behind those in Europe. The First North American Symposium on Poultry Welfare was held in 1995, compared with the First European Symposium on Poultry Welfare, in 1977.¹²⁴

Perhaps more important than the scale of European research has been its approach. Most animal-welfare research in the United States has taken production to be the principal measure of welfare, whereas European research has taken an ethological route, studying what animals choose to do when given options.¹²⁵ In addition, U.S. research has remained focused on the most intensive CAFO systems, while Europe has funded a number of studies on non-CAFO production.¹²⁶

IV

WHAT CAN BE DONE?

The animal-welfare problems described above can be solved, in most cases, by returning to husbandry practices used before World War II. This could be achieved through several different approaches, including government regulation, trade agreements, and labeling and retailer campaigns. Each approach has its drawbacks and critics. For example, the farm-animal industry often resists regulation, claiming it can self-regulate. The few reforms industry has voluntarily adopted have been insignificant. Trade agreements reduce the effectiveness of regulation, as it is unlikely that countries will be permitted to restrict the import of lower-welfare products. Despite their drawbacks, these approaches can lead to substantive gains in animal welfare. Although regulation would increase production costs, surveys suggest consumers would be willing to pay these costs. Labeling and retailer campaigns can reduce trade substitution.

Substantive changes need to be made to conventional farming practices; European practices demonstrate that these changes are realistic. Modifications to birds' environment, diet, and breeding can slow growth and significantly

123. See generally James Moynagh, *EU Regulation and Consumer Demand for Animal Welfare*, 3 *AGBIOFORUM* 107 (2000) (explaining the regulations of the SCAHAW).

124. Appleby, *supra* note 110, at 171.

125. See, e.g., M.S. Dawkins & S. Hardie, *Space Needs of Laying Hens*, 30 *BRIT. POULTRY SCI.* 413 (1989) (studying space needs of hens). See generally Per Jensen, *Observations on the Maternal Behaviour of Free-Ranging Domestic Pigs*, 16 *APPLIED ANIMAL BEHAV. SCI.* 131 (1986) (noting the behavior of pigs in different environmental situations).

126. See generally SUE GORDON, *EFFECT OF BREED SUITABILITY, SYSTEM DESIGN AND MANAGEMENT ON WELFARE AND PERFORMANCE OF TRADITIONAL AND ORGANIC TABLE BIRDS* (2002) (explaining organic animal production); SUE GORDON & DAVID CHARLES, *NICHE AND ORGANIC CHICKEN PRODUCTS: THEIR TECHNOLOGY AND SCIENTIFIC PRINCIPLES* (2002) (explaining other methods of animal production).

improve welfare.¹²⁷ Growth rates can be reduced by shortening eating periods and by modifying poultry feed to provide a lower protein-to-energy ratio.¹²⁸ Genetically, slower growing breeds—including traditional breeds used before World War II—can be selected by primary breeding companies. In France, breeds with a lower growth rate have been used to produce “Label Rouge” chickens for more than twenty years and now comprise around one-third of broilers raised in that country.¹²⁹ In the United States, several slow-growing breeds are available, but their market share is limited.¹³⁰

Due to concerns about hen welfare, member states of the European Union are phasing out the use of the conventional battery cage, and some countries have already banned all cages.¹³¹ Producers are now adopting other housing systems, including “furnished cages” that provide perches, nest boxes, scratching mechanisms, a litter area for dustbathing, and typically more space per hen; non-cage, barn systems that allow birds to move freely indoors; and free-range systems that combine a barn system with outdoor access.¹³² Although each system has advantages and disadvantages, there is virtual scientific consensus that each alternative is significantly more humane than the conventional battery cage.¹³³

Alternatives to conventional sow gestation crates are group-housing systems, where sows are kept together in large pens, affording mobility and the opportunity to socialize, and free-range, group-housing systems that allow outdoor access.¹³⁴ In Europe, more than four million sows are housed in groups.¹³⁵

Alternatives to veal crates are group-housing systems in which calves are kept together in large pens, allowing social interaction and freedom of movement. Some facilities keep calves on wooden-slatted flooring, while others provide deep straw bedding materials. Virtually all of Europe’s calves are now housed in groups.¹³⁶

A. Industry-Based Reforms

Industry could voluntarily abandon inhumane practices without regulation, but it rarely does. Among U.S. producer associations, only the United Egg

127. Duncan, *supra* note 27.

128. Mench, *supra* note 27, at 3.

129. ANNE FANATICO & HOLLY BORN, LABEL ROUGE: PASTURE-BASED POULTRY PRODUCTION IN FRANCE 2 (2002), available at <http://www.attra.ncat.org/attrapub/PDF/labelrouge.pdf> (explaining one type of slow-growth breed in France).

130. *Id.* at 9.

131. Appleby, *supra* note 110, at 163–65.

132. SVC 1996, *supra* note 23, at 99–104.

133. *Id.* at 103–04.

134. SVC 1997, *supra* note 23, at 140.

135. JACKY TURNER, COMPASSION IN WORLD FARMING TRUST, THE WELFARE OF EUROPE’S SOWS IN CLOSE CONFINEMENT STALLS 33 (2000), available at http://www.ciwf.org.uk/publications/reports/the_welfare_of_europes_sows_in_close_confinement_stalls_2000.pdf.

136. SVC 1995, *supra* note 23, at 97–98.

Producers has made any significant reforms. Yet by European standards, even these reforms have been paltry: a replacement of starvation-forced molting with low-nutrient diets, and an increase in cage space to sixty-seven square inches per bird by 2008—still smaller than a sheet of letter-sized paper and still so restrictive the birds cannot stretch their wings, even by a UEP animal welfare committee member's own admission.¹³⁷ Welfare assurance schemes for the other U.S.-industry associations have merely codified existing practice.¹³⁸

There are niche certifications, such as USDA Organic, the pig-welfare standards of the Animal Welfare Institute, or the Certified Humane label of Humane Farm Animal Care—modeled after the RSPCA's Freedom Food certification. But animal products certified with these assurances represent a fraction of one percent of the market.¹³⁹ In fact, the market share of any non-CAFO system in the United States is around five percent for eggs and less than one percent for every other animal product.¹⁴⁰

Non-CAFO eggs have higher market share in Europe. The market share of cage-free eggs is twenty, forty-two, fifty, and sixty percent in Germany, the United Kingdom, the Netherlands, and Sweden, respectively. All Swiss eggs are cage-free and eighty-two percent are free-range. The share is lower in southern European countries; in Italy, for instance, cage-free eggs make up only five percent of the market.¹⁴¹

Despite European progress in free-range egg production, the share of non-CAFO meats is insignificant in most countries—less than one percent of pork production in France and Norway is free-range.¹⁴² The only free-range meat product with significant market share is the Label Rouge program, which makes up one-third of the chicken-meat market in France.¹⁴³

137. See J.A. Mench & J.C. Swanson, *Developing Science-Based Animal Welfare Guidelines*, U.C. Davis 2000 Poultry Symposium and Egg Processing Workshop 3 tbl.1 (2000), <http://animalscience.ucdavis.edu/Avian/mench.pdf> (indicating that wing stretching requires 144 square inches of space). As discussed *supra*, the average space a battery hen is allowed in the U.S. is approximately half that. Dr. Mench was a member of the UEP's Scientific Advisory Committee on Animal Welfare. SCIENTIFIC ADVISORY COMMITTEE ON ANIMAL WELFARE, RECOMMENDATIONS FOR UEP ANIMAL WELFARE GUIDELINES 3 (2000).

138. Wilkins et al., *supra* note 121, at 631.

139. Personal correspondence with Bill Roenigk, Vice President of National Chicken Council (Feb. 23, 2004); Personal correspondence with Larry Cizek, National Pork Board (Feb. 19, 2004); Personal correspondence with the Research Department, National Cattlemen's Beef Association (Feb. 19, 2004); Rahn, *supra* note 22.

140. See *supra* note 89 (listing how the author calculated the aforementioned percentages).

141. MICHELLE JENDRAL, ALTA. EGG PRODUCERS & ALTA. FARM ANIMAL CARE ASS'N, *ALTERNATIVE LAYER HEN HOUSING SYSTEMS IN EUROPE* (2005), available at <http://www.afac.ab.ca/reports/reporthenhousing.pdf>; ROEX & MIELE, *supra* note 102, at 131–34. See generally AGRA CEAS CONSULTING, EUR. COMM'N, *STUDY ON THE SOCIO-ECONOMIC IMPLICATIONS OF THE VARIOUS SYSTEMS TO KEEP LAYING HENS* (2004), available at http://europa.eu.int/comm/food/animal/welfare/farm/socio_economic_study_en.pdf (explaining E.U. egg production methods); *Landmark as Free Range Overtakes Cage*, FARMING U.K., Oct. 26, 2005, available at <http://www.farminguk.com/bsp/10130/ews.asp?DBID=103-281-013-094&iPage=1&id=3679> (noting that free-range eggs have gained market share as compared to cage-egg farming).

142. ROEX & MIELE, *supra* note 102, at 127–30.

143. FANATICO & BORN, *supra* note 129, at 2.

Production costs associated with farm-animal welfare improvements can be offset by increased prices to consumers. In the United States, free-range meat and eggs are often sold at two to three times the price of conventional cage eggs. However, in well-developed markets with significant competition, prices are not this high.¹⁴⁴ If the playing field is leveled by regulation or adoption by producer or retailer associations, the effect on producers can be reduced.

Welfare improvements increase production costs at the farm level.¹⁴⁵ But not all of the increase in production costs is passed on to consumers, as farm costs typically represent less than half the retail price of meat or eggs; wholesalers and retailers add their own margins to each product.¹⁴⁶

For instance, given that farm production costs constitute forty-eight percent of the retail price of poultry meat,¹⁴⁷ a five percent increase in production costs would translate into a 2.4 percent increase in the retail price to the consumer—a few pennies more per pound of chicken to alleviate the “the single most severe, systematic example of man’s inhumanity to another sentient animal.”¹⁴⁸

Assuming substitutable products are not available, increases in price would not be expected to decrease producers’ profits. Demand for meat, eggs, and dairy products is price inelastic: producers can, as a group, pass increased costs on to consumers without a loss in profits, as the decrease in demand is more than compensated by the increase in unit price.¹⁴⁹ While producers would sell less meat, eggs, and milk (and thus raise fewer animals), their profits would be minimally affected by universal adoption of animal welfare improvements. Ultimately, consumers bear the costs of these improvements. But these costs are not as large as one might expect.

Assuming constant-percentage marketing margins at the farm level and fixed marketing margins at the retail level, by purchasing slow-growth chicken meat, barn eggs, and pork from group-housed sows, an American’s average annual food spending need increase by only two dollars.¹⁵⁰ Assuming costlier production methods—free-range meat, eggs, and milk—would increase production costs on average fifty percent (an overestimate); purchasing only

144. *Free Range Retail Price Hits All-Time Low*, FARMING U.K., Apr. 20, 2006, available at <http://www.farminguk.com/bsp/10130/ews.asp?DBID=103-281-013-096&iPage=1&id=4159>.

145. See *infra* Table 3 (listing various increases in cost for different farm practices).

146. See U.S. DEP’T AGRIC., FOOD MARKETING AND PRICE SPREADS: FARM-TO-RETAIL PRICE SPREADS FOR INDIVIDUAL FOOD ITEMS (2002), available at <http://www.ers.usda.gov/Briefing/FoodPriceSpreads/spreads/table1.htm> (comparing retail prices of food to the “farm value”).

147. See *id.* (noting that in 2000 farm value represented only \$0.51 out of \$1.07 of retail price of chicken).

148. WEBSTER, *supra* note 29, at 156.

149. See KUO HUANG & BIIN-HWAN LIN, U.S. DEP’T AGRIC., ESTIMATION OF FOOD DEMAND AND NUTRIENT ELASTICITIES FROM HOUSEHOLD SURVEY DATA 24 (2000), available at <http://www.ers.usda.gov/publications/tb1887/tb1887.pdf> (listing the demand elasticities for various foods by income group).

150. See *generally* HUMANE SOC’Y OF THE U.S., THE ECONOMIC CONSEQUENCES OF ADOPTING ALTERNATIVE PRODUCTION SYSTEMS 1 (2006), <http://www.hsus.org/farm/resources/research/> (listing various reports of the economic effects of alternative production systems).

free-range animal products need increase average annual per capita food spending by only twenty-seven dollars.¹⁵¹

Table 3 provides estimates of cost increases for producers that would result from free-range and other more humane animal production.

Table 3: Costs of welfare improvements

Practice ¹⁵²	Cost increase over standard practice (%)
Group housing (sows)	0-3
Goup housing (calves)	1-2
Slow growth (broilers)	5
Free range (turkeys)	30
Free range (hogs)	8-47
Furnished cages (layers)	8-28
Barn (layers)	8-24
Free range (layers)	26-59

B. Consumers

Consumers report a willingness to pay more for products labeled with welfare assurances. In a 2004 Zogby poll, three-quarters of respondents said they were willing to spend two cents more for a fried-chicken meal with animal-welfare assurances.¹⁵³ In fact, Kentucky Fried Chicken estimated meeting NGOs' demands for welfare improvements would increase costs by a similar amount.¹⁵⁴

151. Calculated by adding fifty percent to per capita meat (excluding fish), egg, and dairy expenditures in NOEL BLISARD, U.S. DEP'T AGRIC., FOOD SPENDING IN AMERICAN HOUSEHOLDS: 1997-98 17 (2001), available at <http://www.ers.usda.gov/publications/sb972/sb972.pdf> (noting food spending trends); HUMANE SOC'Y OF THE U.S., *supra* note 150 (listing various reports that show per capita food spending and economic consequences of animal-welfare improvements).

152. LUDWIG THEUVSEN ET AL., INSTITUTE FOR AGRIC. ECON., LIVESTOCK HUSBANDRY BETWEEN ETHICS AND ECONOMICS: FINDING A FEASIBLE WAY OUT BY TARGET COSTING? (2005), available at http://www.eaae2005.dk/CONTRIBUTED_PAPERS/S21_292_theuvsen_etal.pdf; EUROGROUP FOR ANIMAL WELFARE, INTO THE FOLD: CREATING INCENTIVES FOR IMPROVED ANIMAL WELFARE UNDER THE RURAL DEVELOPMENT REGULATION (2005), available at <http://www.eurogroupanimalwelfare.org/pdf/intothefold.pdf>; C. Andreasen et al., *Swedish Animal Welfare Regulations and Their Impact on Food Animal Production*, 227 J. AM. VETERINARY MED. ASS'N 37, 37-40 (2005); HUMANE SOC'Y OF THE U.S., *supra* note 150.

153. Zogby Int'l, Poll Shows That Fast-Food Consumers Care About Chickens' Welfare (June 2, 2004), <http://www.zogby.com/search/ReadClips.dbm?ID=8379>. For example, Kentucky Fried Chicken sells 2.5 million meals per year. YUM! Restaurants International, <http://www.premier-recruit.com/kfc.doc> 2 (last visited Dec. 28, 2006). KFC's U.S. sales in 2005 were 5.2 billion. YUM! BRAND'S 2005 ANNUAL REPORT 26 (2006), available at http://www.yum.com/investors/annualreport/05annualreport/pdf/yum_ar05.pdf. A cost increase of fifty million represents an extra two cents per year globally that can be covered by raising prices one percent.

154. *Animal Rights: Activism vs. Criminality Before the S. Comm. on the Judiciary*, 108th Cong. (2004) (statement of Jonathan Blum, Senior Vice President, YUM! Brands), available at http://judiciary.senate.gov/testimony.cfm?id=1196&wit_id=3463 (“[I]t is our estimate that these changes, if implemented, would cost our company over \$50 million.”).

In a 2004 Golin/Harris poll for the United Egg Producers, fifty-four percent of consumers reported they were willing to pay five to ten percent more for eggs with the label “Animal Care Certified,” without any information about what the label meant.¹⁵⁵ Ten percent reported they were willing to pay fifteen to twenty percent more, and seventy-seven percent reported they would consider switching to a brand with such a label.¹⁵⁶

Other research suggests that consumers are willing to pay seventeen to sixty percent more for eggs from cage-free systems.¹⁵⁷ In one study, consumers were willing to pay taxes of almost eight dollars per person per year to fund practices they believed would improve conditions for hens.¹⁵⁸ These surveys suggest consumers are willing to pay considerably more than the price required for minimal animal-welfare reforms.

Unfortunately, consumers’ statements do not always translate into actual purchases, as revealed by the low market shares of non-CAFO products.¹⁵⁹ The disconnect between consumers’ intentions and their behavior might be due to the unavailability of non-CAFO products in many supermarkets and restaurants; poor labeling; or a belief among consumers that the responsibility for animal welfare lies with government, producers, or retailers.¹⁶⁰

C. Trade and the Problem of Substitution

Animal-welfare legislation in Europe and Florida outlawed the use of particular production systems within their national or state boundaries. Both sets of legislation, however, may have only a limited effect on animal welfare, so long as consumers continue to demand, and are supplied with, products imported from other nations or states lacking similar animal-welfare laws.

The share of the world’s meat traded across national boundaries is rising, at around nine percent of the total produced.¹⁶¹ International trade represents a special problem for animal-welfare legislation. As the European Commission noted, “[A]nimal welfare standards, notably those concerning farm animal welfare, could be undermined if there is no way of ensuring that agricultural and food products produced to domestic animal welfare standards are not

155. AM. MEAT INST., LAYING OUT THE FACTS 9 (2004), available at <http://www.meatami.com/Content/PressCenter/AnimalCarePresentations/Head.pdf>.

156. *Id.*

157. HUMANE SOC’Y OF THE U.S., *supra* note 150.

158. Richard Bennett & Douglas Larson, *Contingent Valuation of the Perceived Benefits of Farm Animal Welfare Legislation: An Explanatory Survey*, 47 J. AGRIC. ECON. 222, 231 (1996).

159. This share is less than one percent in the United States as previously noted.

160. David Blandford et al., *Potential Implications of Animal Welfare Concerns and Public Policies in Industrialized Countries for International Trade*, in GLOBAL TRADE AND CONSUMER DEMAND FOR QUALITY 6, 6, 16 (Kristoff et al. eds., 2000).

161. U.S. DEP’T AGRIC., LIVESTOCK AND POULTRY: WORLD MARKETS AND TRADE 1 (2003), available at <http://usda.mannlib.cornell.edu/fas/livestock-poultry-ma/lp1003.pdf>.

simply replaced by imports produced to lower standards.¹⁶² The concern would apply just as readily to interstate trade within the United States as it does to international trade among E.U. countries.

As an example, the United Kingdom maintains higher animal-welfare standards for sows than most E.U. countries. Since its ban on sow gestation crates and tethers went into effect in 1999, U.K. pork costs increased and imports of fresh and frozen pork products increased by seventy-seven percent.¹⁶³ In 2005, more than half of all pork products in British supermarkets were imported, and more than two-thirds of these imports were produced using systems illegal in the United Kingdom.¹⁶⁴

In one survey, ninety-two percent of British respondents believed imported meat should be produced to U.K. minimum standards.¹⁶⁵ Similarly, ninety-five percent of respondents in a E.U.-wide survey said imported products should be produced under animal-welfare regulations at least as demanding as those applied in their own countries.¹⁶⁶ Trade restrictions are one way to solve the problem, but international trade rules place limits on what kinds of restrictions are possible.

1. The WTO and GATT

The European Union has not yet attempted to restrict imports from countries that do not meet its farm-animal welfare standards. But if it tries, it may face resistance within the World Trade Organization (WTO). Protecting compliant producers from unfair competition with non-compliant producers will depend upon allowing one or more of the following: animal-welfare considerations in Article III or Article XX of the General Agreement on Trade and Tariffs (GATT), international standards, labeling, tariffs, and Green Box provisions.

Article III of GATT states that imported products should be treated no less favorably than “like products” of domestic origin.¹⁶⁷ Disagreement has focused on the interpretation of “like products,” which, in past WTO disputes, have been understood as “directly competitive or substitutable products.”¹⁶⁸ Because products with animal-welfare assurances may be physically identical to products

162. EUR. COMM'N, WTO, EUROPEAN COMMUNITIES PROPOSAL: ANIMAL WELFARE AND TRADE IN AGRICULTURE 1 (2000), available at http://www.wto.org/english/tratop_e/agric_e/ngw19_e.doc.

163. BRIT. PIG EXECUTIVE, AN ANALYSIS OF IMPORTED PORK AND PORK PRODUCTS INTO THE UNITED KINGDOM 2 (2006), available at http://www.npa-uk.net/ds_portal/library/Bpex%20imports%20report%202005.pdf#search=%22u.k.%20animal%20welfare%20pork%20imports%22.

164. *Quality Mark Support*, MEAT NEWS, Jan. 19 2005, available at <http://www.meatnews.com/index.cfm?fuseaction=Article&artNum=8882>.

165. *Id.*

166. *Shoppers Want Better Welfare*, POULTRY WORLD, Mar. 2006, at 3, 3.

167. General Agreement on Tariffs and Trade (GATT) art. III § 4, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194.

168. See Raj Bhala & David A. Gantz, *WTO Case Review*, 22 ARIZ. J. INT'L & COMP. L. 99, 126 (2005) (explaining how case law has evolved into “directly competitive or substitutable products”).

without such assurances, they could be considered “like products” by the WTO. For instance, the WTO may not permit a nation to restrict imports of cage eggs while it allows production of cage-free eggs, which are physically identical. However, because consumers concerned about animal welfare do not view such products as “substitutable,” there may be room for differentiating products according to process and production methods (PPM). No GATT rule explicitly forbids PPM distinctions, and the criteria for what constitutes “like products” continues to evolve in WTO case law.¹⁶⁹ If the WTO Council establishes an interpretive rule accepting PPM distinctions, the European Union could restrict imports that do not comply with its domestic regulations.¹⁷⁰

Article XX of the GATT states, “[N]othing in this agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures: a) necessary to protect public morals; b) necessary to protect human, animal or plant life or health.”¹⁷¹ So far, Article XX(a) has not been used in a WTO dispute panel. However, “necessary” is a difficult criterion to satisfy, as any number of hypothetical policies could fulfill a social objective without trade restrictions, even if such policies are unrealistic. In the past, “animal health” has been interpreted to refer only to sanitary concerns that affect human health.¹⁷² It remains to be seen whether XX(b) could be applied to animal welfare.¹⁷³

169. See, e.g., *Tembec, Inc. v. United States*, 441 F. Supp. 2d 1302, 1342 n.37 (Ct. Int'l Trade 2006) (discussing the impact of changing definitions of “like products” under the WTO; “[b]efore determining whether a domestic industry is faced with material injury or a threat of material injury, the ITC must first determine the scope of the ‘domestic industry’ by defining the ‘like product’ under investigation. Having defined the domestic like product, it becomes possible to determine the scope of the domestic industry injured by foreign imports.”); *PS Chez Sidney L.L.C. v. U.S. Int'l Trade Comm'n*, 442 F. Supp. 2d 1329, 1337 (Ct. Int'l Trade 2006) (“A ‘domestic like product’ is defined as ‘a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation.’”) (citing 19 U.S.C. § 1677(10) (2000)); *NSK Ltd. v. United States*, 346 F. Supp. 2d 1312, 1329 (Ct. Int'l Trade 2004) (“‘Foreign like product’ means, in descending order of preference: (1) ‘identical’ merchandise; (2) ‘like’ merchandise that is of approximately equal commercial value, component material, and use, and is produced by the same person and in the same country; or (3) ‘like’ merchandise that is of the ‘same general class or kind’ and use, and is produced by the same person and in the same country.”) (internal citations omitted); *Slater Steels Corp. v. United States*, 297 F. Supp. 2d 1351, 1354–55 (Ct. Int'l Trade 2003) (“The foreign like product is restricted, under any of its definitions in 19 U.S.C.S. § 1677(16), to identical or similar merchandise that is produced in the same country as the subject merchandise.”).

170. See Leesteffy Jenkins & Robert Stumberg, *Animal Protection in a World Dominated by the World Trade Organization*, in *THE STATE OF THE ANIMALS: 2001*, at 149, 156–59 (2001) (explaining the various arguments for carving out these distinctions).

171. GATT, *supra* note 167, at art. XX.

172. According to the USDA, GATT recognizes the OIE as “the authority on animal health issue[s].” U.S. Dep’t Agric., *International Services: Global Perspectives on American Agriculture*, <http://www.nal.usda.gov/ttic/coagra/intl.htm>. OIE’s official animal health publication, the “International Animal Health Code” defines its purpose in terms of preventing sanitary and human health risks. OIE, *INTERNATIONAL ANIMAL HEALTH CODE* (2006), available at http://www.oie.int/eng/publicat/en_code.htm (“The aim of the *Terrestrial Animal Health Code* . . . is to assure the sanitary safety of international trade in terrestrial animals and their products. This is achieved through the detailing of health measures to be used by the veterinary authorities of importing and exporting countries to avoid the transfer of agents pathogenic for animals or humans, while avoiding unjustified sanitary barriers.”).

173. See Jenkins & Stumberg, *supra* note 170, at 156–59 (noting different justifications under article XX); Alan Swinbank, *Ethics, Trade and the WTO* 10–13 (Apr. 14–17, 2000) (unpublished paper

A common criterion applied to trade negotiations is that the least trade-distorting mechanism should be used to achieve desired policy objectives. Because the WTO has in the past demonstrated a narrow interpretation of “like products” and Article XX exceptions, the European Union is now pursuing three strategies to harmonize animal-welfare restrictions on its domestic and imported products: international standards, mandatory labeling, and targeted subsidies.¹⁷⁴

International standards are now being developed by the OIE, which has been designated by the WTO as its scientific reference body for animal health. In 2006, the OIE finalized animal-welfare standards for transport and slaughter, and began drafting standards for husbandry.¹⁷⁵ Although compliance with the standards is voluntary, it is expected they will be used in future trade disputes. It is unlikely these standards will require significant changes by any developed country, and they will almost certainly fall short of the standards adopted by the European Union. Nevertheless, farm-animal-welfare concerns have gained legitimacy as the world’s leading scientific body on animal health has begun addressing the issues. OIE recently published an authoritative volume on the challenges.¹⁷⁶

Labels describing farming methods are already mandatory for E.U. shell eggs.¹⁷⁷ Since 2004, all egg cartons produced in the European Union must be labeled “eggs from caged hens,” “barn eggs,” or “free-range eggs.”¹⁷⁸ The European Union also requires that imported eggs bear their country of origin and the method of production.¹⁷⁹

Mandatory labeling suffers from two problems. First, not all labels are sufficiently transparent. The U.S. Federal Trade Commission forced the United Egg Producers to change its “Animal Care Certified” label, after the Better Business Bureau found that the label misled consumers, who did not realize the

presented to the Agric. Econ. Society, Annual Conference at the Univ. of Manchester), *available at* <http://www.apd.rdg.ac.uk/AgEcon/staff/staffpapers/AESEthics00.pdf> (explaining the uncertainty of a WTO ruling on animal-welfare restrictions).

174. EUR. COMM’N, *supra* note 162, at 3; see Anna Hobbs et al., *Ethics, Domestic Food Policy and Trade Law: Assessing the EU Animal Welfare Proposal to the WTO*, 27 FOOD POL’Y 437 (2002) (explaining the E.U.’s arguments and summarizing why the WTO will not implement the E.U.’s proposal).

175. OIE, INTERNATIONAL ANIMAL HEALTH CODE, § 3.7 (2006), *available at* http://www.oie.int/eng/normes/mcode/en_sommaire.htm.

176. David Bayvel et al., *Animal Welfare: Global Issues, Trends, and Challenges*, 24 REVUE SCI. ET TECHNIQUE 475 (2005).

177. Shell eggs are eggs with intact shells as opposed to liquid eggs, which have been removed from shells.

178. Commission Regulation 91/1274, 1991 O.J. (L 121) 1, 11 (introducing detailed rules for implementing marketing standards for eggs) (EC) *amended by* Commission Regulation 2001/1651, art. 18, J.O. (L 220) 1, 5.

179. WALES DEP’T ENV’T, FOOD, & RURAL AFFAIRS, EXPLANATORY LEAFLET ON LABELLING REQUIREMENTS 6 (2005), *available at* http://www.defra.gov.uk/corporate/regulat/forms/livestock_prods/eggs/emr13.pdf.

eggs were produced by starved and intensively confined hens.¹⁸⁰ Regulated labeling with third-party certification would help address the problem. But, second, even with transparent labeling, a market may not achieve the desired level of animal welfare. Many consumers will not buy free-range eggs because they are more expensive, even though the extra expense could be negligible compared to the benefit received by those who value animal welfare, not to mention the animals themselves.¹⁸¹

This is not to say labeling is worthless. On the contrary, the market share of products with “humane” labels serves as a signal to retailers and legislators. However, as the market share of cage-free eggs is under twenty percent in most countries with strict labeling requirements,¹⁸² labels alone are unlikely to achieve animal welfare objectives.

An effective policy could combine third-party certified labeling with price equalization, which can be achieved through tariffs or subsidies. With tariffs, E.U. governments could apply a preferential import duty for imports meeting the E.U. animal-welfare standards, a higher duty for those not meeting the E.U. minimum standards, or both.

More consistent with GATT principles than tariffs would be subsidies for more animal-friendly housing, equipment, training, and certification. In theory, such subsidies could be defended as “Green Box” payments within the WTO’s Agreement on Agriculture (AoA). Green Box provisions are not subject to the usual AoA rules against subsidies, as the payments are “limited to the extra costs or loss of income involved in complying with the government programme,” and thus are not trade-distorting.¹⁸³ E.U. trade negotiators, as well as animal-welfare NGOs, have pushed for Green Box rules to permit payments for animal welfare, which are not yet explicitly allowed. Because Green Box payments mean extra costs for governments, they must have widespread

180. *Business Group Shells Egg-Industry Ads*, MSNBC, May 11, 2004, available at <http://www.msnbc.msn.com/id/4951194/>.

181. Lorraine Mitchell, *Impact of Consumer Demand for Animal Welfare on Global Trade*, in *CHANGING STRUCTURE OF GLOBAL FOOD CONSUMPTION AND TRADE* 80, 83–85, 88 (Anita Regmi ed., 2001), available at <http://www.ers.usda.gov/publications/wrs011/wrs011k.pdf>.

182. MICHELLE JENDRAL, ALTA. EGG PRODUCERS & ALTA. FARM ANIMAL CARE ASS’N, *ALTERNATIVE LAYER HEN HOUSING SYSTEMS IN EUROPE* (2005), available at <http://www.afac.ab.ca/reports/reporthenhousing.pdf>; ROEX & MIELE, *supra* note 102, at 131–34. See generally AGRA CEAS CONSULTING, *EUROPEAN COMM’N, STUDY ON THE SOCIO-ECONOMIC IMPLICATIONS OF THE VARIOUS SYSTEMS TO KEEP LAYING HENS* (2004), available at http://europa.eu.int/comm/food/animal/welfare/farm/socio_economic_study_en.pdf (explaining E.U. egg-production methods).

183. See generally PETER STEVENSON, *THE WORLD TRADE ORGANISATION RULES: A LEGAL ANALYSIS OF THEIR ADVERSE IMPACT ON ANIMAL WELFARE* (2002), http://www.ciwf.org.uk/publications/reports/world_trade_legal_analysis2002.pdf (detailing the legal issues raised by WTO rules); DEREK EATON ET AL., *AGRIC. ECON. RESEARCH INST., PRODUCT DIFFERENTIATION UNDER THE WTO* (2005), http://www.lei.dlo.nl/publicaties/PDF/2005/6_xxx/6_05_11.pdf (analyzing labeling and tariffs under WTO rules for animal welfare).

political support. The Common Agricultural Policy in the European Union suggests such support may already exist.¹⁸⁴

The combination of labeling and targeted subsidies worked for the Swiss. Switzerland effectively banned battery-cage egg production in 1981 but has continued to allow imports of cage eggs.¹⁸⁵ Although Swiss shell eggs cost more than imports, their market share has *increased* since the ban.¹⁸⁶ Swiss liquid eggs have decreased in market share, but the total market share of Swiss eggs has remained constant.¹⁸⁷

Perhaps the most practical means of protecting animal welfare is for the European Union to bypass the WTO by pressuring retailers to carry only certified products¹⁸⁸ or by establishing bilateral agreements with its major trading partners: New Zealand, Brazil, Argentina, Australia, and the United States. The European Union succeeded in negotiating humane fur-trapping standards with the United States and Canada; New Zealand already provides animal-welfare assurances on products exported to the European Union.¹⁸⁹ In fact, the E.U. market has done much to accelerate New Zealand's own animal-welfare legislation.¹⁹⁰

2. Developing Countries

Developing countries have generally viewed the European Union's animal-welfare proposals as disguised protectionism.¹⁹¹ However, developing countries may not recognize their own strengths. Because less-abusive production methods tend to be more labor-intensive while CAFO systems are more capital-intensive, and because labor tends to be cheaper in developing countries than capital, developing countries may have a comparative advantage in satisfying the demand for welfare-enhanced meat, eggs, and milk. Animal welfare is already seen as a value-adding attribute for some exporting developing countries.¹⁹² Those that have retained traditional, non-CAFO livestock

184. See EUR. COMM'N, THE COMMON AGRICULTURAL POLICY, 2000 REVIEW 22 (2001), available at http://ec.europa.eu/agriculture/publi/review00/full_en.pdf ("The impact on trade by the so-called blue and green box measures has proved, as anticipated, to be less distorting than market price support on the one hand, and payments based on output or on variable input use on the other hand.").

185. Imported battery eggs must be labeled as such. FAWC Report on Farm Welfare: Effectiveness of Labelling, <http://www.thepigsite.com/articles/3/feed-nutrition-and-water/1686/fawc-report-on-farm-welfare-effectiveness-of-labelling> (last visited Dec. 28, 2006).

186. HEINZPETER STUDER, UNITED POULTRY CONCERNS, HOW SWITZERLAND GOT RID OF BATTERY CAGES 27 (2001), http://www.upc-online.org/battery_hens/SwissHens.pdf.

187. *Id.* at 31.

188. See *infra* text at note 204.

189. EURO. COMM'N, COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT: ON ANIMAL WELFARE LEGISLATION ON FARMED ANIMALS IN THIRD COUNTRIES AND THE IMPLICATIONS FOR THE EU 12 (2002), available at http://ec.europa.eu/food/animal/welfare/international/2002_0626_en.pdf.

190. See generally Blandford et al., *supra* note 160 (explaining the improvements to animal welfare in New Zealand).

191. Hobbs et al., *supra* note 174, at 446.

192. See David Bowles et al., *Animal Welfare and Developing Countries: Opportunities for Trade in High-Welfare Products from Developing Countries*, 24 REVUE SCI. ET TECHNIQUE 783, 785 (2005),

production have found export markets in Europe, where there is increasing demand for more humane animal products.¹⁹³ However, as more developing countries adopt CAFO systems, the opportunity is closing. CAFOs now produce around half of the world's beef and more than half of the world's pork, poultry, and eggs.¹⁹⁴

The export market is one way of slowing the adopting of CAFO production methods in developing countries. Another is the potential influence of organizations that provide grants or loans to livestock projects, including the production of meat, milk, and eggs.¹⁹⁵ Over the last twenty years, meat and milk consumption in developing nations has tripled; egg consumption has quadrupled.¹⁹⁶ These increases have been most dramatic in Asia. China is now the world's leading producer and consumer of meat and eggs; Chinese annual per-capita meat consumption has increased six-fold over the last twenty years.¹⁹⁷ By 2020, developing countries will be home to sixty percent of the world's farm animals.¹⁹⁸ Inevitably, any influence that grant- and loan-giving organizations might have on animal-friendly production would have a worldwide impact.

Yet, rather than stop the introduction of CAFOs to developing nations, historically these grant- or loan-giving entities have accelerated the adoption of such practices.¹⁹⁹ Nonetheless, there are signs that development organizations are beginning to take animal welfare seriously. In 2001, the World Bank reviewed the damage done by CAFOs to smallholders, the environment, and animal welfare, and committed to “[a]void funding large-scale commercial, grain-fed feedlot systems and industrial milk, pork, and poultry production,” a remarkable turn from its historic lending.²⁰⁰ In addition, the Food and Agriculture Organization of the United Nations (FAO) has worked with Humane Society International to introduce humane transport and slaughter

available at <http://www.oie.int/eng/publicat/RT/2402/PDF/bowles783-790.pdf> (explaining the potential for developing countries to use animal-welfare issues to their advantage).

193. *Id.* at 785–86.

194. CORNELIS DE HAAN ET AL., FAO, LIVESTOCK & THE ENVIRONMENT: FINDING A BALANCE 53 (1997), available at <http://www.fao.org/docrep/x5303e/x5303e00.htm>.

195. Such institutions include the World Bank, regional-development banks, bilateral aid agencies and the United Nations development programs.

196. Andrew Speedy, *Global Production and Consumption of Animal Source Foods*, 133 J. NUTRITION 4048S, 4049S (2003).

197. U.S. DEP'T AGRIC., *supra* note 161.

198. CHRISTOPHER DELGADO ET AL., LIVESTOCK TO 2020. THE NEXT FOOD REVOLUTION ¶ 9 (1999), available at <http://www.ifpri.org/2020/briefs/number61.htm>.

199. *See, e.g.*, DANIELLE NIERENBERG, HAPPIER MEALS: RETHINKING THE GLOBAL MEAT INDUSTRY 63 (Lisa Mastney ed., 2005) (explaining how the WTO previously operated), available at <http://www.plantsforhunger.org/PDF/WorldWatch%20Happier%20Meals.pdf>.

200. CORNELIS DE HAAN, WORLD BANK, LIVESTOCK DEVELOPMENT: IMPLICATIONS FOR RURAL POVERTY, THE ENVIRONMENT, AND GLOBAL FOOD SECURITY 65 (2001), available at http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2001/12/11/000094946_01112104010387/Rendered/PDF/multi0page.pdf.

techniques to developing countries.²⁰¹ In 2004, the FAO began drafting animal-welfare standards to be used in its technical assistance programs.²⁰² In 2006, the International Finance Corporation (IFC), the private financial arm of the World Bank, began drafting animal welfare criteria for its assistance programs.²⁰³

In the near term, nothing is likely to stop the widespread increase in meat, egg, and milk consumption. As long as the United States and Europe set the trends—both through popular culture and through policy—their animal-centered diets will be imitated.

D. Retailer Campaigns

Development organizations influence animal welfare in developing countries, but, more critically, so can international retailers such as McDonald's and Kentucky Fried Chicken. Trade agreements can force nations to allow cheaper, non animal-friendly imports, but they cannot force supermarkets or restaurants to sell them. Indeed, retailers may be more effective than regulators in affecting animal welfare:

Retailers are becoming the most potent force in setting animal welfare standards and will be the major engine for influencing animal welfare change. They can move faster than Governments, can cut off a supplier's livelihoods by stopping contracts and can ignore international trade agreements. While Europe as a whole has to adhere to the World Trade Organization and cannot bar imports on animal welfare grounds, retailers are free to do so.²⁰⁴

“[W]e are beginning to see that the greater power in the world is not the superpower, but the supermarket.”²⁰⁵

In Switzerland, compliance with animal-welfare standards was limited until the major egg retailers, following pressure from consumers and NGOs, announced they would sell only cage-free eggs.²⁰⁶ Sweden's ban on battery cages has also been helped by retailers' refusal to stock battery eggs.²⁰⁷ All major Austrian supermarkets have volunteered to end the sale of cage eggs by 2007.²⁰⁸

201. Neil Trent et al., *The State of Meat Production in Developing Countries*, in STATE OF THE ANIMALS II 175, 175 (Deborah J. Salem & Andrew N. Rowan eds., 2003).

202. Personal correspondence with David Fraser, University of British Columbia (Mar. 17, 2005) (on file with author).

203. INT'L FIN. CORP., CREATING BUSINESS OPPORTUNITY THROUGH IMPROVED ANIMAL WELFARE 3-4 (2006), available at [http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/p_AnimalWelfare_QuickNote/\\$FILE/Animal+Welfare+QN.pdf](http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/p_AnimalWelfare_QuickNote/$FILE/Animal+Welfare+QN.pdf).

204. David Bayvel, *The Use of Animals in Agriculture and Science: Historical Context, International Considerations and Future Direction*, 24 REVUE SCI. ET TECHNIQUE 791, 794 (2005), available at <http://www.oie.int/eng/publicat/RT/2402/PDF/harris647-653.pdf> (quoting COLIN SPEDDING, ANIMAL WELFARE (2000)).

205. Tim Harris, *Animal Transport and Welfare: A Global Challenge*, 24 REVUE SCI. ET TECHNIQUE 647, 651 (2005), available at <http://www.oie.int/eng/publicat/RT/2402/PDF/harris647-653.pdf>.

206. HEINZPETER STUDER, *supra* note 186, at 34.

207. AGRA CEAS CONSULTING, *supra* note 141, at 88.

208. Personal correspondence with Martin Balluch, President, Verein Gegen Tierfabriken (Association Against Animal Factories), Austria (Apr. 14, 2006) (on file with author).

McDonald's, Europe's largest food service operator, uses only free-range eggs in the United Kingdom, Germany, Austria, and Switzerland.²⁰⁹

In the United States, the largest animal-welfare reforms have been initiated by restaurants. In 1999, following years of pressure from consumers and NGOs, McDonald's informed its suppliers of new animal-welfare requirements, including audits of slaughterhouses, increased cage space per egg-laying hen to seventy-two inches per bird, and a ban on forced molting by feed withdrawal.²¹⁰ Following McDonald's announcement, its competitors Burger King and Wendy's committed to similar welfare improvements. Burger King exceeded some of McDonald's standards and in 2001 petitioned the USDA to actively enforce HMSA.²¹¹

The visibility and name recognition of retailers make them sensitive targets of animal-welfare campaigns. As retailers compete with each other over public perception, successfully negotiating welfare gains with a major retailer can lead to a "race to the top," and to a push for harmonizing regulation so that costs are shared.

V

CONCLUSION

The United States trails the developed world in farm-animal welfare. There is virtually no legal protection for most farm animals in the country, and industry reforms in the United States have not even approached government standards found in Europe, most of which are themselves minimal.

If the objective is to do the greatest good for the greatest number, then animal protection NGOs should invest their finite resources in those efforts most cost-effective in reducing misery. Priority should be placed on those animals raised and killed for meat, eggs, and milk.

As the vast majority of farmed animals in the United States are poultry and fish, these species should benefit from advocates' focus. Regulation of broiler chicken growth is likely to be among the most cost-effective reforms, both because of the vast number of animals involved—8.7 billion—and the relatively small increase in production costs—five percent—involved in the adoption of slow-growth breeds.

Welfare problems in aquaculture have only recently begun to be studied, and there have been no studies estimating the costs of welfare improvements. Given the number of animals involved in aquaculture, this should be a research priority.

209. HEATHER PICKETT, *THE WAY FORWARD FOR EUROPE'S EGG INDUSTRY: KEEPING THE BAN ON BATTERY CAGES IN 2012*, at 18 (2006), available at http://ciwf.org.uk/publications/reports/Battery_Cages2006.pdf.

210. Wilkins et al., *supra* note 121, at 631.

211. *Burger King Wants Humane Treatment of Animals*, UNITED PRESS INT'L, June 29, 2001.

Gestation crates and veal crates could be phased out with little to no increase in production costs. But the number of animal life-years affected is relatively small: 6.3 million—less than one-half of one percent of the total. Arguably, even minor welfare problems for birds and fish represent a larger problem than the most severe welfare problems for other animals.

State referenda are slow, expensive, and impossible in most states.²¹² The Florida referendum cost NGOs more than one million dollars and affected fewer than 2500 animals in the state.²¹³ The net number of animals affected in the United State was probably smaller—perhaps zero—as Florida consumers may now simply eat meat imported from states where gestation crates are legal.

Referenda and other legislation may have symbolic value and draw media attention, but their net effect on welfare may be marginal unless they affect points-of-sale or limit interstate or international trade. More effective than prohibitions on the use of particular production systems are prohibitions on the sale of products from those systems. California's and Chicago's bans on the sale of *foie gras* from force-fed birds represent good precedents, although these, too, may be challenged in a WTO dispute panel.

Most Americans are ignorant about the most basic aspects of factory farming, yet the majority would likely be appalled at how meat, eggs, and milk are actually produced, as evidenced by polling responses when certain practices are identified. A broad public education campaign revealing standard practices could make substantial progress toward both consumer behavior and market and political reforms.

So long as animals continue to be used as food, an ideal production system is one in which the animals have maximum control over their own lives. Most systems, even those predominant in Europe, do not satisfy this criterion. More research is needed on the preferences of farm animals, as well as on farming practices that allow animals to satisfy these preferences.²¹⁴

Animal protection NGOs should focus their efforts on retailers, which have considerable influence over production methods, are most vulnerable to consumer pressure, and are immune to trade agreements. As more retailers require audits of their suppliers, there will be growing need for well-trained, independent third-party auditors; objective, outcome-based audits; and harmonized standards for simple, transparent labeling.²¹⁵

In parallel, NGOs could ask consumers to eat less of those products that cause animals the most misery, encouraging consumption of vegetarian foods and free-range versions of the animal products they insist on eating. This advice

212. Wolfson & Sullivan, *supra* note 1, at 225–26.

213. Personal correspondence with The Humane Soc'y of the U.S. (Mar. 28, 2006) (on file with author).

214. ROWAN ET AL., *supra* note 118, at 69.

215. Alex Thiermann & Sarah Babcock, *Animal Welfare and International Trade*, 24 REVUE SCI. ET TECHNIQUE 747, 751–53 (2005), available at <http://www.oie.int/eng/publicat/rt/2402/PDF/thiermann747-755.pdf>.

is consistent with the “Three R’s” approach used in other animal-welfare campaigns: refine, reduce, and replace.²¹⁶

It is worth noting that welfarist campaigns can be compatible with abolitionist objectives, such as those Francione discusses in this volume.²¹⁷ Welfarist campaigns not only educate consumers, some of whom may choose to become vegetarian, but also drive up production costs, driving down consumption. In the case of eggs, per capita consumption has steadily decreased in Switzerland and Sweden, following the bans on battery cages in those countries.²¹⁸

Campaigns directed toward pigs and cattle, however, could have a negative welfare effect by shifting consumption to poultry and fish products, which provide significantly less food per animal life-year. In fact, removing only poultry, eggs, and farmed fish from the diets of one hundred people would affect more animals than turning ninety-nine people vegan. If it is easier for consumers to shift consumption among animal products than to eschew all animal products, then this arithmetic has implications for both welfarist and abolitionist strategies.

216. WILLIAM RUSSELL & REX BURCH, *THE PRINCIPLES OF HUMANE EXPERIMENTAL TECHNIQUE* 64 (1959).

217. Francione believes the conversion of people to vegan diets is an abolitionist success, because veganism reduces the number of animals exploited. Welfare improvements also reduce the number of animals exploited. They do this by increasing the price of animal products, which drives down consumption and production. In contrast, Francione argues that welfare improvements would cause a net *increase* in animal consumption and production, by assuaging consumers’ guilt. If this were correct, most producers would, out of self-interest, happily adopt welfare improvements and reject CAFO practices, in order to maximize their profits. With ninety-nine percent of farm animals raised in CAFOs, Francione’s argument is not well-supported.

218. The decrease can be seen by running various queries based on country and type of agriculture in the FAOSTAT database. FAOSTAT queries, Consumption: Eggs, Switzerland and Sweden, <http://faostat.fao.org/site/346/default.aspx> (last visited Dec. 28, 2006).