

ANIMAL WELFARE REFORM AND THE MAGIC BULLET: THE USE AND ABUSE OF SUBTHERAPEUTIC DOSES OF ANTIBIOTICS IN LIVESTOCK

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I. INTRODUCTION

Laws protecting animals from abuse are common at both the state and federal levels.¹ This broad-based support for animal protection indicates a societal concern that animals be treated kindly. Yet however much Americans may love their companion cats and dogs, their concern for animals generally does not extend to how their food gets to the dinner table. The substance of the

1. See 7 U.S.C. §§ 2131-2159 (1994); ALA. CODE § 13A-11-14 (1994); ALASKA STAT. § 11.61.140 (1985); ARIZ. REV. STAT. ANN. § 13-2910 (1989); ARK. CODE ANN. §§ 5-62-101 to -114 (Michie 1993); CAL. PENAL CODE §§ 596-597 (Deering 1995); COL. REV. STAT. §§ 18-9-201 to -206 (1994 & Supp. 1995); CONN. GEN. STAT. §§ 53-247 to -252 (1994); DEL. CODE ANN. tit. 11, § 1325 (1987 & Supp. 1994); D.C. CODE ANN. §§ 22-801 to -814 (1989 & Supp. 1995); FLA. STAT. ch. 828.02 to .27 (1994); GA. CODE ANN. § 16-12-4 (1992); HAW. REV. STAT. § 711-1109 (1985); IDAHO CODE §§ 18-2101 to -2116 (1985 & Supp. 1995); ILL. REV. STAT. ch. 225, para. 605 (1993 & Supp. 1995); IND. CODE §§ 35-46-3-7 to -12 (1994); IOWA CODE §§ 717, 725 (1993 & Supp. 1995); KAN. STAT. ANN. §§ 21-4310 to -4311 (1988 & Supp. 1994); KY. REV. STAT. ANN. §§ 525.125, 525.130 (Baldwin 1990 & Supp. 1994); LA. REV. STAT. ANN. §§ 3-2361 to -2363 (West 1987); ME. REV. STAT. ANN. tit. 7, § 3907 (West 1983 & Supp. 1994); MD. CODE ANN., AGRIC. §§ 59-70E (1992 & Supp. 1994); MASS. GEN. LAWS ANN. ch. 272, § 77 (West 1992); MICH. COMP. LAWS § 752.21 (1991 & Supp. 1995); MINN. STAT. §§ 343.20 to .40, 346.35 to .44 (1990 & Supp. 1996); MISS. CODE ANN. §§ 97-41-1 to -19 (1994); MO. REV. STAT. §§ 578.005 to .050 (1986); MONT. CODE ANN. § 45-8-211 (1995); NEB. REV. STAT. § 28-1009 (1989 & Supp. 1995); NEV. REV. STAT. ANN. § 574 (Michie 1994); N.H. REV. STAT. ANN. § 644:8 (1986 & Supp. 1994); N.J. STAT. ANN. §§ 4:22-17 to -26 (West 1973 & Supp. 1995); N.M. STAT. ANN. § 30-18-1 (Michie 1994); N.Y. AGRIC. & MKTS. LAW §§ 350-359 (Consol. 1991); N.C. GEN. STAT. §§ 14-360 to -363.2 (1993); N.D. CENT. CODE §§ 36-21.1-01 to -07 (1987); OHIO REV. CODE ANN. § 959.13 (Anderson 1988); OKLA. STAT. tit. 21, §§ 1685-1688 (1983 & Supp. 1995); OR. REV. STAT. §§ 167.315 to .340 (1991); 18 PA. CONS. STAT. § 5511 (1984 & Supp. 1995); R.I. GEN. LAWS §§ 4-1-1 to -34.3 (1987 & Supp. 1994); S.C. CODE ANN. §§ 47-1-10 to -200 (Law. Co-op. 1987 & Supp. 1994); S.D. CODIFIED LAWS ANN. §§ 40-1-1 to -37 (1991 & Supp. 1995); TENN. CODE ANN. §§ 39-14-202 to -203 (1991 & Supp. 1995); TEX. HEALTH & SAFETY CODE ANN. §§ 821.021 to .025 (West 1992); UTAH CODE ANN. §§ 76-9-301 to -305 (1995); VT. STAT. ANN. tit. 13, §§ 351-354 (1989); VA. CODE ANN. §§ 3.1-796.68 to 796.77 (Michie 1994 & Supp. 1995); WASH. REV. CODE §§ 16.52.010 to .200 (1992 & Supp. 1995); W. VA. CODE § 61-8-19 (1992 & Supp. 1995); WIS. STAT. §§ 951.01 to .18 (1982 & Supp. 1994); WYO. STAT. § 6-3-203 (1988 & Supp. 1995).

state and federal animal welfare statutes reflects a selective insensitivity to the welfare of farm animals. Many of the statutes exempt actions that fall within "acceptable animal husbandry practices";² some statutes exclude farm animals altogether from the definition of "animal."³

No matter which option legislators choose, the result is the same—the exemption of an enormous number of animals from statutory protection. It is difficult to determine exactly the number of animals raised for food, but an estimated six billion chickens, pigs, cows, calves, ducks, rabbits, sheep, turkeys, and goats are slaughtered each year.⁴ This number does not include animals raised for food production but not slaughtered, such as dairy cows and egg-laying hens.

Although the conditions in which these animals are raised might be considered deplorable by some,⁵ only two federal statutes exist that grant any protection to farm animals; and these statutes apply in only two limited circumstances. The Livestock Transportation Act of 1906⁶ and the Humane Slaughter Act of 1958⁷ regulate the treatment of animals on their way to, and at the time of, slaughter.⁸ Even animals protected by these statutes, however, have no legal protection while they are being reared. The animal husbandry industry sets the standards by which the animals are raised. Individual farmers generally need only comply with these accepted industry standards to stay within the law, and these standards are determined primarily by what is profitable, not out of a humanitarian concern for livestock.⁹

2. A typical way of excluding farm practices that would violate the basic provisions of the anticruelty statutes is to exclude "accepted animal husbandry practices utilized by any person in the care of companion or livestock animals" COLO. REV. STAT. § 18-9-201.5 (Supp. 1995).

3. See, e.g. IOWA CODE § 717B.1 (West Supp. 1995) ("animal" does not include any of the following: (a) livestock . . .").

4. STUART B. LEVY, *THE ANTIBIOTIC PARADOX: HOW MIRACLE DRUGS ARE DESTROYING THE MIRACLE* 137 (1992).

5. See *infra* part II.

6. 49 U.S.C.A. § 80502 (1995).

7. 7 U.S.C. §§ 1901-1906 (1994).

8. Under the Livestock Transportation Act, a carrier may not confine animals in a vehicle or vessel for more than 28 consecutive hours without unloading the animals for feeding, water, and rest. 49 U.S.C.A. § 80502 (1995). The Humane Slaughter Act requires that animals be "rendered insensible to pain" before slaughter. 7 U.S.C. § 1902 (1994).

9. That industry standards are governed solely by profit and without an element

Private citizens have almost no judicial avenue by which to pursue improved treatment of livestock. Enforcement of the Humane Slaughter Act and the Livestock Transportation Act is entirely within the discretion of the United States government.¹⁰ Private citizens' inability to enforce existing statutes is not, however, the foremost impediment to improved treatment of livestock. The Humane Slaughter Act and the Livestock Transportation Act apply only to the transportation and slaughter of livestock.¹¹ Even if individuals could enforce applicable animal welfare statutes, it would do little to curtail the mistreatment of livestock during cultivation.

Factory farming systems have largely eroded free-market incentives to consider animal welfare in food production.¹² There is nothing in the laws, and nothing called for by economic principles, to protect animals. As a result, farmers generally implement husbandry methods that enhance productivity without

of compassion for the animals is best illustrated by the way the industry deals with "downers." Downers are animals too sick to walk unaided to slaughter. The animals are rarely euthanized and usually are left to die if they are not fit for human consumption. *See infra* note 22.

Despite the assertion that farmers do not consider animal welfare when rearing livestock, nothing in this Comment is intended as a personal attack on all farmers. The rise of factory farms has taken its toll on the traditional family-sized farm as well as on farm animals' welfare. One *Farm Journal* survey showed that pig farmers' greatest fear was being put out of business by big factories or poultry-type integrated operations. JIM MASON & PETER SINGER, *ANIMAL FACTORIES* 177 (1990) (citing John Byrnes, *Rating Your Worst Nightmare*, *HOGS TODAY*, May-June 1989). A Kentucky pig farmer who had been put out of the poultry business in the 1960s told *Hogs Today* his strategy for staying in the hog industry: "I'd join every animal rights group I could find, and I would support them with my money. I'd help outlaw crates and slotted-floor confinement buildings, forcing hog production back outdoors or onto straw." *Id.* (citing Ralph Watkins, *Large Units Appear Inevitable*, *HOGS TODAY*, July-Aug. 1989, at 11).

A former editor of *Farm Journal* wrote about the animal rights movement:

Which is more of a threat to your independent business as a family livestock farmer: animal rights or animal megafactories? . . . [I]f the animal rightists have their way, the livestock industry will return to the smaller, family sized farm. . . . Obviously, at some point the grave problems of overconcentration in the form of disease, pollution, transportation and loss of independent farmers turns animal megamanufacturing into animal maniac-manufacturing. Far from harming animal husbandry, the animal rightists might prevent it from committing suicide.

Id. at 177 (citing Gene Lodgsen, *Maybe the Animal Rights Movement is Good For Us*, *FARM J.*, Jan. 1989, at 26-D, 26-D).

10. 7 U.S.C. § 1904 (1994); 49 U.S.C.A. § 80502 (1995).

11. 7 U.S.C. §§ 1901-1906 (1994); 49 U.S.C.A. § 80502 (1995).

12. *See infra* text accompanying note 78.

regard for their effect on the animals in order to remain competitive. For example, if a farmer can keep chickens in less space by using antibiotics to prevent the spread of disease and by debeaking the chickens to prevent cannibalism, the market forces the farmer to do so in order to compete with other farmers. Neither legal requirements nor economic incentives protect these birds. Acting in the best interest of the animals does not always generate the greatest profits.¹³

At this point, an inevitable philosophical question arises: does it really matter in what conditions the animals live?¹⁴ One argument against animal welfare reform is that one can never know what an animal feels, and therefore one can never know if an animal suffers. Perhaps the visceral reaction a human might experience when seeing a caged hen or a veal calf confined in a crate is simply projection—we imagine how we might feel if we were subjected to similar treatment.

Opponents of livestock protection scoff at this anthropomorphic tendency to assess animals' subjective well-being based on human preferences.¹⁵ Admittedly, there is no way to prove conclusively the subjective state of another. Nevertheless, objective clues and past experiences of the observer remain the sole bases for assessing another's suffering, joy, or sentience. That is as true for assessing the subjective state of another human as it is for a nonhuman.

Assuming the opponents' objections are valid, that using human experience in an effort to understand an animal's experience is illegitimate, then we are left with observation alone to provide evidence that animals suffer. The best proof that monotony and overcrowding affect animals' well-being is the livestock industry's own response to the deleterious effects stress

13. A farmer could, however, find a niche in the growing market for organic, free-range meat, which caters to consumers concerned with the very issues discussed in this Comment. For example, Rambling Rose Veal enjoyed a small but sustained market for its free-range veal. The calves were raised outdoors and fed nonantibiotic supplemented milk. LEVY, *supra* note 4, at 155-56.

14. A more thorough exploration of this fundamental philosophical issue is beyond the scope of this Comment. For a compelling articulation of the case for animal rights, see PETER SINGER, *ANIMAL LIBERATION* (2d ed. 1990).

15. See, e.g., Gene Wunderlich, *The Ethics of Animal Agriculture: Issues Confronting Livestock Production and Marketing*, U.S.D.A. FOOD REV., Oct. 1991, at 24 ("The levels of human sensitivity are influenced in part by anthropomorphism—the tendency of people to impute human qualities of emotion, personality, and reasoning to animals.").

has on the animals. For example, at a 1989 agricultural conference, an animal scientist who had long been an advocate of intensive and confinement husbandry stated that "animal mental activities are being seen as more important; stress is recognized. We must meet all of the animal's needs."¹⁶

In 1991, perhaps in response to such concerns, the United States Congress and Purdue University created the Center for Food Animal Well-Being, an experimental farm in Indiana.¹⁷ The farm was designed to determine which environments are conducive to the greatest productivity. For example, researchers found that exposing a calf to mechanical stimulation, in a manner comparable to that of a cow licking her calf's chin, left that animal calmer than calves not so exposed. Calves allowed outside to play with other calves were more relaxed and content. Dairy cows exposed to the music of Beethoven and Haydn produced up to five and a half percent more milk than those not so exposed.¹⁸ The researchers also investigated cows' body language. A relaxed cow's tail hangs straight down, for example, whereas a frightened cow might tuck her tail between her legs much like a frightened dog.¹⁹ An animal scientist at Purdue summed up the farm's purpose: "At bottom, our work is about animal cognition. We want to get inside the animal's head, to figure out what it feels, what it perceives, and how we can make it happier."²⁰

What makes the animals happy apparently also increases productivity. From the perspective of an animal welfare advocate, concern for the well-being of animals is a welcome consideration. In the farming industry, however, productivity is the end, and attention to animal welfare is just one of several means by which productivity can be enhanced—subtherapeutic doses of antibiotics is another. As long as drugs can increase productivity

16. MASON & SINGER, *supra* note 9, at 20 (citing remarks of Stanley E. Curtis in a presentation entitled "Technical Overview of Disease Control in Animals," at the conference "Biotechnology and Sustainable Agriculture: Policy Alternatives," at Iowa State University, Ames, Iowa, May 22, 1989).

17. Jeffrey Kluger, *Friendlier Farms; Happy Livestock Are More Productive*, DISCOVER, Mar. 1994, at 37.

18. *Id.* Further evidence of animals' capacity to suffer was the finding that heifers exposed to the music of the heavy metal rock group *Kiss* actually experienced a decrease in their milk output by 6%. *Id.*

19. *Id.*

20. *Id.*

more cost effectively than can attention to stress and comfort, they will continue to substitute for a more holistic approach.²¹

One way to improve the treatment of farm animals is to ban the use of subtherapeutic doses of antibiotics in livestock. The farmer, having no rules or guidelines but industry standards by which to abide, will often treat animals like machines in order to maximize output and profit.²² Such an approach, however, requires an arsenal of drugs to ward off the inevitable infections and health problems that animals suffer when reared under stressful conditions. Antibiotics prevent the spread of infectious disease among herds kept in close confinement. The close confinement systems that characterize factory farming methods are the root of many of the modern, inhumane practices associated with factory farming.²³ Without close confinement, many of

21. "Subtherapeutic" means "below therapeutic." See, e.g., *Is Absolute Safety Impossible?*, HOG FARM MGMT., Mar. 1978, at 99 ("I've heard some people say using antibiotics is maybe a substitute for good management. This could be true to a certain extent. But I don't think many of us [swine producers] would or could apply management that can do away with antibiotics and come up with the same net results.").

22. An example of apathy for the animals' welfare is the plight of downers. See *supra* note 9. There is no economic incentive to euthanize an animal that is too sick to walk. The result is that the animal may be shoved, kicked, or dragged to the side so that it does not interfere with the more important business of the slaughterhouse. S. 2296, 102d Cong., 2d Sess. (1992).

Legislation has been proposed that would mandate immediate and humane euthanization of downers. *Id.* The Downed Animal Protection Act reads: "It shall be unlawful for any stockyard owner, market agency, or dealer to buy, sell, give, receive, transfer, market or hold nonambulatory livestock unless the livestock has been humanely euthanized." *Id.* § 2. A spokesman for the Livestock Marketing Association called the proposed legislation "unnecessary." *Bill Would Protect Sick Animals in Stockyards*, CHI. TRIB., July 24, 1992, at 6.

Despite the spokesman's assertion that such a measure was "unnecessary," documented cases of abuse exist. In 1991, the South Street St. Paul Livestock Market, the nation's largest stockyard, announced a policy recommendation to stop accepting downers after a concerned citizen, Beckey Sandstedt, had accumulated more than 40 hours of videotape showing the day-to-day practices at the stockyard and had threatened to make them public. Susan Reed, *Where's the Beef? Don't Ask*, PEOPLE, Aug. 19, 1991, at 91. Over a period of 18 months, Ms. Sandstedt had visited the market with her camcorder to document the suffering of downers, who had broken legs after being electrically prodded onto trucks or had collapsed out of exhaustion from the extreme heat or cold of the trip from the farm to the market. The downers were usually abandoned to "cripple chutes" and were later roped and dragged to a truck bound for the slaughter house. *Id.* The plight of downers illustrates that when economics does not require kind, compassionate treatment, industry rarely takes it upon itself to change the animals' conditions. See also discussion *infra* part II.

23. For example, chickens and turkeys kept in close quarters will often react

the conditions of the factory farm would more closely resemble the animal husbandry practices of the traditional family farm. The use of subtherapeutic doses of antibiotics makes factory farm practices feasible.²⁴ In one trade journal, a hog farmer remarked: "One reason large confinement systems have worked so well is because of antibiotics. Without the antibiotics it would be hard to have these larger systems and crowd the pigs as we do in some cases."²⁵

The widespread use of subtherapeutic doses of antibiotics in animal husbandry, however, poses a public health threat to humans, as it increasingly produces strains of antibiotic-resistant bacteria.²⁶ Some people might be unwilling to support animal husbandry reform for the sake of animals alone. Indeed, the deliberate exclusion of farm animals from animal welfare statutes indicates that at least a majority of legislators believe these animals simply do not deserve protection in the first place. The human health threats that accompany close-confinement systems, however, could prove sufficiently compelling to overcome this reluctance. Thus, animal welfare advocates pursuing improved treatment for livestock might be wise to turn their efforts from seeking the expansion of animal welfare legislation to seeking increased regulation of antibiotic usage on factory farms. This latter avenue could result in improved conditions for livestock and would likely be more politically palatable than the former approach.

This Comment explores the possibility of improving conditions for livestock on factory farms through greater regulation of the use of subtherapeutic doses of antibiotics. Part II discusses

with aggressive behavior. To remedy this, farmers "de-beak" the birds so they do not hurt each other. Birds can establish a pecking order in a flock of 100 or fewer members. When thousands of chickens or turkeys are kept together in close confinement, the instinct that governs their interactions goes haywire, and cannibalism can result. Caged birds, such as laying hens, have the opposite problem: the weakest birds of the small caged "flocks" cannot escape the stronger ones trying to establish the pecking order. The crowded conditions lead to the unnatural behavior that causes farmers to de-beak the birds. MASON & SINGER, *supra* note 9, at 22.

24. LEVY, *supra* note 4, at 138. Subtherapeutic doses administered to livestock are not intended to treat existing disease but instead are given to prevent disease and to promote growth. A subtherapeutic dose may be one to ten percent of a therapeutic dose. *Id.* at 139; see discussion *infra* part III.

25. MASON & SINGER, *supra* note 9, at 78 (citing *Is Absolute Safety Impossible?*, HOG FARM MGMT., Mar. 1978, at 98).

26. See *infra* part III.

the conditions on factory farms. It describes how chickens, pigs,²⁷ veal calves, and cattle are kept before their slaughter. Part III discusses the link between antibiotic usage in animals and health risks to humans. Part IV explains how inadequate enforcement has eviscerated existing animal welfare laws designed to protect animals in settings other than factory farms. Part V discusses how antibiotic use in livestock has been and could be challenged, and why banning subtherapeutic doses of antibiotics in animal husbandry would be the most effective way to improve the conditions on factory farms.

II. ON THE FARM: AGRIBUSINESS AND MODERN HUSBANDRY PRACTICES

Factory farming is a method of raising livestock characterized by overcrowding, restricted movement, unnatural diets, and unanesthetized surgical procedures.²⁸ The factory farm is indeed a far cry from the notion of a peaceful, bucolic farm, on which some might believe most food animals are raised. Hogs, calves, dairy cows, cattle, and poultry, however, are all subjected to methods of intensive farming.²⁹ The following sections of this Comment briefly examine the various segments of the factory farming industry in an effort to illustrate how conditions in which farm animals are actually raised differ from commonly held perceptions of conditions on farms across America.³⁰

27. In this Comment, "hogs," "swine," and "pigs" are used interchangeably. "Sows" refers to female pigs.

28. Jonny Frank, *Factory Farming: An Imminent Clash Between Animal Rights Activists and Agribusiness*, 7 B.C. ENVTL. AFF. L. REV. 423, 425 (1979). Some state animal welfare statutes protect animals not raised for food from being kept in close quarters. For example, Ohio prohibits close confinement yet specifically exempts from its prohibition "cattle, poultry or fowl, swine, sheep or goats." See OHIO REV. CODE ANN. § 959.13 (Anderson 1988). Other states list confinement as a type of inhumane treatment. For example, Florida proscribes the confinement of an animal "in any enclosure without wholesome exercise and a change of air." FLA. STAT. ANN. § 828.13 (West 1994). Florida, however, exempts "recognized husbandry practices" from these provisions. *Id.* § 828.125(5). See also MONT. CODE ANN. § 45-8-211 (1995) ("A person commits the offense of cruelty to animals if without justification the person knowingly or negligently subjects an animal to mistreatment or neglect by . . . (b) carrying or confining any animal in a cruel manner Nothing in this section prohibits . . . the use of commonly accepted agricultural and livestock practices on livestock.").

29. Frank, *supra* note 28, at 425.

30. The transition from the small family farm has been deleterious not only for animals but for industry workers as well. For example, workers in poultry plants

A. Chickens

1. Broiler Chickens

Chickens raised as broilers begin their lives at the hatchery. The first stage of raising chickens begins in laboratories that develop genetically altered strains of chickens.³¹ Broiler hens are bred to gain weight quickly so that the farmer can slaughter and sell the birds as soon as possible.

A day or two after hatching, the chicks are debeaked and their claws are clipped.³² The chicks live under warm lights that the farmers keep on most of the day to encourage feeding. After about six weeks, the birds reach the market weight of four pounds. At this point in their development, the chicks are kept in the dark for most of the day to discourage fighting.³³

The stressful confinement in which the broilers are reared can induce cannibalism. The chicken's instinct is to establish a pecking order in a flock of about a hundred birds. In a broiler shed, where the chickens are raised, thousands of birds live on the same floor. Debeaking the chickens to control the cannibalism that results from the birds' inability to establish a pecking order is a widely used practice.³⁴ One industry specialist has posited that birds resort to cannibalism as a result of "overcrowding, lack of adequate feeder or waterer space, poor ventilation, dietary deficiencies, feather change, improper lighting, failure to remove injured or crippled birds and sheer boredom."³⁵

face one of the most dangerous jobs in America. MASON & SINGER, *supra* note 9, at 148 (citing Bob Hall, *Chicken Empires*, SOUTHERN EXPOSURE, Summer 1989). Workers on the chicken assembly line commonly suffer carpal tunnel syndrome, skin disease, tendonitis, ammonia exposure, infections, and back injury, yet poultry workers earn some of the lowest wages in the food industry. *Id.*

31. Frank, *supra* note 28, at 425.

32. MASON & SINGER, *supra* note 9, at 6.

33. *Id.*

34. *Id.* at 22; J.V. Craig & H.Y. Lee, *Beak Trimming and Genetic Stock Effects on Behavior and Mortality from Cannibalism in White Leghorn-Type Pullets*, 25 APPLIED ANIMAL BEHAV. SCI. 107, 108 (1990).

35. F.D. Thornberry et al., *Debeaking Laying Stock to Control Cannibalism*, POULTRY DIG., Apr. 1975, at 205. This poultry specialist also acknowledged that "debeaking is mandatory to control cannibalism" for most commercial egg producers. *Id.*

Debeaking undoubtedly causes pain to the birds.³⁶ The practice of debeaking began in the early 1940s when a poultry farmer found that burning away the upper beaks of the chickens with a blowtorch prevented them from plucking and pulling at each others' feathers. Soon, a modified soldering iron was used, and eventually a machine called the "Debeaker" was developed to slice off the birds' beaks with a hot blade. This machine is still widely used on factory-farmed birds.³⁷

Due to the large size of the flocks, debeaking must be done as quickly as possible. The rapid rate of debeaking, about fifteen birds per minute, sometimes causes accidents. Other factors can also lead to mishaps.

An excessively hot blade causes blisters in the mouth. A cold and or dull blade may cause the development of a fleshy, bulb-like growth on the end of the mandible. Such growths are very sensitive and will cause below average performance. . . . Incomplete severance causes torn tissue in the roof of the mouth. The bird's tongue must be held away from the blade. Burned or severed tongues result in cull [worthless] hens.³⁸

A group of veterinarians appointed by the British Parliament in 1965 to investigate animal welfare concerns conducted a study to determine whether a chicken experiences pain from a properly executed debeaking. The Committee found the following:

Irrespective of whether the operation is performed competently, and in the way that meets with the general approval of the poultry industry, we are convinced that it causes considerable pain lasting for much longer than the second or so that the operation takes to perform. It has been frequently represented to us . . . that the operation is similar to the clipping of fingernails . . . of humans. There is no physiological basis for

36. H.J. Blokhuis & J.W. Van Der Haar, *Effects of Floor Type During Rearing and of Beak Trimming on Ground Pecking and Feather Pecking in Laying Hens*, 22 APPLIED ANIMAL BEHAV. SCI. 359, 360 (1989) ("As the beak of the chicken has a variety of sensor receptors, beak trimming is likely to result in sensory deficits.") (citations omitted); *id.* at 367 ("[B]eak trimming resulted in a very low level of ground pecking during rearing. . . . This may well be an effect of *acute and chronic pain* in the beak-trimmed birds. . . . The possibility that pain is an important factor in beak-trimmed birds may also explain the lower frequencies of other pecking behaviours.") (emphasis added).

37. MASON & SINGER, *supra* note 9, at 39.

38. *Id.* (quoting F.D. Thornberry et al., *Debeaking Laying Stock to Control Cannibalism*, POULTRY DIG., May 1975, at 207) (alteration in original).

this assertion. The upper mandible of the bird consists of a thin layer of horn covering a bony structure of the same profile which extends to within a millimetre or so of the tip of the beak. Between the horn and the bone is a thin layer of highly sensitive soft tissue, resembling the quick of the human nail. The hot knife blade used in debeaking cuts through this complex of horn, bone and sensitive tissue causing severe pain.³⁹

The modern husbandry practice of confining chickens in crowded conditions thus subjects these animals to some arguably painful and uncomfortable procedures.

2. Egg-Laying Hens

At the hatchery, workers separate the male chicks from the female chicks and eliminate the males by either drowning them or suffocating them in trash bags.⁴⁰ These dead chicks are then used in the manufacture of animal feed.⁴¹

From the hatchery, the chickens move to breeding farms where growers raise them to maturity.⁴² The egg producers clip the hens' beaks, just as is done in the broiler industry. Growers use light to manipulate the birds' behavior. Egg-laying hens are kept in near darkness until they are ready to lay eggs, usually after twenty weeks.⁴³ When the birds begin laying eggs, the lights are turned on to condition them to lay whenever there is light. The lights remain on for progressively longer periods, until they are lit seventeen hours per day.⁴⁴ This lengthens the hens' egg-laying day, thereby increasing production.⁴⁵

39. *Id.* at 40 (quoting R.W.R. BRAMBELL, HER MAJESTY'S STATIONARY OFFICE, REPORT OF THE TECHNICAL COMMITTEE TO ENQUIRE INTO THE WELFARE OF ANIMALS KEPT UNDER INTENSIVE LIVESTOCK HUSBANDRY SYSTEMS, 1965, CMND 2836, at 26). Moreover, debeaked birds eat less than their beaked counterparts.. L. Workman & L.J. Rogers, *Pecking Preferences in Young Chicks: Effects of Nutritive Reward and Beak-Trimming*, 26 APPLIED ANIMAL BEHAV. Sci. 115, 115 (1990).

40. Frank, *supra* note 28, at 426.

41. MASON & SINGER, *supra* note 9, at 5. Some manufacturers have responded to attacks on the method of disposing of the young male chicks by decapitating or asphyxiating them. However, some hatcheries grind up the chicks live. *Id.*

42. *Id.* at 6.

43. Frank, *supra* note 28, at 426.

44. *Id.*

45. *Id.*

This practice takes its toll on the birds' health. A chicken living in more natural conditions can live and continue to lay eggs for up to twenty years. Chickens kept on factory farms generally die after only one or two years.⁴⁶ At that point, they are processed into soup or other foods.⁴⁷

The laying hens live in conditions even more crowded than do broiler chickens. Between four and nine hens are confined to wire cages measuring from one cubic foot to four and one-half cubic feet.⁴⁸ Wire cages are more sanitary than ones with flat, solid floors, but they frustrate the chickens' need to scratch. Because the chickens cannot scratch, their claws sometimes grow so long that the birds become attached to the cage as their claws wrap around the mesh bottom.⁴⁹

Hence, although egg-laying chickens are not raised for slaughter as broiler hens are, they endure what is likely an uncomfortable existence.

B. Hogs

Although most pig farms are still family owned and operated, about ninety percent of pigs are raised in some type of confinement system.⁵⁰ The degree of confinement varies among farms.⁵¹ Farmed pigs, like chickens, are often subjected to overcrowded conditions. The degree of overcrowding is not as severe as it is in the poultry industry, but the pigs do display the unnatural and unhealthy behavior associated with overcrowding.⁵² For example, closely confined pigs frequently bite each others' tails, a problem that some farmers try to preempt by tail docking.⁵³ Pigs also suffer what is known in the pig industry as "porcine stress syndrome," which is analogous to shock in human beings.⁵⁴ Pigs

46. *Id.*

47. MASON & SINGER, *supra* note 9, at 6.

48. Frank, *supra* note 28, at 428. The dimensions of the hens' cages range from 12 cubic inches to cages 18 inches wide by 24 inches long by 18 inches high. Seven or eight hens live in a space the size of a single, unfolded page of the *New York Times*. *Id.* at 428 n.38.

49. *Id.* at 428.

50. MASON & SINGER, *supra* note 9, at 7.

51. *Id.*

52. Frank, *supra* note 28, at 431.

53. *Id.*

54. MASON & SINGER, *supra* note 9, at 22.

can drop dead from the stress of weaning, being moved between pens, being mixed with other pigs, or being shipped to market.⁵⁵

The stress and crowding can disrupt patterns of behavior between a parent pig and its piglets. The abundant sights, sounds, and smells associated with close confinement often overwhelm a pig's senses. Unable to recognize the smells or squeals of her own piglets, a sow is liable to crush her offspring under her body or hoof. Farmers attempt to prevent this problem with restrictive farrowing cells. The conditions in which these pigs are kept can also cause sows to reject their offspring, refusing to allow the piglets to suckle.⁵⁶

During the breeding phase of confinement, a pregnant sow is kept in an individual stall—known as a “gestation crate”—until a week before giving birth.⁵⁷ Although the small size of these stalls makes it easier for the farmer to feed and control the animals, it prevents the pigs from either walking or turning around.⁵⁸ The sow is then moved to another stall where she gives birth and nurses her piglets for a week. These pens are also small in order to restrict movement; typically, the sow can sit down and stand up but cannot turn around.⁵⁹ During this period, some farmers use an iron frame device called an “iron maiden” to keep the sow from moving at all.⁶⁰ These devices prevent the sow from accidentally rolling over on her piglets, a problem that could be avoided if the pig had more space in which to live.⁶¹

Other farmers forgo the iron maiden and instead implement the “nursery phase,” which allows the sow to rebreed immediately after giving birth. The nursery phase involves taking the piglets from the mother a day or two after birth and placing them either in individual cages where they are fed a liquid diet by machine, or in slatted floor pens of eight to ten square feet with about twenty- five other piglets.⁶²

When the piglets are five to six weeks old, they are transferred to finishing pens to be fattened.⁶³ The finishing pens are

55. *Id.*

56. *Id.*

57. *Id.* at 23.

58. *Id.*

59. Frank, *supra* note 28, at 430.

60. *Id.*

61. *Id.*

62. *Id.* at 430 n.56.

63. *Id.*

sometimes outdoors on cement floors; the more modern indoor ones have either slatted floors or sloped concrete floors for easier cleaning.⁶⁴ The hard floors often cause foot and leg injuries not typically suffered by hogs raised in dirt pens.⁶⁵

C. Calves

In Europe, newborn calves raised for veal are fed on their mothers' milk for a week or two, then slaughtered.⁶⁶ In contrast, the American method of veal production only seeks to imitate the look and taste of young flesh. The modern American method of raising veal calves was imported from the Dutch in the early 1970s.⁶⁷

Good veal has always been difficult to find. But recently a Dutch process has come to our shores and is giving us a limited quantity of much finer veal than was generally available before. . . . The process consists simply of taking calves from their mothers' milk to small stalls, where they are fed with vitamins and powdered milk that contains no iron to darken the flesh. Also, the calves are kept comparatively quiet during their milk regime. Thus, they have delicate whitish-pink flesh and clear fat and are deliciously tender.⁶⁸

To maximize profits, however, American farmers wait until the calf is about fifteen weeks old, and therefore heavier, before slaughtering it.⁶⁹ To make the older calves' flesh look like that of younger calves, the day-old calves are separated from their mothers and placed into a stall too small for the calves to turn around. This confinement system prevents them from developing reddish muscle or from burning too many calories.⁷⁰

64. *Id.*

65. *Id.* at 430-31. See also BETH LAUTNER, NATIONAL PORK BOARD, TAKE STEPS TO AVOID DOWNED HOGS, reprinted in 138 CONG. REC. S3722, S3724-5 (daily ed. Mar. 13, 1992).

66. David B. Kopel, *Calf Cruelty Is Not Necessary*, HOUS. POST, Apr. 24, 1989, at A17, reprinted in 135 CONG. REC. 16,209 (1989).

67. MASON & SINGER, *supra* note 9, at 180.

68. JAMES BEARD, AMERICAN COOKERY 331-32 (1972), reprinted in MASON & SINGER, *supra* note 9, at 180.

69. MASON & SINGER, *supra* note 9, at 13, 16.

70. *Id.* at 12, 28.

Farmers feed their calves an iron-poor diet to produce meat that resembles younger, whiter flesh.⁷¹ A veal calf's diet consists of powdered milk, water, vitamins, sulfa drugs, mold inhibitors, and antibiotics, which the calf takes from a plastic bucket hung in front of its pen.⁷² The tight confinement leaves no place for the calf to defecate. The calf usually ends up sitting in its own excrement and breathing the ammonia gas produced by the excrement, which often leads to respiratory disorders.⁷³

These unhealthy conditions make the calf extremely susceptible to disease, including intestinal disorders and pneumonia.⁷⁴ About ten percent of veal calves die before slaughter.⁷⁵ This number would be higher but for the large doses of antibiotics administered to the calves daily.

D. Cattle

The beef cattle industry employs the least confining method of husbandry. Cows are free to graze until the age of one or two years, when they are transferred to feedlots to fatten during the few months before slaughter.⁷⁶ Perhaps because they do not use the total confinement systems used in the production of pork, veal, and chicken, cattle farmers have responded to the controversy surrounding the use of drugs by claiming that they no longer add antibiotics to the feed, although they do use hormones and hormone substitutes to promote growth.⁷⁷ Although husbandry practices in the beef industry are not paradigms of animal welfare, beef cattle lead less restricted and consequently more comfortable lives than do other farm animals. Beef industry practices provide proof that where farmers do not use total confinement systems, subtherapeutic doses of antibiotics are not necessary.

71. Frank, *supra* note 28, at 431-32. Stalls also lack bedding or straw to prevent the calves from eating the iron-rich straw. *Id.*

72. MASON & SINGER, *supra* note 9, at 12-13.

73. Frank, *supra* note 28, at 432.

74. MASON & SINGER, *supra* note 9, at 25, 28.

75. Thomas A. Decapo, *Challenging Objectionable Animal Treatment with the Shareholder Proxy Proposal Rule*, 1988 U. ILL. L. REV. 119, 124.

76. MASON & SINGER, *supra* note 9, at 14..

77. *Id.* at 66-67.

III. ANTIBIOTIC USE ON THE FARM: ANIMAL WELFARE AND THE THREAT OF ANTIBIOTIC-RESISTANT BACTERIA

Farmers deny the need for regulation of animal welfare during cultivation by arguing that they already treat animals well for economic reasons. Treating animals well makes economic sense because it yields a better product.⁷⁸ However, this argument fails to address the fact that the use of antibiotics in livestock farming makes drugs a substitute for humane treatment.⁷⁹

For the past forty years, farmers have given their animals feed laced with small doses of antibiotics to prevent bacterial infection and to promote growth.⁸⁰ This practice began after veterinarians experimented with administering antibiotics to sick animals to determine if the miracle drugs that save so many human lives could also help livestock.⁸¹ This humble experiment led veterinarians and farmers to the serendipitous discovery that lacing animals' feed with small doses of the drugs not only treats existing disease but also prevents infection and enhances growth.⁸²

This discovery created a whole new industry: the manufacture and distribution of antibiotic-laced feed.⁸³ The doses of antibiotics administered to livestock were below the level used to treat disease; they were therefore regarded as "nutritional," rather than therapeutic, by the producers and governmental agencies regulating the industry.⁸⁴ Consequently, the antibiotics could be sold without a prescription and were often sold as additives in premixed feed.⁸⁵

78. Neil D. Hamilton, *Feeding Our Future: Six Philosophical Issues Shaping Agricultural Law*, 72 NEB. L. REV. 210, 245 (1993).

79. See LEVY, *supra* note 4, at 137-56. As a biology professor from Rutgers University pointed out in a letter to the *New York Times*, "[t]hese drugs are unnecessary and less effective for promoting growth in chickens, pigs and cattle that are raised under traditional methods in humane and uncrowded conditions." David Ehrenfeld, *What Agribusiness Is Doing to Agriculture*, N.Y. TIMES, Sept. 16, 1984, §4, at 22.

80. LEVY, *supra* note 4, at 138.

81. *Id.* at 137-38.

82. *Id.* at 138.

83. *Id.* at 139.

84. *Id.*

85. *Id.*

The effect of antibiotics on the animals' growth appears to be diminishing. Over time, farmers have had to increase gradually the amounts of antibiotics fed to the animals to maintain the same rate of growth per pound of laced feed.⁸⁶ Approximately eighty percent of the antibiotics fed to animals are used to promote growth, not to treat disease.⁸⁷ This amounts to fifteen to seventeen million pounds of antibiotics used subtherapeutically each year in this country alone.⁸⁸

The use of antibiotics for growth enhancement has stirred controversy since the 1970s.⁸⁹ Critics' concerns appeared unfounded at first: the animals did not have allergic reactions, the antibiotics were not being passed on to the consumers in their food, and antibiotic-resistant strains of bacteria had not emerged.⁹⁰ Unfortunately for agribusiness, the initial glowing reports were premature. It now appears that resistant strains of bacteria had been developing undetected from the beginning.⁹¹ Bacteria on the skin and in the intestines of food animals, for example, are largely immune to many antibiotics.⁹²

Stuart Levy, a microbiologist and professor at Tufts University School of Medicine, has been a crusader in the medical community for more judicious administration of antibiotics to humans and for an end to the subtherapeutic use of antibiotics in livestock. In his recent book, *The Antibiotic Paradox: How Miracle Drugs Are Destroying the Miracle*,⁹³ Levy argues that the livestock industry's use of antibiotics for growth enhancement contributes to the increasing ineffectiveness of antibiotics in treating infections in humans.⁹⁴

Levy, along with a growing number of his colleagues, argues that overuse of antibiotics presents a risk to human health.⁹⁵

86. *Id.* at 142. In the 1950s, for example, five to ten parts per million of tetracycline achieved the same rate of growth enhancement that 50-200 parts per million achieve today. *Id.*

87. *Id.* at 140.

88. *Id.*

89. *Id.* at 141.

90. *Id.*

91. *Id.*

92. *Id.*

93. LEVY, *supra* note 4.

94. *Id.* at 141.

95. See LEVY, *supra* note 4; see also, e.g., Lisa Scott, *Restraint on the Use of Antibiotics Urged*, MOD. HEALTHCARE, June 13, 1994, at 47; John Travis, *Reviving the Antibiotic Miracle? Antibiotic Research: Resistance to Antibiotics*, SCIENCE, Apr. 15,

Antibiotics kill most of the bacteria present in an animal's system. A few mutant bacteria, resistant to the antibiotics, remain.⁹⁶ When the nonresistant bacteria are killed by the antibiotic, resistant mutant bacteria can reproduce in an environment free from competitor bacteria.⁹⁷ Due to bacteria's high rate of reproduction, the resistant bacteria now flourish, passing on their resistance to millions of offspring within hours.⁹⁸

Sometimes mutant bacteria are harmless or are susceptible to a different antibiotic. And, of course, the risk that a harmful mutant bacteria will develop is present every time anyone takes an antibiotic to treat an infection. The overuse of antibiotics facilitates this process, however, giving the bacteria an advantage in the race between scientists developing new antibiotic drugs and bacteria evolving to resist them.⁹⁹ Human overuse certainly contributes to this problem, but the volume of antibiotics administered to animals vastly exceeds the amount taken by humans.¹⁰⁰ Eliminate most agricultural usage and bacteria's evolution would likely slow down to a pace that would allow researchers to stay ahead with new, effective antibiotics.

Opponents of antibiotic-laced feed argue that the subtherapeutic use of antibiotics creates a fertile ground for new, antibiotic-resistant bacteria to develop, and that these bacteria will be passed on to the human population.¹⁰¹ In 1970, England banned the use of subtherapeutic drugs in food animals after a committee of British microbiologists and doctors concluded that the practice threatened human health.¹⁰² The committee reasoned that subtherapeutic doses over a prolonged period "produced a strong selection for resistant bacteria in the animal intestinal flora."¹⁰³ The committee believed this phenomenon to

1994, at 360.

96. LEVY, *supra* note 4; see also Scott, *supra* note 95; Travis, *supra* note 95; Karen Schmidt, *The Troubling Ghosts of Scourges Past*, U.S. NEWS & WORLD REP., Oct. 26, 1992, at 70.

97. LEVY, *supra* note 4.

98. *Id.*

99. *Id.*

100. Marjorie Sun, *Use of Antibiotics in Animal Feed Challenged*, SCIENCE, Oct. 12, 1984, at 144.

101. See LEVY, *supra* note 4; Sharon Begley, *The End of Antibiotics?* NEWSWEEK, Mar. 7, 1994, at 63.

102. LEVY, *supra* note 4, at 141.

103. *Id.*

be a threat to human health, citing instances where salmonella was traced from animals to people.¹⁰⁴

To achieve such a ban in the United States, there must be a definite link established between the antibiotic-resistant bacteria that cause human disease and the use of subtherapeutic doses of antibiotics in animals.¹⁰⁵ Because the drugs being fed to animals are the same ones used to treat human diseases, however, resistance could result from either usage.¹⁰⁶ Ironically, using the same antibiotics in humans and animals increases the risk of the proliferation of antibiotic-resistant bacteria, yet it makes the link between the bacteria infecting animals and that infecting humans more difficult to prove.

New research, however, may establish the link more clearly. In the past few decades, microbiologists concerned with the threat of infections impervious to antibiotic treatment have been researching the links between long-term antibiotic use in animals and human antibiotic resistance. In 1982, a Harvard researcher published a study reporting a new laboratory technique for demonstrating that animal and human bacteria share genetic material that codes for drug resistance.¹⁰⁷ In 1984, the Centers for Disease Control conducted a study concluding that there was a direct connection between antibiotic feed additives and eighteen severe salmonella poisonings the previous year.¹⁰⁸ The victims had shared one trait: they had all eaten hamburger during the week before they got sick.¹⁰⁹ The study used a genetic "fingerprinting" technique and computerized slaughterhouse records to trace the food poisoning to a South Dakota farm where the cattle ate grain laced with tetracycline.¹¹⁰ In twelve of the cases, the victims had been taking antibiotics that had killed competing bacteria, allowing the resistant bacteria to flourish.¹¹¹

104. *Id.* at 142. Unfortunately, Britain's 25-year-old ban does not provide an effective model to examine the effects of the ban on animal welfare because the farmers can still obtain the antibiotics by prescription. Consequently, the reduction in use was not as substantial as was expected. Sun, *supra* note 100, at 144.

105. LEVY, *supra* note 4, at 142.

106. *Id.*

107. Sun, *supra* note 100, at 144.

108. Scott D. Holmberg et al., 311 NEW ENG. J. MED. 617 (1984).

109. LEVY, *supra* note 4, at 152.

110. Bill Keller, *Ties to Human Illness Revive Move to Ban Medicated Feed*, N.Y. TIMES, Sept. 16, 1984, § 1, at 1.

111. *Id.* The study was described by several scientists as the "smoking gun" that would provide FDA with the evidence it needed to ban antibiotics in animal feed. *Id.*

Professor Levy studied whether bacteria could easily spread from one species to another. His researchers tracked the natural spread of a particular strain of bacteria, *Escherichia coli* ("*E. coli*"). The researchers isolated an *E. coli* from one calf, marked it for tracking purposes, and returned it to the calf. Soon, the *E. coli* had colonized the calf and spread to the mice sharing its barn, then to pigs, chickens, flies, and wild turkeys. Many of the animals colonized by the *E. coli* lived significant distances from the calf. Eventually, the human caretakers began excreting the *E. coli*.¹¹² The same experiment conducted on pigs led Levy to conclude that this bacteria could colonize the intestines of many different species.¹¹³

Humans can pick up these resistant strains of bacteria in several ways. Farm workers do so in their everyday contact with animals; consumers pick them up by eating contaminated foods.¹¹⁴ One can also come into contact with animals' resistant genes and bacteria through foods fertilized with manure.¹¹⁵ The resistant bacteria multiply, remain in the soil, and are retained in the foods harvested.¹¹⁶ The resistant bacteria can enter the body through the mouth or nose and, when swallowed, enter the intestinal tract.¹¹⁷ While in most cases these bacteria are benign, some strains are not.¹¹⁸

Overcrowded conditions on the farm contribute to the need for such antibiotic use. The closer the confinement, the greater the chance that an infectious disease will afflict the herd. Confinement also makes it less likely that an animal will grow to the size it could if raised outdoors, with plenty of fresh air, exercise, and sunlight.¹¹⁹ As evidence for the link between antibiotic use in animals and human illness mounts—as it appears likely to do—a ban on antibiotic use will become more feasible. Such a ban would serve two ends: it would ameliorate some of the overcrowded conditions in which farm animals live, and it would protect human health.¹²⁰

112. LEVY, *supra* note 4, at 148.

113. *Id.*

114. *Id.* at 143.

115. *Id.*

116. *Id.*

117. *Id.* at 144.

118. *Id.*

119. MASON & SINGER, *supra* note 9, at 88.

120. Unfortunately, while a ban would substantially alter the farming practices

IV. THE FAILURE OF EXISTING ANIMAL WELFARE LEGISLATION TO PROTECT ANIMALS: INADEQUATE GOVERNMENTAL ENFORCEMENT AND JUDICIAL UNWILLINGNESS TO RECOGNIZE PRIVATE PARTY STANDING TO SUE ON BEHALF OF STATUTORILY PROTECTED ANIMALS

The inhumane conditions on factory farms result from the incongruity between humanitarian concerns for animals and economic incentives. This problem could be remedied by the law in two ways: by reforming animal welfare statutes to include protection from inhumane husbandry practices,¹²¹ or by regulating more heavily the use of antibiotics on the farm.¹²² Although the former is a more direct avenue, the latter is a more feasible alternative. Agribusiness has an enormous stake in maintaining the current methods of husbandry, and it is unlikely that humanitarian concern for animals alone could overcome the opposition that would likely be mounted if proposals to alter husbandry practices were seriously entertained by state or federal legislators.¹²³

The ideal solution, of course, would be a statute to protect farm animals. Sweden implemented such a statute in 1988, which could serve as a model for legislation in this country.¹²⁴ However, even if a law like Sweden's could overcome enormous political opposition and become law in the United States, likely problems with its enforcement would still prevent meaningful reform. Existing animal welfare laws are enforced by various governmental agencies. Private citizens and animal welfare advocacy groups, however, have alleged that the government has

involving veal calves and swine, for example, the industries that use the antibiotics least would be least affected. It is unlikely, then, that a ban would drastically improve the conditions on poultry farms since less than 20% of poultry producers use antibiotics in poultry feed. LEVY, *supra* note 4, at 154.

121. See Steve Lohr, *Swedish Farm Animals Get a Bill of Rights*, N.Y. TIMES, Oct. 25, 1988, at A1.

122. See discussion *supra* part III.

123. See *infra* note 215.

124. Lohr, *supra* note 121. The Swedish law grants grazing rights to cows, prohibits the tethering of pigs, and requires that pigs be given separate straw and feeding places. Cows and pigs must have access to straw and litter, and chickens may not be kept in cramped cages. The use of antibiotics is also prohibited, except to treat disease. These statutory requirements were phased in over a period of several years to help the farmers make the transition to free-range farming. *Id.* Free-range farming means raising animals without complete confinement.

not adequately enforced these statutes. When advocates have attempted to use the courts to enforce the statutes themselves, they have generally been blocked by rigid standing requirements.¹²⁵

A. *The Difficulty Private Plaintiffs Face in Bringing Lawsuits in Federal Courts Under Animal Welfare Statutes*

Under Article III of the United States Constitution, courts have power only over actual cases or controversies.¹²⁶ One aspect of that requirement is that "the litigant is entitled to have the court decide the merits of the dispute or of particular issues."¹²⁷ Only a party having a sufficient stake in the controversy has "standing" to sue.¹²⁸

To establish standing, a plaintiff must satisfy three separate, but intertwined, criteria.¹²⁹ The party must show that he or she has suffered, or will suffer, an actual injury as a result of the conduct in question. Second, the injury must be traceable to the defendant's actions. Finally, the harm must be redressable by the relief requested.¹³⁰ In addition to these three constitutional requirements, the Supreme Court has further limited standing to a plaintiff that falls within a statute's "zone of interests," if that plaintiff seeks judicial review under the Administrative Procedure Act.¹³¹ The zone-of-interest analysis requires that the prospective litigant show either a congressional intent to protect

125. See, e.g., *Animal Legal Defense Fund v. Espy*, 23 F.3d 496 (D.C. Cir. 1994) (holding that plaintiffs challenging USDA's regulations lacked standing).

126. U.S. CONST. art. III, § 2, cl. 1. ("The judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, under their Authority; . . . to Controversies to which the United States shall be a party;—to Controversies between two or more States;—between a State and Citizens of another State;—between Citizens of different States; . . . and between a State, or Citizens thereof, and foreign States, Citizens, or Subjects.")

127. *Animal Legal Defense Fund v. Quigg*, 932 F.2d 920, 925 (D.C. Cir. 1991) (citing *Warth v. Seldin*, 422 U.S. 490, 498 (1975)).

128. *Id.* (citing *Sierra Club v. Morton*, 405 U.S. 727, 731-32 (1972)).

129. *Id.*

130. *Id.*

131. See *Clarke v. Securities Indus. Ass'n*, 479 U.S. 388, 399 (1987); *Quigg*, 932 F.2d at 925. The Court has required litigants to fall "within the zone of interest addressed by the substantive provisions of the law they seek to invoke." *Id.* at 937 (citing *Air Courier Conference of Am. v. American Postal Workers Union*, 498 U.S. 517 (1991)).

or regulate the interest asserted or some indication that the plaintiff is particularly suited to pursue the interest in court.¹³²

Animal welfare advocates have had little success satisfying the standing requirements to sue on behalf of animals under federal animal welfare statutes.¹³³ *Animal Legal Defense Fund v. Espy*¹³⁴ illustrates the problems that animal welfare advocates face when challenging inadequate enforcement of an animal welfare statute. The plaintiffs brought suit against the United States Department of Agriculture ("USDA") under the Administrative Procedure Act, challenging a regulation promulgated by the Secretary of Agriculture.¹³⁵ The plaintiffs claimed the Secretary's failure to include birds, rats, and mice in its regulatory definition of "animals" violated the Animal Welfare Act.¹³⁶

The plaintiffs in *Espy* were two individuals and two organizations. One of the individual plaintiffs was a psychobiologist who had worked for sixteen years in laboratories covered by the Animal Welfare Act. She alleged that the agency's failure to include rats and mice in its definition rendered her "unable to effectively control the care and treatment these institutions afforded the rats and mice she used" and that the "inhumane treatment of these animals would directly impair her ability to perform her professional duties as a psychobiologist."¹³⁷ The court held that her alleged injuries were neither sufficiently concrete nor imminent to create a justiciable claim. The court found her claims too speculative to satisfy standing requirements.¹³⁸ An ethical dilemma that would affect the plaintiff's ability to function in her chosen career was not sufficient to confer standing.

The two plaintiff organizations, the Animal Legal Defense Fund ("ALDF") and the Humane Society of the United States ("HSUS"), also requested that the Secretary of Agriculture reconsider the exclusion of birds, rats, and mice.¹³⁹ The ALDF

132. *Animal Legal Defense Fund v. Espy*, 23 F.3d 496, 502 (D.C. Cir. 1994) (citing *First Nat'l Bank & Trust Co. v. National Credit Union Admin.*, 988 F.2d 1272, 1275 (D.C. Cir. 1993), *cert. denied*, 114 S. Ct. 288 (1993); *Hazardous Waste Treatment Council v. Thomas*, 885 F.2d 918, 923-24 (D.C. Cir. 1989)).

133. *See, e.g., Espy*, 23 F.3d 496.

134. *Id.*

135. *Id.* at 497.

136. *Id.* at 497-98.

137. *Id.* at 499-500.

138. *Id.* at 500.

139. *Id.* at 501.

and the HSUS claimed that the exclusion hampered "their attempts to gather and disseminate information on laboratory conditions for those animals."¹⁴⁰ They claimed that if the definition were broadened, laboratories would have to provide information about these animals to the Secretary of Agriculture, who would then include it in the annual report to Congress.¹⁴¹ The plaintiffs also alleged that the restricted definition made it difficult for the organizations to educate laboratories about the humane treatment of birds, mice, and rats because there was no legal requirement that laboratories consider their animals' welfare. The court found that although the plaintiffs satisfied "informational standing,"¹⁴² they fell outside the "zone of interest" protected or regulated by the Animal Welfare Act.¹⁴³ In summary, *Espy* held that all the plaintiffs lacked constitutional standing and did not fall within the Animal Welfare Act's zone of interest; they therefore could not secure judicial review under the Administrative Procedure Act.¹⁴⁴

For a plaintiff organization to have standing, it must couch the harm it is trying to prevent, or have redressed, as a human harm.¹⁴⁵ The arguments made by the plaintiff organizations in *Espy* demonstrate this point. Those organizations exist to protect the welfare and rights of animals. Yet to carry out this function in court, they must frame any allegations concerning abuse to animals in terms of the harm such abuse causes humans, unless, of course, the statute provides those organizations with the power to enforce the statute directly.¹⁴⁶

140. *Id.*

141. *Id.*

142. See *Animal Legal Defense Fund v. Yeutter*, 760 F. Supp. 923 (D.D.C. 1991). Although an informational injury satisfies the constitutional requirements of Article III, it does not fall within the zone of interest protected by the Animal Welfare Act. Informational standing involves an injury to the plaintiff organization that hinders its ability to disseminate information about the treatment and conditions of animals to its members. To sustain informational standing, "a plaintiff must assert a plausible link between the injury to their organizational activities and the agency action." *Id.* at 926-27.

143. *Espy*, 23 F.3d at 501-02.

144. *Id.* at 502.

145. See *Espy*, 23 F.3d 496.

146. See, e.g., *Humane Soc'y v. Lyng*, 633 F. Supp. 480 (W.D.N.Y. 1986) (holding that the Humane Society had standing to challenge a federal regulation requiring dairy farmers admitted to the Dairy Termination Program to hot brand their cows because New York State law specifically authorized the Humane Society to prosecute violations of animal cruelty laws).

*International Primate Protection League v. Administrators of the Tulane Educational Fund*¹⁴⁷ further illustrates the problems that animal welfare and animal rights organizations face when trying to protect animals under animal welfare statutes.¹⁴⁸ In *International Primate*, the plaintiffs sued to enjoin the defendant from euthanizing three monkeys for medical research.¹⁴⁹ The plaintiffs, the People for the Ethical Treatment of Animals, the International Primate Protection League, the Animal Law Enforcement Association, and several individuals, claimed that the personal relationships they had established with the monkeys would be permanently disrupted if the monkeys were put to sleep.¹⁵⁰ The court declared the injury insufficient to meet the requirements of Article III because the plaintiffs lacked any right to continue their relationships with the monkeys.¹⁵¹ Killing the monkeys would have no "direct sensory impact" on [the plaintiffs'] own environment or on any environment to which [their] member[s] would have access."¹⁵² The court reasoned that if protecting the animals would affect the plaintiffs' rights to watch and enjoy the animals in the wild, for example, the case would be different.¹⁵³ The plaintiffs had no right to enjoy these animals because they were laboratory animals.

The plaintiffs further argued that they had a "long-standing, sincere commitment" to preventing animal cruelty, and their "aesthetic, conservational and environmental interests" would be affected by the euthanization of the monkeys.¹⁵⁴ The court found this argument also to be insufficient to confer standing under Article III. If a special interest were enough to entitle an organization to commence litigation, it reasoned, there would be

147. 895 F.2d 1056 (5th Cir. 1990), *rev'd on other grounds*, 500 U.S. 72 (1991).

148. *Id.* The holding on the standing issue was later reversed by the Supreme Court in *International Primate Protection League v. Administrators of the Tulane Educ. Fund*, 500 U.S. 72 (1991). The ruling, however, was based on a jurisdictional issue that affected the plaintiffs' rights personally as litigants; the standing decision was not reversed based on the plaintiffs' arguments as to the harm they suffered because of the animals' alleged suffering. *Id.*

149. 895 F.2d at 1057.

150. *Id.* at 1057, 1059.

151. *Id.* at 1059 (citing *International Primate Protection League v. Institute for Behavioral Research*, 799 F.2d 934, 938 (4th Cir. 1986)).

152. *Id.* (citing *Animal Lovers Volunteer Ass'n v. Weinberger*, 765 F.2d 937 (9th Cir. 1985)).

153. *Id.*

154. *Id.* at 1060.

no basis ever to reject a suit by any bona fide special interest group. Moreover, there would be no rational basis for denying any individual with the same bona fide special interest standing to sue.¹⁵⁵

The plaintiffs' third argument was that they were acting as the monkeys' advocates and that that objective would be severely impaired by the monkeys' destruction.¹⁵⁶ To deny the plaintiffs standing would leave the monkeys unprotected.¹⁵⁷ The court rejected this argument and held that "the mere fact that the monkeys would be left without an advocate in court does not create standing where it otherwise does not exist."¹⁵⁸ The court therefore dismissed the case.¹⁵⁹

Espy and *International Primate* illustrate the difficulties that private citizens and organizations face when trying to enforce animal welfare statutes or challenge administrative regulations. The harm alleged is a thin guise for the special interest the plaintiffs have in protecting the animals for the animals' sake. If legislation were passed granting protection to farm animals, then the animals might still be at the mercy of the USDA or whichever agency is in charge of enforcing the laws and making the pertinent regulations, unless standing requirements were broadened.¹⁶⁰

*B. Jones v. Butz: A Successful Case for Plaintiffs'
Standing Based on Alleged Human Harm*

Plaintiffs could more easily meet standing requirements if they could assert a more direct human harm rather than a generalized objection to animal cruelty. In *Jones v. Butz*,¹⁶¹ the plaintiffs asserted harm based on an alleged deficiency in the Humane Slaughter Act (the "Act").¹⁶²

155. *Id.* (citing *Sierra Club v. Morton*, 405 U.S. 727, 739 (1972)).

156. *Id.* at 1060-61.

157. *Id.* at 1061.

158. *Id.*

159. *Id.* at 1062.

160. For example, the USDA has the power to enforce the Humane Slaughter Act, 7 U.S.C. § 1904 (1988), and the Laboratory Animals Welfare Act, 7 U.S.C. § 2146 (1988 & Supp. 1995).

161. 374 F. Supp. 1284 (S.D.N.Y. 1994).

162. 7 U.S.C. §§ 1901-1906 (1988).

The action involved a challenge to the Act based on the First Amendment's Free Exercise and Establishment Clauses.¹⁶³ Specifically, the plaintiffs claimed that the Act's provision permitting ritual slaughter of animals amounted to a governmental preference for a particular religious group.¹⁶⁴

Under the Humane Slaughter Act, a slaughter must comport with the Act's general requirement that the animal be "rendered insensible to pain by a single blow or a gunshot or an electrical, chemical, or other means that is rapid and effective, before being shackled, hoisted, thrown, cast or cut."¹⁶⁵ This requirement furthers the Act's stated policy that animals be treated kindly by assuring that the "slaughtering of livestock and the handling of livestock in connection with slaughter be carried out only by humane methods."¹⁶⁶

One section of the Act, however, permits slaughter in accordance with the ritual requirement of Judaism, which entails the slaughter of a conscious animal.¹⁶⁷ Due to sanitary concerns, however, the USDA now requires that the animals be shackled and hoisted off the floor prior to slaughter.¹⁶⁸ The plaintiffs in *Jones v. Butz* contended that this practice did not comport with the policy of humane slaughter set forth in the Act because the animals remained conscious during the shackle, hoist, and slaughter.

The *Jones* plaintiffs were six individuals and three organizations with a professed commitment to the humane treatment of animals and to the separation of church and state.¹⁶⁹ The complaint alleged that each of the plaintiffs was a taxpayer and that two of the plaintiffs had refused to eat meat because of the alleged inhumane treatment of the animals before their slaughter. The other individual plaintiffs were consumers of meat who

163. U.S. CONST. amend. I ("Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof . . .").

164. *Jones*, 374 F. Supp. at 1285.

165. 7 U.S.C. § 1902(a) (1988).

166. *Id.* § 1901.

167. *Id.* § 1902(b).

168. *Jones*, 374 F. Supp. at 1288. The shackle and hoist method involves shackling the animal's legs and lifting it off the floor, prior to its slaughter. *Id.* at 1294 n.8.

169. *Id.* at 1286.

had, at times, eaten meat slaughtered according to the method allowed by the religious exception contained in the Act.¹⁷⁰

The court held that the question of standing did not present a serious obstacle to the consideration of the claim on its merits.¹⁷¹ The plaintiffs contended that they, as taxpayers, had sustained the requisite injury because federal funds are sometimes used to buy meat. They also alleged injury as consumers of meat because they could not, as a practical matter, distinguish between meat produced according to the differing standards set forth in the Act. Because of this uncertainty, the plaintiffs claimed that if they chose to eat meat they were "forced to eat ritually prepared meat."¹⁷² The final claim of injury was that the plaintiffs were citizens whose moral, religious, and aesthetic principles were offended because they were unable to avoid the ritually prepared meat.¹⁷³

The court stated that the plaintiffs' injuries may reflect "aesthetic, conservational, and recreational" values.¹⁷⁴ It further stated that "an identifiable trifle is enough for standing to fight out a question of principle; the trifle is the basis for standing and the principle supplies the motivation."¹⁷⁵ The plaintiffs' commitment to the humane treatment of animals and to the separation of church and state was undisputed and provided the requisite motivation. The only question was whether the alleged injury was sufficient for the court to conclude that the issues would be framed with the requisite specificity, the issues contested with the "necessary adverseness," and the litigation pursued with the "necessary vigor" to make the controversy capable of judicial resolution.¹⁷⁶ The court found that the plaintiffs' alleged injuries as taxpayers and consumers resolved that question in their favor and sustained their standing.¹⁷⁷

170. *Id.*

171. *Id.*

172. *Id.* at 1288.

173. *Id.*

174. *Id.* (citing *Sierra Club v. Morton*, 405 U.S. 727, 738 (1972)).

175. *Id.* (citing *United States v. Students Challenging Regulatory Agency Procedures (SCRAP)*, 412 U.S. 669 (1973)).

176. *Id.*

177. *Id.* The merits of *Jones* turned on the question of whether the Jewish method of slaughter was humane. The plaintiffs challenged the notion that allowing animals to be slaughtered in accordance with Jewish ritual was consistent with the policy of humane slaughter. The court determined that Congress had considered the Jewish method of slaughter to be humane when it enacted the provision and,

This recognition of the consumers' right to sue based on how the relevant law affected the way the product was made seems to open a door for plaintiffs to use the courts to change the circumstances under which animals are raised for food production. Clearly, a plaintiff will not have standing to sue a factory farmer based on the unpleasant conditions of the farm because such a suit does not involve a legally recognized right. The situation of farm animal is like that of the laboratory animals in *International Primate Protection League*—the conditions in which the animals are kept on the farm would also lack a “direct sensory impact’ on [the plaintiffs’] own environment or on any environment to which [their] member[s] would have access.”¹⁷⁸

However, due to the increasingly well-documented connection between antibiotic use in animals and increased resistance to antibiotics in humans,¹⁷⁹ standing to sue to prevent farmers from using these drugs may be the way to effect changes in the conditions on farms. The threat of antibiotic-resistant bacteria creates a risk that humans will become contaminated with bacteria that do not respond to traditional antibiotic therapy. The human harm alleged—the risk of these bacteria being transmitted through meat—is precisely the kind of harm courts require to recognize a plaintiff's standing.

V. ATTACKING THE SUBTHERAPEUTIC USE OF ANTIBIOTICS

A. Consumer Protection Statutes

The use of antibiotics in veal calves has raised special concerns. *Animal Legal Defense Fund of Boston v. Provimi Veal Corp.*¹⁸⁰ addressed the issue of whether the plaintiffs had a valid claim that the defendant veal producers were misleading consumers by not warning them that veal calves were administered subtherapeutic doses of antibiotics as growth hormones.¹⁸¹

therefore, that allowing Jewish ritual slaughter was not inconsistent with the policy set forth in § 1901 of the Humane Slaughter Act. The importance of *Jones* lies not in its holding but in its recognition of consumers' standing to sue.

178. *International Primate Protection League v. Administrators of the Tulane Educ. Fund*, 895 F.2d 1056, 1057 (5th Cir. 1990) (citing *Animal Lovers Volunteer Ass'n v. Weinberger*, 765 F.2d 937 (9th Cir. 1985).

179. See discussion *supra* part III.

180. 626 F. Supp. 278 (D. Mass. 1986).

181. *Id.* The plaintiffs also claimed that the veal producers should be required

The Animal Legal Defense Fund ("ALDF") claimed that consumers have a right to know not only that the calves were mistreated but also that the calves' feed was laced with growth promotants.¹⁸²

The court, however, held that the plaintiffs' claims were preempted by the comprehensive federal scheme regulating the labeling, packaging, and marketing of meat and the use of medicated animal feeds.¹⁸³ Medicated animal feeds must be approved by the Food and Drug Administration ("FDA") before they can be marketed.¹⁸⁴ Meat and meat products that are shipped in interstate commerce are regulated by the Federal Meat Inspection Act ("FMIA"), which is administered by the USDA.¹⁸⁵ The court in *Provimi* stated that the Federal Food, Drug, and Cosmetic Act ("FDCA")¹⁸⁶ and the FMIA together form a comprehensive regulatory scheme to "protect the health and welfare of consumers and to prevent and eliminate burdens on commerce by assuring that meat and poultry products are wholesome and properly labeled."¹⁸⁷

The court conceded that veal containing bacteria resistant to antibiotics is adulterated within the meaning of the FDCA.¹⁸⁸ The court cited the 1984 Centers for Disease Control study that traced an outbreak of human food poisoning caused by an antibiotic-resistant strain of salmonella to animals fed sub-therapeutic doses of antibiotics.¹⁸⁹ Such a link between the use of

under a Massachusetts consumer protection statute to make consumers aware of the inhumane conditions under which the veal calves were raised and of the antibiotics used in the animals' cultivation. *Id.* (citing MASS. GEN. L. ch. 93A, §§ 1-11 (1985 & Supp. 1994)). The court, without addressing the issue of standing, held that the plaintiffs had no legitimate cause of action against *Provimi*. *Id.* at 280. The District Court of Massachusetts held that the conditions in which the animals were raised were the subject of state animal cruelty statutes and, therefore, the concern of local authorities. *Id.* at 279. To hold for the plaintiffs would circumvent the role of the public prosecutor. The court, therefore, refused to grant an injunction in a private lawsuit against the alleged violators of animal welfare provisions specifically addressed by a criminal statute. *Id.* at 280.

182. *Id.* at 279.

183. *Id.*

184. *Id.* at 282 (citing 21 U.S.C. § 360b(m) (1972)).

185. *Id.* (citing 21 U.S.C. §§ 601-695 (Supp. 1985)).

186. 21 U.S.C. §§ 301-392 (1972).

187. *Provimi*, 626 F. Supp. at 282; see also *National Pork Producers Council v. Bergland*, 631 F.2d 1353, 1361 (8th Cir. 1980), cert. denied, 450 U.S. 912 (1981); *American Pub. Health Ass'n v. Butz*, 511 F.2d 331, 332 (D.C. Cir. 1974).

188. *Provimi*, 626 F. Supp. at 283.

189. *Id.* (citing Scott D. Holmberg et al., 311 NEW ENG. J. MED. 617 (1984)); see

subtherapeutic doses of antibiotics and human harm, however, would not suffice unless the plaintiffs could allege that *Provimi* had sold veal in Massachusetts contaminated with antibiotic-resistant salmonella.¹⁹⁰ The court further stated that even if the ALDF could make such a claim, the FDCA does not imply a private right of action: "Massachusetts cannot confer on private citizens the power to enforce a federal statute whose enforcement Congress left to federal administrative agencies."¹⁹¹

Provimi demonstrates that the battle to restrict or abolish the use of subtherapeutic doses of antibiotics in animals might not be fought and won in the courtroom. The *Provimi* court did not dismiss the serious concerns that these subtherapeutic doses in animal feed raise.¹⁹² It did state, however, that the decision to allow the subtherapeutic use of antibiotics is in the hands of Congress and governmental regulatory agencies.¹⁹³

B. *The Possibility and Likely Effects of a Legislative Ban*

Considering the unlikelihood of a more comprehensive animal welfare statute being passed and the barriers that private plaintiffs have faced trying to enforce existing animal welfare statutes in court, an outright ban on subtherapeutic antibiotic usage might be the most feasible way to effect change. In 1977, the FDA proposed to regulate the unrestricted use of certain common antibiotics in animal feed by making their sale and use contingent on a veterinarian prescription.¹⁹⁴ Around that time, the FDA also began to withdraw its approvals for the subtherapeutic use of penicillin and tetracycline in animal feed.¹⁹⁵ Congress, urged by farm-state legislators and the livestock and pharmaceutical industries, blocked the move and directed the FDA to wait until further studies had been completed before changing its policies regulating subtherapeutic doses.¹⁹⁶

also *supra* notes 108-11 and accompanying text.

190. *Provimi*, 626 F. Supp. at 283.

191. *Id.*

192. *See id.* at 285-86.

193. *Id.* at 286.

194. *Id.* at 285.

195. *Id.* at 285-86; *see also* United States v. An Article of Drug Constituting 4,680 Pails, 725 F.2d 976, 988-89 (5th Cir. 1984).

196. *Provimi*, 626 F. Supp. at 285-86; *see also* Keller, *supra* note 110.

So what have the various governmental agencies done with the evidence regarding the link between bacterial resistance and the use of antibiotics in animal husbandry? In 1977, after the FDA had proposed a ban, Congress rejected that idea in favor of more studies.¹⁹⁷ Even after the Centers for Disease Control documented another outbreak of antibiotic-resistant salmonella in 1984, the petition for a ban by the Natural Resources Defense Council was denied by the Department of Health, which also proclaimed the need for more studies.¹⁹⁸ In 1987, the Centers for Disease Control discovered further evidence linking antibiotics in animal feed to illness in humans, and despite predictions that a ban on the growth hormones was inevitable,¹⁹⁹ no such ban has ensued.

Despite the inaction of Congress, some farmers have begun cutting back voluntarily on subtherapeutic doses of antibiotics in their livestock's feed, replacing the drugs with more natural farming methods or nonantibiotic alternatives to avoid public panic and stimulate demand for meat.²⁰⁰ Some consumers that are aware of the problem have demanded meat produced from animals raised in more natural conditions.²⁰¹ Resistance to phasing out subtherapeutic doses for growth enhancement, however, does remain. A farmer's decision to use antibiotics, after all, is primarily economic. The farmer simply asks whether demand will be greater for a cheaper product or for a safer product.²⁰²

In addition to its effects on the price of meat, a ban would undoubtedly affect the livestock industry's structure. The trend since World War II has been from small, family-owned, labor-intensive farms to large, corporate, capital-intensive farms. The use of antibiotics as feed additives has facilitated this transition

197. Marian Burros, *U.S. Food Regulation: Tales from a Twilight Zone*, N.Y. TIMES, June 10, 1987, at C1.

198. *Id.*

199. Irvin Molotsky, *Animal Antibiotics Tied to Illnesses in Humans*, N.Y. TIMES, Feb. 22, 1987, at A1.

200. LEVY, *supra* note 4, at 242; see also Robert Reinhold, *Beef Industry Reduces Use of Disputed Drugs in Feed*, N.Y. TIMES, Feb. 16, 1985, at A1.

201. LEVY, *supra* note 4, at 242.

202. See, e.g., Keller, *supra* note 110. Prior to the cattle industry's announcement that it would no longer use antibiotics for growth purposes, the National Cattlemen's Association estimated that a ban would cost consumers \$3.5 billion annually. Karen Freifeld, *Beef Stakes: Use of Antibiotics in Meats*, HEALTH, Apr. 1985, at 41.

to large confinement systems.²⁰³ Setting up for large production has high fixed costs. For example, the estimates for setting up pig-confinement facilities range from about \$1,500 to \$2,000 for each breeding sow, not including the cost of the land or the animal.²⁰⁴

The poultry industry was the first to make the transition to agribusiness.²⁰⁵ Pig production is following the trend of fewer producers, each producing more. The National Pork Producers reported that from 1985 to 1989, forty percent of the farmers in the hog industry had left the business.²⁰⁶ The trend has continued into the 1990s. Trade magazines like *Successful Farming* report the controversy that surrounds expanded livestock production.²⁰⁷ The livestock industry expands in unit size while becoming more efficient by involving fewer people.²⁰⁸

In North Carolina, for example, large-scale pig production is already in place.²⁰⁹ At Carroll's Foods, "the genetics of all of Carroll's 110,000 sows are as carefully controlled as . . . the formula for Coke."²¹⁰ The pigs "never touch the ground."²¹¹ From

203. *Is Absolute Safety Absolutely Impossible?*, HOG FARM MGMT., Mar. 1978, at 99 ("If [swine producers] ever lost antibiotics, we'd have to do some changing on the facilities that we have. My facilities and a lot of the facilities I've seen were designed since antibiotics came into use. If we get away from the use of antibiotics I think we'll have to take a new look at the type of facilities we're using . . .").

204. MASON & SINGER, *supra* note 9, at 146.

205. *See id.* at 88.

206. *Id.* at 152 (citing *Pork Leader Sees Five Change Areas*, HOGS TODAY, Jan. 1989, at 38).

207. *See, e.g.*, Betsy Freese & Rod Fee, *Livestock-Hungry States: Some States Offer Carrots, Others Turn Their Backs on Livestock Expansion Within Their Borders*, SUCCESSFUL FARMING, Jan. 1994, at 19.

208. *Id.* Expansion has not been without protest within the agricultural community. In Missouri, protesters against corporate hog farms chanted "save our farms" after industry giant Continental Grain announced plans to build a 15,000-sow farm and a 5,000-sow farm in Missouri. Betsy Freese, *Fed Up with the Big Boys; Missouri Protest Against Corporate Hog Farms Such as Continental Grain*, SUCCESSFUL FARMING, Apr. 1994, at 18. Continental Grain avoided Missouri's anticorporate farm statute because it is owned by a family in New York. *Id.* Why would a community rally against an industry that would surely bring in thousands of jobs? One protester explained: "There are a lot of issues involved: community disruption, survival of the family farm, odor, waste pollution, job quality and even animal rights. We have to ask ourselves, 'At what cost economic development?' We are confusing quality of life with jobs." *Id.*

209. David Bailey, *Hog Heaven: Vertical Integration Has Turned a Down-to-Earth Business into a Paradise of Profits for North Carolina Pork Producers*, BUS.-N.C., Apr. 1994, at 30.

210. *Id.*

211. *Id.*

1990 to 1992, North Carolina's pig population went from 2.8 million to 4.5 million, in part because of the increase in the use of large-scale, specialized production techniques.²¹² One of Carroll's executives boasted, "[w]e were one of the first ones to start putting hogs in buildings on cement floors."²¹³ Comments by Carroll's president, a former accountant, demonstrate the trend in husbandry: "I'm not a farmer. . . . I came into this business thinking you could and had to apply sound business principles to agriculture. . . . The driving force of this whole animal-growing business is being the least-cost producer."²¹⁴

The use of growth hormones makes large-scale production feasible.²¹⁵ There is no way that producers can keep thousands of excrement- and urine-producing animals in one place without the use of drugs.²¹⁶ And the factory-style farms cannot be profitable with their huge capital inputs without the numbers.²¹⁷ A ban on

212. *Id.* at 32.

213. *Id.* at 33.

214. *Id.* at 35. Why is animal husbandry getting bigger and bigger? When he was Secretary of Agriculture in the early 1970s, Earl Butz had a slogan that was a harbinger of things to come: "Get big or get out." MASON & SINGER, *supra* note 9, at 141. The emphasis was on greater output, efficiency, and yields. *Id.* Agribusiness had much to gain from this mind-set: machinery sales, drug sales, and other capital inputs meant more profits. *Id.* at 142. During the 1960s and 1970s, agribusiness became big business and with it came even greater political power. *Id.* Lobbying brought tax breaks that favored size, because the biggest producers got the biggest payments. *Id.* For example, throughout the 1960s, the top 20% of farms were getting more than half the subsidies for corn, cotton, and other crops. *Id.* In 1987, the biggest 4.5% of farms got 27% of the government farm payments. *Id.* The bias of agricultural journalists also contributes to the expansion mind-set. The trade journals are filled with machinery, drug, and feed advertisements. *Id.* at 143. The mobility of the individual journalists within the industry contributes to the bias towards bigger agribusiness. *Id.* For example, when the USDA proposed a three million dollar investment for projects to help promote roadside markets (0.02% of its total budget for that year), the editor of *National Hog Farmer* wrote: "Why don't we just turn the Department of Agriculture over to the do-gooders?" *Id.* at 144 (quoting Neal Black, *Let's Give USDA to Do-Gooders, Gardeners*, NAT'L HOG FARMER, Aug. 1976, at 26).

215. For example, small-scale dairy farmers are concerned that the use of Bovine Growth Hormone in milk will create a surplus of milk, drive the price down, and make smaller farms completely unprofitable. MASON & SINGER, *supra* note 9, at 152-53 (citing Charles Johnson, *A Herdsman at Heart*, DAIRY TODAY, May 1989, at 26).

216. Daily animal fecal excretion can surpass that of humans by four to five hundred times. LEVY, *supra* note 4, at 140.

217. "We've got a huge investment; we can't afford to let it sit idle. The building has to be working for us all the time. That means keeping it at capacity all the time." MASON & SINGER, *supra* note 9, at 146 (quoting Warren Clark, *Have We Broken the Hog Cycle?*, FARM J., Oct. 1976, at Hog-34).

the use of subtherapeutic doses of antibiotics in food animals for growth and disease prevention seems, at first blush, harmful to the farmer. Yet many small farmers either have already been squeezed out of the business or are struggling to keep up with the trend toward total confinement systems. Thus, while banning the use of subtherapeutic doses of antibiotics in animal husbandry would have an adverse economic impact on those farmers dependent on them to make the total confinement systems feasible, many smaller farmers would not be hurt by a ban. Indeed, smaller farmers might even benefit from such a change by avoiding the need to embark on high fixed-cost confinement systems in order to compete with large-scale producers.

VI. CONCLUSION

Existing anticruelty laws reflect a societal belief that nonhuman animals should be treated with compassion and kindness.²¹⁸ For the most part, however, these laws exclude the billions of farm animals raised in this country for food. Any attempt to extend protection to those animals would probably face enormous opposition from agribusiness. Furthermore, protecting pigs and chickens is not one of most voters' highest priorities. A statute to protect farm animals' interests, then, is unlikely. Thus, as the trend toward total confinement in agribusiness continues, the conditions under which farm animals are raised will only worsen.

As consumers and legislators become more aware of the use of subtherapeutic doses of antibiotics in livestock feed and its inherent risks, however, cheap meat might look increasingly less attractive. A mild concern for animal welfare, compounded by a substantial fear of the health risks these drugs pose, might force this issue onto some candidates' agendas. England and Sweden have already banned the subtherapeutic use of antibiotics in livestock for the very reasons discussed in this Comment. In the United States, such a ban could ameliorate the conditions that animals endure for agribusiness. Such a ban would take the industry one step closer to providing a more humane environment for animals because farmers would have to consider their ani-

218. See *supra* note 1.

mals' physiological and psychological well-being to ensure the production of healthy and strong animals.

A ban on the subtherapeutic use of antibiotics in animals, however, would not necessarily transform agribusiness into a compassionate, free-range system of husbandry. Nonantibiotic drugs, which would presumably not be the subject of such a ban, might allow farmers to continue to employ close-confinement methods in limited circumstances, leaving some farm animals no better off than before the ban. In the end, however, such a ban would make total confinement systems less feasible,²¹⁹ thus bringing the best interests of animals more in line with the best interests of humans.

219. One of the reasons that producers have resisted the ban is that the substitutes are not as effective in preventing diseases in close confinement systems. Keller, *supra* note 110.