

REGULATING CAFOS FOR THE WELL-BEING OF FARM ANIMALS, CONSUMERS, AND THE ENVIRONMENT

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SUMMARY

The livestock sector is one of the planet's primary causes of resource consumption and environmental degradation. Approximately 99% of meat and other animal products in the United States are from factory farms, and the number of concentrated animal feeding operations (CAFOs) continues to grow. This Article, adapted from Chapter 8 of *What Can Animal Law Learn From Environmental Law?*, 2d Edition (ELI Press, forthcoming 2020), examines animal agriculture in the U.S and the associated problems. It explores the economic advantage CAFOs enjoy over small-scale models, and provides suggestions for improving market imbalances; explains existing federal, state, and local laws addressing animal welfare and federal environmental laws that should apply, and offers suggestions for modifying these to adequately protect farm animals and the environment; and offers innovative alternatives to the use of CAFO products to allow consumers to fill the gaps left in farm animal regulation.

According to the United Nations Food and Agriculture Organization, the livestock sector of the agriculture industry is one of the planet's primary causes of resource consumption and environmental degradation.¹ It is a leader in air and water pollution, greenhouse gas (GHG) emissions, freshwater use, rainforest deforestation, biodiversity loss, species extinction, ocean dead zones, and habitat destruction.² In addition to its environmental impacts, the industry engages in practices that cause extreme animal suffering, and has dangerous impacts on human health and welfare, contributing to antibiotic resistance, disease, diet-related health issues, and even decreased property values.³

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1. U.N. FOOD & AGRIC. ORG., LIVESTOCK'S LONG SHADOW: ENVIRONMENTAL ISSUES AND OPTIONS 267 (2006), <http://www.fao.org/3/a0701e/a0701e.pdf>.
2. COWSPIRACY: THE SUSTAINABILITY SECRET (Kip Andersen 2014).
3. CARRIE HRIBAR, NATIONAL ASS'N OF LOCAL BDS. OF HEALTH, UNDERSTANDING CONCENTRATED ANIMAL FEEDING OPERATIONS AND THEIR IMPACT ON COMMUNITIES (2010).

Commonly linked to farming are idyllic American images of open fields, green pastures, and cows grazing under the warm sun. In previous times, this may have been an accurate description, but over the past several decades, the animal agriculture industry in the United States has morphed into a high-intensity, high-profit, and high-pollution industrial farming system; or what has been described as a collection of "assembly line meat factories."⁴

As overall economic, political, and social paradigms related to meat, agriculture, and our food system have shifted, a monolithic farming model has emerged in the United States and abroad to replace the charming family farm described above with concentrated animal feeding operations (CAFOs).

The federal Clean Water Act (CWA) provides a somewhat sterile and unsatisfying definition of a "CAFO," as an animal feeding operation:

[A] lot or facility . . . [where] animals . . . have been, are, or will be stabled or confined and fed or maintained . . . [and] crops, vegetation, forage growth, or post-harvest

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4. Mark Bittman, *Rethinking the Meat-Guzzler*, N.Y. TIMES, Jan. 27, 2008, <https://www.nytimes.com/2008/01/27/weekinreview/27bittman.html>.

residues are not sustained in the normal growing facility over any portion of the lot or facility.⁵

It is further classified by its size and the number of animals confined.⁶ In other words, a CAFO is a high-density facility that houses hundreds or thousands of animals in confinement, where the animals are brought feed, as opposed to grazing on land.⁷ These facilities are also known as intensive livestock operations or, colloquially, “factory farms.”

Today, approximately 99% of meat and other animal products in the United States are from factory farms,⁸ and the number of CAFOs in the United States continues to grow.⁹ This industrial production system no longer resembles its humble and sustainable beginnings. Notwithstanding these dramatic changes, the accompanying federal and state laws regulating animal agriculture have not similarly evolved. Consequently, CAFOs are largely not regulated, nor are their operators adequately penalized for their negative impacts on the environment, animals, and human health and welfare.¹⁰

This Article examines animal agriculture in the United States, with CAFOs reigning as the industry’s contemporary production model. Part I of the Article introduces the problems associated with the development and existence of CAFOs. Part II explores the economic advantage that CAFOs enjoy over small-scale models, and provides suggestions for improving market imbalances. Part III explains existing federal, state, and local laws addressing animal welfare and federal environmental laws that should apply to CAFOs, and offers suggestions for modifying these regulations to adequately protect farm animals and the surrounding environment. Finally, Part IV offers innovative alternatives to the use of CAFO products to allow consumers to fill the gaps left in farm animal regulation.

I. Overview of CAFOs

A. Environmental Damage

The modern animal agriculture industry presents a cornucopia of environmental problems due to the collective quantity and mass confinement of livestock, such as manure management issues, air and water pollution,¹¹ and usage of freshwater.¹²

Manure storage and disposal is one of the most serious environmental issues associated with CAFOs. It is estimated that the nine billion confined U.S. farm animals produce almost one million tons of manure daily, which is three times the amount generated by humans in the country.¹³ As the U.S. Government Accountability Office warns, this volume of waste threatens water quality in the event of spills, leakage from waste storage facilities, and runoff from fields.¹⁴ In addition to the threat of physical spillage, ammonia and hydrogen sulfide emissions from waste can be harmful to the air quality, affecting animals, facility workers, and surrounding rural communities.¹⁵

Agricultural runoff from CAFOs causes aquatic “dead zones.”¹⁶ Given that many CAFO facilities exist in the American Midwest and throttle the Mississippi River, excess nitrogen and phosphorus from manure collect in the Gulf of Mexico, and have created an oxygen-deficient environment that destroys marine life and habitat.¹⁷ With respect to freshwater usage, animal agriculture consumes a staggering one-third of the planet’s drinkable water.¹⁸ If that isn’t enough, mass animal production is also responsible for numerous ancillary environmental damage, such as rainforest deforestation, species extinction, and habitat destruction in order to make space for animal grazing and feed cultivation.¹⁹

5. 40 C.F.R. §122.23(b) (2019).

6. *Id.*

7. DOUG GURIAN-SHERMAN, UNION OF CONCERNED SCIENTISTS, CAFOs UNCOVERED, THE UNTOLD COSTS OF CONFINED ANIMAL FEEDING OPERATIONS 13 (2008), https://www.ucsusa.org/food_and_agriculture/our-failing-food-system/industrial-agriculture/cafos-uncovered.html.

8. Jason R. Richards & Erica L. Richards, *Cheap Meat: How Factory Farming Is Harming Our Health, the Environment, and the Economy*, 4 KY. J. EQUINE, AGRIC. & NAT. RESOURCES L. 31, 32-33 (2012). Analysis uses data from the 2017 U.S. Department of Agriculture’s (USDA’s) *Census of Agriculture*, which was released on April 11, 2019. The most recent previous data available was for 2012, which showed around 98.66% of U.S. farmed animals lived on factory farms compared to the current figure of 98.74%. Analysis uses EPA regulations for what constitutes a CAFO in combination with the USDA data on how many animals live on farms of various sizes. Ninety percent of farmed animals worldwide live on factory farms.

9. The number of CAFOs have increased in the United States over the past seven years, bringing the total to just under 20,000, according to EPA. From 2011 to 2017, the United States saw more than 1,400 new CAFOs. Christopher Walljasper, *Large Animal Feeding Operations On the Rise*, INVESTIGATE MIDWEST.ORG (June 7, 2018), <https://investigatamidwest.org/2018/06/07/large-animal-feeding-operations-on-the-rise/>.

10. *Id.*

11. While recognizing the profound impacts CAFOs have on climate change, this Article omits discussion of GHG emissions. For a discussion, see Linda Breggin & Bruce Myers, *Tackling the Problem of CAFOs and Climate Change: A New Path to Improved Animal Welfare?*, in WHAT CAN ANIMAL LAW LEARN FROM ENVIRONMENTAL LAW? (2d ed., Randall S. Abate ed. forthcoming 2020).

12. GURIAN-SHERMAN, *supra* note 7.

13. <https://www.farmsanctuary.org/learn/factory-farming/factory-farming-and-the-environment/>.

14. U.S. GEN. ACCOUNTING OFFICE, REPORT TO THE HONORABLE TOM HARKIN: ANIMAL AGRICULTURE WASTE MANAGEMENT PRACTICES 1 (1999), <https://www.gao.gov/archive/1999/rc99205.pdf>.

15. GURIAN-SHERMAN, *supra* note 7, at 14.

16.

Dead zone is a more common term for hypoxia, which refers to a reduced level of oxygen in the water . . . most marine life either dies, or, if they are mobile such as fish, leave the area. Habitats that would normally be teeming with life become, essentially, biological deserts.

NATIONAL OCEANIC & ATMOSPHERIC ADMIN., U.S. DEP’T OF COMMERCE, WHAT IS A DEAD ZONE? (2014), <http://oceanservice.noaa.gov/facts/deadzone.html>.

17. Emily A. Kolbe, “*Won’t You Be My Neighbor?*,” *Living With Concentrated Animal Feeding Operations*, 99 IOWA L. REV. 415, 422 (2013).

18. COWSPIRACY, *supra* note 2.

19. *Id.*

B. Animal Health and Welfare

There are ethical issues associated with CAFOs with respect to the treatment, health, and overall welfare of agriculture animals. In most existing livestock productions, cows, pigs, chickens, and other types of farm animals are collected in dangerously confined and filthy spaces and are forced to live on top of other animals and their own waste.²⁰ In an industry that values efficiency over quality, safety, and morality, these animals are viewed only as commodities, as typified by the following observation:

Beef cattle in America at least still live outdoors, albeit standing ankle-deep in their own waste eating a diet [corn] that makes them sick. And broiler chickens, although they are bred for such swift and heavy growth they can barely walk, at least don't spend their lives in cages too small to ever stretch a wing. That fate is reserved for the American laying hen, who spends her brief span of days piled together with a half-dozen other hens in a wire cage Every natural instinct of this hen is thwarted, leading to a range of behavioral "vices" that can include cannibalizing her cage mates and rubbing her breast against the wire mesh until it is completely bald and bleeding [A]nd when the output of the survivors begins to ebb, the hens will be "force-molted"—starved of food and water and light for several days in order to stimulate a final bout of egg laying before their life's work is done.²¹

Commonly, CAFOs restrict animals from exercise or even moving their limbs, turning their bodies, or lying down.²² These egregious conditions exist in the intensive confinement of hens in battery cages, calves in veal crates, and pigs in sow gestation crates,²³ and such immobilization causes extreme physical and psychological distress.²⁴ Yet unlike our beloved companion animals, farm animal abuse often goes unnoticed and unregulated.

C. Human Health and Welfare

CAFOs similarly impact human health and welfare. For example, animal products from these facilities—products in our grocery stores—are often riddled with disease, including *Escherichia coli* (*E.coli*) and *Salmonella*.²⁵ Given that antibiotics are habitually administered to livestock to manage disease and to increase growth,²⁶ people who eat these products are increasingly becoming resistant to antibiotics.²⁷ Diet-related chronic illnesses, including obesity, cardiovascular disease, arthritis, hypertension, type 2 dia-

betes, and various cancers, have also been associated with excess meat consumption.²⁸ In addition to all the foregoing direct health consequences, rural community residents who live and work near CAFOs suffer from noxious odors, noise, light pollution, and water and air contamination from the facilities, which often lead to other illnesses and decreased property values of their homes.²⁹

D. Recipe for Disaster

Despite the noted environmental, animal, and human health and welfare crises associated with CAFOs, U.S. and international demand for animal products has risen dramatically over the past 50 years.³⁰ The reason for this, in part, is because meat is convenient and cheap. Animal products are relatively and artificially inexpensive because producers have developed extremely efficient husbandry methods, compounded with the benefits enjoyed by an industry that is radically and uniquely unregulated, where producers are not forced to internalize costs associated with the damage they create.³¹

CAFO proponents argue that these facilities naturally evolved to meet an increased demand, and that they are able to keep costs to consumers low because technological advancements have enabled efficient practices.³² In a classic which came first—the chicken or the egg quandary—this begs the question of whether the industry evolved in order to sustain demand for animal products, or conversely, whether demand is high because the product is cheap. More importantly, why aren't producers forced to internalize costs for the damage created by these facilities? Why are CAFOs essentially unregulated in the United States?

II. Is Meat Really Cheap? Allocating the Negative Impacts to CAFOs

"What you pay for a cheeseburger is the price, but price isn't the cost. It isn't the cost to the producers or the marketers and it certainly isn't the sum of the costs to the world; those true costs are much greater than the price."³³

Meat, eggs, and dairy (collectively, animal products) are relatively inexpensive. Yet, the prices we pay at the grocery store and fast-food restaurants are set artificially low due to the fact that the American animal agriculture industry is poorly regulated, not forced to internalize costs, and enjoys the benefits of strong federal subsidies.³⁴ This gives CAFOs an unfair economic advantage over smaller farms and food alternatives.³⁵

According to the U.S. Department of Agriculture (USDA), over the past few decades, animal product production in the United States has shifted to fewer and much

20. UNION OF CONCERNED SCIENTISTS, *THE HIDDEN COSTS OF CAFOs* 8 (2008).

21. MICHAEL POLLAN, *THE OMNIVORE'S DILEMMA* 317 (2007).

22. HUMANE SOC'Y OF THE UNITED STATES (HSUS), *AN HSUS REPORT: THE WELFARE OF INTENSIVELY CONFINED ANIMALS IN BATTERY CAGES, GESTATION CRATES, AND VEAL CRATES* (July 2012), <https://www.humanesociety.org/sites/default/files/docs/hsus-report-animal-welfare-of-intensively-confined-animals.pdf>.

23. *Id.*

24. See discussion *infra* Part III.A.

25. GURIAN-SHERMAN, *supra* note 7, at 62.

26. HRIBAR, *supra* note 3, at 10.

27. *Id.*

28. Mark Bittman, *The True Cost of a Burger*, N.Y. TIMES, July 15, 2014, <http://www.nytimes.com/2014/07/16/opinion/the-true-cost-of-a-burger.html>.

29. HRIBAR, *supra* note 3.

30. Bruce Myers, *Livestock's Hoof Print*, ENVTL. F., Mar./Apr. 2014, at 36.

31. GURIAN-SHERMAN, *supra* note 7.

32. HRIBAR, *supra* note 3, at 2.

33. Bittman, *supra* note 28.

34. GURIAN-SHERMAN, *supra* note 7, at 1.

35. *Id.*

larger farms.³⁶ As evidence of this fact, historically, only four corporations have controlled over 85% of beef production in the United States; Tyson and Smithfield have controlled over one-half of the pork production; and Dean Foods has controlled 40% of the milk production.³⁷ With this trend, CAFOs are replacing family farms that simply cannot compete.

While CAFOs utilize subsidized grain feed, generally, non-CAFO operations are more environmentally sustainable and provide livestock with feed much closer to their natural diet.³⁸ Family-farmed, local, or humanely raised animal products, therefore, are often more expensive than their factory-farmed counterparts, partly because their prices more accurately reflect the “true cost” of the product.

The industry economically benefits from shifting certain costs to society as a whole. These costs, known as “externalities,” are those not borne by the producer³⁹ to later pass to the consumer in the form of higher prices, but instead, are borne by the consuming public. So the price for that cheeseburger, for instance, is not the “true cost” because we ultimately pay for production in other ways.

A. Negative Externalities

It is difficult to estimate the exact monetary costs that society bears for all of the negative environmental, animal, and human health and welfare impacts caused by CAFOs. After all, is it possible to put a price on animal suffering? There are, however, numerous examples of direct and indirect environmental and human health and welfare damage to begin an analysis.

For instance, the Wisconsin Department of Natural Resources (DNR) recorded that in aggregate, over one million gallons of manure leaked from livestock operations across the state in 2013,⁴⁰ and additionally reported a 2018 manure spill that leaked 300,000 gallons into a grassy waterway.⁴¹ This indicates that the threat is real and the problem continues. In some cases, a producer will be fined for such a release, but damage from runoff to the surrounding freshwater and groundwater in the form of wildlife and habitat destruction, odors, human illness, decreased property values, or new infrastructure, are generally paid by citizens.⁴²

Furthermore, approximately 80% of antibiotics in the world are used for livestock.⁴³ Antibiotics have become

part of the CAFO diet to prevent disease and to quickly increase animal size.⁴⁴ This practice, however, is creating a health crisis among humans because the more we ingest these drugs through animal product consumption, the less effective they become, which enables antibiotic-resistant bacteria-related illnesses, including *E. coli* and *Salmonella*.⁴⁵ Antibiotic resistance is a costly issue, as the National Academy of Sciences estimates that it has historically increased U.S. healthcare costs by approximately \$4 billion dollars annually.⁴⁶

B. Federal Subsidies for CAFOs

The U.S. government provides approximately \$20 billion taxpayer dollars per year for farm subsidies.⁴⁷ By providing abundant grain subsidies for high-yielding crops, such as corn, the market price for grains has often dipped below the production price.⁴⁸ Because animal feed accounts for over one-half of a CAFO’s operating costs, using corn allows CAFOs to save significantly on production costs.⁴⁹

Do cows eat corn? They do when they are confined in CAFOs. CAFOs could not exist if not for the advent of cheap, federally subsidized corn,⁵⁰ because most of the corn grown in the United States is used for animal feed.⁵¹ Animals that would naturally eat grass are instead given a diet of corn, antibiotics, and whatever pharmaceuticals are required for the animal to process corn.⁵² This is considered a more efficient food source than grass because corn is cheaper and supplies greater caloric energy.⁵³

C. Suggestions to Improve Market Imbalances

Animal law can learn from environmental law in areas where industries are held responsible for negative environmental impacts. For example, under the federal Resource Conservation and Recovery Act (RCRA), polluters are held strictly liable for the treatment, storage, and disposal of solid and hazardous substances that endanger human health or safety.⁵⁴ This guiding “polluter-pays” principle should be extended to CAFOs for the environmental damage they create. If, by regulation, CAFOs were forced to internalize the environmental, animal, and human health and welfare costs they generate, and thereby incur higher production costs,⁵⁵ these costs would likely pass to the consumer. This more expensive price could accurately reflect the “true cost”

36. NATIONAL AGRIC. STATISTICS SERV., USDA, 2012 CENSUS OF AGRIC., U.S. SUMMARY & STATE DATA 1, GEOGRAPHIC AREA SERIES, PART 51 (May 2014).

37. See Community Environmental Legal Defense Fund, *Model Food Bill of Rights*, <http://celfd.org/-1-77> (last visited Jan. 17, 2020); see also S.J. Res. 12, 2015 Leg. Sess. (Ind. 2015), <http://www.hecweb.org/wp-content/uploads/2015/01/SJR-12-Policy-Brief-2015-session.pdf>.

38. POLLAN, *supra* note 21, at 67.

39. Bittman, *supra* note 28.

40. Lee Bergquist & Kevin Crowe, *Manure Spills in 2013 the Highest in Seven Years Statewide*, JOURNAL SENTINEL, Dec. 5, 2013, <http://www.jsonline.com/news/wisconsin/manure-spills-in-2013-the-highest-in-seven-years-statewide-b99157574z1-234701931.html>.

41. Colleen Kottke, *Public Warned to Stay Out of Duck Creek on Oneida Reservation Due to “Acute” Manure Smell*, WIS. ST. FARMER, Sept. 12, 2018.

42. GURIAN-SHERMAN, *supra* note 7, at 65.

43. David A. Kessler, *Antibiotics and the Meat We Eat*, N.Y. TIMES, Mar. 27, 2013, <http://www.nytimes.com/2013/03/28/opinion/antibiotics-and-the>

[meat-we-eat.html?r=0](http://www.nytimes.com/2013/03/28/opinion/antibiotics-and-the-meat-we-eat.html?r=0).

44. HRIBAR, *supra* note 3, at 10.

45. THE HIDDEN COSTS OF CAFOs, *supra* note 21, at 6.

46. *Id.*

47. Rachel Wechsler, *Blood on the Hands of the Federal Government: Affirmative Steps That Promote Animal Cruelty*, 4 J. ANIMAL L. & ETHICS 183, 183-87 (2011).

48. *Id.* at 185.

49. *Id.*

50. POLLAN, *supra* note 21, at 67.

51. Myers, *supra* note 30, at 35.

52. POLLAN, *supra* note 21, at 75.

53. *Id.*

54. 42 U.S.C. §6901.

55. GURIAN-SHERMAN, *supra* note 7, at 17.

of the factory-farmed cheeseburger, and allow the consumer to fairly choose from a comparably priced, sustainable source of meat, or a meat-free alternative.

Recent trends may indicate consumer demand for safer food practices has prompted industry self-regulation. For example, in December 2014, Starbucks initiated a policy banning the use of growth hormones and other inhumane practices.⁵⁶ Even McDonald's announced in March 2015 that U.S. restaurants will source only chickens raised without human-used antibiotics and milk from cows not treated with artificial growth hormones.⁵⁷ In following this trend, the United States should look to the European Union and regulate antibiotics for agricultural animals, in which case, there would likely be a similar decrease in the prevalence of resistant bacteria and illness.⁵⁸

Finally, existing U.S. policies have put CAFOs at an economic advantage over small-scale, diversified farms, because many non-CAFO farms grow their own, suitable animal feed and do not benefit from grain subsidies.⁵⁹ In theory, the purpose of government subsidization is to assist industries and other organizations for the public good. In the case of agricultural subsidies in the United States, this should include meeting consumer demand safely and healthfully. As an alternative to the current system, then, the U.S. government could subsidize small-scale farms or animal product alternatives.

III. Existing Laws to Address CAFOs

A. Gaps in Existing Animal Rights Laws: Farm Animal Exceptions

1. Background on Farm Animal Cruelty

When abuse is inflicted on a companion animal, the act makes headlines in U.S. media coverage.⁶⁰ The coverage will describe the inhumane treatment of animals like dogs or cats in great detail, explaining how an individual beat, burned, starved, or even gassed an animal to death. The article typically will discuss how the perpetrator was held accountable for the act of cruelty, either by being sentenced to jail or having to pay a significant fine, or both. Yet similar acts of inhumanity occur daily on the factory farms that produce the majority of the U.S. meat supply, and these acts are not nearly as closely or comprehensively regulated by anti-cruelty protections.

Farm animals are subject to unnatural, unsanitary, and inhumane conditions for the duration of their wretched

lives. Chickens are often debeaked to avoid fighting, die from suffocation caused by poor ventilation and the accumulation of ammonia from their waste, and spend their lives in confinement without the ability to exercise normal behaviors.⁶¹ Cows also live in confined areas, spending the majority of their lives indoors.⁶² Calves used for veal suffer some of the worst treatment in their short lives, including confinement to a location that does not allow movement and a limited diet to maintain the tenderness of their meat.⁶³ Pigs live a life of constant confinement without having the ability to walk or exhibit their natural survival instincts.⁶⁴

What may be most disturbing is the effect of poor living conditions on the animal's mental health. The intelligence of pigs is well documented.⁶⁵ "Like dogs, pigs are active, inquisitive, and extremely social, forming bonds with other pigs, other animal species, and even humans."⁶⁶ While farm animals may be as smart and cognizant of their circumstances as companion animals, cruelty toward farm animals receives little attention. Such cruelty rarely makes the news, and the individuals responsible for the cruelty go unpunished. The discrepancy in the treatment of farm animals compared to other animals is the result of a history of farm animals being exempted from federal and state anti-cruelty laws.

2. Animal Welfare Law

a. Federal Animal Welfare Act

The Animal Welfare Act (AWA) is a federal act that seeks to regulate certain animals affecting commerce.⁶⁷ Specifically, Congress determined that it was

essential to regulate . . . the transportation, purchase, sale, housing, care, handling, and treatment of animals by carriers or by persons or organizations engaged in using them for research or experimental purposes or for exhibition purposes or holding them for sale as pets or for any such purpose or use.⁶⁸

While Congress found it critical to protect animals used for experimentation, exhibits, or pets, the AWA expressly excludes farm animals. The AWA defines "animal" as "any live or dead dog, cat, monkey (non-human primate mammal), guinea pig, hamster, rabbit, or such other warm-blooded animal, as the Secretary may determine is being used, or is intended for use, for research, testing, experi-

56. HSUS, *Timeline of Major Farm Animal Protection Advancements*, http://www.humanesociety.org/issues/confinement_farm/timelines/timeline_farm_animal_protection.html (last visited Jan. 17, 2020).

57. Press Release, McDonald's USA Announces New Antibiotics Policy and Menu Sourcing Initiatives (Mar. 4, 2015).

58. GURIAN-SHERMAN, *supra* note 7, at 62.

59. Wechsler, *supra* note 47, at 185-86.

60. *New Jersey Man Who Gassed His Dog to Death Gets Probation*, N.Y. TIMES, Mar. 6, 2015, <http://www.nytimes.com/aponline/2015/03/06/us/ap-us-dog-gassed-sentencing.html>.

61. Elizabeth Overcash, *Unwarranted Discrepancies in the Advancement of Animal Law: The Growing Disparity in Protection Between Companion Animals and Agricultural Animals*, 90 N.C. L. REV. 837, 866-67 (2012).

62. *Id.* at 868.

63. *Id.* at 868-69.

64. *Id.* at 867.

65. *Id.* at 872.

66. *Id.* at 873.

67. 7 U.S.C. §2131.

68. *Id.*

mentation, or exhibition purposes, or as a pet”⁶⁹ The definition expressly excludes, “other farm animals, such as, but not limited to livestock or poultry, used or intended for use as food or fiber, or livestock or poultry used or intended for use for improving animal nutrition, breeding, management, or production efficiency, or for improving the quality of food or fiber.”⁷⁰ Consequently, the major animal welfare law in the country explicitly excludes the billions of animals that pass through inhumane CAFOs and slaughterhouses that may or may not be subject to (and may or may not comply with) humane slaughter requirements.⁷¹

While the scope of the AWA has been amended since it was originally enacted in 1966, the legislative history has been consistent throughout the years in its treatment of farm animals. The scope of the AWA has always been focused on companion-type animals and has always excluded animals used for human consumption. For example, during a U.S. House of Representatives’ Committee on Agriculture meeting held in 1975, in a discussion regarding whether the Act should be amended to include certain classes of horses, Rep. W.R. Poage (D-Tex.), vice chairman of the committee, expressed his concern for horses during travel even if the horse’s ultimate fate is slaughter: “I cannot understand what difference it makes whether you move them out for slaughter or for feed. A horse should be protected from unnecessary cruelty while he is being moved.”⁷² In the same meeting after a committee member explained that the AWA defined animals as excluding livestock and horses, committee member Rep. Jack Hightower (D-Tex.) stated that “[t]here is a substantial amount of difference in horses.”⁷³ While the dialogue began a discussion about the applicability of the AWA to horses and what types of horses would be covered, what is noteworthy about the comments made by these Texas committee members is their opinion that horses are different even if the horse is going to slaughter. This blanket differential treatment of farm animals compared to other animals is evident throughout the committee meetings.

b. Humane Methods of Slaughter Act

Originally enacted in 1958, the Humane Methods of Slaughter Act (HMSA)⁷⁴ set national policy regarding the humane treatment of livestock during slaughter.⁷⁵ Under §1901 of the HMSA, the Act explains why humane slaughter is good U.S. policy, including the improvement of products derived from slaughter operations, safer working conditions for slaughterhouse employees, and the prevention of needless suffering.⁷⁶ Slaughtering methods meet-

ing the humane slaughter requirements are set forth in §1902 of the HMSA. Specifically, there are two methods of slaughter deemed to be humane under the act: (1) cattle, calves, horses, mules, sheep, swine, and other livestock may be “rendered insensible to pain . . .” by gunshot or an electrical or chemical means; provided such method “is rapid and effective . . .”⁷⁷ or (2) anemia of the brain exercised “in accordance with the ritual requirements of the Jewish faith or any other religious faith”

The HMSA directs the Secretary of Agriculture to research and designate humane methods of slaughter for each species of livestock,⁷⁸ including nonambulatory livestock.⁷⁹ There are specific slaughter standards applicable to nonambulatory animals (or immobile animals), which seek to ensure humane slaughter is extended to animals that are either already near death or in a position that makes them more vulnerable to added abuse.⁸⁰ The HMSA is only applicable to livestock (not poultry) and excludes ritual slaughter.

While the HMSA attempts to bring humanity to the ultimate fate suffered by U.S. livestock, the HSMA fails because it excludes slaughtering operations that account for a majority of our meat supply. Over the past decade, poultry consumption has been on the rise.⁸¹ The decision whether to include poultry within the scope of the HSMA has been a debate since the first humane-slaughter bill was introduced.⁸² Until the bill that ultimately became the HMSA was enacted, both livestock and poultry were included under proposed bills.⁸³ The bill that was ultimately adopted, however, only addressed livestock, which term, as used by industry, does not include poultry species.⁸⁴ There was, however, a U.S. Court of Appeals for the Ninth Circuit case around the time the HSMA was making its way through the legislature, *Levine v. Vilsack*, that suggested USDA had acknowledged that poultry was livestock.⁸⁵

In a 2005 *Federal Register* announcement, USDA expressly explained that while poultry was not protected under the HSMA, the Poultry Products Inspection Act’s requirement that poultry slaughter be in accordance with good commercial practices so as to avoid having a poultry product be deemed adulterated, provided sufficient protection for poultry.⁸⁶ The failure to extend the HMSA to poultry is still a gap in the law that animal advocacy organizations seek to correct. *Levine* was an action to compel

69. *Id.* §2132(g).

70. *Id.*

71. Overcash, *supra* note 61, at 861 (“Due to this farm animal exemption, the Act specifically exempts more than ten billion animals killed yearly on factory farms.”).

72. H.R. REP. NO. 94-2, at 21 (1975).

73. *Id.*

74. 7 U.S.C. §§1901-1907.

75. *Id.*

76. *Id.* (“It is therefore declared to be the policy of the United States that the slaughtering of livestock and the handling of livestock in connection with slaughter shall be carried out only by humane methods.”).

77. *Id.* §1902(a).

78. *Id.* §1904.

79. *Id.* §1907.

80. See generally Cynthia Hodges, *Detailed Discussion of the Humane Methods of Slaughter Act*, MICH. ST. U. ANIMAL & LEGAL HISTORICAL CTR. (2010), <https://www.animallaw.info/article/detailed-discussion-humane-methods-slaughter-act> (discussing specific regulations for the humane treatment of nonambulatory animals).

81. *Food and Agriculture, Meat Consumption per Person in the United States, 1960-2013*, EARTH POL’Y INST., Feb. 25, 2014, http://www.earth-policy.org/data_center/C24.

82. Jeff Wedy, *Humane Slaughter Laws*, 70 L. & CONTEMP. PROBS. 175, 199 (2007).

83. *Id.* at 199-200.

84. *Id.* at 198-99.

85. 587 F.3d 986 (9th Cir. 2009).

86. Treatment of Live Poultry Before Slaughter, 70 Fed. Reg. 56624-701 (Sept. 28, 2005).

USDA to include the term “poultry” in the definition of the term “other livestock.”⁸⁷ The Ninth Circuit dismissed the case for lack of redressability, explaining that because the HSMA does not contain an enforcement provision, a court opinion dictating the inclusion of poultry in the term livestock would be futile.⁸⁸

c. State Criminal Anti-Cruelty Laws

Generally, states have gone to great lengths to ensure farm animals are excluded from state anti-cruelty statutes.⁸⁹ State anti-cruelty laws are hard to enforce against individuals suspected of farm animal abuse, including the ability to establish a requisite mental state for anti-cruelty statutes that require knowingly inflicting abuse and an inability to establish evidence since the abuse occurs on private property that is often not subject to regulatory inspection.⁹⁰ Despite the fact that state anti-cruelty laws are difficult to enforce given the broad discretion written into the statutes and the difficulty in establishing the elements of the charge, many state anti-cruelty protections do not even apply to farm animals.⁹¹ Most states exclude farm animals expressly from state anti-cruelty statutes or, at a minimum, exclude cruelty in connection with normal farming practices.⁹²

Notwithstanding this trend, there may be some hope for the enforcement of state criminal anti-cruelty laws for farm animals—if only it’s not too late. As a cruel example, in June 2019, Fair Oak Farms in Indiana made headlines after an animal-rights organization released a video of abuse on the farm.⁹³ It was alleged that farm employees routinely abused farm livestock and “tortured, kicked, stomped on, body slammed, stabbed with steel rebar, threw off the side of trucks, dragged through the dirt by their ears and left [the animals] to die unattended in over 100-degree heat.”⁹⁴ Authorities arrested workers in this case for the criminal charge of beating a vertebrate animal, and the suspects could face years in prison.⁹⁵ Hopefully, public awareness

of these types of atrocities will force accountability and demand legislative change and enforcement.

3. Other Existing Laws That Affect Animal Rights

While the two main laws enacted in the United States to support animal rights and state anti-cruelty laws do little to protect farm animals from the torture experienced in CAFOs and during slaughter, the gaps in animal rights laws are somewhat mitigated by laws enacted to protect human public health. “Ag-gag” laws, however, could potentially cause additional harm to animals that are moving through the factory farm and slaughter process, as ag-gag laws restrict transparency in CAFO and slaughterhouse operations.

a. Federal and State Public Health Laws

In 1906, Upton Sinclair published *The Jungle*, a novel intended to expose the unsafe working conditions of immigrants in Chicago slaughterhouses.⁹⁶ The novel, however, became popular based on the food safety hazards that it revealed, including unsanitary meat-packing facilities, with graphic details of rats running across meat and being broken down into sausage.⁹⁷ Following publication of this novel, consumer protection laws, including food safety laws and meat inspection laws, were developed.⁹⁸ Consumer protection with regard to food production is an area that has received increasing attention in recent years as evidenced by the adoption of the Food Safety Modernization Act of 2011,⁹⁹ which mandates a complete review of issues related to food-borne illnesses in order to improve food safety.¹⁰⁰

Today, there are various laws in place to ensure the safe production of meat. For example, the Federal Meat Inspection Act is a consumer protection law that was enacted because “[i]t is essential in the public interest that the health and welfare of consumers be protected by assuring that meat and meat food products distributed to them are wholesome, not adulterated, and properly marked, labeled, and packaged.”¹⁰¹ The Act seeks to regulate meat that may fall into the category of “adulterated” meat by ensuring that animals showing signs of disease be separately slaughtered and subject to careful examination.¹⁰² Similarly, the Poultry Products Inspection Act seeks to prevent misbranded poultry from entering interstate commerce.¹⁰³ The Act requires adherence to commercial best practices¹⁰⁴ and seeks to ensure diseased animals are not used for human food.¹⁰⁵ These federal food safety laws recognize the need to ensure safety in the United States and international food

87. 587 F.3d at 987-88.

88. *Id.* at 989:

In 1978, in legislation also termed a “Humane Methods of Slaughter Act” (“HMSA of 1978”), Congress repealed (along with certain other sections) the only enforcement provision contained within the HMSA of 1958 . . . and, at the same time, incorporated humane slaughter provisions into the Federal Meat Inspection Act. . . .

89. See David J. Wolfson & Marianne Sullivan, *Foxes in the Hen House—Animals, Agribusiness, and the Law: A Modern American Fable*, in *ANIMAL RIGHTS: CURRENT DEBATES AND NEW DIRECTIONS* (Cass R. Sunstein & Martha C. Nussbaum eds., 2004) (e-book).

90. *Id.* at 591-92:

Thus, a recent New Jersey conviction of an egg producer was vacated on appeal because the evidence failed to show that the company, which had been found guilty of cruelty for having discarded two sick, but living, hens in a garbage bin containing dead hens, has “knowingly” done so since, “keeping in mind someone is dealing with an awful lot of these chickens . . . I can perhaps see how it could have been overlooked” that the chickens were alive then they were discarded.

91. Richards & Richards, *supra* note 8, at 34.

92. *Id.*

93. Alexia Elejalde-Ruiz, *1 Arrested in Fair Oaks Farms Animal Abuse Case; Fairlife, Farm Owners Hit With Lawsuit as Activists Release New Video*, CHICAGO TRIB., June 13, 2019, <https://www.chicagotribune.com/business/ct-biz-fairlife-mccloskeys-fraud-lawsuit-20190612-story.html>.

94. *Id.*

95. *Id.*

96. UPTON SINCLAIR, *THE JUNGLE* (1906).

97. *Id.*

98. *Id.*

99. 21 U.S.C. §§2201-2252.

100. *Id.* §2201.

101. *Id.* §602.

102. *Id.* §603(a).

103. *Id.* §452.

104. Hodges, *supra* note 80.

105. 21 U.S.C. §460(d).

supplies to maintain consumer confidence in domestically produced food. While CAFOs still operate under these federal laws, as food safety becomes an increasingly important issue for U.S. consumers, preventing food-borne illnesses may require the improvement of commercial best practices and an increase in food production standards.

States have also enacted laws applicable to the handling and treatment of diseased animals, recognizing the need to ensure public health and viability of state agriculture industries. Federal and state governments have wide discretion in controlling animal disease.¹⁰⁶ The federal government may regulate diseased animals pursuant to its powers under the Commerce Clause, and state governments may regulate diseased animals through its police power.¹⁰⁷ In Florida, the Department of Agriculture and Consumer Services may declare certain animal diseases to be a public nuisance if “determined to be dangerous, transmissible, or threatening to an agricultural interest of the state”¹⁰⁸ If an animal is suffering from an infectious disease, individuals with this knowledge must notify the state veterinarian.¹⁰⁹ Florida statutes also require veterinarians with knowledge of diseased animals to report such information to the state veterinarian.¹¹⁰ Failure to comply with these provisions can result in harsh consequences. Specifically, “[a]ny veterinarian or owner of an animal who is convicted of willfully failing to report an animal as required in subsection (1) or subsection (2) is guilty of a felony of the second degree”¹¹¹

In Iowa, the Department of Agriculture and Land Stewardship has broad discretion to control infectious animal diseases.¹¹² For example, the department has the authority to do the following:

Enter any place where any animal is at the time located, or where it has been kept, or where the carcass of such animal may be, for the purpose of examining it in any way that may be necessary to determine whether it was or is exposed to or afflicted with an infectious or contagious disease.¹¹³

In addition, “[t]he department may quarantine or destroy any animal exposed to or afflicted with an infectious or contagious disease.”¹¹⁴ Similarly, in Kansas, “[t]he state animal health commissioner is hereby directed to protect the health of domestic animals of the state from all contagious or infectious diseases and for this purpose is hereby authorized and empowered to establish, maintain and enforce such quarantine, sanitary and other regula-

tions”¹¹⁵ Failure to comply with a quarantine set by the state animal health commissioner could result in a felony conviction.¹¹⁶

b. Ag-Gag Laws

U.S. Environmental Protection Agency (EPA) Region 7, which consists of Iowa, Kansas, Missouri, and Nebraska, has some of the highest levels of livestock inventories.¹¹⁷ Three of these states (Iowa, Kansas, and Missouri) have passed some form of an ag-gag law.¹¹⁸ The term “ag-gag” refers to anti-whistleblower laws, which “make taking pictures, filming, or recording on farms and livestock production facilities illegal.”¹¹⁹ In Kansas, under the Farm Animal and Field Crop and Research Facilities Protection Act,¹²⁰ individuals may not, without the consent of the property owner, “enter an animal facility to take pictures by photograph, video camera or by any other means.”¹²¹ In Iowa, it is a crime to obtain access to an agricultural facility under false pretenses, including making a false statement in the process of becoming employed by the agriculture facility.¹²² These laws are troubling both in their potential to inhibit free speech and their potential to block access to acts of animal cruelty, unsanitary operations, and Occupational Safety and Health Administration-related violations on factory farms and in slaughterhouses.

4. Suggestions to Improve Animal Rights Laws as Applied to CAFOs

Given the strength of the agribusiness lobby, comprehensive legislation to extend rights to farm animals is unlikely in the current political environment. This gap in animal welfare legislation across the United States leaves factory farms with wide discretion to operate in a manner that leads to the inhumane treatment of farm animals and, potentially, unsafe food production.

Federal laws enacted to ensure slaughtering activities are conducted in a manner that ensures the safety of the meat that enters U.S. and international markets, and the recently enacted Food Safety Modernization Act, are consumer protection-driven statutes aimed at protecting the food supply. State laws that provide state agricultural commissions with broad discretion to regulate diseased animals are grounded in protecting public health and maintaining viable agriculture industries within their state. While such laws are not grounded in reasons related to animal rights or improving the lives of farm animals,

106. See *Campoamor v. State Live Stock Sanitary Bd.*, 136 Fla. 451, 457 (Fla. 1938) (“The doctrine of due process has no such implication when the life, health, and welfare of man or beast is involved as it has when other tangible property is at stake.”).

107. *Id.* at 455.

108. FLA. STAT. §585.15 (2012).

109. *Id.* §585.18.

110. *Id.* §585.19(4).

111. *Id.*

112. IOWA CODE §163.1 (2012).

113. *Id.* §163.1(6).

114. *Id.* §163.2.

115. KAN. STAT. ANN. §47-610 (2012).

116. *Id.* §47-604.

117. Kolbe, *supra* note 17, at 430.

118. *Ag-Gag Bills at the State Level*, AMERICAN SOC’Y FOR THE PREVENTION OF CRUELTY TO ANIMALS, <http://www.aspc.org/fight-cruelty/advocacy-center/ag-gag-whistleblower-suppression-legislation/ag-gag-bills-state-level> (last visited Jan. 17, 2020).

119. Sonci Kingery, *The Agricultural Iron Curtain: Ag Gag Legislation and the Threat to Free Speech, Food Safety, and Animal Welfare*, 17 DRAKE J. AGRIC. L. 645, 647 (2012).

120. KAN. STAT. ANN. §47-1827.

121. *Id.* §47-1827(c)(4).

122. IOWA CODE §§717A.3A(1)(a), 717A.3A(1)(b) (2019).

they do promote best practices to reduce disease and promote sanitary operations. These measures, while focused on human interests, could be used to indirectly support farm animals. For example, under the Food Safety Modernization Act, the U.S. Food and Drug Administration (FDA) is directed to “build an integrated national food safety system in partnership with state and local authorities and put[] more responsibility on food producers to institute plans to make food safer.”¹²³ With this new mandate to promote safer food, FDA should take a closer look at the safety and regulation of the antibiotics used to rapidly increase the growth of farm animals and at the safety of farm animal feed. Reducing the use of antibiotics and feed that cannot be naturally digested by animals will prevent foodborne illnesses and overexposure to antibiotics while simultaneously improving the health and well-being of farm animals.

B. Existing Environmental Laws That Should Apply to CAFOs and Indirectly Protect Farm Animals

Many U.S. environmental laws were enacted in the 1970s, before the widespread development of CAFOs across the country. Therefore, the originally enacted regulations could not contemplate the various environmental concerns that would ensue from the development of the agriculture industry, and they have not been adequately amended since then to regulate the land, air, and water pollution from CAFOs.¹²⁴ Most federal environmental laws provide exemptions for agricultural activities; and this, combined with strong industry influence, has made it difficult for EPA to effectively regulate CAFOs.¹²⁵

Nevertheless, to an extent, CAFOs *are* addressed under the CWA and the CAA. While these laws do not directly address animal welfare protection, or sufficiently redress their environmental impacts, agricultural animals could indirectly benefit from U.S. federal environmental laws if under their framework, CAFOs were comprehensively and strictly regulated.

1. The Clean Water Act

The large amount of waste produced from CAFOs presents water quality issues for groundwater, surface water, and aquatic ecosystems. Groundwater contamination may occur through runoff, leaching of manure into the ground, or leaks in manure containment structures, presenting a serious threat to drinking water.¹²⁶ CAFOs are the leading cause of pollution to surface water bodies¹²⁷ and cause dead zones in oceans.

123. Lauren Orrico, *Squashing the Superbugs: A Proposed Multifaceted Approach to Combating Antibiotic-Resistant Bacteria*, 27 J.L. & HEALTH 259, 273 (2014).

124. Elizabeth M. Stapleton, *Agriculture as an Industry: The Failure of Environmental and Agricultural Policy to Adapt to the Modern Agricultural Landscape*, 7 ALB. GOV'T L. REV. 321 (2014).

125. Myers, *supra* note 30, at 36.

126. HRIBAR, *supra* note 3, at 3-4.

127. *Id.* at 4.

The CWA, administered by EPA, is a federal law that prohibits the discharge of any pollutant by any person from any point source, into navigable waters of the United States, except for those who obtain requisite permits.¹²⁸ A “point source” is defined as “any discernable confined and discrete conveyance . . . from which pollutants are or may be discharged,”¹²⁹ and CAFOs are specifically listed in this definition.¹³⁰ Under §402 of the CWA, the national pollutant discharge elimination system (NPDES) program requires that all facilities that discharge pollutants into U.S. waters obtain an NPDES permit;¹³¹ therefore, some CAFOs must obtain NPDES permits to comply with the CWA.¹³²

Nevertheless, not all animal feeding operations fit within this regulatory scheme. Only medium- and large-size CAFOs (determined by the type of species and capacity of confined animals) are subject to regulation.¹³³ Even then, the CWA does not require a medium-size CAFO to obtain an NPDES permit unless one of the following conditions is satisfied: (1) pollutants are discharged into waters of the United States through a man-made ditch, flushing system, or other similar man-made device; or (2) pollutants are discharged directly into waters of the United States that originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.¹³⁴

Therefore, small CAFOs and some medium CAFOs are considered “nonpoint sources,” and are not held to the same standards as large CAFOs, even when they discharge pollutants into U.S. waters.¹³⁵ Moreover, though the CWA requires large (and some medium) CAFOs to obtain NPDES permits for discharges of manure, litter, or process wastewater, there is a broad exemption contained in the CWA for agricultural stormwater discharge.¹³⁶

2. The Clean Air Act

CAFOs contribute to hazardous air pollution, particularly from decomposing animal manure that releases in the form of harmful gases, particulate matter, and odor.¹³⁷ These emissions are dangerous to the environment, animals, and human health and welfare, particularly to those within the facilities and neighboring rural communities, where residents suffer from respiratory issues, headaches, nausea, infant mortality, and depression.¹³⁸

The federal CAA is the principal U.S. law regulating air pollution emissions from stationary and mobile sources¹³⁹

128. 33 U.S.C. §§1251-1388.

129. *Id.* §1362(14).

130. *Id.*

131. *Id.* §1342.

132. 132 U.S. EPA, *Clean Water Act (CWA) Compliance Monitoring—Discharges From Concentrated Animal Feeding Operations* (last visited June 28, 2019).

133. 40 C.F.R. §122.23(b) (2014).

134. *Id.* §122.23(b)(6)(ii).

135. Kolbe, *supra* note 17, at 420.

136. 40 C.F.R. §22.23(e).

137. J. Nicholas Hoover, *Can't You Smell That Smell? Clean Air Act Fixes for Factory Farm Air Pollution*, 6 STAN. J. ANIMAL L. & POL'Y 1, 7 (2013).

138. *Id.* at 7-8.

139. *Id.* at 9.

and authorizes EPA to protect and enhance the air quality of the United States.¹⁴⁰ The CAA regulates criteria pollutants,¹⁴¹ hazardous air pollutants,¹⁴² and emissions from certain specific sources.¹⁴³ Under §108 of the CAA, EPA is authorized to establish national ambient air quality standards (NAAQS) for air pollutants it finds may be reasonably expected to contribute to air pollution and endanger public health and welfare, and lists six criteria pollutants, including sulfur dioxide, carbon monoxide, ozone, nitrogen dioxide, lead, and particulate matter.¹⁴⁴

Manure from CAFOs emits more than 160 gases, including some listed as these six criteria pollutants,¹⁴⁵ and therefore should be strictly regulated under the CAA. In fact, in 2002, EPA determined that CAFOs “plainly fit the definition of a stationary source.”¹⁴⁶ In practice, however, EPA has rarely enforced the CAA against CAFOs, due to complexities in its regulatory structure, difficulty in enforcement, and pushback from the industry.¹⁴⁷ Moreover, like the CWA, regulatory definitions in the CAA allow many animal feeding operations to fall outside the scope of regulation and permitting requirements because the CAA focuses on “major source” air pollution emissions, under which most agricultural activities do not qualify.¹⁴⁸

3. Suggestions to Improve Environmental Laws as Applied to CAFOs

The CWA and the CAA offer promising federal frameworks for meaningful regulation of the animal agriculture industry. But as it stands, the regulatory frameworks for both are deficient to effectively regulate the environmental damage to the water and air created by CAFOs.

The CWA’s distinction between “point source” and “nonpoint source” for large, medium, and small animal feeding operations enables smaller facilities to discharge pollutants into U.S. waters because they do not fall within the definition to necessitate NPDES permits.¹⁴⁹ The agricultural stormwater discharge exemption presents an additional dangerous loophole. Ideally, both sections of the CWA should be amended to address these gaps in regulation. Similarly, the CAA should incorporate all animal feeding operations to qualify as “major sources” of air pollution emissions.

C. Using Local Land Use Principles to Regulate CAFOs

Outside of the federal regulatory requirements with which CAFO operators must comply, CAFOs may be subject to state and local laws, including zoning or public health ordinances that create further restrictions and limitations on CAFO siting procedures. While zoning and common-law nuisance claims remain options for some neighborhoods challenging the construction of a CAFO, zoning regulations may be preempted by state and federal laws.

1. State Agriculture Exemptions

Various forms of right-to-farm laws are present in all states.¹⁵⁰ These laws vary by state but generally seek to limit common-law nuisance claims against agricultural operations.¹⁵¹ In Florida, farming operations in existence for at least one year may not be deemed a public or private nuisance if the operation was not a nuisance at the time it was established and is operated pursuant to generally accepted agricultural practices.¹⁵² The statute provides examples of what would be deemed a nuisance, including the existence of untreated dead animals or human waste.¹⁵³ Similarly, in Michigan, “[a] farm or farm operation shall not be found to be a public or private nuisance if the farm or farm operation alleged to be a nuisance conforms to generally accepted agricultural and management practices according to policy determined by the Michigan commission of agriculture.”¹⁵⁴ The right-to-farm law in Kansas seeks to undo the “coming to the nuisance” concept¹⁵⁵ discussed in *Spur Industries, Inc. v. Webb*.¹⁵⁶

State right-to-farm laws, however, are not the only laws enacted at the state level. Agricultural exceptionalism is prevalent in many states and goes beyond limitations to nuisance claims. In Florida, nonresidential buildings, fences, and signs located on agricultural lands are exempt from the Florida Building Code and local codes that do not involve floodplain management.¹⁵⁷ Iowa exempts similar structures from county building codes on agricultural lands.¹⁵⁸ Beyond zoning regulations, some states even exempt actions that result in wetland degradation or diverting surface water flows if the purpose of the topography alteration is for agricultural purposes, and

140. 42 U.S.C. §§7401-7671.

141. *Id.* §7409.

142. *Id.* §7412.

143. *Id.* §7411.

144. *See id.* §7408; *see also* U.S. EPA, *What Are the Six Common Air Pollutants?*, <http://www.epa.gov/oaqps001/urbanair/> (last visited Jan. 18, 2020).

145. Hoover, *supra* note 137, at 7.

146. Partial Withdrawal of Approval of 34 Clean Air Act Part 70 Operating Permits Programs in California; Announcement of a Part 71 Federal Operating Permits Program, 67 Fed. Reg. 63551, 63554-55 (Oct. 15, 2002).

147. Hoover, *supra* note 137, at 13.

148. Stapleton, *supra* note 124, at 329.

149. 40 C.F.R. §122.23(e).

150. Terence J. Centner, *Governments and Unconstitutional Takings: When Do Right-to-Farm Laws Go Too Far?*, 33 B.C. ENVTL. AFF. L. REV. 87, 87 (2006). *See also* Jonathan Morris, *One Ought Not Have So Delicate a Nose: CAFOS, Agricultural Nuisance, and the Rise of the Right to Farm*, 47 ENVTL. L. 261, 276-79 (2017).

151. *Id.* at 88.

152. FLA. STAT. §823.14(4)(a) (2012).

153. *Id.* §823.14(4)(a)(1).

154. 154 MICH. STAT. §286.473 (1)(1995).

155. KAN. STAT. ANN. §2-3201.

156. *See Spur Indus., Inc. v. Del E. Webb Dev. Co.*, 494 P.2d 700 (Ariz. 1972) (enjoining cattle feedlot because it was deemed a nuisance to residential neighborhood and requiring developer to pay damages to the cattle feedlot because it was the developer who built a neighborhood close to the preexisting cattle feedlot operation).

157. FLA. STAT. §604.50(1).

158. IOWA CODE §335.2 (2015).

the alteration is normal and customary for the specific agricultural property.¹⁵⁹

2. Zoning Challenges and Common-Law Nuisance Claims

While agricultural exceptionalism thwarts localized efforts to challenge the siting of new CAFOs or existing nuisance claims, there has been some localized success. In *Thieman v. Cedar Valley Feeding Co.*, a real property owner challenged Cedar Valley Feeding Company's livestock feeding operation for violating local zoning regulations.¹⁶⁰ Cedar Valley Feeding Company operated a livestock feeding operation prior to the implementation of specific zoning laws applicable to such operations.¹⁶¹ The livestock-feeding ordinance allowed non-conforming uses existing at the time the zoning ordinance went into effect but did not allow such use to be increased.¹⁶² Cedar Valley Feeding Company argued the non-conforming use would allow a use up to the actual capacity of the facility on the date the ordinance went into effect; however, the court disagreed. The Nebraska Court of Appeals determined that the non-conforming use was not based on capacity, but instead was based on actual use.¹⁶³ While this decision did not restrict Cedar Valley Feeding Company's operation of the CAFO completely, it did limit its operations to 5,000 cattle as opposed to the 7,500 cattle to which the company claimed rights.¹⁶⁴

In *Nickels v. Burnett*, landowners surrounding a prospective hog confinement facility challenged the facility based on common-law nuisance and sought a preliminary injunction to prevent the facility's construction.¹⁶⁵ At the time the plaintiffs challenged the action, the Illinois Department of Agriculture had already authorized the construction pursuant to the Livestock Management Facilities Act.¹⁶⁶ Defendant farm owners filed a motion to dismiss, arguing that plaintiffs needed to exhaust their administrative remedies by challenging the Illinois Department of Agriculture's authorization of the facility.¹⁶⁷ The trial court granted plaintiffs' preliminary injunction and held that they could pursue a common-law nuisance claim despite the pending review of the Illinois Department of Agriculture's decision.¹⁶⁸ Defendants appealed the trial court's decision as a violation of the separation-of-powers doctrine and claimed the trial court's decision to grant the injunction was erroneous because plaintiffs failed to exhaust their administrative remedies.¹⁶⁹ The Appellate Court of Illinois, Second District, however, affirmed the trial court's decision.¹⁷⁰ First, the appellate court considered the defendant's challenges

to be, essentially, a preemption argument.¹⁷¹ The court held the Livestock Management Facilities Act did not preempt a claim for common-law nuisance because the Act, among other reasons, did not provide a remedy or an enforcement provision.¹⁷² In 2018, landowners living near hog farms successfully challenged the farm's practice of storing and disposing of hog waste by suing the pork producers—Murphy-Brown/Smithfield Foods—for public nuisance instead of pursuing a claim against the facility owner.¹⁷³

Using zoning and common-law nuisance claims to fill gaps in environmental law is not a new concept. Zoning regulations that restrict high-intensity uses from low-intensity uses provide added protection to environmentally degrading activities that may be authorized under federal and state environmental laws. Zoning regulations that prioritize protecting open spaces, recreation areas, historical sites, and conservation areas have become priorities for many local governments.¹⁷⁴ Zoning and common-law nuisance claims also have been used to combat climate change-related issues.¹⁷⁵ Provided that preemption or federal displacement does not preclude such claims, local land use mechanisms and common-law claims may be available as strategies to prevent the siting of CAFOs.

IV. Innovative Solutions for Consumers to Address the CAFOs Problem

Increasingly, individuals are concerned about where their food comes from, how it was made, and the health consequences associated with its consumption. People are realizing that their poor health is associated with a broken food system. Localized movements are not new—anti-corporate farming legislation has been in place for years.¹⁷⁶ These food transparency movements may be the key to resolving the environmental and animal welfare issues arising from CAFOs because these initiatives will work to reduce consumer demand for meat produced through factory farming. While individuals are becoming increasingly interested in knowing where their food comes from, gaining meaningful information that allows individuals to make educated decisions can be a challenge. Labels used to describe products or processes as “natural,” “antibiotic-free,” and “USDA

159. FLA. STAT. §373.406(2).

160. 789 N.W.2d 714, 716 (Neb. Ct. App. 2010).

161. *Id.* at 719.

162. *Id.* at 716.

163. *Id.*

164. *Id.*

165. 343 Ill. App. 3d 654, 655-56 (Ill. App. Ct. 2003).

166. *Id.* at 655.

167. *Id.* at 659.

168. *Id.* at 656-57.

169. *Id.* at 657.

170. *Id.* at 656.

171. *Id.* at 659.

172. *Id.* at 661.

173. Anne Blythe, *Jury Awards More Than \$25 Million to Duplin County Couple in Hog-Farm Case*, THE NEWS & OBSERVER, June 29, 2018, <https://amp.newsobserver.com/news/local/article214096384.html>.

174. John R. Nolon, *Using Zoning to Protect the Environment: An Excerpt From Protecting the Environment Through Land Use Law: Standing Ground*, LAND USE PROF BLOG (2014), https://lawprofessors.typepad.com/land_use/2014/10/using-zoning-to-protect-the-environment-an-excerpt-from-protecting-the-environment-through-land-use-.html#.

175. See generally *Native Village of Kivalina v. Exxon-Mobil Corp.*, 696 F.3d 849 (9th Cir. 2012) (public nuisance claim involving a native Alaskan tribe against multiple oil and energy companies); see also FLA. STAT. §163.3178(1) (addressing sea-level rise in local government comprehensive plans: “[I]t is the intent of the Legislature that local government comprehensive plans restrict development activities where such activities would damage or destroy coastal resources. . .”).

176. John C. Pietila, “(W)e’re Doing This to Ourselves”: *South Dakota’s Anticorporate Farming Amendment*, 27 J. CORP. L. 149, 161 (2001).

certified” have unclear meanings.¹⁷⁷ Such labels may also represent the opinion of a review board with inadequate ethical standards.¹⁷⁸ Without educating consumers about the true meaning of statements made on meat packaging, consumers may think they are purchasing items within the realm of their health or ethical standards, but in reality are being misled by deceptive labeling practices.¹⁷⁹ Educational campaigns that seek to provide insight into the true meaning of meat labeling will arm consumers with the tools they need to make well-informed purchases.¹⁸⁰

Campaigns to support more sustainable agriculture, including reducing food waste, may be helpful to improve conditions on CAFOs. For example, to reduce the use of corn as cattle feed, which is not a food source that can be naturally digested by cows and leads to *E. coli*,¹⁸¹ the byproducts of human food production may be redirected from the landfill to use as animal feed.¹⁸² Redirecting spent grain, which is the byproduct of brewing beer, to animal feed is a common example of reducing the use of corn while simultaneously preventing food waste, which is acceptable under FDA regulations so long as the brewery complies with human-food rules.¹⁸³ Further, programs like Green Mountain Power’s cow power program in Vermont, which promotes using anaerobic digesters to put waste from dairy cows to good use by capturing methane from the waste and converting it to electricity, are innovative ways of reducing waste on farms.¹⁸⁴ After a digester processes manure, the manure goes through a separator to create a dry, odorless solid that can be used for bedding for the animals and fertilizer.¹⁸⁵ This program makes dairy farms more efficient, reduces waste and environmental degradation, and improves animal welfare by creating an incentive to remove waste from animal pens.

Campaigns seeking to reduce meat consumption could also be used to improve farming practices and reduce the impact of CAFOs on the environment by reducing the

overall consumer demand for meat products. Campaigns such as the “Meatless Monday”¹⁸⁶ initiative that encourages consumers to forego meat just one time per week or the “Meat Out” initiative that encourages consumers to “kick the meat habit”¹⁸⁷ appeal to consumers’ desires to support the environment, improve their individual health, and accomplish personal financial goals.¹⁸⁸ Complementing initiatives to reduce meat consumption are the initiatives to produce plant-based meat alternatives. Many innovative companies recognize that using factory farming to produce meat and animal products is unsustainable and are shifting their focus to the production of plant-based meat alternatives.¹⁸⁹ Investment in meat alternatives, however, is not limited to innovative startups, as major players in meat production are entering the plant-based meat market.¹⁹⁰ Specifically, Tyson has invested in Beyond Meat, producer of the Beyond Burger that looks and tastes like real meat; and, ConAgra Foods purchased LightLife, which produces meat alternatives.¹⁹¹

While there appears to be a market for plant-based meat,¹⁹² and the big players in meat production are looking to participate in this new market,¹⁹³ farmers have challenged how meat alternatives can be marketed to consumers.¹⁹⁴ Ranchers and other members of the beef industry have challenged whether the Beyond and Impossible burgers, which have striking similarities to beef in their look and feel, i.e., bleeding like real meat, should be legally marketed as meat.¹⁹⁵ Conversely, grocers support using the term “meat” to market plant-based food products.¹⁹⁶ While it is still unclear how lab-produced meat alternatives should be marketed to avoid consumer confusion, such products do appear to be another way to mitigate the consequences of large-scale factory farming and meat production.¹⁹⁷

177. People for the Ethical Treatment of Animals (PETA), *Other Labels on Meat Packages*, <http://www.peta.org/issues/animals-used-for-food/labels/>. See also Kyle Sigmon, *Consumer Perceptions of Organic, Natural, and Conventional Products When Provided at the Same Price*; Agricultural Education, Communications and Technology Undergraduate Honors Theses (2019), 8-13, <https://scholarworks.uark.edu/cgi/viewcontent.cgi?article=1007&context=aectuht> (“If consumers have no knowledge of how these various labeled products differ, they could be buying products which have qualities for which they do not actually want to pay.”).

178. Michelle Kretzer, *CONSUMER ALERT: Don't Be Fooled by Butterball's "Humane" Label*, PETA, Nov. 13, 2014, <http://www.peta.org/blog/consumer-alert-dont-fooled-butterballs-humane-label/>.

179. Sigmon, *supra* note 177, at 8-13.

180. *Id.* at 29.

181. Frontline, *Interview With Michael Pollan*, <http://www.pbs.org/wgbh/pages/frontline/shows/meat/interviews/pollan.html>.

182. Eliza Barclay, *Why We Rarely Feed Animals Food Scraps, Even in a Drought*, NPR, Sept. 6, 2012, <http://www.npr.org/blogs/the-salt/2012/09/06/160684126/why-we-rarely-feed-animals-food-scraps-even-in-a-drought>.

183. Press Release, FDA, *FDA Releases Updated Proposals to Improve Food Safety and Help Prevent Food-Borne Illness in Response to Public Comments* (Sept. 19, 2014), <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm414867.htm>.

184. Green Mountain Energy, *How It Works*, <http://www.greenmountainpower.com/innovative/cow/how-it-works/>.

185. *Id.*

186. Meatless Mondays, <http://www.meatlessmonday.com/>.

187. Brad Tuttle, *The Meatless (and Less Meat) Revolution*, TIME, Mar. 22, 2012, <http://business.time.com/2012/03/22/the-meatless-and-less-meat-revolution/>.

188. *Id.* (“The USDA has noted a steady decline in meat consumption throughout the recession era, which is understandable because meals without meat (think rice and beans, pasta, etc.) tend to be much less expensive than New York strip steaks.”)

189. Jeremy Collier, *The State of Factory Farming: Present and Future*, 20 ABA AGRIC. COMM. NEWSL. 4, 6 (2016). (“Meat alternatives are more sustainable over the long term, and in the short term generally offer lower and less volatile input costs, e.g., chickpeas are much cheaper to produce than chicken, and exciting opportunities exist to use current manufacturing processes to quickly build scale. Bruce Friedrich, Chief Executive Officer at specialists New Crop Capital argues: ‘In 2014, the global meat substitutes market was worth about \$3.4 billion and is forecast to grow by 7.5 percent a year over the next five years—making it worth nearly \$6 billion by 2022.’ And these are conservative estimates.”)

190. Michele H. Inman, *An Investigation into the Potential Impact of Carve-Outs for Ranching and Farming Protects Through State Constitutional Amendments*, 8 ALB. L. REV. 1417, 1467-48 (2019) (“It is possible that the growing awareness of food animal cruelty practices, environmental damage, food safety and nutrition and business interests are increasingly resonating with consumers, causing the major players in the food system to pay attention.”)

191. *Id.*

192. Collier, *supra* note 189, at 6.

193. Inman, *supra* note 190, at 1467-48.

194. Nathaniel Popper, *You Call That Meat? Not So Fast, Cattle Ranchers Say*, N.Y. TIMES, Feb. 9, 2019, <https://www.nytimes.com/2019/02/09/technology/meat-veggie-burgers-lab-produced.html>.

195. *Id.*

196. *Id.*

197. For an in-depth analysis of lab-grown meat and its implications for animal welfare and sustainability, see Carita Skinner & Gabriela Steier, *Lab-Grown*

Additionally, consumers are increasingly looking to local food options because of fears regarding food-borne illnesses and a demand for transparency in the food system.¹⁹⁸ The Tester-Hagen Amendment seeks to exempt small direct-to-consumer farmers from the regulatory requirements imposed by the Food Safety and Modernization Act and increase research into the safety of food produced on a small-scale operation instead of in an industrialized setting.¹⁹⁹ Increasing the availability of local direct-to-consumer farms provides consumers with greater opportunities to demand their food come from humane operations.

Innovative ideas like these and conscious consumers are key to returning to our idyllic image of the farm where there is minimal impact on the environment, the animal is raised and fed sustainably and fairly, and after a good life, the animal is humanely slaughtered and consumed by individuals with confidence in the nutritional quality and safety of their meal. As innovation continues and people become acutely aware of the environmental degradation and animal injustice suffered in the factory farming process, legislators may be more apt to close the loopholes existing throughout federal and state animal welfare and environmental laws. Until then, individuals must remem-

ber that eating is more than a mere act of consumerism, but instead “eating is an agricultural act” that requires scrupulous attention to the consequences of their food choices.²⁰⁰

V. Conclusion

Current federal and state regulations governing CAFOs are riddled with exemptions and loopholes that allow factory farming to thrive throughout the United States at the expense of the environment, animal welfare, and human health and welfare. The market is not an accurate representation of the true costs of meat production because it fails to internalize the environmental and ethical consequences of factory farming and is skewed by government subsidies. Local residents and governments make attempts to keep CAFOs out of their neighborhoods, but suffer more losses than wins due to preemption by state and federal law. With these hurdles in place, how can the environmental consequences of factory farming be managed to promote farm animal and human health and welfare? The answer lies in increasing transparency in the food system, supporting research and development into meat alternatives, and finding innovative ways to promote best practices for CAFOs.

Meat: A Critical Perspective on Cellular Agriculture and Its Role in the Future of Farm Animal Welfare and Environmental Protection, in *WHAT CAN ANIMAL LAW LEARN FROM ENVIRONMENTAL LAW?* (2d ed., Randall S. Abate ed. forthcoming 2020).

198. See Peter Anderson, *Empowering Local and Sustainable Food: Does the Food Safety Modernization Act's Tester-Hagen Amendment Remove Enough Barriers?*, 9 J.L. ECON. & POL'Y 145 (2012).

199. *Id.* at 158 (Few studies of this kind for meat and poultry have been conducted, but there is anecdotal evidence supporting the hypothesis that non-industrial meat is safer than industrial meat.).

200. WENDELL BERRY, *WHAT ARE PEOPLE FOR?* 170 (2010).