

Chapter 4

Voluntary Standards and Their Impact on National Laws and International Initiatives

Dena Jones and Michelle Pawlinger

Abstract Numerous private entities—both national and international in scope—have developed or are in the process of developing nonregulatory standards to assure consumers that animals and natural resources used in agricultural production are properly treated. This chapter describes the differing approaches of three countries: one that uses voluntary standards to supplement legal standards (United Kingdom), one that uses voluntary standards as a substitute for legal standards (United States), and a third that uses voluntary standards to assist in interpreting and enforcing legal standards (Canada). The impact of these voluntary standards on international animal welfare initiatives is also discussed.

4.1 Introduction

Worldwide, 70 billion land animals are slaughtered for food each year.¹ Nine billion of these animals are killed in the United States, 650 million in Canada, and 1 billion in the United Kingdom² (together approximately 15% of the worldwide total). A growing number of animals in agriculture are covered under voluntary animal welfare and environmental stewardship standards in an attempt to assure consumers that the animals and the environment are not abused in the production process.

¹Food and Agriculture Organization of the United Nations (FAO) Statistics Division (2015). This number is an approximation and does not include animals killed for indigenous meats.

²See US Department of Agriculture (USDA), National Agricultural Statistics Service (NASS) (2015a), p. 5; USDA, NASS (2015c), p. 5; See Agriculture and Agri-Food Canada (2014); see Royal Society for the Prevention of Cruelty to Animals (2008). The slaughter numbers are approximations calculated using these slaughter reports and statistics.

D. Jones (✉) • M. Pawlinger
Animal Welfare Institute, Washington, DC, USA
e-mail: Dena@awionline.org

The International Organization for Standardization (ISO), the world's largest developer of voluntary international standards, defines "standards" as documents that provide "requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose."³ Voluntary animal welfare standards apply to the processes used to raise, transport, and slaughter animals, while voluntary environmental stewardship standards relate to the resources used in the production of agricultural products.⁴

Voluntary animal welfare and environmental stewardship standards are most often associated with private entities. Various private entities have established standards, and continue to develop these standards, as consumer demand increases for higher-quality products. Private standards are set by individual companies, industry trade associations, and independent third-party certifiers. Animal welfare and environmental stewardship standards have expanded in scope and in depth in all three sectors. At present, the global animal agriculture industry is impacted by a variety of differing and in some cases contradictory standards, and this trend is expected to continue.

Consequently, efforts are underway through international initiatives to harmonize individual sets of standards. The World Organization for Animal Health (commonly referred to by its French initialism "OIE"), for example, is an inter-governmental organization aiming to advance global animal health.⁵ It maintains animal welfare standards that aspire to be a global solution to individualized standards.⁶ In addition to the OIE, the ISO has several sets of environmental standards and is in the process of developing animal welfare standards similar to those of the OIE.⁷ GLOBALG.A.P., another international organization seeking to harmonize agriculture standards worldwide, maintains voluntary animal welfare standards.⁸ This chapter will discuss how individual private standards and those of the OIE, ISO, and GLOBALG.A.P. compare and how they impact one another.

While private voluntary standards are more prevalent, voluntary standards are sometimes established by governments. Organic production standards, for instance, are often regulated by governmental entities. Governments often require farmers to meet higher-than-industry animal welfare and environmental stewardship standards

³International Organization for Standardization (ISO) (no date), Standards.

⁴This chapter will focus on animal welfare, but will provide a review of environmental stewardship voluntary standards.

⁵World Organization for Animal Health ("OIE") (2015a), About us.

⁶OIE (2015b), OIE's achievements in animal welfare.

⁷See ISO (no date), ISO 14000-environmental management.

⁸GLOBALG.A.P. (no date), GLOBALG.A.P. animal welfare add-on.

for organic production, and rely on third-parties to verify compliance on organic farms.⁹ Section 4.4 of this chapter focuses on third-party certification, and voluntary organic standards are included in that discussion.

The main focus of the chapter, however, is the effect of private voluntary standards on national laws and international initiatives. The chapter concentrates on voluntary standards in the United States, Canada, and the United Kingdom in order to demonstrate three distinct approaches to voluntary standards and their impacts on national and international policy initiatives. Section 4.2 details corporate approaches to voluntary standards, including insight into the origins of corporate interest in animal welfare and environmental stewardship, and the impact of corporate national and international standards. Section 4.3 reviews the role of trade associations in animal welfare and environmental stewardship, and explains how their impact on animal welfare differs in the reviewed nations. Section 4.4 discusses independent, third-party certification organizations and their impact on animals and the environment. Section 4.5 provides case studies of how voluntary standards impact national laws and international initiatives.

4.2 Self-Regulation Through Corporate Policies

4.2.1 *Overview of the Origin and Role of Farm Animal Welfare and Environmental Stewardship Policies in Corporate Entities*

Social responsibility has been a longstanding issue within corporate development, but companies have often separated philanthropic endeavors from business practices.¹⁰ As the world economy globalized, companies seeking a competitive advantage began incorporating socially responsible practices into their business strategies.¹¹ These socially responsible practices—often referred to as “Corporate Social Responsibility,” or CSR—typically include plans to improve worker safety, human health, the environment, and the community in which a corporation is involved.¹²

⁹Organic production could also be discussed under trade associations, as in certain countries organic production is certified by organic industry associations, such as in the UK where the leading organic certifier is the United Kingdom’s Soil Association.

¹⁰Pastore (2013), p. 109.

¹¹Pastore (2013), p. 109.

¹²According to the World Business Council for Sustainable Development, Corporate Social Responsibility is “the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.” Watts and Holme (1999), p. 3.

According to the Food and Agriculture Organization of the United Nations (FAO), “CSR has become an important part of business. It is an explicit set of business principles, developed and adopted by the companies themselves to suit their specific procurement, manufacturing, logistics, marketing, and other business circumstances.”¹³ Companies embrace CSR policies because they can positively impact communities, better retain employees, and set examples for respective industries.¹⁴ Perhaps the most obvious reason for implementing CSR policies is economic advantage; CSR policies can improve a company’s image and thus help set it apart from others.¹⁵

Companies tend to focus their CSR policies on areas that are already regulated by governments or on issues upon which society places great value.¹⁶ For instance, the natural environment, which is highly regulated and of high societal interest, is often a key element of corporate social responsibility.¹⁷ Animal welfare is a newer concept in corporate policies, but it is gaining traction.¹⁸ A 2014 international report on corporate animal welfare policies, titled *The Business Benchmark on Farm Animal Welfare* (BBFAW),¹⁹ found that only 41 % of companies publish farm animal welfare-related objectives and targets.²⁰ The BBFAW report observes, however, that there are tangible signs of an increase in animal welfare policies.²¹

The following section will review corporate animal welfare and environmental stewardship policies in the United States, Canada, and the United Kingdom.

4.2.2 Corporate Standards for Farm Animal Welfare and Environmental Stewardship

4.2.2.1 United States

In the 1980s, corporations increasingly added environmental stewardship to their corporate social responsibility policies.²² Another decade would pass before corporate entities began to develop animal welfare policies, as well.²³ Prior to this,

¹³Pastore (2013), p. 109.

¹⁴Thorpe (2013).

¹⁵Portney (2005), p. 112.

¹⁶Davis et al. (2006), p. 8.

¹⁷See Portney (2006), p. 108 (maintaining that environmental responsibility is part of CSR).

¹⁸Amos and Sullivan (2014), p. 4.

¹⁹Amos and Sullivan (2014). This report assessed businesses in three core areas: (1) management commitment and policy, (2) governance and management, and (3) leadership and innovation.

²⁰Amos and Sullivan (2014), p. 7.

²¹Amos and Sullivan (2014), p. 8.

²²Rondinelli and Berry (2000), p. 1.

²³See Singer (1998), Ch. 5 (explaining how McDonald’s became the first fast food company to make small improvements in its supply chain).

a few companies had general statements that mimicked industry standards and did little to ensure compliance.²⁴ Numerous companies continue to use vague statements for both environmental and animal welfare policies; however, businesses are making strides to improve in both areas.

Animal welfare policies were developed, in part, because pressure from animal advocacy groups—including graphic exposés at slaughterhouses—drove companies into action.²⁵ Fast food companies were among the first corporations to form specific policies regarding animal welfare.²⁶ McDonald’s implemented animal welfare auditing at its suppliers’ slaughterhouses; Wendy’s and Burger King quickly followed suit, and over time slaughterhouses made modest improvements to their practices.²⁷

Along with fast food restaurants like McDonald’s and Wendy’s, food producers, hotels, high-end restaurants, and supermarket chains began devising animal welfare policies and statements. While fast food restaurants originally developed only slaughterhouse policies, they pushed corporations across the country to open dialogue on animal-raising practices as well. For instance, Aramark, one of the largest private companies in the United States, has announced plans to (1) purchase eggs that are produced only from cage-free hens by 2020, (2) purchase pork only from crate-free sows and veal only from crate-free calves by 2017, and (3) “address animal welfare issues associated with fast growth of broiler chickens and turkeys.”²⁸

There are two main trends among corporate animal welfare policies in the United States: companies tend to make incremental versus sweeping changes, and they grant suppliers lengthy phase-in periods for compliance. Incremental changes allow companies to improve in areas that are demonstrably important to consumers, while acknowledging that changes can be financially burdensome for producers. Long phase-in periods allow producers time to gradually pay for improvements and for expensive equipment to depreciate. For example, in 2007, Smithfield Foods, the country’s largest pork producer, announced it would phase out the use of sow gestation crates from company-owned facilities in 10 years, and in 2014 the company expanded this requirement to contract-farmers, requiring compliance in 8 years.²⁹

²⁴See Singer (1998), Ch. 5 (showing McDonald’s general statement on animal welfare before it implemented basic, but specific standards).

²⁵See People for the Ethical Treatment of Animals (no date).

²⁶See Singer (1998), Ch. 5.

²⁷Grandin (2005), pp. 370–373 (explaining that slaughterhouses able to properly stun animals 95 % of the time increased from 3 out of 10 to 9 out of 10).

²⁸Aramark (2015).

²⁹Smithfield (2007); Smithfield (no date), Housing of pregnant sows. As another example of the main trends in corporate policies, in 1999, McDonald’s created slaughterhouse standards. In 2012, it announced that by 2017 it would source pork from producers *committed* to going crate free, and by 2022 would only source pork from supply chains free of gestation crates. The company also

While there has been significant progress in terms of the development of corporate social responsibility policies that address the raising and slaughtering of animals, the actual impact on animal welfare is unclear. This is because (1) numerous companies still use general statements as opposed to specific animal welfare requirements,³⁰ (2) company auditing and reporting of animal welfare indicators is relatively new, and (3) many phase-in periods have yet to come to fruition.³¹ Kroger, the largest grocery chain in the United States for example, does not obligate suppliers, but merely encourages them, to eliminate the use of gestation crates.³² Additionally, the company does not publically report the percentage of animals in confinement versus group housing in its supply chain. Starbucks, the largest coffeehouse company worldwide, states that it incentivizes suppliers to phase out gestation crates for pregnant pigs and battery cages for egg-laying hens, but does not provide public progress reports.³³ However, companies are beginning to require auditing and/or reporting from their suppliers. In 2014, for example, several companies, including Smithfield, Jack in the Box, and Wendy's, announced that they will start requiring progress reports from suppliers.³⁴

Along with animal welfare policies, corporations also create environmental stewardship policies. Corporations have been refining their environmental policies over the last 60 years—evolving from managing crises as they occurred to a more proactive approach.³⁵ Companies have moved in this direction because of public demand for environmental protections, new technologies making advancements easier, and long-term cost savings.³⁶ Corporations often focus on water quality and use, energy efficient operations, and waste management. For example, Starbucks had a goal to reduce its water usage 25 % by 2015.³⁷ Additionally, in 2014, 98 % of new Starbucks stores were LEED-certified³⁸ when they opened.

plans to develop a “verification system to assess compliance” with its standards. McDonald's (2014), p. 21.

³⁰For example, while a number of US food companies have prohibited their suppliers from using gestation crates, they have not provided alternative welfare requirements, such as the type of space, flooring, bedding, and feeding systems. As a result, it is unclear to what degree new policies will improve animal welfare for sows.

³¹Amos and Sullivan (2014), p. 9 (concluding that “reporting on farm animal welfare remain [s] underdeveloped across. . . Management Commitment and Policy, Governance and Management, Innovation, and Performance.”).

³²Kroger (2012).

³³See Starbucks Coffee (no date), Animal welfare-friendly practices statement.

³⁴Smithfield (no date), Housing of pregnant sows; Wendy's (2014); Jack in the Box (2014).

³⁵Berry and Rondinelli (1998), p. 39.

³⁶Berry and Rondinelli (1998), pp. 39–40.

³⁷Starbucks (2014), p. 7. At the end of 2014 Starbucks had reached 23 %.

³⁸LEED stands for Leadership in Energy and Environmental Design.

While countless corporations have established environmental policies, it is important to remember that there is a distinction between creating policies and implementing them.³⁹ Companies may tout a commitment to protecting the environment, but this does not always translate into an improved environmental record. One study notes that service companies, which include companies in the food service industry, “appear to be less likely to implement . . . environmental policies than those in the manufacturing, chemical manufacturing, and oil and gas industry sectors.”⁴⁰ The study concludes that this is due to the fact that environmental upgrades improve business performance to a greater degree for the other three industry sectors than for the service industry.⁴¹

The impact of corporate environmental and animal welfare policies are not fully known, but large strides have been made in the years since their introduction. New corporations will continue to join the growing list of companies creating voluntary policies, and companies with animal welfare practices will continue to make new commitments as long as (1) consumers continue to show that animal welfare and the environment are important to them, (2) new technologies help incentivize strong corporate policies, and (3) advocacy organizations campaign for improvements. For animal welfare, the extent of the impact will become more evident as phase-in periods end and reporting requirements expand.

4.2.2.2 Canada

Relatively few international food corporations, which include retailers, food service companies, producers and processors, are headquartered in Canada. Some international corporations with operations within Canada are committed to global corporate policies for farm animals and environmental stewardship, while others follow country-specific policies. For example, as of 2015, Burger King’s transition to cage-free eggs and crate-free pork in the United States does not apply to its operations in Canada.⁴² Conversely, Wendy’s announcement in 2014 that it is phasing out use of gestation crates for sows applies to its suppliers in both the United States and Canada.⁴³ McDonald’s 2012 announcement that, as of 2022, it will no longer buy from suppliers using gestation crates, is specific to stores in the United States but appears to impact Canadian stores, as well, since they source their pork products from US suppliers.⁴⁴

³⁹See Ramus and Montiel (2005).

⁴⁰Ramus and Montiel (2005), p. 394.

⁴¹Ramus and Montiel (2005), p. 394.

⁴²Canadian Federation of Humane Societies (“CFHS”) (no date), Putting an end to gestation stalls in Canada.

⁴³CFHS (no date), Putting an end to gestation stalls in Canada.

⁴⁴CFHS (no date), Putting an end to gestation stalls in Canada.

Several Canadian retailers have committed to eliminating the use of gestation crates, including supermarket chain Loblaws⁴⁵ and coffee shop chain Tim Hortons.⁴⁶ In addition, in 2013, the Retail Council of Canada (composed of Co-op Atlantic, Canada Safeway, Costco Wholesale Canada, Federated Cooperatives Limited, Loblaw Companies Limited, Metro Inc., Sobeys Inc., and Walmart Canada) committed to sourcing pork products from sows raised under alternative housing as defined by the Canadian revised code of practice for the raising of pigs.⁴⁷

While Canada has had far fewer producers offering to change their production practices than the United States, a few have announced commitments. Maple Leaf, Canada's largest pork producer, intends to phase out the use of gestation crates by 2017,⁴⁸ and Olymel, another Canadian pork producer based in Quebec, estimates that all pigs slaughtered by its company in Canada will come from crate-free farms by 2022.⁴⁹ In terms of trade associations, the Manitoba Pork Council has pledged to encourage producers to eliminate gestation crates by 2025,⁵⁰ and Manitoba Egg Farmers is requiring that egg farmers building new facilities or renovating existing ones utilize enriched caging or a noncage housing system, beginning in 2015.⁵¹

4.2.2.3 United Kingdom

Several major multinational food corporations are headquartered in the United Kingdom, including Compass, the world's largest contract food service company, with operations in over 50 countries, and Tesco, the world's third-largest food retailer. UK-based companies have attained the highest average scores in the 2014 BBFAW report, although the authors caution that small sample sizes have the potential to skew the results.⁵² The survey included 18 UK companies, or 22 % of the total companies reviewed. Those 18 companies were evenly split between the production, retail/wholesale, and restaurant/bar sectors.⁵³ The UK-based companies in the retail/wholesale sector scored significantly better than those in the other two sectors, with all six UK retail/wholesale companies scoring in the top three (of six) tiers, and all six UK bar/restaurant companies landing in the bottom three tiers of the survey results.⁵⁴

⁴⁵Loblaw (no date).

⁴⁶Tim Hortons (no date).

⁴⁷Post (2013).

⁴⁸Maple Leaf (no date).

⁴⁹Olymel (no date).

⁵⁰Manitoba Pork Council (2011), p. 39.

⁵¹The Poultry Site (2013).

⁵²Amos and Sullivan (2014), p. 30. Average overall score for UK-based was 47 %, compared with 25 % for European companies, 30 % for US companies, and 30 % for all 80 companies included in the survey.

⁵³Amos and Sullivan (2014), pp. 85–86.

⁵⁴Amos and Sullivan (2014), p. 9.

Several individual UK-incorporated companies have made serious commitments to improving farm animal welfare in their supply chains. For example, Cranswick, a UK food producer, allows no genetic modifications or growth hormones, requires pre-stunning of all animals at slaughter, and is moving toward no castration of pigs and no routine beak trimming of chickens.⁵⁵ It also is sourcing some meats from organic or free-range systems.⁵⁶ Marks and Spencer Group, which operates stores in 40 international locations and was one of only three companies to score in the top tier of the BBFAW report, also allows no routine mutilations⁵⁷; in addition, it has set limits on the length of time animals can be transported,⁵⁸ and the company has created a payment scheme that rewards dairy farmers who implement high welfare standards.⁵⁹

UK-based businesses are also setting the bar for sustainability commitments. Marks and Spencer has made 100 individual commitments toward becoming a sustainable business.⁶⁰ In 2014, the company became the first retailer to obtain three Carbon Trust Standard Certifications for carbon, water, and waste. Also in 2014, Marks and Spencer achieved carbon neutrality for all of its own operations and joint ventures across the world, by reducing emissions, sourcing renewable electricity, and buying and retiring carbon offsets. In 2014, the company's carbon dioxide emissions were down 24 % from 2006/2007 baseline levels. It achieved this by using electricity more efficiently, reducing gas leaks from refrigeration, and employing better waste recycling methods.⁶¹ Similarly, the Compass Group plans to reduce both carbon dioxide emissions and water use by 2020 to 20 % below 2014 levels.⁶² Also by 2020, the company intends to serve wild caught and aquaculture seafood only from environmentally responsible sources, or from sources that are on a clear path toward sustainability.⁶³

4.2.2.4 International

Animal welfare is a growing concern for businesses around the world. In the BBFAW report, 84 % of participating companies acknowledged animal welfare as a “business issue.”⁶⁴ According to the report, this is the first step toward

⁵⁵Amos and Sullivan (2014), pp. 39–45.

⁵⁶Amos and Sullivan (2014), p. 37.

⁵⁷Amos and Sullivan (2014), p. 43.

⁵⁸Amos and Sullivan (2014), p. 46.

⁵⁹Amos and Sullivan (2014), p. 50.

⁶⁰Marks and Spencer (no date), p. 2.

⁶¹Marks and Spencer no date, p. 6.

⁶²Compass Group (no date), p. 8.

⁶³Compass Group (no date), p. 6.

⁶⁴Amos and Sullivan (2014), pp. 7, 33. This is a notable increase from the 71 % in the 2012 and 2013 Benchmark reports.

implementing animal welfare policies. Reasons for the growing international concern with animal welfare noted by the report include “the 2013 European horsemeat scandal, tightening regulatory requirements on animal welfare and on food safety and quality, investor concerns about how food companies are managing animal welfare and other risks in their supply chains, and consumer interest in issues around food quality, safety, provenance, and traceability.”⁶⁵

While the report’s authors are encouraged by the continued interest in animal welfare, the report concludes that the food industry is not effectively managing or reporting animal welfare.⁶⁶ The report identified seven animal welfare issues of interest to businesses: close confinement, the use of genetically modified or cloned animals, the use of growth promoting substances, the use of antibiotics for prophylactic purposes, routine mutilations, pre-slaughter stunning, and long-distance live transportation.⁶⁷ Only 10 % of companies had specific policies on long distance travel; 14 % had policies on pre-slaughter stunning, and 23 % had policies on routine mutilations.⁶⁸ Additionally, the number of policies on close confinement and genetic modification actually decreased from 2013 to 2014.⁶⁹

International corporations’ animal welfare policies often vary by geographic location. For example, the international corporation Sodexo, one of the largest food services companies in the world, provides all suppliers with general animal welfare policies, but sets specific animal welfare guidelines for different countries.⁷⁰ In North America, the 39 million shelled eggs purchased each year by Sodexo must come from cage-free hens, and animal welfare audits are required for “fully integrated” suppliers.⁷¹ In the Netherlands, the company supports welfare initiatives but is not as specific as it is with its North American guidelines.⁷² In the BBFAW report, only 1 % of companies made a universal commitment to avoid extreme confinement practices; 8 % committed to prohibiting growth-promoting substances, and 3 % committed to avoiding routine mutilations.⁷³ Changes in standards based on geographical location are dependent on societal pressure and expectations in the region, supply availability, varying legal obligations, and differing welfare benchmarks.

The need for harmonization of food standards across regions of the globe has been addressed by an organization known as GLOBALG.A.P. (formerly named EUREPGAP), which claims to be the “world’s leading farm assurance program.”⁷⁴

⁶⁵Amos and Sullivan (2014), p. 14.

⁶⁶Amos and Sullivan (2014), p. 48.

⁶⁷Amos and Sullivan (2014), p. 35.

⁶⁸Amos and Sullivan (2014), p. 35.

⁶⁹Amos and Sullivan (2014), p. 36.

⁷⁰Sodexo (2013), pp. 1–5.

⁷¹Sodexo (2013), p. 4.

⁷²Sodexo (2013), p. 4.

⁷³Amos and Sullivan (2014), p. 37.

⁷⁴GLOBALG.A.P. (no date), History.

It was established in 1997 as an initiative by European retailers to provide their supermarket consumers with assurance of producer compliance with Good Agricultural Practices. The organization has developed standards for product safety, environmental impact, and the health, safety and welfare of workers and animals. In the area of animal welfare, GLOBALG.A.P. offers certification in transport and in husbandry for meat chickens and finishing pigs.⁷⁵ Although GLOBALG.A.P. is active in more than 100 countries, as of 2015, a majority of participating producers and retailers were headquartered in Europe.⁷⁶ The program, whose standards exceed legal requirements of the European Union, provides one option for harmonizing environmental, food safety, and animal care standards at the international level.

4.3 Self-Regulation Through Industry Trade Associations

4.3.1 *Overview of the Origin and Role of Industry Trade Associations*

Prior to World War II, most chicken meat in the United States came from a surplus in egg-production flocks and Americans scarcely consumed it.⁷⁷ In the late 1940s and early 1950s, vertical integration and new technologies—evisceration machinery, modified chicken breeds, and confinement practices—allowed for the commercial expansion of the chicken meat industry.⁷⁸

As a result of increased chicken production, the growing industry created the National Broiler Council (NBC), now called the National Chicken Council (NCC). This industry trade association represents producers, processors, hatcheries, and all other segments within the market.⁷⁹ The NBC played a key role in increasing consumer demand for chicken products: aggressive advertising campaigns such as “chicken, the high-protein, low-calorie meat” and “chicken, the food of the future,” along with increased federal lobbying, helped boost annual chicken consumption from 20 pounds per capita in the 1940s to over 80 pounds per capita in 2010.⁸⁰

Trade associations such as the NCC are created to standardize and promote industries. Globally, companies from an industry market or sector align to form trade associations and use their combined efforts to influence the public, lobby

⁷⁵GLOBALG.A.P. (no date), Animal welfare add-on.

⁷⁶GLOBALG.A.P. (no date), Membership.

⁷⁷Perry et al. (2012), p. 3.

⁷⁸Reimund et al. (1981), p. 4; Also see Perry et al. (2012).

⁷⁹See National Chicken Council (NCC) (2012e).

⁸⁰Macdonald (2014), p. 7; Perry et al. (2012), p. 3. See NCC (2012c).

governing bodies, provide a unified voice, and create (not always successfully) an overall positive and respectable image of the industry.⁸¹

A key role of industry associations is to set unified guidelines for those within the association, and industry as a whole, to follow. Trade associations do this in order to forestall government intervention, develop industry practices, and promote good public relations.⁸² Industry standardization can properly police the industry when stringent standards are set, companies have an incentive to follow the standards, and an enforcement mechanism is in place to ensure compliance. On the other hand, standard-setting can be used as a tool by trade associations to appease consumers and governments, without establishing competitive and auditable standards.⁸³

The following section will review industry trade associations' animal welfare and environmental stewardship standards. This will include a discussion of how standards are administered, and the level to which producers conform to industry standards in the United States, Canada, and the United Kingdom. (For the purpose of this chapter, farm animal welfare assurance schemes created by or for the conventional meat, dairy, and egg industries will be discussed as industry trade association programs in this section, while national organic programs and farm animal certification programs administered by animal welfare organizations will be covered in the following section on third-party standards.)

4.3.2 Trade Association Standards for Farm Animal Welfare and Environmental Stewardship

4.3.2.1 United States

In the United States, trade associations represent all sectors of animal agriculture, including eggs, dairy, and meat. United Egg Producers (UEP) and the NCC respectively represent 95 % of all egg and chicken production.⁸⁴ The North American Meat Institute (NAMI), formed in 2015 from the merger of the American Meat Institute (AMI) and the North American Meat Association, represents 95 % of red meat and 70 % of turkey processors and suppliers in the United States.⁸⁵ NAMI overlaps with the National Cattlemen's Beef Association (NCBA), representing "America's one million cattle farmers and ranchers," and with the National Turkey

⁸¹See LaBarbera (1983), pp. 58–59.

⁸²See LaBarbera (1983), pp. 58–59.

⁸³See LaBarbera (1983), p. 58.

⁸⁴NCC (2012d); United Egg Producers (UEP) (2004a). In 2014 the egg industry produced approximately 99 billion eggs, while the chicken industry slaughtered 9 billion chickens for consumption. USDA, NASS (2015b), pp. 7, 12.

⁸⁵NAMI (2015a). In 2014 the cattle industry slaughtered approximately 31 million cattle and the turkey industry slaughter 236 million turkeys. USDA, NASS (2015b), p. 5; USDA, NASS (2015a), p. 5.

Federation (NTF), representing 95 % of the turkey industry. The National Pork Producers Council represents 43 state pork associations and is closely connected to the quasi-governmental body, the National Pork Board (NPB).⁸⁶

Quasi-governmental bodies have characteristics of both governmental bodies and private entities.⁸⁷ A subset of quasi-governmental bodies are agency-related nonprofit corporations, which can significantly differ from one another, but always have a legal association with a federal department or agency.⁸⁸ The United States Department of Agriculture (USDA) uses several of these nonprofit corporations for commodity research and promotion, mirroring the role of trade associations.⁸⁹ The NPB, established under the Pork Promotion, Research, and Consumer Information Act of 1985,⁹⁰ is one of these entities and maintains voluntary pig welfare standards for the industry.⁹¹ The Cattlemen’s Beef Promotion and Research Board, another quasi-governmental body, has created animal welfare standards with the NCBA through their Beef Quality Assurance Coalition.⁹²

Animal welfare standards, whether created through quasi-governmental bodies or traditional trade associations, cover similar categories of on-farm husbandry: physical alterations, space allowance, air quality, lighting, euthanasia, and handling procedures. For instance, UEP guidelines allow debeaking of chickens up to 10 day of age, 67–86 square inches of space per hen, and ammonia levels up to 25 parts per million (ppm).⁹³ The NPB, through its Quality Assurance Standards and supplemental reference manuals, states that ammonia should not exceed 25 ppm, pigs must have space to lie down and stand up, males can only be castrated within 7 days of birth, and immobile pigs with a body condition score⁹⁴ of 1 should be euthanized (while all other sick or injured animals should receive “timely euthanasia”).

Along with on-farm guidelines, trade associations often cover animal care standards during transport and at slaughter. NCC transport recommendations endorse a stocking density that allows birds to sit in a single layer, and state that

⁸⁶NAMI (2015a); National Pork Producers Council (no date). In 2014 the pork industry slaughtered 106 million pigs. USDA, NASS (2015a), p. 5.

⁸⁷See Kosar (2011).

⁸⁸Kosar (2011), p. 12.

⁸⁹Kosar (2011), p. 13; See the Pork Promotion, Research and Consumer Information Act (7 U.S.C. § 4801) as an example of quasi-governmental bodies mirroring trade associations. The purpose of the law is to create “an effective and coordinated program of promotion, research, and consumer information designed to strengthen the position of the pork industry in the marketplace; and maintain, develop, and expand markets for pork and pork products.”

⁹⁰7 U.S.C. §§4801–4819.

⁹¹See generally National Pork Board (no date), Pork quality assurance plus, site assessment guide 2.0; See also National Pork Board (NPB) (2003).

⁹²Dunn (2006), p. 2 (showing the relationship between the National Cattlemen’s Beef Promotion and Research Board and the National Cattlemen’s Beef Association (NCBA)). See generally, Beef Quality Assurance (no date).

⁹³UEP (2014), pp. 9, 21–22, 32.

⁹⁴National Pork Board (no date), Pork quality assurance plus, pp. 24, 28–29; NPB (2003), p. 10.

corrective action must be taken if “dead on arrival” (DOA) ⁹⁵ rates exceed 0.5 %.⁹⁶ Additionally, the cattle industry maintains a manual dedicated to transportation through the Beef Quality Assurance program; the NTF provides its industry with a slaughter manual, and NAMI provides core criteria recommendations for the transport and slaughter of mammals.⁹⁷

Guidelines published by trade associations are generally inadequate to properly address animal welfare. They are often performance-based—qualitative descriptions without quantitative standards. For instance, the NPB’s space allowance recommendation, that pigs have enough space to lie down and stand up, allows for significant variation in raising practices. Even when trade industry guidelines are output-based, such as UEP’s space requirements, they do not represent a high standard of care for animals.⁹⁸ Furthermore, trade association guidelines are missing several essential welfare components—environmental enrichment, access to the outdoors, and pain control for physical alterations are scarcely addressed.

Not only are these guidelines insufficient, they are not consistently implemented or audited to incentivize conformity, and all trade association guidelines are explicitly voluntary. The NCC and the NTF provide auditing guidelines for producers and recommend third-party audits to limit bias; however, producers are not penalized if found to be nonconforming.⁹⁹ Similarly, pork producers can use NPB guidance on their own or they can become Pork Quality Assurance Plus Certified, which entails a training session and test of standards, but does not require compliance with the NPB’s *Swine Care Handbook*.¹⁰⁰ In contrast, UEP allows producers to use the logo “United Egg Producer Certified” on packaging only if they comply with UEP guidelines.¹⁰¹ Producers opting in to this program are audited by an independent company or the Agricultural Marketing Service (AMS), an agency within the USDA responsible for facilitating “fair marketing” of agricultural products.¹⁰² Producers are audited yearly and must file quarterly compliance reports with UEP.¹⁰³

In addition to animal welfare recommendations, trade associations often develop environmental impact policies. All animal agriculture trade associations in the United States advertise responsible environmental practices, but commitment to

⁹⁵“Dead on arrival” is a term used by the industry and the USDA to describe birds that have died prior to arrival at the place of slaughter.

⁹⁶NCC (2014), pp. 11–12.

⁹⁷See generally Beef Quality Assurance (no date), Master cattle transport guide; See also National Turkey Federation (“NTF”) (2012b), Animal care best management practices for the production of turkeys; and AMI (2013).

⁹⁸See Sect. 4.4.2 below for examples of high-welfare animal care standards.

⁹⁹NCC (2012a); NTF (2012a), p. 3.

¹⁰⁰The *Swine Care Handbook* is used as a reference.

¹⁰¹UEP (2004b).

¹⁰²UEP (2004b); USDA, Agricultural Marketing Service (AMS) (2014).

¹⁰³UEP (2014), pp. 6, 8.

responsible policies varies from association to association. The NCC, for example, provides a public statement describing the importance of environmental policies, but does not provide producers with guidance on how to properly make positive changes for the environment.¹⁰⁴ On the other hand, NAMI encourages producers to use “Environmental Management Systems,”¹⁰⁵ even providing tools and incentives to get started. Several associations, including NAMI, also have environmental stewardship awards to incentivize progress.¹⁰⁶

Trade associations’ animal welfare and environmental policies are often used to forestall government intervention. Currently, there is no federal law regulating on-farm treatment of animals, and 98 % of animals raised for food are exempt from the few existing federal laws that address animal welfare. Additionally, animal agriculture is frequently exempt from environmental regulations. For example, under the Clean Air Act agriculture facilities often do not meet the threshold requirements for regulation, and under the Clean Water Act “agriculture stormwater discharges” are expressly exempt from the “point source of pollution” definition.¹⁰⁷

Overall, animal agriculture trade association guidelines help to ensure a minimal level of care for animals and the environment. However, guidelines are implemented mainly to forestall government intervention, reassure consumers when producers’ practices are brought into question, and ultimately to promote the industry.

4.3.2.2 Canada

Trade association standards have more influence in Canada than in the United States, and they are arrived at through a far more transparent and deliberative process. In Canada, animal agriculture’s efforts to address farm animal care are coordinated by the National Farm Animal Care Council (NFACC).¹⁰⁸ It describes itself as “the only organization in the world that brings together animal welfare groups, enforcement, government and farmers under a collective decision-making model for advancing farm animal welfare.”¹⁰⁹ Council members include commodity associations; processor associations; animal welfare associations; retail, restaurant, and food service associations; veterinary associations; and provincial farm

¹⁰⁴See NCC (2012b).

¹⁰⁵According to the Environmental Protection Agency, an “Environmental Management System is a set of processes and practices that enable an organization to reduce its environmental impacts and increase its operating efficiency.” Environmental Protection Agency (2015).

¹⁰⁶NAMI (2015b); NCBA (2015).

¹⁰⁷33 U.S.C. § 1362.

¹⁰⁸National Farm Animal Care Council (“NFACC”) (no date), About NFACC.

¹⁰⁹NFACC (no date), About NFACC.

animal care councils, with nonvoting members from the federal government and the research community.¹¹⁰ The Canadian Federation of Humane Societies (CFHS) is a founding member of the NFACC and, in 2015, represented the only animal welfare organization on the council.¹¹¹

The NFACC was established in 2005 and it facilitated consultations that created a code development process in 2006.¹¹² The process was pilot-tested in 2007 and 2008 to revise the Code of Practice for the Care and Handling of Dairy Cattle, which was released in 2009. In addition to dairy cattle, codes of practice have been developed for beef cattle, equines, farmed deer, goats, sheep, pigs, and for transport of farm animals, although not all of these were created under the new code development process. As of 2015, the NFACC was updating its codes for bison, chickens and turkeys, egg-laying hens, rabbits, and veal calves.¹¹³ The codes address such animal care issues as housing systems and space provisions for animals; painful practices such as castration, dehorning, and tail docking; care and treatment of sick and injured animals; use of electric prods; and other handling and euthanasia methods.¹¹⁴

The CFHS views the codes as a compromise between regulations for on-farm care of animals, which it supports, and having no recognized standards for farm animal husbandry. It identifies the main advantage of the voluntary approach as the ability to develop and revise the codes more quickly and more cost-effectively, and notes that the codes were “established with the expectation that they would be reviewed every 5 years and revised according to new scientific knowledge and technological advances.”¹¹⁵ The council operates on a consensus model. As with the rulemaking process in some countries, the process brings together diverse stakeholders, and input is accepted from the general public.¹¹⁶ Financial support for the code-development process comes from the federal government through the Department of Agriculture and Agri-Food Canada.¹¹⁷

The NFACC acknowledges that the codes of practice alone are insufficient to ensure farm animal care; a mechanism is required to assess producer compliance with the standards.¹¹⁸ Accordingly, the council has developed an animal care assessment process to complement its codes. An initial animal care assessment model was developed using the dairy code of practice, which was pilot-tested during 2012 and 2013 by the Dairy Farmers of Canada. Based on the pilot, an Animal Care Assessment Framework was revised and finalized by the NFACC in

¹¹⁰NFACC (no date), About NFACC.

¹¹¹CFHS (no date), Codes of practice and the National Farm Animal Care Council.

¹¹²NFACC (no date), About NFACC. See also NFACC (2015), NFACC code of practice development process.

¹¹³NFACC (no date), Codes of practice for the care and handling of farm animals.

¹¹⁴CFHS (no date), Codes of practice and the National Farm Animal Care Council.

¹¹⁵CFHS (no date), Codes of practice and the National Farm Animal Care Council.

¹¹⁶NFACC (no date), About NFACC.

¹¹⁷CFHS (no date), Codes of practice and the National Farm Animal Care Council.

¹¹⁸NFACC (no date), Animal care assessment framework.

2014.¹¹⁹ In addition to this process, individual industry trade groups have developed their own auditing programs.¹²⁰

4.3.2.3 United Kingdom

Most farm animals in the United Kingdom are raised under the standards of a farm assurance program or “scheme.”¹²¹ The programs vary greatly in their requirements for the housing and handling of animals raised for food, yet all claim to ensure high levels of animal welfare.¹²² Included are programs created and/or administered by the food industry, the national government, and independent, nonprofit organizations.

Assured Food Standards (also known as “Red Tractor”) is a UK food assurance scheme that covers over 78,000 participating farm enterprises that sell their food to one of 350 packers licensed to use the Red Tractor logo on their packaging.¹²³ Launched in 2000 by UK farmers, food producers, and retailers, current program standards cover five kinds of farm animals (chickens, pigs, dairy cattle, beef cattle, and sheep). Additionally, Red Tractor recognizes as equivalent similar farm animal assurance programs operating in Ireland, Scotland, and Wales. The program is owned by the UK food industry but is independently operated. Red Tractor actively manages the certification bodies that police their standards, and its independent inspectors conduct over 60,000 inspections a year.¹²⁴ The British Lion Quality program for eggs addresses environmental protection and animal welfare for hens, with an emphasis on *Salmonella* surveillance and traceability.¹²⁵ Turkeys are covered by the Quality British Turkey program of the British Poultry Council.¹²⁶ Quality Meat Scotland, which is associated with the UK’s Assured Food Standards program, operates an assurance scheme that covers more than 90% of the beef, lamb, and pork produced in Scotland.¹²⁷

These schemes represent the conventional industry standard for farm animal welfare in the United Kingdom and ensure little more than compliance with minimum legislative requirements.¹²⁸ This is illustrated by the results of a

¹¹⁹NFACC (no date), Animal care assessment framework.

¹²⁰CFHS (no date), Codes of practice and the National Farm Animal Care Council. Industry groups that have developed auditable animal care programs include Chicken Farmers of Canada, Egg Farmers of Canada and the Canadian Turkey Marketing Association.

¹²¹Compassion in World Farming & OneKind (2012), p. 3.

¹²²Compassion in World Farming & OneKind (2012), p. 3.

¹²³Assured Food Standards (Red Tractor) (no date).

¹²⁴Assured Food Standards (Red Tractor) (no date).

¹²⁵Lion Egg Farms (no date).

¹²⁶Quality British Turkey (no date).

¹²⁷Quality Meat Scotland (no date).

¹²⁸Compassion in World Farming & OneKind (2012), p. 58. While the UK farm assurance standards, such as those of the “Red Tractor” program, may only reflect minimum legal standards, they are considerably higher than US trade association guidelines.

comprehensive review of UK farm animal welfare assurance schemes conducted in 2012 by Compassion in World Farming and OneKind, two UK-based animal protection charities. The groups scored six UK farm assurance schemes on their performance on various animal welfare criteria grouped into five core areas: the animals' environment; husbandry; handling, transport, and slaughter; genetics and breeding; and auditing.¹²⁹ The Red Tractor, Quality Meat Scotland, and British Lion Quality program for eggs consistently scored significantly lower on animal welfare than the British and Scottish organic programs and the food certification program administered by the Royal Society for the Prevention of Cruelty to Animals (RSPCA).¹³⁰

4.4 Independent Regulation Through Third-Party Certification

4.4.1 Overview of Third-Party Certification Programs

Third-party certification provides companies with the opportunity to have their practices and procedures evaluated by an independent auditor. The auditor certifies that the company is compliant with standards developed by the third party. This provides companies a means to assure consumers that the products they purchase meet a certain quality. In the context of this chapter, independent auditors assess compliance with animal welfare and environmental stewardship standards set by third-party certification organizations. The standards are generally above industry guidelines, and certification is used to show consumers that farmers did not mistreat animals or abuse the environment. Once compliance is demonstrated, companies can use a certifier's logo on product packaging (which increases its value), or to gain access to specific markets.¹³¹

Certification programs are helpful in reducing consumer confusion in the often-puzzling marketplace.¹³² Third-party certifiers publish their certification requirements, which makes it easier for interested consumers to decipher animal-raising and environmental stewardship practices. Additionally, most third-party certifiers require that auditors go onto farms to ensure compliance with standards, and are generally transparent in their auditing procedures.¹³³ If a farm is not compliant with

¹²⁹Compassion in World Farming & OneKind (2012), pp. 6–7.

¹³⁰Compassion in World Farming & OneKind (2012), p. 58.

¹³¹Santacoloma (2013), p. 11. For instance in order to sell certain meat products at Whole Foods one must be certified by Global Animal Partnership (GAP) (discussed below).

¹³²Anders et al. (2007), pp. 650–651.

¹³³For example GAP and Animal Welfare Approved (AWA) (discussed below) maintain manuals explaining the procedures necessary to become certified. GAP (2014); AWA (no date), Animal welfare policy manual.

a program's standards it may be obligated to remove the certification logo on products until the nonconformance is fixed.

While third-party certification programs are helpful for consumers, and generally provide higher than industry standards, they have several drawbacks. For example, auditing standards range in breadth and do not always require audits for each farm used by a single producer.¹³⁴ There is also a wide range of animal welfare standards among different third-party programs, and as standards get higher, the number of producers and farmers opting to participate tends to decrease because the standards are harder to meet.¹³⁵ Consequently, few animals are typically covered under the programs with the highest standards. Additionally, consumers are commonly not aware of the wide spectrum of animal care associated with third-party certification programs and often believe they are purchasing products from animals raised to their own perception of "humane," even though this may not be the case.¹³⁶ Arguably, the most significant shortcoming of third-party certification programs is that their contribution to animal welfare is currently unproven. The few studies that have compared the health and welfare of animals raised on conventional farms with animals raised on organic or higher-welfare farms have failed to demonstrate a clear difference.¹³⁷ Additional research is needed to better understand the impacts of these programs on the animals themselves.

The following section will provide an overview of third-party certification programs found in the United States, Canada, and the United Kingdom. Third-party standards within these nations are generally higher than industry guidelines, and more comprehensive than corporate policies.

¹³⁴See and compare GAP (2014), AWA (no date), Animal welfare policy manual, and Humane Farm Animal Care (HFAC) (2014c).

¹³⁵For example American Humane Certified (AHC) (no date) (a program of American Humane Association (AHA)) has lower standards than AWA, but covers over 1 billion animals, while AWA covers significantly fewer.

¹³⁶For example in a survey commissioned by Consumer Reports 66% of participants thought the claim "humane" meant that animals had access to the outdoors, and nearly 80% believed the claim should mean animals have outdoor access. Consumer Reports (2014), p. 10.

¹³⁷See Bergman et al. (2014), Main et al. (2003), Norwegian Scientific Committee for Food Safety (2014), Napolitano et al. (2009), and Ruegg (2009).

4.4.2 *Farm Animal Welfare and Environmental Stewardship Certification Programs*

4.4.2.1 United States

In the United States, as of 2015, four third-party certification programs focused solely on animal welfare: American Humane Certified (AHC), Animal Welfare Approved (AWA), Certified Humane,¹³⁸ and Global Animal Partnership (GAP).¹³⁹ In addition, three third-party certification programs certified farms for environmental stewardship: USDA Organic,¹⁴⁰ Food Alliance Certified (FAC), and Certified Naturally Grown (CNG).¹⁴¹ Of the countries reviewed in this chapter, the United States has the most third-party certification programs, and they cover the greatest number of animals.

Animal welfare third-party certification programs developed in the United States after farmers and consumers came to recognize the problems associated with intensive farming.¹⁴² Farmers wanted to provide an alternative to industry practices and showcase this to consumers. In 1989, the Animal Welfare Institute (AWI), a nonprofit animal welfare organization, developed high-welfare animal care standards for raising pigs.¹⁴³ These standards led to the first USDA-approved animal-raising label (“Pastureland Farms”) on meat packaging.¹⁴⁴ In 2006, after several years updating and expanding its standards, AWI developed the AWA program.¹⁴⁵ Meanwhile in 2000, American Humane Association founded the first third-party certification program in the United States, called “Free Farmed” (later renamed “American Humane Certified”).¹⁴⁶ Certified Humane developed standards a few years later, and GAP launched its standards in 2010.¹⁴⁷

¹³⁸HFAC administers the Certified Humane program.

¹³⁹AHA (no date); AWA (2013); Certified Humane (2015a); GAP (2015b) About (GAP is a step-level program with unique standards ranging from Step 1 to Step 5+).

¹⁴⁰As of the writing of this chapter USDA organic regulations mention animal welfare, but do not provide detailed standards. See 7 C.F.R. § 205.239.

¹⁴¹7 U.S.C. §§ 6501–6523 (organic enabling statute); Food Alliance (no date), About Food Alliance; Certified Naturally Grown (CNG) (2015a). Both Food Alliance and CNG have animal welfare requirements incorporated into their standards, but they are not the main focus of either program.

¹⁴²Sullivan (2013), p. 391.

¹⁴³Animal Welfare Institute (2015).

¹⁴⁴Animal Welfare Institute (2015).

¹⁴⁵In 2014, AWA became a program of the Trust for Conservation Innovation’s “A Greener World” project. The Animal Welfare Institute remains associated with the AWA, but no longer administers the program.

¹⁴⁶AHA (2013b).

¹⁴⁷GAP (2015c), History (explaining the program started in 2008, but the organization did not set out standards until a few years later).

Together, the four programs cover over 10 % of animals raised for food in the United States.¹⁴⁸ AHC, the largest of the certification programs, covers more than 1 billion animals,¹⁴⁹ whereas, 290 million and 96.7 million animals are raised under GAP and Certified Humane standards, respectively.¹⁵⁰ The number of animals covered under AWA, considered the most stringent of the four, is much lower. All four programs maintain standards for the care of beef cattle, bison, meat chickens, pigs, and turkeys.¹⁵¹ Three of the programs (GAP excluded) have standards for additional species such as dairy cattle and egg-laying hens.¹⁵²

Each program has its own unique standards, which range from just above industry guidelines to high-welfare pasture-based programs. Certified Humane, GAP Steps 1 and 2, and AHC allow feedlots and do not require outdoor access for all animals.¹⁵³ GAP Steps 3 to 5+ and AWA require compliance with higher welfare standards and provide animals with opportunities to perform more natural behaviors: GAP Step 3 requires continuous outdoor access; GAP Steps 4 to 5+ and AWA have pasture-based standards.¹⁵⁴

Environmental third-party certification programs also play a large role in animal production in the United States. USDA Certified Organic was created after inconsistent state and regional organic standards complicated interstate marketing of organic products.¹⁵⁵ Organic certification is now a voluntary program run by the AMS; the agency accredits third-party certifiers to audit producer compliance with regulatory requirements.¹⁵⁶ CNG developed as an alternative to organic certification for small farmers who sell most products intrastate.¹⁵⁷ FAC originated from a collaborative project between universities in Oregon and Washington aiming to create incentives for sustainable agriculture practices.¹⁵⁸ USDA Certified Organic is by far the biggest of the three programs. In 2011, Certified Organic covered over 37 million animals, and this number continues to grow.¹⁵⁹ FAC certifies approximately 330 small to mid-size farms, and CNG certifies over 700.¹⁶⁰

¹⁴⁸There are 9 billion animals slaughtered for food in the United States each year. See USDA, NASS (2015a), p. 5; USDA, NASS (2015c), p. 5.

¹⁴⁹AHA (2015).

¹⁵⁰GAP (2015d); HFAC (2014a), Annual report, p. 1.

¹⁵¹See Certified Humane (2015b); GAP (2015a), 5-step standards (GAP is in the process of writing standards for several additional species); AWA (no date), Standards; AHA (no date), Science-based standards.

¹⁵²See Certified Humane (2015b); GAP (2015a), 5-step standards (GAP is in the process of writing standards for several additional species); AWA (no date), Standards; AHA (no date), Science-based standards.

¹⁵³HFAC (2014b), p. 10; AHA (2013a), p. 19; GAP (2009), p. 15.

¹⁵⁴GAP (2015d); AWA (2013).

¹⁵⁵Sustainable Agriculture Research & Education (2012).

¹⁵⁶7 C.F.R. §§205.500- 205.510; USDA (2014).

¹⁵⁷CNG (2015b).

¹⁵⁸Food Alliance (no date), History of Food Alliance.

¹⁵⁹USDA, Economic Research Service (2013).

¹⁶⁰Food Alliance (no date), About Food Alliance; See CNG (2015c).

All three environmental certification programs have both livestock and crop production standards.¹⁶¹ Organic certification prohibits the use of specific substances, requires use of tillage and cultivation practices that minimize soil erosion, and requires soil fertility to be managed through cover crops, rotations, and application of plant and animal materials.¹⁶² CNG standards are based on USDA organic standards, but have several distinctions—mostly related to cost, paperwork requirements, and animal treatment.¹⁶³ FAC’s livestock standards are more comprehensive and cover, *inter alia*, soil and water conservation, pest and disease management, and wildlife habitat conservation.¹⁶⁴

While there is a large spectrum of care provided to animals and the environment through third-party certification programs, all have some standards higher than the industry baseline. The number of animals and the amount of land impacted by certification programs continues to grow, and consumers are becoming increasingly concerned with animal welfare—making them more inclined to seek out and purchase “humane” and “environmentally-friendly” products.¹⁶⁵ This does not mean, however, that third-party certification programs will be able to solve all problems of industrial agriculture, but they likely will continue to help raise standards for farm animals and the environment in the United States.

4.4.2.2 Canada

In Canada, as of 2015, two independent food certification programs addressed farm animal welfare, and two other certification programs addressed both environmental stewardship and farm animal welfare. Overall, Canadian third-party programs certify fewer producers and cover far fewer animals than their US counterparts. Products from welfare certification programs based in the United States, including AWA, Certified Humane, and GAP, are also available in grocery stores in limited areas of Canada.

The British Columbia Society for the Prevention of Cruelty to Animals (BC SPCA) launched its “SPCA Certified” program in 2002. As with other animal welfare certification programs, SPCA Certified is based on the principle of

¹⁶¹They also maintain animal welfare standards, but these are not as comprehensive as those of certification programs dedicated solely to animal welfare; FAC goes even further and maintains worker safety standards.

¹⁶²See generally §§ 7 C.F.R. 205.1- 205.690; 7 C.F.R. § 205.203.

¹⁶³CNG (2015d).

¹⁶⁴Food Alliance (no date), Sustainability standards for livestock operations.

¹⁶⁵See Grimshaw et al. (2014), pp. 443–444 (demonstrating that nearly 70 % of participants in a survey conducted by Texas A&M University believed that animal welfare is important). The number of animals covered by AHC soared over 1000 % in 4 years, and organic production increased over 11 % from 2013 to 2014.

“Five Freedoms” for farm animals,¹⁶⁶ and their standards exceed those of the Canadian animal agricultural industry’s codes of practice.¹⁶⁷ As of 2015, the program certified more than 20 producers of eggs, dairy, chicken, pork, and beef products in three of Canada’s provinces (British Columbia, Alberta, and Saskatchewan).¹⁶⁸ Since BC SPCA’s launch, 1.8 million animals have been raised under the program’s standards.¹⁶⁹ The Winnipeg Humane Society also launched a certification program in 2002, this one based on organic standards.¹⁷⁰ Significantly smaller in scope than SPCA Certified, the program offers certified humane meat in a few Winnipeg-area markets.¹⁷¹

Local Food Plus, introduced in 2006, certifies farmers according to standards that represent seven key tenets of sustainable agriculture: (1) reduce or eliminate synthetic pesticides and fertilizers, (2) avoid the use of hormones, antibiotics, and genetic engineering, (3) conserve soil and water, (4) ensure safe and fair working conditions, (5) provide healthy and humane care for livestock, (6) protect and enhance wildlife habitat and biodiversity, and (7) reduce on-farm energy consumption and greenhouse gas emissions.¹⁷² By 2015, the Land Food People Foundation–administered program had certified over 200 producers and processors, and partnered with nearly 100 retailers and other food service companies.¹⁷³

The largest certification program operating in Canada that impacts farm animal welfare and environmental stewardship is Canada Organic. With higher national regulatory standards than those of USDA Certified Organic,¹⁷⁴ the program sets

¹⁶⁶The concept of Five Freedoms originated in the United Kingdom in 1965 with issuance of the Report of the Technical Committee to Enquire into the Welfare of Animals kept under Intensive Livestock Husbandry Systems, also referred to as “the Brambell Report.” This stated that farm animals should have freedom “to stand up, lie down, turn around, groom themselves and stretch their limbs.” As a result of the Brambell Report, the Farm Animal Welfare Advisory Committee was established, which disbanded when the Farm Animal Welfare Council (FAWC) was formed in 1979. FAWC eventually developed what is currently known as the list of Five Freedoms for farm animals. They are: (1) freedom from hunger and thirst, (2) freedom from discomfort, (3) freedom from pain, injury or disease, (4) freedom to express normal behavior, and (5) freedom from fear and distress. See Farm Animal Welfare Council (FAWC) (no date).

¹⁶⁷CFHS (no date), Farm animal welfare certification in Canada.

¹⁶⁸British Columbia Society for the Prevention of Cruelty to Animals (“BC SPCA”) (no date).

¹⁶⁹CFHS (no date), Farm animal welfare certification in Canada.

¹⁷⁰CFHS (no date), Farm animal welfare certification in Canada.

¹⁷¹Winnipeg Humane Society (no date).

¹⁷²Land Food People Foundation (no date), About.

¹⁷³Land Food People Foundation (no date), Projects.

¹⁷⁴In June 2009 the governments of Canada and the United States entered into an agreement on the trade of organic products. The two countries’ systems were recognized as equivalent with four exceptions, one of which is space allowances for animals. Products from animals raised in the United States may not be sold as organic in Canada unless the stocking densities set out in Canadian organic regulations are met. See Canadian Food Inspection Agency (no date).

minimum space requirements and requires access to the outdoors for all animals.¹⁷⁵ Unfortunately, Canada does not conduct frequent surveys for all types of products in the organic sector (i.e., dairy, eggs, meats); however, in 2008, more than 2 million animals were raised under Canada Organic, a large majority of whom were meat chickens and turkeys.¹⁷⁶

4.4.2.3 United Kingdom

The “Freedom Food” program (renamed “RSPCA Assured” in 2015) was launched in 1994 with standards for laying hens, pigs, beef cattle, dairy cattle, and sheep based on the Five Freedoms concept for farm animals.¹⁷⁷ By 2010, 1000 labeled product lines were available, which doubled to 2000 product lines in 2013.¹⁷⁸ By 2015, the United Kingdom’s only farm assurance scheme dedicated solely to farm animal welfare had more than 3500 participating businesses, and was covering 43 million land animals and 140 million salmon. Since its creation, 600 million animals, representing 10 animal species, have been raised under the program’s standards.¹⁷⁹ As of 2013, 54 % of all ducks, 31 % of pigs, and 70 % of salmon raised in the United Kingdom were covered under the program.¹⁸⁰ That year, McDonald’s UK switched to 100 % Freedom Food—produced pork.¹⁸¹

The RSPCA program likely has been the inspiration for all humane food certification programs currently operating worldwide; in fact, the standards of the AHC (“Free Farmed”) and Humane Farm Animal Care (“Certified Humane”) programs at the time of their launch in the United States mirrored the RSPCA’s standards almost exactly.¹⁸² In the Compassion in World Farming and OneKind (2012) survey of farm assurance programs, Freedom Food consistently scored well above UK industry-backed programs (described in Sect. 4.3.2.3). In fact, for some species (dairy cattle, turkeys, and egg-laying hens), Freedom Food scored higher than the Scottish organic program.¹⁸³

¹⁷⁵See Organic production systems and general principles and management standards, CAN/CGSB-32.310-2006. See also Canadian Federation of Humane Societies (no date), Farm animal welfare certification in Canada.

¹⁷⁶Agriculture and Agri-Food Canada (no date).

¹⁷⁷Freedom Food (no date), Our history.

¹⁷⁸Freedom Food (no date), Our history.

¹⁷⁹Freedom Food (no date), Facts and figures.

¹⁸⁰Freedom Food (no date), Impact report 2013.

¹⁸¹Freedom Food (no date), Our history.

¹⁸²Since the launch of the welfare certification programs in the US in the early 2000s, RSPCA has continually revised and upgraded its standards, while the standards of the Certified Humane program have remained relatively unchanged, and the American Humane standards have been lowered significantly (examples include a shorter weaning period for pigs, less light and space for meat chickens, and allowing confinement to cages for egg-laying hens).

¹⁸³Compassion in World Farming & OneKind (2012), pp. 16–53.

The oldest organic certification program in existence is administered by the United Kingdom's Soil Association. It was launched in 1946 by a group of farmers, scientists, and nutritionists who saw a connection between farming practices and the health of plants, animals, people, and the planet.¹⁸⁴ The Soil Association program and its high animal welfare and environmental standards have influenced pasture-based farming systems in many countries, including the AWA program in the United States. The program is the leading organic organization in the United Kingdom, certifying over 70 % of all organic products sold in that country,¹⁸⁵ and scored the highest of any UK farm assurance program in the 2012 Compassion in World Farming and OneKind survey. The Soil Association standards were deemed superior to the standards of the industry-backed programs, the RSPCA's Freedom Food program, and the Scottish organic program for all eight species of farm animals covered by the survey.¹⁸⁶ Soil Association standards are also higher than the EU organic minimum standards in several areas, including animal welfare.¹⁸⁷

4.5 Impact of Voluntary Standards on National Laws and International Initiatives

4.5.1 *International Initiatives on Animal Welfare*

As described in previous sections, individual multinational food corporations, along with international food assurance programs (such as GLOBALG.A.P.), have attempted to address the treatment of farm animals on a global level. The leading international initiative impacting animal welfare, to date, has been the development and adoption of guidelines by the OIE. The OIE was established in 1924 to address animal diseases at the global level and is accepted worldwide as the intergovernmental organization responsible for improving animal health.¹⁸⁸ It is recognized by the World Trade Organization, and as of 2015, had a total of 180 member countries and territories.¹⁸⁹ Originally formed to address animal health, in recent years the scope of the organization's mission has been expanded to include animal welfare.

¹⁸⁴Soil Association (no date), Who we are.

¹⁸⁵Soil Association (no date), Our work 2014.

¹⁸⁶Compassion in World Farming & OneKind (2012), pp. 16–53. For example, for pigs, the Soil Association scored 81 out of 100 possible points, compared with 71 for the Scottish organic program, 58 for Freedom Food, 29 for Quality Meat Scotland, and 27 for Assured Food Standards (“Red Tractor”).

¹⁸⁷Soil Association (no date), Organic standards. The United States and the European Union have signed an organic equivalency agreement despite the two sets of respective standards differing significantly, particularly in the area of animal welfare.

¹⁸⁸OIE (2015a), About us.

¹⁸⁹OIE (no date), The 180 member countries.

In 2005, the OIE adopted the first international farm animal welfare standards, for the transport of animals by sea, land, and air; the slaughter of animals; and the killing of animals for disease control purposes. Subsequently, the OIE developed and adopted standards for the raising of beef cattle, dairy cattle, meat chickens, and farmed fish, and for the transport, slaughter, and killing for disease control purposes of farmed fish.¹⁹⁰

In 2008, the International Committee of the OIE raised the issue of private animal health and welfare standards, which it characterized as a “problem” due to the fact that these standards are established unilaterally by private entities without direct involvement of governments. The committee noted that individual OIE members were concerned regarding the potential for private standards to conflict with the official standards established by the OIE. In 2009 an ad hoc group on private standards was convened to examine the possible risks and rewards presented by private standards for food safety and animal welfare in regard to international trade. The group distributed a questionnaire to all OIE members, the results of which demonstrated a significant difference of opinion, particularly between developed and developing countries.¹⁹¹

In February 2010, the OIE convened a meeting with global private standard-setting organizations, including GLOBALG.A.P. and the Global Food Safety Initiative.¹⁹² While it was agreed that the basis for private standards on food safety should be the existing standards of the OIE and Codex Alimentarius¹⁹³ (and any relevant national and regional legislation), no definitive approach for animal welfare was identified.¹⁹⁴ In May 2010, the World Assembly of Delegates of the OIE adopted a resolution on public and private standards in animal health and welfare. This recommends “the implementation of the OIE animal welfare standards as reference standards that apply globally.”¹⁹⁵

In order to promote the implementation of its animal welfare standards, the OIE is supporting an initiative by the ISO to develop a technical specification on animal welfare management for organizations in the food supply chain.¹⁹⁶ The stated purpose of the technical specification, which is only in the drafting stage as of 2015, is “to improve the living conditions of animals raised for food production

¹⁹⁰OIE (2015b), OIE achievements in animal welfare.

¹⁹¹OIE (no date), Implications of private standards in international trade of animals and animal products. An executive summary of a report on the questionnaire’s findings may be accessed at: http://www.oie.int/fileadmin/Home/eng/International_Standard_Setting/docs/pdf/en_executive_20summary.pdf.

¹⁹²Global Food Safety Initiative (no date), What is GFSI? The scope of GFSI is limited to food safety and does not extend to issues related to animal welfare, the environment, or ethical sourcing.

¹⁹³Codex Alimentarius is a collection of international food standards set out by the Codex Alimentarius Commissions, which the FAO established in 1961. Codex Alimentarius (2015).

¹⁹⁴OIE (no date), Implications of private standards in international trade of animals and animal products.

¹⁹⁵OIE (2010).

¹⁹⁶ISO (no date), ISO/WD TS 34700.

around the world.” The ISO aims to do this by (1) providing a management tool that facilitates implementation of the OIE animal welfare guidelines, (2) providing guidance for the “integration and mutual recognition of additional provisions from public or private standards and relevant legislation, on condition that they meet at least the OIE TAHC [Terrestrial Animal Health Code],” and (3) facilitating the integration of animal welfare principles in business relations between suppliers and their customers.¹⁹⁷

4.5.2 *Impact of Voluntary Standards*

Voluntary standards are particularly relevant in the United States and Canada due to a general lack of federal laws addressing the treatment of farm animals. The Humane Methods of Slaughter Act¹⁹⁸ and the Twenty-Eight Hour Law¹⁹⁹ (which addresses transportation) are the only laws expressly addressing farm animal welfare in the United States.²⁰⁰ Neither law protects birds (which account for 98 % of all animals killed for food in the United States), and there have been few, if any, prosecutions of truck drivers under the Twenty-Eight Hour Law. Similarly, federal protections for farm animals in Canada are limited to laws governing transport and slaughter, with additional limited coverage for animal cruelty under the criminal code. However, voluntary standards have impacted the lives of animals raised for food and influenced government regulation of food animal production in these two countries. Some areas where voluntary standards have influenced government regulation are described below.

4.5.2.1 **Case Study: Farm Animal Cruelty**

In Canada, as in the United States, there are no national laws protecting the welfare of animals raised for food while they are on the farm.²⁰¹ Furthermore, the criminal code that prohibits willful cruelty to animals in Canada does not apply to meat chickens and other birds.²⁰² Instead, the treatment of farm animals is generally addressed at the provincial level, which results in a lack of consistency in how abuse or neglect of farm animals is managed in the country. While compliance with

¹⁹⁷ISO (2014).

¹⁹⁸7 U.S.C. §§ 1901–1907.

¹⁹⁹49 U.S.C. 80502.

²⁰⁰The Twenty-eight Hour Law does not specifically exempt birds from its purview; however the USDA has interpreted the law to exclude birds. 7 U.S.C. §1902.

²⁰¹Farm Animal Council Network (2013). See also CFHS (no date), Realities of farming in Canada.

²⁰²Government of Canada, Criminal Code, Section 446—Cruelty to Animals.

the codes of practice for the care and handling of farm animals is voluntary, four provinces—Manitoba,²⁰³ Newfoundland and Labrador,²⁰⁴ Prince Edward Island,²⁰⁵ and Saskatchewan²⁰⁶—reference the codes of practice in their animal protection laws and/or regulations. Consequently, police officers and SPCA inspectors in those provinces may cite the codes of practice as representing acceptable husbandry practices in court proceedings. The codes of practice can be offered as a credible standard even in provinces that lack a specific reference to them in their cruelty law.²⁰⁷

4.5.2.2 Case Study: Crates for Veal Calves

In 2007, two prominent American veal producers—Strauss Veal and Marcho Farms—pledged to stop using veal crates within 10 years.²⁰⁸ These announcements followed two decades of campaigning by American animal protection advocates on the issue. Soon after the corporate announcements, the American Veal Association—the trade association for the industry in the United States—resolved to encourage all producers of veal to make the same commitment.²⁰⁹ Since the Strauss Veal and Marcho Farm’s announcements, eight American states have limited or banned the use of veal crates.²¹⁰ This example demonstrates that, as large companies improve their animal welfare policies, they are likely to influence their respective trade associations. Furthermore, as individual corporate practices become established in trade association guidelines, laws will more easily change.

²⁰³Government of Manitoba, Animal Care Regulation 126/98 of the Animal Care Act (C.C.S.M. c. A84).

²⁰⁴Government of Newfoundland and Labrador, Regulation 36/12, Animal Protection Standards Regulation under the Animal Health and Protection Act, 2012.

²⁰⁵Government of Prince Edward Island, Animal Health and Protection Act Chapter A-11.1, Animal Protection Regulations, PEI Reg EC 71/90.

²⁰⁶Government of Saskatchewan, The Animal Protection Act, 2000, Chapter A-21.1 Reg 1, as amended by Saskatchewan Regulations 32/2015.

²⁰⁷See Farm Animal Council Network (2013).

²⁰⁸Humane Society of the United States (2012), p. 2.

²⁰⁹Bakke and American Veal (2007).

²¹⁰Ariz. Rev. Stat. Ann. § 13-2910.07; Cal. Health and Safety Code §25990; Colo. Rev. Stat. Ann. §35-50.5-102; Me. Rev. Stat. tit.7 § 4020; Mich. Comp. Laws Ann. § 287.746; Ohio Admin. Code § 901:12-4, 901:12-5-03; R.I. Gen. Laws Ann. §4-1.1-3; 302 KAR 21:030. Most state’s veal confinement laws have vague language, allowing farmers to use crates so long as they provide space to turn around, lie down, and stand up.

4.5.2.3 Case Study: Gestation Crates for Sows

In 2007, Smithfield Foods, the largest pork producer in the United States, committed to phasing out gestation crates from its supply chain.²¹¹ Shortly after, Canada's largest pork producer, Maple Leaf, announced its intention to phase out the use of gestation crates.²¹² Other major American and Canadian pork producers followed the lead of Smithfield and Maple Leaf. Since the time Smithfield made its original commitment, six American states have banned or limited the use of gestation crates.²¹³ Moreover, in 2014, the NFACC released its revised Code of Practice for the Care and Handling of Pigs, which includes a prohibition on the use of sow crates for all newly built or rebuilt facilities in Canada after July 1, 2014.²¹⁴ It seems unlikely that the NFACC would have taken this step without prior action from at least one major pork producer or trade industry group. As of 2015, the OIE had yet to adopt standards for the welfare of animals in pork-production systems; however, the organization was expected to address pig welfare in the near future. Whether the OIE standards ultimately prohibit intensive confinement may well be decided by the adoption of voluntary positions against confinement by private food corporations and industry trade associations, particularly those operating on an international level.

4.5.2.4 Case Study: Battery Cages for Hens

As described earlier in the chapter, as of 2015, many major American and Canadian food corporations had adopted positions in regard to the manner in which egg-laying hens are housed. Although no major American egg producers have eliminated the use of conventional battery cages as of 2015, enriched cages have been adopted by Manitoba Egg Farmers.²¹⁵ This move may lead to a revision of Canada's NFACC standard for hen housing, which is in the process of being updated as of 2015. In the United States, third-party certification standards for egg-laying hens have significantly impacted hen-housing laws in at least two states. The Oregon Legislature passed a law in 2011 regulating cage requirements for egg-laying hens. According to the law, by 2026, producers selling eggs in Oregon must meet "standards equivalent to the requirements for certification of enriched colony facility systems established in the American Humane Association's farm

²¹¹Smithfield (2013).

²¹²Maple Leaf (no date).

²¹³Cal. Health and Safety Code § 25990; Colo. Rev. Stat. Ann. § 35-50.5-102; Me. Rev. Stat. tit. 7, § 4020; Mich. Comp. Laws Ann. § 287.746; Ohio Admin. Code § 901:12-8; Or. Rev. Stat. § 600.150; R.I. Gen. Laws Ann. §4-1.1-3. Arizona (Ariz. Rev. Stat. Ann. § 13-2910.07) and Florida (Fla. Const. art. X, § 21) did however outlaw crates before Smithfield made its decision.

²¹⁴NFACC (2014), p. 11.

²¹⁵The Poultry Site (2013).

animal welfare certification program.”²¹⁶ Washington also codified AHC’s enriched colony cage standards in 2011.²¹⁷

4.5.2.5 Case Study: Tail Docking of Cattle

Following the adoption by the OIE of standards for the welfare of animals in beef cattle production, trade associations representing beef cattle producers in both the United States and Canada made related revisions to their animal care guidelines. For example, the OIE standards recommend that producers not dock the tails of cattle, noting that research shows that increased space per animal and proper bedding are effective in preventing a condition known as “tail tip necrosis,” the reason commonly given for routine tail docking in beef cattle.²¹⁸ In 2013, the NFACC revised its beef cattle code of practice to include a prohibition on docking the tails of beef cattle except on the advice of a veterinarian, and a recommendation that stocking densities in slatted-floor facilities be lowered to reduce tail injuries.²¹⁹ Similarly, in 2014 the NCBA published supplemental animal care guidelines consistent with the OIE beef cattle standards. The supplemental guidelines cover castration, dehorning, branding, and tail docking in a manner very similar to the OIE, and in some cases the language is taken verbatim from the OIE standard.²²⁰ The previous NCBA guidelines contained no prohibition against the practice of routine tail docking, and the standard for castration was that it be performed prior to 120 days; this was lowered in the 2014 guidelines to 3 months, consistent with the OIE.²²¹

²¹⁶ORS 632.840. There are several incremental changes that producers must meet before 2026 to comply with the Oregon law. AHC has separate standards for enriched cages and cage-free production.

²¹⁷Wash. Rev. Code §69.25.065, §69.25.107.

²¹⁸OIE (2014).

²¹⁹NFACC (2013), p. 25.

²²⁰For example, the tail docking section states: “Tail docking has been performed in beef cattle to prevent tail tip necrosis in confinement operations. Research shows that increasing space per animal and proper bedding are effective means in preventing tail tip necrosis. Therefore it is not recommended for producers to dock the tails of beef cattle.” Beef Quality Assurance (“BQA”) (2014), p. 2.

²²¹See BQA (no date), The cattle industry’s guidelines for the care and handling of cattle, p. 7. See also OIE.

4.5.2.6 Case Study: Organic Production

In 1990, the United States Congress passed the Organic Food Production Act (OFPA) in order to “establish national standards governing the marketing . . . [of] organically produced products.”²²² In order to affix the claim “organic” to a product, a producer must be in full compliance with the OFPA. The law gives the USDA authority to write animal care regulations for organic production.²²³ The regulations, which the USDA first promulgated in 2001, state that all animals must have year-round access to the outdoors with direct sunlight, fresh air, and exercise areas.²²⁴ Despite taking over 10 years to finalize, the organic regulations are overly general in terms of animal care, allowing for significant variation in practices. For instance, 38 % of organic egg farms give birds less than 2 square feet of space, while 24 % provide from 2 to less than 3 square feet, 25 % provide from 3 to less than 5 square feet, and 13 % provide 5 or more square feet. Additionally, outdoor access varies greatly in organic egg production; some birds are raised on pasture while others are confined to giant barns with small enclosed porches that certifiers qualify as outdoor access.²²⁵

The National Organic Standards Board (NOSB), USDA’s organic advisory board, spent roughly a decade drafting more reliable welfare regulations for the USDA to promulgate.²²⁶ As part of its deliberative process, the NOSB reviewed standards of the AHC, Certified Humane, GAP, and AWA programs. Third-party certification standards influenced the NOSB’s recommended regulations in several ways, including how birds should be handled before slaughter and how long animals may be transported before rest and feed are provided. As of the writing of this chapter, the USDA has drafted but not yet finalized new welfare regulations based on the NOSB recommendations.

4.5.2.7 Case Study: Livestock and Poultry Slaughter

In 2008, an undercover investigation documenting animal cruelty at a California slaughterhouse led to the largest meat recall in United States history. A significant portion of the meat produced at the slaughter facility had been destined for the federal school lunch program,²²⁷ which is overseen by the AMS. The agency spends approximately \$1.5 billion each year procuring products for this program.²²⁸ After the recall incident, the AMS implemented slaughter and handling standards

²²²7 U.S.C. § 6501.

²²³7 U.S.C. § 6509(2).

²²⁴7 CFR §205.239.

²²⁵USDA, Animal and Plant Health Inspection Service (2013), p. 11.

²²⁶See National Organic Standards Board (2001).

²²⁷Martin (2008).

²²⁸See USDA, AMS (2015a).

for livestock commodity purchasing. In order for the AMS to consider purchasing meat, the supplier must meet certain animal welfare standards.²²⁹ These standards are based on the 2013 edition of the AMI's *Recommended Animal Handling Guidelines & Audit Guide*.²³⁰ Bidding suppliers must, *inter alia*, ensure that all animals are rendered unconscious, and that no more than 1% are compromised (injured) when arriving at the slaughterhouse.²³¹ The AMI guidelines only apply to mammals; consequently, as of 2015, there are no animal welfare purchasing requirements for poultry suppliers.

Poultry slaughter in the United States is regulated by the Poultry Products Inspection Act (PPIA),²³² which aims to ensure that poultry products are properly labeled and unadulterated.²³³ The PPIA gives the USDA authority to institute regulations when necessary to fulfill its purpose.²³⁴ One such regulation states that birds must be slaughtered "in accordance with good commercial practices."²³⁵ However, the United States has no legal definition for the term "good commercial practices." Instead the USDA's Food Safety and Inspection Service (FSIS) utilizes the NCC's animal welfare guidelines when auditing slaughterhouses for "good commercial practices."²³⁶ Inspectors issue "Memorandums of Interview"²³⁷ when slaughterhouses are noncompliant with NCC standards.²³⁸ The FSIS's sister agency, the AMS, also uses NCC guidelines in its "Process Verified Program."²³⁹ The program allows producers to use a label claim, such as "humanely raised," on packaging that also states "USDA Process Verified" after the AMS audits the producer for compliance with its own animal care standards, which are typically based on minimal industry guidelines.²⁴⁰

²²⁹ AMS (2015b).

²³⁰ AMS (2015b), pp. 2–3.

²³¹ AMI (2013), pp. 45–53; USDA, AMS (2015b).

²³² 21 U.S.C. §§ 451–472.

²³³ 21 U.S.C. § 452.

²³⁴ 21 U.S.C. § 463.

²³⁵ 9 C.F.R. § 381.65.

²³⁶ 70 Fed. Reg. 56624–56626.

²³⁷ Memorandums of Interview record non-regulatory deficiencies at slaughter plants, while Noncompliance Records document a failure to meet a regulatory requirement. In a recent FSIS notice the agency prohibited inspectors from quoting NCC in Noncompliance Records.

²³⁸ Food Safety and Inspection Services (2015).

²³⁹ AMS (no date), Official listing of approved USDA process verified programs, p. 20.

²⁴⁰ AMS (2015c).

4.6 Conclusion

Voluntary standards have the potential to significantly impact the manner in which farm animals are raised, transported, and slaughtered, particularly in countries such as Canada and the United States where few national legal standards exist. One country may have a dozen or more sets of private standards for the raising of a particular animal species. The variety of differing—and sometimes contradictory—private standards is fueling a call for international harmonization. While harmonizing standards may facilitate their adoption by countries in certain regions of the world without animal welfare standards, harmonization may also constrain the development and acceptance of higher standards. The actual impact on animals of voluntary standards—and regulatory standards for that matter—is largely unknown. Appropriate species-specific animal welfare indicators must be identified and then routinely measured to determine to what extent various husbandry standards impact the lives of animals raised for food.

References

- 7 C.F.R. §§ 205.1-205.690
 9 C.F.R. § 381.65
 7 U.S.C. §§ 1901–1907
 7 U.S.C. § 4801–4819
 7 U.S.C. §§ 6501–6523
 21 U.S.C. §§ 451–472
 33 U.S.C. § 1362
 49 U.S.C. § 80502
 70 Fed. Reg. 56624–56626
 302 Kentucky Administrative Regulations 21:030
 Agriculture and Agri-Food Canada (no date) Certified organic production in Canada 2008. <http://www.agr.gc.ca/eng/industry-markets-and-trade/statistics-and-market-information/by-product-sector/organic-products/organic-production-canadian-industry/certified-organic-production-in-canada-2008/?id=1276033208187>. Accessed 18 May 2015
 Agriculture and Agri-Food Canada (2014) Slaughter reports. <http://www.agr.gc.ca/eng/industry-markets-and-trade/statistics-and-market-information/by-product-sector/red-meat-and-live-stock/red-meat-market-information-canadian-industry/slaughter/?id=1415860000003>. Accessed 15 June 2015
 American Humane Association (no date) About American Humane Association. <http://www.humaneheartland.org/about-us>. Accessed 15 June 2015
 American Humane Association (no date) Science-based standards. <http://www.humaneheartland.org/our-standards>. Accessed 15 June 2015
 American Humane Association (2013a) Animal welfare standards for beef cattle
 American Humane Association (2013b) Humane Euthanasia. <http://humaneheartland.org/our-farm-programs/american-humane-certified/2-uncategorised>. Accessed 15 June 2015
 American Humane Association (2015) Celebrate those who grow our food, and do it right. <http://www.humaneheartland.org/the-certified-blog/item/celebrate-those-who-grow-our-food-and-do-it-right>. Accessed 15 June 2015

- American Meat Institute (2013) Recommended animal handling guidelines & audit guide: a systemic approach to animal welfare. <http://animalhandling.org/ht/a/GetDocumentAction/i/93003>. Accessed 15 June 2015
- Amos N, Sullivan R (2014) The business benchmark on farm animal welfare 2014 report. http://www.bbfaw.com/wp-content/uploads/2015/02/BBFAW_2014_Report.pdf. Accessed 15 June 2015
- Anders S, Souza Monteiro DM, Rouviere E (2007) Objectiveness in the market for third-party certification: does market structure matter? Paper presented at the 105th EAAE seminar, Bologna, Italy 8–10 March 2007
- Animal Welfare Approved (no date) Animal Welfare Approved policy manual. <http://animalwelfareapproved.org/wp-content/uploads/2015/04/Policy-and-Guidelines-v14.pdf>. Accessed 15 June 2015
- Animal Welfare Approved (no date) Standards. <http://animalwelfareapproved.org/standards/>. Accessed 15 June 2015
- Animal Welfare Approved (2013) About. <http://animalwelfareapproved.org/about/>. Accessed 15 June 2015
- Animal Welfare Institute (2015) History of AWI's leadership on establishing and upholding farm animal standards. <https://awionline.org/content/history-awis-leadership-establishing-and-upholding-farm-animal-standards>. Accessed 15 June 2015
- Aramark (2015) Aramark establishes animal welfare policy. <http://www.aramark.com/about-us/news/aramark-general/aramark-establishes-animal-welfare-policy>. Accessed 15 June 2015
- Arizona Revised Statute Annotated § 13–2910.07
- Assured Food Standards (Red Tractor) (no date) FAQs. <http://www.redtractor.org.uk/faqs>. Accessed 21 May 2015
- Bakke, American Veal Association (2007) Resolution. http://www.americanveal.com/wp-content/uploads/2011/10/GRP_HOUSING_RESOL1-0507.pdf. Accessed 15 June 2015
- Beef Quality Assurance (no date) Master cattle transport guide
- Beef Quality Assurance (no date) National manual for cattle care & handling guidelines. http://www.bqa.org/CMDocs/bqa/CCHG2015_Final.pdf. Accessed 15 June 2015
- Beef Quality Assurance (no date) The cattle industry's guidelines for the care and handling of cattle. <http://www.bqa.org/Cmdocs/BQA/GuidelinesfortheCareandHandlingofCattle.pdf>. Accessed 3 June 2015
- Beef Quality Assurance (2014) Supplemental guidelines. http://www.bqa.org/CMDocs/bqa/Supplemental%20Guidelines%202014_.pdf. Accessed 3 June 2015
- Bergman MA, Richert RM, Cicconi-Hogan KM et al (2014) Comparison of selected animal observations and management practices used to assess welfare of calves and adult dairy cows on organic and conventional dairy farms. *J Dairy Sci* 97:4269–4280
- Berry MA, Rondonelli DA (1998) Proactive corporate environmental management: new industrial revolution. *Acad Manag Exec* 12:38–50
- British Columbia Society for the Prevention of Cruelty to Animals (no date) SPCA Certified farms. <http://www.spc.bc.ca/welfare/farm-animal-welfare/spca-certified/spca-certified-farms/>. Accessed 18 May 2015
- California Health and Safety Code §25990
- Canadian Federation of Humane Societies (no date) Codes of practice and the National Farm Animal Care Council. http://www.cfhs.ca/farm/codes_of_practice. Accessed 15 May 2015
- Canadian Federation of Humane Societies (no date) Farm animal welfare certification in Canada. http://www.cfhs.ca/farm/humane_labelling_in_canada. Accessed 18 May 2015
- Canadian Federation of Humane Societies (no date) Putting an end to gestation stalls in Canada
- Canadian Federation of Humane Societies (no date) Realities of farming in Canada. http://www.cfhs.ca/farm/farming_in_canada. Accessed 18 May 2015
- Canadian Food Inspection Agency (no date) Canada – US organic equivalence arrangement – overview. <http://www.inspection.gc.ca/food/organic-products/equivalence-arrangements/us-overview/eng/1328068925158/1328069012553>. Accessed 18 May 2015

- Certified Humane (2015a) Our mission. <http://certifiedhumane.org/>. Accessed 15 June 2015
- Certified Humane (2015b) Standards. <http://certifiedhumane.org/how-we-work/our-standards/>. Accessed 15 June 2015
- Certified Naturally Grown (2015a) About CNG. <https://www.naturallygrown.org/about-cng>. Accessed 15 June 2015
- Certified Naturally Grown (2015b) Brief history of certified naturally grown. <https://www.naturallygrown.org/about-cng/brief-history-of-certified-naturally-grown>. Accessed 15 June 2015
- Certified Naturally Grown (2015c) List of producers. <https://www.naturallygrown.org/producers>. Accessed 15 June 2015
- Certified Naturally Grown (2015d) Livestock standards. <https://www.naturallygrown.org/programs/livestockstandards>. Accessed 15 June 2015
- Codex Alimentarius (2015) Codex timeline from 1945 to the present. <http://www.codexalimentarius.org/about-codex/codex-timeline/en/>. Accessed 15 June 2015
- Colorado Revised Statutes Annotated §35-50.5-102
- Compass Group (no date) Sustainability platform: a vision for 2020. <http://compass-usa.com/Pages/Sustainabilityfor2020.aspx>. Accessed 21 May 2015
- Compassion in World Farming and OneKind (2012) Farm assurance schemes and animal welfare: how the standards compare. <http://www.onekind.org/uploads/publications/120323-farm-assurance.pdf>. Accessed 21 May 2015
- Consumer Reports (2014) Food labels survey. <http://www.greenerchoices.org/pdf/consumerreportsfoodlabelingsurveyjune2014.pdf>. Accessed 15 June 2015
- Davis GF, Whitman MN, Zald MN (2006) The responsibility paradox: multinational firms and global corporate social responsibility. Ross School of Business Paper No. 1031
- Dunn BH (2006) Beef Quality Assurance: present and future in a review of the beef quality assurance program for the joint evaluation advisory committee, Reno, Nevada July 10, 2006
- Environmental Protection Agency (2015) Environmental Management Systems (EMS). <http://www.epa.gov/ems/>. Accessed 15 June 2015
- Farm Animal Council Network (2013) A summary report on farm animal welfare law in Canada
- Farm Animal Welfare Council (no date) Five freedoms. <http://webarchive.nationalarchives.gov.uk/20121007104210/http://www.fawc.org.uk/freedoms.htm>. Accessed 4 June 2015
- Florida Constitution article X, § 21
- Food Alliance (no date) About food alliance. <http://foodalliance.org/about>. Accessed 15 June 2015
- Food Alliance (no date) History of food alliance. <http://foodalliance.org/about/history>. Accessed 15 June 2015
- Food Alliance (no date) Sustainability standards for livestock operations. <http://foodalliance.org/livestock/livestockops>. Accessed 15 June 2015
- Food and Agriculture Organization of the United Nations Statistics Division (2015) Download data. <http://faostat3.fao.org/download/Q/QL/E>. Accessed 15 June 2015
- Freedom Food Limited (no date) Facts and figures. <http://www.freedomfood.co.uk/aboutus/facts-and-figures>. Accessed 22 May 2015
- Freedom Food Limited (no date) Impact report 2013. <http://www.freedomfood.co.uk/aboutus>. Accessed 22 May 2015
- Freedom Food Limited (no date) Our history. <http://www.freedomfood.co.uk/aboutus/history>. Accessed 22 May 2015
- Global Animal Partnership (2009) Global animal partnership 5-step animal welfare rating standards for beef cattle. <http://gblanimalpartnership.blob.core.windows.net/standards/Beef%20Cattle%20Welfare%20Standards.pdf>. Accessed 15 June 2015
- Global Animal Partnership (2014) Pilot GAP policy manual. <https://gblanimalpartnership.blob.core.windows.net/other/GAP%20Policy%20Manual.pdf>. Accessed 15 June 2015
- Global Animal Partnership (2015a) 5-step standards. <http://www.globalanimalpartnership.org/5-step-program/standards>. Accessed 15 June 2015

- Global Animal Partnership (2015b) About. <http://www.globalanimalpartnership.org/about>. Accessed 15 June 2015
- Global Animal Partnership (2015c) History. <http://www.globalanimalpartnership.org/about/history>. Accessed 15 June 2015
- Global Animal Partnership (2015d) Welcome to global animal partnership. <http://www.globalanimalpartnership.org/>. Accessed 15 June 2015
- Global Food Safety Initiative (no date) What is GFSI? <http://www.mygfsi.com/about-us/about-gfsi/what-is-gfsi.html>. Accessed 8 June 2015
- GLOBALG.A.P. (no date) Animal welfare add-on. http://www.globalgap.org/uk_en/what-we-do/globalg.a.p.-certification/globalg.a.p.-00001/Animal-Welfare/. Accessed 3 June 2015
- GLOBALG.A.P. (no date) History. http://www.globalgap.org/uk_en/who-we-are/about-us/history/. Accessed 3 June 2015
- GLOBALG.A.P. (no date) Membership. http://www.globalgap.org/uk_en/who-we-are/members/. Accessed 3 June 2015
- Government of Canada Criminal Code, Section 446 – cruelty to animals
- Government of Manitoba, Animal Care Regulation 126/98 of the Animal Care Act (C.C.S.M. c. A84)
- Government of Newfoundland and Labrador, Regulation 36/12, Animal Protection Standards Regulation under the Animal Health and Protection Act, 2012
- Government of Prince Edward Island, Animal Health and Protection Act Chapter A-11.1, Animal Protection Regulations, PEI Reg EC 71/90
- Government of Saskatchewan, The Animal Protection Act, 2000, Chapter A-21.1 Reg 1, as amended by Saskatchewan Regulations 32/2015
- Grandin T (2005) Special report: maintenance of good animal welfare standards in beef slaughter plants by use of auditing programs. *J Am Vet med Assoc* 226:370–373
- Grimshaw K et al (2014) Consumer perception of beef, pork, lamb, chicken, and fish. *Meat Sci* 96:443–444
- Humane Farm Animal Care (2014a) Annual report. http://certifiedhumane.org/wp-content/uploads/2015/03/Annual_Report_2014-Final.pdf. Accessed 15 June 2015
- Humane Farm Animal Care (2014b) Beef cattle. <http://certifiedhumane.org/wp-content/uploads/2014/02/Std14.BeefCattle.1J.pdf>. Accessed 15 June 2015
- Humane Farm Animal Care (2014c) Program/policy manual. <http://certifiedhumane.org/wp-content/uploads/2014/07/Pol14.2J.pdf>. Accessed 15 June 2015
- Humane Society of the United States (2012) An HSUS report: the welfare of animals in the veal industry. http://animalstudiesrepository.org/cgi/viewcontent.cgi?article=1028&context=hsus_reps_impacts_on_animals. Accessed 15 June 2015
- International Organization for Standardization (no date) ISO 14000-environmental management. <http://www.iso.org/iso/home/standards/management-standards/iso14000.htm>. Accessed 15 June 2015
- International Organization for Standardization (no date) ISO/WD TS 34700. http://www.iso.org/iso/catalogue_detail.htm?csnumber=64749. Accessed 8 June 2015
- International Organization for Standardization (no date) Standards. <http://www.iso.org/iso/home/standards.htm>. Accessed 15 June 2015
- International Organization for Standardization (2014) WG 16 consultation on the outline of the TS on animal welfare proposed by the drafting group
- Jack in the Box (2014) Animal welfare at Jack in the Box Inc. <http://www.jackintheboxinc.com/assets/animal-welfare-report.pdf>. Accessed 15 June 2015
- Kosar RK (2011) The quasi government: hybrid organizations with both government and private sector legal characteristic, congressional research service. <https://www.fas.org/sgp/crs/misc/RL30533.pdf>. Accessed 15 June 2015
- Kroger (2012) Kroger provides update on animal welfare. <http://ir.kroger.com/Cache/1001185186.PDF?Y=&O=PDF&D=&FID=1001185186&T=&IID=4004136>. Accessed 15 June 2015

- LaBarbera PA (1983) The diffusion of trade association advertising self-regulation. *J Mark* 47 (1):58–67
- Land Food People Foundation (no date) About. <http://landfoodpeople.ca/about>. Accessed 18 May 2015
- Land Food People Foundation (no date) Projects. <http://landfoodpeople.ca/projects>. Accessed 18 May 2015
- Lion Egg Farms (no date) British Lion quality code of practice. <http://www.lioneggfarms.co.uk/information/british-lion-quality-code-of-practice/>. Accessed 21 May 2015
- Loblaw (no date) 2012 Corporate social responsibility report. <http://www.loblaw-reports.ca/responsibility/2012/targets-and-achievements/source-with-integrity/>. Accessed 15 May 2015
- MacDonald J (2014) Technology, organization, and financial performance in U.S. broiler production, Information Bulletin No. 126, p. 7. <http://www.ers.usda.gov/media/1487788/eib126.pdf>. Accessed 15 June 2015
- Main DC, Whay HR, Green LE et al (2003) Effect of the RSPCA Freedom Food scheme on the welfare of dairy cattle. *Vet Rec* 153:227–231
- Maine Revised Statute title 7 § 4020
- Manitoba Pork Council (2011) Embracing a sustainable future. <http://manitobapork.com/wp-content/uploads/2012/12/Embracing-a-Sustainable-Future-Full-Version-FINAL.pdf>. Accessed 15 May 2015
- Maple Leaf (no date) Sustainability report. <http://www.mapleleafsustainability.ca/social.html>. Accessed 15 May 2015
- Marks and Spencer (no date) Your M&S plan: a report 2014. <http://planareport.marksandspencer.com/>. Accessed 21 May 2015
- Martin A (2008) Largest recall of ground beef is ordered. *New York Times* (18 February 2008). http://www.nytimes.com/2008/02/18/business/18recall.html?_r=0. Accessed 15 June 2015
- McDonald's (2014) 2014 McDonald's sustainability update. https://www.aboutmcdonalds.com/content/dam/AboutMcDonalds/2.0/pdfs/2014_sustainability_report.pdf. Accessed 15 June 2015
- Michigan Compiled Laws Annotated § 287.746
- Napolitano F, De Rosa G, Ferrante V et al (2009) Monitoring the welfare of sheep in organic and conventional farms using an ANI 35 L derived method. *Small Rumin Res* 83:49–57
- National Cattlemen's Beef Association (2015) Environmental stewardship award. <http://www.beefusa.org/environmentalstewardshipaward.aspx>. Accessed 15 June 2015
- National Chicken Council (2012a) Animal welfare for broiler chickens. <http://www.nationalchickencouncil.org/industry-issues/animal-welfare-for-broiler-chickens/>. Accessed 15 June 2015
- National Chicken Council (2012b) Environment. <http://www.nationalchickencouncil.org/industry-issues/environment/>. Accessed 15 June 2015
- National Chicken Council (2012c) History of the National Chicken Council. <http://www.nationalchickencouncil.org/about-ncc/history/>. Accessed 15 June 2015
- National Chicken Council (2012d) Overview. <http://www.nationalchickencouncil.org/about-ncc/overview/>. Accessed 15 June 2015
- National Chicken Council (2012e) U.S. chicken industry history. <http://www.nationalchickencouncil.org/about-the-industry/history/>. Accessed 15 June 2015
- National Chicken Council (2014) Animal welfare guidelines and audit checklist. <http://www.nationalchickencouncil.org/wp-content/uploads/2014/04/NCC-Guidelines-Broilers-April2014.pdf>. Accessed 15 June 2015
- National Farm Animal Care Council (no date) About NFACC. <http://www.nfacc.ca/about-nfacc>. Accessed 15 May 2015
- National Farm Animal Care Council (no date) Animal care assessment framework. <http://www.nfacc.ca/animal-care-assessment>. Accessed 15 May 2015
- National Farm Animal Care Council (no date) Codes of practice for the care and handling of farm animals. <http://www.nfacc.ca/codes-of-practice>. Accessed 15 May 2015

- National Farm Animal Care Council (2013) Code of practice for the care and handling of beef cattle. https://www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf. Accessed 3 June 2015
- National Farm Animal Care Council (2014) Code of practice for the care and handling of pigs. https://www.nfacc.ca/pdfs/codes/pig_code_of_practice.pdf. Accessed 3 June 2015
- National Farm Animal Care Council (2015) NFACC code of practice development process
- National Pork Board (no date) Pork Quality Assurance Plus site assessment guide 2.0. <http://porkcdn.s3.amazonaws.com/sites/all/files/documents/PQAPlus/V2.0/SiteAssessment/SiteAssessmentGuideV2.0.pdf>. Accessed 15 June 2015
- National Pork Board (2003) Swine care handbook. <http://porkcdn.s3.amazonaws.com/sites/all/files/documents/PQAPlus/V2.0/TrainingAdults/SwinecareHandbookv2.0.pdf>. Accessed 15 June 2015
- National Pork Producers Council (no date) About us, mission and governance. <http://www.nppc.org/about-us/>. Accessed 15 June 2015
- National Turkey Federation (2012a) Animal care best management practices. <http://www.eatturkey.com/sites/default/files/NTF%20Production%20Welfare%20-%202012%20FINAL.pdf>. Accessed 15 June 2015
- National Turkey Federation (2012b) Animal care best management practices for the production of turkeys. <http://www.eatturkey.com/sites/default/files/NTF%20Slaughter%20Welfare%202012%20-%20FINAL.pdf>. Accessed 15 June 2015
- National Organic Standards Board (2001) Pasture livestock committee recommendation. <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5057231>. Accessed 15 June 2015
- North American Meat Institute (2015a) About. <https://www.meatinstitute.org/index.php?ht=d/sp/i/204/pid/204>. Accessed 15 June 2015
- North American Meat Institute (2015b) Environmental achievement awards program. <https://www.meatinstitute.org/ht/display/ShowPage/id/11491/pid/11491>. Accessed 15 June 2015
- Norwegian Scientific Committee for Food Safety (2014) Comparison of organic and conventional food and food production, Part II: animal health and welfare in Norway. Doc. No.: 11-007-2
- Ohio Administrative Code § 901:12-4, 12-8, 12-5-03
- Olymel (no date) Olymel and animal welfare. <http://www.olymel.ca/en/commitments/animal-welfare/>. Accessed 15 May 2015
- Oregon Revised Statute § 600.150
- Oregon Revised Statute §632.840
- Organic production systems general principles and management standards. CAN/CGSB-32.310-2006, amended Oct. 2008, Dec. 2009 and June 2011
- Pastore A (2013) FAO's strategic vision to engage with the private sector. In Maybeck A, Redfern S (eds) Voluntary standards for sustainable food systems: challenges and opportunities. Rome, p 109
- People for the Ethical Treatment of Animals (no date) Peta's milestones for animals. <http://www.peta.org/about-peta/milestones/>. Accessed 15 June 2015
- Perry J et al (2012) Poultry production in the United States. In: Broiler farms' organization, management and performance agriculture, Information Bulletin No. 748, p 3. http://www.ers.usda.gov/media/256034/aib748b_1_.pdf. Accessed 15 June 2015
- Portney P (2005) Corporate social responsibility an economic and public policy perspective. In: Hay BL, Stavins RN, Vietor RHK (eds) Environmental protection and the social responsibility of firms perspectives from law, economics and business. RFF Press, Washington
- Post A (2013) Grocers agree to eliminate pig gestation crates. Winnipeg Free Press. <http://www.winnipegfreepress.com/business/agriculture/Pig-gestation-crates-to-be-eliminated-at-Mani-toba-farm--205400701.html>. Accessed 15 May 2015
- Quality Meat Scotland (no date) QMS. <http://www.qmscotland.co.uk/qms>. Accessed 15 May 2015
- Ramus CA, Montiel I (2005) When are corporate environmental policies a form of greenwashing? Bus Soc 44:377-414
- Reimund D et al (1981) Structural change in agriculture: the experience for broilers, fed cattle, and processing vegetables. U.S. Department of Agriculture, Economics and Statistics Service, p 4 Revised Code of Washington §69.25.150

- Rhode Island General Laws Annotated §4-1.1-3
- Rondinelli DA, Berry MA (2000) Corporate environmental management and public policy bridging the gap. *Am Behav Sci* 44:168–187
- Royal Society for the Prevention of Cruelty to Animals (2008) The slaughter of food animals
- Ruegg PL (2009) Management of mastitis on organic and conventional dairy farms. *J Anim Sci* 87:43–55
- Santacoloma P (2013) Nexus between public and private food standards: main issues and perspectives. In: Maybeck A, Redfern S (eds) *Voluntary standards for sustainable food systems: challenges and opportunities*. Rome
- Singer P (1998) *Ethics into action*. Rowan & Littlefield Publishers, Inc, Lanham
- Smithfield (no date) Housing of pregnant sows. <http://www.smithfieldcommitments.com/core-reporting-areas/animal-care/on-our-farms/housing-of-pregnant-sows/>. Accessed 15 June 2015
- Smithfield (2007) Smithfield foods makes landmark decision regarding animal management. http://files.shareholder.com/downloads/SFD/264465172x0x173866/A793AB68-6806-4E6E-AF82-CABDF36FC791/SFD_News_2007_1_25_General.pdf. Accessed 15 June 2015
- Smithfield (2013) Smithfield foods global hog production operations moving towards complete conversion to group housing. <http://investors.smithfieldfoods.com/releasedetail.cfm?releaseid=731294>. Accessed 15 June 2015
- Sodexo Group (2013) Sodexo Group position paper: animal welfare. <http://sodexousa.com/usen/Images/Sodexo-Group-Animal-Welfare-Position-Paper-Final-december2013342-797767337-843001.pdf>. Accessed 15 June 2015
- Soil Association (no date) Organic standards. <http://www.soilassociation.org/Whatisorganic/Organicstandards>. Accessed 3 June 2015
- Soil Association (no date) Our work 2014. <http://www.soilassociation.org/annualreview>. Accessed 22 May 2015
- Soil Association (no date) Who we are. <http://www.soilassociation.org/aboutus/whoweare>. Accessed 22 May 2015
- Starbucks Coffee (no date) Animal welfare-friendly practices statement. <http://globalassets.starbucks.com/assets/a228b865c3aa45938b7508cb82a17cf1.pdf>. Accessed 15 June 2015
- Starbucks (2014) Global responsibility report. <http://globalassets.starbucks.com/assets/ea2441eb7cf647bb8ce8bb40f75e267e.pdf>. Accessed 15 June 2015
- Sullivan S (2013) Empowering market regulation of agricultural animal welfare through product labeling. *Anim Law* 19:391–422
- Sustainable Agriculture Research & Education (2012) History of organic farming in the United States. <http://www.sare.org/Learning-Center/Bulletins/Transitioning-to-Organic-Production/Text-Version/History-of-Organic-Farming-in-the-United-States>. Accessed 15 June 2015
- The Poultry Site (2013) Manitoba egg producers to phase out conventional cages. <http://www.thepoultrysite.com/poultrynews/30239/manitoba-egg-producers-to-phase-out-conventional-cages/>. Accessed 15 May 2015
- Thorpe D (2013) Why CSR? The benefits of corporate social responsibility will move you to act. *Forbes*. <http://www.forbes.com/sites/devinthorpe/2013/05/18/why-csr-the-benefits-of-corporate-social-responsibility-will-move-you-to-act/>. Accessed 15 June 2015
- Tim Hortons (no date) Animal welfare at Tim Hortons. <http://www.timhortons.com/us/en/social/animal-welfare.php>. Accessed 15 May 2015
- United Egg Producers (2004a) About Us. <http://www.unitedegg.org/default.cfm>. Accessed 15 June 2015
- United Egg Producers (2004b) Animal welfare <http://www.unitedegg.org/AnimalWelfare/>. Accessed 15 June 2015
- United Egg Producers (2014) Animal husbandry guidelines for U.S. egg laying flocks.
- US Department of Agriculture, AMS (no date) Official listing of approved USDA process verified programs. <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRD3320450>. Accessed 15 June 2015

- US Department of Agriculture, AMS (2013) National organic program. <http://www.ams.usda.gov/AMSV1.0/nop>. Accessed 15 June 2015
- US Department of Agriculture, Agriculture Marketing Service (AMS) (2014) About AMS. <http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateD&navID=AboutAMS&topNav=AboutAMS&page=AboutAMS&acct=AMSPW>. Accessed 15 June 2015
- US Department of Agriculture, AMS (2015a) AMS annual purchasing summary. <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5099583>. Accessed 15 June 2015
- US Department of Agriculture, AMS (2015b) Federal purchase program specifications for animal handling and welfare. <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5084518>. Accessed 15 June 2015
- US Department of Agriculture, AMS (2015c) LPS process verified program. <http://www.ams.usda.gov/AMSV1.0/processverified>. Accessed 15 June 2015
- US Department of Agriculture, Animal and Plant Health Inspection Service (2013) Layers 2013 Part IV: reference of organic egg production in the United States. http://www.aphis.usda.gov/animal_health/nahms/poultry/downloads/layers2013/Layers2013_dr_PartIV.pdf. Accessed 15 June 2015
- US Department of Agriculture, Economic Research Service (2013) Table 3: certified organic and total U.S. acreage, selected crop and livestock, 1995–2011.
- US Department of Agriculture, Food Safety and Inspection Services (2015), FOIA response 2014–0092, Good commercial practices Aug 2012–Nov 2013 final response (on file with the Animal Welfare Institute)
- US Department of Agriculture, National Agricultural Statistics Service (NASS) (2015a), Live-stock slaughter. <http://usda.mannlib.cornell.edu/usda/nass/LiveSlau//2010s/2015/LiveSlau-01-22-2015.pdf>. Accessed 15 June 2015
- US Department of Agriculture, NASS (2015b) Poultry-production and value 2014 summary. <http://usda.mannlib.cornell.edu/usda/nass/PoulProdVa//2010s/2015/PoulProdVa-04-30-2015.pdf>. Accessed 15 June 2015
- US Department of Agriculture, NASS (2015c) Poultry slaughter 2014 summary. <http://usda.mannlib.cornell.edu/usda/current/PoulSlauSu/PoulSlauSu-02-25-2015.pdf>. Accessed 15 June 2015
- Washington Revised Code §69.25.065, §69.25.107
- Watts P, Holme L (1999) Corporate social responsibility. World Business Council for Sustainable Development, Geneva
- Wendy's (2014) Wendy's animal welfare program. <https://www.wendys.com/en-us/about-wendys/animal-welfare-program>. Accessed 15 June 2015
- Winnipeg Humane Society (no date) Purchase humane food. <http://www.winnipeghumanesociety.ca/humane-certified-meat-and-eggs>. Accessed 18 May 2015
- World Organization for Animal Health (no date) About us. <http://www.oie.int/about-us/>. Accessed 8 June 2015
- World Organization for Animal Health (no date) Implications of private standards in international trade of animals and animal products. <http://www.oie.int/international-standard-setting/implications-of-private-standards/>. Accessed 8 June 2015
- World Organization for Animal Health (no date) The 180 member countries. <http://www.oie.int/about-us/our-members/member-countries/>. Accessed 8 June 2015
- World Organization for Animal Health (2010) Resolution no. 26: roles of public and private standards in animal health and animal welfare. http://rpawe.oie.int/fileadmin/doc/eng/Resolutions/78_GS_2010_Resolution_26.pdf. Accessed 8 June 2015
- World Organization for Animal Health (2014) Animal welfare and beef cattle production systems. Terrestrial Animal Health Code, Chapter 7.9
- World Organization for Animal Health (2015a) About us. <http://www.oie.int/about-us/>. Accessed 15 June 2015
- World Organization for Animal Health (2015b) OIE achievements in animal welfare. <http://www.oie.int/animal-welfare/animal-welfare-key-themes/>. Accessed 8 June 2015