

WELFARE IMPROVEMENTS FOR ORGANIC ANIMALS:  
CLOSING LOOPHOLES IN THE REGULATION OF  
ORGANIC ANIMAL HUSBANDRY

By  
Aurora Paulsen\*

*For many consumers, farm animal welfare matters. To ensure the well-being of farm animals, consumers often pay premium prices for animal products with humane labels. Because “organic” is an example of a label presumed to convey information about animal husbandry practices, animal products with this label may offer an alternative to products from animals that were raised “conventionally” on large, industrialized farms with minimal welfare protections. The Organic Foods Production Act of 1990 and ensuing regulations require that organic animals be able to engage in natural behaviors. However, many of the requirements are general and thus result in significant variations in livestock living conditions, confounding consumer expectations of uniform organic production and high standards for organic farm animal welfare. This Comment discusses the background of organic regulations, including issues with their application in the areas of organic dairy and egg production. Next, this Comment analyzes aspects of organic regulations as applied to organic laying hens and organic pigs. Finally, this Comment suggests ways to make organic regulations more quantifiable and thus more enforceable so organic animals are able to engage in natural behaviors.*

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\* © Aurora Paulsen 2011. Aurora Paulsen obtained her B.A. from Reed College and will obtain a J.D. with a certificate in Environmental and Natural Resources Law from Lewis & Clark Law School in May 2012. She sincerely thanks her mom and brother for their unwavering patience and support. Ms. Paulsen also thanks her nonhuman family members Mayet, Fossa, Mara, and Dandy for their constant companionship and joyful antics.

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## I. INTRODUCTION

Animal-based protein is currently an important component of the average American diet. According to federal agricultural estimates, animal protein consumption in the United States included 221 pounds of meat<sup>1</sup> and 250 eggs<sup>2</sup> in 2007, and 162 pounds of fluid milk<sup>3</sup> per person in 2008. To meet consumer demand for animal-based products, U.S. producers kept 9.3 million dairy cows<sup>4</sup> and 280 million laying hens<sup>5</sup> and slaughtered 9.5 billion animals in 2008.<sup>6</sup> Of the animals slaughtered for human consumption, 95%, or approximately 9 billion, were poultry.<sup>7</sup> As a result of such an immense demand for meat, on average, 1 million chickens are slaughtered in the U.S. every hour.<sup>8</sup>

Despite the significant number of animals involved in food production and a growing public interest in farm animal welfare,<sup>9</sup> conventional farm animal husbandry is largely exempt from regulation. For

<sup>1</sup> U.S. Dept. of Agric. (USDA), *USDA Agricultural Projections to 2018* 49, [http://www.usda.gov/oce/commodity/archive\\_projections/USDAAGriculturalProjections2018.pdf](http://www.usda.gov/oce/commodity/archive_projections/USDAAGriculturalProjections2018.pdf) (Feb. 2009) (accessed Apr. 2, 2011).

<sup>2</sup> *Id.* at 52.

<sup>3</sup> See Agric. Mktg. Resource Ctr. & Madeline Schultz, *Fluid Milk Profile*, [http://www.agmrc.org/commodities\\_products/livestock/dairy/fluid\\_milk\\_profile.cfm](http://www.agmrc.org/commodities_products/livestock/dairy/fluid_milk_profile.cfm) (updated Oct. 2009) (accessed Apr. 2, 2011) (stating that per capita milk consumption in the U.S. in 2008 included 50.7 pounds of whole milk, 62.9 pounds of 2% milk, 22.4 pounds of 1% milk, and 27.1 pounds of skim milk).

<sup>4</sup> USDA, *supra* n. 1, at 53 (rounding the estimated number of dairy cows up to 9.3 million from 9.265 million).

<sup>5</sup> ThePoultrySite.com, *US Poultry Outlook Report—December 2008*, <http://www.thepoultrysite.com/articles/1098/us-poultry-outlook-report-december-2008> (Dec. 2008) (accessed Apr. 2, 2011).

<sup>6</sup> Humane Socy. of the U. S. (HSUS), *Farm Animal Statistics: Slaughter Totals*, [http://www.humanesociety.org/news/resources/research/stats\\_slaughter\\_totals.html](http://www.humanesociety.org/news/resources/research/stats_slaughter_totals.html) (updated Feb. 2011) (accessed Apr. 2, 2011).

<sup>7</sup> *Id.* The other 5% of animals slaughtered for food in the U.S. in 2008 included 271 million turkeys, 116 million hogs, 34 million cattle, 24 million ducks, and 2.5 million sheep and lambs. *Id.* Estimates of annual American animal consumption do not include fish. *Id.*

<sup>8</sup> This calculation is arrived at using the following formula: 9 billion divided by 365 days and then divided by 24 hours equals 1,027,397.

<sup>9</sup> See Animal Welfare Inst., *Consumer Perceptions of Farm Animal Welfare*, <http://www.awionline.org/ht/a/GetDocumentAction/i/25067> (Oct. 2010) (accessed Apr. 2, 2011) (providing statistics about consumers' levels of concern for farm animal welfare, perceptions of claims such as "humanely raised," willingness to pay more for food that is "humanely raised," and understanding of current labels).

example, although the Animal Welfare Act of 1966 is the central piece of federal legislation aimed at animal protection, farm animals are explicitly exempted from the Act.<sup>10</sup> Unlike the Animal Welfare Act, the Humane Methods of Slaughter Act (HMSA) of 1958<sup>11</sup> applies to farm animals, requiring that the slaughter of livestock “be carried out only by humane methods” to prevent “needless suffering.”<sup>12</sup> However, HMSA exempts poultry,<sup>13</sup> with the result that the Act applies to only approximately 5% of animals slaughtered for food in the U.S.<sup>14</sup> Notably, HMSA has no bearing on the treatment of animals prior to slaughter.<sup>15</sup> The Twenty Eight Hour Law of 1877 also applies to farm animals, prohibiting carriers from transporting animals for more than twenty-eight hours without unloading them for food, water, and rest; this Law permits significant exceptions.<sup>16</sup> As with HMSA, the Twenty Eight Hour Law does not affect the treatment of animals on the “farm.”<sup>17</sup> No federal law governs the treatment of conventionally raised farm animals during rearing.<sup>18</sup>

Like the federal government, state governments provide little in the way of protection for farm animals. Many states explicitly exempt farm animals from anti-cruelty statutes, often by simply prohibiting the application of the statutes to “‘customary’ farming practices.”<sup>19</sup> In reference to agricultural exemptions, one treatise observed, “Such [state] amendments indicate that current methods of farming encompass practices that might have been considered illegal prior to the amendments.”<sup>20</sup> Theoretically, without blanket agricultural exemptions, state anti-cruelty statutes govern the treatment of farm animals.<sup>21</sup> However, prosecutors face a number of hurdles, and anti-cruelty cases involving farm animals are rarely pursued.<sup>22</sup> Thus, most

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<sup>10</sup> 7 U.S.C. § 2132(g) (2006).

<sup>11</sup> 7 U.S.C. §§ 1901–1907 (2006).

<sup>12</sup> 7 U.S.C. § 1901.

<sup>13</sup> *Id.*

<sup>14</sup> See HSUS, *supra* n. 6 (asserting that 9.5 billion animals were slaughtered in the U.S. in 2008 and that 9 billion of those animals were poultry); 7 U.S.C. §§ 1901–1907 (2006) (exempting poultry from standards for slaughter methods).

<sup>15</sup> See 7 U.S.C. §§ 1901–1907 (applying only to slaughter methods, not husbandry standards).

<sup>16</sup> 49 U.S.C. § 80502(a) (2006).

<sup>17</sup> *Id.* (applying only to those transporting animals across state lines).

<sup>18</sup> David J. Wolfson, *Beyond the Law: Agribusiness and the Systemic Abuse of Animals Raised for Food or Food Production* 14 (Farm Sanctuary, Inc. 1999).

<sup>19</sup> David J. Wolfson & Mariann Sullivan, *Foxes in the Hen House: Animals, Agribusiness, and the Law: A Modern American Fable*, in *Animal Rights: Current Debates and New Directions* 205, 212 (Cass R. Sunstein & Martha C. Nussbaum eds., Oxford U. Press 2004). As just two examples, “customary” farming practices may include docking pigs’ tails without anesthesia and confining pregnant and lactating sows to crates that are too small to permit them to turn around. Wolfson, *supra* n. 18, at 24.

<sup>20</sup> Wolfson, *supra* n. 18, at 10.

<sup>21</sup> *Id.* at 16.

<sup>22</sup> Wolfson & Sullivan, *supra* n. 19, at 209–12.

state laws are either ineffective at protecting farm animals or are simply inapplicable to farm animal husbandry.<sup>23</sup>

Because of the paucity of legislation governing the treatment of farm animals and a growing concern for farm animal welfare, many consumers seek assurance that animal-based foods are produced humanely. For example, in a study conducted by Oklahoma State University, 49% of respondents said that they considered the well-being of farm animals when purchasing meat.<sup>24</sup> In an attempt to ensure that they are supporting humane farming practices, consumers may opt for products with humane labels,<sup>25</sup> such as “Animal Welfare Approved” or “Free Range.” The farm animal husbandry standards behind such labels may be set and overseen by government agencies,<sup>26</sup> by groups interested in animal welfare,<sup>27</sup> or even by industry groups themselves.<sup>28</sup> However, although humane labels might appear to assist consumers with selecting items that were produced “humanely,” there are three significant problems with the current American labeling system.

First, government agencies may fail to adequately regulate production methods under the humane labels they oversee, rendering those labels of little use to consumers.<sup>29</sup> Second, the husbandry stan-

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<sup>23</sup> Wolfson, *supra* n. 18, at 14–22.

<sup>24</sup> Jayson L. Lusk et al., *Consumer Preferences for Farm Animal Welfare: Results of a Nationwide Telephone Survey* 15, <http://asp.okstate.edu/baileynorwood/AW2/InitialReporttoAFB.pdf> (Aug. 17, 2007) (accessed Apr. 2, 2011).

<sup>25</sup> In this Comment, the phrase “humane labels” refers to labeling on animal-based food products that indicates, or appears to indicate, that an item was produced according to increased standards of farm animal welfare.

<sup>26</sup> For example, the USDA oversees the labels “free range” or “free roaming” and “natural.” USDA: Food Safety & Inspection Serv., *Fact Sheets, Food Labeling, Meat and Poultry Labeling Terms*, [http://www.fsis.usda.gov/factsheets/Meat\\_&\\_Poultry\\_Labeling\\_Terms/index.asp](http://www.fsis.usda.gov/factsheets/Meat_&_Poultry_Labeling_Terms/index.asp) (Oct. 29, 2010) (accessed Apr. 2, 2011).

<sup>27</sup> Examples of labels promulgated by groups interested in farm animal welfare include “Animal Welfare Approved,” which is overseen by the Animal Welfare Institute, and “American Humane® Certified,” which was created by the American Humane Association. Animal Welfare Approved, *About*, <http://www.animalwelfareapproved.org/about/> (accessed Apr. 2, 2011); Am. Humane Assn., *American Humane® Certified, Farm Animals*, <http://www.americanhumane.org/protecting-animals/programs/farm-animals/> (2011) (accessed Apr. 2, 2011).

<sup>28</sup> For example, the label “Animal Care Certified” that appeared on egg cartons from 2002 to 2005 was overseen by the United Egg Producers, an egg cooperative that boasts representation of the ownership of approximately 95% of U.S. egg-laying hens. Compassion Over Killing, *“Animal Care Certified”—A Case of Animal Abuse and Consumer Fraud*, <http://www.cok.net/camp/acc/> (accessed Apr. 2, 2011); United Egg Producers, *About Us*, <http://www.unitedegg.org/> (2004) (accessed Apr. 2, 2011). Similarly, the National Pork Board’s Animal Welfare Committee oversaw the development of the Swine Welfare Assurance Program. Natl. Pork Bd. & Am. Assn. of Swine Veterinarians, *Swine Welfare Fact Sheet, What Is the Swine Welfare Assurance Program<sup>SM</sup> (“SWAP”)?*, <http://www.pork.org/filelibrary/Factsheets/Well-Being/FactsOnAnimalWelfare.pdf> (Dec. 2003) (accessed Apr. 2, 2011).

<sup>29</sup> See GreenCityBlueLake Institute, *What Do Food Labels Really Mean?*, <http://www.gcbi.org/forum/what-do-food-labels-really-mean> (updated July 29, 2009) (accessed Apr. 2, 2011) (stating that the USDA “does not regulate [the label ‘grass fed’] in any way” and does not regulate other labels “as thoroughly as possible”).

dards guaranteed by humane labels represent widely divergent living conditions,<sup>30</sup> which may not be apparent to consumers. For example, under the label “Animal Welfare Approved,” laying hens may not be raised in cages and physical mutilations such as de-beaking (removal of part of a hen’s beak) are prohibited.<sup>31</sup> Under the label “United Egg Producers Certified,” producers may permanently confine laying hens in small, stacked cages and de-beaking is permitted; anesthesia is not required during de-beaking.<sup>32</sup> Thus, although the label “Animal Welfare Approved” indicates an increase in the humaneness of farm animal husbandry practices, the label “United Egg Producers Certified” represents nothing more than a codification of existing industry standards. Unfortunately, humane labeling systems abound, and consumers may not understand these systems. For example, in one poll the Animal Welfare Institute found that only 2% of 2,000 respondents could correctly identify the meaning of the term “natural” as applied to poultry and meat.<sup>33</sup> Consumers may be unable to distinguish between humane labels without doing significant personal research, and expecting consumers to do such research is unrealistic.

Products labeled as “organic” offer consumers another, and perhaps better, alternative to some humane labels because the National Organic Program (NOP) is both administered by the federal government rather than an interest group and subject to considerable regulation. Thus, organic standards should be readily identifiable. In addition, “organic” may be associated in consumers’ minds with conditions resembling the familiar, iconic family farm. Importantly, people who choose to pay a premium for organic meat, dairy, and eggs are likely to believe that organic animals move freely about a farm, engaging in behaviors that consumers believe to be typical for those species. Indeed, federal legislation requires that organic animals be able to engage in natural behaviors,<sup>34</sup> providing an assurance to consumers. For

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<sup>30</sup> See Farm Sanctuary, *The Truth Behind the Labels: Farm Animal Welfare Standards and Labeling Practices* 3–4, <http://www.farmsanctuary.org/issues/assets/Farm%20Animal%20Welfare%20Standards%20Report.pdf> (Apr. 2009) (accessed Apr. 2, 2011) (stating that animal industry quality assurance guidelines “codify inhumane farming systems, fail to prevent suffering and distress, and do not allow for the expression of normal animal behavior”).

<sup>31</sup> Animal Welfare Approved, *Animal Welfare Approved Standards for Laying Hens and Meat Chickens* 8, 11, <http://www.animalwelfareapproved.org/wp-content/uploads/2009/12/AWA-Meat-Chicken-and-Laying-Hen-Standards-2010.pdf> (2010) (accessed Apr. 2, 2011).

<sup>32</sup> See Farm Sanctuary, *supra* n. 30, at 3–4 (stating that “confinement to small cages [is] allowed” and “access to the outdoors [is] not required” under the United Egg Producers Certified label); UEPCertified.com, *Guidelines, Beak Trimming*, <http://www.uepcertified.com/program/guidelines/categories/beak-trimming> (explaining the guidelines for beak trimming) (accessed Apr. 21, 2011); UEPCertified.com, *Guidelines, Housing, Space, Feed & Water*, <http://www.uepcertified.com/program/guidelines/categories/housing-space-feed-water> (accessed Apr. 2, 2011) (explaining the cage production system for laying hens).

<sup>33</sup> Animal Welfare Institute, *supra* n. 9, at 4.

<sup>34</sup> 7 C.F.R. § 205.239 (Westlaw current through Mar. 31, 2011).

example, a consumer of organic animal products might expect that “organic” cows spend much of their lives in pastures, “organic” chickens peck and scratch in natural materials, and “organic” pigs are able to root and forage. However, many requirements for organic production are insufficiently specific, and thus, absent reform that strengthens organic production requirements, consumers cannot be assured that “organic” farm animals are able to engage in natural behaviors or are otherwise raised in a manner consistent with consumer expectations.

While many organic farms are small, increased demand for organic products has expanded the market, and some large-scale industrial operations are currently certified as organic.<sup>35</sup> Thus, although the U.S. Department of Agriculture (USDA) reports that the national average for the number of organic cows per dairy is 82,<sup>36</sup> large organic dairies may have 4,000 or 5,000 cows.<sup>37</sup> As consumers might expect, small organic farms exist in greater numbers than large organic operations; however, large operations command much of the market for organics.<sup>38</sup> For example, a single large company, Horizon Organics, has more than 50% of the market share in fluid organic milk.<sup>39</sup> In the push for profitability, some producers may comply with organic standards as minimally as possible,<sup>40</sup> compromising the intended uniformity of organic production.

Recently, consumers voiced concerns about organic milk production. In response to claims that organic producers were unnecessarily restricting ruminants’ access to pasture and to the outdoors, the USDA amended its regulations on that issue in 2010,<sup>41</sup> making the requirements more quantifiable and thus more enforceable.<sup>42</sup> However, requirements for other species of organic livestock remain ineffective because, like the “access to pasture” requirement before the 2010 amendment, they fail to ensure that organic animals are able to en-

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<sup>35</sup> *Id.*

<sup>36</sup> 75 Fed. Reg. 7154, 7186 (Feb. 17, 2010).

<sup>37</sup> Mark Alan Kastel & Cornucopia Inst., *Maintaining the Integrity of Organic Milk: Showcasing Ethical Family Farm Producers Exposing the Corporate Takeover—Factory Farm Production* 12–13, [http://cornucopia.org/dairysurvey/OrganicDairyReport/cornucopia\\_milkintegrity.pdf](http://cornucopia.org/dairysurvey/OrganicDairyReport/cornucopia_milkintegrity.pdf) (Apr. 19, 2006) (accessed Apr. 2, 2011) [hereinafter Kastel & Cornucopia Inst., *Maintaining the Integrity of Organic Milk*].

<sup>38</sup> A similar ratio between small and large dairies also exists with conventionally produced milk: Dairies with herds of more than 2,000 cows produce 30.5% of conventional milk despite the fact that the largest number of conventional dairies (21,100) has between 1 and 29 cows. Agric. Mktg. Resource Ctr. & Schultz, *supra* n. 3.

<sup>39</sup> Erin Speiser Ihde, *Milking the Organic Market*, [http://www.brandchannel.com/features\\_effect.asp?pf\\_id=133](http://www.brandchannel.com/features_effect.asp?pf_id=133) (Nov. 25, 2002) (accessed Apr. 2, 2011).

<sup>40</sup> See Chad M. Kruse, Student Author, *The Not-So-Organic Dairy Regulations of the Organic Food Production Act of 1990*, 30 S. Ill. U. L.J. 501, 516–18 (2006) (describing allegations that cost-motivated factory farming practices are not sufficiently compliant with the Organic Foods Production Act to be considered organic).

<sup>41</sup> See 75 Fed. Reg. at 7154–55 (discussing the reasoning behind the 2010 amendment of the final rule concerning organic ruminants’ access to pasture).

<sup>42</sup> *Id.* at 7184.

gage in natural behaviors.<sup>43</sup> As it has done with “access to pasture,” the USDA should adopt specific, quantifiable standards governing the husbandry of all organic animals.

Although there are a great number of organic animal production issues that affect farm animal welfare, this Comment focuses on the requirement that organic animals be able to engage in natural behaviors. Additionally, due to limited scope, this Comment only addresses a sampling of the welfare issues surrounding protections for animals’ natural behaviors; discussions of organic animal welfare are intended merely to highlight examples of previous and potential difficulties with the application of current organic regulations. Part II of this Comment provides background information on organic animal production and discusses recent issues with organic requirements as applied to organic dairy cows and organic laying hens. Part III details potential welfare issues for organic laying hens and organic pigs, identifying ways in which organic requirements fail to ensure that these animals are permitted to engage in natural behaviors because of loopholes in the Act’s enacting regulations. Additionally, Part III suggests amendments to the ‘organic regulations that would ensure that organic laying hens and organic pigs are granted environmental opportunities that promote natural behaviors. Part IV concludes that greater specificity in the regulation of organic animal production is needed in order to ensure that organic animals are engaging in natural behaviors, which is in line with consumer expectations.

## II. BACKGROUND ON ORGANIC ANIMAL PRODUCTION

The United States Department of Agriculture (USDA) oversees the National Organic Program (NOP), which is governed by the Organic Foods Production Act of 1990 (OFPA)<sup>44</sup> and its enacting regulations.<sup>45</sup> Under the NOP, the National Organic Standards Board (NOSB) issues recommendations concerning improvements to organic animal husbandry;<sup>46</sup> the USDA, however, declines to address many of the NOSB’s recommendations.<sup>47</sup> Although OFPA provides for the regulation of organic animal production, many of the organic regulations are vague enough that great variations in organic animal husbandry standards are permitted, and some variations are at odds with common assumptions about organic production methods. As a result, the

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<sup>43</sup> For example, consult *infra* pt. III (discussing issues with organic regulations as applied to organic laying hens and organic pigs).

<sup>44</sup> 7 U.S.C. § 6503(a).

<sup>45</sup> 7 C.F.R. §§ 205.1–205.699 (Westlaw current through Mar. 31, 2011).

<sup>46</sup> USDA, *National Organic Program: National Organic Standards Board (NOSB)*, <http://www.ams.usda.gov/AMSV1.0/NOSB> (updated Feb. 3, 2010) (accessed Apr. 2, 2011) [hereinafter USDA, *NOSB*].

<sup>47</sup> See 75 Fed. Reg. at 7154 (noting six recommendations by the NOSB from 1994 to 2005 but amending rules only in 2010); see also Kastel & Cornucopia Institute, *Maintaining the Integrity of Organic Milk*, *supra* n. 37, at 9 (stating that between thirty and forty NOSB recommendations have never been addressed by the USDA).

USDA has received complaints alleging the violation of organic standards for both dairy cows and laying hens.<sup>48</sup> The USDA recently amended its requirements concerning the production of organic dairy to make organic regulations more specific and thus more enforceable.<sup>49</sup> However, the USDA has not addressed concerns surrounding the production of organic eggs or other animal-based products.

#### A. Overview of Standards for Organic Animal Production

In 1990, Congress passed the OFPA to “establish national standards” and “assure consumers that organically produced products meet a consistent standard.”<sup>50</sup> Organic farming has since become one of the fastest growing sectors in agriculture, with retail sales of organic foods growing from \$3.6 billion in 1997 to \$21.2 billion in 2008.<sup>51</sup> Growth in organic sales persists despite the fact that organic products are more expensive, often costing between 10% and 30% more than conventional products.<sup>52</sup> Consumers pay such a premium for organic products out of concerns for personal health and the environment, and for ethical and political reasons, including a preference for the humane treatment of farm animals.<sup>53</sup>

Within organics, dairy production has been one of the fastest growing sectors, with annual retail sales increases of 16% to 34% between 1997 and 2007.<sup>54</sup> Although the growth of the organic meat sector has lagged behind that of the organic dairy sector, organic meat production increased dramatically between 2000 and 2005,<sup>55</sup> with close to a 20% average annual increase in beef production, a 58% increase in swine production, and a 53% increase in chickens produced for food.<sup>56</sup> Additionally, there was a 22% increase in organic egg production during that five-year span.<sup>57</sup> Thus, in 1997 there were approx-

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<sup>48</sup> 75 Fed. Reg. at 7184 (stating that the USDA’s Agriculture Marketing Service received fourteen complaints about organic dairy production); Cornucopia Inst., *Complaint Concerning Possible Violation of the National Organic Program’s Regulatory Standards by Various Egg Producers*, [http://www.cornucopia.org/egg-report/Eggs\\_Legal\\_Complaint.pdf](http://www.cornucopia.org/egg-report/Eggs_Legal_Complaint.pdf) (Sept. 27, 2010) (accessed Apr. 2, 2011) [hereinafter Cornucopia Inst., *Complaint*].

<sup>49</sup> 75 Fed. Reg. at 7154.

<sup>50</sup> See 7 U.S.C. § 6501(1)–(3) (stating OFPA’s goals). OFPA was passed as Title XXI of the 1990 Farm Bill, Food, Agriculture, Conservation, and Trade Act of 1990, Pub. L. No. 101–624, §§ 2101–2123, 104 Stat. 3359, 3935–51 (codified as the Organic Foods Production Act at 7 U.S.C. §§ 6501–6522 (2006)).

<sup>51</sup> USDA Econ. Research Serv. et al., *Marketing U.S. Organic Foods: Recent Trends from Farms to Consumers*, *Economic Information Bulletin Number 58* i, <http://www.ers.usda.gov/Publications/EIB58/EIB58.pdf> (Sept. 2009) (accessed Apr. 2, 2011) [hereinafter USDA, *Marketing U.S. Organic Foods*].

<sup>52</sup> *Id.* at 5.

<sup>53</sup> Richard Shepherd et al., *Determinants of Consumer Behavior Related to Organic Foods*, 34 *Ambio* 352 (June 2005).

<sup>54</sup> USDA, *Marketing U.S. Organic Foods*, *supra* n. 51, at 16.

<sup>55</sup> *Id.* at 18.

<sup>56</sup> *Id.*

<sup>57</sup> *Id.*



imately 18,000 organic livestock animals and 798,000 organic chickens; by 2005, there were approximately 196,000 organic livestock animals and nearly 14 million organic chickens.<sup>58</sup>

Under OFPA, the USDA established the NOP to regulate organic production.<sup>59</sup> In addition, OFPA empowered the Secretary of Agriculture to create a fifteen-member NOSB, and the first NOSB was established in 1992.<sup>60</sup> The NOSB is tasked with proposing approved and prohibited substances and advising the USDA on aspects of the implementation of OFPA.<sup>61</sup> NOSB recommendations are advisory only and are not official policy until the USDA formally adopts them.<sup>62</sup>

Within the NOSB, a Livestock Committee makes recommendations about aspects of organic production that involve livestock,<sup>63</sup> including: (1) requiring that livestock feed and forage be organically produced; (2) prohibiting the use of preventative antibiotics and hormones; (3) maintaining living conditions that include “access to pasture for ruminants and access to the outside, direct sunlight, fresh air, and freedom of movement for all livestock;” and (4) “practicing preventive health care to minimize [the] occurrence and spread of diseases and parasites.”<sup>64</sup> In reference to its recommendations for animal husbandry, the NOSB Livestock Committee has stated: “Animal welfare is a basic principle of organic production.”<sup>65</sup> As early as 2001, the Livestock Committee observed that, with regard to organic products, there is a “consumer expectation of humane animal care.”<sup>66</sup> Furthermore, the Livestock Committee has noted, “From [OFPA’s] conception, regulation in organic agriculture was intended to provide conditions that foster the natural behavior of livestock.”<sup>67</sup>

Organic regulations presently require the “provision of conditions which allow for exercise, freedom of movement, and reduction of stress appropriate to the species.”<sup>68</sup> In addition, the regulations mandate that producers establish “living conditions which accommodate the

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<sup>58</sup> *Id.* at 19.

<sup>59</sup> 7 U.S.C. § 6503(a).

<sup>60</sup> USDA, *NOSB*, *supra* n. 46.

<sup>61</sup> *Id.*

<sup>62</sup> *Id.*

<sup>63</sup> NOSB, *Policy and Procedures Manual* 17, <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELDEV3013893> (revised Apr. 29, 2010) (accessed Apr. 2, 2011).

<sup>64</sup> NOSB, *Access to Pasture Rule for Organic Livestock, Frequently Asked Questions* 1, <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5082653> (Oct. 1, 2010) (accessed Apr. 2, 2011) [hereinafter NOSB, *Frequently Asked Questions*].

<sup>65</sup> NOSB Livestock Comm., *Recommendation, Animal Welfare* 1, <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5079545&acct=nosb> (Sept. 14, 2009) (accessed Apr. 2, 2011) [hereinafter NOSB Livestock Comm., *Recommendation*].

<sup>66</sup> NOSB, *Pasture, Livestock Committee Recommendation* 1, <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5057231> (June 7, 2001) (accessed Apr. 2, 2011).

<sup>67</sup> NOSB, *Livestock Committee Recommendation* 1, <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5081490&acct=nosb> (Nov. 5, 2009) (accessed Apr. 2, 2011).

<sup>68</sup> 7 C.F.R. § 205.238(a)(4).

health and natural behavior of animals,” including “year-round access for all animals to the outdoors, shade, shelter, exercise areas, fresh air, clean water for drinking, and direct sunlight, suitable to the species, its stage of life, the climate, and the environment” and “access to pasture for ruminants.”<sup>69</sup> Exceptions to the requirement that animals have continuous access to the outdoors include “inclement weather” and “the animal’s stage of life.”<sup>70</sup> Although apparently consistent with consumer expectations and the concept of humane animal care, such vaguely worded requirements and exceptions have been subject to considerable differences in interpretation.

### B. *Challenges to Methods of Organic Dairy Production*

Organic dairy production has increased significantly, in part because of consumer preference for products from animals who have not been treated with artificial growth hormones such as recombinant bovine growth hormone (often known as rBGH).<sup>71</sup> Perhaps as a result of the success of the organic dairy industry, questions about organic animal production first arose in this context. Between 1994 and 2005, the NOSB made six recommendations concerning the standards for access to the outdoors for all livestock, access to pasture for ruminants, and conditions for the temporary confinement of animals.<sup>72</sup> In 2006, the NOSB published an Advance Notice of Proposed Rulemaking to discuss the requirement that ruminants have access to pasture;<sup>73</sup> it subsequently received more than 80,500 comments,<sup>74</sup> nearly all of which came from consumers.<sup>75</sup> The USDA’s Agricultural Marketing Service (AMS) noted that consumers and other commenters “expressed a clear expectation that organic ruminants graze pastures for the purpose of obtaining nutritional value as well as to accommodate their health and natural behavior.”<sup>76</sup> Thus, AMS concluded that consumers “supported the adoption or incorporation of quantifiable, numeric measures.”<sup>77</sup>

By the time the NOSB recommendation on “access to pasture” was finalized in 2005, AMS had already received five complaints alleging violations of the pasture requirement.<sup>78</sup> AMS observes that these allegations derived from organic management practices that “reflected varying application of existing regulations and interpretations of

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<sup>69</sup> *Id.* at § 205.239(a)(1)–(2).

<sup>70</sup> *Id.* at § 205.239(b)(1)–(2).

<sup>71</sup> Kastel & Cornucopia Inst., *Maintaining the Integrity of Organic Milk*, *supra* n. 37, at 12.

<sup>72</sup> 75 Fed. Reg. at 7154.

<sup>73</sup> *Id.* at 7155.

<sup>74</sup> *Id.*

<sup>75</sup> *Id.* at 7156.

<sup>76</sup> *Id.* at 7155.

<sup>77</sup> *Id.*

<sup>78</sup> 75 Fed. Reg. at 7183.

requirements.”<sup>79</sup> For example, AMS reported that some producers had temporarily confined dairy animals for stages of life that included “lactation” and “brief periods of rainfall,” and the agency asserted that such confinement practices were not warranted.<sup>80</sup> The Cornucopia Institute, a “food think tank,”<sup>81</sup> identified the question as “whether it is legal to confine cows in an industrial setting, without access to pasture, and still label milk and dairy products organic,” noting that the impracticality or increased cost of providing dairy cows with pasture does not justify what amounts to the continuous confinement of organic cows.<sup>82</sup> By February 2010, AMS received nine additional complaints about organic dairies, bringing the total number of complaints to fourteen.<sup>83</sup>

Cornucopia was responsible for several of the complaints about organic milk production, and it targeted some of the largest organic dairy producers. For example, in 2005, Cornucopia filed complaints concerning Aurora Dairy Corporation,<sup>84</sup> which is a \$100 million business enterprise,<sup>85</sup> and Dean Foods/Horizon,<sup>86</sup> which had a 55% market share in organic dairy.<sup>87</sup> Word of concerns about organic milk production quickly reached the public: When Cornucopia filed its first complaint against Aurora in January 2005, the *Chicago Tribune* ran a story comparing industrial farms to family-style farms.<sup>88</sup> By 2007, the USDA proposed the revocation of Aurora’s organic certification, citing willful violations of organic standards; Aurora subsequently entered into a consent agreement with the USDA wherein it vowed to change some of its practices.<sup>89</sup> Meanwhile, consumers filed nineteen class action lawsuits against Aurora and major retailers selling Aurora’s products, alleging consumer fraud based on false claims on Aurora’s milk cartons.<sup>90</sup> The class action suits were consolidated, and the case is cur-

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<sup>79</sup> *Id.*

<sup>80</sup> *Id.*

<sup>81</sup> Cornucopia Inst., <http://www.cornucopia.org> (accessed Apr. 2, 2011).

<sup>82</sup> Organic Consumers Assn. & Tony Azevedo, *Group Files Complaint to USDA on “Factory-Style Dairy Farms” Certified as Organic*, <http://www.organicconsumers.org/organic/cornucopia011205.cfm> (Jan. 10, 2005).

<sup>83</sup> 75 Fed. Reg. at 7184 (stating that AMS has received a total of fourteen complaints about organic dairy production).

<sup>84</sup> Cornucopia Inst. & Mark Alan Kastel, *Forward / Update 2008* i–ii, [http://www.cornucopia.org/dairysurvey/OrganicDairyReport/Dairy\\_Report\\_Update.pdf](http://www.cornucopia.org/dairysurvey/OrganicDairyReport/Dairy_Report_Update.pdf) (2008) (accessed Apr. 2, 2011).

<sup>85</sup> *Id.* at i.

<sup>86</sup> *Id.* at ii–iii.

<sup>87</sup> Kastel & Cornucopia Inst., *Maintaining the Integrity of Organic Milk*, *supra* n. 37, at 13.

<sup>88</sup> Robert McCoppin, *Two Family Farms, Two Different Directions: One Produces Organic Milk, the Other Grew Tenfold*, *Chi. Trib.* (Sept. 26, 2010) (available at [http://articles.chicagotribune.com/2010-09-26/news/ct-met-megadairy-farm-families-20100926\\_1\\_organic-milk-organic-valley-family-farms](http://articles.chicagotribune.com/2010-09-26/news/ct-met-megadairy-farm-families-20100926_1_organic-milk-organic-valley-family-farms) (accessed Apr. 2, 2011)).

<sup>89</sup> *In re Aurora Dairy Corp. Organic Milk Marketing and Sales Practices Litigation*, 621 F.3d 781, 789 (2010).

<sup>90</sup> *Id.* at 787, 789–90.

rently under judicial consideration.<sup>91</sup> AMS observes that complaints about organic production methods result in “negative press,” which “damage[s] the image of organic milk and milk products.”<sup>92</sup>

After fourteen complaints about organic milk production during five years and nineteen class action lawsuits alleging consumer fraud, the USDA finally amended the “access to pasture” requirement in 2010.<sup>93</sup> Significantly, the new standard requires that producers “provide not more than an average of 70% of a ruminant’s dry matter demand from dry matter feed” for 120 days of the year and notes that “dry matter fe[e]d” does not include grazed feed.<sup>94</sup> The result of this requirement is that ruminants must receive 30% of their dry matter intake from grazing for the requisite 120 days out of each year. According to the USDA, “the choice of 120 days was based on producer knowledge of the minimum period when pasture is actively growing and suitable for grazing,”<sup>95</sup> which accommodates organic producers in varying climates. The USDA also noted that “the 30% [dry matter intake standard] was based upon the metric by which a dairy operation would qualify as a grazing system in several traditional dairy production areas in the United States.”<sup>96</sup>

The new standard for access to pasture explains that the “continuous total confinement of any animal indoors” and the “continuous total confinement of ruminants in yards, feeding pads, and feedlots” are prohibited.<sup>97</sup> Concerning exceptions to the requirement that ruminants be on pasture continuously, the new standard states that “lactation is not a stage of life” that exempts ruminants from access to pasture.<sup>98</sup> Additionally, the new standard for access to pasture notes that although dairy animals may be temporarily confined during milking, they must still receive 30% of their dry matter intake from grazing, and “milking frequencies or duration practices cannot be used to deny dairy animals pasture.”<sup>99</sup>

In amending the access to pasture requirement, the USDA observed that the previous regulation “lack[ed] sufficient specificity and clarity to enable [the agency] to efficiently administer the Program.”<sup>100</sup> In addition, the USDA noted that the earlier provisions concerning access to pasture were “too general” and that this generality “resulted in significant variations in practice.”<sup>101</sup> According to the USDA, failing to change the standards would have resulted in “continued dissatisfac-

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<sup>91</sup> See *id.* at 799–800 (the Court of Appeals for the Eighth Circuit remanded the case for a consideration of consumer fraud claims against Aurora and retailers).

<sup>92</sup> 75 Fed. Reg. at 7186.

<sup>93</sup> NOSB, *Frequently Asked Questions*, *supra* n. 64.

<sup>94</sup> 7 C.F.R. § 205.237(c)(1).

<sup>95</sup> 75 Fed. Reg. at 7185.

<sup>96</sup> *Id.*

<sup>97</sup> 7 C.F.R. § 205.239(a)(1).

<sup>98</sup> *Id.* at § 205.239(b)(2).

<sup>99</sup> *Id.* at § 205.239(c)(4).

<sup>100</sup> 75 Fed. Reg. at 7183.

<sup>101</sup> *Id.*

tion and confusion among consumers, producers, and certifying agents in the organic community.”<sup>102</sup> Presumably, consumer dissatisfaction and confusion remain if there are other significant variations in organic practices.

### C. A Challenge to Methods of Organic Egg Production

Although consumers have expressed a clear expectation of quantifiable, enforceable standards for organic animal production in response to concerns about “access to pasture,”<sup>103</sup> and although the USDA noted that a lack of specificity in standards results in problematic variations in production methods, vagueness persists in other OFPA regulations.<sup>104</sup> In 2002, the NOSB made its first recommendation concerning access to outdoors for poultry,<sup>105</sup> offering the following clarifications: “[o]rganic livestock facilities shall give poultry the ability to choose to be in the housing or outside in the open air and direct sunshine,” and “[t]he producer’s organic system plan shall illustrate how the producer will maximize and encourage access to the outdoors.”<sup>106</sup> In 2009, the NOSB made further recommendations concerning organic poultry production, including the statement that “[b]eak trimming and de-toeing of birds is prohibited.”<sup>107</sup> In 2010, the NOSB noted that “outdoor access allows exercise to enhance muscle tone and relieve boredom”; to that end, it recommended further requirements, including the mandate that “poultry houses and outdoor areas are to be managed in a manner that allows birds to perform natural behaviors which minimize stress and aggressive acts.”<sup>108</sup> The 2010 NOSB recommendation also included maximum stocking densities for organic animals.<sup>109</sup>

As with “access to pasture” for dairy cows, the Cornucopia Institute is concerned about some methods of organic egg production. On September 27, 2010, Cornucopia filed a complaint with the USDA alleging a “possible violation” of organic production standards by four organic egg producers.<sup>110</sup> In the complaint, Cornucopia noted that “additional formal complaints from the Cornucopia Institute may be forthcoming.”<sup>111</sup> Specifically, Cornucopia alleged that, with regard to “access to the outdoors” for poultry, not all birds actually have access to the outdoors because: (1) the “outdoor area is too small” or “birds are

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<sup>102</sup> *Id.* at 7184.

<sup>103</sup> *Id.* at 7186.

<sup>104</sup> NOSB Livestock Comm., *Recommendation*, *supra* n. 65, at 1.

<sup>105</sup> NOSB, *Access to Outdoors for Poultry*, <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELDEV3104560> (May 8, 2002) (accessed Apr. 2, 2011).

<sup>106</sup> *Id.*

<sup>107</sup> NOSB Livestock Comm., *Recommendation*, *supra* n. 65, at 4.

<sup>108</sup> NOSB Livestock Comm., *Animal Welfare Discussion Document Stocking Density 82*, <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5086584#nameddest=stocking> (Sept. 9, 2010) (accessed Apr. 2, 2011) [hereinafter NOSB Livestock Comm., *Stocking Density*].

<sup>109</sup> *Id.*

<sup>110</sup> Cornucopia Inst., *Complaint*, *supra* n. 48.

<sup>111</sup> *Id.*

regularly prevented from any outdoor access”; (2) “exit doors are inaccessible”; or (3) “the outdoor area’s substrate is bare concrete/wood/gravel.”<sup>112</sup>

Thus, although the USDA has observed that overly general organic regulations result in “significant variations in practice,”<sup>113</sup> and that such variations cause “continued dissatisfaction and confusion among consumers,”<sup>114</sup> organic regulations concerning laying hens and other organically produced species still lack specificity. Variants of organic practices may have detrimental effects on organic animal welfare, frustrating consumer preferences for humane animal care.

### III. ANALYSIS OF ASPECTS OF ORGANIC ANIMAL WELFARE

Enacting regulations for the Organic Foods Production Act require that organic livestock producers provide “conditions which allow for exercise, freedom of movement, and reduction of stress appropriate to the species.”<sup>115</sup> Additionally, the regulations require that organic animals be able to engage in natural behaviors.<sup>116</sup> However, because many provisions are general and vague, significant variations in organic production practices may occur, and some practices might prohibit or discourage animals from engaging in natural behaviors.

#### A. *Welfare of Organic Laying Hens*

For many Americans, chickens are part of the vision of American family farms. As one author claimed, “there are few more vivid and classic bucolic images than chickens pecking contentedly in a barnyard.”<sup>117</sup> Indeed, the U.S. does host a significant number of chickens: They constitute 95% of the animals slaughtered for food in the U.S. each year.<sup>118</sup> Thus, the great majority of farm animals subject to agricultural production in the U.S. are chickens.<sup>119</sup> Although most chickens in our food production system are bred for direct human consumption, many millions of hens are kept to produce eggs; the USDA reports that there were more than 2 million organic laying hens in 2005.<sup>120</sup> Many mid-size organic egg producers have henhouses with between 1,000 and 20,000 hens, and some large-scale organic produc-

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<sup>112</sup> *Id.*

<sup>113</sup> 75 Fed. Reg. at 7183.

<sup>114</sup> *Id.* at 7184.

<sup>115</sup> 7 C.F.R. § 205.238(a)(4).

<sup>116</sup> *Id.* at § 205.239(a).

<sup>117</sup> Bernard E. Rollin, *Farm Animal Welfare: Social, Bioethical, and Research Issues* 118 (Iowa St. U. Press 1995).

<sup>118</sup> HSUS, *supra* n. 6.

<sup>119</sup> *Id.*

<sup>120</sup> IBM, *Data Sets: Number of Certified Organic Animals, United States*, <http://www-958.ibm.com/software/data/cognos/manyeyes/datasets/number-of-certified-organic-animal/versions/1> (Jan. 23, 2007) (accessed Apr. 2, 2011) (compiling USDA statistics on organic livestock production).

ers have as many as 85,000 birds in one henhouse.<sup>121</sup> According to large-scale producers, 80% of organic eggs come from large operations.<sup>122</sup>

Hens are social creatures, and their behaviors are highly synchronized.<sup>123</sup> Laying hens' wild counterparts are usually arranged in relatively small groups,<sup>124</sup> and large flock size may contribute to problem behaviors and aggression between hens.<sup>125</sup> Perches reduce stress and permit hens to evade other, more dominant hens,<sup>126</sup> and providing additional vertical space may be more important to hen welfare than increasing floor space.<sup>127</sup> Granting hens access to the outdoors may increase floor space, but hens are most likely to use outdoor areas if they live in smaller flocks.<sup>128</sup> For example, with a flock of 16,000 hens, only 4% were outside on a daily basis;<sup>129</sup> with flocks of 490 hens, 42% were outside on a daily basis.<sup>130</sup>

In addition to being social, hens are very curious about their physical environment, and wild hens spend most of their waking time engaged in feeding and foraging behavior, which includes pecking, walking, and scratching.<sup>131</sup> In addition, hens spend a substantial amount of time engaged in dust bathing, for which they require a material such as sand or straw.<sup>132</sup> Hens have been shown to choose access to nesting areas over access to food,<sup>133</sup> suggesting that nesting areas are very important to them. Hens may compete for access to nesting areas,<sup>134</sup> increasing aggression if nest boxes are scarce.

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<sup>121</sup> Cornucopia Inst., *Scrambled Eggs* 6, <http://www.cornucopia.org/egg-report/scrambledeggs.pdf> (2010) (accessed Apr. 2, 2011).

<sup>122</sup> *Id.*

<sup>123</sup> S. Waiblinger et al., *Animal Health and Welfare in Organic Agriculture: Applied Ethology in Organic Farming* 140 (M. Vaarst et al. eds., CABI Publ. 2004).

<sup>124</sup> *Id.*

<sup>125</sup> See Animal Welfare Approved, *Animal Welfare Approved Standards for Laying Hens and Meat Chickens* 8, <http://www.animalwelfareapproved.org/wp-content/uploads/2009/12/AWA-Meat-Chicken-and-Laying-Hen-Standards-2010.pdf> (2010) (accessed Apr. 2, 2011) [hereinafter Animal Welfare Approved, *Standards for Hens and Chickens*] (stating that, “[f]lock size is a factor that has been shown to affect the occurrence of negative behaviors such as feather pecking, cannibalism[,] and others”).

<sup>126</sup> R.C. Newberry, *Welfare of the Laying Hen: Cannibalism* 249 (G.C. Perry ed., CABI Publ. 2004).

<sup>127</sup> Rollin, *supra* n. 117, at 124.

<sup>128</sup> Waiblinger et al., *supra* n. 123, at 142.

<sup>129</sup> U. Knierim, *Animal Welfare Aspects of Outdoor Runs for Laying Hens: A Review*, 54-2 *Wageningen J. of Life Sci.* 133, 138 (Aug. 9, 2006) (available at <http://library.wur.nl/ojs/index.php/njas/article/viewPDFInterstitial/1155/734> (accessed Apr. 2, 2011) (internal citation omitted).

<sup>130</sup> *Id.* (internal citation omitted).

<sup>131</sup> *Id.* at 134.

<sup>132</sup> *Id.*; Rollin, *supra* n. 117, at 121.

<sup>133</sup> L.J. Keeling, *Welfare of the Laying Hen: Nesting, Perching and Dustbathing* 205 (G.C. Perry ed., CABI Publ. 2004).

<sup>134</sup> See also *id.* at 206 (stating that, “recent results on aggression may support the long-held view that some hens lay [eggs] on the floor because they are not able to compete effectively for nests, even if they can reach them”).

Feather pecking is one of the primary welfare concerns for laying hens.<sup>135</sup> As one researcher observes, hens may initiate feather pecking because of “feed deficiencies, absence or poor quality of litter, boredom, and insufficient possibilities to perform their natural behaviour.”<sup>136</sup> Specific risk factors for feather pecking include a stocking density greater than ten birds per square meter during rearing, limited access to perches during rearing, fewer than 50% of hens in a flock using outdoor runs, and an insufficient amount of litter for hens to scratch in.<sup>137</sup> Importantly, feather pecking should not be equated with aggression. As researchers note, “neither feather-pecking nor body-pecking is preceded by threatening behaviour and both are preceded by body orientation and movements which are typical of investigatory behaviour.”<sup>138</sup> Thus, feather pecking is thought to be a redirected form of pecking for food when a substrate suitable for pecking and scratching is not available.<sup>139</sup>

To prevent feather pecking, many large producers trim hens’ beaks, removing a significant portion of the upper beak.<sup>140</sup> Beak trimming, or de-beaking, reduces the sharpness of the beak and pecking accuracy,<sup>141</sup> so hens with trimmed beaks are less able to pull feathers or cause serious damage to other hens.<sup>142</sup> Additionally, hens reduce feather pecking after being de-beaked or having their beaks trimmed because the procedure makes pecking painful.<sup>143</sup> Hens demonstrate less beak-related behavior, such as pecking or preening, for up to six weeks after beak trimming,<sup>144</sup> and there is significant evidence that hens suffer chronic pain after the procedure.<sup>145</sup> In addition, beak trimming does not necessarily decrease the incidence of feather pecking,<sup>146</sup> but rather primarily minimizes the severity of injuries resulting from the activity.

Providing scratching areas with sufficient litter, which permits hens to engage in natural behaviors, is an effective means of minimizing feather pecking.<sup>147</sup> Also, providing hens with enough space to avoid one another may reduce pecking, because “at high stocking den-

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<sup>135</sup> Christoph Menke et al., *Animal Health and Welfare in Organic Agriculture: Mutilations in Organic Animal Husbandry: Dilemmas Involving Animal Welfare, Humans and Environmental Protection* 172 (M. Vaarst et al. eds., CABI Publ. 2004).

<sup>136</sup> *Id.* at 173.

<sup>137</sup> *Id.* at 174.

<sup>138</sup> A. F. Fraser & D. M. Broom, *Farm Animal Behaviour and Welfare* 326 (3d ed., London: Baillière Tindall 1990).

<sup>139</sup> T.B. Rodenburg & P. Koene, *Welfare of the Laying Hen: Feather Pecking and Feather Loss* 230 (G.C. Perry ed., CABI Publ. 2004).

<sup>140</sup> Fraser & Broom, *Farm Animal Behaviour and Welfare*, *supra* n. 138, at 326.

<sup>141</sup> Michael C. Appleby et al., *Poultry Behaviour and Welfare* 87 (CABI Publ. 2004).

<sup>142</sup> Fraser & Broom, *Farm Animal Behaviour and Welfare*, *supra* n. 138, at 326.

<sup>143</sup> Appleby et al., *supra* n. 141, at 88.

<sup>144</sup> Menke et al., *supra* n. 135, at 173.

<sup>145</sup> Rollin, *supra* n. 117, at 119.

<sup>146</sup> *Id.*

<sup>147</sup> Waiblinger et al., *supra* n. 123, at 143.



sity, birds may learn that they cannot avoid being pecked<sup>148</sup> and may therefore fail to evade hens who engage in feather pecking. High rates of use of outdoor areas may reduce the risk of feather pecking by a multiple of nine.<sup>149</sup> Finally, producers may utilize environmental enrichment technology such as a radio to reduce negative interactions between hens.<sup>150</sup>

### 1. Access to Outdoors

Limiting hens' access to the outdoors increases the likelihood that feather pecking will occur.<sup>151</sup> Providing hens with access to the outdoors can thus reduce injuries caused by other hens and give laying hens opportunities to engage in natural behaviors such as pecking and scratching. Because hens in large flocks are less likely to use outdoor areas,<sup>152</sup> flock sizes should be limited to encourage outdoor access.

Organic regulations require "year-round" access to the outdoors for all organic animals<sup>153</sup> and the "provision of conditions which allow for exercise, freedom of movement, and reduction of stress appropriate to the species."<sup>154</sup> As an exception, organic regulations permit temporary confinement due to inclement weather or the animal's stage of life.<sup>155</sup> Organic regulations require organic producers to establish living conditions that permit animals to engage in natural behaviors.<sup>156</sup> Furthermore, the regulations mandate the provision of shelter that reduces the "potential for livestock injury."<sup>157</sup> However, despite the fact that providing laying hens with access to the outdoors is in accordance with organic standards because the practice reduces the potential for injury and permits hens to engage in natural behaviors, organic regulations do not describe the conditions that would permit laying hens to have regular access to the outdoors.<sup>158</sup>

As discussed *supra*, the Cornucopia Institute alleges that some organic egg producers are failing to provide hens with sufficient access to the outdoors.<sup>159</sup> According to Cornucopia, few hens have actual access to the outdoors because the outdoor areas provided are too small to

<sup>148</sup> Appleby et al., *supra* n. 141, at 86.

<sup>149</sup> Knierim, *supra* n. 129, at 135 (internal citation omitted).

<sup>150</sup> See R.B. Jones, *Welfare of the Laying Hen: Environmental Enrichment: The Need for Practical Strategies to Improve Poultry Welfare* 215 (G.C. Perry ed., CABI Publ. 2004) (stating that, "[f]armers reported that playing the radio reduced aggression, improved birds' health[,] and increased productivity").

<sup>151</sup> Menke et al., *supra* n. 135, at 174.

<sup>152</sup> See Waiblinger et al., *supra* n. 123, at 142 (stating that hens in smaller flocks are more likely to use outdoor areas).

<sup>153</sup> 7 C.F.R. § 205.239(a)(1).

<sup>154</sup> *Id.* at § 205.238(a)(4).

<sup>155</sup> *Id.* at § 205.239(b)(1)–(2).

<sup>156</sup> *Id.* at § 205.239(a).

<sup>157</sup> *Id.* at § 205.239(a)(4)(iii).

<sup>158</sup> See *also id.* at § 205.237–205.239 (features of access to the outdoors for hens are not specified).

<sup>159</sup> Cornucopia Inst., *Complaint*, *supra* n. 48.

permit many hens to utilize them.<sup>160</sup> Additionally, Cornucopia asserts that hens in large flocks are regularly prevented from using outdoor areas, asserting that exits to outside enclosures are rendered inaccessible to hens either socially, because they are unwilling to push through many other chickens to get to the few openings, or physically, because they are unable to actually reach the doors due to excessive flock size.<sup>161</sup> Cornucopia also alleges that the outdoor areas often have floors of bare concrete, wood, or gravel,<sup>162</sup> which do not permit hens to engage in pecking or foraging. Finally, Cornucopia claims that organic egg producers condition laying hens to stay indoors by denying them access to the outdoors until after they reach seventeen weeks of age;<sup>163</sup> by seventeen weeks, laying hens learn to live indoors and are unlikely to ever venture into outdoor areas.<sup>164</sup>

In 2009, the National Organic Standards Board (NOSB) recommended that organic regulations include a provision stating, “Outside access and door spacing must be designed to promote and encourage outside access for all birds on a daily basis, weather permitting.”<sup>165</sup> The NOSB also recommended requiring outdoor access for laying hens from the age of six weeks, “providing they are fully feathered and weather permits,” in order to “train” them to use outdoor areas.<sup>166</sup> In 2010, the NOSB noted that “[o]utdoor access allows exercise to enhance muscle tone and relieve boredom,” and it considered mandating that “[p]oultry houses and outdoor areas are to be managed in a manner that allows birds to perform natural behaviors which minimize stress and aggressive acts.”<sup>167</sup> The NOSB Livestock Committee has also suggested that organic regulations include a provision requiring exit doors to be “at least [fourteen] inches high and spaced evenly about the building” and “the total door opening” to be six feet per 1,000 hens.<sup>168</sup> However, although providing cover or places to hide in outdoor areas encourages use of outdoor areas and promotes freedom of movement,<sup>169</sup> the NOSB’s formal recommendations do not require the

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<sup>160</sup> *Id.*

<sup>161</sup> *Id.*

<sup>162</sup> *Id.*

<sup>163</sup> Cornucopia Inst., *Scrambled Eggs*, *supra* n. 121, at 15.

<sup>164</sup> *Id.*

<sup>165</sup> NOSB, *Formal Recommendation by the NOSB to the NOP, Subject: Animal Welfare* 8, <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5081490&acct=nosb> (Nov. 5, 2009) (accessed Apr. 2, 2011) [hereinafter NOSB, *Formal Recommendation, Animal Welfare*].

<sup>166</sup> *Id.*

<sup>167</sup> NOSB Livestock Comm., *Stocking Density*, *supra* n. 108, at 82.

<sup>168</sup> *Id.* at 85.

<sup>169</sup> Global Animal Partn., *Global Animal Partnership 5-Step™ Animal Welfare Rating Standards for Broiler Chickens*, 6.3 *Outdoor Conditions* 13, <http://www.globalanimalpartnership.org/wp-content/uploads/2011/01/5-Step-Animal-Welfare-Rating-Standards-for-Broiler-Chickens.pdf> (2009) (accessed Apr. 2, 2011) [hereinafter Global Animal Partn., *Standards for Broiler Chickens*].

provision of cover in either outdoor or indoor areas.<sup>170</sup> Additionally, the NOSB's recommendations do not address maximum flock sizes.<sup>171</sup>

First, the USDA should amend organic regulations to incorporate the NOSB Livestock Committee's recommendation requiring exit doors to be fourteen inches high and spaced evenly throughout buildings, with a total door opening of six feet per 1,000 hens,<sup>172</sup> so hens in large flocks have actual physical access to the outdoors and do not face significant social competition for door openings. Second, the regulations should incorporate the NOSB's recommendation requiring access to the outdoors for laying hens beginning at six weeks of age<sup>173</sup> to prevent them from being "trained" to stay indoors. Third, organic regulations should include a provision with language similar to the following: "Chickens must be provided with cover (a horizontal barrier) and blinds (a vertical barrier) in both indoor and outdoor areas that enable them to hide and isolate themselves from other chickens."<sup>174</sup> Such a provision would encourage hens to use outdoor areas—thus potentially reducing feather pecking and aggression—and permit hens to escape from feather pecking while indoors. Fourth, the regulations should identify the percentage of hens that must have access to cover or blinds at a given time, or the ratio of covered areas or blinds to hens. Finally, organic regulations should identify a maximum flock size, such as 500 hens,<sup>175</sup> in order to encourage hens to use outdoor areas.

## 2. Minimum Space Allowances, Nest Boxes, and Littered Areas

Although stocking densities over ten hens per square meter may increase the likelihood of feather pecking<sup>176</sup> and limit a hen's ability to engage in natural behaviors, organic regulations do not identify maximum stocking densities for any species of organic animal.<sup>177</sup> Furthermore, although organic regulations require the provision of "appropriate clean, dry bedding,"<sup>178</sup> the regulations do not specify the amount of space that bedding materials must occupy,<sup>179</sup> implicitly per-

<sup>170</sup> See also NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165 (the NOSB's recommendations do not address the provision of cover either indoors or outdoors).

<sup>171</sup> See also *id.* (the NOSB's recommendations do not mention the possibility of restrictions on flock sizes).

<sup>172</sup> NOSB Livestock Comm., *Stocking Density*, *supra* n. 108, at 85.

<sup>173</sup> NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165, at 8. (the NOSB's recommendations do not address the provision of cover either indoors or outdoors).

<sup>174</sup> This recommendation was adapted from Global Animal Partn., *Standards for Broiler Chickens*, *supra* n. 169, at 13.

<sup>175</sup> This suggested flock size is adapted from the Animal Welfare Approved program's guidelines. Animal Welfare Approved, *Standards for Hens and Chickens*, *supra* n. 125, at 8.

<sup>176</sup> Menke et al., *supra* n. 135, at 174.

<sup>177</sup> See 7 C.F.R. §§ 205.237–205.239 (stocking densities are not specified).

<sup>178</sup> *Id.* at § 205.239(a)(3).

<sup>179</sup> See *id.* at §§ 205.237–205.239 (bedding requirements are not specified either by material or by space allowance).

mitting the provision of only minimal bedding. While some bedding materials such as straw are suitable for pecking, scratching, or dust bathing, other materials may not be; organic regulations do not require that hens have access to materials that are appropriate for those behaviors. Additionally, the regulations do not have a requirement for the number of nest boxes a producer must provide relative to the number of hens in a building.<sup>180</sup>

In 2009, the NOSB recommended that organic regulations require organic producers to provide “materials for dust bathing.”<sup>181</sup> In 2010, the NOSB Livestock Committee also recommended that organic regulations be amended to include minimum space requirements for laying hens of 1.5 square feet or 1.2 square feet with six inches of perch space indoors and 2 square feet outdoors.<sup>182</sup> Reducing floor space when perching space is provided is consistent with the observation that vertical space may contribute more to hen welfare than floor space.<sup>183</sup> Additionally, the NOSB recommended that organic regulations include the statement that “perching areas and nest boxes may not be used in the calculation of floor space.”<sup>184</sup> However, NOSB recommendations have not specified the size of the littered area that must be available relative to the number of hens in the building or the ratio of nest boxes to hens.

First, the USDA should amend organic regulations to include the NOSB’s recommended minimum space requirements<sup>185</sup> in order to reduce feather pecking and provide laying hens with enough space to engage in natural behaviors. Second, organic regulations should include a provision such as the following: Housing for hens must provide at least 250 square centimeters of littered area per hen and the litter must occupy at least one third of the ground space available to the hens.<sup>186</sup> Litter materials allow hens to scratch, peck, and bathe in the dust, which are fundamental natural behaviors.<sup>187</sup> Third, organic regulations should include the requirement that nest boxes be provided at a rate of not less than one per every five hens<sup>188</sup> to avoid negative

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<sup>180</sup> See *id.* (nest box requirements are not mentioned).

<sup>181</sup> NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165, at 7.

<sup>182</sup> NOSB Livestock Comm., *Stocking Density*, *supra* n. 108, at 84.

<sup>183</sup> Rollin, *supra* n. 117, at 124.

<sup>184</sup> NOSB Livestock Comm., *Stocking Density*, *supra* n. 108, at 84.

<sup>185</sup> *Id.*

<sup>186</sup> Adapted from a requirement established by the U.K. Department for Environment, Food and Rural Affairs. The Welfare of Farmed Animals (England) Regulations 2007, 2007 No. 2078, SCHEDULE 2, 2(e) (available at <http://www.legislation.gov.uk/ukxi/2007/2078/schedule/2/made> (accessed Apr. 2, 2011)).

<sup>187</sup> See Waiblinger et al., *supra* n. 123, at 141 (stating that “feral domestic chickens spend half to two-thirds of the day in feeding and foraging behaviour, such as walking, scratching and pecking”).

<sup>188</sup> This suggested nest box ratio is adapted from the Animal Welfare Approved program’s guidelines. Animal Welfare Approved, *Standards for Hens and Chickens*, *supra* n. 125, at 9.

interactions between hens that may result from competition for limited nesting areas.

### 3. *Beak Trimming*

As mentioned *supra*, feather pecking is one of the primary welfare concerns for laying hens.<sup>189</sup> Although beak trimming does not necessarily reduce the incidence of feather pecking,<sup>190</sup> it does decrease the severity of injuries caused by such pecking.<sup>191</sup> However, beak trimming causes hens both acute, short-term pain<sup>192</sup> and chronic, long-term pain.<sup>193</sup> A producer can reduce feather pecking by providing hens with an enriched environment that permits them to engage in natural behaviors<sup>194</sup> and evade other hens.<sup>195</sup> Maintaining flock sizes that allow a significant numbers of hens to use outdoor areas also helps prevent feather pecking.<sup>196</sup> Because organic regulations require that organic animals be able to engage in natural behaviors,<sup>197</sup> producers should permit hens to engage in fundamental activities such as scratching, pecking, and dust bathing.

Presently, organic regulations permit the “performance of physical alterations as needed to promote the animal’s welfare and in a manner that minimizes pain and stress.”<sup>198</sup> Because feather pecking impairs the victim’s welfare and de-beaking reduces the severity of injury and thus promotes the victim’s welfare, the regulations implicitly permit routine de-beaking as a way of improving hens’ welfare. In 2009, the NOSB recommended that organic regulations include a provision stating that “[m]inimal beak trimming is allowed for protection of the flock and must be done in a manner that minimizes pain and stress” when hens are under ten days old.<sup>199</sup> The NOSB has not discussed the use of analgesia during beak trimming in its recommendations.<sup>200</sup> However, in 2009, the NOSB recommended that the regulations include a provision stating that “[d]ebeaking (severe beak trimming) is prohibited.”<sup>201</sup> The recommendation did not explain how an organic producer would

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<sup>189</sup> Menke et al., *supra* n. 135, at 172.

<sup>190</sup> Rollin, *supra* n. 117, at 119.

<sup>191</sup> Fraser & Broom, *Farm Animal Behaviour and Welfare*, *supra* n. 138, at 326.

<sup>192</sup> Menke et al., *supra* n. 135, at 173.

<sup>193</sup> Rollin, *supra* n. 117, at 98.

<sup>194</sup> See Menke et al., *supra* n. 135, at 173 (noting that the frustration of natural behaviors precipitates feather pecking).

<sup>195</sup> See Global Animal Partn., *Standards for Broiler Chickens*, *supra* n. 169, at 13 (suggesting that providing cover or places to hide in outdoor areas allows hens to avoid negative encounters with other hens).

<sup>196</sup> Waiblinger et al., *supra* n. 123, at 142.

<sup>197</sup> 7 C.F.R. § 205.239(a).

<sup>198</sup> *Id.* at § 205.238(a)(5).

<sup>199</sup> NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165, at 9.

<sup>200</sup> See *id.* (the NOSB’s recommendation does not mention analgesia).

<sup>201</sup> *Id.*

be expected to discriminate between “beak trimming” and “debeaking,”<sup>202</sup> likely rendering the proposed provision unenforceable.

In lieu of beak trimming, organic producers should provide hens with opportunities to engage in their fundamental natural behaviors, and organic regulations should include provisions specifying environmental enrichment such as litter materials for scratching, pecking, dust bathing, and sufficient access to the outdoors. These alternatives to beak trimming encourage organic egg producers to comply with the requirement that they provide “livestock living conditions which accommodate the health and natural behavior of animals.”<sup>203</sup> Thus, in addition to provisions requiring sufficient litter materials and regular access to the outdoors, the USDA should amend organic regulations to include a provision stating that beak trimming is prohibited.<sup>204</sup>

### B. Welfare of Organic Pigs

As one animal welfare expert notes, “[S]wine are almost universally considered the most intelligent of farm animals.”<sup>205</sup> Pigs are inquisitive animals who demonstrate high levels of interaction with other pigs and with their physical environments;<sup>206</sup> pigs also establish stable social groups.<sup>207</sup> To maintain social hierarchies, subordinate pigs avoid interactions with dominant pigs,<sup>208</sup> so providing space that is adequate to permit pigs to separate from one another is essential to pig well-being. Aggression can be avoided if pigs are able to escape into “hidey-holes.”<sup>209</sup> Additionally, aggression may be more prevalent in groups of more than 100 pigs<sup>210</sup> and can be reduced if pigs are familiar with one another.<sup>211</sup>

Being highly social, pigs tend to synchronize feeding times.<sup>212</sup> Consequently, pigs should be able to eat at the same time, allowing them to avoid unnecessary competition for resources.<sup>213</sup> Pigs also develop different areas for lying, eating, and dunging,<sup>214</sup> even at a young

<sup>202</sup> See *id.* (the NOSB’s recommendation does not discuss methods of determining the difference between beak trimming and de-beaking).

<sup>203</sup> 7 C.F.R. § 205.239(a).

<sup>204</sup> For example, the Animal Welfare Approved program already prohibits de-beaking, which it defines to include “beak clipping, tipping[,] and trimming.” Animal Welfare Approved, *Standards for Hens and Chickens*, *supra* n. 125, at 11.

<sup>205</sup> Rollin, *supra* n. 117, at 73.

<sup>206</sup> *Id.*; see Waiblinger et al., *supra* n. 123, at 133 (discussing the facts that pigs live in social groups and have strongly developed exploratory behavior).

<sup>207</sup> Waiblinger et al., *supra* n. 123, at 133.

<sup>208</sup> *Id.* at 131.

<sup>209</sup> Rollin, *supra* n. 117, at 97.

<sup>210</sup> Waiblinger et al., *supra* n. 123, at 134.

<sup>211</sup> *Id.*

<sup>212</sup> See Fraser & Broom, *Farm Animal Behaviour and Welfare*, *supra* n. 138, at 88 (stating, “farm animals usually synchronize their feeding”).

<sup>213</sup> See Donald M. Broom & Andrew Ferguson Fraser, *Domestic Animal Behaviour and Welfare* 86 (4th ed., CABI Publ. 2007) (stating that “[f]eeding troughs should also be designed to minimize any fighting or threats at the time of communal feeding”).

<sup>214</sup> *Id.* at 101; Rollin, *supra* n. 117, at 74–75.

age.<sup>215</sup> Therefore, pig housing should provide space for pigs to develop places for these different life activities.

Pigs have highly developed exploratory behaviors,<sup>216</sup> and domestic pigs in an enriched enclosure have been observed to spend six to eight hours per day searching for food by rooting, grazing, and browsing.<sup>217</sup> Pigs also spend significant amounts of time exploring their environment.<sup>218</sup> One researcher observed that space is not as essential for pig well-being as are environmental factors.<sup>219</sup> However, in many modern agricultural systems, pigs are provided with feed that may be consumed rapidly; for example, pigs may consume a quantity of food that is sufficient for twenty-four hours in as little as fifteen minutes when food is provided in troughs.<sup>220</sup> Thus, when feeding is accomplished quickly and pigs do not have access to enrichment such as straw that encourages rooting, foraging, and exploration, they may develop problem behaviors. For example, when pigs' investigatory impulses are directed toward one another due to an absence of enrichment in their environment and when space to evade each other is limited, pigs may engage in tail biting.<sup>221</sup>

To discourage tail biting, some producers dock pigs' tails,<sup>222</sup> causing acute physical and mental stress.<sup>223</sup> Tail docking reduces tail biting because a docked tail is sensitive, and a pig will zealously guard its docked tail from other pigs' exploratory behaviors to avoid pain.<sup>224</sup> Although tail biting is a severe problem in intensive swine production systems, pigs who have the opportunity to root rarely engage in tail biting.<sup>225</sup> As an author writing on farm animal welfare observes, "[T]he major problems in the swine industry grow out of housing conditions that, while congenial to economic efficiency, are fundamentally at odds with the animals' natures."<sup>226</sup>

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<sup>215</sup> Fraser & Broom, *Farm Animal Behaviour and Welfare*, *supra* n. 138, at 101.

<sup>216</sup> Waiblinger et al., *supra* n. 123, at 133.

<sup>217</sup> *Id.*

<sup>218</sup> See Menke et al., *supra* n. 135, at 177 (quoting a study finding that pigs spend 25–60% of their waking time foraging and exploring).

<sup>219</sup> D. G. M. Wood-Gush, *Elements of Ethology* 197–98 (London: Chapman & Hall 1983).

<sup>220</sup> Fraser & Broom, *Farm Animal Behaviour and Welfare*, *supra* n. 138, at 96.

<sup>221</sup> *Id.* at 126.

<sup>222</sup> M. A. Sutherland et al., *Tail Docking in Pigs: Acute Physiological and Behavioural Responses*, 2 *Animal* 292, 292 (2008) (available at <http://journals.cambridge.org/action/login>; search "tail docking in pigs," select Tail Docking in Pigs: Acute Physiological and Behavioural Responses (accessed Apr. 2, 2011)).

<sup>223</sup> *Id.*

<sup>224</sup> Fraser & Broom, *Farm Animal Behaviour and Welfare*, *supra* n. 138, at 328.

<sup>225</sup> *Id.*

<sup>226</sup> Rollin, *supra* n. 117, at 74.

### 1. Access to Outdoors and Maximum Stocking Densities

Because aggression and problem behaviors may be more prevalent in large groups of pigs<sup>227</sup> and aggression may be reduced if pigs are able to avoid interactions with more dominant pigs,<sup>228</sup> pigs should be kept in relatively small groups. Pigs should also be permitted enough space to avoid negative social interactions and develop different areas for lying, eating, and dunging. Because pigs are highly explorative by nature,<sup>229</sup> providing pigs with access to the outdoors promotes natural behaviors, ensuring compliance with organic regulations.

Organic regulations require that all organic animals have “year-round access” to the outdoors and to exercise areas.<sup>230</sup> However, given that the regulations permit a producer to temporarily confine an animal due to inclement weather or the animal’s stage of life<sup>231</sup> and the USDA notes that those exceptions were exploited in organic dairy production,<sup>232</sup> it is safe to assume that the requirement for access to the outdoors is insufficiently specific as applied to pig husbandry as well. The NOSB has not made a recommendation concerning clarification of access to the outdoors for pigs.<sup>233</sup>

In order to close the potential loophole created by permitting the temporary confinement of pigs during inclement weather, the USDA should amend organic regulations to include a provision stating the minimum number of days during which pigs must have access to the outdoors. Such a provision should account for geographical variations. For example, organic regulations presently require that producers provide ruminants with access to pasture for not less than 120 days per calendar year;<sup>234</sup> a similar level of access to the outdoors might be both appropriate for other species of livestock and suitable for different climates. Organic regulations should also specify the conditions that constitute permissible temporary confinement during some stages of the animal’s life.<sup>235</sup> Presently, the regulations note that “lactation is not a stage of life that would exempt ruminants” from access to the outdoors.<sup>236</sup> Similarly, organic regulations should identify stages of life for pigs that may not result in temporary confinement. For example, the regulations could include the following provision concerning pigs:

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<sup>227</sup> Waiblinger et al., *supra* n. 123, at 134.

<sup>228</sup> *Id.* at 131.

<sup>229</sup> *Id.* at 133.

<sup>230</sup> 7 C.F.R. § 205.239(a)(1).

<sup>231</sup> *Id.* at § 205.239(b)(1)–(2).

<sup>232</sup> See 75 Fed. Reg. at 7183 (intimating that some dairy cows were confined because they were lactating or because of brief periods of mild rainfall).

<sup>233</sup> See NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165 (the NOSB’s recommendations do not discuss the requirement that pigs have access to the outdoors).

<sup>234</sup> 7 C.F.R. § 205.237(c)(1).

<sup>235</sup> *Id.* at § 205.239(b)(2).

<sup>236</sup> *Id.* at § 205.239(a)(4)(iii).



After eight weeks of age, youth is not a stage of life that would exempt pigs from access to the outdoors.<sup>237</sup>

As discussed *supra*, stocking densities may have significant effects on a pig's ability to engage in natural behaviors. However, despite the requirement that organic animals be allowed to engage in natural behaviors, organic regulations do not identify maximum stocking densities for any species of organic animal.<sup>238</sup> Similarly, pigs naturally develop separate bedding, eating, and dunging areas, but organic regulations are silent as to whether pigs must be permitted to develop separate areas for different life activities, and the NOSB has made no recommendation on this topic.<sup>239</sup>

In 2010, the NOSB recommended that organic regulations be amended to include maximum stocking densities for organic animals.<sup>240</sup> The NOSB's recommended regulation requires that stocking densities be set based on stages of life and the size of individual animals.<sup>241</sup> In addition, the NOSB's 2010 recommended regulation prescribes both indoor and outdoor space allowances.<sup>242</sup> The NOSB has not addressed the topics of limits on the number of pigs that may be housed together or methods of housing pigs with other familiar pigs.<sup>243</sup> To remedy organic regulations' implicitly permissive stance on high stocking densities, the USDA should amend the regulations to include the NOSB's recommended maximum stocking densities.<sup>244</sup> Limits on stocking densities should provide organic pigs with enough space to avoid negative social interactions with more dominant pigs. In addition, organic regulations should include a provision such as the following: Housing for pigs must provide the pigs with space sufficient for them to establish separate bedding, eating, and dunging areas.<sup>245</sup>

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<sup>237</sup> Natural weaning for pigs occurs at approximately eight weeks of age. Farms.com, *Start Weaned Pigs Right!*, <http://www.farms.com/FarmsPages/Commentary/DetailedCommentary/tabid/192/Default.aspx?NewsID=34652> (Oct. 4, 2010) (accessed Feb. 4, 2011) (site no longer available) (on file with *Animal Law*).

<sup>238</sup> See 7 C.F.R. §§ 205.237–205.239 (stocking densities are not specified for any species).

<sup>239</sup> See *id.* (space permitting the development of separate areas for different life activities is not discussed); NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165.

<sup>240</sup> NOSB Livestock Comm., *Stocking Density*, *supra* n. 108.

<sup>241</sup> *Id.*

<sup>242</sup> *Id.*

<sup>243</sup> NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165 (no NOSB recommendation discusses the number of pigs that should be housed together or the concept that pigs should be housed with other pigs with whom they are familiar).

<sup>244</sup> NOSB Livestock Comm., *Stocking Density*, *supra* n. 108.

<sup>245</sup> This suggested provision was adapted from the EU's requirement stating that, for pigs, "[e]xercise areas must permit dunging and rooting by the animals." Council Regulation (EC) No 1804/1999 of 19 July 1999, 8.3.8 (available at <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1999:222:0001:0028:EN:PDF> (accessed Apr. 2, 2011)).

## 2. Opportunities for Social Behavior

Social interactions are an essential part of pigs' natural behavior.<sup>246</sup> Presently, other than the general requirement that organic animals be able to engage in "natural behavior," organic regulations do not specifically ensure that pigs are able to engage in appropriate social behaviors.<sup>247</sup> However, the regulations do require that shelter be designed to reduce the "potential for livestock injury";<sup>248</sup> this provision suggests that organic producers have a duty to minimize injurious intra-species behaviors.

In 2009, the NOSB recommended that organic regulations include a provision mandating that organic production techniques allow "animals in a group to eat at the same time."<sup>249</sup> Additionally, the NOSB recommended a provision stating that group housing for pigs is mandatory, with the exception that sows could be housed individually during farrowing and nursing and boars would be exempted from group housing.<sup>250</sup> However, the NOSB's recommendations do not address methods of discouraging aggression among pigs, such as housing pigs in smaller groups or with other pigs with whom they are familiar. Furthermore, the NOSB's recommendations do not require the separation of pigs who show persistent aggression toward other pigs; nor do the recommendations protect the victims of either aggression or confinement-induced stereotypies such as tail biting. Because excessive aggression and animal-directed stereotypies both indicate poor welfare on the part of the actor and contribute to poor welfare on the part of the victim, production techniques that fail to address such behaviors do not reduce the "potential for livestock injury." Therefore, present production techniques that do not account for pigs' potentially injurious social interactions under some housing conditions appear to be in contravention of organic regulations.<sup>251</sup>

Organic regulations should be amended to encourage social behaviors between organic pigs. First, the USDA should amend organic regulations to incorporate the NOSB's recommendation requiring group housing for pigs.<sup>252</sup> Second, organic regulations should mandate that pigs be able to see other pigs unless they are temporarily isolated for veterinary care or during farrowing or suckling.<sup>253</sup> Third, organic reg-

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<sup>246</sup> Waiblinger et al., *supra* n. 123, at 131.

<sup>247</sup> See 7 C.F.R. §§ 205.237–205.239 (what is meant by "natural behavior" is not elaborated upon).

<sup>248</sup> *Id.* at § 205.239(b)(2).

<sup>249</sup> NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165, at 6.

<sup>250</sup> *Id.*

<sup>251</sup> See 7 C.F.R. § 205.239(a)(4)(iii) (stating that shelter must be designed for the "[r]eduction of potential for livestock injury").

<sup>252</sup> NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165, at 6.

<sup>253</sup> This suggestion was adapted from a U.K. provision requiring that accommodations must be arranged "to allow each pig to . . . see other pigs, except (i) where the pig is isolated for veterinary reasons; or (ii) in the week before the expected farrowing time and during farrowing." The Welfare of Farmed Animals (England) Regulations 2007,

ulations should include a provision such as the following to balance the risk of injury and need for social interaction between pigs with aggressive tendencies: Pigs showing persistent aggression toward other pigs must be housed individually but must be able to see other pigs.<sup>254</sup> Fourth, the USDA should adopt the NOSB's recommended provision mandating "the ability of all animals in a group to eat at the same time."<sup>255</sup> Finally, additional requirements concerning the optimal number of pigs in a housing unit and the creation of stable social groups could serve to further reduce aggression and potential injuries.

### 3. Bedding Material

Providing pigs with straw increases pig welfare and decreases problem behaviors such as tail biting or other stereotypies.<sup>256</sup> Pigs spend significant amounts of time exploring their environment,<sup>257</sup> so environmental enrichment—such as materials that may be manipulated—permits pigs to engage in natural exploratory behaviors. Pigs may use straw or other bedding material for foraging and rooting, as a dietary supplement, for comfort when lying down, and for nest building.<sup>258</sup>

Organic regulations currently require producers to provide "appropriate clean, dry bedding."<sup>259</sup> In addition, the regulations require producers to provide shelter that allows "natural maintenance, comfort behaviors, and opportunity to exercise."<sup>260</sup> However, requirements concerning livestock bedding and general housing are not quantifiable and are subject to a broad array of interpretations. Also, although rooting and exploratory behaviors are undoubtedly part of pigs' natural behavior and should therefore fall under the regulatory ambit of organic regulations, neither behavior is explicitly recognized in the regulations as essential for pigs. Furthermore, while organic regulations specify that "living conditions" must provide an outlet for "natural behavior," shelter must only permit "comfort behaviors" and "opportunity to exercise." Rooting does not clearly fall under either category. In sum, one can imagine a situation in which organic pigs are denied access to the outdoors for much of their lives as the result of either "in-

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2007 No. 2078, SCHEDULE 8, 8(5)(2)(c)(i)–(ii) (available at <http://www.legislation.gov.uk/uksi/2007/2078/schedule/8/made> (accessed Apr. 2, 2011)).

<sup>254</sup> This suggestion was adapted from U.K. provisions stating that "[i]f pigs are kept together, measures must be taken to prevent fighting which goes beyond normal behaviour" and "[p]igs which show persistent aggression towards others or are victims of such aggression must be separated from the group." *Id.* at 8(8)(1)–(2).

<sup>255</sup> NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165, at 6.

<sup>256</sup> Waiblinger et al., *supra* n. 123, at 136.

<sup>257</sup> See Menke et al., *supra* n. 135, at 177 (quoting a study finding that pigs spend 25–60% of their waking time foraging and exploring).

<sup>258</sup> Rollin, *supra* n. 117, at 79.

<sup>259</sup> 7 C.F.R. § 205.239(a)(3).

<sup>260</sup> *Id.* at § 205.239(a)(4)(i)–(iii).

clement weather” or their “stage of life” and are not provided with opportunities to root, which is a fundamental natural behavior.

In 2009, the NOSB recommended that organic regulations be amended to include a provision requiring that buildings have “areas for bedding and resting that are sufficiently large, solidly built, and comfortable so that animals are kept clean, dry, and free of lesions.”<sup>261</sup> The NOSB also recommended that the regulations require producers to provide shelter that permits animals to “express normal patterns of behavior” and exercise areas that “permit rooting.”<sup>262</sup> The NOSB’s 2009 recommendations appear to set bedding and general housing requirements that foster fundamental aspects of pig behavior. For example, ensuring that animals are free of lesions necessitates sufficient bedding of some kind because lesions may result from lying on hard surfaces for long periods of time. Furthermore, the NOSB explicitly recommends that pigs have access to areas that permit rooting.

Nonetheless, even the NOSB’s recommended provisions would not provide sufficient assurance that organic pigs are able to root and engage in exploratory behavior because, again, the recommended provisions are neither quantifiable nor easily enforceable. For example, what if an exercise area permitted only one out of fifty pigs to root? Or, what if the exercise area is outdoors and is unavailable to the pigs during much of the year because of inclement weather? Facially, neither the current organic regulations nor the NOSB recommendations would prohibit such arrangements. To correct the potential inconsistency, the USDA should amend organic regulations to incorporate language similar to the following: To enable rooting and proper investigatory behaviors, all pigs must have permanent, daily access to a sufficient quantity of material such as straw that encourages rooting and does not adversely affect their health.<sup>263</sup> Additionally, the provision should specify the minimum age at which materials that encourage rooting and exploratory behavior should be provided, such as from the age of eight weeks.<sup>264</sup>

#### 4. *Flooring Material*

Floor materials may have significant effects on pig welfare. For example, slippery floors may lead to lameness, strains, and abrasions in pigs,<sup>265</sup> and slatted floors lead to more injuries than unslatted floors.<sup>266</sup> Slatted floors may result in injuries such as trapped and bro-

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<sup>261</sup> NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165, at 6.

<sup>262</sup> *Id.*

<sup>263</sup> This language is adapted from the U.K.’s Department for Environment, Food and Rural Affairs. The Welfare of Farmed Animals (England) Regulations 2007, 2007 No. 2078, SCHEDULE 8, 10 (available at <http://www.legislation.gov.uk/ukxi/2007/2078/schedule/8/made> (accessed Apr. 2, 2011)).

<sup>264</sup> Eight weeks is a typical weaning age for pigs. Farms.com, *supra* n. 237.

<sup>265</sup> Fraser & Broom, *Farm Animal Behaviour and Welfare*, *supra* n. 138, at 362; Rollin, *supra* n. 117, at 119.

<sup>266</sup> Rollin, *supra* n. 117, at 93; Waiblinger et al., *supra* n. 123, at 136.

ken claws,<sup>267</sup> but limiting the size of the openings in slatted floors reduces injuries.<sup>268</sup> Currently, organic regulations require that producers provide livestock with shelter that “reduc[es] [the] potential for livestock injury.”<sup>269</sup> Therefore, because slatted flooring contributes to injuries and lameness in livestock, slatted flooring appears to be inconsistent with organic production methods. However, organic regulations do not include a requirement pertaining to flooring materials.<sup>270</sup>

In 2009, the NOSB recommended that organic regulations include a provision stating that livestock housing shall have “non-slip floors, and the floor shall be primarily of non-slatted or non-grid construction.”<sup>271</sup> Presumably, “primarily” means more than 50%. However, several independent animal welfare certification programs for farm animals prohibit slatted floors for pigs entirely.<sup>272</sup> Because organic regulations currently permit high stocking densities for pigs, allowing half of all floor space to be slatted might mean that some pigs are unable to access non-slatted flooring for much of the time. For example, when stocking densities are high, there simply may not be enough room for all pigs to utilize the non-slatted flooring, or subordinate pigs may need to keep distance between themselves and more dominant pigs as a social maintenance tactic, potentially limiting their use of non-slatted areas.

To protect organic pigs from the potential dangers of unsafe flooring, the USDA should amend organic regulations to prohibit slatted flooring for pigs. Slatted flooring contributes to injuries and is therefore inconsistent with the current requirement that producers reduce the potential for livestock injury. If organic regulations continue to tacitly permit slatted flooring, the ratio of slatted to un-slatted floor space should be set at no higher than one to four,<sup>273</sup> and the maximum width of openings in the slatted floorings should be separately specified for pigs of different sizes so as to minimize the possibility that pigs will catch and break their claws between the slats.<sup>274</sup>

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<sup>267</sup> Rollin, *supra* n. 117, at 97.

<sup>268</sup> Waiblinger et al., *supra* n. 123, at 136.

<sup>269</sup> 7 C.F.R. § 205.239(a)(4)(iii).

<sup>270</sup> *See id.* at §§ 205.237–205.239 (flooring materials are not discussed).

<sup>271</sup> NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165, at 6.

<sup>272</sup> Certified Humane, *Humane Farm Animal Care Standards, Pigs*, <http://www.certifiedhumane.org/uploads/pdf/Standards/English/Microsoft%20Word%20-%20Std08.Pigs.2R.pdf> (Jan. 2008) (accessed Apr. 2, 2011) (site no longer available) (on file with *Animal Law*); Animal Welfare Approved, *Animal Welfare Approved Standards for Pigs*, <http://www.animalwelfareapproved.org/wp-content/uploads/2010/05/AWA-Pig-Standards-5.2010.pdf> (2010) (accessed Apr. 2, 2011).

<sup>273</sup> This recommendation was adapted from Global Animal Partn., *Global Animal Partnership 5-Step Animal Welfare Rating™ Standards for Pigs* 18, <http://www.globalanimalpartnership.org/wp-content/uploads/2011/01/5-Step-Animal-Welfare-Rating-Standards-for-Pigs.pdf> (Aug. 13, 2009) (accessed Apr. 2, 2011).

<sup>274</sup> This language is adapted from a requirement set by the U.K.’s Department of Food and Rural Affairs. *See* The Welfare of Farmed Animals (England) Regulations, 2007 No. 2078, SCHEDULE 8, 8(12)(2) (available at <http://www.legislation.gov.uk/uksi/>

### 5. Tail Docking

Docking a pig's tail is an antidote to tail biting, in part because the severed tail remains sensitive enough that the pig will protect it from other pigs' exploratory behaviors more vigorously than if the full tail was present.<sup>275</sup> Although tail biting in pigs is a significant concern for many producers, pigs with access to rooting materials rarely engage in tail biting.<sup>276</sup>

Presently, organic regulations permit the "performance of physical alterations as needed to promote the animal's welfare and in a manner that minimizes pain and stress."<sup>277</sup> Because tail biting is detrimental to the welfare of the victim and tail docking limits tail biting, tail docking can be characterized as promoting the victim's welfare. Thus, on their face, organic regulations permit routine tail docking. In 2009, however, the NOSB recommended that organic regulations include a provision stating that "[t]ail docking of pigs is prohibited except when necessary for veterinary treatment of injured animals."<sup>278</sup>

Tail docking may serve as a partial substitute for providing pigs with regular access to rooting materials. However, organic regulations require "livestock living conditions which accommodate the health and natural behavior of animals."<sup>279</sup> By implicitly permitting tail docking as partial compensation for the fact that many organic pigs are not able to engage in natural behaviors, organic regulations create an inconsistency. Thus, the USDA should amend organic regulations to include the NOSB's recommended provision stating that tail docking is prohibited unless such an alteration is medically necessary.<sup>280</sup> Furthermore, the regulations should identify a maximum percentage of pigs for whom tail docking would be appropriate, lest "medical necessity" becomes a routine practice in pig husbandry.

## IV. CONCLUSION

In electing to pay a premium for organic animal products, many consumers believe they are supporting producers who permit animals to engage in natural behaviors. Consumers anticipate that federal regulation of organic production ensures that organic production methods are uniform and organic farm animals are treated humanely. However, when provisions governing organic animal production are too general, sufficient variations in practices emerge, and some aspects of

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2007/2078/schedule/8/paragraph/12/made (accessed Apr. 2, 2011) (setting minimum slat widths for pigs' flooring).

<sup>275</sup> Peter Stevenson, *The Tail-Docking of Piglets – A Report by Compassion in World Farming Trust*, [http://www.ciwf.org.uk/includes/documents/cm\\_docs/2008/t/tail\\_docking\\_of\\_piglets\\_1999.pdf](http://www.ciwf.org.uk/includes/documents/cm_docs/2008/t/tail_docking_of_piglets_1999.pdf) (July 1999) (accessed Apr. 2, 2011).

<sup>276</sup> Fraser & Broom, *Farm Animal Behaviour and Welfare*, *supra* n. 138, at 328.

<sup>277</sup> 7 C.F.R. § 205.238(a)(5).

<sup>278</sup> NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165, at 4.

<sup>279</sup> 7 C.F.R. § 205.238(a)(5).

<sup>280</sup> NOSB, *Formal Recommendation, Animal Welfare*, *supra* n. 165, at 4.

permitted practices may be inconsistent with consumer expectations. Controversy over variations of organic production methods has recently occurred concerning organic dairy production<sup>281</sup> and may ensue for organic egg production as well.<sup>282</sup> Such public controversy damages the image of organic products,<sup>283</sup> undermining faith in the organic label and, ultimately, contravening Organic Foods Production Act's (OFPA) stated purpose of promoting organic production.

Organic regulations require that organic producers establish "living conditions which accommodate the health and natural behavior of animals," including year-round access for all animals "to the outdoors, shade, shelter, exercise areas, fresh air, clean water for drinking, and direct sunlight, suitable to the species, its stage of life, the climate, and the environment" and "access to pasture for ruminants."<sup>284</sup> To ensure that organic production methods permit animals to engage in natural behaviors, and to uphold OFPA's stated goal of establishing reliably uniform standards, the U.S. Department of Agriculture should adopt quantifiable standards pertaining, at a minimum, to the fundamental aspects of farm animals' natural behaviors.

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<sup>281</sup> For example, consult *supra* pt. II, sec. B (discussing complaints alleging willful violations of organic dairy production requirements and the USDA's 2010 amendment concerning ruminants' access to pasture).

<sup>282</sup> For example, consult *supra* pt. II, sec. C (discussing the complaint the Cornucopia Institute filed with the USDA in September 2010 concerning organic egg production).

<sup>283</sup> 75 Fed. Reg. at 7186.

<sup>284</sup> 7 C.F.R. § 205.239.