



CENTER FOR
FOOD SAFETY

July 13, 2016

Mr. Paul Lewis, Ph.D.
Director Standards Division
National Organic Program
USDA-AMS-NOP
Room 2646-So., Ag Stop 0268
1400 Independence Ave, SW
Washington, D.C. 20250-0268

Re: Docket No. AMS-NOP-15-0012; NOP-15-06PR; RIN 0581-AD44

Dear Mr. Lewis,

Center for Food Safety (CFS) is a non-profit membership organization that works to protect human health and the environment by curbing the proliferation of harmful food production technologies and by promoting organic and sustainable agriculture. Our membership has rapidly grown to include over seven hundred thousand people across the country that support organic food and farming, grow organic food, and regularly purchase organic products.

The proposed Organic Livestock and Poultry Practices rule is an important step toward aligning all organic production systems with the high bar of organic integrity and consumer expectations of the organic label. It is the next step in what has been a decades-long process of developing strong, uniform standards for raising animals organically. Throughout that process, Center for Food Safety has provided extensive input via the public comment process¹ as well as additional publications² and engagement. As the Federal Register notice acknowledges, the intent of the rulemaking is to “better satisfy consumer expectations that organic livestock meet a uniform and verifiable animal welfare

¹ CFS submitted written comments and letters related to animal welfare in organic to the National Organic Standards Board in [May 2012](#), [April 2011](#), [November 2009](#), [December 2008](#), [September 2006](#), [June 2006](#).

² P.M. Tomaselli & L.J. Bunin (2014). *USDA Stalls Regulations to Improve Organic Poultry Living Conditions*, Washington, DC: Center for Food Safety, available at www.centerforfoodsafety.org/files/animal-welfare-final_56276.pdf.

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standard.”³ Organic is the gold standard, and as such, organic animals must be well fed, healthy, have access to the outdoors, and be raised in an environment that allows them to engage in their natural behaviors.

Consumers feel that organic foods have value over conventional due to a strong belief that they have been produced in a manner that conserves natural resources, protects the native environment, does not rely on synthetic chemicals, and provides for the welfare of animals raised for food. To support such production systems, consumers accept a price premium to purchase foods that align with their values. In 2013, CFS conducted a survey of U.S. organic consumers to determine what factors influence their decision to purchase organic poultry products. Of the 17,396 participants who purchase organic eggs, more than 70 percent listed the provision of humane and natural conditions as among the top five reasons they choose organic eggs.⁴ When a few producers take advantage of lax or unclear standards, consumer confidence in all organic producers and products is undermined. In the spirit of continuous improvement on which the U.S. federal organic law was founded, the aim of NOSB and NOP must always be to ensure that the standards are increasingly stringent and that all certified organic producers are held to a high bar of integrity.

The proposed rule recommends many changes to the current regulations for livestock and poultry that will significantly improve the wellbeing of organic animals and bring animal production systems in line with consumer demands, including:

Livestock Health Care Practices

Amended language related to the prohibition of hormones is a welcome addition

An integral component of organic animal production systems is the prohibition of animal drugs used to enhance productivity. As such, CFS appreciates the language in the proposed rule that provides further clarification on the prohibition of exogenous hormones. At §205.238(c)(3), the rule prohibits the use of synthetic or nonsynthetic hormones for production or reproductive purposes, in addition to the existing language prohibiting their use for promoting growth.⁵ As hormone drugs are approved by FDA for uses other than growth promotion, the new language ensures that the regulatory prohibition of their use in organic is sufficiently comprehensive. Consumers do not expect animals that are raised

³ 81 Fed. Reg. 71, 21956, 22009 (Wednesday, April 13, 2016), at 21956.

⁴ Center for Food Safety (2013). *Survey on Organic Eggs & Poultry*, Online survey conducted in September. Survey participants comprise a group of self-selected Center for Food Safety supporters who volunteered to take the survey, and they were not randomly selected.

⁵ 81 Fed. Reg. 71, *supra* note 3, at 21965.

organically to be dosed with drugs for any non-therapeutic purposes, which would include the regulation of an animal's reproductive cycle.

Avian Living Conditions

Requirements for poultry operations have been significantly improved in the proposed rule

CFS has consistently argued that strong welfare rules for poultry will not only provide outdoor space to birds, but ensure that the housing and outdoor areas are designed to encourage birds to utilize the outdoor space. The proposed language at §205.241(c)(1) & (2) provide some much needed specificity requiring appropriate space design and utilization.⁶ In particular, requiring producers to train birds from an early age to use the outdoor space, provide enticing enrichment, and to ensure that exit areas are appropriately designed and accessible are all critical measures that provide for the greater welfare of poultry.⁷

The inclusion of language at §205.241(c)(6) prohibiting the consideration of porches as outdoor space⁸ is a welcome addition to the rule and in line with the position expressed by the organic community throughout the development of this rule. CFS has consistently advocated against allowing producers to rely on porches or similar enclosed areas as suitable outdoor space. Not only are porches contrary to consumer expectations of outdoor space for organic animals, they do not allow birds to access the soil, insects, vegetation, and sunlight necessary for healthy and humane conditions.

Additionally, the proposed indoor space requirements for broilers, layer chickens, and turkeys are comparable to those established for other private welfare labels, as illustrated in the chart below, see Table 1 below. CFS also appreciates the proposal to institute stocking rates by weight rather than per animal. In past comments we have advocated for

⁶ 81 Fed Reg 71, *supra* note 3, at 21970.

⁷ See, e.g. B. Rodenburg (2011). "Preventing feather pecking in laying hens," *World Poultry*, 29 March, available at: <http://www.worldpoultry.net/Layers/Housing/2011/3/Preventing-feather-pecking-in-laying-hens-WP008683W>; R. Trudelle-Schwarz (no date). "Cannibalism: Chicken Little Meets Hannibal Lector?" *Stories of Applied Animal Behavior*. K. Luanchberg & L. Shipley, (eds). University of Idaho and Washington State University, available at: http://www.webpages.uidaho.edu/range556/appl_behave/projects/chicken_cannibalism.html; J. Moritz, et al. (2005). "Synthetic Methionine and Feed Restriction Effects on Performance and Meat Quality of Organically Reared Broiler Chickens," *J. Appl. Poult. Res.*, 14: pp. 521-535; M.W.P. Bestman & J.P. Wagenaar (2003). "Farm level factors associated with feather pecking in organic laying hens," *Livestock Production Science*, 80: pp. 133-140; C.J. Nicol, et al. (2003). "Matched concurrent case-control study of risk factors for feather pecking in hens on free-range commercial farms in the UK," *British Poultry Science*, 44: pp. 515-523.

⁸ 81 Fed Reg 71, *supra* note 3, at 21970.

this metric, since animals increase in size and weight throughout production. Providing the same amount of space per animal at all stages of growth forces increasingly cramped conditions as they approach slaughter weight. Also, as noted in the Federal Register, this helps to accommodate differences in weight between breeds and species.

Table 1 Comparison of minimum indoor space requirements⁹

| | Proposed Rule | American Humane Association | Animal Welfare Approved | Certified Humane |
|-----------------|--|--|--------------------------------|--|
| Broilers | 5 lbs/ft ² (less than 1 ft ² /bird) | 7 lbs/ft ² | 0.67 ft ² /bird | 6 lbs/ft ² |
| Layers | 2.25 lbs/ft ² (2 ft ² /bird), except: Pasture: 4.5 lbs/ft ² (1 ft ² /bird) Aviary: 4.5 lbs/ft ² (1 ft ² /bird) Slatted/Mesh: 3.75 lbs/ft ² (1.2 ft ² /bird) Floor litter: 3 lbs/ft ² (1.5 ft ² /bird) | 116 in ² /bird (0.9 ft ² /bird, called enriched colony housing) Aviary: 1.2 ft ² /bird Slatted/Mesh: 1.2 ft ² /bird Floor Litter: 1.5 ft ² /bird | 1.8 ft ² /bird | Pasture: 1 ft ² /bird Aviary: 1 ft ² /bird. Slatted/Mesh: 1.2 ft ² /bird Floor litter: 1.5 ft ² /bird |
| Turkeys | 5 lbs/ft ² (less than 1 ft ² /bird) | None specified | 5 ft ² /bird | 7.5 lbs/ft ² |

⁹ See Animal Welfare Approved (2015). *Animal Welfare Approved Standards for Laying Hens*; Animal Welfare Approved (2015). *Animal Welfare Approved Standards for Meat Chickens*; Animal Welfare Approved (2015). *Animal Welfare Approved Standards for Turkeys*; American Humane Certified (2016). *Animal Welfare Standards for Broiler Chickens*, April; American Humane Certified (2016). *Animal Welfare Standards for Laying Hens – Cage-Free*, March; American Humane Certified (2015). *Animal Welfare Standards for Layers – Enriched Colony Housing*, October; American Humane Certified (2016). *Animal Welfare Standards for Laying Hens – Free Range & Pasture*, March; Humane Farm Animal Care (2014). *Animal Care Standards: Chickens*, August; Humane Farm Animal Care (2014). *Animal Care Standards: Egg Laying Hens*.

There are many opportunities to strengthen the proposed rule, including:

Livestock Health Care Practices

Breed restrictions and requirements for poultry should be expressly stated in the rule

The current regulations at §205.238(a)(1) state that organic producers must establish preventative health care practices including, “Selection of species and types of livestock with regard to suitability for site-specific conditions and resistance to prevalent diseases and parasites.”¹⁰ The NOP has not proposed to amend this language in any way. This represents a missed opportunity to more ardently restrict the breeds of animals allowed in organic to those that will flourish and thrive in organic systems. For example, the European Commission’s organic standards require producers to use only slow-growing breeds, which have been shown to be better suited to organic diets, outdoor conditions, and pastures.

In addition to the general language at §205.238(a)(1), the new section, Avian Living Conditions, includes language that could offer de facto restrictions on poultry breeds in organic. For example §205.241(a) “would require organic poultry producers to provide their birds with year-round access to the outdoors, soil, shade, shelter, exercise areas, fresh air, direct sunlight, clean water for drinking, materials for dust bathing, and adequate space to escape both predators and aggressive behaviors, *in a manner that is suitable to the species*, the stage of life, and the environment.”¹¹ This suggests that producers must take breed considerations into account, but the vague language allows for incredible flexibility that does not successfully limit breeds to those most appropriate for organic production. Similarly, as the space requirements were calculated based on the mature size of the ISA Brown strain of chicken, which weighs 4.5 pounds at maturity, the proposed rule tacitly incentivizes producers to select similar or smaller strains in order to raise more birds in a given space and comply with the rule.

Unfortunately, none of the proposed language offers a sufficient restriction on breeds for organic systems. In the case of poultry, this allows organic producers to continue using industrially-bred strains that thrive in confinement conditions and have difficulty maintaining health and vigor in outdoor or pasture-based systems. Industrial strains also have higher protein requirements in order to produce muscle tissue at higher rates. The use of these breeds has propelled the proliferation of “organic” confinement poultry systems as well as the continued use of the synthetic amino acid DL-methionine to meet their accelerated nutritional requirements. As both practices significantly undermine

¹⁰ 81 Fed Reg 71, *supra* note 3, at 21962.

¹¹ *Ibid.*, at 21971, emphasis added.

organic integrity and consumer confidence in organic poultry, the NOP should provide language in the rule that adequately restricts the breeds allowed in organic livestock and poultry systems and expressly prohibits industrial, fast-growing breeds.

Breed selection is an important aspect of preventative health care practices, as certain breeds maintain healthy condition and demonstrate higher adaptability in pasture-based and outdoor systems than others, particularly slower growing breeds compared to faster growing breeds.¹² For example, researchers in Italy found that slower growing breeds spent a significantly higher percentage outdoors in organic systems than faster growing breeds, and had significantly lower mortality in organic systems as well.¹³ Slow-growing Leghorns had 2 percent mortality and spent 70 percent of the time outdoors in organic systems compared to 16 percent mortality and only 30 percent time spent outdoors for the fast growing Ross breed.¹⁴ In addition, selection of broilers for fast growth has resulted in increased appetite, “such that birds kept for breeding need to be feed-restricted to prevent obesity and reproductive failure. Birds on such limited diets show signs of chronic hunger, including pacing, stereotyped pecking, and excessive water intake.”¹⁵

As an additional step to ensure that producers are sourcing breeds appropriate for organic systems, the final rule should include language that limits the allowable daily growth rate for poultry. When averaged over the life of the flock, the rate of growth for meat chickens allowed to grow naturally on an optimum ration must not exceed 0.075 pounds per day. This will not only encourage producers to source appropriate breeds for their systems and conditions, but will effectively prevent industrial management practices designed to spur growth, such as constant lighting and lack of room for exercise.

The phrase “appropriate body condition” is vague and unclear

At §205.238(a)(2) on the sufficiency of the organic feed rations, NOP is proposing to add the qualifying phrase “resulting in appropriate body condition” to the feed requirements.¹⁶ This phrasing is both vague and unnecessary and must be deleted from the final rule. “Appropriate body condition” is a subjective determination not only dependent on the species, breed, stage of life, age, gender, and time of year, but also subject to inspector qualification, experience, and perspective. Its inclusion in the rule would support the use of

¹² C. Castellini, et al. (2016). “Adaptation to organic rearing system of eight different chicken genotypes: behaviour, welfare, and performance,” *Italian Journal of Animal Science*, 15(1): 37-46.

¹³ A. Dal Bosco, et al. (2009). “Effect of genotype and rearing system on chicken behavior and muscle fiber characteristics,” *J Anim Sci*, 87: 4109-4117.

¹⁴ Dal Bosco, et al., 2009.

¹⁵ D. Fraser, et al. (2013). “General Principles for the welfare of animals in production systems: The underlying science and its application,” *The Veterinary Journal*.

¹⁶ 81 Fed Reg 71, *supra* note 3, at 21962.

body scoring as a quantitative measure for assessing the health and wellbeing of animals. However, body scoring is not compatible with organic systems.

Instead, strong organic animal welfare standards will encourage practices that reflect good husbandry and provide for natural behavior, sufficient space to move and exercise, and appropriate nutrition. Best management practices will result in healthy body condition of the animals. As such, inspectors should be trained to recognize conditions that are adverse to the animals' ability to exhibit natural behaviors, particularly when temporarily confined.

For physical alteration requirements, the definition of “competent person” must be clarified

At §205.238(a)(5), the proposed regulations for performing approved physical alterations on organic animals includes new language stipulating that alterations must be performed “by a competent person.”¹⁷ The attempt to clarify this term later in the notice is vague, stating only that, “Competency may be demonstrated by training or experience of the person performing the alterations or may be demonstrated by the training or experience of the person training the person performing the alterations.”¹⁸ Physical alterations can be minor surgical procedures. When conducted by untrained or over-worked farm workers without formal training on pain and sensitivity management, there is increased likelihood of physical suffering for the animals. CFS believes that the final rule should include requirements for animal welfare training for all employees authorized to perform physical alterations on animals. In the European Union, it is common for animal welfare regulations to recommend that all employees handling animals attend animal welfare training courses.¹⁹ Increased training in proper animal care increases the ease of animal handling for workers as well as productivity.²⁰ Local veterinarians, land grant universities, and veterinary students could be enlisted in order to ensure that necessary training is not cost prohibitive to small farmers.

CFS recommends that AMS add “competent person” to the regulatory definitions, and propose a definition that clearly identifies the competency required to perform physical alterations on organic livestock and poultry.

CFS suggests the following language: Any person that has, through formal training, achieved the necessary ability, knowledge, and skill to perform a specific function or action.

¹⁷ 81 Fed Reg 71, *supra* note 3, at 21962.

¹⁸ *Ibid.*, at 21964.

¹⁹ See, e.g. Council Directive 2001/93, EC Laying Down the Minimum Standards for the Protection of Pigs, art. 5, 2001 O.J. (L 316) 36-38 (EU).

²⁰ EU Scientific Veterinary Committee (1997). *The Welfare of Intensively Kept Pigs*, September 30. Web, available at: ec.europa.eu/food/animals/docs/aw_arch_1997_intensively_kept_pigs_en.pdf.

For persons handling or performing physical alterations on organic livestock and poultry, competence is demonstrated through sufficient animal welfare and animal handling trainings.

For physical alterations, the phrase “reasonably young age” is vague and undefined

The requirement that physical alterations “must be performed at a reasonably young age” requires greater clarity to ensure that the wellbeing of organic animals is protected. “Reasonably young” is subjective, and leaves too much room for the provision to be abused and producers to conduct the approved physical alterations that are not explicitly restricted by age in the rule at any age. This language should be more specific in the final rule, even if age maximums must be established for each species and/or each alteration.

Certain inhumane alterations are still allowed under the proposed rule

CFS has previously commented on the importance of ensuring that tooth clipping or needle teeth trimming (hereinafter needle teeth trimming) in pigs is prohibited in the organic animal welfare regulations.²¹ Scientific evidence indicates that needle teeth trimming is likely to cause immediate pain to pigs²², with minimal benefit. NOP has added the practice to §205.238(a)(5)(i), which is an improvement, however CFS is concerned that the language in §205.238(a)(5)(i) will still allow some producers to abuse the provision by regularly trimming piglets’ teeth at any sign of damage. Tooth grinding is not currently listed in the proposed restrictions on physical alterations.

Teeth trimming and tooth grinding are used to protect a sow’s udder from tears. However, such damage is often minimal, whereas these practices, and teeth trimming in particular, can cause both acute and long-term pain. Teeth trimming can expose the tooth pulp cavity to infection, the teeth may fracture and bleed, abscesses may form, and gum damage may occur. One recent study concluded that pigs are likely to experience long-term pain from the tooth abnormalities that occur following trimming, and that this pain is likely to last until the milk teeth are lost and replaced with permanent teeth – a period of 50–120 days. This means that many pigs reared for meat may experience pain as a result of teeth trimming throughout their entire life.

Successful sow and piglet management can occur without resorting to teeth trimming. For example, producers can limit litter size to that which can be fully sustained by the sow, ensure that the sow is healthy with good milk supply, ensure that litter sizes are even, and ensure that there is adequate space and enrichment for the sow and for piglets. Without this type of precise litter management, it is possible that tears will be common and

²¹ See Center for Food Safety (2011). Comments to NOSB, April 2011, *supra* note 1.

²² Council Directive 2001/93, *supra* note 19, Preamble.

producers will resort to needle teeth trimming. Thus, CFS recommends that NOP add needle teeth trimming and tooth grinding to the list of prohibited physical alterations at §205.238(a)(5)(ii) that must not be performed on a certified operation. Animal Welfare Approved prohibits both practices by its certified producers.²³

CFS also opposes beak trimming as a common practice and encourages producers to actively seek alternative management methods that prevent severe feather pecking and cannibalism. While the regulations prohibit de-beaking in poultry and beak trimming after 10 days of age, beak trimming is a painful procedure that can continue to cause pain throughout the animal's life, and therefore should not be encouraged as the immediate option for organic poultry producers. The UK organic standards through the Soil Association ban beak trimming entirely, as do the organic standards in China, Argentina and Australia.²⁴ While the practice is commonly performed as a measure against severe feather pecking,²⁵ studies do not demonstrate a strong connection between beak trimming and reduced feather pecking.

Instead, more humane practices such as providing sufficient litter and scratching material and ample access to vegetative outdoor space have been shown to reduce feather pecking by encouraging natural foraging behaviors. Feather pecking and cannibalism can also be reduced if appropriate breeds are selected for organic production, as well as with appropriate light and nutrition management.²⁶ AMS' own materials state that, "Most organic producers find alterations such as beak trimming to be unnecessary when they have designed their systems and management practices to provide adequate space, include roosters for natural social order, and use other strategies to reduce stress among birds."²⁷ Only if such methods prove ineffective should producers consider beak trimming. CFS recommends that the qualifying phrase "after days of age" be removed from §205.238(a)(5)(ii) such that beak trimming as a practice will be prohibited in organic.

Infrared beak trimming is considered the most humane of the available technologies to perform the alteration. This is most commonly done at the hatchery on the 1st day of life.²⁸

²³ Animal Welfare Approved (2015). *Animal Welfare Approved Standards for Pigs*.

²⁴ Compassion in World Farming. (2012). *Frequently Asked Questions: laying hens*, Farm Animal Welfare Compendium (Updated January 3, 2012).

²⁵ M.C. Appleby, J.A. Mench, & B.O. Hughes (2004). *Poultry Behavior and Welfare*, Oxfordshire, UK: CABI Publishing; B. Rollin (1995). *Farm Animal Welfare: Social, Bioethical, and Research Issues*, Iowa State U. Press.

²⁶ J. Jacob (2015). "Beak Trimming of Poultry in Small and Backyard Poultry Flocks," *eXtension*, May 5, available at: <http://articles.extension.org/pages/66245/beak-trimming-of-poultry-in-small-and-backyard-poultry-flocks>.

²⁷ A. Baier (2015). *Tipsheet: Organic Poultry Production for Meat and Eggs*, National Center for Appropriate Technology, developed with support from U.S Department of Agriculture's Agricultural Marketing Service, National Organic Program, July.

²⁸ H.W. Cheng (2010). *Laying Hen Welfare Fact Sheet*, USDA-ARS-MWA Livestock Behavior Research Unit.

It involves immobilizing the chicks via head restraint and focusing high intensity, infrared energy through the beak's corneum layer, inhibiting further growth and causing the tip of the beak to erode away after 7-10 days.²⁹ This is considered the most humane technology available. However, as it is relatively new technology utilized by the industry, the degree of its welfare impacts may not yet be known. Further, this illustrates the need for a distinct, certified organic hatchery industry, as poultry producers seeking to address feather pecking through management practices rather than physical alterations may only have access to chicks from conventional hatcheries that beak trim their chicks on the 1st day of life.

Additionally, CFS continues to oppose all instances of tail docking. The proposed rule only fully eliminates this practice for cattle. Tail docking in pigs is restricted to non-routine uses when alternatives have failed, and in sheep it is limited only by a specific threshold (cannot be "shorter than the distal end of the caudal fold"³⁰). Tail docking is commonly practiced to prevent tail biting as an aggressive behavior. Studies have shown, however, that high rates of tail biting in pigs are associated with poor living conditions such as slatted rather than solid flooring, high stocking densities, crowded feeding systems, high post-weaning mortality rates, the presence of respiratory diseases,³¹ nutrition, and a lack of more suitable objects to occupy the animals.³² Organic production systems must implement practices and conditions that promote high welfare, addressing the factors that increase tail biting with management practices such as suitable stocking densities, appropriate nutrition, and enrichment. Further, a study of ninety-two pig farms in England, UK, found that "tail docking was associated with a three-fold increase in the risk of tail biting." As such, tail docking is incompatible with organic production and all instances of the practice must be prohibited.

Maximum ammonia levels should apply to all species and have one limit to prevent confusion

The proposed language related to ammonia limits in poultry houses is unnecessarily confusing and could be burdensome to producers and certifiers. Rather than two ammonia limits at which different actions would be required, NOP should establish one limit which producers must prevent ammonia levels from exceeding. Due to the harms caused to animals from ammonia emissions, such as respiratory and ocular diseases³³ and lowered

²⁹ Cheng, 2010, *supra* note 28.

³⁰ 81 Fed. Reg. 71, *supra* note 3, at 21962.

³¹ C. Moinard, et al. (2003). "A case control study of on-farm risk factors for tail biting in pigs," *Applied Animal Behavior*, 81(4): 333-355.

³² P.K. Walker & G. Bilkei (2006). "Tail-biting in outdoor pig production," *The Veterinary Journal*, 171: pp. 367-369.

³³ D.M. Miles, et al. (2006). "Ocular responses to ammonia in broiler chickens," *Avian Disease*, 50(1): pp. 45-49; A. Michiels, et al. (2015). "Impact of particulate matter and ammonia on average daily weight gain, mortality

immunity,³⁴ the proposed 10 parts per million (ppm) limit should be set as the maximum in the final rule. The 25 ppm limit is too high, as studies have demonstrated that birds suffer significant health impacts at 25 ppm.³⁵

Further, high ammonia levels pose risks to other animals, not just poultry. A cross-sectional epidemiological study recommended that a maximum ammonia concentration of 7 ppm is necessary to protect pig health.³⁶

As such, the language at §205.238(a)(9) should be changed to establish the ammonia limit as 10 ppm, as well as to strike the phrase “in poultry houses” to apply the requirement to all livestock. CFS recommends the following language: “Ventilation must be adequate to prevent buildup of ammonia. Ammonia levels in livestock housing must be less than 10 ppm. Producers must monitor ammonia levels on a monthly basis.” The amendments to the language at §205.238(a)(9), applying to all livestock, means that the proposed §205.241(b)(2) specific to avian living conditions is no longer necessary.

The proposed requirements for euthanasia support euthanasia when it may not be necessary

The proposed language at §205.238(e)(1) states that “Organic livestock producers must have written plans for prompt, humane euthanasia for sick or injured livestock.”³⁷ The use of the terms “sick” and “injured” without any further qualification allow for too broad a spectrum of conditions at which producers could euthanize animals. Illnesses or injuries are not necessarily severe enough to merit ending an animal’s life. NOP must amend this language to clarify that humane and prompt euthanasia would be required for animals that are in irreversible condition and will not likely recover. CFS recommends the language be changed to “Organic livestock producers must have written plans for prompt, humane euthanasia for animals suffering from irreversible disease or injury.”

and lung lesions in pigs,” *Preventative Veterinary Medicine*, 121(1-2): pp. 99-107; K.J. Donham (1991).

“Association of environmental air contaminants with disease and productivity in swine,” *American Journal of Veterinary Research*, 52(10): pp. 1723-1730.

³⁴ D.P. Anderson, C.W. Beard, & R.P. Hanson (1964). “The adverse effects of ammonia on chickens including resistance to infection with Newcastle disease virus,” *Avian Research*, 8:pp. 369-379; C.L. Quarles & H.F. Kling (1974). “Evaluation of ammonia and infectious bronchitis vaccination stress on broiler performance and carcass quality,” *Poultry Science*, 53: pp.1592-1596.

³⁵ Miles, et al., 2006, *supra* note 33; F.N. Reece, B.D. Lott, & J.W. Deaton (1981). “Low concentrations of ammonia during brooding decrease broiler weight,” *Poultry Science*, 60(5): pp. 937-940.

³⁶ Donham, 1991, *supra* note 33.

³⁷ 81 Fed. Reg. 71, *supra* note 3, at 21964.

Mammalian Living Conditions

Language addressing housing and shelter must accommodate the unique needs of different species

CFS understands the intent behind the detail and specificity in the proposed language for §205.239(a)(4)(i), which has been changed from requiring shelter that allows for the “Natural maintenance, comfort behaviors, and opportunity to exercise” for animals,” to the far more specific requirement to provide “Sufficient space and freedom to lie down in full lateral recumbence, turn around, stand up, fully stretch their limbs without touching other animals or the sides of the enclosure, and express normal patterns of behavior.”³⁸

This level of specificity, however, results in language that is too prescriptive and does not accommodate for major differences between species. The proposed language is appropriate for pigs, for example, but not for cattle. Unlike pigs, cattle will defecate and urinate where they stand or lie. In order to keep cows in clean, hygienic, sanitary housing, stalls need to be sized and designed in a manner that positions the animal’s hind end such that the waste is channeled away from it and the other animals. Allowing cows to lie sideways or backwards while in their stalls may cause waste to end up at the front of the stall, on their feed, underneath the animal, or in neighboring stalls. This will lead to unsanitary conditions with increased risk of disease and infection.

This example illustrates the challenges with including language in the final rule that is far too prescriptive if the rule is divided only into the two broad categories of mammalian and avian species. AMS should consider further dividing the mammalian section into ruminant and non-ruminant mammals, recognizing that the living conditions, welfare, and health requirements for ruminant mammals are largely covered by the existing pasture rule.

Space requirements for pigs are needed

Clear stocking requirements are noticeably absent from the proposed rule, but are necessary to the protection of pig welfare. The NOSB did recommend establishing stocking rates for pigs in its final recommend. However, the NOSB’s recommended stocking requirement of 6 square feet for a growing pig of 225 to 255 pounds would be woefully inadequate and put organic pig production significantly behind private welfare labels and the European Union. The NOP should look to Certified Humane, Animal Welfare Approved, and the EU’s general requirements for pig welfare as resources for identifying minimum space requirements per pig that make organic the strongest label. CFS has recommended specific rates below.

³⁸ 81 Fed Reg 71, *supra* note 3, at 21966.

Providing adequate space for pigs is a critical component of ensuring that organic systems promote high welfare of the animals. Limited space can contribute to serious problems of aggression, and studies have shown that increased floor area can reduce the level and severity of injurious behavior.³⁹ At least one study determined that a minimum of 2.4 - 3.6 m² (25.8 - 38.7 ft²) per sow was necessary to promote good welfare. This space range reduced aggression by allowing adequate space for social signaling of submissive behavior.⁴⁰

The EU's minimum stocking rate for a growing pig of similar weight, regardless of organic or conventional production, is 6.9 - 10.8 ft².⁴¹ This means that even if NOP had included the NOSB's proposed requirement for organic porcine stocking densities, it would still fall short of the minimum requirements for *conventional* pigs in the EU. Consumers expect that organic meat is produced with a higher standard than non-certified organic products. To ensure that consumer faith in U.S. organic meat products is maintained and they continue to support domestic producers, the standards for organic pig living conditions should exceed those for conventional pigs from other countries.

In contrast, Certified Humane provides that total indoor floor space should provide each pig with "no less than 1.5 times their minimum lying area," and that mature sows must have a minimum of 37.6 ft² of space per sow.⁴² They also provide a detailed breakdown of minimum total space requirement (lying area and additional floor space combined) by weight of the animal, see Table 2 below.

Table 2 Certified Humane minimum total indoor space requirements for pigs⁴³

| | | | | | | | | | | | | |
|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Weight (lbs) | 22 | 44 | 66 | 88 | 110 | 132 | 154 | 176 | 198 | 220 | 242 | 264 |
| Min. total area (ft ²) | 1.7 | 2.4 | 3.3 | 4.2 | 5.0 | 5.9 | 6.6 | 7.2 | 7.5 | 8.1 | 8.5 | 9.1 |

³⁹ S. Edwards (2008). "Balancing sow and piglet welfare with production efficiency," *London Swine Conference – Facing the New Reality*, April 1-2.

⁴⁰ R.C. Weng, S.A. Edwards, & P.R. English (1998). "Behaviour, social interactions and lesion scores of group-housed sows in relation to floor space allowance," *Applied Animal Behavior Science*, 59: pp. 307-316.

⁴¹ Council Directive 2001/93, *supra* note 19, art. 1(1)(a).

⁴² Humane Farm Animal Care (2013). *Animal Care Standards: Pigs*, March.

⁴³ *Ibid.*

Similarly, Animal Welfare Approved stipulates the following requirements for pigs, see Table 3 below.

Table 3 Animal Welfare Approved Indoor Spacing Requirements for Pigs, when pigs have access to ranging and foraging areas⁴⁴

| When pigs have access to ranging and foraging areas: | | | | |
|---|-------------------------------------|------------------------------------|--|-------------------------------------|
| Breeder pigs | Sows: 16 ft ² | Boars: 16 ft ² | Farrowing Sows: 42 ft ² | |
| Fattening Pigs | Up to 66lbs: 3 ft ² | 67-110 lbs: 4.5 ft ² | 111-187 lbs: 7 ft ² | 187-242 lbs: 8.5 ft ² |
| When pigs are excluded from ranging and foraging areas: | | | | |
| Breeder Pigs (min. bedded lying area + min. additional loafing area) | Sows: 64 ft ² | Boars: 150 ft ² | Farrowing Sows: 112 ft ² | |
| Fattening Pigs (min. bedded lying area + min. additional loafing area) | Up to 66 lbs: 11 ft ² | 67-110 lbs: 15 ft ² | 111-187 lbs: 20.5 ft ² | 187-242 lbs: 25 ft ² |

As such, CFS recommends adding a new §205.239(f) establishing maximum indoor stocking densities for swine, to read:

(f) Total minimum indoor space requirements for swine, including bedded lying area and additional floor space.

- (1) For breeder pigs;
 - (i) No less than 38 ft² for sows and boars.
 - (ii) No less than 42 ft² for farrowing sows.
- (2) For growing pigs;
 - (i) No less than 3 ft² for pigs up to 66 lbs.
 - (ii) No less than 4.5 ft² for pigs 67-110 lbs.
 - (iii) No less than 7 ft² for pigs 111-187 lbs.
 - (iv) No less than 8.5 ft² for pigs over 187 lbs.

If NOP does not, at this time, strengthen the many weak areas in this proposed rule regarding welfare standards for swine species, then it must put separate recommendations for pig welfare on the NOSB’s agenda immediately to begin the process of promulgating a pig-specific rule. If the requirements in this proposed rule move forward as they stand,

⁴⁴ Animal Welfare Approved (2015). *Animal Welfare Approved Standards for Pigs*.

organic pork products will continue to seek additional welfare labels in order to meet consumer expectations.

The time allowed for independent housing of calves is excessive

The language at §205.239(a)(7) does not establish a minimum age for weaning calves, and allows for calves to be individually housed and prevented from socializing or accessing the outdoors until 6 months of age.⁴⁵ In contrast, Certified Humane establishes that calves may not be weaned before 5 weeks of age and sets an 8 week limit for calves to be kept from the herd and prevented from socialization. The European organic standards set the same 8 week limit. Six months, or roughly 26 weeks, is more than three times the length of other welfare standards. It must therefore be reduced to better align with international and other domestic welfare requirements.

Research shows that calves benefit from social housing at an early age. Due to the greater space availability in group housing, calves are allowed a more natural and comfortable lying position and display increased social behaviors. When provided with socialization, interaction with other calves exceeds interactions with the dam as early as 2 weeks of age.⁴⁶ Play-fighting and social licking are found to occur in the second and fourth weeks of age, respectively.⁴⁷ Social housing has also been shown to reduce repetitive oral behaviors during the first 6 weeks of rearing and to decrease the incidence of hairballs in the rumen.⁴⁸ It has also been shown to increase play behavior.⁴⁹ Play behavior reaches a peak at around four months old, and by six months of age the incidence of play behavior and investigative behavior (e.g., sniffing another animal) decrease rapidly.⁵⁰ Allowing producers to house calves individually for up to 6 months of age would effectively deprive them of their prime period of play and socialization.

The European Food Safety Authority's Scientific Veterinary Committee recommends socializing calves as early as possible. The authors agreed with the following statements: "Where calves cannot be kept with their mother, the system where welfare is best is in

⁴⁵ 81 Fed. Reg. 71, *supra* note 3, at 21967.

⁴⁶ K.E. Bøe & G. Færevik (2003) "Grouping and social preferences in calves, heifers and cows," *Applied Animal Behaviour Science*, 80: 175-190, at 183.

⁴⁷ *Ibid.*

⁴⁸ American Veterinary Medical Association (2008). "Welfare Implications of Veal Calf Husbandry, AVMA Literature Reviews. October 13. Web, last accessed July 12, 2016, *available at*: <https://www.avma.org/KB/Resources/LiteratureReviews/Pages/Welfare-Implications-of-the-Veal-Calf-Husbandry-Backgrounder.aspx>.

⁴⁹ M.B. Jensen, K.S. Vestergaard, & C.C. Krohn (1997). "Play behaviour in dairy calves kept in pens: the effect of social contact and space allowance," *Applied Animal Behaviour Science*, 56: pp. 97-108; M.B. Jensen & R. Kyhn (2000). "Play behaviour in group-housed dairy calves, the effect of space allowance," *Applied Animal Behaviour Science*, 67: pp. 35-46.

⁵⁰ AVMA, 2008, *supra* note 48.

groups with a bedded area and an adequate space allowance available to them;” “The welfare of calves is very poor when they are kept in small individual pens with insufficient room for comfortable lying, no direct social contact and no bedding or other material to manipulate;” “Calves are very social animals, interacting frequently with other calves after one week of age and developing normal social behaviour only if they can interact freely with other calves.”⁵¹

A primary concern of socializing calves at an early age is the risk of inappropriate suckling, in which calves attempt to suckle at other calves. When calves are not provided with opportunities to suckle appropriately they will spend time licking or sucking inanimate objects when housed individually, or other calves when housed in groups. A study observing calves in social housing found that repetitive oral behaviors occurred 10-35 percent of the time.⁵² However, management practices can adequately address and prevent inappropriate suckling while still providing calves with the social interactions and play that they desire. Repetitive sucking is reduced when calves are given brief opportunities to suckle their dams, as little as 15 minutes each day. Providing objects, such as artificial teats, in the housing for calves to direct their suckling behavior toward, as well as providing additional water, are additional effective interventions.⁵³

Calf welfare requires social interaction from an early age, and any potential negative welfare associated with inappropriate suckling can be effectively prevented by designing systems appropriately. The maximum period for individually housing calves should be set at 8 weeks, and the rule should encourage producers to begin socializing calves as early as possible.

Regulations for temporary confinement must ensure adequate housing is provided and that instances of temporary confinement are rare and well-documented

For both mammalian and avian livestock, the allowance for temporary confinement must be clear and specific enough so as to prevent producers from exploiting said allowance and denying animals’ access to the outdoors indefinitely. CFS appreciates the restrictive language prohibiting the potential of a disease outbreak as justification for temporary confinement.⁵⁴ However, the proposed rule fails to provide sufficient clarity to guard against producers continuously denying herds and flocks from accessing the outdoors. For example, if meat chickens are allowed to be kept indoors for the first four weeks of life, and

⁵¹ European Food Safety Authority (2006). “Scientific opinion on the risks of poor welfare in intensive calf farming systems. An update of the Scientific Veterinary Committee Report on the Welfare of Calves,” *The EFSA Journal*, 366: at 18.

⁵² AVMA, 2008, *supra* note 48.

⁵³ AVMA, 2008, *supra* note 48.; EFSA, 2006, *supra* note 51.

⁵⁴ 81 Fed. Reg. 71, *supra* note 3, at 21970.

disease is documented in the area the remaining 2-3 weeks, these “organic” chickens will have never been even introduced to the outdoors.

To address these concerns, the final rule should include language restricting the ability of producers to utilize continuous confinement, including, but not limited to: establishing a maximum limit for periods of temporary confinement, by species; mandating that producers immediately reinstate outdoor access when the instigating issue or risk has been resolved; and, implementing a maximum number of times that “risk to soil or water quality” may be used as justification for temporary confinement, above which punitive measures will be taken against the producer.

In addition, the rule does not expressly require that adequate housing must be provided during all periods of temporary confinement. Language must be added clarifying that, during periods of temporary confinement, the housing provided must meet all standards outlined in the rule.

The final rule must expressly prohibit the use of farrowing crates

Added language at §205.239(8)(i) provides that “Sows may be housed individually at farrowing and during the suckling period.”⁵⁵ However, language is needed to clarify that sows in organic operations may never be confined to farrowing crates. Farrowing crates would certainly not comply with the stipulation that housing must provide “Sufficient space and freedom to lie down in full lateral recumbence, turn around, stand up, fully stretch their limbs without touching other animals or the sides of the enclosure, and express normal patterns of behavior.”⁵⁶ Not only should this language be amended to be specific to swine as argued earlier in these comments, new language should also be added at §205.239 to expressly prohibit the use of farrowing crates in organic swine production. Any lack of clarity or specific language in the provision allowing individual housing of sows at farrowing could be exploited.

The final rule must define “aggression” to prevent unnecessary confinement of pigs

§205.239(a)(8)(iii) allows for individual housing for “Swine with documented instances of aggression.”⁵⁷ Without a definition for “aggression” or “instances of aggression,” this provision could lead to unnecessary confinement of individual pigs based on subjective assessments of behavior. Tail biting and other aggressive behavior is usually seen in confined populations. Overcrowding and boredom are the main causes of swine aggression. Free-ranging pigs rarely have aggression problems, as they spend 5 to 10 hours a day

⁵⁵ 81 Fed. Reg. 71, *supra* note 3, at 21967.

⁵⁶ *Ibid.*, at 21966.

⁵⁷ *Ibid.*, at 21967.

looking for food and rooting. The current standards §205.238(a)(4) already require producers to provide “conditions which allow for exercise, freedom of movement, and reduction of stress appropriate to the species.” Implementation of these requirements should alleviate most instances of aggression.

CFS recommends adding a new term in §205.2, “swine aggression”, to read: “A pig that repeatedly initiates threatening physical contact such as biting, knocking, or lateral fighting with another pig that ends with submissive behavior or escape by the subject animal.”

Additionally, the provision at §205.239(a)(8)(ii) allowing for individual housing of boars must stipulate that boar pens must be of sufficient dimensions to enable animals to turn around easily and lie fully stretched, such as included in the Certified Humane standards for pigs.⁵⁸ It should be noted that some research on mixed-gender housing for pigs suggests that the presence of boars can reduce incidence and intensity of fighting among sows.⁵⁹

Requiring 50 percent soil cover outdoors for all mammalian livestock will threaten soil and water quality

The phrase “with at least 50 percent soil” should be deleted from the proposed regulatory definition of outdoors and instead, specifications for outdoor space provisions should be clarified separately under the Mammalian and Avian Living Conditions sections. For ruminants in particular, there are times when access to pasture is inappropriate, and requiring producers to provide access to bare or vegetative soil during the non-grazing season can negatively impact soil and water quality through nutrient loading and runoff.

Managing cows on soil during the winter and non-grazing seasons contradicts Natural Resource Conservation Service (NRCS) recommendations and many local watershed requirements. Requiring year-round access to outdoor space that includes at least 50 percent soil cover is not conducive to the health and well-being of mammals, particularly heavier species. The NRCS Conservation Practice Standard allows for producers to use protected surfaces on sites that may become muddy due to the higher risk of disease and impaired mobility of animals in muddy conditions. Yards/feeding pads of appropriate material in high use areas should be encouraged during those periods in the interest of animal welfare.

CFS supports the language proposed by FOOD Farmers in their written comments as §205.239(a)(13)(ii). In addition, CFS supports removing “with at least 50 percent soil” from the proposed definition of “outdoors” at §205.2.

⁵⁸ HFAC, 2013, *Pigs*, *supra* note 42.

⁵⁹ *Ibid.*

Avian Living Conditions

The thresholds of “inclement weather” are not justified for triggering continuous confinement

The regulations currently allow for the temporary confinement of poultry flocks in inclement weather, defined as “Weather that is violent, or characterized by temperatures (high or low), or characterized by excessive precipitation that can cause physical harm to a given species of livestock.”⁶⁰ The proposed rule seeks to establish clear parameters for the temperatures at which poultry producers may consider the weather to be unsuitable for birds to be outdoors. The low threshold temperature of 40 degrees Fahrenheit (below which animals may be confined to protect them from cold) and the high threshold of 90 degrees Fahrenheit (above which animals may be confined to protect them from heat) are proposed without sufficient reasoning or scientific support.⁶¹ Research suggests that the concern for thermal stress is more related to the negative growth promotion and feed efficiency effects of lower- or higher-than-optimal temperatures, rather than on bird wellbeing.

While the literature is slightly varied on the optimal temperature range for efficient production, and primarily focused on temperatures in indoor, controlled environments, an ideal temperature range seems to fall between 17-25°C (62.6-77°F).⁶² However, poultry scientists have consistently demonstrated that the stress associated with lower- or higher-than-optimal temperatures primarily impacts growth and feed efficiency rather than animal wellbeing. Researchers have also concluded that, “Selection for growth rate and feed efficiency (FE) is associated with a number of undesirable consequences and the increased susceptibility to heat stress is one of them. The magnitude of the reduction in body weight (BW) and BW gain at high temperatures (averaging 30°C [86°F]) appears to be associated with a high growth rate and breast yield at normal environment (averaging 25°C [77°F]).”⁶³ This illustrates the importance of establishing clear breed requirements for organic poultry production. As other poultry scientists have demonstrated, “Because fast-growing broilers produce more heat and have a higher heat load, the effect of heat stress is more pronounced in commercial broiler stocks and in broilers with high growth potential compared to the slower-growing chickens (Cahaner and Leenstra, 1992; Eberhart and Washburn, 1993; Cahaner *et al.*, 1995; Yunis and Cahaner, 1999). During heat exposure, the

⁶⁰ 7 C.F.R. §205.2

⁶¹ 81 Fed. Reg. 71, *supra* note 3, at 21970.

⁶² J. Blahova, et al. (2007). “Effect of Low Environmental Temperature on Performance and Blood System in Broiler Chickens (*Gallus domesticus*),” *Acta Vet Brno*, 76: pp. S17-S23; H. Lin, et al. (2006). “Strategies for preventing heat stress in poultry,” *World’s Poultry Science Journal*, 62: pp. 71-85, at 72.

⁶³ Lin, et al., 2006, *supra* note 62, at 72.

slower growing broiler lines have relatively lower mortality and body temperature compared to fast growing lines (Yalcin, *et al.*, 2001).⁶⁴

Further, if birds are introduced to cold or hot temperatures at an early age, it has been shown that their thermotolerance improves during temperature challenges later in life. Shinder, *et al.* (2002) showed that short-term exposure to cold in chicks improved viability during periods of extreme cold, and Yahav and McMurtry (2001), showed the same increased thermotolerance to heat stress when exposed to heat in the first days of life.⁶⁵ This is further justification for ensuring that birds are introduced to the outdoor space at an early age.

Bird must, of course, always be allowed to seek shelter indoors when desired, such as in unfavorable weather conditions. Confining them indoors when temperatures are below or above a certain threshold, however, is not a matter of protecting their welfare. Maintaining ideal temperatures in the housing (e.g., heat during winter and air conditioning during summer) will likely encourage birds to seek shelter indoors while still allowing access to outdoor space for those that continue to utilize it. Even with air conditioning in the summer, for example, confining all birds indoors might lead to greater discomfort due to the generation of body heat combined with warm external temperatures, leading some to seek reprieve outdoors. Maintaining access to the outdoors during this time may also result in ancillary benefits to the producers, as the energy costs of cooling the housing space will likely increase with all birds confined indoors at one time.

Justification for allowing 70 percent of flooring to be slatted is needed

The proposed rule allows for organic poultry houses to be designed with slatted flooring so long as “30 percent of the flooring is solid with sufficient litter so that birds may dust bathe freely without crowding.”⁶⁶ AMS provides no justification for allowing this ratio of slatted-solid flooring for poultry. According to the International Poultry Training Centre in The Netherlands, the ratio of litter to slatted flooring in poultry houses has a direct impact on the stocking density producers can use, and “the higher proportion of slats, the higher the density can be.”⁶⁷ The three common litter-to-slatted floor ratios are $\frac{1}{3}$ slatted floor to $\frac{2}{3}$ litter, $\frac{1}{2}$ slatted floor to $\frac{1}{2}$ litter, and $\frac{2}{3}$ slatted floor to $\frac{1}{3}$ litter.⁶⁸ AMS is proposing to

⁶⁴ Lin, *et al.*, 2006, *supra* note 62 (2006), at 72. All references cited in the quote have been submitted to the docket with these comments.

⁶⁵ Blahova, 2007, *supra* note 62; S. Yahav & J.P. McMurtry (2001). “Thermotolerance Acquisition in Broiler Chickens by Temperature Conditioning Early in Life—The Effect of Timing and Ambient Temperature,” *Poultry Science*, 80: pp. 1662-1666.

⁶⁶ 81 Fed. Reg. 71, *supra* note 3, at 21971.

⁶⁷ J. Hulzebosch (2006). “Wide range of housing options for layers,” *World Poultry*, 22(6): pp. 20-22.

⁶⁸ *Ibid.* Full (100 percent) litter systems are also used, but full (100 percent) slatted floor systems are uncommon as they are relatively expensive and inconvenient for farmers to provide regular care to the birds.

allow organic producers to use a slightly higher proportion of slats, at 70 percent slatted floor to 30 percent litter. The relationship between increased proportion of slatted flooring over litter and increased stocking densities suggests that this housing design is primarily functional for industrial confinement poultry production, and likely not appropriate for organic systems.

Producers using aviary housing must demonstrate how the housing design encourages birds in tiered levels to access the outdoors

An important component for encouraging birds to utilize the outdoor space is that the exits are well distributed in the space, such that birds are not forced to travel far inside the shelter in order to find the nearest exit. Birds often stick to a specific area. As such, there must be an exit available and reasonably accessible from any given point in the house. CFS is concerned that aviary-style housing, which utilizes multiple levels or tiers, does not provide meaningful outdoor access if all exits are located on the ground level. Before allowing for aviary-style housing in the final rule, it must be demonstrated that aviaries can be designed such that birds are either consistently encouraged to move down to the ground level, and thus regularly made aware of the availability of exits, or that exits can be provided at each tier that safely and effectively allow birds to get outside. AMS estimates that 50 percent of the U.S. organic laying flock is in aviary housing. It would be detrimental to organic integrity and trust in the organic label if half of the organic laying hen population are kept in housing that cannot provide meaningful outdoor access even after the rule is finalized.

Outdoor access for poultry must require 50 percent vegetative cover

The NOSB recommended that outdoor space consist of at least 50 percent vegetative cover. Additionally, many private welfare labels include language specific to providing vegetation or vegetative cover in outdoor areas for poultry. For example, Animal Welfare Approved includes language for laying hens and meat chickens, requiring that “nutritional requirements of grazing animals can be adequately met through grazing and appropriate supplementation,” and that “Birds must have access to growing green vegetation on the range whenever conditions allow.”⁶⁹

CFS recommends that NOP exceed the precedents set by existing welfare labels and require that outdoor space for poultry be at least 50 percent vegetative cover when conditions allow. This requirement will help ensure that producers are providing adequate outdoor space per bird. Overcrowding the space will denude the vegetation, forcing producers to employ measures such as reducing stocking density or increasing the outdoor space in order to comply with the vegetative cover standard.

⁶⁹ AWA, 2015, Standards for Laying Hens, and AWA, 2015, Standards for Meat Chickens, *supra* note 9.

The vegetative cover requirement will also bring organic poultry more strongly in line with consumer expectations of organic. Bare soil, without vegetation, does not provide a quality living environment for the birds, since soil without living roots and plants does not provide the following important food sources: insects, invertebrates, or plant matter. Bare soil, without living plants, quickly becomes compacted and does not provide good scratching, dust bathing, or exercise areas for the birds. Poultry outdoor access areas comprised of bare soil do not protect water, soil or air quality. During times of high temperatures or sunny days, bare soil yards are significantly hotter than vegetated yards, making the outdoor experience for the birds less attractive and hardly beneficial to their welfare.

CFS recommends the following changes to the proposed rule to ensure that poultry producers are providing vegetative cover for at least 50 percent of the outdoor space:

Adding a new term, “vegetation,” in the definitions at §205.2 to read: “*Vegetation*. Living plant matter, can be native or planted, anchored in the soil by roots. Can be a mix of grasses, forbs and/or brush with majority of the soil covered by this living plant matter during the growing season.”

Changing the language at §205.241(c)(1) to read: “Outside access and door spacing must be designed to promote and encourage outside access for all birds on a daily basis. Producers must provide access to the outdoors at an early age to encourage (train) birds to go outdoors. Outdoor areas must be at least 50% covered with vegetation and suitable enrichment, such as shade and water, to entice birds to go outside.”

Changing the language at §205.241(c)(8) to read: “At least 50 percent of outdoor access space must be covered with vegetation except when conditions threaten the soil or water quality. Outdoor access without soil or vegetation must be provided temporarily only due to seasonal or climatic conditions.”

The proposed outdoor space requirements are not sufficient to provide for natural behavior of birds, and are not in line with other welfare systems

AMS has proposed outdoor space requirements of 2.25 pounds (lbs) of hen per square foot (ft²) for layers, comparable to 2 ft² per bird. According to the Federal Register notice, “This is consistent with the NOSB recommendation for outdoor stocking density.”⁷⁰ However, the recommendation from NOSB was a range of 2-5 ft², noting that 5 ft² would ensure adequate availability of vegetation per bird.⁷¹ In addition, the proposed outdoor space requirements

⁷⁰ 81 Fed. Reg. 71, *supra* note 3, at 21984-85.

⁷¹ 81 Fed. Reg. 71, *supra* note 3, at 21984-85.

for broilers and turkeys are 5 lb per ft², which is equivalent to less than 1 ft² per bird for chickens according to AMS' equivalency calculations. CFS has previously supported outdoor space requirements that provide the equivalent of 5 ft² per bird, which is the minimum requirement of Organic Valley for its layer flocks, for example.

Table 4 Comparison of Outdoor Space Requirements

| | Proposed Rule | American Humane Association | Animal Welfare Approved | Certified Humane |
|-----------------|---|---|--------------------------------|---|
| Broilers | 5 lb/ft ² (<1 ft ² /bird) | 7 lb/ft ² | 2 ft ² /bird | 109 ft ² /bird * |
| Layers | 2.25 lb/ft ² (2 ft ² /bird) | Pasture: 109 ft ² /bird* Aviary: None specified Slatted/Mesh: None specified Floor Litter: None specified | 4 ft ² /bird | Pasture: 109 ft ² /bird* Free Range (housing type not specified): 2 ft ² /bird |
| Turkeys | 5 lb/ft ² ** | None specified | 11 ft ² /bird | None specified |

*American Humane and Certified Humane mandate outdoor space as minimum 2.5 acres per 1,000 birds in pasture-based poultry systems, which is roughly 109 ft² per bird. According to personal communication with Certified Humane, this acreage could at most be broken into fourths and rotate the birds between the four sections. This would provide for an allowed minimum space per bird of roughly 27 ft² per bird.

**Certified Humane provides a range of average weights for broiler, hen, and tom turkeys of 15-37.5 pounds. Using this range, the proposed 5 lb/ft² for turkeys would equate to roughly a range of 3-7.5 ft² per bird depending on the birds raised.⁷²

Table 4, above, clearly depicts how the proposed outdoor space requirements for broilers are deficient compared to two of the three private welfare labels.⁷³ Considering that an intention of updating the rule is to prevent organic producers from needing additional certifications to convey high welfare provisions to their customers, the organic standards should exceed private welfare standards wherever possible. Less than 1 ft² per bird is less

⁷² Humane Farm Animal Care (2014). *Animal Care Standards: Turkeys*, August.

⁷³ American Humane's requirement of 7 lbs per ft² amounts to roughly 0.64 ft² per bird using AMS' conversion formula based off the mature weight of the ISA Brown strain of 4.5 pounds. American Humane Certified (2013). *Animal Welfare Standards for Turkeys*, May 22.

than half the outdoor space required by Animal Welfare Approved of 2 ft² per bird. CFS strongly urges NOP to require organic producers to at least meet, if not exceed, the space required by the strongest private welfare labels. Therefore, the final rule should require a minimum space equivalent to 2 ft² per bird, equivalent to 2.8 lbs of bird per ft² at maturity based on mature weight of broiler chickens of 5.6 lbs.

There is wide variation in the types of poultry housing utilized by layer operations in the U.S., and the outdoor space requirements for layers must reflect this diversity. As it did in the proposed rule for indoor space requirements, NOP should establish distinct minimum outdoor space requirements for different types of housing. For all stationary housing systems, 2 ft² of outdoor space per layer is not sufficient to promote the high level of welfare required of organic. Instead, a minimum requirement should be equivalent to 5 ft² per bird, equivalent to 1 lb of bird per ft² at maturity based on mature weight of laying hens of 5 lbs. The next section of our comments discusses pasture-based systems in great detail.

The final rule should outline separate standards for organic pastured poultry systems

Pasture-based housing systems for poultry are unique in design and the provision of welfare. For this reason, they are not adequately covered by standards governing “outdoor” or “indoor” space requirements, and require separate standards be developed for these production systems. CFS supports the request made in written comments submitted by the National Organic Coalition for NOP to establish a separate section, to be §205.241(c)(9), outlining the requirements of pasture-based poultry operators.

The American Pastured Poultry Producers Association identifies two main practices for pasturing poultry. Daily move systems (also called pasture pen systems) consist of a movable, well-ventilated shelter without a floor, such that direct access to the pasture is provided, in which the birds are confined at all times to within this structure. Currently, these systems are not adequately covered by the proposed rule, as the proposed definition of “outdoors” or “pasture housing.”⁷⁴ These systems are difficult to fit within the current rule, as birds must have “year round access to the outdoors,”⁷⁵ but “Space that has a solid roof overhead and is attached to the structure providing indoor space does not meet the definition of outdoor access.”⁷⁶ As such, these structures within which birds are confined but on pasture would have to be defined as *either* indoor or outdoor space, and could not constitute both. This is problematic, particularly for establishing minimum space requirements in such systems. NOP must determine separate standards for daily move

⁷⁴ 81 Fed. Reg. 71, *supra* note 3, at 21960.

⁷⁵ *Ibid.*, at 21967.

⁷⁶ *Ibid.*, at 21967.

pasture systems, also referred to as pasture pen systems, based on current, scientific data regarding welfare, stress, flock size, and adequate stocking rates to provide for the health and natural behavior of the birds.⁷⁷

Day range pasture systems (also called movable shelter systems), also consist of moveable structures, which may or may not have flooring, but birds are provided access to space outside of the structure created by portable fencing. There is a clear delineation between the outdoor and indoor space provided.

Organic poultry producers that raise birds on pasture should represent the gold standard of pastured poultry production. As such, it is important to look to existing welfare standards as benchmarks for organic to meet and ideally, exceed. Certified Humane's definition of pasture raised poultry requires that, whether the housing provided is fixed or mobile, the birds have access to the pasture space, which is more than 50 percent vegetative cover, 12 months a year and they are only kept indoors at night as protection from predators (this definition would not include daily move/pasture pen system but would refer to dry range/movable shelter systems).⁷⁸ Both American Humane Certified and Certified Humane require that, for layers on pasture, 2.5 acres be provided per 1,000 birds.⁷⁹ Producers are allowed to divide this pasture area into at most quarters and rotate the flock among the four segments. This amounts to a minimum of 27.25 ft² per bird. For Certified Humane, these same space allowances are required of broiler chickens when they are raised on pasture.⁸⁰

NOP should require that organic producers raising layer or broiler chickens on pasture provide an equivalent amount of space per bird, 27.25 ft², equivalent to roughly 0.18-0.21 lbs of bird per ft² at maturity. In systems that do not fit the criteria for pastured organic, the space requirements would be as described above, a minimum of 2 ft² per broiler (2.8 lbs/ft²) and 5 ft² per laying hen (1 lb/ft²).

It is critical that pastured poultry continue to play a role in the broad spectrum of organic poultry production systems. While there are a variety of strategies and systems utilized by producers raising chickens on pasture in the U.S., NOP should, to the extent possible, promulgate standards that recognize this diversity in operations. It is imperative, however, that the welfare standards for certified organic pastured poultry operations at least meet those of existing domestic welfare labels.

⁷⁷ See, e.g., A.W. Bassler (2005). *Organic Broilers in Floorless Pens on Pasture*. Doctoral Thesis. Uppsala, Sweden: Swedish University of Agricultural Sciences Department of Animal Nutrition and Management.

⁷⁸ HFAC, 2014, Egg Laying Hens, *supra* note 9.

⁷⁹ *Ibid.*; Amer. Humane Cert., 2016, Laying Hens – Free Range & Pasture, *supra* note 9.

⁸⁰ HFAC, 2014, Chickens, *supra* note 9.

The lengths allowed for confining broilers and pullets due to the stage of life are contrary to consumer expectations of organic

Allowing producers to deny broiler chickens access to the outside for the first 4 weeks of life means that broilers may spend nearly 60 percent of their roughly 7-week lives with complete confinement indoors. This is in direct contradiction to the requirement at §205.241(c)(1) that “Producers must provide access to the outdoors at an early age to encourage (train) birds to go outdoors.”⁸¹ Providing access only in the latter half of a bird’s life can hardly be considered “at an early age.” Additionally, as the proposed language acknowledges, birds must be conditioned to the outdoors in order to meaningfully use the space. Confining birds indoors for 4 weeks will effectively discourage birds from utilizing the outdoor area for the remaining 2-3 weeks of their lives. By allowing producers to deny access to the outdoors for broilers for the first 4 weeks, it is likely that many of the birds will never go outdoors unless coerced or forced.

While generally birds should not be outside before their feathers have fully developed, typically by 4-5 weeks, there are a number of factors that influence the age at which chicks can safely be introduced to the outdoors. Certain breeds, for example, are more likely to develop feathers at earlier ages. In warmer climates and during warmer seasons, in which daytime temperatures are consistently above 65°F, birds as young as 2 weeks old can safely be outside.⁸² The final rule must ensure that producers are required to provide birds with access to the outdoors prior to 4 weeks of age when feathering and weather are suitable.

The allowance of continuous confinement of pullets up to 16 weeks similarly decreases the likelihood that birds will successfully utilize the outdoor space. As such, the stage of life at which pullets must be provided with outdoor access should be reduced to 8 weeks. CFS recommends that the language at §205.241(d)(2) be changed to, “The animal’s stage of life, including until sufficiently feathered, but no longer than the first 4 weeks of life for broilers and other meat type birds and the first 8 weeks of life for pullets.”

Furthermore, the fact that climates, seasons, and poor feathering may prevent birds from safely going outdoors prior to 4 weeks of age reinforces the need for requiring producers to

⁸¹ 81 Fed. Reg. 71, *supra* note 3, at 21970.

⁸² Southern States (no date). “Moving Your Chicks Outside,” Web. Last accessed July 12, 2016, *available at*: <https://www.southernstates.com/articles/moving-chicks-outside.aspx>; My Pet Chicken (no date). “The My Pet Chicken Guide to Chicken Care, Chapter 4: Caring for Baby Chicks,” Web. Last accessed July 12, 2016, *available at*: <http://www.mypetchicken.com/backyard-chickens/chicken-care/chapter-4-caring-for-baby-chicks.aspx?t=1>; J. Rhodes (no date). “Getting Started with Chickens: The Ultimate Guide,” *Abundant Permaculture*, Web. Last accessed July 12, 2016, *available at*: <http://abundantpermaculture.com/getting-started-with-chickens-the-ultimate-guide/>.

use poultry breeds that align with organic principles and expectations. By restricting growth rates and encouraging slower-growing breeds in organic, producers would need to use broilers that are slaughtered well after 7 weeks. As such, producers that do confine broilers until 4 weeks of age due to climate, weather, or feathering conditions that prevent them from safely going outdoors, this confinement period would constitute a much smaller percentage of their total lifespan compared to fast-growing breeds slaughtered at 7 weeks.

Certain vaccinations have a period before which they effectively inoculate birds against pathogens of concern. CFS strongly believes that this waiting period for vaccines to take effect must not be used as justification for confining poultry indoors longer than absolutely necessary. Any vaccine-related temporary confinement must correspond only to the requirements of the specific vaccine. Further, producers must not use the lack of vaccination as a reason to confine poultry when there is an approved vaccine available that could be administered to the flock.

CFS, therefore, recommends the addition of new language, to be §205.241(d)(2)(i) and (ii):

- (i) If temporary confinement of poultry is used to allow vaccinations the time needed to become fully effective before exposing birds to the outdoors, this temporary confinement is limited to the earliest possible timeframe for that specific vaccine, and no longer than 16 weeks.
- (ii) When regionally necessary, nonuse of available vaccines should not be a reason to confine poultry for extended periods of time. The use of approved vaccinations to prevent disease is encouraged as part of a comprehensive Organic Systems Plan.

The final rule must expressly require a minimum period of darkness for poultry

The proposed language at §205.241(b)(3) enables producers to use artificial light to prolong the daylight up to 16 hours. This phrasing is unclear as to whether producers are required to provide a minimum period of darkness for poultry. The explanatory text of the notice states only that, “No artificial light could be used to prolong the day if natural darkness was 8 hours or less.”⁸³ While this appears to be an attempt to prevent producers from keeping birds in continuously lit conditions, it lacks sufficient clarity to effectively prevent this practice. As it stands, the text of the rule allows producers to use artificial light for 16 hours of their choosing, meaning they could use natural light during the 8 hours mid-day, and use artificial lighting overnight. The explanatory language in the notice restricts the use of artificial light only to days in which the natural darkness was longer than 8 hours. However, this restriction needs to be made clear in the text of the final rule itself.

⁸³ 81 Fed. Reg. 71, *supra* note 3, at 21971.

CFS also recommends rephrasing that restriction to an explicit requirement for producers to provide birds with a minimum period of darkness.

The proposed implementation timeline for poultry producers to comply with outdoor space requirements is unnecessarily long

The proposed timeline for full implementation of the rule is unacceptable. The exception for poultry producers from the one year implementation timeline is unnecessarily complicated and provides for too long of a window in which certified organic poultry may continue to be crowded and denied access to the outdoors. This timeframe is in stark contrast to that provided to the organic ruminant industry when the pasture rule was finalized in 2010. Published in the Federal Register February 17, 2010, the notice established that the rule was to become effective June 17, 2010.⁸⁴ Operations that were certified organic at the time of the rule's publication were given only until June 17, 2011, one year from the effective date, to fully comply with the new rule. The total period from publication of the final rule to requiring full compliance by the industry, therefore, was 16 months. Furthermore, operations that were not certified organic at the time of the rule's publication were required to comply with the final rule in order to obtain certification at the effective date, June 17, 2010.

Achieving compliance with the final pasture rule was a significant undertaking for organic ruminant producers, yet they were provided a 16 month window to bring their operations in line with the new rule. The proposed timeframe in the Organic Livestock and Poultry Practices rule would afford the poultry industry nearly 5 times that. This demonstrates an inappropriate preferential treatment within NOP for certain organic producers over others. CFS recommends that the final rule follow the precedent set by implementation of the pasture rule. Full compliance with the rule should be required one year after the date at which the rule goes into effect, which must be no more than one year after publication of the rule.

Transport and Slaughter

CFS supports the positions and recommendations regarding transportation of organic livestock put forward by FOOD Farmers in their written comments. In particular, the proposed rule should be amended to:

⁸⁴ 75 Federal Register 31, 7154, 7195 (Wednesday, February 17, 2010), <https://www.regulations.gov/document?D=AMS-TM-06-0198-4165>.

- Specify the type of transportation covered by the regulation. FOOD Farmers recommends changing §205.242(a) to read “Transport to Buyers, and Slaughter and Auction Facilities.”
- Make the requirements for identifying organic animals during transport under §205.242(a)(1) more feasible for small producers by removing the requirement that organic animals be segregated in separate pens from non-organic animals during transport.
- Add clarifying language at §205.242(a)(2) to specify that animals must be ambulatory in order to be considered fit for transport.
- Allow for the provision of bedding during transport to be dependent on the species, size, and type of flooring.
- Amend §205.242(a)(5) to be a direct reference to the Federal Twenty-Eight Hour Law (49 USC 80502).

In regards to the slaughter provisions for mammalian and avian species, CFS agrees that organic operations must be in compliance with all requirements established by USDA’s Food Safety and Inspection Service (FSIS) and the Humane Slaughter Act (HAS). As such, we support AMS’ proposal in the rule related to slaughter.

National Environmental Policy Act (NEPA)

NOP must comply with NEPA before finalizing this proposed rule. USDA’s NEPA regulations mandate that each USDA agency comply with NEPA and the Council on Environmental Quality’s (CEQ’s) implementing regulations. 7 C.F.R. § 1b.4 excludes certain agencies—including the Agricultural Marketing Service—from NEPA’s requirements to conduct an Environmental Assessment or an Environmental Impact Statement “unless the agency head determines that an action may have a significant environmental effect.” The Organic Livestock and Poultry Practices rule will have a significant environmental effect. Thus, a failure to conduct a NEPA analysis would be arbitrary and capricious, otherwise not in accordance with the law, and without observance of the procedure required by law. 5 U.S.C. 706(2)(A), (D).

The Organic Livestock and Poultry Practices rule will substantially change the way organic animals are raised, including providing much needed access to the outdoors for millions of animals that currently do not have access. This shift in organic livestock rearing may have significant positive or negative impacts on the environment, depending on how the final rules are structured. For example, if the agency promulgates a rule that only requires outdoor access for poultry to be 50 percent bare soil, this could further compact and degrade soil quality, negatively impacting waterways. On the other hand, if NOP adopts the

NOSB recommendation of 50 percent vegetative cover for poultry outdoors, this could have a positive impact on soil health and water quality.

The CEQ regulations define effects as: “those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.” 40 C.F.R. § 1508.8(b). Similarly, 40 C.F.R. § 1508.27(b)(1) states “a significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.” Simply because the balance of this rule may be beneficial to the environment does not diminish agency’s requirement to study the impacts. “Environmental[ly] enhancing agencies and actions are not exempt from NEPA absent a clear and unavoidable *statutory* conflict. The relevant inquiry in each case is whether the proposed action has a significant impact on the quality of the human environment. This question cannot be answered without at least going through the preliminary environmental assessment stage. See [Jones v. Gordon, 792 F.2d 821 \(9th Cir.1986\)](#). It is only through the analysis mandated by NEPA that the true impacts of an agency action can be identified and evaluated.” *Douglas County v. Lujan*, 810 F. Supp. 1470 (D. Or. 1992) at 1482.

Conclusion

The Organic Livestock and Poultry Practices rule is long overdue. There are many areas in the proposed rule that must be strengthened in the final iteration in order to protect the integrity of the organic label, to ensure that organic consumers are buying animal products that meet a consistent standard of welfare, and to adhere to the spirit and letter of the law. NOP must move forward with the final rulemaking in a timely manner, so that animal production practices that are less-than-organic will not be permitted to continue.

Thank you for the opportunity to submit comments.

Respectfully submitted,



Paige M. Tomaselli, Esq.
Senior Attorney

A handwritten signature in blue ink, appearing to read 'Cameron Harsh', written in a cursive style.

Cameron Harsh
Senior Manager, Organic & Animal Policy