

**National Organic Standards Board  
Livestock Committee  
Animal Welfare Discussion Document  
Stocking Density**

**September 9, 2010**

## **Introduction**

Animal welfare is a basic principle of organic production. The Livestock Committee of the NOSB considers that a focus on animal welfare warrants appropriate and effective regulation. Good animal welfare requires that animals be able to perform species specific behaviors and enjoy as natural and normal a life as possible.

From its conception, regulation in organic agriculture was intended to provide conditions that foster the natural behavior of livestock. Since research in organic animal production has increased considerably, it is now possible to obtain science-based evidence for justifying and supporting expanded regulation for improved animal management practices.

With this proposal, which involves several terms defined and added language to **§205.239 Livestock living conditions**, the Livestock Committee intends to move closer to the goal of providing stricter definitions for animal welfare in certified organic operations.

## **Background**

The need for specificity regarding animal welfare has been considered by the Livestock Committee for many years. Consumers have become increasingly concerned about the welfare of farm animals. Organic farmers have led the way in animal welfare, and continuous improvement and clarification of the Standards are a major part of that. Stocking density, outdoor access, pasture, and outcome based standards are important components.

Livestock Committee members wish to provide specifics that will reduce confusion between producers, inspectors and certifiers. Further, the Livestock Committee determined that the imprecise language had created unintended production practices which could allow the welfare of some animals to be compromised.

The following document is a continuation of the fall 2009 NOSB animal welfare recommendation; the intention of this document is to refine, not replace, topics related to animal stocking rates. The National Organic Standards Board is presenting a framework to include the topic of stocking rates in the regulation and to invite additional discussion. In presenting the current proposal for discussion, the Livestock Committee carefully reviewed studies presented on animal welfare, considered existing legislation from other countries, and weighed comment from the organic community. Some of the major documents reviewed were:

American Humane  
Animal Welfare Approved  
Global Animal Partnership  
Humane Farm Animal Care

Department for Environment, Food and  
Rural Affairs (UK)  
Organic Production Systems, General Principles, and  
Management Standards (Canada)

## Relevant Areas in the Rule

Those areas of the Rule which impact animal welfare include **§205.237 Livestock feed**, **§205.238 Livestock health care practice standard** and **§205.239 Livestock living conditions**. However, historical context relating to animal welfare and the intent of the Rule is best found in the testimony provided to the NOSB on November 28, 2007, by Kathleen Merrigan and William Lokeretz, both of Tufts University at that time. Dr. Merrigan reflected upon the time she had spent in helping write the Organic Foods Production Act as staff of the US Senate Committee on Agriculture, Nutrition and Forestry. The introduction to their presentation is reproduced here:

“The United States Congress foresaw the need to elaborate livestock standards in 1990 when it passed the Organic Foods Production Act. The report accompanying the Senate bill included the following statements anticipating additional standards and directing the NOSB to recommend additional standards to the Secretary.

More detailed standards are enumerated for crop production than for livestock production. This reflects the extent of knowledge and consensus on appropriate organic crop production methods and materials. With additional research and as more producers enter into organic livestock production, the Committee expects that USDA, with the assistance of the National Organic Standards Board will elaborate on livestock criteria. (Report, 292)

There are not many organic livestock producers at this time, perhaps as few as one hundred. A major reason is that few producers are willing to invest in raising animals organically since USDA explicitly prohibits meat and poultry from being labeled as organically produced. There is also little consensus on appropriate livestock standards and thus State and private programs vary widely. (Report, 302)

The Board shall recommend livestock standards, in addition to those specified in this bill, to the Secretary. (Report, 303)

These passages do not explicitly discuss health and welfare, but the general consensus of the organic community is that animal health and welfare would be encompassed whenever such standards were developed. Also, records show the central role played by The Humane Society of the United States in advocating for passage of OFPA, and it was widely understood at the time that organic livestock production would eventually include specific standards requiring superior welfare for animals.

Animal health and welfare standards were also anticipated by USDA when it promulgated the National Organic Program Final Rule. The Preamble accompanying the NOP Final Rule describes several animal health and welfare practices, most of which have yet to be fully articulated by the program. According to the Description of Regulations, an organic livestock producer **must**:

- Select species and types of livestock with regard to suitability for site-specific conditions and resistance to prevalent diseases and parasites

- Provide a feed ration including vitamins, minerals, protein, and/or amino acids, energy sources, and, for ruminants, fiber.
- Establish appropriate housing, pasture conditions and sanitation practices to minimize the occurrence and spread of diseases and parasites.
- Maintain animals under conditions which provide for exercise, freedom of movement, and reduction of stress appropriate to the species.
- Conduct all physical alterations to promote the animals' welfare and in a manner that minimizes stress and pain.
- Establish and maintain livestock living conditions which accommodate the health and natural behavior of the livestock.
- Provide access to the outdoors, shade, shelter, exercise areas, fresh air, and direct sunlight suitable to the species, its stage of production, the climate, and the environment.
- Provide shelter designed to allow for the natural maintenance, comfort level, and opportunity to exercise appropriate to the species.

Furthermore, in sections relating to comments, the Preamble describes several issues that the Secretary understood would require elaboration in the short-term, but for which he had insufficient expertise to prescribe. In these cases, a central role for the NOSB is established, with the Board soliciting public comment, building consensus, and providing expert recommendations to USDA on animal health and welfare standards.

- (Confinement) species-specific guidelines would be developed in conjunction with future NOSB recommendations and public comment.
- We will seek additional input from the NOSB and public comment before developing such standards (on a specific length of time that cattle or other species may be confined prior to slaughter).
- We anticipate that additional NOSB recommendations and public comment will be necessary for the development of space requirements.
- The NOP will work with the NOSB to develop additional guidance for managing ruminant production operations.
- We will continue to explore with the NOSB specific conditions under which certain species could be temporarily confined to enhance their well-being.”

## Discussion

The tables below list livestock by species and weight. The indoor bedded space allowance is to be considered a minimum for housed animals. Outdoor runs for cattle are to be considered a minimum during the non-grazing season when weather allows animals to leave the indoor bedded area. Cattle pastured during the non-grazing season may not require an indoor bedded area. Piglets and chicks must be protected from freezing weather, so outdoor runs would not be necessary. Calves, lambs, kids, and other young animals require protection from frostbite.

Basic outcome standards for hygiene, locomotion, body condition, lesions and injury would be expected in addition to the minimum space requirements. No more than 5% of ruminant animals should have an extremely low body condition score, be obviously lame, or have lesions or injuries. No more than 2% of non-ruminant animals should have an extremely low body condition score, be obviously lame, or have lesions or injuries. No animals should have broken tails. There are many welfare groups writing standards with numbers and consumers are demanding animal welfare certification. Ultimately, the Livestock Committee will need to include numbers with the outcome based standards.

The less space provided per animal the more labor intensive it may be to keep them clean and in good health. Bedding keeps animals warm, clean, and dry and also protects animals from developing lesions due to abrasion on rough surfaces. Animals must be managed in a manner that lameness does not become a common and routine occurrence as a result of diet or housing. If routine hoof trimming due to lameness is required adjustments to diet or environment are indicated. Outdoor access allows exercise to enhance muscle tone and relieve boredom.

Bison are not domesticated animals and therefore indoor bedded space would be an added stressor.

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. Poultry mortality lessens when perches are provided because they encourage natural behaviors; strengthen bones via exercise, reduce aggression, and mortalities. Perches also allow for maximum use of vertical space within the house. Two square feet of outdoor space is required because paddocks need to be rotated to minimize parasite load for the birds and to protect the soil.

Outcome based standards require that birds be in good body condition, have good feather cover for stage of life, no more than 2% with impaired gait, poor hygiene, lesions or other injuries. Like ruminants, poultry would not need to be scored unless a problem is obvious.

Mobile poultry units require the same amount of indoor space per bird but allow the house to be moved so birds always have access to fresh vegetation.

#### **§ 205.239 Livestock living conditions. (Mammalian section)**

(c) The producer of an organic livestock operation may provide temporary confinement for an animal for the following reasons. If only one animal requires treatment another animal of the same species should be within visual proximity as a lone animal experiences increased stress. Temporary confinement may last no longer than necessary to safely perform the procedure, or address the condition:

(5)(iii) Ventilation in confined housing must be adequate to prevent buildup of ammonia. Ammonia level testing must be documented and ammonia levels must be at or below 25ppm.

<b>Livestock</b>	<b>Indoor Bedded Space / Animal</b>	<b>Outdoor Runs and Pens</b>
The space allowances listed below are to be considered minimums when animals cannot be provided pasture access. Young may be kept indoors when there is danger of frostbite.		
<b>Bison weight (pounds)</b>	NA	Square feet
Up to 220	NA	70.0
220-440	NA	120.0
440-770	NA	190.0
Over 770	NA	400 .0
<b>Beef cattle weight (pounds)</b>	Square feet	Square feet
Up to 220	15.0	10.0
220-440	25.0	20.0
440-770	40.0	30.0
770-1100	50.0	40.0
over 1100	10.0 sq. ft per 220 pounds	8.0 sq. ft per 220 pounds live weight
<b>Dairy cattle weight (pounds)</b>	Square feet	Square feet
Up to 220	15.0	10.0
220-440	25.0	20.0
440-770	40.0	30.0
770-1100	50.0	40.0
over 1100	10.0 sq. ft per 220 pounds	8.0 sq. ft per 220 pounds live weight
<b>Sheep and goats (pounds)</b>	Square feet	Square feet
Adults up to 230	16.0	10.0
Doe with one kid	22.0	12.0
Kid: up to 75	4.0	2.0
<b>Swine</b>	Square feet	Square feet
Sows and piglets	48.0	40.0
Sows	30.0	30.0
Boars	64.0	85.0
<b>Growing pigs (pounds)</b>	Square feet	Square feet
Up to 22	1.0	0.5
22--44	2.0	1.0
44--110	3.0	1.0
110--154	4.0	2.0
154--220	5.0	2.5
220--265	6.0	3.0

<b>Rabbits</b>	<b>Square feet</b>	<b>Square feet</b>
Adult rabbits	3.0	20.0
Pregnant does	5.0	20.0
Doe and litter	8.0	20.0
Young rabbits 5-12 weeks	1.0	N/A
Reserved for additional species		

**§ 205.239 Livestock living conditions. (Avian section)**

(1)(iv) Outdoor access should be provided at the rate of 2 square feet per bird. This would allow for rotation of paddock, re-growth of any vegetation, and reduced parasite load.

(3) Ventilation must be adequate to prevent buildup of ammonia. Ammonia level testing must be documented and ammonia levels must be at or below 25ppm.

**(h) Space Allowance**

Poultry housing must be sufficiently spacious to allow all birds to move freely, stretch their wings and engage in natural behaviors. Perching areas and nest boxes may not be used in the calculation of floor space. Slatted/grated floors may be considered floor space.

(i) Birds in mobile poultry units are subject to the same minimum space requirement as housed birds.

<b>Poultry</b>	<b>Indoor Bedded Space / Animal</b>	<b>Outdoor Runs and Pens</b>
	Square feet	Square feet
Laying hens	1.5 1.2 / bird with 6 inches perch space / bird	2.0
Pullets	1.0 / bird with 4 inches perch space / bird	2.0
Breeders	1.5 / bird 1.2 / bird with 6 inches perch space / bird	2.0
Broilers	1 sq. ft. / 6 lbs.	1 sq. ft. / 3 lbs.
Turkeys and Geese—breeding, laying, or meat birds (pounds)	1 sq. ft. / 7 lbs.	1 sq. ft. / 7 lbs.
Ducks-meat	1.0	3.0
Ducks-laying hen	2.5	6.0
Ducks—breeder	1.5	6.0

<b>Mobile poultry units</b>	<b>Square feet</b>	<b>Maximum number of birds / acre</b>
Laying hens	1.5 / bird	Laying hens: 800/acre
Broilers	1.0 / bird	Broilers:1000 /acre
Turkeys	7 pounds / square foot	Turkeys:540/acre
Geese	7 pounds / square foot	Geese:540/acre

Reserved for additional species		
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### **(i) Access to Outdoors**

(1) Doors should be spaced uniformly over the length of the poultry house. There must be direct access to outdoor areas. These should be at least 14 inches high and spaced evenly about the building. The total door opening available must be 6 feet per 1,000 hens.

### **Committee Vote**

Motion: Jeff Moyer                      Second: Kevin Engelbert  
Yes: 7                  No: 0                      Abstain: 0              Absent: 1