

**National Organic Standards Board
Livestock Committee
Animal Welfare Discussion Document
Animal Handling, Transport, and Slaughter**

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 related to animal handling, transport and slaughter, the Livestock Committee intends to move closer to the goal of providing stricter parameters 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 handling, transport, and slaughter. The National Organic Standards Board is presenting a framework to include the topic of animal handling, transport, and slaughter in the regulation and to invite additional discussion on the topic. 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)²

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

Handling

Mammalian

It is important to keep animals calm. They are all herd animals and will become agitated if one is separated from the group. When moving a group of animals it is important to understand the flight zone and point of balance. If the handler is too close animals will become upset. If animals are moving and become hesitant, do not rush, touch, or strike them. Once the lead animal decides it is safe to cross a shadow or other object of intimidation the herd will follow.

The point of balance is an animal's shoulder. When handlers are in front of the point of balance animals will not move forward. When handlers are behind the point of balance animals move forward. Groups will often move quietly through a well designed chute with no problems. A light tap on the back behind the shoulder is often all that is required to get an animal to move forward.

Calm animals are the easiest to move. Livestock have different vision and hearing systems than humans which must be considered. Yelling and loud noise is very upsetting to livestock as is any change in flooring that must be crossed. Flapping objects, drafts, hissing air, and water sprayed on the face will cause animals to balk. Once animals become excited it will take 20-30 minutes for them to calm down. Electric prods should not be required or allowed to move animals through a chute or onto a trailer. Once people learn how to properly handle animals and remove objects from the environment that livestock find frightening, the prod becomes unnecessary. Flags, sorting boards, and rattle paddles may be used to encourage animals to move without touching the animal. Light can also be used to encourage animal movement as animals will move toward the light.

Non-slip flooring is a must whether it is grooved or textured concrete, or rubber matting. Walkways must be free of ice. Gates must be in good repair such that animals are not cut or bruised.

Avian

Birds should be caught for loading after they have settled in for the night and before they become active in the morning. Birds should be handled carefully and with respect to prevent injury. Ideally birds should be carried upright or held by both legs if they are inverted.

Rabbit

Rabbits must be handled carefully in order to prevent back injuries. One hand should be placed under the chest and one under the rump.

Transport

Mammalian

Animals that may be at risk for being a down animal should be slaughtered on farm or sent to the nearest local processing plant. At risk animals should not ever be loaded for long distance transport. Bulls and boars may need to be penned separately to prevent injury to other animals.

During temperature extremes measures must be taken to keep animals comfortable. During periods of extreme heat animals should be loaded and hauled during the night. Sand is a

cooling bedding material and prevents slipping. Misters or sprinklers should be used during rest stops if animals are open-mouth panting. Panels can be removed from trailers to improve air movement through the trailer. If animals must be hauled more than ten hours a rest stop with feed and water is necessary. Injuries and mortalities at delivery points must be documented to determine if any changes need to be made at the farm or by the transporter. Healthy organic animals do not have the health and mortality issues during transport that other animals may incur.

Straw bedding should be used in trailers during periods of extreme cold to prevent slipping and maintain warmth. Trailers are closed up, minimizing air movement through the trailer. Mature animals generally tolerate cold weather much better than extreme heat. Calves less than one week old should not be transported long distance.

When an immobile or fatigued animal does arrive at a plant there must be accommodations allowing the animal to rest and recover. Stretchers, sleds, hand carts, or other mechanized equipment may be used to humanely move the animal.

Avian

Birds must have adequate space to lie without being on top of one another during transport. Care must be taken to maintain comfortable environmental conditions for birds during transport.

Rabbit

Long transport times add stress which results in negative effects on meat quality. Rabbits should have enough space in transport to lie down comfortably and without being on top of one another. Care must be taken to maintain comfortable environmental conditions during transport.

Slaughter

Minimum acceptable scores

Mammalian

Stunning

Any of the following procedures renders an animal unconscious which is necessary before slaughter may begin.

1. Captive bolt stun or firearm. Captive bolt stun is safer than a firearm as there is no danger to people or other animals from a free bullet. Captive bolt is used where animals can be easily restrained or with animals unable to stand or walk.

Abattoirs must achieve 95% effective stunning with a single shot.

2. Electric stunning. The animal feels nothing when this procedure is done correctly. There are two types of electric stunning: head only and head to back. With head only the animal must be bled immediately. Head to back stunning stops heart function.

Abattoirs must achieve 99% effective stunning with a single application of the stunner.

3. Gas stunning or other chamber method—Hogs, sheep.
Plants must achieve 100% on a 100 animal audit. A window or an internal video camera must be installed so that the animal's behavior before loss of posture can be viewed. There must be no attempts to escape from the container or struggling before the animal loses posture or the ability to stand. Vigorous movement after the animal falls over (has lost consciousness) should be ignored.
4. Halal and kosher slaughter methods are allowed. Animals must be insensible before hoisting.

Insensibility

It is important for an animal to be insensible as a result of stunning to ensure that the animal does not experience pain or fear. When viewed from a distance, the most important signs to look for in a properly stunned (insensible) animal are:

1. A floppy head
2. Tongue hangs straight out and is limp
3. The back and head hang straight down. There is no arched back righting reflex.

Animals that show all three of the above signs will be insensible and blinking and other eye reflexes will be absent.

The score must be 100% on a 100 animal audit. Animals must be rendered insensible before hoisting to the rail or starting dressing procedure.

Vocalization

Vocalization (squeal or moo) by hogs or cattle in the stun box may indicate something frightening or painful which should be corrected immediately. This measure is used in the stun box or restrainer for cattle and pigs and must not exceed 5%. This includes driving the animals into the stun box or restrainer. This measure is not used for sheep because they tend to communicate vocally on a more constant basis.

Falling

Only 1% or less may fall on a 100 head audit. Falling is defined as any part of the body touching the floor.

Electric prods may not be used.

Small plant scoring

With a sample size of less than 20 animals a single error in stunning, falling, or vocalization is allowed. This data may be aggregated over time to achieve the larger sample. Insensibility before hoisting must be 100%.

Avian

1. Electric stun. The disadvantage for poultry with electric stunning is that they must be shackled and hung upside down before they enter the stunner.
 - 99% of the birds must be rendered insensible by the stunner. Applies to both electric and controlled atmosphere.
 - 99% must be effectively cut by the bleed machine.
 - Live birds must not enter the scalding.
 - Broken and dislocated wings--there may be no more than 3% on a per bird basis fails regardless of bird weight. One percent is excellent for light weight birds.

2. Gas stunning or other chamber method. Plants must achieve 100% on a 100 animal audit. A window or an internal video camera must be installed so that the animal's behavior before loss of posture can be viewed. There must be no attempts to escape from the container, vigorous wing flapping or struggling before the animal loses posture or the ability to stand. Vigorous movement after the animal falls over (has lost consciousness) should be ignored.

Poultry would gain the greatest humane benefit from carbon dioxide or a mixture of nitrogen and argon gases, delivered in an appropriate container at acceptable concentrations. Much research has been conducted to achieve more humane slaughter conditions for poultry. Nitrogen gas mixtures are being successfully used in some instances and should be investigated by plants seeking to upgrade or renovate their slaughter practices.

Rabbit

There are few processing plants in the U.S. for rabbits. Electric stunning is the standard while smaller producers are trained in cervical dislocation.

Committee Vote

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