



# Animal Welfare Institute

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The Animal Welfare Institute (AWI) is pleased to submit the following comments on the *OIE* Terrestrial Animal Health Code draft chapter “Animal Welfare and Beef Cattle Production Systems”.

## I. Background

Since its founding in 1951, AWI works to reduce the sum total of pain and fear inflicted on animals by people. We seek to achieve humane husbandry, handling, transport and slaughter for all animals raised for food. AWI’s Animal Welfare Approved (AWA) certification program has the most rigorous standards for farm animal welfare currently in use by any United States organization. The premise of AWA standards is that animals must be allowed to behave naturally, and the standards allow animals the opportunity to perform natural and instinctive behaviors essential to their health and well-being. Provisions are made to ensure social interaction, comfort, and physical and psychological well-being.

The following proposed language and general comments are consistent with the OIE mandate to “take the lead internationally on animal welfare.”

## II. AWI Comments on “Animal Welfare and Beef Cattle Production Systems”

### Environment

#### Heat stress, Section 2.a.i

Recommended Language: All cattle and calves must have continuous access to natural or artificial shelter such as trees, buildings or sunshades to lower the risk of heat stress.

Justification of Recommended Language: Heat stress is a major threat to animal welfare that has contributed to the deaths of thousands of animals. The most logical way to reduce the main cause of heat stress- direct exposure to solar radiation- is to provide adequate shade for animals. Several studies have shown positive results from providing shade that correlate with higher animal health and welfare (ex. decreased respiration rate, improved feed intake, higher daily gains, higher resting times).<sup>1</sup>

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<sup>1</sup> Rushen, J., A. M. de Passillé, M. A. G. von Keyserlingk, and D.M. Weary. 2008. *The Welfare of Cattle*. Springer, Dordrecht, the Netherlands.

## Management

### Reproductive management, Section 3.b

Recommended Language: When indoor calving is necessary, a clean environment with proper bedding and sufficient space must be provided. Bedding must be provided if calving occurs anywhere else but on non-denuded pasture. All cows and heifers that are close to calving should be monitored on a regular basis (at least once per day in all cases, with increased frequency based on history of dystocia, low parity, inclement weather or poor pasture conditions).

Recommended Language: Bull pens must be positioned to allow the bull sight, smell and sounds of other cattle and general farm activity. Bulls should be attended to at least once daily and have full access to fresh water at all times, a bedded area for resting and adequate space for exercising. Appropriate accommodations for restraining animals safely and an escape route for handlers should also be made.

### Weaning, Section 3.d

Recommended Language: Calves are ideally weaned using a two-step process<sup>2</sup> around 7-8 months of age, unless the health and welfare of the calf or cow would be otherwise compromised. Calves should not be weaned before 3 months of age.

Justification of Recommended Language: Weaning beef calves involves two very stressful occurrences in the life of a young animal; separation from both the calf's dam and its primary source of nutrition. Permitting calves to stay close to their mothers without allowing them to continue nursing is a method of separating these two occurrences in order to reduce the stress that calves experience during the difficult weaning process.<sup>3</sup> Calves weaned at less than 3 months of age are still functionally prerinants, and still rely primarily on milk for their nutrient supplies. Weaning at such an early stage would require intensive management in order to avoid serious health and welfare problems such as respiratory disease, digestive disturbances, scours, and coccidiosis.<sup>4</sup>

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<sup>2</sup> Thompson, M. M., C. R. Dahlen, M. L. Van Emon, R. F. Cooke, T. C. Gilbery, B. W. Neville, and C. S. Schauer. 2011. Effects of calf weaning method on calf stress, hormone concentration, growth performance, and carcass ultrasound characteristics. *West. Sec. Am. Soc. Anim. Sci.* 62:139-144.

<sup>3</sup> Rushen, J., A. M. de Passillé, M. A. G. von Keyserlingk, and D.M. Weary. 2008. *The Welfare of Cattle*. Springer, Dordrecht, the Netherlands.

<sup>4</sup> Parish, J.A., J.D. Rhinehart, and H.T. Boland. 2009. *Early Weaning Beef Calves*. Mississippi State University Extension Service.

Recommended Language: Weaning should not coincide with additional stressors such as transportation, group socialization, or painful husbandry procedures as calves are at risk of increased morbidity under these circumstances.

Justification of Recommended Language: Weaning presents a point in a calf's life that is full of significant stressors (ex. separation from the dam, dietary changes, and changes in the animal's physical and social environment); research suggests that distress can be lessened by staggering these events.<sup>5</sup>

### **Castration, Section 3.e.i**

Recommended Language: Recommended methods of castration include the Burdizzo method, performed from 24 hours to 2 months of age under a local anaesthetic and in combination with analgesics, and the Rubber ring method, from 24 hours to 7 days of age, under a local anesthetic. The use of surgical and chemical castration methods is strongly discouraged unless absolutely necessary due to the age of the animal, in which case analgesia/anaesthesia should be administered accordingly.

Justification of Recommended Language: The application of local anaesthesia prior to castration, in combination with analgesics, significantly reduces the cortisol response when using the Burdizzo method.<sup>6</sup> Furthermore, local anaesthesia significantly reduces the cortisol response, and thus the acute pain and stress, caused by the rubber-ring method as well.<sup>7</sup> By inference, reducing the cortisol response subsequently reduces pain and distress experienced by animals during the castration process.

Recommended Language: Outcome-based measurables that indicate complications: Excessive swelling or edema, infection, poor wound healing, excessive pain behavior (ex. vocalizations, reluctance to move, low feed intake and/or decreased weight gain).

### **Dehorning (including disbudding), Section 3.e.ii**

Recommended Language: The selection and breeding of polled stock is the best means to eliminate both animal pain and production expenses associated with dehorning.

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<sup>5</sup> Rushen, J., A. M. de Passillé, M. A. G. von Keyserlingk, and D.M. Weary. 2008. *The Welfare of Cattle*. Springer, Dordrecht, the Netherlands.

<sup>6</sup> Thuer S, Mellema S, Doherr MG, et al. Effect of local anaesthesia on short- and long-term pain induced by two bloodless castration methods in calves. *Vet J* 2007;173:333-342

<sup>7</sup> Stafford KJ, Mellor DJ, Todd SE, et al. Effects of local anaesthesia or local anaesthesia plus a non-steroidal anti-inflammatory drug on the acute cortisol response of calves to five different methods of castration. *Res Vet Sci* 2002;73:61-70.

Recommended Language: The optimum method of disbudding is the hot-iron (thermocautery) method performed under local anaesthesia, preferably within the first 5 weeks of life, but always before the first 2 months of life. The use of caustic paste as a disbudding method is strongly discouraged. Moreover, the use of dehorning methods in general is strongly discouraged unless absolutely necessary to avoid dangerous interactions with herd mates or handlers, in which case tipping of the horn is much preferred over gouge dehorning (providing that living tissue inside the horn is not being cut).

Justification of Recommended Language: While hot-iron disbudding is quite painful, if performed within the first 5 weeks of life by a trained professional along with the use of local anaesthesia, it is the preferred method of disbudding due to the dangers of alternative methods. Caustic substances present the opportunity for painful bodily damage to occur if chemical agents come into contact with tissues<sup>8</sup>- which can be especially difficult to regulate in extensive beef systems. Surgical dehorning of adult cattle is a more invasive procedure which is associated with increased risks of sinusitis, bleeding, prolonged wound healing, and infection.<sup>9</sup>

Recommended Language: Outcome-based measurables that indicate complications: redness, swelling, discharge, excessive pain behavior (ex. vocalizations, reluctance to move, failure to nurse and/or decreased weight gain).

### **Ovariectomy, Section 3.e.iii**

Recommended Language: The use of analgesia/anaesthesia for spaying of beef cattle is strongly recommended. Performing pregnancy diagnosis before procedures could reduce the risk of complications.<sup>10</sup>

Recommended Language: The optimum technique for spaying cattle is the transvaginal method, performed by a veterinarian under proper aseptic technique and restraint; flank ovariectomy performed without anesthesia is inhumane.<sup>11</sup>

### **Identification, Section 3.e.v**

Recommended Language: Care should be taken to avoid hitting the cartilage ridges or major blood vessels when inserting ear tags. When performing the ear notching technique, no

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<sup>8</sup> Vickers KJ, Niel L, Kiehlbauch LM, et al. Calf response to caustic paste and hot-iron dehorning using sedation with and without local anesthetic. *J Dairy Sci* 2005;88:1545-1459.

<sup>9</sup> AVMA, Reference. Background: Welfare Implications of the Dehorning and Disbudding of Cattle. Dec. 9, 2011.

<sup>10</sup> AVMA, Reference. Background: Welfare Implications of Ovariectomy in Cattle. Dec. 12, 2011.

<sup>11</sup> AVMA, Policy. Ovariectomy in Cattle. Dec. 12, 2011.

more than 10% of the ear must be removed using a clean, sharp implement.<sup>12</sup> Although not the preferred identification method from an animal welfare standpoint, if branding is to be performed then freeze branding is preferred and must be performed with pain relief.

### **Handling and inspection, Section 3.f**

Recommended Language: All cattle must be moved in a calm and consistent manner, where stress from loud noises and rapid movements are minimized. Hot prods or electric shocks are not an acceptable means of moving cattle, nor is the use of a stick or other aversive device for hitting cattle.

### **General Comments**

While the use of outcomes-based measurables to assess the health and welfare of beef cattle is appreciated, their efficacy is greatly reduced if no real parameters are set to assist stakeholders in assessing the health and welfare of their animals (ex. maximum panting score and respiratory rate acceptable when monitoring cattle for heat stress). Especially in regards to painful husbandry procedures, more of an effort must be made to specifically state which practices are/are not recommended from an animal welfare standpoint and under which conditions such procedures are appropriate (ex. age, use of analgesia/anaesthesia, etc.).

If the true purpose of this chapter is to provide guidance for a variety of stakeholders around the world on “Animal Welfare and Beef Cattle Production Systems” then simply listing which outcomes-based measurables and husbandry practices are available does not accomplish that goal. In many areas of the world veterinarians, community animal health workers and producers are looking to the OIE for guidance in ensuring the health and welfare of their animals, and the simple provision of information without actual recommendations on best practices does not provide stakeholders with strong enough guidance.

Thank you for the opportunity to comment on the *OIE* Terrestrial Animal Health Code draft chapter “Animal Welfare and Beef Cattle Production Systems.” With our recommendations, AWI seeks to help strengthen the draft chapters. Please do not hesitate to contact me by phone at 202-446-2147 or email at [Melissa@awionline.org](mailto:Melissa@awionline.org) if you have any questions or require additional information.

Respectfully submitted,



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<sup>12</sup> AVMA, Reference. Backgrounder: Welfare Implications of Hot-Iron Branding and Its Alternatives. Dec. 12, 2011.