The Animal Care Council met on Wednesday, March 25, 2015 from 8:00 a.m. to 11:30 noon during the 2015 NIAA Annual Conference in Indianapolis, Indiana, with approximately 25 people present. Ms. Sherrie Webb and Mr. Jim Fraley served as Co-Chairs.

The Animal Care Council session focused on the recently-released final report of the Coalition for a Sustainable Egg Supply and euthanasia.

Dr. Richard Blatchford, UC Davis
Update on Coalition for Sustainable Egg Supply
The research started due to the growing interest from the public on how food is produced – especially in the area of animal welfare. In California, they adopted Proposition 2, which mandates more space for laying hens. There was a lack of egg studies in North American studies that evaluated alternative hen housing systems. The Coalition for Sustainable Egg Supply is a group of AVMA, humane associations, processors, retailers, industry, and academia. Evaluated three types of hen housing: conventional, enriched, and cage-free aviary. They also looked at five sustainability factors: environmental impact, food safety, worker safety, animal health and well-being, and food affordability. Two flock cycles were conducted. Conventional housing consisted of six birds per cage; enriched were 60 hens per cage with curtained nesting areas and scratch pad; and aviary housing allowed for multiple levels with perches with 852 birds per section. Mortality was highest in the aviary system, lowest in the conventional system. Hypocalcemia and peritonitis were the leading causes of death, pecking and cannibalism were only seen as the causes of death in the aviary system. Keel (breast bone) fractures and deviations were much higher in the aviary systems. Animal welfare examinations noted that pullets coming into the aviary system already had keel bone deviations because they were raised in an aviary system as hatchlings. Feather cleanliness was noted to be the dirtiest in the aviary system. The only cases of foot lesions were in the aviary system. Evaluation of the bones showed that the birds raised in an aviary system did have better load-bearing capacity. Limited exercise probably led to poorer bone quality in the conventional system. The scratch pads got very dirty, and some of the hens were laying eggs in the manure. The nesting pads used were kept very clean in both the enriched and aviary systems. There is no evidence of chronic or acute stress in any of the housing systems. The aviary system had much higher costs associated with it – primary due to labor – there was more time spent looking for dead hens and collecting eggs that were laid on scratch pads. The conventional was the most economically efficient. There was no differences in egg quality across all of the systems.
This was a true multi-stakeholder process. The research was to identify the trade-offs and risk factors involved if a producer wanted to consider a housing system. It was not meant to find a “best” or “worst” system. The website, http://www2.sustainableeggcoaltion.org/, uses infographics to explain the research to lay people.

**Importance of Timely Euthanasia and the Impacts on Caretakers**

*Dr. Jan Shearer, Iowa State University*

The *Veterinarian’s Oath* states that they will “prevent and relieve animal suffering.” Euthanasia is part of a veterinarian’s duty. It could be harvesting animals for human consumption or managing overpopulation of dogs and cats. Of the seven million dogs and cats entering shelters, 60% of dogs and 70% of the cats will be euthanized. The paradox of caring and killing is very real. It is experienced by 4-H and FFA students, shelter workers, lab animal care takers. It is marked by depression, grief, etc. Workers on the farm are oftentimes thrust into the role from caretaker to the role of responsibility to euthanize the animal. If the animal is down or debilitated, the act of euthanasia is “easier”, but sometimes it is difficult for other reasons – taking it to market, euthanasia on runt pigs, or killing a cow that has been on the farm for many years. A very high percentage of the pet-owning public (as high as 88%) view their pet as a member of the family. These folks are now paying for hospice care, radiation, chemotherapy. A veterinarian is placed in the position of counseling clients about their pet’s end of life circumstances. A veterinarian has a three-fold higher rate of suicide when compared to the average population. There is a syndrome called “perpetration-induced traumatic stress.” This happens during mass-depopulation events. Directly or indirectly every living thing must kill to survive. According to Dr. Temple Grandin, there are three coping mechanisms for those who are on the killing floor: some use an unemotional, mechanical approach; a few are sadists; others approach their job as a sacred, respectful ritual. On the farm it is important that the job of euthanasia is spread around. These people need to be well-trained for these tasks, and have the proper equipment to conduct this effort. Managers need to be aware of warning signs and that it is a high priority that it be done correctly. Using the proper firearm is important. A .22 caliber rifle is not sufficient for adult cattle. Whichever method is used, the animal needs to be rendered unconscious immediately, and then you must confirm death through cardiac arrest. The heart will beat for at least seven to eight minutes following a captive bolt or gun shot. The lack of breathing (oxygen deprivation) will eventually stop the heart.

**AVMA’s Euthanasia Guidelines**

*Dr. Gail Golab, AVMA*

Euthanasia is probably the number-one reason members call the AVMA. There are three areas of animal use where we get into trouble: euthanasia, restraint of animals, and modification of animals (castration, tail-docking, ear-notching, ear-trimming without anesthesia.) The recent update to the AVMA Guidelines for the Euthanasia of Animals (2013), expanded its species guidelines. AVMA’s website has resources on “humane endings” for a variety of species. It also has proceedings from their euthanasia symposium. Their goal is to assist DVMs with professional judgment, set euthanasia criteria, and look at euthanasia as a process to minimize pain and distress for those animals. There are animal and human considerations while performing euthanasia. There are emotional attachments, compassion, personnel safety, as well as public health concerns. It is important that the veterinarian confirms death properly. There are four classifications: acceptable, acceptable with conditions, adjunctive, and unacceptable. Don’t use the phrase “humane euthanasia.” By definition euthanasia is humane and should simply be stated as “euthanasia.” The guidelines are outlined for each species. If a veterinarian uses a barbiturate to euthanize an animal, it is buried on the farm, and wildlife dig up the body and are impacted, the veterinarian can be held responsible. Using blunt-force trauma to euthanize a piglet is effective, but very difficult to “sell” to the public. It also takes an emotional toll on the workers that are delivering this method of euthanasia.
On-farm Euthanasia Panel

**Beef- Jan Shearer, DVM, Iowa State University**

Beef animals are less comfortable around human contact. Bringing animals into chutes does create its own problems.

**Dairy- Karen Jordan, DVM, Dairy Farmers of America**

The NAHMS survey conducted in 2014 will be released in June 2015. Karen is able to share a descriptive, preliminary report. Only 17% of the dairies in the US have a written plan on euthanasia guidelines. Most (91.7%) use gunshot, and are done by the owner. Up to 17% of the euthanasia is done by the renderer.

**Chicken- Joe Baker, DVM, Washington State Veterinarian**

Mass destruction applies to euthanasia of large numbers of animals, usually on an emergency basis. Cervical dislocation is only practical for small numbers of birds, and for younger animals. This is not recommended for turkeys. CO₂ gas is relatively inexpensive, and does not require special equipment. Using a double-bagged garbage container works very well. Valves and lines will freeze up if you don’t use a regulator. Foaming agents require specialized equipment and chemicals and it requires a certain level of expertise. Loss of consciousness and death is comparable to CO₂ gas. It works well for ground-raised birds, but if the birds can fly (duck or pheasants) it will be difficult for you to handle them. Also of importance, ducks can hold their breath, and it will take a longer time to smother them with foam.

**Swine- Ms. Sherrie Webb, National Pork Board**

There is a significant variety of types of pigs, types of farms, and sizes of farms. The role of the veterinarian is important, and not all people are suited for performing euthanasia. There are ethnic and gender differences in the suitability of conducting euthanasia. Anesthetic overdose is not a realistic alternative, and electrical stunning is also not a safe or effective means. Captive bolts are expensive, so many resort to gun shots. Manual blunt-force trauma is very effective, but some workers are reluctant to use this method. NPPC has a DVD on euthanasia that they have found to very helpful. Euthanasia is not failure – it may be what is best for the animal.

**Small Ruminants- Jim Logan, DVM, Wyoming Livestock Board**

One of the challenges associated with euthanasia of sheep, is the remote locations associated with many sheep flocks. Sometimes, a veterinarian is simply not available. Barbiturates work well, but contaminate the carcass and are expensive. In most cases, a well-placed gunshot is the most practical.

**Equine- Dr. Tom Lenz, Zoetis Animal Health**

Some clients look at the animals as livestock, but the vast majority look at them as a companion animal. There are many reasons for euthanasia: no longer wanted, can’t afford it, injury, hopeless prognosis, hazard to itself or others, or it’s incorrigible. You have to give a barbiturate quickly and in the vein, otherwise you have a train wreck. You will have to prepare the owner that it may lash out, stumble, or gasp. The carcass will be an environmental hazard in that wildlife or dogs could eat the carcass and be impacted. The vet should use an IV to ensure it’s in the vein. The gunshot is the most practical, but very few horse owners will opt for this choice. Sherriff deputies are the worst at knowing how to euthanize an animal. 95% of the vets use barbiturates for euthanasia. Only 32% of the vets are willing to euthanize a healthy horse. If a gunshot is used, it needs to be through the brain and along the spinal cord. This is tough to do on a tall horse. When you give a horse sodium pentobarbital, for a few seconds it has a “look” in its eye that says, “Something’s wrong here.” The veterinarians on the panel all noted this, and felt that an instantaneous gunshot is the best method for euthanizing horses.
Old Business: None.

New Business: There was no New Business to report. One resolution, ACC4 Equine Transportation and Processing, will be retired due to no action taken by the committee.

Consensus Points for NIAA White Paper Development:
1) The Coalition for a Sustainable Egg Supply’s research identified the trade-offs and risk factors involved if a producer wanted to consider an egg-layer housing system.
2) Euthanasia methods are different for each species, and it is a very emotional topic.
3) A well-placed gunshot is still the most economical, and humane method of euthanasia for most adult species of livestock.

General Discussion: The panel was very well received and generated a considerable amount of discussion. One overriding theme that was borne out today is that performing euthanasia on an animal is a very difficult and emotional task to perform. It needs to be done quickly, safely, and humanely to ensure the animal does not suffer.

Animal Care Council Session adjourned at Noon.