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Abstract

Consumers of dairy products look to veterinarians and producers to ensure humane care is provided to farm animals. Animal welfare is a consensus of opinions, and what is considered acceptable welfare, or husbandry, changes over time. Animal welfare can be assessed or described in three different approaches: animal bodies (physiologic, production, disease), animal natures (comparison to similar animals in nature) and animal minds (feelings, suffering). All three approaches should be considered when judging animal welfare. Audits are structured events so they can be repeatable and defensible. Auditors should have education in the given species and experience in the industry to evaluate different housing and management systems. The goal of an auditor is not to pass or fail the farm, but to determine if the agreed-on processes are being carried out. The auditor is verifying the welfare of the animals to consumers and retailers and is neutral to the farm. Training for auditors covers the welfare issues of the species, some industry standards, and how to perform an audit and comply with that company's requirements. The Professional Animal Auditor Certification Organization (PAACO) will certify the training of individual auditors and also the actual audit forms or processes of companies doing audits. PAACO will, in the future, provide training for people wanting to be certified to audit each species of farm animal, but who have not received training elsewhere.

Résumé

Les consommateurs de produits laitiers attendent des vétérinaires et des éleveurs que les animaux de ferme soient bien traités. La notion de bien-être animal résulte d'un consensus d'opinions et la définition d'un bien-être ou d'un élevage acceptable évolue avec le temps. On peut évaluer ou décrire le bien-être animal suivant trois aspects : le corps de l'animal (physiologie, production, maladie), la nature de l'animal (comparaison avec des animaux semblables dans la nature) et l'aspect émotionnel de l'animal (sentiments, souffrance). Il faut tenir compte de ces trois aspects quand on juge le bien-être animal. Les audits sont des pratiques structurées de manière à pouvoir être répétées et défendables. Pour bien évaluer les divers systèmes de logement et de régie des animaux, les vérificateurs qui

effectuent les audits doivent avoir une formation et une expérience adéquates de l'espèce animale et de l'industrie en question. L'objectif d'un vérificateur n'est pas de faire passer ou échouer une ferme, mais de déterminer si les procédés appropriés sont effectivement respectés. Le vérificateur doit évaluer le respect du bien-être animal au nom du consommateur et du détaillant, en gardant sa neutralité vis-à-vis de la ferme. La formation des vérificateurs couvre les questions du bien-être animal selon les différentes espèces, certaines normes de l'industrie, ainsi que la façon d'effectuer l'audit et de se conformer aux exigences de l'entreprise. Aux États-Unis, la Professional Animal Auditor Certification Organization (PAACO) certifie la formation des vérificateurs ainsi que la forme ou le procédé utilisés par les agences qui effectuent les audits. À l'avenir, la PAACO assurera la formation des personnes intéressées à devenir vérificateur certifié pour chacune des espèces d'animaux de ferme et qui n'ont pas été formées ailleurs.

What is Meant by "Dairy Animal Welfare"?

Farm animal welfare includes the care and housing of animals so that they are truly comfortable, content and happy. Livestock production has been, and will continue to be important in society because of the high quality protein provided by animals and the economic contribution of production, distribution and sales of livestock products. Consumers of dairy products look to veterinarians and producers to ensure humane care is provided to farm animals. Animal welfare is a consensus of opinions and what is considered acceptable welfare, or husbandry, changes over time. Animal welfare can be assessed or described in three different approaches. Farm animal welfare has traditionally been assessed by people in the industry using production or physiologic parameters. We measure cortisol to see if the animals have a stress response or we say cows have high milk production, and we conclude that they must therefore be well-cared for. These types of parameters may reflect the attitudes and comfort of the animals, but they must be used cautiously because stress responses can be short-term, or milk production high because the dairy has a high cull rate or mortality rate and the cattle remaining are above average. Another way to assess welfare is to compare farmed, or kept, animals to similar animals in nature. This approach might contrast cows in confinement to those on pasture, for example. If the differences appear large, the inference is that welfare may be compromised. Veal regulations in the EU utilize this method - calves are born with a simple stomach to digest milk and develop the rumen as they eat dry feed or grass, so humanely raised veal may be required to eat dry feed to induce rumen development. This approach also may or may not reflect or

assure real animal welfare. The third way attempts to get at the real issue: what does the animal think, or want? Is the animal happy in its environment or is it distressed? This method at first appears unreasonable to many livestock owners, but reflect for a moment: do you think cows prefer clean, dry bedding out of the rain or do you think they prefer to lie down in the rain in mud and manure? The dairy industry, in fact, embraces this method when marketing milk and cheese. We sell milk by advertising “happy cows” on pasture, singing and talking to each other. An important point here is that animal welfare can and should be judged in several different ways. There is a desire to use science to determine the appropriate methods to assure good husbandry, but welfare is not a totally scientific issue. It is a consensus of opinion, arrived at by considering the available science, people’s perceptions and society’s needs. Because society needs large volumes of food, especially the high-quality protein and fats in milk and meat, we are willing to accept that cattle may be managed in confinement rather than on pasture. We have the responsibility to truly provide the animals with comfortable environments and honestly provide them with appropriate nutrition and care. The welfare of farmed animals in the US is a consensus of science, opinion, perceptions and tradition. Temple Grandin has said that farms should manage their animals so that the average person can walk through the farm and be comfortable with everything they see. She’s right, if we do things to cattle that we have to hide from our consumers, we probably should reconsider those practices.

What is a Dairy Animal Welfare Audit?

An audit is an objective, repeatable verification that the husbandry of animals on a farm conforms to predetermined standards. The audit has to be conducted referenced to a written document, an audit form. An on-farm auditor will assess written protocol and training programs, then may interview and watch workers to verify the training did occur and the protocols are followed. Housing and sanitation will be assessed by observation and, finally, the animals will be observed to determine that the outcomes of clean, healthy cattle are actually occurring. Audits are third-party verifications that certain things in a process are really being done. Audits assure the purchasers of dairy products (consumers, retailers and processors) that the animals on a farm are being taken care of properly.

Why Should Dairies Consider Having an Audit Conducted?

Dairies have been requesting audits for several reasons. Some owners want to be sure they are caring for their animals as well as they can and they want to have that verified and be recognized for their efforts; in other words, pride. Others want to market milk and meat as

having been cared for under acceptable standards; niche marketing now, but becoming more common in the marketplace. Consumers have been taking more interest in the housing and welfare of farmed animals, and retailers of our products want to assure their customers that the animals are truly well cared for. Another reason to have an audit or an assessment that may not be readily apparent, but is very important, is that the dairy gets a report on essentially all management areas. This can be extremely valuable to the dairy – a review by a third party on how well-trained the workers are, how they are doing their tasks regarding handling the animals, how comfortable and clean the animals are and how they are being treated. All dairy owners want the cattle to be taken care of correctly and well; an audit tells the owner whether their management goals and desires are being carried out.

What are Some Issues in the Dairy Industry Concerning Animal Welfare?

For the most part, dairy cows and calves are very well cared for. There are some issues that need attention on some dairies, and some things that have become areas of concern for consumers and retailers. Many welfare issues on farms are regional due to environment, housing, nutrition and husbandry practices common to those areas. The dairy industry has some general welfare issues and several specific issues. The general issues include inadequate housing (dry lots that are deep in mud in rain periods, freestall housing that results in lame cows), nutrition that causes rumen acidosis and lameness and pain management. Some of the more specific issues include colostrum feeding, downer cattle, euthanasia, dehorning and castration, lameness, calf housing and tail docking. Colostrum feeding of calves is definitely an area of concern. Calves have an absolute requirement for colostrum after birth, but many calves simply do not get colostrum. About two-thirds of bull calves arriving at calf ranches in the Southwest have not had any colostrum, and the calf ranches have to use increased antibiotics and accept increased mortality rates because of it. Down cows are a problem throughout the dairy industry. The American Veterinary Medical Association (AVMA) and the American Association of Bovine Practitioners (AABP) are both opposed to sending down cows to slaughter because of welfare and public health concerns. Cows will go down on dairies; prevention is the key and a sound plan for caring for those that go down is imperative. If the down cow is to be treated, it must be carefully moved to a sheltered area and provided water and feed. If the animal is suffering it must be humanely euthanized. Euthanasia is an issue the industry must deal with. Cows and calves that are suffering are too often left to die. If the decision has been made to stop treating the animal with the expectation that it will die, it must be humanely euthanized at that time. Lameness can be an issue in some regions and on some dairies. Lame cows

are definitely in pain, and dairies with many lame cows are not caring for their animals well. Calf housing can become a large issue for the dairy industry. Consumers want to be assured that the young animals are raised humanely. The traditional veal housing where calves are tethered without being able to turn around has been very unpopular with consumers. The veal industry sells one-sixth the product they did 50 years ago because people do not believe the calves are raised humanely. As long as dairy calves are housed in clean and dry environments and can comfortably turn around, the system can be defended. Pain management in cattle is an issue dairy owners and veterinarians need to deal with. There are painful procedures that need to be done to cattle such as dehorning and castration. Horned cattle and intact bulls can be dangerous to people and other cattle, so dehorning and castration are warranted and necessary. It is our responsibility to perform these painful procedures in ways that minimize pain, both acute (immediate) and longterm. Calves disbudded or castrated in the first few weeks of life showed less distress behavior (vocalizing, feet stamping) and have lower stress (cortisol) response than calves castrated after three or four months of age. Calves dehorned or castrated after three or four months should get local anesthetics. Administration of a nonsteroidal anti-inflammatory drug, such as flunixin, has been shown to manage the pain after the local anesthetic has worn off.

Are there Different Companies that Offer Dairy Animal Welfare Audits?

There are, to my knowledge, three companies actively providing welfare audits for the dairy industry in the US. These are the Dairy and Beef Quality Assurance Center's DQA Five-Star Quality Assurance Program (<http://www.dqacenter.org/>), FACTA (Farm Animal Care Training and Auditing); and Validus. Detailed information on each program can be found at the company websites. Farmed animal welfare audit programs started in the US, with People for the Ethical Treatment of Animals (PETA) convincing McDonald's and Burger King to adopt housing requirements for layer hens. The fast food restaurants and some supermarket chains then requested their trade organizations, namely the National Council of Chain Restaurants (NCCR) and the Food Marketing Institute (FMI), to develop animal care and welfare guidelines for each farmed species in the US and to make true audited programs for each farmed species. NCCR and FMI, together, established a board of experts to review and endorse programs and audit forms. The intent was to have national, uniform welfare audit programs by species throughout the country. Members of NCCR and FMI (fast food restaurants and supermarkets) would have to buy livestock products from farms that passed welfare audits. A single firm, SES, Inc, was designated to provide, for profit, all

onfarm welfare audits in the NCCR–FMI program. Dairy was the first industry to have an audited welfare program developed through this system because the program and booklet, “Caring for Dairy Animals Technical Reference Guide and On–Farm Self–Evaluation Guide”, produced by Keith Carlson at the Dairy and Beef Quality Assurance Center, existed and was used as the template. In fact, most dairy welfare guidelines in the US stem from Mr. Carlson’s booklet. The Dairy and Beef Quality Assurance Center has been actively providing both assessments and audits through their Five Star Quality Assurance program. FACTA has provided primarily audits to the swine industry, but also has been active in auditing the veal industry. The Validus program was began initially to provide dairy welfare assessments prior to a dairy asking for the SES audit. However, the SES program, intended to begin in 2002, did not develop to the point of providing on–farm audits. Some dairies requested audits after the Validus assessments and Validus (formerly Environmental Management Solutions) began providing audits along with their welfare assessment program.

How is a Dairy Audit Conducted?

Audits are structured events so they can be repeatable and defensible. The audit normally begins before the farm visit. Basic inventory, housing and management information is provided to the auditor via a questionnaire, so the audit can be planned and performed efficiently and the whole dairy reviewed without missing animals, facilities or events. Biosecurity needs are determined before going to the farm. The audit itself starts with an entrance interview where the auditor explains the audit process. This should explain in detail what will be reviewed and why. The auditor will ask questions regarding the numbers of animals and will request documentation of protocols, training programs, euthanasia programs and milking and feeding schedules. The dairy owner or manager can ask questions about the audit, and should have a clear understanding of the process before the entrance interview is completed. The auditor will then go out to the dairy and visually inspect the animals and facilities, watch workers and ask the workers questions, if appropriate. The dairy audit may have requirements for specific types of animals to be observed. The farm portion of the audit ends with an exit interview where the auditor reviews the observations and can ask questions of the management about things seen during the audit. The owner or manager should be satisfied that the audit was clear and performed professionally. The audit is complete when the final report is filed with the audit company and then sent to the farm. The auditor will have been trained to pursue questioning, observations or documentation until he or she is truly satisfied that

procedures or processes are being carried out or not.

What are Some Examples of Areas Evaluated in a Dairy Audit, and How Does the Auditor Evaluate Them?

An on-farm welfare audit is conducted using an established audit form so that the observations are complete and objective. The auditor should bring his or her education and experience to the audit, but not their personal opinion. The auditor has responsibility to observe, ask and investigate each of the areas in an audit until he or she is satisfied that the process is or is not actually being done according to the agreed-to process. This is the professional responsibility the auditor accepts, so that all parties can be assured that on the day of the audit the animals were being cared for according to the agreed processes and that these processes are likely to be continuously followed. Some examples of areas evaluated on an audit include the broad category of nutrition. The audit would not focus on the actual ration being fed – that would change over time and be difficult to assess. The audit will determine if animals have sufficient bunk space so they can eat when they want (i.e. freedom from hunger), enough water access so they can drink when they want and that the feeding and water areas are clean and protected from severe weather. The final audit point for nutrition is body condition scoring. If cows are in the industry accepted range of 2.5 to 3.75 for BCS, then the nutrition program is performing well and the cows are well-cared for on this item. If too many cows (proportions or percentages of the groups) are too thin or too fat, then the nutrition program is not being managed well. The audit assesses the space allotments, the sanitation and the outcome variables. The nutrition of calves as well as cows can be assessed this way. Lameness is audited in a similar way. The dairy should have a written program to prevent lameness and also to do something about lame cows when they do occur. There should be training programs so that employees (or family members) understand the importance of preventing and treating lameness, can recognize a lame animal early in the disease, know what to do regarding getting attention to the animal (move it to the trimming area, notify a supervisor) , and the cow has to be treated properly and pain alleviated. The auditor will verify that a system exists that will identify lame cows early and get them taken care of properly so that the animals' welfare is served. Training can be written programs or shadow training. Most smaller farms use shadow training and that can be very acceptable. The auditor has the duty of verifying that whatever system the dairy uses is being done and that it is working. The auditor will review any written programs, will ask questions about shadow training, will observe workers and ask them questions, if necessary, to see that they are trained and are, in fact, performing as trained.

Then animals will be outcome-assessed; in this case, locomotion scores are often used to determine how well the dairy is performing regarding controlling and treating lameness. Another example audit item is footing for the cattle. Slippery walkways are a welfare problem because cows can be injured when they slip or fall in the feed lanes, freestall areas or barn alleys. Audits will usually assess this by watching cows walk and determining the numbers or proportions that slip or fall.

Who Should Become an Animal Welfare Auditor, and Where Does that Individual Obtain the Necessary Training?

Animal welfare auditors should have education in that species and experience in the industry so that the auditor can evaluate different housing and management systems. The auditor should be someone who can communicate well, both orally (interviews and questioning) and in writing (reports). An auditor has to be objective and professional. The goal of an auditor is not to pass or fail the farm, but to determine if the agreed-on processes are being carried out. The auditor is verifying the welfare of the animals to the consumers and the retailers and is neutral to the farm. An assessment is quite different and is interactive with management regarding areas that are being done well and problem areas. An assessment can provide solutions for problem areas to the farm management. Training has been provided by the auditing companies. Training covers the welfare issues of the species, some industry standards, and how to perform an audit and comply with that company's requirements. There is a relatively new organization, the Professional Animal Auditor Certification Organization (PAACO, <http://www.animalauditor.org/paaco/>) that is intended to certify the training of individual auditors so that farm owners and retailers have some assurance that the people doing the audits know what they are doing. PAACO will also certify the actual audit forms or processes of companies doing audits. Additionally, PAACO will, in the future, provide training for people wanting to be certified to audit each species of farm animal but who have not received training elsewhere. PAACO has begun training people to become slaughter house welfare auditors. Veterinarians are well positioned because of training and experience to provide services to dairy clients to help them prepare for a welfare assessment or audit. Practitioners can provide services to train employees in animal handling, lameness and mastitis control and recognition, euthanasia procedures and emergency situations. Regular herd visits can be times to review the housing, animal handling and care of the cattle. Dairy owners, consumers and veterinarians share the same goals: animals taken care of well, with comfortable lives. Farm animal welfare audits are instruments to assure consumers that we are really doing the things we

can to provide good husbandry.

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