

# Animal Welfare

## Understanding and Addressing Issues Related to the Well-being of Livestock

*R. Pawelek and C. Croney*

The goals of Oregon livestock producers are parallel to those of the American Dream—to enjoy an occupation of raising livestock, provide for their families, be independent, and avoid unwarranted criticism and interference. For Oregon livestock producers to stay in business and remain on the ranch, they must be efficient, responsible producers. This requires proper animal husbandry practices as well as business acumen. Furthermore, producers need to adapt to changing situations and adopt methods that allow for continued improvement of their practices. One way to achieve these goals is to become familiar with issues that are becoming increasingly important to livestock industries and to the consuming public. One of these issues is animal welfare.

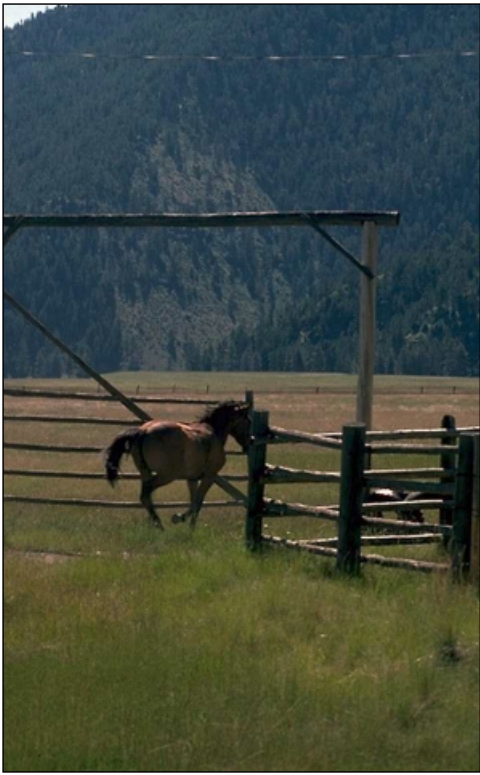


Some individuals may balk at addressing animal welfare because they are unclear about what it entails, they fear having to make large, expensive changes, or they are unaware of the impacts that poor animal welfare can have on their operations. Others may feel that animal welfare concerns are already being addressed adequately. However, most producers can do something to improve animal welfare. Often small, inexpensive changes can do much to improve the well-being of livestock. In many instances, little is required beyond becoming aware of practices that can compromise animal welfare and knowing how to minimize or avoid problems. In short, promoting good animal welfare can be as simple as applying good husbandry practices on a consistent basis.



**OREGON STATE UNIVERSITY**  
**EXTENSION SERVICE**

Robert Pawelek, Extension faculty (livestock), Jefferson County, and Candace Croney, animal scientist, Oregon State University.



## At issue

Concern among consumers about how food animals are treated, cared for, and ultimately converted into meat has increased dramatically in the past decade. Producers are constantly challenged to address these concerns, while still producing affordable, safe animal products. For example, to avoid undue criticism and to promote livestock welfare, beef cattle producers should review and abide by the principles outlined in the Animal Welfare section of the Oregon Beef Quality Assurance guidelines. Ranchers must be prudent in caring for and handling cattle and calves to assure that the animals in their charge are not subjected to inhumane practices or conditions.

A growing body of evidence suggests that well managed and gently handled animals are more productive than anxious animals, or those handled more roughly. It is known that when slaughter cattle are stressed prior to harvest, they

are more likely to produce dark colored and dry beef, and they may shed more pathogens. Likewise, studies have shown that pigs that are handled roughly even a few times are more fearful and less productive than pigs handled gently on a consistent basis. Diligence in attending to animal welfare therefore may not only be ethically gratifying to producers and consumers of livestock but also may generate significant monetary rewards.

In short, animals that receive proper care are more productive. This requires proper feeding, health maintenance, care, and handling.

The line between animal welfare and animal rights has become blurry and vague. Some of the confusion is caused by:

- Lack of knowledge about the meaning of the two terms
- Manipulation and misinformation from various sources
- Conflicts created by consumer demands for humanely reared animals *and* inexpensive food

Animal welfare and animal rights are two separate issues. The animal welfare position allows for animals to be used, provided they are cared for humanely and responsibly, i.e., good animal husbandry practices. Animal rights is a position taken by those who believe that animals have legal and moral rights similar to humans; therefore, no use of animals for human purposes is acceptable.

Welfare issues and questions cannot be resolved by science alone. Scientists and producers are beginning to realize the importance of acknowledging the emotional and ethical aspects of animal welfare issues. Problems often occur when these factors are disregarded. In addition to improving the well-being of livestock, acknowledging and attempting to address these issues may foster positive perceptions of livestock production by the consuming public and even provide a niche market for your animals.

## General welfare for all livestock

Criteria that can be used as indicators of animal welfare include:

- Survival rates (mortality, morbidity)
- Reproductive rates (number of offspring produced)
- Productivity (milk yield, growth rate)
- Health (immune function, nutritional and physical condition)
- Behavior (normal vs. abnormal)
- Physiological measures (heart rates, respiration rates, cortisol levels)

A decrease in productivity, such as a drop in milk yield, can indicate a welfare problem. Likewise, decreases in reproductive rates or increases in mortality or morbidity should be clear signs that the well-being of livestock is declining. Illness and injury can indicate poor welfare. Other symptoms of problems are changes in behavior; animals that are lethargic, unwilling to move, or that have become aggressive are unlikely to be doing well.

Animal welfare is improved when livestock managers adhere to the following:

- Caring and responsible planning and management
- Skilled, knowledgeable, and conscientious stockmanship
- Access to wholesome and nutritious feed and water
- Appropriate equipment, facilities, and environmental design
- Appropriate veterinary care
- Humane handling and transport
- Humane slaughter

Animal welfare varies along a spectrum, ranging from poor to very good. Thus, an animal's level of welfare can change throughout its life. Animals at the poor end of the spectrum typically have problems coping with some aspect of their environment. If left unattended, they are likely to become sick, and possibly die. To avoid such situations, producers should strive to maintain good animal welfare. To do so, producers must first ensure that they are meeting the basic needs of their livestock, including adequate food, water, and shelter.

Livestock should be fed a wholesome diet that is appropriate to their age, species, and purpose. They should be fed in sufficient quantity to maintain good health and to satisfy their nutritional needs.

Livestock should have access to nutritious food and clean water each day. Pastures should be clean and free of





poisonous weeds. Hay should be clean, well colored, free of weeds, and free of dust or mold. Proper feeding means attention to details.

No feedstuffs containing ruminant-derived protein sources should be fed to livestock, with the exception of milk and milk products. Antibiotics should be used on individual livestock only to treat disease. Seek advice from your local Extension educator or feed professional on your feeding program.

Once basic needs have been met, the welfare of livestock can be improved by objectively scrutinizing their environments and making appropriate adjustments. For instance, sharp edges on pens or equipment should be covered or filed to avoid injury to animals. All aspects of the environment, including equipment and facilities, should be designed to meet the needs of the species being raised. Choosing solid-sided chutes instead of those with open sides can minimize distractions and distress to cattle being loaded or processed. Using correctly angled loading ramps can ensure that hogs are loaded efficiently and without undue distress. Relatively small considerations such as these will improve efficiency of husbandry and management as well as promote good animal welfare.

Appropriate and timely veterinary care is essential for maintaining the welfare of livestock. Many animal welfare problems could be prevented simply by seeking regular and timely veterinary assistance. Your veterinarian can be helpful not only in planning an animal health program, but in objectively assessing the overall well-being of your animals.

Humane handling, transport, and slaughter are imperative for maximizing the welfare of animals through all stages of production and for minimizing losses to producers. Poor or rough handling and transport of animals can have devastating effects on the physiology and behavior of livestock. These problems manifest themselves in many ways, including downed animals, animals that are difficult to handle, and those that yield poor meat quality. Education about and implementation of humane and appropriate means of handling and transporting animals is a simple but essential step that can ensure the welfare of livestock.



## Cattle

Carefully plan and maintain body condition change in cattle according to the stage of production cycle. No animal should be allowed to drop to a body condition score of 3 or less.

Healthy young calves can tolerate low air temperatures well, but newborn animals, calves that have been transported or deprived of food, or sick calves are particularly susceptible to hypothermia. Under these conditions, calves benefit by housing in a well

ventilated, but not drafty, unheated building and the use of thick, dry bedding. Sick individuals may benefit from artificial heat and should be isolated from healthy animals if possible. Provide cows with a clean, dry calving area and access to natural or artificial shelter as weather conditions dictate.

Handle cattle quietly and with care to avoid unnecessary pain or distress. Animal handlers must understand the likely causes of distress in cattle and should understand how cattle react toward each other, people, and other animals, such as dogs, as well as to strange noises, sights, sounds, and smells.

Limit exposure of cattle and calves to excessive dust. Provide access to feed and clean water at the corral. Avoid undue stress during roping activities. For example, do not allow children to ride calves after branding and processing. Do not use dogs around confined livestock.

Take the time to familiarize dairy cattle with facilities, handlers, and procedures, and handle and move them gently. The importance of each of these items cannot be overstated. One study found that impatience in handlers was a serious factor in development of lameness in dairy cows. Other studies show that the attitude of the stockperson can have a marked effect on productivity. In fact, productivity can be used as an indirect measure of animal welfare. In high-performing dairy herds, cattle that have a positive relationship with their handlers tend to move more quickly into the milking parlor, have smaller flight zones, and are less nervous and more settled. Adopting this approach to animal care and management can result in greater ease and efficiency of management as well as reduced production losses and, in some cases, increased productivity. Savvy producers should ensure that all personnel handling animals adopt this approach.

## Horses

The horse is a domesticated animal that depends on its caretakers to provide all of its basic needs for survival and good health. The enjoyment of horse ownership depends on the animal's health and condition.

Horses require attention, which should come from someone knowledgeable about proper horse care. However, a horse will survive without affection as long as it is not otherwise mistreated. Horses, like many other domesticated animals, become accustomed to the behavior of their owners or handlers. Good treatment produces a more satisfactory response than poor or rough treatment. For the best response, the owner or handler must be in control of the animal at all times.

Horses must receive daily exercise. If your horse is kept in a stall, it is especially important to exercise your horse daily. If you have enough space for a large paddock or pasture, your horse can exercise on its own. Your horse should have sufficient space to canter or lope.



Engage the services of a licensed veterinarian to establish a vaccination and deworming program. Extension personnel, as well as veterinarians, are good sources of advice on general health needs and disease prevention.

All horses require routine hoof care. Contact your veterinarian, farrier, or local Extension educator to determine the most appropriate schedule for your horses.



## Sheep and goats

Many common practices associated with sheep and goat production may draw criticism from those considering animal welfare. For instance, raising sheep on pasture or range might cause some concerns as this practice increases their exposure to predators and severe weather.

Several practices of the sheep industry might adversely affect the welfare of the animals. Shearing is a necessary but stressful procedure due to the required restraint as well as the noise, heat, and contact of the shears. Shear quickly, but with care to avoid cuts. Castration and tail docking are painful procedures that

can cause distress to sheep. They should be done in a timely and appropriate manner by trained personnel only. Contact your veterinarian or local Extension educator to determine when and how to do these procedures safely and correctly.

Many of the concerns about sheep production also apply to raising Angora goats for mohair. Dairy goats are more often subjected to restraint and confinement than sheep, and may be dehorned and descended.

Appropriate personnel, equipment, and facilities are essential to attain the highest standard of animal welfare in any operation. Well-trained, skillful, and conscientious personnel should be used whenever possible when handling sheep.

## Swine

Proper care of swine requires attention to a number of factors that affect their productivity and welfare.

All hogs should have nutritionally balanced diets and access to good-quality water. Monitor self-waterers to ensure that they function properly at all times.

Hogs require facilities that are safe and provide adequate protection from weather extremes. Proper ventilation is essential for maintaining swine and human health. Air pollutants may affect swine health as well as human health.

Hogs are social animals. Therefore, they should be group housed or at least housed in proximity to other pigs whenever possible. Avoid isolation, which can cause distress in hogs and result in adverse effects on health and performance.



Handle and transport swine safely and humanely at all times, particularly prior to slaughter. Those that are handled gently perform better than those handled roughly even infrequently. Distress caused by rough handling, overcrowding, or excessively long transport periods can result in detrimental physiological changes, such as PSE (pale, soft, exudative) meat. Thus, for ethical as well as economic reasons, all personnel should be trained to care for and handle hogs humanely and efficiently.

Develop a herd health program with the assistance of trained personnel such as Extension professionals or a veterinarian. Processing of swine, including castration, ear notching, and teeth clipping, should occur at the appropriate age to minimize distress, and should be conducted only by trained personnel. Provide timely veterinary care throughout the pig's life.



## Conclusion

Oregon livestock producers are proud of their identity as Western ranchers. Stockmen have little quarrel with the ethic of animal welfare, as it is essentially the traditional ethic of animal care and husbandry. The challenge is not to resist the new ethic for animals. Rather, it is to learn how to incorporate it into production systems. In some cases, it may be necessary to find relevant information and enlist the aid of a professional, such as an Extension educator or veterinarian, to identify problem areas and develop strategies. In others, this challenge can be met simply with forethought and constant application of good husbandry practices. Regardless of your approach, you will be taking a critical step toward addressing consumers' concerns about how livestock are treated and ensuring that animal welfare is optimized.

## Additional reading

- Albright, J.L. 2000. Dairy cattle behavior, facilities, handling and husbandry. In: Grandin, T. (ed.). *Livestock Handling and Transport*. CABI International, Wallingford, Oxon, pp. 127–150.
- Broom, D.M. and Johnson, K.G. 1993. *Stress and Animal Welfare*. Chapman and Hall, London.
- Curtis, Stanley E. 2002. *Environmental Aspects of Animal Care*. Iowa State University Press, Ames, Iowa.
- Hemsworth, P.H. and Gonyou, H.W. 1997. Human contact. In: Appleby, M.C. and Hughes, B.O. (eds.). *Animal Welfare*. CABI International, Wallingford, Oxon, pp. 205–217.
- Horse Industry Handbook, HIH 120-3, Winter 1994, American Youth Horse Council, Lexington, KY.

## For more information

Many OSU Extension Service publications may be viewed or downloaded from the Web. Visit the online Publications and Videos catalog at <http://eesc.oregonstate.edu>.

Copies of many of our publications and videos also are available from OSU Extension and Experiment Station Communications. For prices and ordering information, visit our online catalog or contact us by fax (541-737-0817), e-mail ([puborders@oregonstate.edu](mailto:puborders@oregonstate.edu)), or phone (541-737-2513).

© 2003 Oregon State University

---

This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties.

---

Oregon State University Extension Service offers educational programs, activities, and materials—*without regard to race, color, religion, sex, sexual orientation, national origin, age, marital status, disability, and disabled veteran or Vietnam-era veteran status*—as required by Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. Oregon State University Extension Service is an Equal Opportunity Employer.

---

Published March 2003.