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Animal Welfare Basics

Yvonne Vizzier Thaxton
Professor

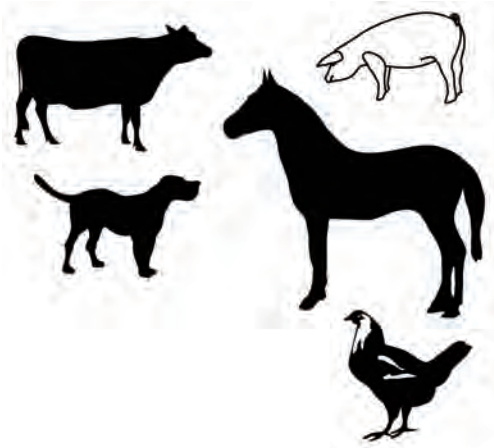
F. Dustan Clark
Professor and
Extension Veterinarian

Animal welfare or wellbeing has become a controversial and confusing topic. The need to prevent animal abuse has long been recognized. However, in recent years it has received more attention than ever before. In the past, issues of abuse have most commonly been focused on pet animals like dogs and cats. More recently, farm animals have become a focus. Television shows concerning the enforcement of anti-animal cruelty laws have also resulted in awareness of a wide variety of issues surrounding the care of animals, as have undercover videos showing abuse of food animals. The relationship between animal abuse and violent crime has been demonstrated and is now a tool being used by law enforcement in the United States. All of this has produced increased scrutiny of modern animal agriculture.

The History

In the early part of the 20th century about 98 percent of the U.S. population was directly or indirectly involved in agriculture. In contrast, less than 2 percent of today's population has any contact with agriculture, and fewer than 1 percent work in agriculture. This shift has produced a population with little specific knowledge of food production, resulting in many misconceptions.

In the first half of the 20th century there was a shift from farming with virtually no mechanization to the advent of mechanization in the form of tractors, harvesters, planters



and other equipment powered by engines rather than animals. For example, in 1900 there were no tractors in the U.S., but by 1960 there were 4.7 million tractors. That change allowed farmers to prepare and care for more acreage than ever before, leading to expansion of the size of farms and a reduction in the number of people that it took to operate those farms. The average size of U.S. farms increased, and at the same time, the number of farmers decreased. It became more difficult to profit on the small farms that could not afford the addition of mechanization. At the same time, this mechanization improved the lives of the work animals and allowed many improvements in the care of food animals.

Also during this period of time, science made many discoveries in the prevention and treatment of disease, nutritional requirements of humans and animals and a greater understanding of genetics. All of this new knowledge led to the development of crops with higher yields, drought and

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disease tolerance along with vaccines and improved nutrition and genetics. These changes further added to the efficiency of farming operations allowing individual operations to produce more food using less land, water and energy, thus reducing the cost of production.

Changes in animal agriculture such as housing animals year-round became possible, making production more efficient and thus sustainable. The same changes also produced a greater awareness of the factors affecting the optimum environment for the various animals and led to more interest in understanding their behavior.

Animal Welfare on the Farm

As knowledge of behavior increased, so did understanding of the needs of animals. Increased efficiency and expansion after World War II also presented challenges. In the United Kingdom the publication of the book *Animal Machines: The New Factory Farming Industry* by Ruth Harrison in 1964 led to an investigation into animal agriculture. This 1965 investigation, led by Professor Roger Brambell, produced a report that included recommendations concerning natural behaviors and appropriate facilities for animal production. It included a recommendation that facilities for these animals should allow the animals to stand up, lie down, turn around, groom themselves and stretch their limbs. This list was later refined into what is now universally known as the "Five Freedoms" which have been adopted by animal care groups throughout the UK and North America as well as other countries and the OIE (World Organization for Animal Health).

The Five Freedoms

1. **Freedom from thirst and hunger** – by ready access to fresh water and a diet to maintain full health and vigor.

2. **Freedom from discomfort** – by providing an appropriate environment including shelter and a comfortable resting area.

3. **Freedom from pain, injury and disease** – by prevention or rapid diagnosis and treatment.

4. **Freedom to express normal behavior** – by providing sufficient space, proper facilities and company of the animal's own kind.

5. **Freedom from fear and distress** – by ensuring conditions and treatment which avoid mental suffering.

There is little controversy surrounding the first three freedoms as anyone who expects good production from their animals agrees that these are basic requirements. The last two are less widely accepted as they are more difficult to define.

The most common issue with "normal behavior" is the definition. Who decides? For example, is dust bathing by chickens normal behavior in an environment without exposure to ecto-parasites, such as mites? Some horses sleep standing, others recline, so which is normal? At this point, it is virtually impossible to get everyone to agree on some issues. On the other hand, there are behaviors that are widely recognized as normal, such as crowing in roosters or barking in dogs. Scientists who study animal behavior (ethologists) are continuing research in an attempt to determine which behaviors are necessary behaviors for specific groups of animals.

Stress and fear can also be difficult to determine. Sudden loud noises can produce a fearful reaction in most animals including humans. Without appropriate exposure to humans, many domesticated animals seem to experience fear in the presence of humans. Stress can also be caused by being too hot or cold. Illness is definitely a stress as the immune system's actions produce unpleasant side effects such as fever.

As our understanding of these animals and their needs increase, there is likely to be changes in systems for housing them. These systems may be very different from what we now consider the ideal. Good animal welfare improves efficiency of the operation and is the right thing to do.

YVONNE VIZZIER THAXTON, PhD, is professor and director of the Center for Food Animal Wellbeing at the University of Arkansas, Fayetteville. **F. DUSTAN CLARK**, DVM, PhD, is professor, Extension veterinarian and associate Poultry Center director of Extension with the University of Arkansas Division of Agriculture, Center of Excellence for Poultry Science at the University of Arkansas, Fayetteville.

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