

## One Welfare – Bovine Welfare

In this month's column, we will discuss welfare of cattle. The information for this article is from a presentation by Dr. Katy Proudfoot, Ohio State University College of Veterinary Medicine, the American Association of Bovine Practitioners (AABP) Animal Welfare Committee, and my personal experiences as a bovine practitioner.

Veterinarians and dairy and beef producers are involved in the well-being of cattle on a daily basis. Dr. Proudfoot reminds us that consumers and stakeholders in food production are also concerned about the welfare of cattle, but that we examine their well-being from different viewpoints and experiences. Dr. Proudfoot's presentation pointed out that there are three concepts of animal welfare: biological functioning, affective states, and natural living. As veterinarians we strive to improve the biological functioning of cattle. As we work to improve dairy and beef production, the best solutions will not compromise the affective states and natural living of cattle.

As a bovine practitioner I may define animal welfare as high production and good health. We also are concerned that cattle under our care are feeling good and are free from pain. To some people, the most important animal welfare concern is that they are leading a reasonably natural life. The challenge of improving animal welfare is to address all of these concerns at the same time. So our challenge is to improve health, growth, and productivity, while providing positive mental states for the cattle; also incorporating aspects of nature into the management that are important to cattle.

Great strides have been made in recent years in providing safe, comfortable housing for dairy cattle. The size and dimensions of free stalls are based on observations of how cattle stand up and lay down and their preferences in moving about. Stalls deeply bedded with sand are preferred by cows over other bedding sources and sand provides a clean, dry, comfortable bed. Barns are open and airy to provide good healthy natural ventilation, and to provide plenty of room for cows to move around and interact with each other, while also having their own individual space to lie down and ruminate. Much research has been done to study feedbunk design so that cows can eat in a natural posture, without intimidation from socially dominate cows.

As bovine veterinarians we develop protocols and training for our clients to humanely care for their cattle. A critical area is care of the non-ambulatory animal. AABP has developed a protocol for us to use with our clients in educating them in how to care for the down cow and assist in her recovery, and how to determine when euthanasia is the most humane option. AABP has also developed euthanasia guidelines that comply with guidelines from the AVMA. We continue to work with our clients to develop humane standards for routine dehorning and castration procedures.

We are learning the relationship between behavior, health, and welfare. Good stockman and veterinarians are adept at recognizing illness behavior in cattle. I spend time training herdsmen to recognize and understand illness behavior. It is obvious that illness changes behavior. But we are also learning that change in behavior can cause illness. For example a pen move and re-socialization of cows

within 10 days before calving can cause a drop in dry matter intake. This drop in dry matter intake leads to increased incidence of fatty liver and ketosis after calving. We also know that if we disrupt normal cow behavior within certain time periods before calving, we may have increased incidence of dystocia and stillbirth. Understanding normal cow behavior and what they desire to be comfortable, leads us to more humane care for our cattle.

I was fortunate to have Dr. Jack Albright as an instructor in animal behavior more than 30 years ago. At the time I thought animal behavior was interesting, but I did not take it as seriously as I should. Dr. Albright was definitely ahead of his time. With Dr. Albright's passing on February 26, it is appropriate to recognize his contributions to cattle behavior and welfare.

Early in my practice career, a client commented to me, "Dr. Kurtz, the thing I appreciate about you is that you treat my cattle gently and with respect". This is the greatest compliment I have received in 32 years of practice. Her statement encouraged me to always try to treat cattle in the proper way. I have also noticed that my clients treat cattle with more gentleness and respect than 25-30 years ago. The last 10 years in the cattle industry have been economically challenging and the professional dairymen and cattlemen that remain, truly are in this business because they enjoy working with cattle. It is encouraging to see the strides we have made in the welfare of cattle in the past 30 years, and exciting to look at the emphasis on studying cattle behavior and welfare.