SNACK AND FACT:

The Human-Animal Bond: Animals in Our Lives

July 7, 2014 / House Agriculture Committee
1300 Longworth House Office Building / Washington, DC

The July *Animal Frontiers* cover photo is a deconstructed photo of Anne Zinn (daughter of *Animal Frontiers* Editor-in-Chief Steve Zinn) and her puppy. Following deconstruction, we reformed the photo using hundreds of photos illustrating staff, family, and board members with the domesticated animals that bring meaning to their daily lives. The original photo was taken by Jacob Zinn and the reconstruction was done by John Scott Radcliffe.

Hosted by the American Society of Animal Science

SCHEDULE

12:00 to 12:05 p.m.
Welcome
Walt Smith and Lowell Randel, FASS Science Policy Directors

12:05 to 12:10 p.m.
Introduction and Goals
Dr. Deb Hamernik, University of Nebraska, ASAS Public Policy Committee Chair

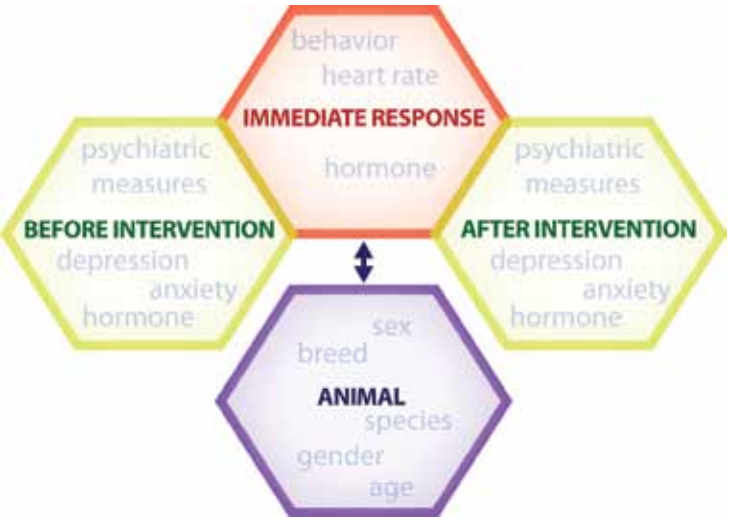
12:10 to 12:35 p.m.
The Human-Animal Bond: Animals in Our Lives
Dr. Alan Beck, Purdue University

12:35 to 12:50 p.m.
Domestication of Cattle and Dogs
Dr. Steve Zinn, University of Connecticut

12:50 to 1:00 p.m.
Questions & Answers
Dr. Deb Hamernik, University of Nebraska, ASAS Public Policy Committee Chair

For additional information, contact ASAS at asas@asas.org.

The study of the psychological and social relationship that humans have with animals (e.g., the human-animal bond) is a true "animal frontier". The July 2014 issue of Animal Frontiers (volume 4 number 3) includes an overview of the domestication of cattle and dogs from their ancestors to their modern counterparts as well as an in-depth review of the bond between humans and animals.



Modern genetic tools, coupled with archeological finds, have been used to track the development and migration of cattle from wild oxen or aurochs (now extinct) to domestic breeds of cattle that are commonly used for the production of meat or milk. A high quality, draft sequence of the cattle genome was published in 2009. Comparison of DNA sequences between domesticated cattle and non-domesticated animals will provide new information about biological variation in animal populations. This information may help identify genes and regulatory regions that affect important economic traits such as fertility, feed efficiency, disease resistance, and meat quality.

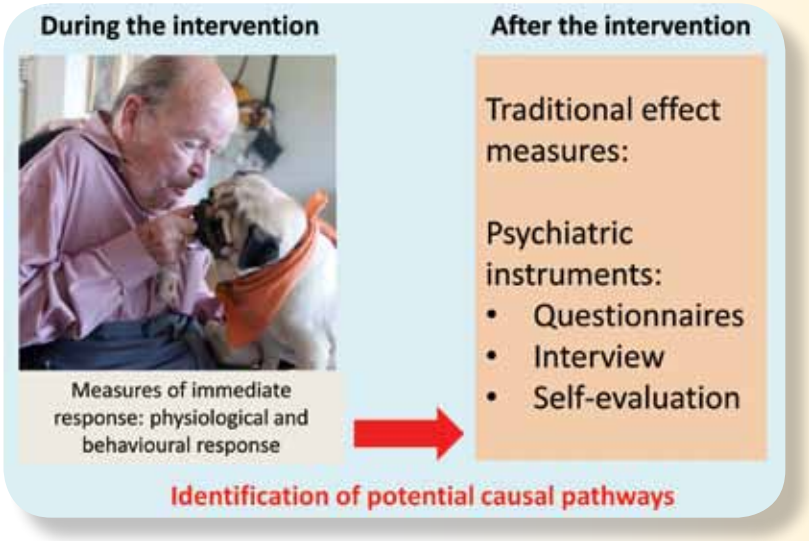
Domestication of dogs has been studied extensively. Dogs were the first species to be domesticated by the Upper Paleolithic hunter-gatherers. A draft sequence of the dog genome was published in 2004. Genetic and archaeological analyses have shown that the only ancestor of the dog is the wolf. In the 19th century, dogs began to be selected for various purposes including, hunting, protection of people or animals, companionship, disposal of waste products, entertainment, and even meat production (in South Korea). To date, more than 400 breeds of dogs have been described.

During domestication of animals, it was inevitable that a unique bond would form between humans and animals. A person's relationship with domestic animals is rooted in evolutionary, psychological, and physiological processes. There are significant health benefits for people associated with their interactions with animals. Improved cardiovascular health, improved immune function, and an increased ability to cope with stress are some examples of how pets can benefit human health. The health of animals also benefits from association and interactions with people.

Photo: http://www.servicedogproducts.com

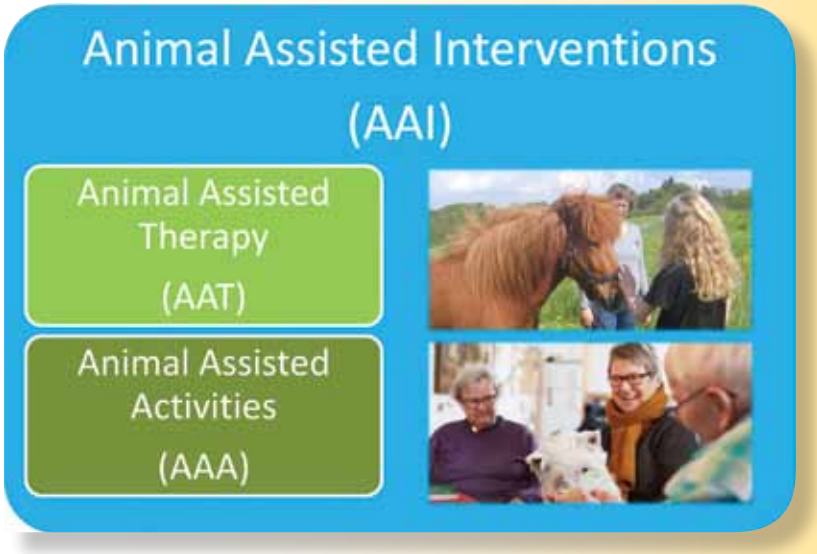
There are many examples of effective use of animals in therapeutic interventions for children and adults with emotional, physical, or psychological issues. Specially trained animals serve a variety of roles to assist people with special needs. Guide dogs have provided this service since 1929. Animals may also be used to help people with neurodevelopmental disorders such as autism or ADHD. Riding horses provides benefits on balance, posture, and muscle control to individuals with disabilities such as cerebral palsy.

Although the term "human-animal bond" is not usually used with agricultural animals, the importance of the quality of interactions between humans and agricultural animals on the behavior and well being of these animals has been well established. High quality interactions between humans

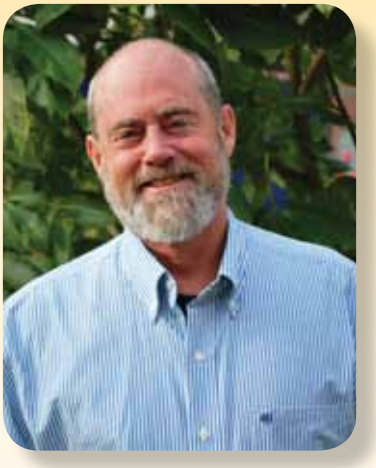


and agricultural animals are typical because the wellbeing of animals is essential in efficient food production systems. As use of the term "human-animal bond" is more often extended to agricultural animals, societal expectations of the quality of life that should be provided to these animals is likely to be debated. These debates must be informed by science. The relationships many people have with companion animals may provide a basis for concerns about animal welfare relative to food animal products and issues. When people control the lives of animals, they assume obligations to protect the well being of these animals. Currently, there are differing opinions around the world regarding what constitutes good or acceptable levels of well being for animals raised for food.

Thus, a need exists to create conversation among animal care givers, decision-makers, policy makers and scientists who are involved in the interdisciplinary studies of the human-animal bond. Because a bond does exist between humans and animals, individuae perspectives are varied and can be emotional. Thus the dialogue that occurs during the policy making process must be open, transparent and must include state-of-the-art science as a basis for decision making . These inclusive conversations will enhance the sharing of knowledge and concerns so the policies that result are well-conceived, effective, and based on applicable science. When research, practice and policy are aligned, thoughtful, actionable and impactful recommendations can be made. The bond or covenant between humans and the animals that serve humankind is a critical area for research and discussion.



SPEAKERS



DR. STEVEN ZINN is professor and head of the Department of Animal Science at the University of Connecticut. His research focuses on understanding genetic and physiological mechanisms important in efficient growth and development of livestock animals for food production. Special emphasis is placed on the role of growth hormone in milk production, growth, and feed utilization in cattle in order to improve methods for identifying and selecting superior animals. Dr. Zinn has also made important contributions to education and communication of scientific research. He served as the Editor in Chief of the *Journal of Animal Science* from 2008-2013. More recently he was a founding member, and Editor in Chief of *Animal Frontiers*. He has received numerous awards for excellence in research, teaching, and advising at the University of Connecticut. Dr. Zinn earned his B.S. degree from Cornell University and his M.S. and Ph.D. degrees in the laboratory of H. Allen Tucker at Michigan State University. He has been a member of the faculty at the University of Connecticut since 1990.

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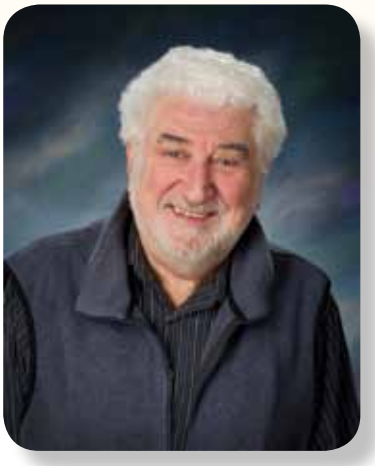

Since 1990, **DR. ALAN BECK** has served as the Dorothy N. McAllister Professor of Animal Ecology, and Director of the Center for the Human–Animal Bond at the College of Veterinary Medicine, Purdue University, West Lafayette, IN. This Center was established to develop a comprehensive understanding of the relationship between people and their companion animals. As part of his research, Dr. Beck has studied the ecological and public health implications of dogs in Baltimore, St. Louis, New York, and along the United States–Mexican border. His book, *The Ecology of Stray Dogs: A Study of Free Ranging Urban Dogs*, is considered a classic in the field of urban ecology and was republished by Purdue University Press in 2002. Together with Dr. Aaron Katcher, he edited the book, *New Perspectives on Our Lives with Companion Animals*, and co-authored the popular book, *Between Pets and People: The Importance of Animal Companionship*, first published in 1983 and revised in 1996. He edited The Health Benefits of Dog Walking for Pets and People (with Drs. Rebecca Johnson and Sandra McCune) in 2011. Dr. Beck directed the animal programs for the New York City Department of Health for five years, then Directed the Center for the Interaction of Animals and Society at the University of Pennsylvania, School of Veterinary Medicine for 10 years. He earned his baccalaureate from Brooklyn College and master's degree from California State University at Los Angeles. He received his doctorate in Animal Ecology from The Johns Hopkins University School of Public Health.

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