Applied Animal Behavior and Welfare

This project has compiled unique data sets regarding appropriate tests for assessing fear in livestock through collaborative multi-state research efforts.

Who cares and why?

Understanding animal welfare has become increasingly important to livestock producers in the U.S. and internationally. Recent legislative initiatives in the U.S. and the establishment of global animal welfare standards by the World Organisation for Animal Health all indicate that animal welfare concerns will play large roles in determining the future survival and competitiveness of livestock producers. In general, consumers, legislators and activists have expressed concerns regarding the quality of life experienced by agricultural animals. In particular, there is strong public concern that farm animal welfare is compromised as a result of fear, pain, and suffering. The possibility that animals suffer greatly due to excessive fear during interactions with handlers, social disruptions, and exposure to transport conditions is of particular concern. Management practices associated with fear and pain are also viewed very negatively by animal scientists and veterinarians. As a result, several animal welfare certification programs now include assessment of fear levels in their auditing procedures; however, little is known about whether such assessments accurately and reliably measure fear in animals.

What has the project done so far?

Over the past five years, NC-1029 members have formed working sub–groups to design fear tests for use on farms with small ruminants, swine, poultry, and cattle. Members of the working groups have designed protocols for validating tests that are commonly used to assess fear in laboratory animals to be sure that these tests accurately measure fear

NC-1029 has been working to test for and reduce fear among small ruminants, like sheep. Fear and suffering can result from improper handling, transporting, and other practices that startle, cause pain to, or disrupt the behavior of the animals. Photos courtesy of USDA-ARS.

Piglets are one of the main subjects of animal welfare studies. The goal is to improve animal handling practices to reduce stress on the animals, which also lowers production costs for livestock producers. Photo courtesy of USDA-ARS.

in various livestock species. Thus far, multi-site research has been conducted on small ruminants and swine with research on poultry to be conducted in the near future.

Impact Statements

Increased collaboration among animal behavior and welfare researchers at sites across the U.S. and Canada.

Validated protocols for testing fear in swine and small ruminants, making sure that these tools are practical for on-farm animal welfare assessments.

Enhanced consumer confidence in and the competitiveness of U.S. livestock by updating best management practices to reduce fear and improve welfare among livestock. Improved animal welfare also cuts losses and costs for farmers.

What research is needed?

Research still needs to be conducted to evaluate fear tests in poultry and cattle to arrive at useful on-farm tests for these animals.

Want to know more?

Administrative Advisor:
Ernie Minton
eminton@ksu.edu

Edited and designed by Sara Delheimer

NC-1029 scientists are developing ways to measure fear in poultry, so that they can better understand what kinds of conditions and interactions lead to fear and suffering. Photo courtesy of USDA-ARS.