Phil Miller Receives Holling Award

Dr. Phillip S. Miller, Professor of Animal Science, is recipient of an IANR (Institute of Agriculture & Natural Resources) Holling Senior Faculty Award for Teaching Excellence which is designed to recognize outstanding contributions by faculty in the College of Agricultural Sciences and Natural Resources, Extension, and the Nebraska College of Technical Agriculture. Miller was recognized, along with the other Holling Award recipients, at an awards reception held March 11.

Phil Miller is one of the strongest advocates for students in Animal Science whether it be working directly for one of his advisees or for the greater student population. His impact is through the courses he teaches, through academic and club advising, and by serving on UNL committees concerned with student education and student welfare. Miller’s teaching style and goals are directed toward making all students critical thinkers and being able to solve real-world problems, especially those problems that will be part of students’ future professions.

The primary objective of the group project in ASCI 320, Animal Nutrition and Feeding, is to foster a group-based learning experience using the combined instruments of a poster presentation and an individual review paper. The students gain exposure to peer-reviewed literature by focusing on contemporary issues selected by the students. In this manner, students have greater ownership of the topic and the desire to expand their understanding—based on sound science—of a contemporary issue. The students soon realize that a great deal of “information” is available regarding nutritional issues facing livestock and companion animal industries which is not entirely “science based” but rather attributed to opinions, innuendos and political correctness. Student groups frequently pursue a project with an inherent bias (e.g., effects of nutrient intake on meat quality), and then upon completion of the project form a new conclusion or opinion based on the scientific and economical data uncovered during their discovery process. Although the course content does not deal formally with societal

and economical issues, the group project does allow students to investigate and consider these in their analysis and conclusion formation.

Through this group project, students develop skills in finding and understanding scientific literature relating to a question, discuss findings with fellow students, formulate conclusions through these discussions, prepare written communication devices (paper plus the poster) to convey clearly the conclusions, and communicate orally to others the conclusions of the project. During the oral communication, answering questions while “on your feet” is another goal of the project. The exercise stimulates collaboration with others and teamwork. The broader goal is for students to build confidence in their own ability to find, read and understand scientific literature; to formulate conclusions to many of today’s and future questions; and, to communicate those finds to a lay audience.

Over the five years that Miller has used this teaching technique, over 350 students have benefitted. Engaging students to analyze a contemporary issue related to animal nutrition stimulates active participation and inherent interest, requires written and oral communication as well as working in a group setting. This activity aids students in their future endeavors by giving them a solid experience base to address an issue, collect and digest the pertinent scientific information, and then make an informed, defendable decision.

A native of Visalia, California, Miller obtained a B.S. in 1985, an M.S. in 1988 and a Ph.D. in 1990 from the University of California, Davis. He joined the faculty of the Animal Science Department in August 1990.