GLS Student Attends Her 4th National SRM Meeting

It may be “old hat” for the veteran Society for Range Management meeting goer who first attended as a senior in high school, but Kyra Baldwin learns new things every time. The junior GLS/Animal Science major was one of 15 UNL students who headed to Orlando in February for the national SRM meeting. She especially likes interacting with both students (which this year made up about 40% of total attendance) and the professionals who offer lots of good information and advice.

Kyra participated in the two main student contests: URME (Undergraduate Range Management Exam, which includes a wildlife component) and the Plant ID contest. For the latter, students must identify 100 plants using their scientific names — from memory!

She also took advantage of two tours. One was to The Nature Conservancy’s Disney Wilderness Preserve, which according to the SRM meeting website, “revolutionized the way agencies, businesses and conservationists think about environmental mitigation and the benefits of nature. Disney purchased an entire 8,500-acre ranch that was being eyed for homes and golf course development and protected it permanently by giving it to The Nature Conservancy to restore the wetlands and forests into a healthy state. Today, the ranch’s successful restoration serves as a model around the world. Wildlife is thriving, water is flowing naturally to the benefit of people, and ground-breaking research is under way that will inform markets critical to our future.”

The other tour was of Deseret Ranch, the largest (300,000 acres) cow-calf operation in the U.S. They learned about the ranch’s herd management and breeding program, wildlife management program, management of the wetlands, how the ranch deals with water rights, and listened to discussion regarding native range versus improved pasture use for cattle management and the ecological implications involved.

“It was so different than what we’re used to,” Baldwin said. While she enjoyed it and learned a great deal, she’s not anxious to return to the land of alligators and wild hogs!
When you are one of three in your graduating class, it’s difficult to be involved in typical extracurricular activities like FFA and school sports. That was the situation for Miles Anderson who hails from the small northeast Nebraska town of Hoskins. He did play club sports, and the size of his private school afforded him some opportunities for interesting ways of learning, including unique field trips and one-on-one interactions. Much of his farming knowledge, as well as his love for genetics, came from his dad, who is a graduate of the College of Agricultural Sciences and Natural Resources (CASNR).

The family farm consists of swine breeding stock (bred for meat quality specifications and maternal genetics), a small cow-calf herd, and about 800 acres of crops — mostly corn and soybeans along with some alfalfa. The operation incorporates rotational grazing and federal conservation programs, with which Miles has been involved, including compliance reporting for the federal programs.

As one might expect from a dual Grazing Livestock Systems/Animal Science major, it is the cattle that most interests Miles. “Herefords are my thing,” he said. So while he pays attention to genetics of both cattle and swine, he likes concentrating on the Herefords.

Miles’ dad obtained an associate’s degree from Northeast Community College and then a bachelor’s degree from UNL. Miles originally planned on stopping with the associate’s degree, but his dad encouraged him to continue his education as he had done. He entered UNL as a transfer student in the fall semester of 2012. He let his animal science adviser, Bryan Reiling, know of his interest in taking range science and business classes, so Dr. Reiling introduced him to GLS. Miles liked the integration of animal science, forage and range science and economics, so he added GLS as a second major. “It combines so many different aspects that are key to running a grazing operation — managing the animals, managing the grass, and business management,” he said.

He also works on campus as a research assistant, clipping grasses and analyzing grass and soil samples.

His classes, job, and trips home on weekends to help with the farm don’t leave much time for other activities, but Miles is involved in UNL Collegiate Cattlemen. Affiliated with the Nebraska Cattlemen’s Association, Nebraska Cattlemen, and the National Cattlemen’s Beef Association, this new organization’s mission is to alert members of current beef industry related issues.

In the summer of 2013 Miles did an internship not too far from home with Mason Grove Land & Cattle in Bloomfield. He was involved in all areas of the operation consisting of feedyard, cow-calf and crop enterprises. This summer he’ll be conducting his official GLS internship on Lone Creek Cattle Company’s Pullman Ranch in Whitman, NE. He’ll be working with the company’s nucleus (maternal) herd while learning more about genetics and range management in the Sandhills — a new environmental setting for him.

He plans to graduate in December of this year. He would like to get some experience working in farm/ranch management before eventually returning and becoming involved in managing the home farm.

Levi Schroer came from a larger school than Miles Anderson. His graduation class at Lawrence-Nelson High School had a whoppin’ 12 people! Levi was able to participate in FFA (president his senior year), National Honor Society, Student Council, and yes… it was large enough to field a football team (albeit 8-man).

Levi grew up on his family’s 2,000-acre south-central Nebraska farm, which has 250-300 cow-calf pairs and diversified dryland crops. Like Miles, he also has a special interest in the livestock genetics aspect of the operation. That interest was spurred in Levi’s senior year when he job-shadowed someone at the Meat Animal Research Center’s genetics department. He has also visited the Fort Keogh Livestock and Range Research Lab in Miles City, MT. The two career paths...
he's considering are returning to the family farm to eventually take over the operation with his younger brother, or genetics work in a research facility.

Entering UNL as an Animal Science major in Fall 2013, Levi soon learned more about Grazing Livestock Systems from friends in the major, and decided to add it to his program this semester. “It fits really well for someone wanting to take over a family operation because it covers business, range and livestock — preparing you for all the different aspects of running the business,” he said.

At UNL Levi is involved with the Block & Bridle Club, FFA Alumni, and like Miles — Collegiate Cattlemen. He is also in the Nebraska Beef Industry Scholars Program — a four-year certification program designed to develop future leaders for the beef industry. The class he has enjoyed the most so far is the freshman seminar for Beef Scholars Program students.

In high school Levi had been exposed to the College of Agricultural Sciences and Natural Resources culture through activities like FFA, and he really likes living on East Campus. “The people are more laid back,” he commented. “You matter more as an individual.”

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### UNL Graduate Students Interested in Grazing Livestock Systems

**By Walter Schacht and Jerry Volesky, Dept. of Agronomy and Horticulture, UNL**

Grazing strategies using ultra-high stocking densities (>200,000 lbs. liveweight/acre) have gained much interest by livestock producers and advisors because of the proposed benefits of increased grazing efficiency, improved forage plant production, and rapid development of soil. These benefits are then to lead to increased grazing capacity in the short and long term. Of course, these proposed benefits come at a cost because ultra-high stocking densities require multiple pastures (as many as 60 or more) and one or more moves per day. Research to document animal, plant and soil response to ultra-high stocking density (a.k.a., mob grazing) was initiated at UNL’s Barta Brothers Ranch and on privately-owned ranches in the northeastern Sandhills in 2010.

Miles Redden and Ben Beckman are graduate students in the range and forage science program at UNL. Their studies have focused on subirrigated meadow systems’ response to various grazing strategies including mob grazing. Aside from their management of the major study comparing mob grazing to other common grazing strategies, their research looks at the effect of paddock shape and stocking density on forage utilization in mob grazing systems and grazing strategy (including mob grazing) effect on root production and litter decomposition rate.

In the fourth year of the mob grazing study (2013), they found that aboveground and root production did not differ among grazing systems. They also documented that litter decomposition rates and soil organic matter content were not favored by mob grazing; these results do not support reports that ultra-high stocking densities of mob grazing increase the proportion of aboveground plant growth that is trampled into the soil, thus increasing soil organic matter content. They also found average daily gain of yearling cattle on mob-grazed paddocks (0.5 lbs./head/day) was much lower than that of yearling cattle grazing less intensively managed systems (a 4-pasture, 2-cycle system; 1.5 lbs./head/day). The extra management, labor and infrastructure required of mob grazing have not been justified after four years of study.

Miles and Ben are excited about their contribution to this important research. They have been interested in grazing livestock since a very young age. Ben is from a livestock/crop farm near Elgin, NE and graduated from UNL with a B.S. in Grassland Ecology and Management. Miles studied range livestock production in his undergraduate program at Brigham Young University-Idaho and was working on a Sandhills ranch near Lakeside before beginning his graduate program at UNL. Their backgrounds and interest in rangeland management and livestock production systems have made them ideally suited to study grazing strategies in the Nebraska Sandhills. And, in the process, they have provided experiential learning opportunities for students in the Grazing Livestock Systems major, as a number of GLS students have assisted them with their field work. They have also been graduate mentors of the Range Management Club, which has had several GLS students as members. This article illustrates the kind of research GLS students could choose to do either as undergraduates, or if they go on to pursue a master’s degree.
Reiling Wins Teaching Award

Congratulations to animal science associate professor Bryan Reiling, one of four faculty members who work directly with the GLS major, on his 2014 College of Agricultural Sciences and Natural Resources Distinguished Teaching Award!

Upcoming Educational Opportunities

There are multiple opportunities for students to add to their education outside of the classroom. Three such events related to grazing for which GLS students can apply for partial scholarships are listed below. See the websites for details on the events.

Nebraska Grazing Conference, August 12-13, 2014, Kearney, neaskagrazingconference.unl.edu. Many presenters from multiple states will be on the program for this 14th annual event. Past GLS students who have attended (and in some cases, presented) have found this event extremely valuable.

Nebraska Ranch Practicum, North Platte and Whitman, eight dates June 2014 - January 2015, westcentral.unl.edu/gudmundsen/nebraskaranachpracticum. Three-season, hands-on sessions teach how to use decision support tools to evaluate management and marketing alternatives dealing with grazing strategies and many other aspects of ranching. Application deadline is May 8, and enrollment is limited.

Nebraska Range Shortcourse, June 16-20, 2014, Chadron State College, agronomy.unl.edu/nebraskaranage-shortcourse. The week-long course focuses on the principles of range ecology and management and the efficient use of rangeland resources for a variety of purposes.

For more information or to receive GLS materials, please contact:
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