

Grazing Livestock Systems: Integrating the Expertise

We hear it all the time: “What we need is people who can put it all together — who use a systems approach to management.” For grazing livestock, that means knowing how the animal, plant and business aspects of an operation fit together. The Grazing Livestock Systems major was developed to meet that need.

GLS students take courses in animal science (animal biology, anatomy and physiology; nutrition and feeding; breeding and reproduction); agronomy (plant and soil sciences, genetics, forage and range management, ecosystems); and agricultural economics (farm/ranch management, marketing ag commodities) — with additional classes in these three subject areas that are chosen from a group of courses identified by the faculty as being supportive of this particular major. And of course, students take the “gen eds” (general education courses) taken by all UNL students such as those in the broad categories of communications, math, natural sciences, humanities, etc.

There are two key components of the GLS major that help students see how “it all fits together:” the GLS internship (more on this in the next issue of this newsletter) and the capstone course.

The Livestock Management on Range and Pasture course has been integrating animal science, pasture/range management and agricultural economics since the

1960s, and was one of the first courses of its kind in the country. What makes this course unique is that it uses actual case ranches to teach the myriad of management concepts ranchers use “in the real world.”

The course begins with a week-long stay at the state 4-H camp in Halsey the week before the fall semester begins. While there, the students receive preparatory

classroom instruction, then visit one of three area ranches where they use the knowledge they have acquired in past courses and at Halsey. They survey the ranch’s land, complete a resource inventory, and conduct a detailed interview with the ranch owner. Owners of the three rotating host ranches who team with UNL faculty as “field

instructors” are: Al Atkins, Halsey; Wayne Rodocker, Halsey; and Mike Finney, Seneca. In addition to spending time at the host ranch, students also visit various Sandhills ranchers during the week to see other management practices and available resources. Two of the ranchers are Dave Hamilton and Wayne Eatinger — both from Theadford and both on the GLS Stakeholders Board.

Back on the UNL campus, the students use computer programs and other tools to develop their “term paper” for the course: the Ranch Plan. Each student designs his/her plan,



Grazing Livestock Systems (continued)

addressing such areas as grazing capacity, grazing system, winter feeding program, and economic analysis of the proposed plan. The “top” plans (as determined by the instructors) are sent to the host ranchers, who sometimes end up incorporating some of the students’ ideas.

As one GLS alum put it:

“The most important part of the capstone class was designing a plan that made you utilize all your resources and think it through from beginning to end. It forced us to consider everything — from family goals to financial goals.”

This is a required capstone course for the GLS, Animal Science, Agronomy, and Grassland Ecology and Management majors, but students in Agricultural Economics, Agricultural Education, and Applied Science

also take the course. Average class size is 20 to 25 students, which this year includes five GLS students.

The UNL teaching team for the course is led by Rick Rasby (beef specialist) and Walter Schacht (range scientist and GLS faculty adviser), and includes Daryl Cisney with Nebraska Board of Educational Lands and Funds. Guest speakers are also brought in to address specific topics such as irrigated pasture, forage crop production, and beef cattle breeds and breeding. And let us not forget those other members of the team — the ranchers who are so generous in sharing their expertise!

Whether students plan to return to their family operations or manage land and cattle for a private business or the federal government, the ability to integrate the expertise is critical to success.

Student Profiles

Blake Thomsen hails from the small town of Wolbach in central Nebraska. The family farm consists of an 80-head cow-calf and hay operation, and more recently, some row crops.

Through his participation in 4-H and FFA at St. Paul High School, Blake became familiar with the College of Agricultural Sciences and Natural Resources, having made several visits to campus over the years. He started at UNL as an Animal Science major with a minor in Grazing Livestock Systems. After a few semesters he decided to “upgrade” GLS to a second major. At UNL he has been involved with Alpha Gamma Rho and Rodeo Club.

In 2013 Blake conducted his GLS internship at the Gudmundsen Sandhills Laboratory (GSL), a UNL research ranch located in the Nebraska Sandhills near Whitman. The Gudmundsen cowherd consists of approximately 350 March-calving, 100 June-calving and 60 August-calving cows. Forage resources include 1,200 acres of subirrigated and wetland meadows along with 11,600 acres of upland Sandhills range. Blake worked at GSL February through July, so he got good exposure to multiple calving and forage growing seasons.



Blake Thomsen

When asked what courses at UNL have been most useful so far, Blake cited ASCI 451 — Livestock Management on Range and Pasture, which deals with analyzing the plant and animal resources and economic aspects of pasturage, and AECN 201 — Farm and Ranch Management, which covers economic principles and business management concepts involved in the decision-making process when organizing and operating a farm/ranch.

Blake plans a May 2015 graduation. While he hopes to eventually own his own cow-calf operation somewhere in the Sandhills, he would like to do some traveling and perhaps work some ranch management jobs to see how things are done in other parts of the country. He’ll be happy as long as he can be “outside taking care of cattle!”

Marshall Simmons was involved in several sports at Valentine (NE) High School. Although his family had a ranching operation, he was not involved in ag-related activities during high school. That’s because he didn’t plan to have an ag-related career. He entered UNL as a business major, hoping to teach business education and



Marshall Simmons

be a coach. Somewhere along the line he had a change of heart and decided he did want to return to the family business — a commercial cow-calf operation on 10,000 acres. The ranch has a 650-head cow herd and grows both grass and alfalfa hay. In the fall of his sophomore year, Marshall switched to the GLS major.

“As soon as I switched, I began enjoying my classes because I had more interest in them,” he said. Some of his favorites have been those related to range, animal products and carcass evaluation. “I especially like the capstone course (Livestock Management on Range and Pasture) I’m currently taking; it just puts everything together,” he commented. He also liked the atmosphere in the College of Agricultural Sciences and Natural Resources. “I love East Campus! It’s smaller, quieter (than City Campus), and professors are easy to get hold of and are always willing to help you out,” he added. A few semesters after switching to GLS, Marshall added Animal Science. He will graduate this December with the double major, and minors in Agricultural Economics and Grassland Ecology and Management.

“I especially like the capstone course... it just puts everything together.”

For his GLS internship, Marshall wanted to get out of the Midwest to see how things are done differently elsewhere. Buck Island Ranch in Florida certainly qualifies! He noticed one big difference right away: it was HOT for this Midwesterner who was used to spending his summers cutting hay in an air-conditioned cab! Another big difference is that the ranch has planted pastures that are fertilized and aerated every year. “And everything is done on horses; that was a lot of fun,” he said. He would like to implement some aspects of the ranch’s bookkeeping in his family’s business. Another take-away from the internship for Marshall was just how important communication is in a family operation. That’s good advice for all of us!

Meet Newest Member of GLS Faculty Team

The GLS program is guided by a team of faculty advisers from the three disciplines that are integrated into this major: animal science, forage/range science, and agricultural economics. Jay Parsons joined the UNL Department of Agricultural Economics as well as the GLS team in July.

Dr. Parsons grew up on a diversified family farm in western Nebraska. His first two college degrees were in mathematics, which he taught at the high school level in California and Colorado. After earning his Ph.D. in agricultural and resource economics from Colorado State University, he taught several graduate level courses there in agricultural production economics, marketing, and business planning. He was also Co-Director of the Western Center for Integrated Resource Management.

Welcome aboard, Dr. Parsons!



Dr. Jay Parsons

Oregon State Professor Visits with GLS Students about Beef Production

On October 6, David Bohnert, Ruminant Nutritionist and Extension Beef Cattle Specialist at Oregon State University, was on campus to deliver the annual Leu Distinguished Lecture in the Grassland Studies seminar series. Following the formal lecture, Dr. Bohnert gathered with GLS and other students to discuss (over pizza and pop) research-based strategies for efficient beef production in a rangeland environment. The Center for Grassland Studies, which administers the GLS major, occasionally hosts such outside-the-classroom educational events.



Oregon State University beef specialist Dr. David Bohnert listens to a question from a student at an educational event for GLS students.

Students Learn about GLS at College Open House

Every fall the College of Agricultural Sciences and Natural Resources hosts an open house on the UNL East Campus titled “Experience the Power of Red.” On October 18, 133 high school students came with their family members to learn about the various majors (nearly 30) available in CASNR. After visiting lots of exhibit booths, they chose three academic sessions to attend and receive more in-depth information.

The open house is just one way to learn about GLS. There are other types of group and individual visits available throughout the year. To learn more, see admissions. unl.edu/visit, or contact Pam Murray in the UNL Center for Grassland Studies, grassland@unl.edu, 402-472-4101.



At the 2014 college open house, GLS faculty adviser Dr. Dennis Brink describes the types of things students learn in the GLS major.

GLS Faculty Continue Their Award-winning Ways

At the annual College of Agricultural Sciences and Natural Resources Awards Banquet earlier this year, Bryan Reiling, one of the GLS faculty advisers, was recognized for receiving both the 2013 L.K. Crowe Outstanding Undergraduate Student Adviser Award and the 2014 CASNR Distinguished Teaching Award.



Bryan Reiling

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

Center for Grassland Studies
University of Nebraska–Lincoln
203 Keim Hall
P.O. Box 830953
Lincoln, NE 68583-0953
p: 402-472-4101
e: grassland@unl.edu

f: 402-472-4104
w: gls.unl.edu

