

Returning to the Ranch

A revamped range curriculum at South Dakota State University helps students prepare to do just that.

by Sue Gordon

Many ranchers can attest that they've learned their life lessons through the school of hard knocks. Now, a new curriculum at South Dakota State University (SDSU) is designed to help future ranchers hit the ground running.

"We wanted to offer a program for our students who were planning to go back to the ranch," says Pat Johnson, SDSU professor of range science.

"We recognize that if you're going to manage a ranch, you need different skills than if you're going to work for an agency like the Natural Resources Conservation Service (NRCS)," Barry Dunn adds. Dunn has 20 years of experience as a South Dakota rancher and is now a professor in the animal and range science department at SDSU.

So two years ago, curriculum emphasizing range livestock production was created within the university's range science major. The coursework for the program is a blend of range science, animal science and business classes. The new curriculum was developed with input from a team of university professors, researchers, Extension specialists and ranchers.

Setting the foundation

Range science is at the core of the curriculum because of the crucial role it plays in the success of a ranch. "When you go back to the ranch and have grasslands to deal with, grazing becomes one of the most important things to understand and manage," Johnson says.

With that foundation, the program uses an integrated approach to bring the elements of business management, grazing and livestock production together. Based on input from seasoned ranchers in the state, the program also devotes time to learning how to analyze records, as well as to understanding human behavior and working with family.

This combination is designed to give students returning to the farm or ranch a solid education in managing rangeland from a rancher's perspective. "We want our graduates to have practical experience in understanding all of the elements of ranching," Johnson says.

To that end, one of the initial courses for freshman and sophomore students enrolled in the program is designed to offer an overview of ranch management. "From the start, we want to sensitize students to the breadth and depth of information they'll need to be a successful ranch manager," Dunn says.

"Our goal is to help students look at a ranch holistically and realize that it includes people, communities, natural resources and finances, in addition to the livestock," he adds.

In the introductory class, students work as a team to develop ranch plans, conduct resource inventories and set ranch goals. By their senior year, SDSU students formulate their own ranch plans in the advanced ranch management course, which focuses on in-depth business analysis. Dunn says the goal of this final course is to assist these future ranchers in developing a plan to help make their hopes and dreams come true.

Not surprisingly, the feedback from students has been overwhelmingly positive. Dunn says the most frequent comment students make after completing the introductory course is: "I didn't realize there was so much to it."

"And, why would they?" he asks. "Most of them are 18 years old, and their folks have never shared a balance sheet with them. Our goal is to expose them to all of the elements required to manage a successful ranch."

Johnson and Dunn report that several students are taking courses in the new "back to the ranch" curriculum, and there has been a noticeable increase in the number of incoming freshmen enrolling in the range livestock production program.

Johnson adds that the success of their newly revamped program is also due to the support they have received from other departments at SDSU. "The animal science and wildlife professors were very supportive of our efforts to redesign the range curriculum. We all want to help students take courses that suit their career needs," she says.

While the SDSU range science program isn't patterned specifically after any other university, Johnson says Montana, Nebraska, North Dakota and Texas also offer similar programs designed to help students get ready to manage a ranch.



Required reading

As part of the range livestock production coursework at South Dakota State University (SDSU), professor Barry Dunn requires his students to do a lot of reading. On his list of books they must read is *Centennial* by James Michener. Dunn says this is a very good resource for anyone involved in the ranching community. The book profiles the geological development of the Great Plains, and it highlights stories of the transfer of several family ranches from one generation to the next. He says the book gives a realistic view of ranching and shares some stories that were successes and others that were not.



Other range options

At the same time South Dakota State University (SDSU) is retooling its "back to the ranch" curriculum, two other emphasis areas were also redesigned for range science students: a rangeland resource conservation emphasis and a rangeland ecology and habitat management emphasis.

Pat Johnson, SDSU professor of range science, says the ecology and habitat emphasis includes mostly coursework targeting the science and ecological side of rangelands; whereas the resource conservation emphasis is more a blend of the sciences and the practical production courses. Students in the conservation emphasis primarily would be preparing for careers with various government agencies, such as the

Natural Resources Conservation Service (NRCS), USDA Forest Service (FS) or the Bureau of Land Management (BLM).

As a side note, Johnson says job opportunities in the range science arena are expected to increase in coming years.

"It looks like there will be a good opportunity for range science graduates to work with the federal government in the future," she says. That's due to the additional conservation funding in the new farm bill, as well as the number of federal employees retiring.

She adds, "We've seen some universities move away from offering specific curricula in range training. So with fewer range graduates out there, even more opportunities should become available."

Editor's Mailbox

► Readers' viewpoints submitted to our staff

Thanks to all for a great tour

Wow! What a fantastic three days the 2002 National Angus Conference and Tour was. The American Angus Association seems to constantly improve this annual event that is so enjoyable. This year was exceptional, combining the diversity of West Coast agriculture with Angus breeders.

The many ranches we visited were spectacular. I am sure everyone gained a new perspective for California. I realized many of the genetics we use today and will use in the future will come from this state.

I have to say the *Certified Angus Beef*® (CAB®) we ate each day was a highlight for this event. The tri-tip roast was superb. The California Beef Council sure has a winner with that cut.

I always enjoyed the informative commentary from each bus's tour guide, who was familiar with the area we were touring. I also liked the way the tour stopped at other interesting locations, like the Delicato winery. I want to thank the California Angus Association for all its efforts to support this tour. Also, all of the

breeders who took their time to show us such great hospitality. You were great. Also, thanks to the speakers who took the time out of their busy schedules to speak at the conference.

Thanks to the staff at the American Angus Association, who year after year put on such a great event. My hat is off to you! Thanks to all of you for an exciting three days that we will never forget. I am looking forward to the 2003 tour in North Dakota.

— Charles DeMariano, Chamois, Mo.

Hard to breed back a high-milking cow

Dear Dr. Larson,

We've just gotten started calving and I remember now what consumes most of my time during calving — milking out big-bagged cows. When EPDs (expected progeny differences) came out, we started selecting for milk and thought it was the real answer to increased weaning weights. Well, as it turns out today, I am certain that *milk is my enemy!* Several things happened with those big milking cows. First, of course, it is hard to get them bred back since they are milking like a Holstein. Second, their calves are often sick because their mothers' bags have been dragged through every mud puddle on the place. They also are prone to injury. And, they tend to get mastitis

because, unless they happen to have twins every year, no single calf can possibly use up that much milk. Therefore, my ideal bull's milk EPD is less than +15 or so, but nearly every bull I see advertised is +20 or more. Am I the only operator who has come to this bottleneck?

The other topic you might entertain in your "Vet Call" article is the pitfall of production testing. I have been selecting replacement heifers based on the best individual weaning weights. The program I used for many years was the CHAPS (Cow Herd Analysis and Performance System) program. The basic concept of the production test is good and worthwhile; however, there is a flaw. The real-world producer will soon figure out that the profit margin in the long run is the weaned weight as a percentage of the mother's body weight. Yes, a 600-pound (lb.) calf out of a 1,100-lb. cow is more profitable than a 700-lb. calf out of a 1,400-lb. cow.

Unfortunately, I feel I have employed too much technology and now I must take corrective action to repair the damage.

I enjoy your articles. If I don't have time to read the whole *Angus Journal*, I at least make the time for "Vet Call" before Ma tosses it in the fire!

— Jim Kopriva, Raymond, S.D.