

Nebraska Ranch Practicum

Program provides a graduate course in ranch management.

Story & photos by Troy Smith

Remember those stories your granddad used to tell? He claimed he walked 10 miles to school every day, regardless of the weather, and it was uphill both ways.

Well, to reach classes he attended in 2004, Jeff Young traversed the Continental Divide, crossing the breadth of Wyoming and the Nebraska panhandle. He didn't walk that distance, of course. It's much more than 600 miles, one way. Young made the trip several times, to attend sessions of the Nebraska Ranch Practicum.

Young manages the far-flung interests of Ensign Ranches. The 5,000-cow outfit straddles the state line west of Evanston, Wyo., with most of its range lying on the Utah side of the border. But why would the ramrod of a large, western cow-calf operation make multiple trips to participate in a Nebraska-based short course on ranch management? Young says it's because the ranch practicum is a one-of-a-kind educational opportunity.

"It's unique," Young affirms. "I don't know of any other school or seminar that covers an entire year's cycle of range and cattle production. The basic principles taught would apply to ranching anywhere."

Ranch school

Launched in 1999, the Nebraska Ranch Practicum is a program of the University of Nebraska (NU) Cooperative Extension. Often called a graduate school for ranch managers, it offers eight days of education



►Range and forage specialist Jerry Volesky presents information on meadow management for haying and grazing during the Nebraska Ranch Practicum.

in integrated cattle and forage management, with added attention to economic considerations.

What makes the ranch practicum different from most ranch-oriented seminars or workshops is that it takes participants through subsequent seasons of the production year. Sessions are in June, July, September, November and January. The curriculum offers a mix of classroom and hands-on study, where participants spend time in the field monitoring forage growth and development, as well as cattle production as the year progresses.

The first and last sessions take place at NU's West Central Research & Extension Center in North Platte, but much of the participants' learning experience comes from days spent at the Gudmundsen Sandhills Laboratory (GSL), near Whitman. Given to the University of Nebraska Foundation by Elmer and Abbie Gudmundsen, the 12,800-

acre spread is maintained as a working ranch and serves as the site of ongoing research in range and cow-calf management.

Researchers serving as instructors include range ecologist Pat Reece, range and forage specialist Jerry Volesky, ag economists Dillon Feuz and Dick Clark, reproductive physiologist Rick Funston, and beef range systems specialist Don Adams.

"What we try to do with the ranch practicum is talk about technologies and show them in practice," Adams says. "We're tying together principles for managing grass and cattle with the economics. The ultimate goals are improved stewardship of resources and more profitable ranching operations."

Adams says successful management of range-based livestock operations requires a holistic view. Changes in management of one aspect of an operation will affect management of other areas, he notes. Participants are encouraged to develop critical thinking and decision-making skills. They are challenged to think about options and alternatives that might enhance their own operations.

"We're not advocating change just for the sake of change," Adams adds. "You have to look at how changes will affect the whole production system."

Measure and manage

It is said that you can't manage what you can't measure. Nebraska Ranch Practicum participants study plant identification and learn to determine range condition. Understanding the plant community and how climate events (precipitation and late frosts) as well as timing of grazing periods



►Classroom sessions at the Gudmundsen Sandhills Laboratory are in the Wagonhammer Education Center. The facility was built through funding provided by the family of the late James Wolf. The Wolf family owns and operates Wagonhammer Ranches, Albion, Neb., which includes an Angus seedstock enterprise.

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affect plant vigor helps managers gauge pasture potential for forage production. Participants also discuss grazing strategies to improve forage production, including various pasture rotation systems, and they practice calculating stocking rates for pastures.

Instructors also emphasize that nutrient content of range and forage changes with stages of plant growth and development. They share results of research aimed at extending the grazing season and minimizing the need for supplemental feed. Seasonal changes in cow requirements for energy, protein and minerals are discussed, along with the advantages and disadvantages of various supplements.

Ranch practicum participants are urged to monitor cow body condition and use body condition scores (BCSs) effectively. Past participant Michael Scheer says learning how to use BCSs has been put to good use on his Haddam, Kan., cow-calf operation.

"It's an excellent tool and just common sense, really," Scheer says. "I watch body condition more closely now. I wean calves earlier to keep cows in good shape while grazing pasture in the fall and then cornstalks in winter. I'm timing my supplementation to maintain body condition, but I'm feeding less supplement."

Early weaning has been a topic of particular interest in areas affected by drought during recent years. GSL research has explored the effects of both time of calving and time of weaning.

"Sometimes small changes can make a



► **Above:** In the field, practicum participants view results of planned grazing strategies applied at GSL.

► **Left:** In the classroom, range ecologist Pat Reece leads a discussion of range management objectives.



market. You have to look at the whole picture and see how it affects profits."

A survey of participants in the practicum's first five years found that 97% of respondents said the profitability of their operations had improved. They estimated that knowledge gained through the course affected their herds by \$26.40 per head on average.

"The financial aspects of improving management of grass and cattle has been a real benefit," Ashby, Neb., rancher Art Brownlee notes. He says the ranch practicum "covers all the tools and technology available today. That's ideal for the newcomer to ranching or to the veteran that might need to look at things differently. There are lots of ways you can tweak your operation, without spending a lot of money, and be more profitable as a result."

big difference. A two-week change in calving season (shifting the season later) or weaning date (weaning calves earlier) might extend the grazing season for cows and allow for reduced levels of supplements," Adams explains. "You have to consider how it changes costs and marketing plans. But while a [calf seller] might give up a little weight, he might also gain the advantage of a better



► Individual plant identification is part of learning to better manage forage resources.



► University of Nebraska ag economist Dillon Feuz says range and cattle management practices always have financial consequences.



►As part of their study of forage digestion, participants sample rumen contents from a fistulated animal. Later, in the lab, they take a closer look at the breakdown of consumed forage.



►Practicum participants take a hands-on approach to evaluating cow body condition, which gives clues to how cows should be managed in the weeks and months ahead.



►Above: Reproductive physiologist Rick Funston demonstrates ultrasound pregnancy examination and discusses replacement heifer development options.

►Right: In the laboratory, practicum participants view rumen content samples that illustrate how cows have been selectively grazing favored plant species.



►University of Nebraska animal scientist and practicum instructor Don Adams emphasizes the advantages of monitoring cow body condition throughout the year.



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