



Serious Stewardship

Leopold Conservation Award winner focuses on long-term health of the range to guide grazing management strategies.

by **Troy Smith**, field editor

It was mighty dry in 2012. Duane Pelster had to partially destock his Nebraska Sandhills ranch. Cattle he had taken in for the summer grazing season were sent home early. Their owners probably weren't surprised.

Anybody who has known Duane Pelster for very long would also know that he takes land stewardship seriously. Owners of outside cattle would have been told, up front, what could happen if drought withered the forage supply. They would know about Pelster's concern for the long-term health of the range. His management decisions would reflect an understanding that recovery from extreme drought takes time, as well as rain.

"In 2013, we cut our stocking rate by half. Last summer, we stocked at about 75% of normal," says Pelster. "In 2015, I hope we're back to near normal. We'll see."

At Pelster Angus Ranch, "normal" still means stocking the range conservatively. That practice is representative of the serious stewardship that earned Pelster and his wife, Nancy, the Leopold Conservation Award in 2014.

Likened to a "Nobel Prize" for agriculture,

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the award is named for famed conservationist Aldo Leopold. Sponsored by the Wisconsin-based Sand County Foundation, the award celebrates landowners who voluntarily apply ethical and scientifically sound management practices.

Nebraska recipient Duane Pelster says he has followed the example set by two conservation-minded managers — his wife's father and grandfather. Pelster has tried to build upon their legacy, through management focused on enhancing soil and plant health, water resources and wildlife while simultaneously achieving profitability. All are essential to ranch sustainability.

Early guidance

Duane and Nancy Pelster headquarter near the north-central Nebraska community of Ericson, on a spread straddling the Garfield and Wheeler county line. Yet it was on a place located about 18 miles up the Cedar River that, in 1961, the newlywed

couple began ranching with her dad. Early on, Pelster was impressed by his father-in-law's land ethic. He remembers Marden Malmsten's counsel: "If you're good to the land, the land will be good to you and future generations."

After a couple of years, the Pelsters leased a portion of the ranch and started their own breeding herd with cows bought from Malmsten. Pelsters later leased all of the ranch and eventually purchased most of the acreage from the Malmsten estate.

The current headquarters ranch was acquired in 1971 and added to through the years. It includes a relatively small amount of irrigated cropland that lends balance to an operation otherwise dependent on and dominated by Sandhills range with subirrigated meadows. Throughout the years, Pelsters have maintained a commercial cow-calf enterprise. However, part of their summer range is devoted to custom-grazing.

"We've taken in cattle from the beginning, because it gives us management flexibility in a drought situation," explains Pelster. "We can alter the number of cattle we carry, according

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► **Above:** Over time, some 25 miles of water pipeline have been laid to increase the number of watering sites and reduce dependence on windmills. All of the improvements have enabled Duane Pelster to better plan how various groups of cattle will be managed during the five-month summer grazing season.

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to forage conditions, without reducing our own cow herd numbers.”

Making improvements

Through the years, ranch improvements have facilitated better management of grazing by both owned and outside cattle. When Pelsters acquired the Malmsten place, most pastures were relatively large — two sections (1,280 acres) or more. Cross-fencing reduced average pasture size by about half. Over time, some 25 miles of water pipeline have been laid to increase the number of watering sites and reduce dependence on windmills. All of the improvements have enabled Pelster to better plan how various groups of cattle will be managed during the five-month summer grazing season.

Each group is assigned to a “system” consisting of three, four or five pastures that are managed under deferred rotation. Over the course of the season, generally spanning the period between May 15 and Oct. 15, cattle are allowed to graze each pasture in turn. During the following year, the grazing sequence is changed, so each pasture is grazed at a different time than during the previous year.

“Cattle are never started in the same pasture for two years in a row,” Pelster explains, “and the pasture grazed first this year will be grazed last next year. It allows that pasture to rest for most of two growing seasons before it is grazed again. It really makes a difference in range condition.”

By following the old grazing rule-of-

thumb of “take half, leave half,” Pelster always leaves standing forage behind when cattle are removed from a pasture. The practice allows for more ground cover, promotes soil health and provides wildlife habitat. Deferred-rotation grazing also leaves some pastures idle during the nesting season.

“The prairie chickens and grouse like to nest in pastures having the most old grass,” affirms Pelster.

A special effort has been made to maintain vegetation in riparian areas, particularly along the Cedar River whose course winds diagonally across the Malmsten place. Healthy stands of native plants and an abundance of wildlife, including upland birds, waterfowl, deer and northern river otter, are testaments to the health of the landscape.

At the close of a typical summer grazing season, the outside cattle are shipped home and Pelster pairs are moved to small, easily accessible pastures in preparation for weaning. The March- and April-born calves are fenceline weaned, separated from their dams by a woven-wire fence topped with two strands of barbed wire. When weaning is complete, cattle are sorted and moved to meadows where they will graze native grass that has regrown since the summer hay harvest.

Hay meadows

The Pelster operation is blessed with an abundance of subirrigated hay meadows whose value has been enhanced by tree-



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planting initiated by Marden Malmsten and his father. With Pelster’s continued efforts, nearly 80,000 coniferous trees have been planted, creating 24 shelterbelts.

Established along the northern edge of hay meadows, these living windbreaks provide protected winter grazing and feeding areas. Wintertime deposition of cattle manure and urine, and the decay of whatever hay cattle might leave uneaten, further the recycling of nutrients. Essentially, it fertilizes the next hay crop.

“Cows get along on meadow aftergrowth until sometime in December. Then we’ll give them hay and cake (supplemental protein cubes) until it’s time to go to grass again,” says Pelster. “Calves graze on meadows, too, but we supplement them with a ration of corn and distillers’ grains, plus prairie hay.”

As a rule, steer calves are marketed in late-January through a local auction company. Heifer calves are held until March, when replacement-heifer candidates are chosen. The remainder is sold or, depending on the year, may be spayed and grown on grass until an August sale date.

“We usually try to buy some replacement-quality heifers to develop and breed along with our home-raised heifers,” says Pelster. “In late fall, we’ll make our final choice of the bred heifers we want to keep and sell the rest.”

Rest and recovery

Significant to the operation’s success is Pelster’s long-time objective of adapting a production system to the environment, rather than trying to manipulate the environment to fit production goals. A pair of center-pivot



► At the site of a vehicle crossing, a weir was installed on one of the Cedar River’s tributary creeks. Designed to enhance water flow and stabilize creek banks, as well as the crossing, weir construction is an example of Pelster Ranch conservation projects completed in cooperation with the Natural Resources Conservation Service and other agencies.

irrigation systems were added in the 1970s to augment feed production, but Pelster has continually sought ways to better utilize what the ranch has always produced — native grass. To do that, he's tried to be a lifelong learner.

Some lessons Pelster has learned through practical experience. For example, his years of tweaking grazing systems have shown that with rotational grazing, more is better. Pelster says even a two-pasture rotation helps, but the favorable rangeland response to deferred-rotation is increased with greater numbers of pastures. Because cattle graze each pasture for a shorter period of time, each pasture also receives a longer period of time in which to recover.

"When we started rotational grazing, we usually grazed each pasture twice during a growing season," shares Pelster. "We'd rotate through all of the pastures pretty quickly and spend more time in each pasture when we went through them a second time. But going through drought taught us that grazing pastures just once during the growing season is better for the long-term health of the land."

Throughout his career, Pelster has tried to hone his skills by attending various grazing-management seminars. Even after 40 years

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of "on-the-job" experience, he sought to further his knowledge by signing up for the University of Nebraska Ranch Practicum. In turn, Pelster has served on a Sandhills Task Force panel of producers who share their experience with others interested in multipurpose grassland management.

A willing mentor, Pelster wishes he could recommend a sure and economical way to handle Eastern Red Cedars. Encroachment by Red Cedar is a common problem in the region, but it's ironic that an operation that has established so many trees now must contend with a species that has become a bad weed.

"We have cleared cedars in all but two of our [45] pastures, and we've done it twice in some pastures," says Pelster. "We've hired them cut with [machine-mounted] shears, and we cut a lot of them by hand. It's just an on-going thing."

It's unfortunate but no surprise that Pelster family members find that job less

attractive than others. The crew that shows up to help with spring branding could whittle down a bunch of cedars. In fact, the Pelsters' three daughters and their respective families help out regularly. Daughter Tara and her husband, Steve McKay, do so daily. The McKays now lease a portion of the ranch for their own cattle enterprise.

"We have just one full-time hired man, so we depend a lot on family for extra help," says Pelster, explaining that two grandsons also work on the ranch part-time.

Pelster tries to share his land ethic with the younger generations likely to succeed him in managing Pelster Angus Ranch. His message to them is, "Do what is good for the land. You might not see it right away, but it will turn out to be good for your bottom line, too." 

Editor's Note: *Troy Smith is a freelance writer and cattleman from Sargent, Neb. This story was written for the Angus Journal's April theme of pasture management, one of 35 Keys to Success being explored as the Angus Journal celebrates its 35th anniversary under ownership of the American Angus Association. To find more articles in the 35 Keys to Success series, visit www.api-virtuallibrary.com/35keys/index.html.*