

### Farm tour highlights improvements for winter livestock feeding options

When Harry Moser first heard K-State Watershed Specialist Will Boyer's glowing reports on the benefits of feeder pads, he wasn't impressed. "I thought he was nuts," Moser said.

Moser, co-owner with his wife, Lisa, of Moser Ranch, Wheaton, was skeptical. Still, past dealings with agents from a mixture of conservation groups had taught him to think outside the box, so he reluctantly gave the okay to construct a raised pad as an access road and beneath an existing concrete bunkline, which was relocated to high ground.

It seemed simple enough: a layer of geotextile fabric layered with six inches of crushed limestone and, around the feeding station, a thick layer of mulched hay. "I really had my doubts," he said. "I just couldn't see how it could do what it was supposed to do."

One season later, Moser's opinion has changed. "We've had some muddy spells, and that's usually when you find out if something's going to work or not," Moser said. "This has gone beyond my expectations."

Moser told his story to a group of visitors to his farm, one of two selected by the Middle Kansas WRAPS Program (Watershed Restoration and Protection Strategy Program) to highlight improved livestock winter -feeding areas and, conversely, improvements to water quality. Co-sponsored by Pottawatomie County Extension and the Kansas Rural Center, the educational tour included the farm owned by Glenn and Jennifer Brunkow, Westmoreland, and guest speakers Dale Kirkham, Kansas Rural Center, John Bond, Middle Kansas WRAPS, and Boyer.

Like the Mosers, the Brunkows had relocated a feeding site to higher ground with a raised pad leading from the main road, a major renovation over a former entry point that at times was so wet only a tractor could get through, and even then barely. It was so dangerous, in fact, that neighbors would keep an eye out for him, Brunkow said. And like the Mosers, the benefits were immediate.

"We used to feed on a flat area that really got muddy," Glenn Brunkow said. "Since moving to the top of the hill and installing the pad, things have been a lot drier." In extremely wet weather, Brunkow said, cattle seem to prefer the raised pad, and he often sees calves lying on it after a heavy rain.

Brunkow and Moser both were impressed at the pad's resiliency and seeming indestructibility. Moser said he'd bladed the pad several times without damage to the pad, and cattle, used to digging around the trough feeder, had never broken through the upper stone layer. "It's able to withstand semi traffic," Boyer assured them, "and it costs less than a third of a concrete pad."

Another major improvement Brunkow initiated was to install a 600-gallon water tank on the slope side of a ravine. Before, a spring seeped from the side of the ravine, pooling in places where cattle would wallow. In wet times the bed became so boggy he worried about losing calves. Nor was the water supply entirely dependable; boggy conditions were ripe for bacterial contamination potentially leading to scours outbreaks.

A concrete tank, fed by an underground PVC pipe about a hundred feet upslope, provides a steady

supply of water, even during last year's inferno summer. "Now we have way more water than we need," Brunkow said. "I've never seen the water level in the tank drop more than an inch."

The Mosers had also installed a water tank in a ravine below a pond that for decades had been heavily used by livestock. After fencing off the pond, Moser dredged it to its current 18-foot depth and began clearing brush and cedars from the ravine. It was hard work hampered by a clay soil that retained moisture like a sponge. Now a concrete tank backed with galvanized railroad siding provides plentiful water, fed by an underground 200-gallon reservoir. Because the water supply is below ground, tanks remain ice-free even in the harshest winters, with a steady temperature of about 55 degrees, said Andrew Klein, NCRS soil conservation technician.

Relocating livestock away from creeks and ponds to prevent soil erosion and water contamination, and wise winter feeding strategies are hallmarks of best management practices, Kirkham told the audience.

Kirkham, who ranches in Greenwood County, said he noticed a lot more concentrated feeding operations in the area than he was used to. "We have 85 percent native grass and two kinds of soil—rocks and clay and clay and rocks," he said. "You have a good balance of cropland and grassland." Regardless of soil type or pasture mixture, farmers need to think of management from the top down, he said. "Every drop of water that flows from the top of the hill down affects what's going to go into that stream," Kirkham said.

Boyer agreed. Livestock need three things to be healthy and productive, he said: food, shelter and water. "Those three things influence where livestock are going to spend most of their time," he said. "Significant improvements in water quality can be achieved by moving one of those three out of the creek and onto higher ground." Feeding livestock only the amount of supplemental hay they can consume in one day, using bale rollers rather than bales, rotating cattle among pastures and frequently moving feeding stations not only produce healthier livestock, Kirkham said, but they improve pastures.

There's also a financial aspect to consider, Boyer said. "Reducing winter feeding costs is a good opportunity to improve your financial situation," he said. "Wasting hay is an economic factor." Confined winter feeding stations also contribute to bacterial contamination and are known breeding grounds for stable flies, Boyer said.

In all things, producers should ask themselves a simple question, Kirkham said. "Are we having a positive or a negative impact in what we do?" he asked. "There are a lot of little things we can do that don't cost a lot, but the benefits are enormous."

Producers should also seek out assistance from the various conservation organizations, Moser said. "There's a lot of help out there if people will only look around and ask questions," he said.

Educational tours, programs and technical assistance provided by the WRAPS program were designed for farmers such as the Brunkows and Mosers, Bond said. "We're here to educate people and raise awareness," Bond said. "We can provide funding and technical support for action, and coordinate with other conservation organizations. Remember, it's your watershed."

A follow-up meeting for producers wanting to incorporate best management practices into their operations is scheduled for March 15, 9 a.m., in the Sunflower Room of the Pottawatomie County Extension Office, 612 E. Campbell St., Westmoreland. Producers should bring their ideas and farm maps to the meeting. Watershed staff will be on hand to help ranchers design plans and determine if

cost share is available at their specific location to help fund these improvements. Contact KRC's Mary Howell at [marshallcfair@gmail.com](mailto:marshallcfair@gmail.com) or 785-562-8726 for more information