

Make 'Em Forage



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Weldon Thomson represents 6,000 brood cows, while Ken Remington's herd numbers fewer than 100, but innovative management can enhance operations of any size. During the 1999 Range Beef Cow Symposium in Greeley, Colo., both commercial cowmen told how management of annual forage crops can help reduce cow maintenance costs.

T R O Y S M I T H

While many pundits proffer the opinion that cow-calf producers have little, if any, influence over the price they receive for their cattle, Weldon Thomson contends their influence is considerable. The type of cattle that ranchers choose to raise, as well as the management and marketing practices applied, can and do influence price.

However, the manager of Canada's Deseret Ranches believes ranchers exert the greatest influence on profitability by scrutinizing how those same factors affect costs. Thomson says that for most operations the biggest bill on the books represents the cost of cow maintenance. So that's the place

to start looking for cost-cutting opportunities.

Colorado cattleman Ken Remington agrees. He says sophisticated production of pork and poultry, with the benefit of cheap grain, puts pressure on beef producers, so cattlemen have to make the most of the bovine beast's ability to utilize forages. According to Remington, forage-based beef producers must increase their sophistication and efficiency in feeding the brood cow.

"Just because you can put up and feed back hundreds of tons of forage, and seldom leave an air-conditioned tractor cab, doesn't mean you can afford to do it," reckons Remington. "You may need to sell most of your high-quality hay to the dairy or

horse operation down the road and look for cornstalks or other cheaper ways of feeding your cows."

Both Thomson and Remington use annual forages to supplement brood-cow nutrition, albeit in different ways. While one has slashed winter feed costs by grazing windrowed forage, the other uses green, growing cereal pastures to extend the grazing season and to boost nutrition. Both strategies address the fact that forages are only cheap, in relationship to grain, when the cow assumes more responsibility for the harvest.

Windrow grazing

With its southernmost fenceline located just 6 miles

north of the Montana border, Deseret Ranches has its headquarters near Raymond, Alberta. This is foothills country on the Milk River Ridge, with elevations ranging from 3,500 to 4,300 feet, and a region experiencing extreme weather conditions. Temperatures climb to 100° F in the summer and plummet to minus 40° during winters frequently accompanied by generous amounts of snow.

Periodically, Chinook winds temper winter's severity, boosting the mercury by 60°-70° and melting snow cover. Deseret Ranches takes advantage of the Chinook effect to extend grazing by the operation's 6,000 cows into late fall and winter.

As with most Northern

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outfits, however, supplemental feeding of harvested forages had been a normal practice — and an expensive one.

Thomson says feed costs on Northwestern ranches account for 55%-80% of total operating expenses because ranchers often spend too much for supplemental cow feed. He admits that Deseret was guilty, too, until windrow grazing was adopted. He also admits that it began almost by accident.

"We got started one fall when a windrowed field of oats received numerous rains. We felt it wasn't worth baling and hauling in," relates Thomson. "During the winter, we sorted off some thinner cows and turned them into the windrowed field. They picked up in condition, so we pulled them out and turned in some others.

"The next year, an early winter caught us with our harvest incomplete, including a field of windrowed barley. It was a tough winter with snow up to 18 inches deep, but when we turned cows into the field,

they had no trouble finding it. They cleaned it up and left the windrows looking like long lines of troughs in the snow," Thomson adds.

From these unplanned experiences, Thomson says, he learned that the cows could do well on what he thought was lesser-quality feed, and they would clean it up with little waste. Best of all, it took little labor to feed it.

After poking around for information from other producers and after a little experimentation, Deseret's program for planned windrow grazing was developed. Today more than 4,000 acres of oats are seeded for this purpose.

"Fields around our main buildings, where we have access to sufficient water, are seeded to oats in early June," Thomson explains. "Using custom operators, the costs for having the ground worked and seeded, then windrowed in the fall runs between \$50 and \$60 per acre. That includes fertilizer and chemicals. The cost varies with fertilizer requirements, but we

are seeing an increase in soil nutrients each year since cows are harvesting the crop and their manure is scattered over the field."

Dryland yields vary but have been as high as 3 tons/acre. Thomson says the average would be about 2 tons. With \$60/acre cash output, the windrowed forage is worth \$30/ton. Whether swathed and left in the field for grazing or baled, hauled and stored before feeding, the value of the feed should be the same. However, windrow grazing offers significant cost savings.

Based on custom operators' rates, Thomson says swathing costs \$7.50/ton. The cost of fencing and labor associated with windrow grazing adds about \$1.50, for a total of \$9/ton. Combined costs for swathing, baling and stacking are \$35, while machinery and labor for feeding bales adds \$10, for a total cost of \$45/ton.

"I see the \$36 difference as significant savings," insists Thomson. "At a feeding rate of 30 pounds (lb.), the savings

would be 55¢ per cow per day, while a calf eating 12 pounds would save 21.6¢ per day."

Thomson has found that nutrient quality of the windrowed forage compares favorably with that of baled hay. Nutrient levels at the time of swathing range from 11% to 17% protein, while digestible energy has ranged from 1.16 to 1.36 Mcal/lb. As long as windrows are undisturbed, only the tops are affected by weathering (similar to the outside of hay bales), and within the windrows little change in nutrient value occurs.

Thomson recommends swathing the oat crop as the kernels begin to fill. At that stage, he believes, the whole plant is of relatively uniform palatability, which will reduce selective grazing. However, when cattle are first turned into windrowed feed, particularly if there is little or no snow on the ground, they will root through every windrow. To reduce waste, he advises use of temporary electric fence to limit access to windrows and force cattle to clean up the feed.

"Moving fence takes very little time and labor compared to feeding," says Thomson. "Our greatest reduction in wintering costs came from needing less equipment and a substantial cut in manpower."

Smart grazing

Primarily a farmer, Ken Remington returned to his family's northeastern Colorado operation in 1967. Like many who farm the semiarid High Plains, he raised wheat but also added a small Angus-based commercial cow herd. From 1976 through 1987 Remington wintered in Texas where he had additional cattle interests.

He recognized the cow cost advantage Texans achieved when grazing was unhampered by the kind of winter weather Northerners often face. Remington says annual cow maintenance costs for Southern graziers can be \$100/head lower than in the North, where dependence on harvested feed



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often puts cow herds on winter welfare.

Remington believes he has recovered most of that \$100 advantage by working smarter. Diversification of crops has allowed better integration with his cow enterprise. With just a little cooperation from Ol' Man Winter, added forage resources from cornstalks and annual cereal crops allow his cattle to graze throughout the year.

"I used to feed put-up hay for five months of the year, but no more. I still keep a small inventory of hay for when we get deep snow and subzero temperatures, but it's never cheap to harvest and feed hay. I'm trying to make cows do most of the work," Remington offers.

"Now, instead of concentrating on wheat, I also raise dryland corn. The cows run on cornstalks for nearly six months (late October through March), and they go to native pasture in April. We changed our calving season from February-March to April-May so they calve on grass," explains

Remington. "We have to provide a little supplemental feed by raising alfalfa, a forage-type pea crop and annual cereals like oats, rye or triticale. We put up a little for hay, but the cows harvest most of it themselves."

Remington says cereal-crop pasture, when grazed before reaching the boot stage, commonly has a protein content ranging between 20% and 30%, so 5-10 lb. (on a dry-matter basis) will meet the protein requirements of a cow, even when lactating. Such high-quality forage is too valuable to waste, however, and Remington says it requires more management than some producers are willing to apply.

"You wouldn't dump a truckload of cottonseed cake in a pile and let your cows go at it, would you? Neither should you waste resources by giving cows unrestricted access to cereal pastures," admonishes Remington. "You should never let a cow lay down on them. Fifteen minutes daily, at a regular time, or 30 minutes

every other day will suffice. Use it to supplement dry grass, cornstalks or other crop stubble for a full-meal deal. Limited access also removes concern over grass tetany or nitrate poisoning from lush pasture."

Remington favors triticale, calling it 20%-50% more productive than wheat and more tolerant of poor soils. For early spring supplemental pasture, he plants winter triticale during the latter half of August. During years with good late-summer and fall moisture, there will be considerable grazing for cows in October and November, as well as regrowth to graze during the following March and April.

"For supplemental pasture used late August through September, plant a spring-type triticale in late July," Remington explains. "We've seen weaning weights on spring-born calves bumped by 20 to 50 pounds after grazing pairs this way. It's also a good way to get dry cows in better condition for winter.

"Keeping cull cows over the winter and grazing them on

triticale in the spring, with a little supplemental grain, has worked well since gains are worth more than. It's pretty nice to sell a cull cow for \$600 or more in late May. It's been a few years since I've done it with this program, but with improving cull cow prices, I expect to do it again soon," he adds.

Remington insists that, for supplemental pastures of an annual forage, large acreages are not necessary. An acre for every three or four cows is sufficient, but the supplemental pasture does have to be easily accessible for both the cows and the rancher.

"Accessibility can be a challenge," Remington admits. "It has to be close to water, and it will have to be well-fenced. Even if a producer has no cropland adjacent to his permanent pasture, he might want to think about converting a small amount of suitable rangeland to an annual forage crop."

