Cutting Feed Costs

Swath-grazing provides means to reduce forage production, winter feed costs.



Story & photos by ED HAAG

It isn't every day you can cut winter feeding costs in half and the cost of forage production by two-thirds simultaneously, but that is precisely what a savvy Canadian beef producer has done by integrating swath-grazed oats into his feeding program.

Doug Wray of Irricana, Alberta, isn't too worried about rising hay and feedgrain prices as long as he can plant oats in the spring, swath them in the summer, and then turn his cows out on the swaths in the winter. He is confident about making a profit in the beef business, while keeping his winter labor to a minimum.

"It just makes sense to leave the feed out in the field and let the cows go get it," he says. "Without the swath-grazing I'd be hauling bales all winter." Wray began the practice of swath-grazing 12 years ago for precisely that reason, but along the way he has identified some other major benefits to swath-grazing oats. He has also seen his winter feeding costs drop from more than \$1 per day per cow (based on current baled hay prices) to 60¢, while his annual nitrogen bill on the oat field has fallen from \$50 per acre per year when he started to \$15 per acre this year.

A simple plan

Wray's 200-head commercial cow-calf operation is located 30 miles northeast of Calgary. His farm has a land base of 1,800 acres, with 1,500 acres of cold- and warm-season perennial grasses dedicated to spring, summer and fall grazing. The remaining 300 acres are allocated to oat production, which serves as the underpinning for his winter swath-grazing program.

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The Alberta beef producer has also tried swath-grazing barley and triticale. He prefers oats because they will respond to late moisture by producing more tonnage. The earlier-maturing barley and triticale, on the other hand, do not.

"In our country it is almost the norm to go for a month in the summer without rain. This will stress a crop," he says. "With oats, if they get another drink, they will use it."

For Wray, this is no small matter. Some years it can result in an additional 1-1½ tons per acre.

From May through November his animals are rotated, with the aid of electric fencing, through 60 grazing paddocks. At the end of December, his pregnant cows and selected feeder calves are moved onto his oats, which were planted in early June and swathed in the predough or early dough stage.

"I used to plant [in] late June, but I have changed that to mitigate some of our yield variations," Wray says, noting that this would allow him to take greater advantage of local precipitation patterns. "If we seed earlier, our oat yields would be more stable."

Controlled intensive grazing

When the cattle are on the swathgrazed oats, electric fence is used to restrict their feeding to specific areas.



The fact that quality, quantity and availability dates can be preset in a swath-grazing program offers a major advantage to the beef producer.

Wray notes that some beef producers who swath-graze with smaller cattle numbers split their fields into two sections with a temporary fence and then run crossfencing to create feeding cells. These crossfences are then moved to create new feeding cells as required.

Because of his cattle numbers, Wray is able to use an even simpler system.

"My method is to run a wire down from

one end of the field to the other, parallel to the swath, then move it based on how much we want to feed," he says, adding that he usually moves his fences once a day. "The more frequently you move your fences, the less feed is wasted."

Wray concludes that by exposing his cattle to smaller amounts of feed more often, a greater percentage of the feed is actually consumed. He has found, from

his own experience, that the difference in waste between moving fence every day and every five days is as much as 30%.

"It is a labor vs. resource tradeoff," Wray says. "For someone who also has an off-farm job, it might make sense to move his fences less often and not worry about the extra waste."

(Continued on page 60)



Swath-grazing's flexibility makes it the ideal tool for feeding through low production periods in a year-round pasture program.

Cutting Feed Costs (from page 59)

He estimates spending 1½ hours a day moving fences. "And that is without firing up a tractor or moving a bale," Wray adds.

With this system he expects one acre of swath-grazed oats to carry one pregnant cow for five months.

Because Wray uses the same ground every year for swath-grazing, he has

already established permanent water sources for his cattle.

"All our winter swath-grazing paddocks are either adjacent to our yard water or have access to other sources of winter water," he says, adding that while some swath-grazers in Alberta rely on snow as a water source, he does not feel it is worth the gamble. "You don't want to be forced into hauling water in the winter. That is something you don't want to do."

In May, he moves his cows back on pasture as soon as they calve. Wray notes that the tender spring grass provides an excellent boost for the lactating cows, while moving out of the oat field onto new ground prevents the spread of scours.

For Wray, swath-grazing plays a key role in maintaining profitability. Agri-Food Canada estimates, as of 2005, winter-feeding accounts for approximately 65% of a cow-calf pair's yearly production cost. The same government agency has also determined the average cost of winter-feeding is \$1.75 per animal per day.

By swath-grazing oats, Wray is far ahead of most Canadian cow-calf

Since he started swath-grazing oats, Doug Wray has seen his winter feeding costs drop from more than \$1 per day per cow (based on current baled hay prices) to 60¢, while his annual nitrogen bill on the oat field has fallen from \$50 per acre per year when he started to \$15 per acre this year.



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- Kurt Braunwart

operations. He calculates it costs him no more than 60¢ a day per cow to keep his herd healthy from December through May. This is based on an as fed yield of 2 tons to the acre. "When my yields are lower, my costs might be a few cents higher," he says. "When they are higher, my costs are a few cents lower. Over time it evens out."

Swath-grazing needed in U.S.Kurt Braunwart, chief executive officer (CEO) of ProGene Plant Research of Othello, Wash., is not surprised by Wray's achievements with swath-grazed oat forage. He says a growing number of dairy operations within the Northwestern states and into central California have successfully integrated oat silage into their feeding regimen.

"You get a lot of tonnage for not too much effort," Braunwart says. "As the cost of feed increases for all livestockmore ensilaging and swath-grazing of oats for both dairy and beef cattle."

Like their counterparts in Canada, he says, U.S. beef producers have been faced with rising fertilizer, fuel and labor costs, which translate into higher prices for baled forage and feedgrains.

"Swath-grazing annuals are a way to

cut hay and hauling costs while increasing our forage yields," Braunwart says. "Taking the cattle to the forage was one way to accomplish that.'

Braunwart, who has developed highyielding forage oats with delayed heading characteristics, predicts swath-grazing oats will soon be used for more than just

maintenance feeding of cows. "The beauty of swath-grazing annuals like oats is its flexibility," he says. "You can stop it at any stage you want, and by timing the planting, the swathed oats will be available at that stage when they are needed."

(Continued on page 62)



Cutting Feed Costs (from page 61)

He adds that this flexibility extends to all stages of beef development. "Let's say I want a quality product for backgrounding calves," Braunwart says. "I would swath the oats in the late boot stage while the leaf protein is still high."

Swath-grazing's flexibility makes it the ideal tool for feeding through low production periods in a year-round pasture program, Braunwart says, adding that this would apply not only to providing lowcost forage through winter dormancy, but also to extending the grazing season into the hottest months of the summer, when moisture could be an inhibiting factor in some areas. Braunwart cites, as an example, a dryland cow-calf operation that has ample pasture and rainfall available through the end of July, but faces drought conditions and a shortage of forage in August. "By planting spring oats and timing your swathing for the middle of July, you have plenty of time to shift over to oat swaths

before your pastures dry out and lose quality," he says.



Tips for successfully swath-grazing oats

Those who are successfully swath-grazing oats consider the practice a key component in their feeding program. Here are some suggestions for those considering introducing the practice to their operation:

- Swath-grazing oats is rarely the total answer to a beef production program, but it does provide a valuable tool for those producers who want to control their feed costs, particularly during periods when feed is scarce.
- Swath-grazing is best when used as part of a total feeding program. The fact that a crop's quality, quantity and availability dates can be preset offers a major advantage to the beef producer.
- Planning ahead is important when establishing a swathgrazing site. Particular attention should be given to the availability of water while cattle are grazing. This can be done by providing alleyways to an existing source or developing a source closer to the site.
- With the price of fertilizer soaring, it is important to soil test every year, especially if the same location is repeatedly used for swath-grazing. During a five-year period it is possible to reduce fertilizer costs by twothirds.
- Swath-grazing goes hand in glove with intensive grazing and controlled feeding. Braunwart says producers who have turned animals onto large swathed sites without controlling their movements have found the levels of waste unacceptable.
- Rake windrows together while the hay is still moist (right behind the swather or mower). Do not allow the forage to dry out as you would if you were baling the oats. Windrows should be no more than 4 feet (ft.) wide and at least 2 ft. tall. Dense windrows are preferable.