

Williams, moved back to the Wagner home place near Chamberlain. When they first returned to the cow business, Wagner and Williams managed their commercial herd in a traditional manner. However, the couple found the old home place could be more profitable and sustainable after they strayed from tradition.

Like many Northern Plains cattlemen, Wagner had considered wintertime feeding of cows to be a necessary evil. Cow herds generally grazed range or pasture for six or seven months of the year - maybe a little longer on some outfits. But most area ranchers planned on providing hay and other supplemental feed to cows during the winter. And whether you raise it yourself or buy it, stockpiling, processing and delivering winter feed is expensive.

Wagner and Williams started out in that familiar mode, feeding their big brood cows winter rations of silage, ground hay and corn. They decided, however, that the costs associated with the feed, as well as the equipment for handling it, were draining their operation's profitability. Consequently, they implemented major changes aimed at improving the bottom line at Wagner Land and Livestock.

For one thing, Wagner and
Williams have strayed from mainstream philosophy regarding cattle type. While there has been much talk about the feedsaving advantage of "moderate" frame size, many producers think frame score 6 is moderate enough - even when mature cows weigh 1,400 pounds (lb.) or more.

Wagner and Williams are aggressively downsizing the physical stature of their cows. Currently, none exceed frame score 5 , but the goal is $1,250-\mathrm{lb}$. mature cows of frame score 4. The couple believes smaller cows with ample rumen capacity are optimal for their environment and management emphasizing grazed forages with little supplementation.

## Big changes

The biggest changes have involved improving the ranch's forage base and extending the grazing period, on average, to 11 months of the year. Wagner and Williams manage cattle on grass from April to November, trying to make best use of both cool- and warmseason species through pasture rotation. In the late fall and winter, cows graze windrowed forage - either pearl millet or intermediate wheatgrass.

Williams claims the advantages of windrow grazing are many. Chief among them is reduced cost of winter feed processing.
"Swathing is the only cost. There is no baling, hauling and stacking bales, or hauling and feeding bales," Williams explains. "No extra fertilizer is needed because cattle apply manure and urine to the fields. Larry does use a harrow to break up manure pats and spread windrow remnants."

Windrowed forage is rationed and waste is minimized through the use of electrified polywire fence to limit cattle access to one or two windrows at a time. If fields are muddy, access is further limited by placing the fence right down the center of a windrow and along its length. Cattle line up as if they were at a feedbunk and
reach under the wire to eat, so they cannot trample the feed into the mud. Under these conditions, the fence does have to be moved more frequently, but moving fence generally takes far less time than feeding hay with a tractor.

No supplement other than salt and mineral is provided, as the windrowed
forage plus regrowth between the windrows generally meets the cows' minimum protein requirements. Nor has deep snow prevented cattle from finding feed. Based on nine years of experience, Wagner and Williams say cows can and
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Winter feed costs, as well as the equipmen for handling it, were draining Wagner's profitability. So the South Dakota producer began aggressively downsizing the physical stature of the cows and extended the grazing period, on average, to 11 months of the year.


## Windrow Grazing (from page 67)

will dig through up to 18 inches (in.) of snow to reach windrows.

## Break from tradition

Not every field is cut and left in the windrow every year. Some fields may be worked into the pasture rotation and grazed as standing forage. And some windrows are baled for use in the event of blizzards or extremely deep, crusted snow.
"We use a bale processor to feed big round bales when we run out of windrows or the snow is too deep. In years with little or no hay or millet growth, we've grazed the millet in the summer and used straw and soy hulls to bring protein and energy levels to needed levels," Williams explains. "Larry added a grain attachment to the bale processor and feeds soy hulls on top of the straw."

When Wagner and Williams initiated windrow grazing, their forage of choice was pearl millet. It poses less risk of high nitrate levels than most other summer annuals. However, it still has to be planted every year, and establishing a stand is difficult when spring precipitation is lacking. So, to cut down on planting costs and to mitigate the effects of drought, the couple turned to intermediate wheatgrass.

Seed for the cool-season perennial is inexpensive and stands were relatively easy to establish - even with minimal rainfall. Intermediate wheatgrass usually produces a considerable volume of forage, which stores well in the windrow.
"It keeps better than we expected. We haven't ever had mold problems in the windrows," Williams adds. "If you don't cut it too close to the ground, the stubble supports the windrow and the grass doesn't die out underneath either."

Wagner and Williams hire the swathing done, asking that windrows lie with prevailing winds to keep them from
Wagner returned to his family's South Dakota ranch in 1992 after some 40 years on the road as a livestock hauler.

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ruffling. The outside of the windrows will bleach, but forage inside remains bright green and highly palatable. Even their bred heifers maintain adequate body condition [body condition score (BCS) 6-7] while grazing the goodquality forage. Up to 50 heifers have been combined with 200 mature cows without problems due to competition for feed. Windrows of $1 / 2$ - to $3 / 4$-mile in length allow access by all animals in the herd.

The daily feed cost for cows grazing millet windrows has ranged from $45 ¢$ to $60 ¢$ per head, or $42 ¢$ per head when grazing windrowed intermediate wheatgrass. Best of all, the cost of owning and maintaining machinery has been substantially reduced. Wagner and Williams have done away with their own haying equipment. The tractor and bale processor are used only occasionally, and most winter chores are now accomplished with a four-wheeler. Breaking from tradition has made going home more profitable and more fun.


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