Winter Greens Sprout Greenbacks

Changing from feeding hay to grazing boosts the bottom line.

Story & photos by
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By making a few changes in his grazing program, Greg Wade of Halifax, Va., has trimmed his cost of production by more than $200 per cow-calf pair. One of Wade's key changes is using a management-intensive grazing (MiG) technique called strip-grazing. While providing a limited grazing strip, Wade gives his cows and calves the right amount of forage each day without wasting grass from trampling and overmaturity.

Wade controls the grazing area with portable electric fences and rations his forage supply through the year. Reducing the amount of wasted forage helps the commercial producer from southern Virginia stockpile grass and extends winter grazing to cut hay costs.

Winter feed is the biggest expense for most cow-calf operations. According to Virginia Extension 2008 Cow-Calf Budgets, the cost of hay and grain for a traditional winter feeding program is $29,944 for a 100-cow fall-calving herd. Total variable expenses budgeted for the 100-cow operation are $50,003 — $500 per cow. In a stockpiled fescue program, winter feed costs are reduced to $19,783, and total variable costs are $39,766 for a savings of $10,237 for a 100-cow herd.

If cattle graze stockpiled forage 50 days instead of receiving hay, the feed savings are approximately $1 per head per day. For Wade's 45-cow commercial Angus herd, the savings on winter feed cost is at least $2,500 annually.

The Southern Virginia cattleman has reduced his herd's hay feeding period from 140 days per year to 90 days per year and plans to continue reducing his reliance on stored feed by fine-tuning the grazing program. Wade also saves more than $100 per cow-calf pair on reduced fertilizer costs from evenly distributed nutrients in the animals' manure.

Cut your top cost

Feed costs are the single-largest expense for cow-calf operations in Virginia and most other southeastern states. Feed accounts for 60% of a beef operation's overall costs, says forage specialist Chris Teutsch of Virginia Tech. Pastures provide feed at a cost of 1¢-2¢ per pound of total digestible nutrients (TDN) while hay costs 4¢-6¢ per pound of TDN.

"Shrinking the amount you spend on winter feed should contribute to a direct improvement in your bottom line. The best way to lower winter feed costs is by focusing on the amount and quality of pasture forage you produce," Teutsch says.

Both warm- and cool-season grasses grow well from Virginia to East Texas, and well-planned forage programs use multiple forages to keep cattle grazing almost year-round. One of the keys to year-round grazing is managing for the species that grow best in your area.

For example, fescue produces excellent nutrition in spring, fall and for winter stockpiled grazing, but fescue quality falls off in mid-summer. Bermuda grass survives close and frequent grazing and is an excellent candidate for grazing in hot summer months. On the other hand, the feed value of Bermuda grass falls as it reaches late stages of maturity. Crabgrass is often overlooked as a highly nutritious warm-season forage, Teutsch says. Orchard grass is a nutritious cool-

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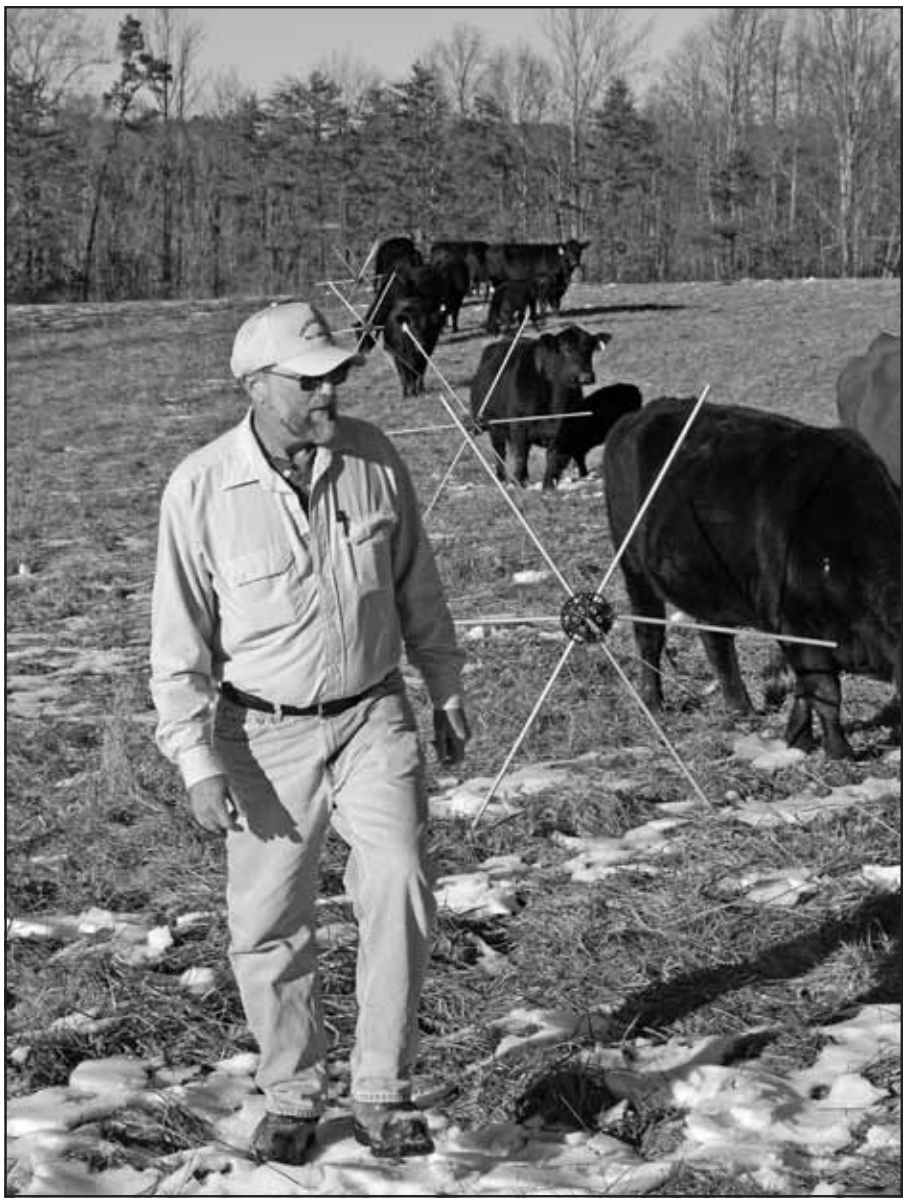
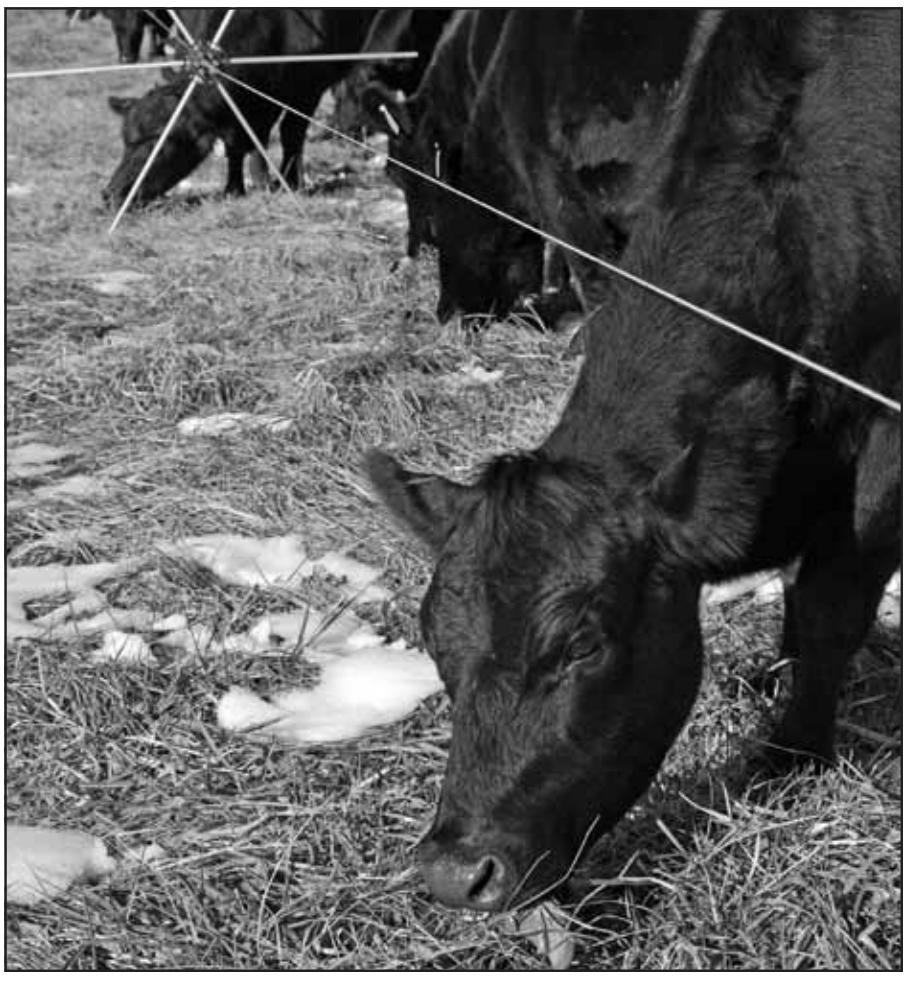


Above: Greg Wade saves money by keeping cows and calves grazing through most of the winter.

Below: Stockpiled fescue is usually higher in nutrition than most grass hay, and cows eagerly graze a new strip each day.



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season species but doesn't tolerate tough treatment in grazing situations.

Game plan

Stockpiling is the key to extended grazing plans in upper-South and mid-South areas and fescue is at the heart of most stockpiling strategies. Stockpiled fescue is a much better winter feed than most of the hay stored by producers, Teutsch says.

Based on laboratory samples collected in late November, TDN concentrations for stockpiled fescue averaged 64%-71% compared to 55% TDN for hay samples. Lactating cows need a TDN of 60% or above, while dry cows can get by on a TDN of 55%.

The protein level was 9%-10% for hay samples and 13%-21% for stockpiled fescue samples. However, TDN represents energy to cows and energy is usually the limiting factor in grazing situations, says the Virginia Tech forage specialist.

Teutsch outlines this strategy for year-round grazing:

- In spring, graze existing fescue or fescue-mix pastures.
- As hot weather arrives, graze cattle on pastures planted with warm-season grass. Crabgrass, for example, provides excellent summer grazing in Virginia.
- In fall, return cattle to existing fescue and mixed-grass cool-season pastures.
- Fertilize and hold back the best stands of fescue for winter grazing.
- As an option, plant small grains or annual ryegrass for highly nutritious grazing during late winter and early spring.
- Store adequate hay for weather emergencies, and feed hay if pastures run short between the late summer/early fall period and late fall when fescue hits its peak.

"Stockpiled forage is better quality and has more energy than the average hay produced in Virginia and most other states with high average rainfall during the hay harvest season," Teutsch says.

Waste not, want not

Even distribution of manure and the resulting savings on fertilizer purchases for pastures is often overlooked as a benefit of rotational grazing. The value of spreading nutrients evenly around a pasture is worth $99 per acre per year, says Jason Tower, superintendent of the Southern Indiana-Purdue Ag Center.

Tower makes some assumptions to estimate the savings from evenly spread manure (nutrients) in pasture fertilizer costs:

Based on research by the University of Missouri, it takes 27 years in a continuous grazing system to have one manure pile dropped in each square yard of pasture, notes Tower. The forage

Greg Wade runs a single wire to give his cows a new strip of stockpiled fescue.

researcher observes that 80% of the animals' manure is applied near water sources and around hay feeding areas in traditional hay/continuous grazing systems.

In a two-day rotational system, it takes only two years to get a manure pile in each square yard.

Based on 2009 fertilizer prices in Indiana, Tower calculates that producing hay removes nutrients valued at $129 per acre from a field. Continuous grazing removes nutrients valued at $104 per acre. Because of even distribution of manure (nutrients) in a two-day rotational system, Tower calculates removal of nutrients valued at $5 per acre.

Feeding hay costs $1.50 per cow each day, and buying extra nitrogen for stockpiling winter grazing costs about 30¢ per day, Tower says.

The potential savings in fertilizer purchases from a two-day rotational grazing system is $99 per acre compared to the purchased fertilizer required in a continuous grazing program, says Tower. Assuming 1.75 acres of pasture per cow-calf pair, the potential annual savings is $173 per pair.

Flexibility is the key

As a rule, the more often new strips are provided, the more efficient the strip-grazing pattern. Providing small, fresh strips every day or two is more efficient than giving the cattle a larger grazing strip for a week's feed.

But strip-grazing can be flexible. If severe weather is in the forecast, a larger strip provides grazing for extended periods. Although cows have a surprising ability to push through snow for grazing, hay or supplements should be available for emergencies. Water should always be available and it's not necessary to back-fence the cattle from the grazed area when the grass is dormant.

When Wade encountered a period of extended snow cover in late winter 2010, he opened the remaining stockpiled grazing area to the cows and hauled round bales of hay to the area as backup feed. Water was available through a freeze-proof pasture water tank.

"We were amazed at how the cows could push through the snow for the stockpiled fescue and hardly ate the hay," Wade says.

Stockpiled fescue usually provides more than adequate TDN and protein for lactating beef cows.

Young calves learn to slip ahead of the cows and creep-graze the best stockpiled forage.