Winter Grazing Wisdom

Three forage specialists share the dos and don'ts of winter and windrow grazing.

by ***Kindra Gordon***

Savvy beef producers know that stretching the grazing season into the winter months can shave dollars off feed expenses. But for winter grazing or windrow grazing to work, planning and management are key.

Here, we get advice from specialists in West Virginia, Wisconsin and Montana on what works — and what doesn't work — when it comes to getting cows to forage through the winter months.

Forage foresight

Dan Undersander, Extension forage agronomist at the University of Wisconsin, emphasizes that planning ahead to stockpile forage for winter grazing is key. This typically requires deferring grazing on the pasture or native range by midsummer.

Undersander adds that it may be necessary to sell calves or stockers early so that pasture remains for stockpiling.

Additionally, he suggests fertilizing pasture set aside for winter grazing to get an extra boost in yield. Undersander says fertilizing with 50 pounds (lb.) of nitrogen (N) per acre in his region can help produce 1-1.5 extra tons of forage per acre.

Undersander's top picks for stockpiling are tall fescue and orchard grass. He says, "Both grow well in the fall to accumulate good forage level." He adds that orchard grass is best suited to late fall or early winter grazing, while tall fescue stands better and can even be deferred to early spring.

Edward Rayburn, West Virginia University Extension forage agronomist, also counts tall fescue among the best perennial grasses for winter grazing since it holds up to freezing weather.

If fescue's not an option for your region, Rayburn says crop residue, such as corn, and winter grain crops like wheat and rye offer high-quality winter forage alternatives for grazing in the Midwest and South.

"I cannot think of any crop I would not recommend," Rayburn says. "If the cows eat a crop residue, it is probably a good feed source. Just make sure that any chemical used on a crop does not legally prevent the crop residue from being grazed."

For windrow or swath grazing, similar guidelines apply. Janna Kincheloe, a Montana State University Extension educator in Judith Basin County, says anything from seeded annual forages to perennial grasses can work for windrow grazing so long as the forage has been allowed to grow enough to make a dense windrow. In some instances, she says fertilization of the forage is also worthwhile.

In her region, she says it typically works best to swath the forage in late August or September to take advantage of cool-season grasses and get better forage quality. Cattle could then graze those windrows from October through December before snowfall gets too deep.

Limit access with fences

The second key to successful winter grazing is limiting the cattle's access to the stockpiled forage or windrows.

"Winter-grazed areas should absolutely be crossfenced or kept to a small size for best forage utilization," Undersander says.

Rayburn reports that by strip-grazing stockpiled fescue, the cattle will get about 50%-75% more grazing days from it than if access is allowed to the entire pasture. Strip-grazing is especially important in rainy regions, he says, to prevent the forage from being trampled down in the mud.

As a rule of thumb, Rayburn recommends allowing access to only as much forage as the cattle will clean up in three to seven days. He adds that for crop residues like corn, crossfencing and limiting access are also the best ways to get the most efficient forage utilization.

With windrow grazing, Kincheloe also emphasizes that use of an electric fence is essential to minimize the amount of forage being wasted. She suggests fencing sections that offer up to a three-day supply of forage for the herd. (To estimate swath utilization, assume a cow will consume 2%-2.5% of her body weight. Thus, a 1,200-lb. cow consumes about 24 dry matter (DM) lb. of swath feed per day.)

That said, Rayburn recognizes crossfencing may not always be practical. "In some cases it may be most practical to let the cows have access to a larger area, realizing they will eat the high-quality feed first and need some supplementation later in the season," he says.

Some supplementation

Undersander says supplementation may be needed along with winter grazing, depending on the type of cattle and goals. He suggests for beef cows, supplementation is only needed if temperatures fall below 0° F. However, for growing animals, some additional supplement might be needed during the entire grazing period. The need for supplemental energy and protein may be especially great when grazing crop residue, such as cornstalks, he says.

Likewise, Rayburn says supplementation depends on the quality of the forage being grazed and the animal's age and production status.

Specifically, Rayburn says dry cows have a low nutritional requirement and will need the least supplementation, probably only a basic trace mineral package in salt. Cows closer to calving should be monitored for body condition and may require an energy or protein supplement and mineral mix.

Lactating cows and growing young animals will have the highest nutritional requirements, and supplements may be needed. For each situation, it is advisable to work with a nutritionist or a local Extension educator to determine

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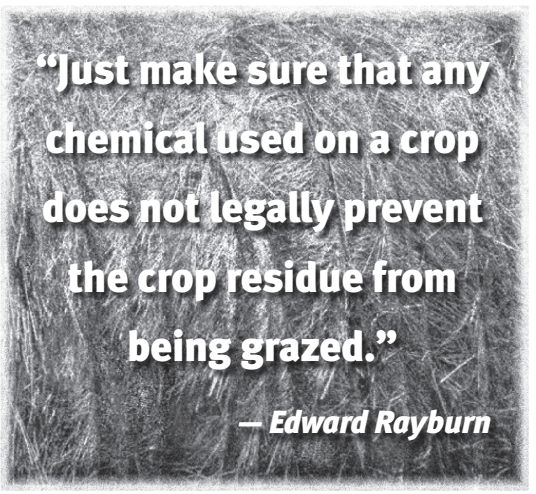

the quality of the winter forage and the nutritional needs of the animals being fed.

With winter grazing, Undersander also stresses it is important for producers to know how much forage is present. He says, "The most common mistake I see is cattle underfed because less dry matter was available than was estimated."

Final considerations

Here are some final points to ponder in deciding if winter or windrow grazing fits your operation.

1) Don't let the snow scare you. Montana's Kincheloe says she often hears producers say they don't windrow graze because snow is a concern. However, she says, cows will usually forage through the snow unless it is crusted over.

Research indicates swath grazing can generally be used with success in snow depths of up to 2 feet. Kincheloe suggests producers make windrows high and dense so they will protrude through the snow. If they do get crusted over, she says driving along the side of the windrow with a tractor will generally help break up the snow and ice so cows can get to the windrow.

In regions with heavy snowfalls, an advisable strategy is to have an emergency feed source on hand for use during blizzards or deep snow cover that limits grazing.

2) Watch forage conditions from year to year. Kincheloe admits that in areas of the West, winter or windrow grazing may not be an option every year — especially if a drought year produces minimal forage growth. She says producers may want to graze in early spring and then defer grazing to see if there is enough regrowth on certain pastures for fall or winter grazing. Also, the pastures used for winter grazing should be rotated from year to year to ensure plant diversity.

3) Give it a chance. In Montana, Kincheloe says not a lot of producers have taken advantage of windrow and winter grazing options, but she encourages them to consider it. "Some producers may have had a flop the first year and decided it wasn't going to work," she says. "But with planning and management this can be an economical option."

Rayburn concludes, "Managers understanding good cropping practices and animal nutrition can get very inventive in how to effectively feed livestock with winter grazing." AJ

Fescue stockpiling tips

Although any forage species or mixture can be stockpiled for winter grazing, tall fescue is among the best grass species for stockpiling because it has productive yields in the fall, and its feeding value deteriorates relatively slowly after a hard frost.

A University of Minnesota study near Morris, Minn., showed tall fescue produced 20% more yield in the fall than its closest competitor in that part of the country. Eight species were evaluated from July 15 to harvest prior to a killing frost.

Reed canary grass and orchard grass were second to tall fescue in stockpile yield, producing about 600 pounds (lb.) per acre less forage dry matter (about 20% less). Because forage quality declines most rapidly with legumes, the researchers concluded alfalfa would not be a good candidate for stockpile management.

The Minnesota researchers offer these tips in stockpiling tall fescue.

- ► Only endophyte-free tall fescue seed should be used.
- ► Seed small acreages initially if you have not seeded tall fescue before.
- ► Earlier stockpile initiation (June to early July) will produce relatively more yield of lower-quality forage. Later stockpile initiation (late July to August) will produce relatively less yield of higher-quality forage.
- ► Application of either synthetic or organic nitrogen at the initiation of stockpiling grasses is essential. For synthetic nitrogen, 40-60 lb. nitrogen per acre is recommended.

After the season's first hard frost, both yield and quality of the forage will decline. (In Wisconsin research, digestibility of stockpiled grasses declined from about 74% in October, to 71% in December, and about 65% the following March.)

The energy level of the forage will deteriorate more than its protein level, so supplementation should most often be geared first toward meeting energy needs.