Practical planning for successful winter grazing

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Most farmers and ranchers consider feeding hay to their stock to be a fairly simple task. You go to the bale yard, pick up some hay, drive out to the stock, and feed them some hay. Simple, but very expensive. Like almost everything else in life, convenience comes at a price. It is up to you to determine what the true cost of each alternative strategy might be and then decide if you’re willing and able to pay the price for the option you choose.

Winter grazing can be as simple and as convenient as feeding hay, but much less expensive, if you plan to make it so. Trying to graze stock through the winter without a coherent plan and the right strategies for your operating environment can turn it into an inconvenient nightmare.

The very first step in planning for year-around grazing is bringing expected livestock demand for forage into balance with forage supply. Breeding herds of livestock, whether they be cows or any other class of livestock, have a cyclic demand for nutrients depending on breeding, gestation, and lactation stage. This cycle is very predictable and consistent with peak demand occurring at peak lactation and lowest demands occurring when the dams are dry. Cows are usually pregnant and dry simultaneously while smaller ruminants may be either dry and open or dry and pregnant. This pattern of forage demand strongly suggests birthing should occur while there is green grass growing in the pasture. There are a few situations counter to this pattern, such as fall calving in pasture environments dominated by endophyte-infected tall fescue or where winter annuals are the highest quality forage available.

Bring livestock demand and forage supply into balance.

Another important component to being able to graze year-around is knowing how much forage you need to provide to your livestock at different times of the year. Setting the stocking rate for your centerpiece enterprise based on your winter grazing capacity rather than summer grazing capacity is one of the first steps towards efficient year-around grazing. If financial analysis shows it is not economically feasible to operate at that stocking rate, it is the necessary to either cost effectively increase winter forage supply to be able to carry the number of head necessary to operate profitably or reconsider what your primary business should or shouldn’t be.

You want to go into winter knowing what you will be doing through each month or week of the dormant season. If the end-of-the-growing-season pasture inventory shows you do not have enough pasture to go through the winter with all the stock you had planned, start making adjustments now. Do not wait until the standing forage is gone before you figure it out. Always remember there is a minimum of two ways to look at the situation. You can increase supply or you can reduce demand. The sooner you make your adjustments, the smoother your path will be.
Knowing your beginning inventory will make feed budgeting easier throughout the winter. In some parts of the country, available stock water is a limitation to which pastures can be used during the winter, while in other areas livestock rely entirely on snow to supply their water needs. Remember dry, pregnant cows or ewes have a much lower daily water requirement than do lactating females. Pound for pound, sheep have lower water requirements than do cattle. They can go for longer time periods between drinking and their absolute requirement relative to metabolic weight is lower than cattle. Cattle, particularly, can travel farther distances to water in the winter than the summer because of both lower temperatures and reduced daily requirement. Proximity of water availability in the winter is relatively less critical than in the summer months.

If you have limited winter water resources and snow is not a reliable source, planning around the available water sources is critical to success. Some sources may freeze up much earlier in the season than other sources. You need to be aware of what the typical patterns are and plan to save the pastures with the most reliable water sources for the coldest part of winter. Within a pasture with a single water source, base your strip grazing strategy on starting close to water and moving away from it with successive strips.

**Optimize the availability of stock water in your grazing plans.**
In larger operations, the winter strip grazing program may only consist of moving from one permanent pasture to another. Some of our range clients rotate 800 to 1200 cows through a series of permanent pastures every 5 to 7 days. They use no movable electric fences, but operate what would be considered a very intensive winter range grazing operation. Smaller operations are more likely to use movable fences to control the daily feed allocation.

What constitutes small is a matter of perspective. Here in Idaho we strip graze 300-500 cows using polybraid on reels and step-in posts. The length of fence for each move is about 1000 ft. When we were in Missouri we only grazed 50-60 cows in the winter and the fence distances were usually in the 300-400 ft range. Same basic principles, just different lengths of fence. The time required for moving the fence is still much less than required to feed hay to the same number of cows in either case.

Because you are typically working out in the cold when using winter grazing, keeping the lengths of fence to be moved to something within your comfort zone is important. Also, using fence products that work reliably and easily will help keep chore time to a minimum.

**Plan your fence system to meet your comfort level for working in cold conditions.**
Depending on the forage you have available and your livestock needs, supplementation may become necessary at certain times. The key word here is supplementation. By definition a supplement is something provided in addition to a basic input, not a replacement of the basic input. Knowing what your livestock need and what your pasture can supply are the first steps to planning supplementation strategies. Remember protein supplementation is usually targeting rumen microbes, not the livestock directly.

Adding protein to a diet of ‘low quality’ dormant forage not only increases protein level but allows the rumen microbes to extract additional energy from the forage. Thus, protein supplementation
increases energy availability. However, supplementing energy does not concurrently increase protein content of the diet. Without necessary N or protein in the rumen, supplementing with energy has very low efficiency.

Supplementation should be kept as simple as possible so it can be done efficiently and cost effectively. When evaluating the cost of supplementation, there is more to consider than just the price of the feed itself. Feed bunks, hauling, labor, and wastage all need to be weighed against the realized benefit to accurately assess cost:benefit ratio. Another important concept to remember is protein supplementation does not have to occur every day.

**Use strategic supplementation to maintain animal performance and stretch forage supply.**
You will face years where the best of plans will not work. Winter grazing is predicated on the assumption that you will be able to grow some forage during the growing season to graze during the dormant season. What if there is no significant rainfall during the growing season? What if a Federal judge cuts off your irrigation water? What if grasshoppers of Biblical proportions ravage your landscape?

Every farm or ranch needs to have a drought plan in place to help them deal with these situations. It is virtually impossible to cost effectively feed your way through a drought. Significant destocking is usually the most profitable or least damaging way to deal with droughts. Destocking does not necessarily mean selling out. It means removing the livestock from your pastures and range. You may retain ownership while shipping them to some other location. It may mean just a partial reduction in stocking rate. There are always options. The key is to have a plan.

**Have a drought strategy in place to help deal with the inevitable.**
Depending on where you farm or ranch, you will also face periodic challenges of snow, ice, wildlife depredation, among others. Some animals learn to cope with these challenges more readily than other animals. Some managers learn to cope with these challenges more readily than do other managers. I have always emphasized the need for flexibility in grazing management. Nowhere is this more true than in winter grazing operations.

**Ongoing observation, analysis, and adjustments will be needed.**