Extending Fall Grazing With Brassicas and Cereal Grains

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Some livestock producers are looking for something to "spice up" their late fall and winter feeding scheme. Along with stockpiling, growing selected varieties of annual ryegrasses, cereal rye, spring oats or forage brassicas can provide high quality forages for grazing in late fall, winter and/or very early spring. Forage Brassicas, such as rape, kale, turnips and swedes are high yielding, high quantity, fast growing crops.

My recommendation for late fall and winter grazing would be a combination of turnips and spring oats. However, if you want to continue grazing early next spring I would also include some annual cereal rye in the mixture.

Use Of Brassica Crops In Fall And Winter Grazing Systems

The above ground parts (stems and leaves) or rape and kale and all parts (stems, leaves, and roots) of turnips and swedes are utilized by livestock. Brassicas are high quality forage if harvested before heading. Above ground parts normally have 20-25% crude protein and 65-80% TDN. The roots of turnips and kale usually have 10-14% crude protein and 80-85% digestibility. Brassicas can provide grazing at any time during the fall or early winter depending on seeding date.

Turnips grow fast and can be grazed as early as 70 days after planting. They reach near maximum production level in 80 to 90 days. Including spring oats with the turnips increases both the total production and digestibility of the forage. The proportion of top growth for turnips to roots can vary from 90 percent tops/10 percent roots to 15 percent to/85 percent roots. Turnips can be seeded any time from when soil temperature reaches 50 degrees until 70 days prior to a killing frost. Ideal time for fall seeding is sometime during the first 15 days of August.

Swedies, likes turnips, produce large edible roots. Swedies yield more than turnips but require 150 to 180 days to reach maximum production. Rape is one of the best crops for fattening lambs and flushing ewes. Yield is maximized with a 180-day growth period for many varieties.
while most hybrids; on the other hand, produce greatest yields when allowed to grow 60 days before first harvest and 30 days before the second harvest.

Establishment Of Brassicas

Brassicas require good soil drainage and a soil pH should be in the range of 5.5 to 6.8. Brassicas can be no tilled into a sod provided it has been killed with glyphosate. This reduces insect problems. They can also be seeded into wheat stubble. Clean till seeding works well but may have increased insect pressure. If seeding after crop farming, herbicide carryover residues are an enormous problem for Brassicas and small grains. Some commonly used herbicides can affect the establishment and growth of Brassicas for up to 24 months. As a rule, carry-over label recommendations for sugar beets are usually applicable to most members of the Brassicas family. Use 2 to 4 lbs/acre of seed for turnips and 3.5 to 4 lbs/acre for rape or kale. Drill the seed on 6-8 inch row spacing and place seed no more than 0.5 inch deep. When seeding spring oats or cereal rye with turnips the usual seeding rate is 1.5 to 2 bushels per acre of the small grain. Some producers have had success in aerial seeding of turnips, spring oats and cereal rye into standing corn in mid-August. Again, check out your herbicide program for potential carryover and grazing restrictions before trying this method of seeding.

Fertilizer should be applied at the time of seeding to give the brassicas a competitive edge on weeds. Apply 75 to 80 pounds per acre of nitrogen and fertilize with phosphorus and potassium similar to what would be applied for a small grain.

Turnip Varieties

The old standard variety of turnips has been Purple-Top, but newer varieties would include Dynamo, Sampson, Barkant, Rondo, Appin and Forage Star Turnip.

How To Graze

When possible, turnips should be strip-grazed (size of available grazing are controlled by temporary electric fencing) during the growing season, much like a rotational grazing system. During the growing season strip grazing with a break wire in front of and behind the animals can be used to control consumption, allowing regrowth, preventing wastage, and conserving available dry matter. Strip grazing limits grazing damage to the root and lower leaf, allowing leaf surface for regeneration of plant growth. If regrowth is desired, at least two inches of leaf should be left intact. Generally animals will consume the leafy portion of the plant before progressing to the root portion.

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