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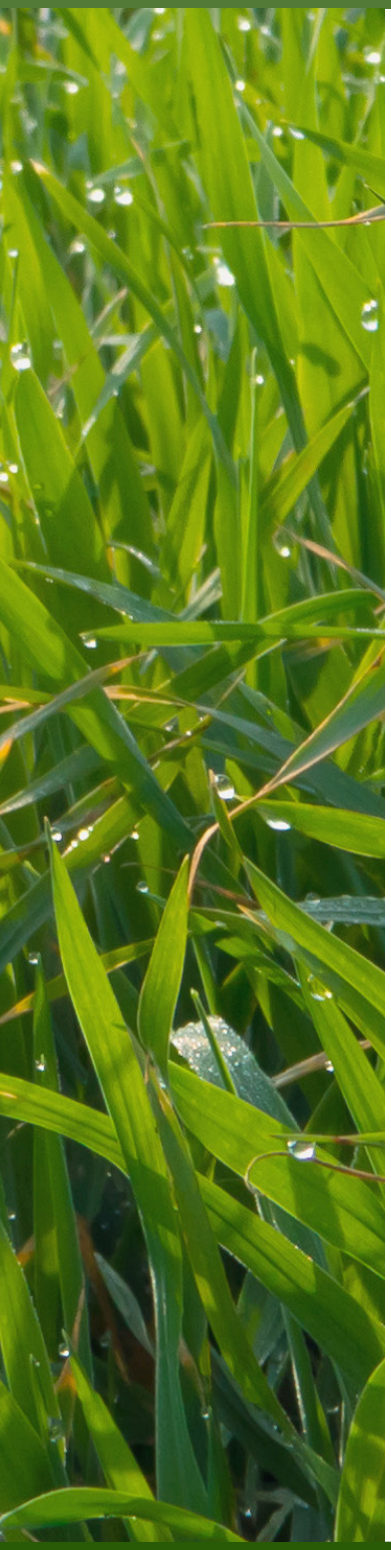
Illinois Grazing Manual Fact Sheet
GRAZING MANAGEMENT

Stockpiling Forages



General Information

Stockpiling forage is an excellent method of saving forage for overwinter use without harvesting. Stockpiled forage can provide adequate protein and energy for dry cows, heifers, weaning calves and ewes for grazing in the fall and winter after forage growth has stopped. Grazing can be provided as long as the forage lasts and as long as grass tips are visible under the snow.

The primary reason for using stockpiled forage is to reduce feed and feeding costs. For each week that the grazing season is extended, total annual feed costs for a forage-fed animal (i.e., ewes or beef cows) are reduced by about 1%. The savings reflect the harvesting costs for grazed forage as compared to hay or silage harvesting, primarily on account of machinery, labor and other inputs not experienced in harvesting the same forage by grazing. Also, livestock grazing stockpiled pasture, spread their manure back onto the pasture without the cost of conventional manure hauling and spreading.

Stockpiled Forage Quality

Stockpiled forage is surprisingly high in forage quality. Data from the University of Wisconsin reported stockpiled bromegrass forages over winter seldom fell below 18%crude protein. Similar analyses from Iowa have indicated about 15% crude protein. Several reports from other research of stockpiled tall fescue all indicated about 20%crude protein. Forage quality is high because stockpiled forage has a high percentage of leaf material due to reduced grass stem growth and heading in late summer.

Stockpiled Management

Several strategies can be employed to supply forage into the fall or winter and effectively extend the grazing season, thus reducing the need for stored feeds. These strategies can be categorized into two major groups: 1) Stockpiling (conserving cool-season forages in late summer for use in the fall and winter), and 2) utilizing forage crops that continue to grow into the fall and early winter.

The normal procedure for stockpiling forage is to remove the animals from the pasture and allow forage to accumulate on a pasture beginning about August 1st to August 15th. Allow regrowth to occur for about 60 to 75 days. The late season growth will produce 0.75 to 1.5 tons of forage per acre, allow pastures to rest and legumes to rebuild root reserves for winter. An application of 40 to 80 pounds of nitrogen between August 1st and August 15th will greatly increase late season pasture tonnage where there are less than 40% legumes.

Not all cool-season species are adapted to stockpiling because most species reduce growth in the fall because of shorter day lengths and/or lose leaves (quality) after being frosted. Tall fescue and birdsfoot trefoil are two forage species which are suited to stockpile management because they continue to grow into fall and do not lose leaves as readily as other cool-season species due to frost.

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Bromegrass can be stockpiled but should be grazed first in the rotation.

Strip grazing or rotational grazing is recommend when grazing stockpiled forages. Livestock should be limited to a few days up to a week of forage at one time, so the use of temporary fencing is recommended. Watering stock on stockpiled pasture is a concern in freezing temperatures. Even in November, pasture forage is between 50 and 70% moisture. Hauling water is an option, as is pumping from pond or stream or using frost-free water systems. Sheep have low water requirements in cool weather and dry ewes can be supplied from only good quality stockpiled forage. For beef cows a water source is essential.

Summary

Stockpiled pastures can be a low-cost source of forage for livestock during the fall and winter months. By adopting management practices, the stockpiled forage can provide high quality and high yielding forages for fall and wintertime grazing. Producers can tailor the type of stockpiled forage to livestock requirements. Managing animals on stockpiled pastures requires rotational or strip grazing with moves every few days. Although experience has indicated little concern with soil compaction or increased winterkill from fall or winter grazing, use caution in wet conditions or on heavy soils.

References

- University of Wisconsin, Dan Undersander, Forage Crop Specialists, Stockpiled Forages.
- Ontario Ministry of Agriculture, J. Johnston and C. Wand, Stockpiling Perennial Forages for Fall and Winter Grazing
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