Spring 2013 Pasture Management Considerations

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Upper Midwest pastures will need extra "TLC" in the coming year to overcome the extremely dry and hot conditions experienced during the 2012 growing season. As snow cover declines, plan to get out and assess pasture condition, review previous fertility, weed, and grazing management programs to anticipate site-specific issues, and develop an overall game plan to get those pastures back into optimal production.

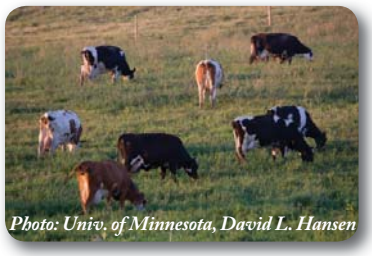

Photo: Univ. of Minnesota, David L. Hansen

Each farm has different pasture goals and the management system must be designed to meet individual production, forage quality, economic, and lifestyle needs. Consult with local Extension or Natural Resources Conservation Service personnel for assistance and advice as these questions are considered:

Who is my Pasture "Customer"?

Whether the answer is a beef cow-calf herd, lactating dairy cows, or growing livestock, each of these "customers" will require management to meet the quantity and quality of pasture needed. Identify these goals and shape pasture management to produce the desired outcomes.

What are my Resources?

Recognize both the opportunities and challenges for pastures and determine how best to optimize the resources available. Think about pastures in terms of total annual production needs. Identify realistic production and quality targets in terms of animal stocking rates, length of grazing season, or potential forage yields as well as considering how production shortfalls will be addressed.

What Can I Do to Improve Efficiency & Sustainability of my System?

How does pasture production fit in with other farm enterprises? What are the opportunities to increase production and efficiency of the pasture program? What pasture improvements are needed to help pastures recover more quickly from the drought? What fencing, conservation, or other improvements are needed that will improve production and quality in the long term?

Attention paid to soil fertility increases capacity of pastures and harvested forages to tolerate suboptimal growing conditions such as variable weather patterns, insect pests, or weed competition, and results in more consistent forage production and quality. For mixed pastures where 30% or more legume content is desired, soil fertility needs should be optimized for pH, phosphorous, and potassium of the legumes, as these species generally require a higher soil mineral status of these nutrients for optimal production. Secondary or trace nutrients such as sulfur and boron, may also be needed in some locations. In addition, research indicates pasture grasses also use applied nitrogen more efficiently when soil potassium and phosphorus status is in the optimal range. Predominantly grass pastures should receive an early season application of 60 lbs nitrogen per acre to encourage spring production, and may need additional nitrogen later in the season. Regular soil testing every 3-4 years, to maintain or improve soil nutrient levels, is recommended for pastures as well as other crops.

Legumes can make significant contributions in both pasture and harvested forage production systems, providing consistent forage yield, quality, and palatability. Legumes also fix nitrogen in symbiosis with rhizobial bacteria colonizing their root systems. Most legumes will need to be reseeded periodically, or allowed an extended rest period to set seed. Consider frost seeding or interseeding thin pasture stands this spring with legumes such as red or white clover. Grazing management that encourages strong seedling growth must also be applied when frost seeding or interseeding into existing pasture sods. Develop a consistent plan to maintain or improve productivity of legumes in pastures to reap the benefits of these forages across the farm.

Weed competition may increase in drought-damaged pastures. Early season observations will assist with determining where weed issues may need to be addressed and what control methods will be most effective. Contact local Extension personnel for assistance with identification of weeds that are not recognizable and recommendations for effective control options.

Research from Iowa suggests pasture forage mixtures should be varied across the farm landscape to maximize production and quality. Increased pasture diversity can also address erosion concerns, improve sward density, and provide management flexibility during dry summers on shallow soils. Improved varieties of legumes and grasses are available that enable producers to develop custom seeding mixtures that fit well across a farm's resources. For those producers interested in developing their own seeding mixtures, a calculator is available online through the University of Wisconsin Forage Research and Extension website at: http://www.uwex.edu/ces/forage/.

Pastures require periodic rest from defoliation and attention paid to residual heights post-grazing to maintain vigorous swards.

Subdividing pastures not only builds in more rest for individual pasture areas, but increases flexibility of grazing management in terms of matching animal dry matter intake and quality requirements along with the opportunity to better manage residual dry matter left after grazing. Recent research from the U.S. Dairy Forage Research Center has demonstrated that several cool season grass species show improved seasonal forage yields and also respond better the following spring with up to 10 days of earlier growth initiation when target residual grazing heights of at least 3-4" are maintained throughout the growing season. These residual height targets also help reduce weed competition. During periods of dry weather, forage residues also provide important cover to soils that will buffer soil temperatures and improve water infiltration when precipitation occurs.

Pasture forages adapted to the Upper Midwest have definite seasonal patterns of quality and production. Producers must plan for those periods of minimal forage production as well as be prepared for unexpected losses due to weather fluctuations. Currently, there is renewed interest in the use of crop residues, annual forages, and cover crops to help fill in expected pasture forage gaps as well as provide emergency forage as needed. Producers should consider including some of these options among the total pasture and forage resource inventory for their farm.

The economic realities of high feeding costs in all sectors of dairy and livestock production requires that producers continue to pay attention to the economics of various pasture and harvested forage alternatives. Pastures still reign as the best low-cost opportunity to produce high quality and quantities of forage, but will do so only if the same amount of attention and effort is made as with other feed crops.