Spring Pasture Management 2015: Ready? Set? Graze!

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Spring is not far off! Now is the time to develop an early spring grazing management strategy. In addition to current weather and soil moisture conditions, early spring pasture growth response depends on grazing management during the previous growing season. Take time to review the 2014 grazing season and identify pastures needing renovation or special management attention. Look at individual paddocks to note residual cover levels left from last fall, bare ground areas from over wintering, and other challenges. Here are several points to consider as part of an early spring pasture management game plan:

Over-Seeding Legumes
The window for frost seeding legumes is often very brief, so have seed and equipment ready for the onset of those warm sunny days and frosty nights of early March conducive to developing frost cracks to receive legume seeds. For optimal frost seeding results, add 2-4 lbs/acre of legumes such as red or white clover to pastures every year – research suggests frost seeding is about 66% effective. Using a no-till drill to seed legumes as soon as pastures can handle traffic is a good alternative to ensure small legume seeds are properly placed if frost seeding conditions seem risky.

Soil Fertility
Nitrogen applications of 40-60 lbs can jumpstart early spring growth on some paddocks and are also desirable for grassy hayfields. Apply other nutrients according to soil test recommendations.

Decide Which Paddocks to Start Grazing First
Annual pastures with winter rye, triticale, or Italian ryegrass are usually ready for grazing first. Because of their high forage quality, winter annuals should be limit- or strip-grazed as they become available and used to supplement winter feeds.

Permanent pastures with at least 4-6" of plant residue from the previous grazing season are good candidates for very early spring grazing. When new spring grass growth is about 2", start rotational grazing. Plan to move onto the next paddock when 3" of sward residue remains. Research by Dr. Geoff Brink, U.S. Dairy Forage Research Center, indicates maintaining at least a 3" residual across the grazing season optimizes forage production and sets paddocks up for earlier spring grazing initiation the following year. A short-term goal is to have enough "residue" paddocks to move through during the first two weeks of spring growth so other pastures can reach at least 6-8" of growth before grazing is initiated.

If paddocks had 2-4" of residue over the winter, start grazing when early spring growth is 6-8" tall in two or more paddocks, and remove livestock when residual forage cover is 3". For paddocks with little to no residual cover, delay initial grazing until paddocks are 10-12" for tall-growing grasses such as orchardgrass, meadow fescue, and smooth bromegrass (6" tall for Kentucky bluegrass and perennial ryegrass). While these are guidelines, graziers will need to make decisions based on their situations. Continue to provide supplemental feeds so animals have sufficient dry matter intake and forage quality to meet early spring nutritional needs.

Be Ready to Handle the Spring Flush (and Weeds!)
Once cool-season grasses start spring growth, they can be rotationally grazed every 14-21 days with good residual management. With sufficient moisture and warm temperatures, rapid spring forage growth often exceeds the herd's consumption and grass plants shift into reproductive mode. As seed heads form in spring, grass forage quality quickly declines.

Flower bud formation in most cool-season grass species was initiated during low temperatures and long nights the previous fall. In response to spring's warm-up and increasing day length, tiller development shifts to seed-head formation. Reproductive tillers dominate vegetative tiller formation until removed by grazing or cutting. Once vegetative tillers are removed, they take over with leafy growth the remainder of the season, and forage quality declines much less rapidly. Reproductive tiller removal is important to continue production of high quality forage under rotational grazing. It is nearly impossible for grazing management to remove all reproductive tillers; so many graziers utilize hay production and/or mowing immediately after grazing to expedite removal of grass seed heads. This has the additional benefit of providing a non-chemical means of controlling common pasture weeds.

Summary
Early spring pasture management sets the stage for success during the remainder of the season. As with other parts of the grazing season, early spring has its particular challenges. If grazing is initiated before plants are ready, decreased production throughout the year and decline in long-term vigor of swards are likely impacts. Without a plan for managing spring flush, forage quality and animal production can be impacted.