FORAGE FORTUNE TELLING

Late winter is a good time to assess and project forage production, and develop grazing plans for the upcoming season.

BY JOHN MADAY
JMADAY@VANCEPUBLISHING.COM

SPRING GREENUP ISN'T FAR OFF, and with feed prices what they are, ranchers longingly anticipate turning their cattle out on lush green grass. A first step, though, is to plan which pastures to graze first, for how long and at what stocking rates.

Naturally, rainfall during the upcoming grazing season is a critical and generally unpredictable factor in pasture and range productivity. But factors including past history, last year's grazing practices, winter precipitation and visual observation can provide working production estimates for objective planning.

LOOKING BACK

Purdue Extension forage specialist Keith Johnson, PhD, says conditions last summer and fall could limit forage production this year, unless producers make adjustments. He notes that many areas experienced heavy rainfall in the spring of 2010, getting pastures off to a fast start and delaying hay harvest in many cases. But by mid to late summer, the weather turned dry and remained dry through the fall. During that period, Johnson suspects producers might have subjected stressed pastures to some degree of overgrazing.

Producers should consider that stress as they plan this year's pasture management, by allowing those pastures time to recover. In the case of improved pastures, they might consider improving soil fertility and overseeding.

The speed of recovery in stressed pastures depends on moisture but also on plant type, says Charlie Orchard who operates Land EKG Inc., a rangeland monitoring and management consulting company based in Bozeman, Mont. Arid native pastures, he says, typically decline more slowly in response to grazing practices but also take more time to improve or recover. High-rainfall or irrigated pastures, on the other hand, can decline more quickly if overgrazed and improve or recover faster if management improves.

Charlie Orchard
www.landekg.com

PASTURE IMPROVEMENT DECISIONS

As a first step toward improving pastures, Purdue Extension forage specialist Keith Johnson, PhD, recommends looking at soil types and taking soil samples, testing for pH, phosphorus, potassium, magnesium, cation-exchange capacity and organic matter.

Adjusting pH can be critical for production, with cool-season grasses producing best in a pH range of 6.2 to 7.0. Most legumes do best with pH closer to 7.0.

Johnson suggests following this "procedural order for pasture renovation."

- **Assess the need for pasture improvement.**
- **Soil test and apply amendments.**
- **Control perennial broadleaf weeds.**
- **Leave residual growth at less than 4 inches of height.**
- **Make seed selections and purchase.**
- **Overseed before dormancy breaks.**
- **Reduce competition to young seedlings by grazing growth of established forages or by hay harvest.**

FOR MORE INFORMATION, GO TO
WWW.DROVERS.COM/PRODUCTION.

KEEP IT SIMPLE

"For busy managers," Orchard says, "the key to any grazing-management program is keeping the program smart, simple and easily documented. This puts key decision information at their fingertips and helps managers make plans based on facts, not guesses."

Maintaining grazing records and reviewing grazing plans from the previous one to four years are valuable first steps in planning this year's management. Photo records help document trends in forage condition, and other technology also can help. Orchard says Land EKG has developed a system using Google Earth to record historical grazing practices, and teaches it to ranchers in a webinar format.

Orchard recommends tracking these indicators to help predict pasture health leading up to grazing season:

- **REST OR RECOVERY TIME FOLLOWING GRAZING** A shorter grazing period means a longer rest period, which can make up for mistakes in grazing management.
- **SEASON OF GRAZING** Generally, plants are more resilient during early vegetative growth, following reproductive growth or during dormancy. In some cases, fall grazing can limit tiller development for next year.
- **GRAZING INTENSITY** Pastures recover faster if they were not heavily stocked. The stocking rate, Orchard says, relates to cattle numbers and duration of grazing, and thus the amount of forage consumed. This differs from stocking density. Good managers practicing intensive or mob grazing can use heavy stocking densities, but low stocking rates while by keeping grazing periods very short.
- **SEASONAL MOISTURE** Naturally, plants recover slowly with low rainfall, adequately with average rainfall, and exceptionally well with above-average rainfall. Rain gauges placed in different areas around the ranch provide timely information for estimating production.

Orchard suggests combining records for each of these factors to develop "pasture report card" scores for each pasture. "Many times the pastures with the highest scores could be the ones to go to in the spring."

For producers who do not have detailed grazing records, Orchard suggests a simple decision process based on last year's grazing. First, select pastures that were grazed moderately and well-rested during late summer and fall for early spring grazing. An ideal situation is when managers kept grazing light through most of their pastures, leaving a lot of tall grass. This provides a great spring grazing advantage because it offers the flexibility of choosing where to turn cattle out first. These pastures also provide well-balanced nutrition including protein from green grass and energy from the old grass, "a difficult combo to beat," Orchard says.