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Wintertime is decision time

By Stan Wise

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PIERRE, SD – It's often said that the best time to start improving your land was 20 years ago, but the second-best time is right now. That statement might be harder for ranchers to swallow with winter on their doorstep, nothing growing in their pastures, and a tally of their hay inventory running in the back of their minds.

However, the first step in taking any new action is making a decision, and winter is perfect deciding weather. This time of year affords landowners a chance to take a breath, analyze what they have done in the past, and make a plan for the future of their operations.

"Now is a good time to kind of map out where you were this year and then figure out where you were at different times of the year in each of your pastures and then plan out the grazing for next year," Natural Resources Conservation Service State Rangeland Management Specialist Emily Rohrer said.

She said that NRCS recommends three basic concepts for designing a grazing plan to improve rangeland diversity and health: Include time for pastures to rest in a grazing rotation, leave adequate grass stubble height, and change the season of pasture use.

Resting pastures

"As you're building your grazing plan, make sure you're putting in that growing season rest so you're not grazing one pasture for the whole green season. You give it some rest throughout the year," Rohrer said. "We recommend between 30 and 45 days of growing season rest, at least."

Dividing rangeland into separate pastures allows ranchers to rotate their livestock between the pastures, meaning each individual pasture gets more rest time. This rest time is important so plants can recover and maintain optimal forage production. Rangeland that is overgrazed experiences a decline in forage production.

The rest time for pastures can vary depending on plant species, how much they are grazed and how much precipitation they receive. In drought years, pastures will need longer recovery times.

Maintaining plant health

Leaving adequate stubble height is another important practice for grassland health.

Rohrer said NRCS recommends the “take half, leave half concept – taking half of the production and leaving the other half for ground cover or for nutrient cycling and different biological processes.”

“If you graze a plant too much, the roots stop growing, and it takes a while for the roots to begin to grow again,” Rohrer said. “So, we always recommend not taking too much of that plant, or if you do take a lot, just allowing a lot of rest in order for the roots to begin growing again because the roots are the part of the plant that brings up water and nutrients so the grasses can grow.”

Rohrer said that maintaining plant and root health and leaving enough stubble and residue in the pasture as soil cover stores more carbon in the soil and improves soil health.

“You are reducing erosion issues or soil crusting. Having a little bit of residue on the soil surface helps promote infiltration, so you could capture more rain,” Rohrer said.

Changing season of use

Rohrer said it’s important not to graze the same pastures at the same time every year.

“We recommend at least two weeks of difference in season of use, but more is better in most situations,” Rohrer said. “Grazing at different times of the year promotes different species. So then that can help promote more diversity in your range system. So, you’re not grazing the same plant year after year, which can degrade that plant over time. You’re giving it that rest when it needs it.”

Healthy rangelands are diverse ecosystems with complex relationships between plants, animals, fungi, and microbes both above and below the ground. This biodiversity is a benefit not only to wildlife but also to agricultural producers. Livestock need to graze on many different types of grasses, shrubs and forbs to get the nutrients they need to thrive.

By changing a pasture’s season of use every year, rangeland managers promote the biodiversity that will feed their livestock and improve their soil health. By improving their soil, ranchers can increase their rangeland’s water infiltration rates and storage capacities, which results in greater drought resilience.

Other decisions

Rohrer said that now is a good time for producers to predict next year’s forage production.

“You can figure out if you have enough feed for the year or if you need to use some of those non-traditional feed sources like cover crops or if you want to try bale grazing in the fall,” Rohrer said.

There are some tools to help ranchers do just that.

“We have the South Dakota Drought Tool that can predict or give you the current production based on the rainfall for the year. So, you can pick the closest weather stations to your operation and then run it, and it’ll give you kind of an estimate of production for the year,” Rohrer said. “If it’s in a drought, you can reduce stocking rates, or if it’s above normal, maybe you might think about buying some stockers or something like that.”

“We also have the South Dakota Grazing Tool. It helps you create a forage inventory and an animal balance. So, you're balancing how many animals you have with how much forage you have so you're not overgrazing,” she said. “And then it has a couple of different cool grazing plan sheets in there to help you build a grazing plan.”

The South Dakota Drought Tool and Grazing Tool can be accessed online at www.nrcs.usda.gov/conservation-by-state/south-dakota/range-pasture.

“NRCS offers free resources and free technical assistance for producers. They can come in and ask for help creating a grazing plan, or we do have some financial resources available,” Rohrer said. “If they want to develop more water in a pasture or cross-fence something so they can put more rest into the rotation, we have financial assistance programs that can help with that, as well.”

The South Dakota Soil Health Coalition also offers free resources, technical assistance, and some cost-share opportunities for implementing best land management practices. To learn more these resources, visit www.ssoilhealthcoalition.org or contact the South Dakota Soil Health Coalition at ssoilhealth@gmail.com or 605-280-4190.



USDA-NRCS South Dakota photo

Pastures managed with healthy rangeland practices, like the one on the left side of the fence in this aerial photo, produce more forage and are more resilient to drought.

To download a high-resolution version of this photo, visit <https://bit.ly/3R1WLc0>.