

Drought on the Ranch!

Plan for it – soften the impact – make your ranch resilient



Make a drought contingency plan

Droughts are a fact of life in South Dakota—only the severity and length are in question. Overgrazing in the midst of a drought multiplies pasture production problems, sometimes for years to come.

So planning for dry years as part of an overall grazing management plan makes a lot of sense.

What's most important? South Dakota ranchers with the most experience in drought planning say 1) make a complete inventory of land, water resources, and livestock 2) plan each year for why and where your livestock will be grazing, when, and for how long, and how many will be there, and 3) base that plan on its ability to rotate, rest, and recover grasses.

Will your plan build resilience into the soil and the ranch operation? Will it produce more diversity in rangeland plants, and build healthier soils— which in turn will produce more forage? Finally, will the plan help you meet your goals?

With that framework established, detailed planning can begin, using grazing concepts such as "take half, leave half" and trigger dates. The plan includes evaluating forage conditions and using flexible stocking rates that can take advantage of good times with more livestock with the ability to liquidate quickly in a drought.



A drought contingency plan is part of an overall grazing management plan, based on rotating and resting pastures, and allowing plants and their roots time to recover.

Grow resilience through the soil

The same principles being used to develop healthy cropland soils apply to rangelands. Keeping the soil covered, with little soil disturbance, is key. So is a diversity of plants, that promotes more continual root growth throughout the year. Those growing roots feed microbes in the soil, resulting in building aggregated soils below ground with higher organic matter levels.

Importantly, those healthy soils maximize rainfall infiltration and store water more efficiently. The resulting higher level of stored soil moisture reflects the resilience built through the soil, and supports more diverse, healthy forage above ground during a drought.

Remember the R's:

Rotate • Rest • Recover

Tools Available

The Natural Resources Conservation Service's **Grazing Tool** is a spreadsheet that helps you organize your forage inventory, keeping track of AUM's available and grazed forage production by month. The NRCS Drought Tool is an **Excel-based** program with access to local precipitation data. In three clicks, it predicts the percentage of normal forage production at different times of the year.

USDA is an equal opportunity provider, employer and lender.

Natural Resources Conservation Service, South Dakota • March 2021

