



Daybreak Ranch

Central South Dakota



NATIONAL DROUGHT
MITIGATION CENTER
UNIVERSITY OF NEBRASKA

Introduction

The Daybreak Ranch is operated by Jim and Carol Faulstich, along with their daughter and son-in-law, and includes a cow-calf operation, commercial/custom grazing for yearling steers, and guided upland bird and deer hunting. They manage 8,000 acres of native grassland, CRP, cropland, sloughs, and tree groves.

Ranch inventory

- **Precipitation:** 18 inches average (annual). Historical range of 7.5 inches (1976) to 27.9 inches (1993).
- **Range:** Western wheatgrass/needle-grass community is cool season dominant, warm season sub-dominant.
- **Additional feed sources:** Corn acres for cash crop, silage, feed and cover for wildlife, and winter grazing of cornstalks. Year-round cover crops (small grains, purple top turnips, oilseed radish, lentils, canola, rape, vetch, and legumes) for building soil quality, wildlife habitat, grazing livestock in the wintertime, and controlling erosion.

Strategies for preparing for drought

- **Conduct an inventory.** *"Know what your livestock numbers are, what your feed needs are, and what you're capable of producing. The [USDA Natural Resources Conservation Service] does that through whole ranch planning."*
- **Find cost share programs for water development and other improvements.** The Faulstichs have worked with the NRCS on water development and fencing projects as well as pasture improvement to improve the

resilience of the grazing operation before and during drought.

- **Build flexibility, diversity and buffers into forage resources and livestock operations.** Along with developing the diverse mix listed in the inventory, the Faulstichs work to maintain a buffer of at least one-year's forage needs in their pastures and hay crops. The size of the Faulstichs' core cowherd is based conservatively on the forage produced by average precipitation for the area. A custom grazed yearling operation adds flexibility to the operation.
- **Build diversity into ranch enterprises.** Daybreak Ranch operates commercial upland bird and deer hunting businesses, adding diversity to the operation.
- **Make a plan for drought.** Faulstich has developed a plan that helps him and his family make decisions proactively and with minimal regrets. *"You can't wait until you are out of grass or everything is burned up to react to the situation."*

Critical dates and target conditions

- **Oct. 1.** Faulstich examines precipitation trends, amount of stockpiled forage, and subsoil moisture. If conditions indicate drought at this point, he may begin plan-

ning to lessen grazing pressure for the following year.

- **May 1.** April – June is a key precipitation window for the region. If there is not good moisture by May 1, it can be managed, Jim said, but “we know we’ve got trouble.”

Monitoring drought

- **Precipitation, soil moisture, forage quantity and quality and hay stockpile.** Having a year’s worth of hay and forage stockpiled is a condition considered in planning the following year’s stocking rates. Precipitation is monitored with an on-farm weather station that syncs to the South Dakota Drought Tool (www.nrcs.usda.gov/wps/portal/nrcs/main/sd/technical/landuse/pasture). They also use the U.S. Drought Monitor (droughtmonitor.unl.edu) to monitor general drought conditions locally and in the broader region.

Strategies during drought

- **Stick to the plan.** Faulstich adheres strictly to critical dates, and makes decisions based on what he knows as opposed to what he wishes. “I’m not much of a gambler. When it’s dry, it’s dry, and that’s the way I assume it’s going to be until it changes. I see people waiting too long on all this. They’re always betting on the (rain to come).”
- **Send custom grazers home.** Custom grazing contracts are set over the winter, based on conditions monitored in late fall. If precipitation and forage monitoring throughout the spring indicate drought conditions, animals may be sent home early.
- **Sell cull cows.** Stockpiled hay and forage are reserved for the core herd during drought, but if monitoring indicates that drought will persist and food reserves will be stressed, the operation quickly moves to

culling and selling cows. In 2016, culling began by July, months earlier than many other operations in the area. “We always identify cows that we can get rid of as our first priority. We weaned the calves...and sold those cows that we no longer want in the herd anyhow. It was just a matter of whether we sold them in June, July, or next October.”

Strategies for recovering from drought

- **Embrace diversity.** Faulstich said that the enhanced hunting operation weathered the 2016 drought. “It was dry enough to affect our pheasant hunting some that year, but not to a negative effect,” he said. “The hunting operation provides steady revenue through most droughts”.
- **Prioritize soil health.** Faulstich said that soil health has led to reduced impacts in times of drought. “That’s where you really start retaining the moisture and the health of the system, the health of your plant community to make it through these droughts. I can’t say enough about soil health.”

Lessons learned during 2016 drought

- **Timely decision-making pays off.** During the 2016 drought, Faulstich said the custom-grazed cattle never went to grass. They sold some cattle earlier than normal and “beat the rush on other people selling cattle and stopped them from eating at our place.”
- **Proactive drought management helps with recovery.** “That’s the value of the plan right there. We kept the resource in good shape. So in 2017, it was just business as usual. Just like ‘16 didn’t happen.”

This work is supported by a cooperative agreement with the U.S. Department of Agriculture’s Office of the Chief Economist.

Read the full case study at,
drought.unl.edu/ranchplan/WriteaPlan/SampleDroughtPlans.aspx.

“If you ruin your natural resources and the land, it really doesn’t matter if you survive the drought or not, you’re going to put yourself out of business.” - Jim Faulstich