United States Department of Agriculture

Adapting to Drought

Are drought conditions affecting your crop decisions? Or grazing land?

The threat of water shortages in Idaho means that many farmers will have to make difficult pre-planting decisions. Steps can be taken to protect soil and conserve the water you do receive. NRCS can provide technical assistance with water management, crop alternatives, decreased tillage and grazing plans.

Cover Crop Exchange Program

Consider growing a multiple species cover crop and offering to lease the field for grazing

Farmers with reduced water allocations may be able to help ranchers with inadequate grazing land caused by drought. Planting cover crops that grow with little water can provide livestock forage for the rancher and improve soil health for the farmer.

Cover crops improve the soil's health by feeding the microorganisms under the soil surface. Living roots provide carbohydrates for the microorganisms that process organic matter in a cycle. Cover crops also protect soil from wind erosion and moisture loss

Using livestock instead of diesel-powered equipment to remove cover crops provides an added nutrient bonus from the manure.

Find a Match

State and federal agencies working with the Idaho Cattle Association developed an information exchange program to match farmers growing a cover crop with ranchers that need additional grazing days to get through the season.

If you are interested in growing a cover crop for grazing, or are looking for pasture land for livestock go to the Idaho Cattle Association website for more information on the program

Grazed Cover Crop Example

In August 2013, a Canyon County farmer planted a multi-species cover crop to improve soil health. Incorporating livestock grazing on the field was part of his soil health improvement plan. The farmer worked with an Owyhee County rancher that was looking for pasture for cattle coming off rangeland.

Three-hundred mother cows moved onto the field in October. The farmer confined the cows to three-acre paddocks using portable electric fencing. They were kept on the paddock for one day then moved to a fresh paddock before all the green forage was consumed, leaving about 30% of the biomass on the soil surface. Concentrating cattle within small paddocks helps to distribute urine and manure which stimulates soil biology.

The range cows benefitted from lush forage for several weeks (they gained an average of 4 pounds per day). The farmer benefitted from the cows mowing down the cover crop as well as adding urine and manure to the field.

Cows waiting to move to greener pastures.

Leave some green residue to protect soil.

Using Cover Crops

- Be sure to leave enough residue on the ground to protect soil from eroding.
- Plant a multi-species cover crop mix after crop harvest if water is available. That cover crop will be available for grazing later in fall.

For more information on cover crops and mixes, contact your local NRCS office.

Cool Season mix	
Cover crop	**Seeding Rate Lbs / ac**
Hairy Vetch	5
Austrian Pea	15
Crimson clover	2
Red clover	1
Triticale	10
Oats	5
Turnip	1
Radish	1
Total	**40 lbs**

Warm Season Mix	
Cover crop	**Seeding Rate Lbs / ac**
Proso Millet	3
Grazing corn	5
Sunflower	1
Radish	1
Forage pea	15
Soybean	10
Crimson clover	2
Oat	3
Total	**40 lbs**

Save the Soil!

If you don't have adequate water to produce a crop you may find yourself thrust from a water crisis to a dust crisis. Other options for protecting fields vulnerable to erosion include residue management, converting to crops that use less water, and mulching. Use a conservation crop rotation that will replace high water use, long season crops with cool season species that mature early or that can be hayed or grazed.