

Plant Solutions

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The NRCS Plant Materials Program eNewsletter for the conservation community

Proactive Management Helps Colorado Rancher Weather Drought

Colorado rancher Lawlor Wakem watched last year as his ranch, 70 miles southwest of Denver, only received three inches of rain from September to September.

Yet, somehow he was able to keep his grazing lands in good health.

"The key is to react very early to drought," says Wakem, also a supervisor for the local Soil and Water Conservation District. "I could tell by March, we didn't have the snow pack and we reacted very quickly."

Wakem reduced his herd of 350 cow-calf pairs by a third and trucked his heifers to Texas. He decided to

(NRCS) in southeastern Colorado. "But his grass was already healthy going into the drought because of his prescribed grazing management and his experimentation with different seedings."

Over the last several years, Wakem has run trials of different grass varieties on his property in coordination with the NRCS Plant Materials Program and Colorado State University's Mountain Meadow Research Station.

"I try new seedings every year," Wakem says. "I try to find varieties that establish themselves quickly and provide some tonnage."

Through his research, Wakem found inter-seeding his bottomlands with a mix of mountain brome, western wheatgrass and bottlebrush squirreltail increased forage production, provided grazing earlier in the spring and offered an alternative for winter grazing. He used Garnet Germplasm mountain brome and Tusas Germplasm bottlebrush squirreltail, both Plant Materials Program releases.

During the drought, the inter-seeded pastures provided Wakem with additional grazing options, extending his green grass growing period and helping to take some of the pressure off his native rangeland.

"It's really important to plan ahead," Wakem says. "Our pastures look as good this year as other years before the drought."



A trial planting with mountain brome.



Lawlor Wakem stands in a new seeding on his ranch. He used 'Garrison' creeping foxtail, a Plant Materials Program release, on one of his irrigated hay meadows.

completely rest almost a quarter of his rangeland and then continued his rotational grazing system on the remaining uplands and sub-irrigated bottoms, moving cows every seven to ten days through a series of paddocks.

"Lawlor implemented a drought plan in a timely fashion," says Ben Berlinger, rangeland management specialist for the Natural Resources Conservation Service

For more info: NRCS drought information at <http://www.nrcs.usda.gov/feature/highlights/drought.html>
Contact: Ben Berlinger, ben.berlinger@co.usda.gov

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Ask the Expert

Bruce Munda, NRCS Plant Materials Specialist, Tucson, Arizona

What is the greatest challenge to rehabilitating areas burned by wildfire?

Once the threat of the fire passes, the challenge becomes finding solutions to stabilize steep slopes before mudslides can wash out roads and buildings, and diminish water quality. The NRCS Plant Materials Program has assisted with revegetating dozens of burned sites throughout the West. We've generally found we need to seed a fast-establishing native grass or annual grain to stop soil movement and begin building organic material.

I've been working on the Aspen Fire here in Arizona. The fire lasted a month earlier this summer and burned over 86,000 acres. We needed to stabilize scorched slopes immediately since Mt. Lemmon's watershed drains into the Tucson basin. To accomplish this, we included an annual grain in our seeding mix. The grain made up 40 percent of the mix and the rest included grasses indigenous to the area, such as Arizona fescue, mountain brome, junegrass and bottlebrush squirreltail. We based this percentage on successful plantings after the Arizona Rodeo Fire. Annual grains germinate and grow quickly while native perennials take three to five times longer. Over the next couple years, the annual grain will disappear and the native grasses and forbs will take over.

We've found similar results in Idaho and Montana with the planting of native slender wheatgrass. The wheatgrass establishes rapidly, providing a thick carpet of green among black tree trunks and initiating the nutrient cycling process, inspiring growth of the entire native plant community.

For more info: <http://plant-materials.nrcs.usda.gov/publist/wildfire.html>

Contact: Bruce Munda, bruce.munda@az.usda.gov



A burned area revegetated with 'Pryor' slender wheatgrass, selected by the NRCS Plant Materials Program.

Did You Know...

Did you know a new farmer-run cooperative is growing the native plant, Indian ricegrass, for gluten-free flour? More than 50 growers now belong to Amazing Grains, a Montana-based cooperative that harvested over a quarter-million pounds of Indian ricegrass seed for use in breads, muffins and pie crusts last year.

"Indian ricegrass offers hands-down the best gluten-free flour on the market," says Alice Pilgeram, associate research professor at Montana State University, and one of four researchers who initiated the cooperative. "This is important information for people with celiac disease who cannot digest the gluten protein found in traditional bread products."

The Amazing Grains cooperative is marketing the gluten-free flour through the brand-name 'Montina' and on the website, www.montina.com.

Indian ricegrass grows native from New Mexico to Canada. The grass is drought-tolerant, provides quality forage for livestock and wildlife, and often greens back up in the fall. The NRCS Plant Materials Program's release of 'Rimrock' Indian ricegrass is one of several varieties being grown for gluten-free flour.

For more info: Alice Pilgeram, Pilgeram@montana.edu **Link:** <http://www.montina.com>



'Rimrock' Indian ricegrass, useful for conservation and grown for gluten-free flour.

Quotable Quotes

"Every flower has to go through a lot of dirt." --anonymous

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