

# THE MONTANA CONSERVATIONIST

News from Montana's Conservation Districts

## In This Issue

- 2 Restoring the West's Burned Rangeland, With Seeds and a Pasta Machine

Drones becoming vital part of wildland firefighting

- 3 Grass-Cast: A New Grassland Productivity Forecast

MSU Researchers Pioneer Using Wool For Erosion Control

- 4 Legislative committee debates ways to restore funding for stream gauges

12 boats with invasive mussels discovered at Montana check stations so far

DNRC prepares for later, longer fire season

- 5 OPPORTUNITIES

- 6 Calendar

Supervisor & Employee of the Year Nominations Open

July 25, 2018

Volume 12 Issue 15



## At the Water's Edge educates boaters about Invasive Species

KRTV: Montana Fish, Wildlife and Parks and the Cascade Conservation District set up at Broadwater Bay on Wednesday evening to talk with boaters while they launch about the "clean, drain, dry" program and their work protecting Montana waterways from aquatic invasive species.

The clean, drain, dry program hopes to educate boaters, anglers, and any water users about invasive species and to prevent the spread of them.

Invasive species are not native to Montana and include certain types of mussels, pathogens, and some plants.

You can't necessarily see some with the naked eye, such as pathogens and baby mussels, which is why the clean, drain, dry program is so important. If your boat is cleaned, drained, and dried, it will not spread invasive species.

Invasive species are also detrimental to waterways, dams, irrigation systems, and infrastructures. [READ MORE](#)



1101 11th Ave • Helena, MT 59601  
(406) 443-5711 • [www.swcdm.org](http://www.swcdm.org)

This newsletter is made possible by a grant from DNRC.



### Restoring the West's Burned Rangeland, With Seeds and a Pasta Machine

*New York Times:* In a little government building on eastern Oregon's high desert, a restaurant-grade pasta machine spits out sagebrush and grass seed tortellini. Odd, perhaps, but scientists are into it. They put a mixture of compounds into the machine along with the seeds, and pods or pellets come out.

The seeds — coated with a cloak of botanical trickery to hold moisture or delay germination — are ready for planting on the mostly treeless open-range landscapes that have been scorched by fire[2].

If you think sagebrush is the great survivor of the American West, unkillable in the harshest, driest conditions, you're mostly right. Sagebrush is a stubborn survivor when it grows up — a signature species of the arid countryside of Nevada, east of the Sierra Nevada, and in Oregon, east of the Cascades.

But getting to that point is hard.

Infant mortality is a problem. Few seeds survive to germinate. Scientists trying to restore land devastated by wildfire say coating the seeds with the protective layer may help them through the vulnerable early days. The thinking is a little like swaddling a baby. The idea is still in testing.

Along the way, the fires are also becoming their own brutal testing ground. They have gotten bigger, with more acres burned per fire. Last year came close to the record on that measure. And the fires are often hotter as well, enough in some cases to all but sterilize fragile rangeland soils deep below the surface, making regeneration harder.

Why has so much rangeland been burned?

It's partly that this type of land is less treasured than the green, forested places that attract hikers, campers and nature lovers.

[READ MORE](#)

### Drones becoming vital part of wildland firefighting

*Bozeman Daily Chronicle:* A large wildfire ate up a lot of desert in northern Nevada over the last few weeks. Fire crews needed some help getting eyes on all of it, so the fire boss called in a drone.

Along came a team from Belgrade-based Bridger Aerospace, one of four companies that has a contract with the U.S. Department of the Interior to deploy unmanned aircraft systems on wildfires and in other emergency situations. The company sent a team of pilots and four drones to the Martin fire last week, the first wildfire action any private drone has legally seen.

By the end of their time there, the Bridger crew had run 11 flights, logged 14.6 hours of flight time and mapped the whole blaze, all 435,000 acres. They gathered data on burns into a wilderness study area there and lined out unburned islands within the perimeter. They also patrolled the fire's perimeter for hot spots using an infrared sensor.

Kurt Friedemann, the vice president of Bridger Aerospace, said the crew received "a huge thumbs up" from the government officials who called them. The crew has already been assigned to another fire in Nevada, too.

"They're really, really pleased with the team and its capability," he said this week.

[READ MORE](#)

## Grass-Cast: A New Grassland Productivity Forecast

USDA: Every spring, ranchers face the same difficult challenge—trying to guess how much grass will be available for livestock to graze during the upcoming summer. In May, a new Grassland Productivity Forecast or “Grass-Cast” has published its first forecast to help producers in the northern Great Plains reduce this economically important source of uncertainty.

This new, experimental grassland forecast is supported by the U.S. Department of Agriculture's (USDA) Agricultural Research Service (ARS), Natural Resources Conservation Service (NRCS), and the National Drought Mitigation Center (NDMC). Other collaborators include Colorado State University and the University of Arizona.

Grass-Cast uses more than 30 years of historical data about weather and vegetation growth—combined with seasonal precipitation forecasts—to predict if rangelands in individual counties are likely to produce above-normal, near-normal, or below-normal amounts of vegetation for grazing.

Grass-Cast's accuracy improves as the growing season unfolds, so it should be consulted more than just once during the growing season. Grass-Cast maps are updated every two weeks to incorporate newly observed weather data and emerging trends in grazing conditions.

[READ MORE](#)



## MSU Researchers Pioneer Using Wool For Erosion Control

*Helena IR:* The stuff of socks, sweaters and high-tech underwear now has yet another use, according to a Montana State University study: revegetating roadsides to prevent erosion.

At a road cut along Highway 287 near Three Forks, healthy patches of native grasses are a testament to the lasting benefits of using wool, said Rob Ament, a research scientist at the Western Transportation Institute in MSU's Norm Asbjornson College of Engineering.

When Ament's research team began the project four years ago, they suspected that wool might have advantages over the straw and shredded coconut hull used in traditional erosion control blankets, which buffer slopes against sun and rain until seeds germinate and plants take hold. The results of the recently concluded study, however, surprised him.

“We were astonished by the vigorous plant growth,” Ament said

during a recent visit to the site.

At the square-meter plots that received erosion blankets made of wool blended with straw, the team observed three to four times more perennial grasses — a result Ament called “stunning.”

Eli Cuelho, a former research engineer at WTI, also contributed to the project, as did Stuart Jennings and Monica Pokorny at KC Harvey Environmental, a Bozeman-based consulting firm specializing in reclamation. Pokorny, who now works as a plant materials specialist at the Bozeman office of the Natural Resources Conservation Service, worked with Ament to develop the wool products and conduct the field trials.

Revegetating disturbed ground along roadsides is required by various laws to prevent takeover by noxious weeds and runoff of sediment.

[READ MORE](#)



## Legislative committee debates ways to restore funding for stream gauges

*Missoula Current:* Frustrated by the slow pace of studies, some lawmakers want to restore funding for the gauges that measure Montana's rivers.

Lawmakers spent almost an hour Tuesday debating what to do about the dwindling number of stream gauges during a meeting of the Water Policy Interim Committee in Helena.

In all, the committee debated 10 bills that might be considered by the 2019 Montana Legislature.

In the past, the U.S. Geological Survey maintained a vast system of stream gauges throughout the nation, and states augmented that system where additional information was needed.

Many Montanans, from fishing and rafting outfitters to irrigators, depend on those gauges to judge the water level of state streams. So they've been dismayed in recent years when several of Montana's 225 gauges were shut down because of congressional and state budget cuts.

"The pressure on the federal government and especially on conservation groups to support in-stream flows relies so much on these USGS gauges," said Jennifer Downing, Big Hole Watershed Committee executive director, who in May proposed a bill to study stream-gauge funding. "It's not as simple as putting more state money toward it because the money is coming from so many different places." [READ MORE](#)

## 12 boats with invasive mussels discovered at Montana check stations so far

*Montana Untamed:* With summer half over, more than 50,000 watercraft have been inspected at Montana Fish, Wildlife & Parks aquatic invasive species inspection stations around the state.

"The wet spring delayed a lot of boating activity, but boaters are enjoying the water now that hot and dry weather is here," said Thomas Woolf, FWP's AIS bureau chief. "Get out on the water and have fun, but remember to stop at any open watercraft inspection station that you encounter in your travels."

To date, 12 boats with invasive mussels have been intercepted in Montana. Most recently, three boats with mussels were found at the Anaconda inspection station July 18, FWP said in a news release.

"It's important that people adhere to the watercraft regulations and get their boats inspected when they come into the state and when they cross the Continental Divide into the Columbia River Basin," Woolf said. Watercraft must also be inspected when entering into the Flathead River Basin. [READ MORE](#)

## DNRC prepares for later, longer fire season

*KPAX:* The Montana Department of Natural Resources and Conservation is ready to go into action as fire danger rises across the state.

State forester Sonya Germann said Friday that Montana's fire season is already in full swing. DNRC and local first responders have dealt with more than 200 fires in recent weeks, though they have been able to contain them to a total of just 2,700 acres.

DNRC is expecting fire danger to increase substantially over the next week or two. Germann said forecasters predicted the fire season would start later than usual this year, but last longer.

Leaders say, in recent years, summer weather in Montana has been warmer and drier on average.

"We are looking at expanded fire seasons," said Germann. "We're actually calling it a 'fire year.'"

Each year, DNRC adds about 140 seasonal staff to help respond to fires. Germann said those seasonal employees have been fully trained and assigned to their positions.

"Our units are staffed and ready, and our equipment – including our aviation equipment – is staffed and ready," she said.

[READ MORE](#)

## Grants

### 223, Mini Education, and District Development Grants

The Fiscal Year 2019 deadlines for the 223, Mini-Education, and District Development grants are: **July 26, 2018, October 25, 2018, January 17, 2019, April 25, 2019** [Grant Application](#)

### Western States WUI Grants

This program supports hazardous fuel reduction; fire-adapted ecosystem restoration; homeowner information and education; assessment and planning; monitoring through community and landowner action. **Closes August 10.** [More Info](#)

### Conservation Garden or High Tunnel grants

NRCS is accepting applications for grants to establish community gardens, pollinator gardens and seasonal high tunnels through the Montana NRCS Conservation Garden Project. Up to \$4,000 for conservation gardens, \$3,000 for pollinator gardens, \$6,500 for seasonal high tunnels. Applications due **August 10.** [More Info](#)

### Big Sky Watershed Corps Host Site Applications Open

This program provides host sites with a college graduate to assist organizations with local conservation efforts. If your conservation district is in need of extra assistance to work on projects, consider hosting a member.

Members join their host sites in early January and stay on board until mid-November. Cost share for the program is \$12,250 for the entire term. Host sites are able to select their member and conduct interviews to ensure they have a member that will best serve district needs. Visit [www.swcdm.org/programs/big-sky-watershed-corps](http://www.swcdm.org/programs/big-sky-watershed-corps) or contact Jessica Makus for more information and applications.

There will be a [webinar](#) about the program on **August 1.**

### SWCDM has funding available for districts to host a member

SWCDM has secured soil health, pollinator, and "telling the conservation story" funding to support up to 50% of the cost share to host a Big Sky Watershed Corps member in 2019. If your district is interested in hosting a member to work on one of these topics, contact Jessica Makus about funding availability. [jessica@macdnet.org](mailto:jessica@macdnet.org)

## Events, etc

### Level 1 Noxious Weed Management Certification

This is the first workshop in a 3-part

series that provides information on weed identification, biology, ecology, and integrated management. Bozeman, **September 11-13.** [More Info](#)

### Montana Range Tour

Please join us for the 2018 Montana Range Tour hosted by the Richland and Roosevelt Conservation Districts. This year's tour will not be one to miss, ranching in oil country, floods, fire, birds, and cover crops. **September 5 & 6,** Sidney [Registration](#). For more info contact Stacey Barta, [sbarta@mt.gov](mailto:sbarta@mt.gov).

### Armed to Farm training, Glendive

This week-long sustainable agriculture training hosted by NCAT combines classroom sessions with farm tours and hands-on activities to give military veterans an opportunity to transition to a farming life. Applications due by **August 24.** [More Info](#)

## Jobs

### Sustainable Ranching Initiative Program Associate

Since 2011, WWF's Sustainable Ranching Initiative (SRI) has been working to establish a productive dialogue between conservation interests and the ranching community. The Program Associate works to support program goals and objectives through conducting research and analysis, organizing information and materials, drafting reports, proposals and presentations, and assisting with project management, policy development and analysis. Bozeman. [More Info](#)

## Coming Up

### July

- 26 223, Mini Education, and District Development Grants Deadline

### August

- 1-5 Yellowstone Wildlife Ecology Field Course
- 13 MACD Board Conference Call
- 27 MACD Executive Committee Conference Call

### September

- 1 Deadline for submitting proposed Resolutions or By-law changes. Proposals must be approved in local district minutes.
- 5-6 Montana Range Tour, Sidney
- 11-13 Level 1 Noxious Weed Management Certification, Bozeman

#### Have an event to share?

Visit [macdnet.org/calendar](http://macdnet.org/calendar) to add your event to our list!

### Montana Stockgrowers Director of Natural Resources

This position is responsible for the formulation, institution, and monitoring of policies, programs, and issues related to natural resources that are affecting the cattle industry. This position also serves as the executive assistant for the Montana Association of State Grazing Districts and the Montana Public Lands Council and represents the associations at the state legislature. **Closes July 31.** [More Info.](#)

### Big Hole Watershed Committee Restoration Specialist

This is an exciting opportunity to participate in innovative and direct restoration of the Big Hole River watershed that improves water quality and quantity, fisheries and overarching ecological health as part of diverse conservation organization. Closes **July 30.** [More Info](#)

### Misc.

### Supervisor & Employee of the Year Nominations Open

Nominations are now open for MACD Supervisor of the Year and Employee of the Year awards. If you know someone who goes above and beyond in their work for local conservation districts, please consider nominating them. Contact Carie Hess ([petroleumcd@macdnet.org](mailto:petroleumcd@macdnet.org)) for nomination forms.

## NOTICE

### MACD Resolutions and proposed bylaw changes due September 1

Per MACD bylaws, resolutions to be considered at the annual MACD convention in November must be passed by a local conservation district and submitted to the MACD office by **September 1**. This insures that all districts are able to consider the resolution at their regular monthly meeting before deciding how to vote on the resolution at Area Meetings and at Convention.

If your district is considering submitting a resolution or bylaw change this year, your July and August meetings are a great time to discuss wording and intent.

If you'd like to see what resolutions have passed in previous years, our new website has a great Resolutions Library. Head to [macdnet.org/resolutions-library](http://macdnet.org/resolutions-library) to check it out.