

THE MONTANA CONSERVATIONIST

News from Montana's Conservation Districts

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Judith Basin CD welcomes first female supervisor

Editor's Note: March is Women's History Month. In honor of that, and the growing role of women in ag, we thought it was pretty cool that Judith Basin has welcomed their first female supervisor.

Judith Basin Press: Pamela "PJ" Myllymaki was appointed to the Board of the Judith Basin Conservation District on Jan. 9, replacing Terry Metcalfe who sadly passed in early January. Myllymaki is, to the District's knowledge, the first woman to hold a position on their board.

"I did not set out to be the first female supervisor but am very honored," said Myllymaki.

In a phone interview with the Judith Basin Press, Myllymaki conveyed her enthusiasm and desire to never stop learning. Myllymaki stated that the number one lesson she has learned since becoming an agriculture producer is "how precious our land and water are and what we should do as a whole to conserve [these resources]."

The District had reached out to Myllymaki to see if she would serve, recognizing her dedication to conservation and sustainability. According to Board Chair, Steve Hedstrom, "We welcome PJ Myllymaki as the newest supervisor on the Judith Basin Conservation District Board. PJ has been an associate supervisor for some time and is a real asset to the district. As the first woman on the board, her knowledge and viewpoint fill a much needed perspective."



SOIL & WATER
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Study: Different crops release nitrogen at different rates

Modern Farmer: Even if you're not growing cover crops to feed your cash crops, this is great information because it gives us more insight into the mystery of how plants add nitrogen to our soils to help us. Thanks to the Soil Science Society of America for sharing this with us.

A circle of life-and nitrogen-is playing out in farms across the United States. And researchers are trying to get the timing right.

Some cover crops, such as hairy vetch or cereal rye, are not grown to be eaten. Instead, they capture nutrients, including nitrogen, from previous crops, the air, and the soil. When cover crops decompose, these nutrients are released. Cash crops, such as corn or soybean, planted afterward can use these nutrients to grow and thrive.

But cash crops need different amounts of nutrients at different stages of growth. A new study assesses how quickly nutrients are released from two different cover crops. The goal, according to study co-author Rachel Cook, is to time nutrient release from cover crops to better match the nutrient needs of specific cash crops.

"It's like trying to time a meal to come out of the oven exactly when all the hungry dinner guests arrive," says Cook, currently a researcher at North Carolina State University.

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Producers, businesses excited about new pulse crop processing facility

Cut Bank Pioneer Express: Growing demand for pulse crop processing facilities in the Golden Triangle spurred Roger and Lisa Sammons of Pardue Grain, Inc., to seek an upgrade for its Glacier County facility, which will sort, size, clean and bag product at the facility 12 miles west of Cut Bank. The upgraded facility will open in September, in time for the 2018 harvest, Roger Sammons said.

"There's a lot of [pulses] growing in the area and there's a demand for the service that we offer," Sammons said.

Pulse crops grown in Montana include chickpeas, peas, and lentils.

The \$5.7 million project at Pardue will include installing a food-grade processing line for pulses, according to Sammons. The food-grade equipment costs about 30 to 40 percent more than non-food-grade, he added.

"We'll be adding on to two

buildings for bag product storage, and we'll be able to ship both box cars and hopper cars," Sammons continued.

"We have ideal climate for [pulses]," said Paul Kanning, a Flaxville producer who is vice chair of the Montana Department of Agriculture's Pulse Crop Committee, as well as a board member of the Montana Farmers Union. "It works great in our crop rotations. We're not in the corn-soybean rotation, so it works well with cereal grains. It's a fantastic counterpart to cereal grains."

Producers cite several reasons for the appeal of pulse crops. For one, they offer an alternative to summer fallowing or chemical fallowing their fields. In the mid-1990s, when Mike Ehlers, who farms north of Oilmont, was looking for an alternative to fallowing, he discovered pulse crops. Pulse crops do not need nitrogen fertilizer, so they act as a good cover, or soil-building, crop.

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Water, water, everywhere — but drought could still hit, and floods too

Prairie Populist: With parts of Montana buried under record-breaking snow, is drought like last year's even a possibility?

Well, yes.

Yes, we've had a cold, wet February, and parts of the state now have two to three times their normal moisture. Yes, we still expect a cold, wet month ahead.

But, just like last year, all that water might not stave off dry conditions in summer and fall.

"It's the next eight weeks that will really determine where things go," a state water expert told Montana legislators on March 5. "We're right at that point where they could go either way."

Yes, we even have more moisture now than the record-setting, epic flood year of 2011.

But Michael Downey, of the Montana Department of Natural Resources and Conservation, reminded the Water Policy Interim Committee about last year, when the state had above-average moisture everywhere except the Musselshell-Judith drainage. Like he told the panel in January, the wrong combination of conditions — fast melt-off, heat and no rain — can change things quickly.

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A tale of two species

Plants and animals receive different protections under the Endangered Species Act

Western Confluence: In 1998, the US Fish and Wildlife Service listed a small brown mouse with large hind feet and a 6-inch-long whip-like tail as threatened under the Endangered Species Act, which dismayed ranchers and others whose daily activities overlap with the mouse's habitat.

"People were really worried," says Gary Beauvais, director of the Wyoming Natural Diversity Database. "A lot of agriculture producers say, 'Technically, if I go burn my ditch or cut my hay, I'm in violation of the Endangered Species Act.'"

The listing decision for the Preble's meadow jumping mouse forced ranchers and developers to stop or alter some of their activities in the animal's habitat, or face steep penalties.

"The mouse is a symbol of the potential impact of federal regulation and the potential for the presence of a listed species to fundamentally impact the way a rancher can use his or her property," says Mike Brennan, Wildlife Conservation and Mitigation Program Director at Texas A&M University.

Meanwhile, another threatened species that lives in the same riparian meadows as the jumping mouse didn't cause any trouble. The Ute ladies'-tresses orchid, listed as threatened since 1992, didn't interrupt ranching or other activities the way the mouse did. This is in

part because the Endangered Species Act places different restrictions on how people, especially private landowners, can interact with listed plants and animals.

Most people know the Endangered Species Act makes it illegal to "take" fish and wildlife species, a term which is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." But a lot of people don't realize that, "'Take' doesn't apply to plants," says Nathan Darnall, Deputy Field Supervisor for the USFWS's Wyoming Ecological Services Office. "There are some prohibited acts. You can't sell a plant across state lines and can't engage in commerce across the high seas." Collecting or maliciously harming endangered plants on federal lands is also prohibited.

However, landowners are free to trample and destroy endangered and threatened plants, such as the Ute ladies'-tresses orchid, on their land (unless a project there has a "federal nexus"—typically a federal permit or authorization). Some states have their own laws that protect threatened or endangered plants on private lands, though Wyoming does not. So, under the Endangered Species Act, it would be perfectly legal to bulldoze a whole bed of Ute ladies'-tresses on private property.

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State launches app to monitor algae on Smith River

NBC Montana: If you're lucky enough to draw a Smith River permit, your next float could help scientists gather important data. The Montana Department of Environmental Quality launched a smartphone app as a way for river-goers to track algae along the Smith River.

That river is known for its abundant fishing and sharp orange cliffs, but those wanting to enjoy the remote area must have a permit to float it in peak season.

The Montana DEQ says in recent years they've had numerous reports that algae growth on the Smith River is increasing and interfering with recreational

activities.

Darrin Kron is the DEQ water monitoring supervisor. He explained that algae can be kind of an "ick factor" for swimmers, it impacts oxygen levels for fish and hinders insect habitat.

The new smartphone app lets floaters take and submit pictures of algae directly to the DEQ. They're interested in knowing where the algae is growing but also where it's not growing, so they encourage people to take photos along the entire Smith River float from put-in to take-out.

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USDA offers localized assistance for producers to address regional challenges

A pair of recent news releases from NRCS Montana highlight how USDA is using Environmental Quality Incentives Program (EQIP) funding to address regional challenges.

In Southwest Montana, in conjunction with the Montana Headwaters National Drought Resiliency Project, the USDA Natural Resources Conservation Service (NRCS) is offering a localized initiative addressing water conservation and drought resiliency in the Missouri Headwaters Basin. Agricultural producers in the eight targeted watersheds are urged to participate.

EQIP funding will be available to farmers and ranchers in the

Beaverhead, Big Hole, Boulder, Gallatin, Jefferson, Madison, Red Rock, and Ruby basins. Conservation practices will focus on increased water conservation, improved riparian and floodplain health, improved water quality, and upland management practices that mitigate the effects of drought. [READ MORE](#)

And in the Musselshell, EQIP is targeting soil health and erosion concerns to address degradations after major flooding in 2011 and ice jam flooding from 2013 to 2017. In Wheatland, Golden Valley, and Musselshell counties, NRCS will prioritize conservation planning assistance to focus on practices that improve soil health near the Musselshell River flood plain.

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USDA Assistance available for healthier forests and reduced fuel hazards

USDA Press Release: In its second year, the Tri-County Fuels Reduction Initiative is building on work done in areas with high fuel hazards in Broadwater, Lewis & Clark, and Meagher counties. Agricultural landowners can access technical and financial assistance through the USDA's Natural Resources Conservation Service (NRCS) to address forest health.

Assistance for eliminating excessive fuels, improving forest health, treating conifer encroachment, preventing runoff after fires, and revegetating treatment areas is available through the Environmental Quality Incentives Program (EQIP).

While EQIP applications are accepted year-round, applications for the Tri-County Fuels Reduction Initiative must be received by May 18, 2018, to be considered for this funding period.

Contact your local USDA service center for more information and to apply.

Broadwater County – Justin Meissner, 406-266-3146 x 103

Lewis & Clark County – John George, 406-449-5000 x 101

Meagher County – Jenney Paddock, 406-547-3633 x 101

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Grants

223, etc. Grant Deadlines

Deadlines for 223, mini-education, and district development grants from DNRC for FY 2018 are as follows: **April 25, 2018**. [Grant Info](#)

DNRC Landscape Scale Restoration Grants

The Landscape Scale Restoration Grant Program is delivered by a partnership between the USDA Forest Service State and Private Forestry and the Montana DNRC. The program is intended for implementation of watershed level, forest-based projects and activities which address the three State and Private Forestry national themes: 1) conserve and manage working forests, 2) protect forests from threats, 3) enhance public benefits from private forests. DNRC is calling for submissions of short abstracts, which will be followed by a meeting between project leads and grant managers to develop ideas. Due April 2. [More Info](#)

Groundwater Investigation Program

The Ground-Water Steering Committee is currently accepting nominations for Ground-Water Investigation Program (GWIP) projects to be initiated during 2019. This is for watershed, communities and conservation districts to put forth a proposal for an existing or potential ground water issue, for quality and/or quantity. Nomination packages due April 16. [More Info](#)

Ranching For Rivers Program Applications

The Soil & Water Conservation Districts of Montana (SWCDM) is seeking applications for Ranching for Rivers – a cost-share program to help rancher with riparian pasture fencing projects. In partnership with the Missouri River Conservation District Council, SWCDM will offer up to 50% cost-share to landowners throughout the state to voluntarily construct fences and/or other infrastructure (crossings, water gaps, offsite water, etc.) that enable them to better manage the riparian resources on their land. Applications accepted on rolling basis, closes **June 15**. [More Info](#)

Events, etc

Montana Storm Water Conference

Join us, May 1-3, 2018, in Bozeman, MT, for the 2018 Montana Storm Water Conference. This is a time to gather, share, learn and collaborate on storm water and water quality issues with your local, regional and national colleagues [More Info](#)

Wetland Rendezvous

The purpose of this gathering is to spend some quality time in the field exploring springs and wetlands with other wetland scientists and learn about new and innovative ways to inventory, monitor, and assess these ecosystems. Hosted by Montana Wetland Council. Lincoln, MT, **June 26-28**. [More Info](#)

Montana Natural Resources Youth Camp

The 32nd annual Montana Natural Resources Youth Camp will be held July 15-20. Students aged 14-18 will spend a week in rustic cabins at Lubrecht Experimental Forest east of Missoula, learning about our natural resources & their management, and make lasting friendships. Camp cost is \$300. Application & deposit of \$150 due June 15. www.mnryc.com for more info.

Jobs

Summer Internship Opportunity

The Montana Rangeland Resources Committee and the Rangeland Resource Program at DNRC are excited to announce a unique opportunity for 2 students for the summer of 2018. The successful applicants will have the opportunity to spend 2 weeks at each of the 6 host/mentor's ranch operations. This internship is designed to offer beginning agriculturalists, natural resource and range specialists the real-world and hands-on experience implementing the educational tools already gained to a ranching operation. This paid internship will last for three months during the 2018 summer where interns will work and learn from mentoring ranchers from across the state of Montana. A stipend of \$1,600 will be given at the end of each month with room and board supplied by the mentoring ranch. Contact Stacey Barta for more info: sbarta@mt.gov

Coming Up

March

- 21 Saline Seep Workshop, Glasgow
- Board Leadership Training, Dillon
- 22 Montana Pollinator Workshop, Bozeman
- 26 MACD Executive Committee Conference Call

April

- 7 Country Living Workshop, Ronan
- 9 MACD Board Conference Call
- 21 Madison & Ruby Valley District Banquet
- 23-24 Envirothon
- 23 MACD Executive Committee Conference Call
- 28 Fly Fishing Film Tour, Thompson Falls

Have an event to share?

Visit macdnet.org/calendar to add your event to our list!



Montana Ranchers Improve Sage Grouse Habitat And Reduce Fire Risk

By Hayden Nelson, SGI Range Conservationist, Roundup, Montana NRCS Field Office

The success of the Greater sage-grouse has been front and center for landowners in Musselshell and Golden Valley counties since 2007, three years before the Natural Resources Conservation Service-led (NRCS) Sage Grouse Initiative was implemented in 2010. After 10 years, landowners couldn't be faulted for being tired of hearing about sage grouse, but area farmers and ranchers know that the bird represents so much more than itself and are still dedicated to improving habitat.

The most recent concern for producers in the area is mitigating fire risk. The fires of 2017 eliminated large areas of sagebrush-covered landscape and grazing lands for the rest of that growing season. Impacted ranchers were forced to deplete herd numbers to make up for the loss of grass.

The summer months tested producers, with little rain to help the situation, but they have been proactive rather than disheartened. Right away, landowners began looking for ways to mitigate the impacts when fire hits again.

To that end, the NRCS field office in Roundup has seen an increase in producers working to thin the encroachment of ponderosa pine and Rocky Mountain juniper into lands traditionally populated by grass and sagebrush, which support both cattle and sage grouse. Two active contracts and five potential thinning projects will treat more than 100 acres that, together, create a buffer around core sage grouse habitat and improve grazing land health. Fire mitigation is also a priority for the Lower Musselshell Conservation District. The group plans to hire a permanent fire mitigation employee to apply for grants and help with physical labor.

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