

THE MONTANA CONSERVATIONIST

News from Montana's Conservation Districts

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Introducing MACD's new Executive Director, Dan McGowan

Please join MACD in welcoming our new Executive Director, Dan McGowan, to the conservation district community. Dan's first day in the office was July 30, and we can already tell that he'll be a great addition to the team.

Dan was born and raised in Montana. His Montana roots date back to 1917 when his grandfather established McGowan Dairy in the Helena valley.

Dan began his professional career with seven years of corporate marketing and management. In the summer of 2015, he retired from state government after 30 years of service. Dan's areas of expertise include: administration, program execution, strategic planning, consulting, emergency planning, collaborative development, grant writing/administration, major event planning, non-profit development/coordination, and marketing. His career is highlighted with interpersonal interactions at the local, state, tribal, federal and international levels resulting in national recognition as a leader in public service.



Community involvement is important to Dan, and he has been part of the East Helena Valley Rodeo Association since 1982. As a professional auctioneer, he has donated his time for 12-15 community benefits a year since 1994, including at the MACD Convention many times!

Dan's soulmate is Carol. Together, their blended family includes Dan's daughter Megan and son Casey, Carol's three sons Chase, Nick, and Dustin, and their dog Bear.

MACD and SWCDM are excited to have Dan on board to lead us as we work to serve Montana's Conservation Districts. You can contact Dan at dmcgowan@macdnet.org.



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Hahn Ranch in Montana honored for its outstanding environmental stewardship

Tri-State Livestock News: DENVER (August 2, 2018) – The Hahn Ranch, in Townsend, Mont., has been selected as one of six regional honorees of the Environmental Stewardship Award Program (ESAP). The award, announced during the 2018 Cattle Industry Summer Business Meeting Aug. 1, 2018, recognizes the operation's outstanding stewardship and conservation efforts. This year's regional winners will compete for the national award, which will be announced during the Annual Cattle Industry Convention in New Orleans, La., in February 2019.

Established in 1991 by the National Cattlemen's Beef Association to recognize outstanding land stewards in the cattle industry, ESAP is generously sponsored by Corteva Agriscience, Agriculture Division of DowDuPont, McDonald's, USDA Natural Resources Conservation Service (NRCS), U.S. Fish and Wildlife Service, and the National Cattlemen's Foundation.

"Cattlemen and women everywhere understand that the land, air and water resources in their care are the cornerstone of their success and they are only stewards of those resources for a short time," said NCBA President Kevin Kester. "Each of us understands the importance of improving those resources and leaving them better for future generations."

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Sand Springs rancher says prescribed burn may have saved property

Billings Gazette: Northwest of Sand Springs where rancher Kenny Rich makes his living, the log cabin built from hand-felled trees and insulated with sod by his ancestors still stands more than 100 years after the homesteaders arrived in Garfield County.

In a landscape where fire is an inevitability, part of the family ranch's survival story on their slice of the Missouri River Breaks includes an adversarial relationship with wildfires based on the knowledge of how fast things can go wrong when fire touches timber and grass.

"Ranching in this country's a bit of a gamble," Rich said of fire danger in the region.

The temporary fire suppression gains in protection of property and well-being are undeniable, but around 20 years ago Rich began to wonder about the long-term effects on his land as a result of fighting all those fires.

Acres of overly thick stands of ponderosa pine had gone unchecked due to wildfire suppression, choking out the chance for grass to grow and smothering valuable land with pine needles and canopy shade.

"When it gets like this," Rich said, gesturing towards a thick grouping of pines, "that's when I realized back quite awhile ago that we had to start doing something. It's pretty much stagnant."

The decision wasn't an easy one, Rich said, but on Easter Sunday in 2000, he and the Miles City Bureau of Land Management's Fuel Treatment Office partnered on a 3,600-acre burn across his land and government land, one of the first major burns by the BLM's Miles City office in cooperation with an Eastern Montana rancher.

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Students learn during Range Camp

Sidney Herald: Montana Youth Range Camp was held in Eastern Montana July 9-12, and hosted by Dawson and Richland County Conservation Districts. Twenty two of Montana's finest youth gathered at the Eastern Montana Bible Camp near Bloomfield to learn about plants, soils, range management and wildlife.

Staff from the Natural Resource Conservation Service (NRCS). Marni Thompson, Josh Schrecengost, Rick Caquelin and Ashley Gould along with Emily Standley, MSU Extension-Fergus County shared their knowledge of Soils, Wildlife, Plant ID and Range Management. Mother Nature smiled on the area this year and the vegetation was incredible.

FWP Non Game Biologist Brandi Skone, along with some of her staff and conducted a bat study for the campers. Big Sky Watershed Corp member, Andrew Kretschmer led the campers in a session using the Rolling River Trailer. Kaylee Olsen and Alyssa Nordlund won the Green Hand buckles for new campers and Jesse and Wyatt Isaacs tied for the Top Hand Buckles awarded to returning campers.

Campers compete for the prized buckles by taking quizzes each day on plant ID and other questions based on the classes each day. Montana Youth Range Camp is a program for youth interested in Montana's greatest natural resource, Rangeland.

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Regenerative Agriculture at the Myllymaki Farm

Editor's Note: PJ Myllymaki, featured in this article, is a supervisor on the Judith Basin Conservation District.

Judith Basin Press: Soil health is an agricultural concern worldwide. To help improve soil health locally, Bruce Myllymaki, his son Kurt and Kurt's wife P.J. of Stanford seek to work with rather than against nature. On their family farm they are employing a process termed regenerative agriculture.

Last Thursday, July 19, the company North 40 Ag hosted a field day at the Myllymaki Farm, which the Judith Basin Press attended. North 40 Ag also toured Bob and Shari Grubb's farm. North 40 Ag promotes agricultural sustainability. It is based in Ballantine, Mont.

Nearly 50 people attended the field day event to learn more about the regenerative approach, for which the Myllymakis were also recently highlighted in an article in the magazine "Treasure State Lifestyles Montana."

To put it simply, the Myllymakis apply a continuous cropping approach, growing a diversity of cash crops and cover crops. This is the opposite of a fallow approach.

What is fallow, you may ask. Well, when you drive by ash-colored fields with no plant life in the summer, these fields have been sprayed with a chemical(s) to stop plant life and give the soil a chance to rest. While fallow has been thought to be the best practice, the new regenerative

technique employed by Myllymakis reduces the use of chemical controls. Instead they seed a cover crop. The cover crop's roots feed the soil biology, provide shade for soil, as well as provide a feed source for cattle in the winter.

"Soil is a living thing," says P.J., with which Kurt agrees.

Within the soil there are countless species that create its unique ecosystem, including good bacteria, worms and other bugs that live in this system, say the Myllymakis.

The Myllymakis also grow pulse crops like chickpeas and yellow peas.

For their cover crops, which replace fallow fields, they have 12 different plant species in the cover crop mix, including legumes, grasses, brassicas and broad leaves.

These cover crop fields are then seeded the following year, mostly to spring wheat.

"The legumes in the mix fix nitrogen so less commercial fertilizer needs to be used the following year," says Kurt.

The legumes used in the cover crop mix this year are faba beans and common vetch.

"The faba beans have a ton of nodules on them right now," says Kurt.

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Prairies Help Us Understand Antibiotic Resistance

This article comes to us from Sandra Avant, ARS Office of Communications, USDA Agricultural Research Services. It was published in the September 16 issue of AgResearch Magazine.

Since the 1940s, antibiotics have effectively treated certain bacterial diseases. But over the years, some bacteria have developed resistance to the antibiotics that once killed them. Each year, about 2 million people in the United States are infected with bacteria that are resistant to antibiotics, according to the Centers for Disease Control and Prevention.

While antibiotic resistance is commonly viewed as a result of antibiotic overuse in humans and animals, this isn't always the case. Lisa Durso, a microbiologist at the Agricultural Research Service (ARS) Agroecosystem Management Research Unit in Lincoln, Nebraska, recently found antibiotic-resistant bacteria in prairie soils that had little or no exposure to human or animal activity.

Durso belongs to a nationwide network of ARS scientists investigating agriculture-related antibiotic resistance, sharing critical information, and developing solutions. Their research involves examining antibiotic resistance as it relates to food safety, animal production and protection, and the environment.

When it comes to resistance, scientists typically measure three things: drugs (antibiotics people take or give to animals), "bugs" (bacteria that might be resistant), and genes (DNA instructions in the bacteria that code for resistance). Genes are usually in the cells, though not always, Durso explains. After a cell dies, the genes can persist in the soil.

"Antibiotic-resistant bacteria and genes occur naturally," Durso adds. "Studies have shown antibiotic resistance in soil samples dating back to the time of woolly mammoths. This is because antibiotics, such as penicillin, came originally from fungi or other bacteria-found naturally in soil."

One obstacle to identifying the source of antibiotic resistance on farms and in the environment is measurement, according to Durso. Antibiotic-resistant bacteria and antibiotic-resistant genes found in soils where manure has been added (by animals or by spreading) provide valuable information on what is currently present in a sample site, such as a feedlot. A concern is that even if bacteria in manure are dead, their genes can persist in soils. If baseline levels of antibiotic resistance aren't collected, scientists will have a difficult time sorting out resistance caused by human antibiotic use from resistance that occurs naturally.

"To determine the impact of food-animal antibiotic use on resistance, it's essential that baseline levels of resistance be considered and subtracted out when measuring resistance in agroecosystems," Durso says.

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USFWS and NOAA Fisheries propose changes to Endangered Species implementation

The U.S. Fish and Wildlife Service and NOAA Fisheries (Services) are proposing revisions to portions of their regulations that implement two key sections of the Endangered Species Act. The changes are part of an ongoing effort to improve implementation of the ESA so that our actions are clear and consistent, and provide the maximum degree of regulatory predictability to those who are affected by the Act. There are three areas of suggested change:

1) The agencies propose changes to some of the parameters under which other federal agencies must consult with the Service and NOAA Fisheries to ensure their actions do not jeopardize the continued existence of listed species, or destroy or adversely modify critical habitat.

2) The agencies also propose various measures to clarify and improve some of the standards under which listings, delisting, and reclassifications, and critical habitat designations are made.

3) the Service independently proposes a change in its approach to applying protections to threatened species that would align its practice with NOAA Fisheries so the two agencies are consistent in their application of this provision of the ESA.

You can learn more by going to this website: https://www.fws.gov/endangered/improving_ESA/regulation-revisions.html.

Survey indicates conservation a high priority for ranchers

Amanda Radke, Beef Magazine: Last week, I wrote about the economic benefits of farming and cattle grazing in an integrated system. By diversifying, we spread out our financial risks and protect ourselves against volatile markets. In the face of a trade war, this makes more sense now than ever before. Simply stated, for crop farmers looking to reduce risk, cattle might be a nice insurance policy.

In addition to diversifying for financial security, there are also numerous benefits to the

land when soil has a cover of grasslands or cover crops for grazing. Cattlemen are natural conservationists, which certainly goes against what the mainstream media and environmental activists would like consumers to believe.

A recent analysis of results from a 2017 South Dakota farmer survey revealed that cattlemen tend to be more focused on land conservation than their grain farming counterparts.

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MSU Extension releases Montana's Noxious Weeds as mobile-friendly electronic flipbook

From the Monthly Weed Post: Noxious weed management begins with correct identification of the target weed.

Since 2001, Montana State University Extension has published "Montana's Noxious Weeds," (publication #EB0159) a spiral-bound pocket guide for identifying noxious weeds. Over 100,000 copies have been distributed across the state in the last 17 years. The publication has been revised as new weeds are added to the state noxious weed list.

Access to information about noxious weeds has changed over the years due to technological advances. In response to these changes, "Montana's Noxious Weeds" is now available as an electronic flipbook. Mobile device users can download the book for free from the MSU Extension store (<https://store.msuextension.org/>). The new flipbook includes key characteristics of 35 noxious weeds and five regulated plants, colorful photographs of each species, and links to MSU Extension and USDA-NRCS publications that describe plants in more detail, including integrated management recommendations.

The flipbook can be downloaded onto computers and mobile devices, making it accessible even when Wi-Fi is unavailable.

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OPPORTUNITIES

The Montana Conservationist

Grants

223, Mini Education, and District Development Grants

The Fiscal Year 2019 deadlines for the 223, Mini-Education, and District Development grants are: **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](#)

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 Cattlewomen Ranch Run

This run was designed to introduce you to the beauty of Montana's farms and ranches as well as educate the running community about the importance of agriculture and land stewardship. **August 25.** [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.

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](#)

MPDES SWPPP Administrator and SWPPP Preparer Course

Meet the requirements of the MPDES General Permit for Stormwater Discharges Associated with Construction Activity. Learn the permit requirements, New techniques and BMPs, Get hands on experience with BMPs in the field. **September 10 & 11,** Kalispell. [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 or contact Jessica Makus for more information and applications.

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

Coming Up

August

- 13 MACD Board Conference Call
- 14 Lewis & Clark Day on the Range
- 25 Montana Cattlewomen Ranch Run
- 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
- 10-11 MPDES SWPP Administrator and SWPP Preparator Course, Kalispell
- 11-13 Level 1 Noxious Weed Management Certification, Bozeman
- 17 Area 4 Meeting
- 18 Area 2 Meeting

Have an event to share?

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

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](#)

Blackfoot Challenge Operations Manager

This is a full-time position working to support core watershed programs, managing administrative, financial, fund development and Board development functions. The Operations Manager will report directly to the Executive Director, and will work closely with the Executive Committee of the Board of Directors and all staff. Closes **August 17** [More Info](#)

Area Meetings

Notice: MACD's annual Area Meetings will be held on the following dates: 9/17 Area 4, Roundup; 9/18 Area 2, Terry; 9/19 Area 1, Plentywood; 9/20 Area 3, Havre; 9/25 Area 5, Helmville; 9/26 Area 6, Clyde Park. Visit <https://macdnet.org/programsevents/area-meetings/> for registration information.

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 to check it out.