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News from Montana's Conservation Districts

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National Invasive Species Week

In recognition of National Invasive Species Week next week, we asked the Montana Invasive Species Council to submit information on what we can do to stop the spread of unwanted invaders.

Invasive Species in Montana

HELENA, Mont — February 25-March 3, 2019, is National Invasive Species Awareness Week (NISAW). The event raises awareness and identifies solutions for invasive species at the international, national, state, tribal, regional, and local level. The Montana Invasive Species Council (MISC) encourages Montanans to observe the event by learning about ways to help prevent the introduction and spread of invasive species in their everyday lives and work.

Invasive species include plants, animals, insects, and other organisms that cause economic or ecological harm to a new environment in which they have been introduced. Invasive species cause problems in their new environment because predators, competitors, parasites, and other natural controls do not exist in the new range, allowing them to multiply and spread at alarming rates.

In Montana, the newest invasive species of concern are zebra or quagga mussels that were detected in trace amounts at Tiber and Canyon Ferry reservoirs in the fall of 2016. *Continued on page 2*

SOIL & WATER CONSERVATION DISTRICTS of MONTANA

MONTANA ASSOCIATION of CONSERVATION DISTRICTS
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Invasive Species

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A report commissioned by MISC estimates Montana's economy could see more than $230 million in annual mitigation costs and lost revenue if invasive mussels become established in the state. Montana is also impacted by other invasives such as: New Zealand mudsnails, houndstongue, cheatgrass, and Eurasian watermilfoil—which are among the wide variety of invasive organisms threatening agricultural productivity, forest health, water quality, fish and wildlife habitat, and property.

"Invasive species are most often accidentally introduced and spread by humans" said Bryce Christiaens, MISC chair. "By recognizing this fact and taking simple actions, we can all make a difference in helping to protect our water and landscapes from the threat of invasive species."

The United States Department of Agriculture has shown that invasive species cost the U.S. more than $137 billion annually, through crop damage, fisheries reduction, forest health impacts, and management. Montanans can take simple actions to help prevent the introduction and spread of noxious weeds and invasive species. Here are 9 simple tips that you can follow to help.

In recognition of NISAW, MISC will be hosting an education and outreach event at the State Capitol from 10-2 on March 1, 2019. For more information contact Stephanie Hester at 406-444-0547 or shester@mt.gov.

9 ways you can help protect Montana's natural resources from invasive species

On your next walk, **watch for noxious weeds**. If you spot some in your yard or while walking in your neighborhood, notify your county noxious weed control board.

Clean your hiking boots, bikes, waders, boats and trailers, off-road vehicles and other gear before you venture outdoors to stop invasive species from hitching a ride to a new location.

Dispose of unwanted pets, aquarium plants or water, science kits or live bait **the proper way** and NOT by dumping them into waterways. Released pets often suffer a slow death in winter, or may become invasive and damage our wildlife and agriculture. When it comes to unwanted pets or live bait, letting it loose is never the right thing to do. Visit the council's Don't Let It Loose Web page to learn the proper ways to dispose of unwanted pets and plants.

Buy firewood where you'll burn it, or gather it on site when permitted. Remember not to move firewood from the local area where harvested. Visit the Don't Move Firewood website to learn about the potential dangers of moving firewood.

Protect Montana's fisheries by **not moving any fish from one water body into another.** This will prevent spread of fish diseases and also protect fisheries from non-native predatory fish.

Use forage, hay or mulch that is certified as weed free. Visit the Montana Department of Agriculture Web site to see details of its certification program.

Plant only non-invasive plants in your garden, and remove any known invasive plants.

Volunteer to help remove invasive species from public lands and natural areas. Contact your local state, county or city parks and recreation department, or county MSU Extension office to learn more.

Don't pack a pest. Certain items obtained abroad may contain invasive insects, pathogens, or weed seeds. When traveling abroad, review travel guidelines on items that should not be brought back to the United States. Learn more about what you can bring home by visiting dontpackapest.com.

The Montana Invasive Species Council is a statewide partnership working to protect Montana's economy, natural resources, and public health through a coordinated approach to combat invasive species. For more information about MISC, visit misc.mt.gov.

Local efforts to manage Salt Cedar on Missouri River pay off

From Prairie Populist, written by Rachel Frost: The Missouri River Breaks are known for their rugged beauty, and the remarkable wildlife populations that call that region home. What residents of the Missouri River Breaks do not want them to be known for is a home to invasive plants, such as salt cedar (Tamarisk ramosissima). Salt cedar is an invasive tree that spreads rapidly along river banks and lake shores, replacing the iconic cottonwood and using large volumes of water during the warm summer months. Noxious weeds like salt cedar trees have a destructive impact on Montana's landscape by displacing native plant species, increasing soil erosion, and decreasing wildlife habitat and recreational opportunities, according to the Montana Department of Agriculture.

But salt cedar is not as recognizable as leafy spurge or spotted knap weed as an invasive species. Therefore,land managers failed to prioritize it, causing salt cedar to become a real problem on the Missouri River banks and its tributaries, as well as on the shores of Fort Peck Lake. Some landowners fought salt cedar on their own, but few seemed to stem the spread of the invasive tree. There was no collective strategy to stop the expansion of salt cedar.

The reason for the lack of management success lies in Montana's land ownership patterns as much as in salt cedar's tenacious ability to produce millions of seeds. The seeds are carried by water and flow across several federal, state and private lands whose owners have differing budgets and priorities differ on weed management. Not surprisingly, their efforts resulted in spotty control, with no real hope of removing salt cedar from the landscape.

That was the scenario until the local conservation districts got involved. Members of the conservation districts recognized the problem and wanted to see a more organized approach to salt cedar management. They called on their regional conservation district group, the Missouri River Conservation Districts Council, to gather stakeholders and discuss salt cedar management. The collaboration, the first meeting of the Montana Salt Cedar Team, boasted over 40 attendees, including four federal agencies, two state agencies, the Montana State University Extension Service, county weed coordinators, conservation district representatives and local landowners.

But making the gathering unique was Patricia Gilbert, Natural Resource Manager for the US Army Corps of Engineers stationed at the Fort Peck Project, who devised a map and plan. The treatment area that she proposed was rugged, remote and complicated. Stretching seven miles into the Seven Blackfoot drainage in Garfield County across federal, state and private land, Gilbert's map proposed a bold project that would test the commitment of the group. She knew if the project was a success, then any future project would seem like a piece of cake. Despite funding cuts that threatened to end the project, several factors played into the project completion in the fall of 2017: several stakeholder conversations, letters of support for the project to agency leaders, and the personal relationships among local conservation district supervisors and their constituents. More than a win against salt cedar, the project created goodwill throughout Garfield County and helped improve relationships with private landowners and their federal land management neighbors.

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Unique program helps stop the spread of tree destroying beetles

Winter is typically a quiet time of year, but come February, the phone at Swan Valley Connections (SVC) starts ringing. Landowners are calling in asking for the deadline to participate in SVC's bubble-cap program, a creative and simple way to help manage devastating bark beetles.

Douglas-fir beetles, along with mountain pine beetles, are creatures we love to hate. With a shared genus name that means "tree destroyer", it may not be surprising that many associate these insects with words like "nuisance" or "pest." But these bark beetles are native to northwest Montana. Healthy forests require standing dead trees, or snags, and beetle-killed firs and pines have played key roles in diversifying and restoring landscapes for millennia. Woodpeckers, drawn to the beetle-feast, whittle cavities that later house bluebirds and other cavity nesters.

Today are stressed. Decades of fire suppression, periodic drought, and a rapidly warming climate have spurred beetle outbreaks the Intermountain West has never seen before. Bark beetles survive by consuming the living tissues that channel sugars through trees, called the phloem. If not checked by cold winters, woodpeckers, or a tree's natural defenses, mass aggregations of beetles can eat enough phloem to girdle and kill the tree. Beetles thrive by exploiting their hosts' weaknesses and as climate-driven stressors on our trees mount, exploding beetle populations cast deadened waves of red and gray over the forest canopy.

The good news is that only 37,000 acres were counted as newly consumed by mountain pine beetles in 2017, a decline connected to the beetles' depletion of single-age, single-species stands of lodgepole pine, which are highly susceptible to outbreak.

University of Montana entomologist Diana Six's research suggests that healing forests and buffering beetles requires an approach that values diversity, which is what SVC aims to foster with its "bubble cap" program. Unlike broadcast herbicide spraying or extensive removal of snags with high value for wildlife, each palm-sized bubble cap releases a beetle repellent that minimizes harm to the tree and its community. Once tacked to a tree, the bubble cap passively diffuses a chemical which mimics the pheromones released by the beetles themselves. This chemo-communication is effectively a "no vacancy" signal, triggering the beetles to move along to fresh territory.

By placing one large bulk order for the bubble caps, Swan Valley Connections reduces the unit cost and provides convenient pick-up or delivery options that work for landowners. In 2018 alone, SVC sold 5500 bubble caps to 104 landowners across Montana.

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Wet or dry, conservation farming saves the day say producers

Ag Update: On his farm near Arlington, South Dakota, working around wet spots in the field was a common problem for Jesse Hall.

To solve it, he's been working to bring more carbon into use, planting oats and rye that use a lot of moisture.

Hall was one of four South Dakota farmers who shared their experience with no-till and cover cropping at the South Dakota Soil Health Coalition conference in Brookings Jan. 23.

Dry conditions were what prompted brothers Gene and Craig Stehly to change the way they farm near Mitchell. Gene recalls a trip in the late 1980s to the Dakota Lakes Research Farm in Redfield. There were dry fields all around, but the research farm looked different, he said.

"It looked like an oasis. That was our introduction to no-till," he said.

After 30-some years of no-till and cover cropping since the 1990s, a probe into his soil health this summer cemented the idea that he was doing the right thing, he said. A measurement of organic matter in his cropland showed that it's not that far off from native prairie. The untouched ground measured 6.5 percent organic matter, he said, while his farmland was at 4.5 percent.

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EPA signs MOU with national FFA organization to enhance environmental education

WASHINGTON — U.S. Environmental Protection Agency (EPA) Acting Administrator Andrew Wheeler signed a first-time Memorandum of Understanding (MOU) with the National FFA Organization to advance educational outreach for EPA's ongoing environmental and public health initiatives.

"Today's MOU will expand EPA's environmental education programs to an important and diverse new audience: the National FFA Organization's 670,000 student members," said EPA Acting Administrator Andrew Wheeler. "The MOU reflects the importance of agricultural practices in promoting environmental stewardship and builds on our recent collaborations with America's farmers and ranchers."

"This agreement between FFA and EPA recognizes how FFA members are ready to be leaders in environmental fields," said National FFA President Luke O'Leary. "Whether it's studying pH levels in soil or running experiments to reduce water runoff, we're active stewards in preserving and enhancing the resources needed to grow our food."

EPA will continue to work with FFA to ensure environmental education is learned and practiced by all Americans to achieve EPA's mission of protecting human health and the environment. READ THE MOU

Researchers: Land use planning would do more to prevent wildfire loss than logging

When it comes to preventing loss of homes from wildfire, researchers say land use planning is paramount, seconded by logging on private land near homes rather than large swaths of public land.

A study conducted by researchers at the University of Montana found that between 1999 and 2012, only 6.8 percent of fuel-reduction treatment areas in the United States were subsequently hit by wildfires.

Kevin Barnett, a research associate in the Department of Economics at UM, helped quantify the frequency and extent of fire and fuel treatment interactions on federal lands across the U.S.

"The Hazardous Fuels Reduction Program received a lot of financial investment and resources over the past 15 years," Barnett told the Missoulian. "We treat quite a lot of landscapes each year. And less than 10 percent of that had even (been) burned by a subsequent fire. So that raises more broad general questions over the efficacy of fuel treatments to change regional fire patterns."

Wildfires are a growing issue in the U.S. and in Montana. In 2018 alone, 35 wildfires cost the state more than $95 million, an amount of money that ate into the budget for a wide range of services.

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'Art of Range' podcast brings grazing, conservation together

Lewiston Tribune: Helping maintain and preserve rangelands and inform the ranchers and professionals who manage them, Tip Hudson, associate professor of rangeland and livestock management for Washington State University and director of Kittitas County Extension, recently launched a new podcast called "Art of Range."

Seeking to provide education through conversation with national experts on managing and conserving rangelands — the grasslands, forest lands and prairies that support grazing — Hudson began the podcast last fall, posting new episodes every two weeks.

"Healthy land, healthy animals and healthy communities are inextricably linked," Hudson said. "My goal with this podcast is to help people produce food and fiber on naturally-occurring plant communities in ways that promote sound ecology and economy."

Interviewing experts such as Ken Tate, Endowed Rangeland Watershed Science Specialist at the University of California-Davis; Fred Provenza, animal behaviorist researcher emeritus at Utah State University; Karen Launchbaugh, Director of the University of Idaho Rangeland Center; and Jack Southworth, award-winning rancher in eastern Oregon, Hudson explores the interplay of animals and the environment, invasive grass management, ranch resiliency, grazing philosophies and challenges to public lands grazing.

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Grants

223, Mini Education, and District Development Grants

The Fiscal Year 2019 deadlines for the 223, Mini-Education, and District Development grants are: **April 25, 2019** Grant Application

RRGL Planning Grants

This program provides financial assistance to governmental entities preparing quality RRGL grant applications for projects that that will conserve, manage, develop, or protect Montana's renewable resources. **February 28** More Info

RDG Planning Grants

The DNRC Reclamation and Development Grants Program (RDGP) is accepting grant applications to fund planning and assessment for natural resource projects. Proposed projects must plan for projects that will provide benefits in one of two categories: Mineral development reclamation or crucial state need. Up to $50,000 is available, deadline **February 28**. More Info

Forestry Landscape Scale Restoration Grants

The DNRC Forestry Assistance Bureau is now soliciting project ideas for the FY20 Landscape Scale Restoration Grant Program application process. We want a pitch, not a proposal. This process is designed to solicit your best ideas and develop them based on a dialogue. Due **March 1** to awells@mt.gov.

NACD Technical Assistance Grants

NACD has announced the availability of $9 million in technical assistance grants for conservation districts. A significant portion of the granted funds will be awarded directly to conservation districts to hire staff where additional capacity is needed to improve customer service and reduce workload pressure. Due **March 1**. More Info

DEQ Nonpoint Source Pollution Grants

Montana DEQ has $500,000 in funding to address or nonpoint source pollution. Projects should be between $30,000-$100,000. $300,000 will be focused on the Bitterroot watershed. Applications are due by 2 p.m., Friday, **March 15, 2019**. More Info

Water Quality Mini-Grants

SWCDM is seeking to fund local education and outreach efforts in Montana to address water quality issues resulting from nonpoint source pollution. Mini-grants of up to $3,000 are available and SWCDM has approximately $14,025 to award for this cycle. The deadline to apply is **March 27, 2019** by 5 p.m. More Info

Aquatic Invasive Species Grants

DNRC offers state-funded grants for the prevention & control of aquatic invasive species. Activities include but are not limited to aquatic invasive species: (1) outreach and education; (2) prevention; (3) surveying and monitoring; (4) control; (5) treatment demonstration, research or design; or (6) other related actions. Applications due **March 28**, 5 pm. More Info

Future Fisheries Improvement Program

For almost two decades, FWP's Future Fisheries Improvement Program has worked to restore rivers, streams, and lakes to improve and restore Montana's wild fish habitats. Between $350,000 and $650,000 are available each year for projects that revitalize wild fish populations. Any entity proposing a project that would benefit wild fish will be considered for funding. Due **May 31**. More Info

Events, etc

Information Exchange: Working with Oil & Gas Companies

You are invited to a **March 5** summit to learn about easements with oil and gas companies. Billings. RSVP to Linda Brander, LLBrander@mt.gov.

Montana Lakes Conference

This conference will gather resource professionals to exchange information, scientific advancements, and management strategies that promote clean and healthy lake and reservoir ecosystems. Whitefish, **March 13-15 2019**. Hosted by the Whitefish Lake Institute, sponsored by DNRC, Flathead CD. More Info

310 Database Trainings

Montana DNRC is planning on

Coming Up

February

25 **MACD Executive Committee Conference Call**

March

5 Oil & Gas Leases summit, Billings

11 **MACD Board Conference Call**

13-14: SWPP Preparer Certification, Kalispell

13-15 Montana Lakes Conference, Whitefish

15 National Ag Day

25 **MACD Executive Committee Conference Call**

Have an event to share?
Please email tmc@macdnet.org with details.

scheduling some 310 Database training starting in early March. This will consist of some live webinars which will also be recorded and stored on the DNRC site for future training. We may also schedule some in person training if there is enough interest. The first webinar will likely be scheduled for the first week of March. You can find the 310 Permit database here.

SWPP Preparer & Administrator Certification

The Montana DEQ , starting this year, requires SWPPP Preparer certification for Stormwater Pollution Prevention Plan (SWPPP) writing for construction activity. We are currently offering a SWPPP Administrator and SWPPP Preparer certification and recertification class in Kalispell on **March 13 and 14**. More Info: 509-947-6583.

Jobs

Fuel Reduction Program Administrator

The Lower Musselshell Conservation District in Roundup, MT is looking to hire a fuel reduction program administrator to work directly with USDA-NRCS to further develop and administer the district Fuels Reduction Program. Open until filled. More Info

Fisheries Technician

FWP is hiring a fisheries technician for the Flathead-West region. This position will be responsible for managing out-flows at Ashley Lake Dam amongst other data collection and fisheries management duties. Closes **March 8**. More Info

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MACD Scholarships now open!

Each year, MACD awards two $500 scholarships to Montana students. High school seniors or students who are attending an accredited post secondary institution in Montana may apply.

Eligibility requirements include:

- US citizenship,
- Montana residency,
- minimum grade point average of 3.0, and
- enrollment or plans to enroll in a course of study that allows students to explore natural resource issues. Appropriate courses of study include agriculture, agribusiness, animal science, range science, forestry, environmental science, land resource science, plant science, etc.

Students may receive a scholarship both as a high school senior and once during post secondary career. Visit macdnet.org/scholarships