

Minnesota Wildlifers,

Welcome to the February 2021 edition of the Prairie/Farmland Newsletter. Enjoy!

Remember - we'd love for you to share any relevant content with us for inclusion in the next edition. Please send those items to either Jake (jcnelson8487@gmail.com) or Nicole (ndavros@gmail.com). And if you have any issues you'd like to investigate further with the committee, let Jake know.

Grassland/Farmland Wildlife, Habitat, Farming, Soil Health, & Federal Conservation Programs

- [Scienmag - Soil Degradation Costs U.S. Corn Farmers A Half-Billion Dollars Every Year](#) - One-third of the fertilizer applied to grow corn in the U.S. each year simply compensates for the ongoing loss of soil fertility, leading to more than a half-billion dollars in extra costs to U.S. farmers every year, finds new research from the University of Colorado Boulder
- [BWSR - Conservation Reserve Enhancement Program \(CREP\) Batching period expected for April](#) - Future batching periods are dependent upon additional funding from the Minnesota Legislature. The legislative process is inherently uncertain and there is no guarantee on the timing of additional funding for MN CREP.
- [AgWeek - Biden executive order seeks to involve ag in battling climate change](#) - Addressing climate change is the focus of one of the Biden administration's latest executive orders, which pauses new oil and gas leasing on public lands or offshore waters, seeks to more than double the amount of land conserved in the United States, and looks to involve the agriculture sector in the federal government's efforts.
- [Iowa Farm and Rural Life Poll Shows Farmers' Beliefs on Climate Change are Shifting](#) - According to this recent poll, farmers' climate change beliefs shifted substantially between 2011 and 2020. In 2020, 81% of farmers indicated that climate change is occurring, up from 68% in 2011. That number is higher than for the general Iowa public, which another recent study showed is 67%.
- [Research looks into different farmer types regarding soil, water conservation](#) - On a related note, Iowa State University researchers used data from the Iowa Farm and Rural Life Poll to identify four types of farmers - conservationist, deliberative, productivist, and traditionalist - based on different characteristics of each group. They hope their findings can be used to improve the effectiveness of soil and water conservation programs, including outreach and delivery, and increase practice adoption. Their paper in the journal Land Use Policy can be found [here](#).
- [Accelerating regenerative grazing to tackle farm, environmental, and societal challenges in the upper Midwest](#) - Regenerative livestock grazing has a growing body of research complemented by anecdotal evidence, and is increasingly understood to be a "win-win-win" for farmers, society, and the environment. This paper aims to define regenerative grazing and its benefits, to sharpen focus on its rapid expansion, and to provide an overview of opportunities to increase its use in the Upper Midwest and particularly the Upper Mississippi River Basin.
- Union of Concerned Scientists' White Paper - [Eroding the Future: How soil loss threatens farming and our food supply](#) - Nearly a century after the Dust Bowl, the unresolved problem of soil erosion still clouds the future of U.S. agriculture. In this study, the authors explore the potential for soil erosion through the end of this century if today's trends prevail. To avoid such

losses and create more resilient farm and food systems, government policies must support farmers in adopting proven methods of conserving and rebuilding soil.

- [The Prairie Ecologist: Is Fire Really Essential in Prairies?](#) - Chris Helzer's recent blogpost looks at how critical fire is to the health and survival of prairies. Spoiler alert: He concludes that while it is an *effective* tool that should be available to landowners and land managers, he offers up the (perhaps heretical) conclusion that it is not an *essential* tool. And maybe that's a good thing when you consider the training, equipment, neighborhood attitudes, and other factors that make conducting a prescribed fire a challenge for many landowners and organizations who manage prairie.
- In late December, Pheasants Forever's Jim Inglis and Bethany Erb provided a [Governmental Affairs Update](#) on upcoming legislative priorities and programs related to conservation. This was, of course, prior to the riot in Washington D.C. so some federal priorities may have shifted.

Pollinators and Insects

- [Xerces - Western Monarch Population Closer to Extinction as the Wait Continues for Monarchs' Protection Under the Endangered Species Act](#) - Despite the challenges of conducting field work during a pandemic, volunteers surveyed 246 sites, three more sites than last year. Unfortunately, to the surprise and dismay of many, only 1,914 monarchs were counted at all the sites. This is a shocking 99.9% decline since the 1980s.
- [Are declines in insects and insectivorous birds related?](#) Despite many recent studies that indicate both insects and birds have experienced wide-scale population declines, the causal link between the two has received little empirical attention. In this paper, the authors review the evidence for the hypothesis that insect declines are an important factor contributing to the decline of insectivorous birds.

Pesticides and Invasive Species

- [The Guardian - 'There's a red flag here': how an ethanol plant is dangerously polluting a US village](#) - An ethanol plant in Nebraska has been "recycling" excess supplies of fungicide and insecticide treated seeds. Experts say the leftover waste is dangerously polluting water and soil.
- [AgWeek - New soybean diseases threaten area farmers](#) - Upper Midwest soybean farmers grow one of the world's most important crops. But the ag producers must deal with new-to-them soybean diseases, some with colorful names, that are pushing northward.

Webinars, Podcasts, Videos, Social Media, & Other Events

- [PF - Virtual Miles For Monarchs](#) - Pheasants Forever, Quail Forever, and the Monarch Joint Venture have joined forces to support declining pollinator populations, including the iconic monarch butterfly. From February to October 2021, athletes from across the country will run, walk, bike, hike, or paddle to see how many miles the group can log as part of [Miles for Monarchs](#)
- Upcoming Virtual Conferences
 - [Sustainable Farming Association's \(SFA\) Annual Conference](#) will be held February 8-13. It's free to SFA members and \$40 for non-members. Check out their conference site to learn more about the agenda and to register.

- [The Prairie Enthusiasts \(TPE\) 2021 Conference](#) is set for February 24-27. The theme is “Inspired by Fire” and Chris Helzer will be one of several keynote speakers. (See the first section of our newsletter for a link to his recent blogpost discussing his views on how essential fire is for maintaining prairies.)
- [The 8th Annual Midwest Soil Health Summit](#) will be held on March 9-11, 2021. Gabe Brown and Sara Keough are featured speakers of the event. Registration is free for SFA members and \$40 for non-members.

Communicating Science

- [Fairbault Daily News - Students measure effects of cover crops out in the field](#) - Randolph High School ag teacher Ed Terry partnered with the Rice Soil and Water Conservation District (SWCD) and local farmers Tim Little of Millersburg and Mike Ludwig (Rice SWCD District Supervisor) of Northfield to bring the cover crop lesson to the classroom.
- [Crop Science Opinion & Policy Paper: To meet grand challenges, agricultural scientists must engage in the politics of constructive collective action](#) - In this paper, the authors argue that certain politics of constructive collective action - and integral involvement of ag scientists in these politics - are essential for meeting the challenges and complex problems facing agriculture in the 21st century. They outline politics that entail building bonds of affinity within a heterogeneous network, developing a shared roadmap for collective action, and taking sustained action together rather than the traditional routes of political activity (e.g., advisory, advocacy, and protest).

Other Topics (including those outside of our prairie region)

- [Grand Forks Herald - Bills on North Dakota trespassing law align ag and outdoors groups](#) - SB 2144 would allow landowners to post land for no trespassing electronically or with physical signs, update the definition of a fence, establish that all fenced land is closed to anyone but hunters and fishers regardless of posting, and allow law enforcement to issue noncriminal citations for trespassing related to hunting and fishing.
- [MN DNR - New Critical habitat license plates](#) - The image on the license plate displays the rusty patched bumble bee and monarch butterfly, which are Minnesota’s state bee and butterfly, as well as a native wildflower called the purple prairie clover. The beautiful artwork is by Minnesota artist Timothy Turenne.
- [Bobwhites listen to each other when picking habitat](#) - Northern bobwhites are attracted to habitat based on whether other bobwhites are present there, researchers from the University of Illinois at Urbana-Champaign report in their recent [Journal of Field Ornithology paper](#). In their study, they used playbacks to draw bobwhites into restored habitats. Using this phenomenon, called conspecific attraction, could help natural resource managers increase the number of bobwhites, whose populations have been declining for years because of habitat loss. It would be a cost effective and noninvasive approach compared to traditional methods such as translocation of birds, assuming you choose suitable habitat for the birds.