

## Notes from the Field

*Photo by Lindsey Mulcare*

### A MESSAGE FROM SETH



Executive Director Seth Wilson

On June 16, our Board of Directors and staff met in person for the first time in over a year. We gathered at the Lubrecht Experimental Forest pavilion under blue skies and towering ponderosa pines. Among the handshakes, hugs, and smiles was a palpable feeling of being reunited with family and longtime friends.

After months of Zoom meetings, we joked about finally being able to talk without worrying about the mute button. As we got down to business and carried out our agenda, I kept thinking about how lucky we all were to have emerged from a long period of distance and how easily we reconnected. As we sat and had lunch together a board member said, “We haven’t missed a beat. We’ve done so well this past year to stay connected, to get our work done, and it’s amazing just how strong we are together.” As I thought about this, I was reminded of the power of more than three decades of partnerships that have defined how we work together in the Blackfoot watershed.

The investments that we have made in each other — whether state or federal agency, landowner, livestock producer, or NGO; whether we wear boots or Birkenstocks — have proven to be a durable currency during a pandemic and will continue to help us thrive. I invite you to enjoy this newsletter and learn about our shared accomplishments that are a product of our longtime collaborations and trust.

A handwritten signature in blue ink that reads "Seth M. Wilson".



▲ Drought Technician Kate Clyatt monitoring the flow of Elk Creek.

Photo by Leigh Kelley

## WATER: GETTING AHEAD OF DROUGHT

For more than 20 years, Blackfoot communities have approached drought by sharing the responsibility for water conservation. After a couple of years without needing to implement the Blackfoot Drought Response Plan, hot and dry conditions have settled into the watershed in 2021.

To help everyone from lake cabin owners to large cattle ranches prepare for drought, Challenge staff are developing individual water conservation plans with area landowners for implementation during formal drought response restrictions when Blackfoot River flows drop below 700 cfs. From irrigation efficiency improvements to improving soil moisture capacity to enhancing natural water storage in streams, the Challenge is increasingly focused on ways that landowners can incorporate water sustainability into management practices. We are also looking into unique agreements that may allow a water user to conserve some of their water rights instream in exchange for using junior water rights during drought restrictions. Finally, with the Blackfoot's 30 years of stream restoration work, Challenge staff is monitoring how flows hold up in those restored streams during drought to help guide us and our partners toward new restoration projects that build drought resilience.

**If you are interested in developing an individual drought response plan or learning more about ways you can improve water efficiency or drought resilience on your property, get in touch with our Water Steward Jennifer at [jennifer@blackfootchallenge.org](mailto:jennifer@blackfootchallenge.org).**

## FORESTS AND FIRE: LANDOWNERS USE PRESCRIBED FIRE TO KEEP FORESTS HEALTHY

This spring, a number of private landowners, organizations, and public agencies conducted prescribed burns in the Blackfoot watershed. While this fills the skies with smoke for a few days, burning this time of year has numerous benefits for both forested landscapes and communities.

Since 2017, the Challenge has coordinated the Blackfoot Prescribed Fire Work Group, whose goal is to support and increase the use of prescribed fire across private and public land in the watershed. The primary goal of conducting prescribed burns is to decrease the risk of large wildfires in the future. Prescribed fire also enhances the health and vigor of native vegetation, improves wildlife habitat, and increases the forest's resilience to insects and disease.

Prescribed fire is just one tool in the forest management toolbox. By combining this approach with mechanical treatments, "Firewise" building principals, community planning, and a long-term maintenance program, we can enhance both the resilience of our forests and the safety of our communities.

**Questions about forestry and prescribed fire? Get in touch with our Forestry Coordinator Cindy at [cindy@blackfootchallenge.org](mailto:cindy@blackfootchallenge.org).**

*"This underburn was the final chapter of my restoration story. It cleans up the fine fuels that drive wildfires, it rejuvenates the plants under the trees, improving habitat for the bears, birds, deer and elk that we love to see, and it protects the trees that will be my children's and grandchildren's inheritance."*

—David Atkins

Twin Creeks Landowner



Left: Prescribed fire conducted in Twin Creeks this spring.

Right: Spring growth after a prescribed fire was conducted on the same property in 2020.



Photos by Cindy Super

## WILDLIFE: TESTING NEW TECHNOLOGY TO KEEP BEARS OUT OF CONFLICTS

Electricity is proving that it is still one of the most effective tools we have to reduce conflicts with bears. Through a partnership with Blackfoot cattle producers, the Natural Resources Conservation Service, Montana Fish, Wildlife & Parks, and the US Fish and Wildlife Service, Challenge staff are testing electrified drive-over mats to prevent grizzly bears from entering ranch homesites, pastures, and calving areas. While mats can be crossed by vehicles and people without delivering a shock, a bear attempting to cross will receive a quick shock that is enough to steer them away. These mats can either replace or be combined with traditional swing gates, reducing the need to constantly open and close the gate.

One barrier to implementing this technology? Cost. Commercially-available mats range in price from \$15,000 to \$18,000. However, the Challenge has worked with Blackfoot-based welders to develop custom prototypes that are well below these costs. While testing continues, these mats are already proving to be an effective and affordable way to keep bears away from attractants and keep people and property safe.

**Want to learn more about how you can reduce bear conflicts on your property? Get in touch with our Wildlife Coordinator Eric at [eric@blackfootchallenge.org](mailto:eric@blackfootchallenge.org).**

Grizzly bear fleeing from a drive-over electric mat test site after receiving a shock.



Photo courtesy US Fish & Wildlife Service

## TRUMPETER SWANS: THE LAST RELEASE

On the morning of May 20, Blackfoot schoolchildren and a small group of individuals gathered on the shores of Jones Lake just outside Ovando for what was likely the last trumpeter swan release in the Blackfoot. On this chilly spring day, four yearling swans with the familiar red and white collars swam off into their new home.

The first trumpeter swan release occurred in 2004. Since then, anywhere from five to 43 trumpeter swans have been released in the Blackfoot every year. In 2011, we had the first successful nests and Blackfoot swan populations have steadily climbed since then. With at least eight active nests and over 15 pairs in the watershed this spring, the future of trumpeter swans in our area is bright.

What happens now? In addition to celebrating, the Challenge will continue to work with the US Fish & Wildlife Service and others to monitor the whereabouts of swans in the watershed, as well as nesting success rates and population changes.

**Public reports of sightings are greatly appreciated, so please let our Swan Restoration Coordinator Elaine know if you see a swan: [elaine@blackfootchallenge.org](mailto:elaine@blackfootchallenge.org).**

Photo by Melissa Peterson



Four trumpeter swan cygnets released on May 20 near Ovando.

*“It’s amazing what you can accomplish when you’re not concerned about getting credit for it...the Blackfoot is about all of us. Not one entity, one person, one agency; it’s really about all of us and what we accomplish collectively.”*

**—Greg Neudecker**  
US Fish & Wildlife Service Partners  
Program, former Blackfoot  
Challenge Vice-Chair

## LANDSCAPE RESTORATION:

### WORKING THROUGH PARTNERSHIP TO REMOVE INVASIVE CONIFERS

Last year, the Challenge teamed up with the Natural Resources Conservation Service and other partners to launch an ambitious program to remove invasive conifers from up to 6,000 acres in the Helmville Valley. Due to years of fire suppression, conifers like Douglas fir and juniper are beginning to dominate the area's native grassland and sagebrush ecosystem. Historically, Native Americans and lightning strikes ignited these areas every five to 20 years, killing the young conifers and maintaining an open landscape.

So what's wrong with more trees? Look up at the foothills and skyline, you'll notice hundreds of thousands of acres of forest. In contrast, the wide-open prairies in the valley bottom - with their spectacular biodiversity - are



Photo by Josh Schrecengost, NRCS

finite in comparison. Furthermore, landowners depend on these grasslands to graze livestock and generate income, and encroaching trees rarely grow to a merchantable size due to marginal conditions.



### Conifer encroachment has a number of impacts:

- Decreases native grass forage needed by livestock, deer, elk, and birds as trees decrease the sunlight and soil nutrients needed by other plants.
- Alters hydrologic function as trees consume water that is needed by native plants and wildlife.
- Changes the habitat structure allowing birds of prey to use the trees as "predator perches" to more easily stalk prey such as the Brewer's sparrow, a sensitive species dependent on sagebrush ecosystems.

In many cases these conifers are too large to remove with low-intensity prescribed burns. Therefore, tracked "masticators" are used to chip and scatter the material and chainsaws are used to cut and pile the small conifers. Ideally, prescribed burns will be utilized in the future to control conifer encroachment and restore the balance in this important ecosystem.

**Almost a dozen landowners have participated in the program to-date, covering more than 2,500 acres. We are hoping to enroll additional eligible landowners, so get in touch with our Land Steward Brad if you'd like to learn more: [brad@blackfootchallenge.org](mailto:brad@blackfootchallenge.org).**

◀ Cut conifers waiting to be removed from a sagebrush steppe in the Helmville Valley.

## WEED MANAGEMENT: USING NEW TECHNOLOGY TO MANAGE FOR DESIRABLE VEGETATION

A holistic and integrative approach to vegetation management involves employing a variety of tools for greater success. In the Blackfoot, we promote education and prevention, mechanical practices such as hand pulling and prescribed grazing, herbicide applications, monitoring, and the use of insects for biological control. We also encourage the alignment of land management practices with innovative research and technology.

One recent innovation provides a new way to tackle a time-worn vegetation management challenge: access. When terrain is too steep or otherwise inaccessible, Blackfoot landowners can now utilize an Unmanned Aerial Vehicle (UAV), or drone, owned and operated by a local contractor to map, spray and seed their property. The aircraft can hover over targeted treatment areas with an accuracy of 1-2 feet, increasing the precision and safety of herbicide and other applications.

Through a partnership with Bayer Environmental Science this past fall, two demonstration plots combining the use of drone technology and a newly-available preemergent herbicide for cheatgrass control were placed in the Blackfoot. These sites were selected for good visibility to demonstrate the potential of this product, Rejuvra, to

enhance ecosystem function and forage resources. We look forward to continuing to work with the folks at Bayer and evaluate the plots.

**Contact our Vegetation Coordinator Karen if you'd like to learn more about these new approaches, or have any questions about managing the vegetation on your property: [karen@blackfootchallenge.org](mailto:karen@blackfootchallenge.org)**



▶ Treating cheatgrass via Unmanned Aerial Vehicle on a ranch in the Blackfoot.

Photo by Karen Laitala



**None of this great work  
happens without you.**

*Thank you so much for your  
generous partnership and support!  
Learn more at [blackfootchallenge.org](https://blackfootchallenge.org).*