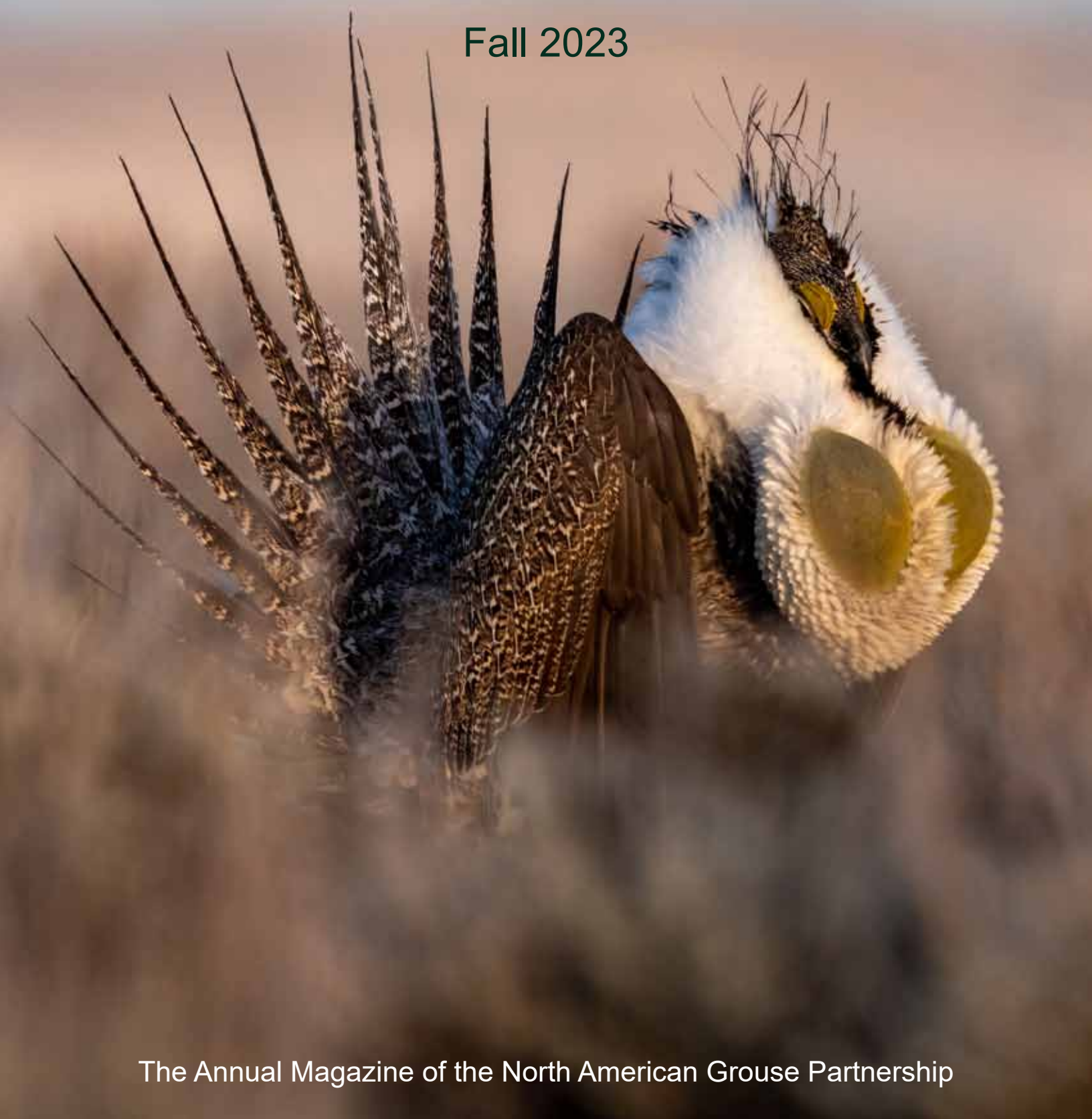
GROUSE PARTNERSHIP NEWS

Fall 2023



The Annual Magazine of the North American Grouse Partnership

GROUSE PARTNERSHIP NEWS

A publication of the North American Grouse Partnership

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Sunlight drips across the morning sky as the sounds of springtime sage-grouse ripple across the western prairies.

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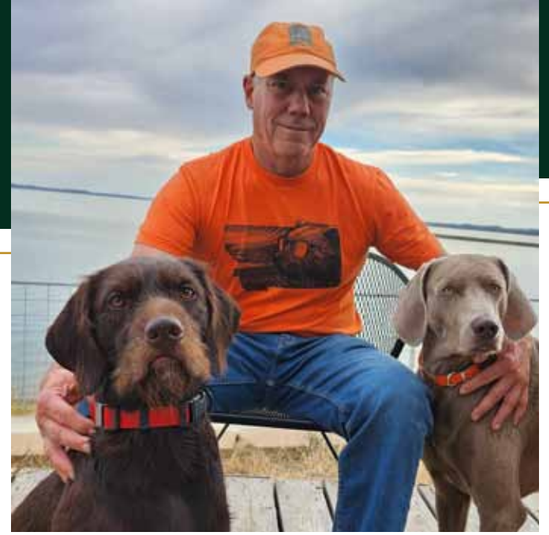
President



It has been a very productive year for the North American Grouse Partnership. Ted Koch, our Executive Director, and Jodie Provost, Communications Director, have been doing outstanding work. With their leadership, we helped the Lesser Prairie-Chicken Landowner Alliance become established. This group of landowners is committed to improving the status of lesser prairie-chickens (LPC) while maintaining their farming and ranching operations. They have provided a key voice in promoting policy and funding changes needed to help save this threatened and endangered species. They support NAGP's conservation strategy for LPC and have added critical perspectives on how to effectively implement this strategy on private lands. Federal agencies are working closely with us and the landowners to provide what is needed to make meaningful improvements to LPC habitat. Our next step is to deliver identified conservation actions on the ground in strategic locations to implement our conservation strategy and produce meaningful improvements to LPC habitat and populations.

We have continued our efforts for greater prairie-chicken (GPC) and sharp-tailed grouse (STG), primarily through the work of Jodie focusing on populations in the Lake States and North Dakota. Through her work we helped organize and support an Upper Midwest Prairie Grouse Summit, and will assist in North Dakota with GPC conservation actions. Our coordination of the interstate working group for these two species has been on hiatus. We hope to reengage and expand this group soon.

NAGP has not done all of this on its own. We have expanded and increased our engagement with our Prairie Grouse Partners who include Pheasants Forever, National Wildlife Federation, American Bird Conservancy, Teddy Roosevelt Conservation Partnership, and Playa Lakes Joint Venture. Cooperative efforts with these organizations are an essential aspect of our work. The support and expertise they provide towards grouse conservation is impressive and needed.

On the policy side, along with our partner organizations, we have been active in providing input and support for additions to the new Farm Bill and for passage of the North American Grasslands Conservation Act. We have supported our partners in advocating for changes to programs that would provide better Federal support to landowners for resting pastures from grazing. These and other policy recommendations are an important component of our work.

With all these activities and successful efforts, NAGP has reached its current capacity in terms of staff and resources. Our combination of part-time staff and volunteer support have been impressive in their accomplishments. However, our staff are maxed out in what they can accomplish with their time constraints. The Board and staff have discussed this concern. We are actively seeking funding for additional staff to directly support implementing our LPC conservation strategy. In addition, we see the need for additional staff time across the organization to engage in various opportunities for additional species. For example, our work on leading conservation efforts for GPC and STG, other than what Jodie has done , has been largely on hold. The status of sage- grouse is an increasing concern that could use more attention with additional staff time.

We are seeking solutions to expand our abilities as the leading science-based organization for conservation of all species of North American grouse. We are exploring new funding sources and expanded partnerships. We also seek assistance from all of you who care about the future of North American grouse. Contributions from individuals continue to be an especially important part of our fund raising, particularly for capacity building. We hope that you will consider NAGP as a very worthy organization for your non-profit support this year. And, if you desire to get more involved with NAGP as a volunteer, please let us know.

Jon Haufler

Message from Ted Koch,
Executive Director

I watched my friend stalk two pronghorn bucks through sage in the low, early morning light. He was about 400 yards from me through the still air. Even from that distance I could hear three sage grouse explode from near his feet, their thunderous wing beats sounding like small helicopters.

We stalked pronghorn for parts of three days in northern Nevada, in sagebrush habitat that at first glance looks pretty good. At least good enough to still have sage grouse. It's only when you put a couple miles on your hunting boots that you see it's just a matter of time before sage grouse are gone from here.

Everywhere we walked, clumps of native perennial bunch-grasses were grazed to a couple inches high, with ungrazed invasive annual cheatgrass filling the spaces in between. Insidiously, year by year, the bunch-grasses are selected against, deprived of the opportunity to go to seed or even photosynthesize efficiently. Meanwhile, the cheatgrass gets a pass from herbivores because it's less palatable. With the next fire, the native bunch-grasses, sagebrush and grouse will be gone for the rest of our lifetimes, and maybe beyond. Fire-loving cheatgrass will come to dominate.

Most people, even trained ecologists, will say fire is what threatens to allow cheatgrass to take over sagebrush ecosystems. But that's false. Fire has historically been a healthy part of sagebrush ecosystems. Aldo Leopold, in his 1949 book, "A Sand County Almanac," presciently wrote a chapter called "Cheat Takes Over", describing the emerging threat of cheatgrass in the last century. He said, "The cause of the substitution [by cheatgrass] is overgrazing."

But who can define "overgrazing"? I'm sure the rancher who operates where we were is proud he leaves behind a couple inches of native grass to regrow next year, rather than grazing it to the ground. Ranchers don't want cheatgrass either and certainly would never willingly be part of the problem. Then there's the added, uncounted stress of feral horses, especially here in Nevada. Where is the leadership necessary to begin identifying the problem correctly so we can all work collaboratively to solve it?

In lesser prairie-chicken country in the southwestern Great Plains, your North American Grouse Partnership is currently spending most of its time working with landowners to save prairie habitat. These landowners are ranchers who want to save chickens and their ranching operations. But we struggle against larger economic forces, like energy development and government agricultural programs that perversely incentivize breaking out grasslands.

Where is the leadership to save this most imperiled of our remaining native prairie grouse? It's with landowners, who we have helped come together to form the Lesser Prairie-Chicken Landowner Alliance. It's with state and federal agency experts who are supporting this landowner group to do good work and invite neighbors to join. And it's with the North American Grouse Partnership, providing leadership to bring all of these parties together.

Back in Nevada we were near the end of my friend's hunt when we jumped a group of eight sage grouse from a wet meadow, feeling their heavy wing beats in our chest. Most of them were juveniles. I wondered and worried about their fate, and the fate of their offspring in the landscape where native grasses are slowly being squeezed out.

Will our leadership be good enough and soon enough to save sage grouse and lesser prairie-chickens? With your help and support of the North American Grouse Partnership, the answer is more likely to be "yes."

Ted Koch

Photo by Richard Hamilton Smith

PARTNER UPDATES:

National Wildlife Federation

Farm Bill and Grasslands Advocacy

Lew Carpenter

At the local, state, and federal levels, the National Wildlife Federation (NWF) is striving to conserve wildlife habitats, including grouse habitats. Through its advocacy on the Farm Bill, one of the largest sources of conservation funding in the federal government, NWF works to ensure that U.S. Department of Agriculture conservation programs are authorized at appropriate levels, structured to achieve maximum wildlife and environmental benefits, and fully funded during the annual appropriations process. These elements are vital to our 21st-century land management strategies.

NWF recently produced its 2023 Farm Bill Platform. This platform lays out opportunities for advancing conservation and wildlife. It notes that Congress should ensure the 2023 Farm Bill provide adequate funding for conservation title programs to meet producer demand, safeguard historic climate-smart agriculture funding, include key conservation provisions for wildlife, and address historical inequities that persist for historically underserved producers.

"Farmers and ranchers are critical partners in deploying solutions that recover imperiled wildlife and help reduce climate impacts. This platform provides strategies that will equip them with the resources needed to remain economically viable while restoring healthy soils, improving water quality and quantity, creating habitat for wildlife, and sequestering carbon," said Collin O'Mara, president and CEO of the National Wildlife Federation. "By including these priorities in the Farm Bill and building upon the historic $20 billion investment included in the Inflation Reduction Act, we can ensure the productivity and profitability of resilient farms and ranches, while supporting healthy ecosystems and communities."

The North American Grasslands Conservation Act also continues to be a top priority for NWF. This Act will help farmers, ranchers, Tribal Nations, and others work to collaboratively address the immense challenges facing America's grasslands and prairies — one of the fastest disappearing ecosystems in the world.

In addition, NWF co-hosted the Sixth America's Grasslands Conference with the University of Wyoming at the Little America Hotel in Cheyenne, Wyoming from August 8-10, 2023. Partners and producers from across Canada, Mexico, and the U.S. engaged in a wildly successful three days that included the entire spectrum of grasslands conservation presentations, influential keynote speakers, and a sold-out crowd.

American Bird Conservancy

Conserving Prairie Grouse and Other Grassland Birds

Steve Riley

The American Bird Conservancy (ABC) has been a member of the Prairie Grouse Partners coalition since its inception in 2009. The coalition, led by the North American Grouse Partnership, was formed to promote the conservation of the four species of prairie grouse and to implement "A Grassland Conservation Plan for Prairie Grouse". ABC's engagement in Prairie Grouse Partners may surprise folks who think of ABC as a birding organization. While birding is important to ABC, conservation of birds and their habitats reigns supreme for it.

ABC works tirelessly to improve and restore bird habitats across both Americas and to remove threats that have led to drastic, and largely universal, declines in bird populations. The greatest declines have been observed in our grassland birds. Perhaps no other group of birds are more emblematic to large, intact grasslands than are prairie grouse. In addition, birds also face non-habitat related threats such as glass collisions, depredation by outdoor cats, and pesticides.

Prairie grouse such as lesser prairie-chicken are iconic grassland birds in decline. Conservation efforts for them are the proverbial "rising tide that lifts all boats" for grasslands. According to Jim Giocomo, ABC's Central Regional Director, "If we can solve the habitat problems that threaten prairie grouse, we will see corresponding population increases for many other species of prairie birds."

Threats to grassland birds include three broad categories of "damage" occurring to their habitats: loss, degradation, and fragmentation. Conservation tools must address these factors. We need to protect what is still in native grassland and ensure it remains profitable for ranchers and other landowners. We need to restore land back to prairie to reconnect habitats. We need to provide better stewardship to existing grasslands to restore lost values and to make them more resilient and productive. And much more. To do these activities requires collaboration, and better systems and tools than we currently use.

Getting better tools and incentives for farmers and ranchers to conserve grasslands is a priority for ABC. Many grasslands are privately owned so Farm Bill conservation programs offer important financial resources such as the Conservation Reserve Program and Environmental Quality Program. But you may know that. What you may not know is that certain aspects of crop insurance and commodity payments—also parts of the Farm Bill—work at cross purposes to conservation and can lead to loss, fragmentation, and degradation of grasslands.

ABC collaborates with landowners and partners to conserve grasslands through partnerships like Migratory Bird Joint Ventures. There are 24 Joint Ventures covering the entire North American continent. ABC hosts six of them and is a key partner in several others.

ABC works with NRCS and other partners to help deliver the Regional Conservation Partnership Program. Currently hosting several of these public-private partnerships, and working with others, ABC can provide technical assistance to ranchers and farmers, helping them through the process of obtaining incentives and implementing conservation practices.

ABC also strives to create better tools through policy and law. Dedicated staff work with Congress and at the state and local levels to create and implement better solutions. Whether it is new conservation practices or new methods to manage habitats or restore them through planting, ABC is a part of the discussion.

Finally, ABC is growing our team of conservationists who collaborate directly with ranchers and farmers so we can help more of them help birds and their operations. More and better grasslands translate to more and healthier bird populations, including grouse populations!

Photo by Richard Hamilton Smith

Pheasants Forever

U.S. Department of Agriculture Unveils Historic, $500 Million Investment in Wildlife Conservation

Jared Wiklund

Leading up to fall, the United States Department of Agriculture (USDA) announced the Natural Resources Conservation Service (NRCS) would invest $500 million in Working Lands for Wildlife initiatives over the next five years. The historic investment will ramp up conservation assistance for farmers, ranchers, private forest owners and tribes within key geographies and species while leveraging the Conservation Reserve Program.

"What an incredible commitment to wildlife at a meaningful scale," said Ron Leathers, Pheasants Forever and Quail Forever's chief conservation officer. "This investment has a chance to reverse population decline in some of our most threatened upland and grassland species, including sage grouse and lesser prairie chicken. Likewise, numerous other game and non-game species will benefit greatly from this announcement, in addition to improved water quality and soil health."

The announcement puts wheels in motion to update existing Frameworks for Conservation Action in the Northern Bobwhite, Grasslands and Savannas, the Sagebrush Biome, and the Great Plains Grasslands Biome to newly integrate the Farm Service Agency's Conservation Reserve Program. The impacts for prairie grouse species could be significant.

"When you find a conservation approach that works, double down—and that's what we're doing with Working Lands for Wildlife," said Robert Bonnie, USDA's Under Secretary for Farm Production and Conservation. "America's farmers, ranchers, forest owners and tribes steward the majority of our nation's wildlife habitat, and our work with them has yielded enormous gains for sage grouse, longleaf pine, and other species and ecosystems. Working Lands for Wildlife is ready to go to the next level, and the incorporation of the Conservation Reserve Program into its vision is a major leap forward."

Pheasants Forever and Quail Forever recognize the enormous impacts these investments will have for grassland species such as sage grouse, lesser prairie chickens, monarch butterflies, and native bees – all declining species with direct ties to grassland loss. The organization views Working Lands for Wildlife as the premier approach to habitat conservation efforts benefiting people and wildlife for the future. Learn more about Working Lands for Wildlife at www.wlfw.org.

Photo by Chad Love

Stroll the "Grouse Trail" Again at 2024 National Pheasant Fest & Quail Classic, March 1-3, in Sioux Falls, South Dakota

Grouse fans, plan to get your tail feathers to the National Pheasant Fest & Quail Classic from March 1-3 at the Denny Sanford Premier Center in Sioux Falls, South Dakota. Stroll the "Grouse Trail" to visit the North American Grouse Partnership booth and other grouse organizations, including the Ruffed Grouse Society. Shoot the breeze with fellow grouse and habitat enthusiasts and support these conservation organizations. We will again have a drawing of door prizes for those who visit all grouse booths. Enjoy the many exhibitors and activities that Pheasant Fest has to offer. There is something for everyone – youth, dog lovers, hunters, landowners, wild game foodies, habitat managers, and more. For more information, see pheasantsforever.org/Pheasant-Fest.

Photo by Lori Thomas

Ruffed Grouse Society & American Woodcock Society

2022 Review

Benjamin C. Jones

Without a doubt, we're energized by reports of work being done in the woods and knowing wildlife benefits will follow. However, that same passion doesn't usually accompany financial reports. Nonetheless, financials drive the business equation and as we say, "No margin, no mission!" This is an occasion to focus on funding and, most importantly, what it means for RGS & AWS habitat management now and in the future.

We'll set the bar for this discussion, noting that, in 2022, **90% of money raised went directly toward our forest wildlife mission**. Delivering 90 cents on the dollar shows we're focused, efficient and living up to our word.

Beyond numbers on a page, I see this every day working with staff — our team is dialed in and working with a great sense of purpose.

We're leading projects that leverage local and national funds. I recently looked back through several years of financial data leading up to 2020. At any given time, we had about $500,000 of funded agreements and grants in place (i.e., the funds we pursue for habitat work through public agencies and foundations). As this is being written, we have more than $10,600,000 of funded agreements in play. That's a 20-fold increase representing the delta for our updated business model. Pretty exciting, but not the end of the story.

A friend and fellow RGS & AWS member recently called them "multiplier projects." The term fits. Each agreement requires that RGS & AWS come to the table with skin in the game, the ever-important and sometimes elusive "match." So, we need cash in hand to negotiate each funded agreement. This is where locally raised funds really shine.

Yes, we're expanding into new funding arenas that expand mission impact — that doesn't mean we can abandon traditional fundraising! Support from individual donors, membership and events is more important than ever. Without a strong, donation-supported core, we can't pursue millions of dollars in innovative projects that work for wildlife. In modeling our financial future, unrestricted contributions are a key catalyst (or Jake brake) for our upward habitat trajectory.

RGS & AWS is growing, but not just for growth's sake. Our progress is intentional and centered on habitat. Over the past year, we added 18 new positions that hit the field supported by an interrelated portfolio of new agreements, local and national contributions and generous donations.

Recruiting new staff, some of whom are just beginning their conservation careers, reminds me that our work is generational. We're positively affecting habitat today. We're leveraging funding for enterprises important to us. We're ensuring access to habitat so people can share the wonders of grouse, woodcock and all forest wildlife. It's work worth doing, and with sound financial footing, it's a legacy that will continue for years to come. Truly generational impact.

In all these things, 2022 was another solid year, yet clearly not a time to rest on our laurels. There's much work to do.

To view the 2022 Annual Report, visit RuffedGrouseSociety.org under the "About" tab.

Missi-Croix RGS Chapter volunteers assist Wisconsin DNR in planting trees and shrubs to benefit ruffed grouse on the Tiffany Bottoms WMA. The Chapter adopted the WMA in 2020. Habitat projects like this one are made possible using RGS Chapter funds.

Photos courtesy of RGS & AWS

Cattle grazing on lesser prairie-chicken lek at TNC's Smoky Valley Ranch, a foundational property in the Chalk Bluff's Generational Grassland. Here TNC partners with a local ranching family for grazing management, which maintains habitat for over 200 male prairie-chicken.
Ranchers are stewards of the last wild places in Kansas - grassland conservation simply isn't possible without ranching.

Photo by Jonathan Strassfeld

The Nature Conservancy

Supporting Generational Grasslands

Matt Bain

TNC is working with a network of partners to support Generational Grasslands (aka "strongholds") with lesser prairie-chicken (LPC) being the initial conservation target. This effort is not separate, but part of the implementation of USDA's Working Lands for Wildlife's Great Plains Grassland Initiative, Central Grasslands Roadmap, LPC Interstate Working Group's Range Wide Plan, NAGP's stronghold development, and LPC Conservation Banking. It is being advised by the LPC Landowner Alliance.

These 50,000 to 400,000 acre strongholds are comprised of foundational properties with permanent commitments to grassland habitat, surrounded by shorter term commitments to effective management. In these locations, we are adding community-based, dedicated staff capacity for outreach and implementation assistance, additional practice incentive payments, social science to identify and address barriers to practice adoption, and funding for long-term, voluntary conservation options.

Instead of a shotgun approach, resources are efficiently focused in core areas using a reverse auction-based Grassland Services Lease. These leases serve as a commitment to non-conversion, extended practice maintenance, and invoice for practice incentive payments. Kansas Grazing Lands Coalition has been a key partner in hosting Grassland Specialist field staff positions and administering producer payments. Meanwhile, we are conducting a scalable gap analysis through producer feedback, interviews, and focus groups being led by Kansas State University.

After a year, we have reached about 200 producers resulting in 13 lease applications totaling $3 million and 37,773 acres. To improve management, 19,192 acres of spatially targeted, 10-15 year commitments have been obligated. These targeted lands include 800 acres of Conservation Reserve Program transition to grazing land (versus reversion to cropland), 5,280 acres of drought resilience and increased rest, and 13,112 acres of drought resilience and woody invasive management. We are expanding foundational properties from approximately 31,000 acres to 48,820 acres.

We have also established a 10-year grass banking grazing lease. Reduced stocking rates, growing season rest, and non-conversion on a nearby 10,000 acres of grassland are being traded for grazing rights on a nearby foundational property. TNC also purchased a 10,000 acre ranch, with LPC as a primary conservation target. TNC will hold the property for 3-5 years, then sell it with a conservation easement. Proceeds will go back into a revolving fund.

JV8 Central Grasslands Conservation Initiative

Taking Bold Steps Forward

Ali Duvall

In 2020, eight Joint Ventures signed a statement of commitment to collaborate and create the JV8 Central Grasslands Conservation Initiative (JV8). This biome-wide partnership established an unprecedented collaboration with hundreds of grassland stewards across Canada, the United States, and Mexico, representing an almost complete footprint in the North American Central Grasslands landscape. The mission is to engage and expand Migratory Bird Joint Venture partnerships across North America for the stewardship of native grassland ecosystems.

JV8 works closely with the Central Grasslands Roadmap and other partners to conserve habitat across the breeding, migration, and wintering ranges of the imperiled guild of grassland-dependent bird species. In 2022, the JV8 partnership invested $180 million to help conserve 2.2 million acres of grassland habitat, leveraging non-federal funds with federal dollars at a ratio of 28:1. Many of these projects benefit North American grouse species, such as Lesser and Greater Prairie-Chickens and Sharp-tailed Grouse.

Building from achievements in 2022, JV8 is now taking bold steps forward with the development of "A Business Plan to Recover North America's Central Grasslands", focusing on the strategies, funding, and partnerships needed to save one of the world's most endangered ecosystems. The plan:

- communicates why JV8 is essential to addressing grassland habitat loss;
- identifies conservation outcomes, geographic focus, and implementation strategies; and
- determines the costs and funding required to scale up Central Grassland conservation effectiveness through expanding partnerships.

The JV8 Business Plan will be released this fall. Over the coming year, the JV8 will use this plan to strengthen relationships with hundreds of land stewards and an array of grassland conservation efforts, including the North American Grouse Partnership. We must scale up voluntary, incentive-based conservation across the biome to meet the challenges before us. JV8 brings together the partnerships and expertise to find creative, innovative ways forward for the birds, wildlife, and people who rely on the Central Grasslands.

Please contact info@JV8.org for more information.

Photo by Greg Kramos, USFWS

Central Grasslands Roadmap

Biome-Wide Collaboration

Matt Gray

The Central Grasslands Roadmap is a collaborative guide to increase conservation of North America's Central Grasslands, which span 700 million acres across Indigenous Lands, Canada, the United States and Mexico. By bringing together diverse nations and seven sectors, the Roadmap identifies a shared vision, common principles, and collaborative priorities for the many people and organizations living and working on the Central Grasslands. Learn more about the overall Roadmap on the website and in the recent summer newsletter.

The Roadmap effort has created a biome-wide collaboration that transcends boundaries and sectors. Over the summer there were meetings across seven states with numerous partners from all seven sectors, three countries and multiple Indigenous/First Nations represented in the coalition. Tammy VerCauteren, lead visionary for the collaboration reflected recently, "I'm pleased to report that we continue to gather momentum for our shared implementation, policy, and communication priorities."

Highlights from the collaborative efforts this summer include:

- Launch of the Indigenous Kinship Circles website, resources, and survey.
- Roadmap-inspired collaborative presentations at both the Pathways Conference in Fort Collins in May and America's Grasslands conference in Cheyenne.
- Release of a revised and improved Assessment Map.
- High engagement in shared social science research to increase understanding of the people and human communities in the biome.
- Expanded reach of the Roadmap's "Roadshow," including the "Grasslands and You" campaign appearing at the Calgary Stampede.
- The formation and initial meeting of the Central Grasslands Bird Working Group toward the development of integrated population models and decision-support tools that will help across the Central Grasslands.

In the months ahead, the Roadmap will build on this momentum while re-convening the Metrics working groups to develop a "Scorecard" for the Central Grasslands. The Scorecard will provide a multi-disciplinary look at the progress that has been made in the last three years while identifying persistent gaps in our knowledge. The Roadmap communications teams will continue to showcase the diverse people, management practices, and communities working across the Grasslands. And finally, the Mexico working group will continue to devise strategies for protecting and managing the grasslands that provide critical wintering habitat for the majority of North America's grassland birds.

Through extended collaboration and partnership, the Central Grasslands Roadmap strives to develop and communicate strategies to protect, restore, and revitalize the Central Grasslands and serves as a convener amongst diverse sectors, people, and communities to make the collective impact needed to ensure the stability of this biome. Please contact us directly for more information or to join the effort: info@grasslandsroadmap.org


Photo by Roy Heilman

Minnesota Prairie Chicken Society

Celebrating 50 Years!

Ross Hier

The Minnesota Prairie Chicken Society (MPCS) held its 50th Annual Meeting this past April 22, Earth Day, in Rothsay, Minnesota which is known as "Prairie Chicken Capitol of Minnesota". Our small and proud organization has worked diligently over the past five decades to educate citizens about our precious prairie lands in western and northwestern Minnesota. We have contributed funds and materials to provide many opportunities for the public to view displaying Greater Prairie Chickens from comfortable viewing blinds across Minnesota's prairie chicken range.

We have an extremely active Board. As the times change, the Board has continued to seek new venues to help prairies and the flora and fauna that reside in them. MPCS often works with the Minnesota Sharp-tailed Grouse Society, Minnesota Department of Natural Resources (MNDNR), U.S. Fish and Wildlife Service (USFWS) and other conservation groups.

In recent years, we have collaborated with Pheasants Forever using Minnesota's tremendous Outdoor Heritage Funds for securing more grassland habitats in the prairie chicken range of Minnesota. This endeavor has been an outstanding relationship and will continue into the future. We have secured approximately 4,000 acres to date which are administered by MNDNR or USFWS.

Other recent efforts include an annual art contest among elementary and high school students to increase awareness of our prairies and prairie chickens, and an annual scholarship of $1,000 to a current wildlife student in the region. We publish four newsletters a year. Join our efforts!

Photo by Bre Owens

Western Landowner Alliance

Led by Those Who Understand Working Lands

Louis Wertz

Rancher Bryce Peterson gives soil scientist Megan Nasto a helping hand as she collects samples on his ranch in New Mexico. The project, coordinated by Western Landowners Alliance, seeks to understand the carbon and lesser prairie chicken habitat benefits of healthy grazing lands.

Out on the plains of eastern New Mexico, landowners are coming together to protect critical grassland habitat for the lesser prairie-chicken. And the Western Landowners Alliance (WLA) is by their side. We helped secure financial support for their efforts from Cargill and Burger King through the National Fish and Wildlife Foundation. The research and monitoring that we are conducting together may allow ranchers who protect prairie-chicken habitat to get paid for carbon that their healthy grasslands store underground.

Because WLA is led by those who understand from daily experience what it means to manage working lands, we create win-win solutions that protect habitat and rural livelihoods. We go beyond "what's good for the bird is good for the herd" to steward whole and healthy landscapes. This winter we are expanding our grazing lands work, adding new positions focused on supporting private stewardship of healthy grasslands in California and Wyoming. Plus, a coordinator of grazing lands conservation coalitions across the West will help landowner-led projects in eleven states find the support and technical assistance they need for the biggest impact. Join in and learn more at westernlandowners.org.

Meanwhile, we are committed to sharing both practical information for, and inspirational stories of, landowner-led species conservation around the West. Season two of our award-winning documentary podcast, Working Wild University, will take listeners into field and stream. They join landowners and their science partners to understand what it really takes to protect the astonishing biodiversity of the American West. Check it out at workingwild.us.

Michigan Sharp-tailed Grouse Association

News from the Upper Peninsula

Marty Sarrault

The Michigan Sharp-tailed Grouse Association (MSGA) held its 2023 Annual Meeting on August 25 at the Hiawatha National Forest Office in St. Ignace. The gathering began with Marty Sarrault, WSGA president, sharing information about the first Upper Midwest Prairie Grouse Summit held August 1 – 2 at Crex Meadows Wildlife Area. Michigan had three people in attendance.

Dave Jentoft, Michigan DNR wildlife biologist, then explained how the DNR monitors sharp-tailed grouse via occupancy studies (presence or absence of the bird in certain areas) and lek census studies (numbers of birds on mating grounds/leks). Michigan DNR will probably be able to maintain, but not expand areas of suitable habitat on public lands in the central and eastern Upper Peninsula. In general, most sharp-tailed grouse in the eastern Upper Peninsula are on private land, while most of the sharp-tailed grouse in the central Upper Peninsula are on public land.

Next, Paul Thompson, Hiawatha National Forest terrestrial ecologist, assisted by Brenda Dale, United States Department of Agriculture, shared habitat improvement projects being planned. These projects on the Hiawatha National Forest will benefit sharp-tailed grouse and other open land wildlife through prescribed burns and prairie grass seedings that will range in size from a few acres to several thousand acres. In the Raco area located west of Sault Ste. Marie, the largest planned prescribed burn approaches several thousand acres in size. Prescribed burns can be expensive, but the cost per acre declines significantly when burns are large. A field trip was then taken to the Raco area where a recent, open land habitat project had been completed.

Finally, MSGA appreciated the dedicated professionals from Michigan DNR, the Hiawatha National Forest, and the United States Department of Agriculture who work to preserve habitat where sharp-tailed grouse and other open land wildlife can flourish. They also recognized the efforts of long time MSGA members, Steve and Karen Rodock, who spent many hours finding sharp-tailed grouse with their dogs on public land areas in the Upper Peninsula, making a major contribution to sharp-tailed grouse management. Steve and Karen were wished a long and enjoyable retirement.

Minnesota Sharp-tailed Grouse Society

A Renewed Vision and Commitment

Mike Chalich

As Minnesota Sharp-tailed Grouse Society's (MSGS) new president, I would like to share ideas regarding my vision. My leadership skills were fine-tuned while serving as president of the Minnesota Trappers Association and working on the railroad for 37 years. The recent Upper Midwest Prairie Grouse Summit in Grantsburg, Wisconsin taught me a lot. It was a beneficial event that should be continued. Some of what I saw and heard scared the hell out of me, but much also gave me hope.

As MSGS president, I will guide MSGS, focus on a solid structure, share clear goals and objectives to support our bylaws, build our visibility and membership, increase our fund raising, and get the word out. Our northeast Minnesota regional representative is creating Facebook and Instagram visibility. It has worked for our neighbors in the Wisconsin Sharp-tailed Grouse Society and they are assisting. We will be at more fairs, sporting events, and banquets, and have more articles in the Outdoor News. These efforts will be for hunters and nonhunters - all interested in our native wildlife that benefit from prairie, grassland, and shrubland landscapes.

Growing up in northeast Minnesota, sadly, I watched the sharp-tailed grouse range there shrink. I can still remember the first flock of sharptail that I ever saw bust out of a willow stand while running my trapline as a sixth grader. I will never forget it. There has not been sharptail in that area for 50 years. We have hard work to do. I am committed to doing all I can to get these treasured birds back on the rise!

Wisconsin Sharp-tailed Grouse Society

A Highly Active Year

Ken Jonas

The Wisconsin Sharp-tailed Grouse Society (WSGS) had a highly active year with positive implications for our remnant population of sharp-tailed grouse in the state. In early February, we teamed up with the University of Wisconsin – Stevens Point Chapter of Backcountry Hunters and Anglers for a fundraising event held at District 1 Brewery. The event enhanced awareness, raised needed funds, and resulted in the brewery creating a masterpiece entitled "Sharptail Ale."

The next major event was participation in the 2023 National Pheasant Fest and Quail Classic where we had a booth on the "Grouse Trail." People from all over the country were in attendance and we talked sharptails, raising awareness with literally thousands of gamebird enthusiasts, as well as selling merchandise and memberships that help fund the mission.

We held our annual meeting in mid-July in partnership with Friends of the Namekagon Barrens Wildlife Area on this showcase sand barrens property, one of the remaining strongholds of sharp-tailed grouse in the state. The event was well attended by folks from both organizations as well as the surrounding communities. Speakers from hosting non-profit organizations, the Wisconsin Department of Natural Resources, and the author of "Sand and Fire," a newly released book, highlighted the natural and human story of the Northwest Sand Barrens with educational benefits for everyone.

Shortly afterward in early August, WSGS along with the North American Grouse Partnership, co-hosted the Upper Midwest Prairie Grouse Summit at Crex Meadows Wildlife Area at the southern reaches of sharp-tailed grouse range in Wisconsin. This focused, professional conference shared management details of fragmented greater prairie-chicken and sharp-tailed grouse populations in Wisconsin, Michigan, and Minnesota.

In addition to our outreach efforts, WSGS funded projects that had positive benefits. We funded two roller chopping efforts on 245 acres that set back succession, especially where prescribed burning is unable to do the job. We purchased two grouse lek viewing blinds for Wisconsin DNR to use on Crex Meadows Wildlife Area and assisted with sharp-tailed grouse surveys on three major properties.

WSGS also funded two Autonomous Recording Units (ARU) that are programmed to detect calls of a variety of bird species. The ARUs were used by Bayfield County Forest staff to listen for sharp-tailed grouse vocalizations at five different sites during the spring mating season, with success at four sites.

WSGS served on the committee and assisted with development of a new state Wisconsin Sharp-tailed Grouse Management Plan. It will be available soon for public review. We also provided supporting comments on a proposal to increase open barrens habitat on the Brule River State Forest and lastly, committed funding and in kind services over a four year period for a proposal that would focus on increasing fire as a management tool on the three early successional, natural sand communities of Wisconsin.

Teddy Roosevelt Conservation Partnership

Championing Quality Habitat and Recreational Access

Aaron Field

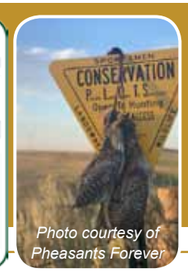


Photo courtesy of Pheasants Forever

In keeping with its mission to guarantee every American quality places to hunt and fish, the Theodore Roosevelt Conservation Partnership (TRCP) continues to work alongside the North American Grouse Partnership (NAGP) and other partners. Together, we champion conservation by advancing federal programs and policies that provide quality habitat and recreational access.

The Farm Bill is the key federal legislative vehicle in 2023 for private lands conservation, including rangelands and forests. The TRCP leads an Agriculture and Wildlife Working Group (AWWG) comprised of twenty-seven hunting, angling, landowner, and conservation organizations, including the NAGP, focused on conserving and restoring fish and wildlife habitat while supporting agricultural production and enhancing recreational access. This year, the AWWG published and distributed our "Hunter and Angler Priorities for the 2023 Farm Bill" which provides recommendations for changes in the Farm Bill that would benefit fish and wildlife. These recommendations provide Congress with a roadmap of solutions to address capacity constraints, help oversubscribed programs meet landowner demand, and ensure that qualified professionals remain available to craft effective conservation plans.

On public lands, the TRCP is working to promote science-based grazing management, balanced energy development, and land management priorities that support quality wildlife habitat. With most of our largest remaining forest and rangeland blocks found on public land, this engagement is a key factor in broader habitat management.

We also continue work to advance the North American Grasslands Conservation Act which has the potential to revolutionize the planning and funding of grassland conservation and restoration activities across the country. The TRCP helped to craft this bill and rally hunter support it from the initial stages of its development and continues to pursue bipartisan input as lawmakers consider the legislation.

The TRCP facilitates a Mitigation and Development Working Group comprised of fifteen hunting, fishing, landowner, and conservation organizations, including the NAGP, focused on developing durable federal policies to avoid, minimize, and mitigate impacts from development on fish and wildlife values. Most recently, that group requested that the Departments of Energy and the Interior develop national voluntary guidelines for the siting of solar energy development on public and private lands, like guidelines for wind development established in 2012.

North America's rangelands and forests face threats too expansive and multifaceted for any organization to face on its own, which makes coalition-building groups like NAGP and the TRCP more important than ever. We look forward to working together to meet the challenge.

CRP and Me

How 60 years with and without the Conservation Reserve Program have touched my life.

Chris Madson, North American Grouse Partnership

I pulled off the section road next to the gate at about six o'clock, two hours before Iowa regulations allow bird hunters to take the field. It was opening morning and since I hadn't been able to sleep back at the dorm, I figured I might as well drive out to where I planned to start. As I killed the engine, I saw half a dozen tiny black specks silhouetted against the brightening eastern horizon as they lifted out of the cover toward the corn stubble beyond. Then another three or four. And a small flock coming back my direction. The place was boiling with pheasants.

It was the fall of 1969. I was an impoverished college student, just starting my sophomore year, living a bare-bones existence in a spartan room with one chair, an old Royal manual typewriter on a particle-board desk, and a bookshelf made of bricks and boards. Under the steel-framed bed there was a Model 12 pump and a bolt-action .22, both stored in surreptitious violation of campus policy, just in case I could find a way to escape into the countryside for a few hours.

I don't remember how I got hold of a car - there was no way my dad could underwrite one for the first in a succession of the family's college kids, and I needed every cent of my summer earnings for textbooks and miscellaneous fees. But, somehow, somewhere, I managed to negotiate some wheels just long enough to scout the northeastern corner of the county in the month before the upland bird season opened. As Dad used to say, "Love will find a way."

Photo by Chris Madson

In those days, there was a pheasant hotspot in eastern Iowa that had gone largely unnoticed. Many hunters still focused on the northwestern corner of the state, the traditional realm of the Iowa ringneck, but biologists and hunters who knew that region had watched a steady decline in cover and pheasant numbers. Over a beer or two, they'd bemoan the fall plowing that turned the inky prairie dirt to the sky just when the birds needed shelter and food the most. They called it "the great black desert."

I was in the rolling country along the Iowa River a hundred miles to the east, a landscape with wet swales and steep hillsides that protected a few places from fencerow-to-fencerow farming. In a long Sunday afternoon, I'd found several promising scraps of cover but nothing extensive.

Headed back to town, I'd seen a wooly-looking patch at a section corner, a stark contrast with the serried corn stubble on the other side of the road. It was a field that had apparently been seeded to smooth bromegrass several years earlier. In Iowa, the original prairie has long been relegated to road ditches and railroad rights-of-way, but given half a chance, it creeps back into the surrounding fields. This stand of brome had been invaded by a host of native grasses and broad-leafed plants, a sturdy mix of dense cover that offered plenty of shelter and even some emergency winter forage.

I pulled into the nearest farmhouse and introduced myself.

"That eighty?" the farmer said as I pointed. "The CRP. Yeah, that's mine. Sure, son, you can hunt it. Thanks for asking - lots of folks don't."

"CRP?" I asked.

"Conservation Reserve Program," he said. "Federal, but the funding's about to run out. You'll find some birds there."

I thanked him and headed back to the dorm.

When I came back for the opener two weeks later, I quickly found out how right he was. I stepped into the cover at the stroke of 8:00. I wasn't ten yards past the gate when half a dozen hens jumped underfoot. The stab of adrenalin had just begun to subside when a rooster flushed ten yards ahead. At the last second, I remembered to finish the swing, and he folded, disappearing into the cover with a "thump" that flushed another dozen birds.

There was no counting the number of pheasants I saw that morning. Hundreds, I think. Without a dog, I lost two cripples in the next ten minutes, but I managed to collect another two roosters before I'd walked a third of the area. Back at the vehicle, I checked my watch: 8:35.

That was my introduction to CRP.

Photo by Chris Madson

Photo by Chris Madson

Photo by Chris Madson

The idea of the federal government paying to take cropland out of production emerged in the depths of the Great Depression as Washington D.C. looked for ways to provide a little support for struggling farmers and raise the prices of major crops by reducing the supply. As American grain prices stagnated at the end of World War II and the Korean conflict, Congress revisited the idea, and in 1956, it passed Public Law 84-540, the Soil Bank Act, which established the "Conservation Reserve Program," not only to reduce "excessive supplies of agricultural commodities" but to "protect the national soil, water, and forest and wildlife from waste and depletion."

The act provided for contracts in which farmers agreed to establish some kind of cover on a piece of cropland with funding help from the government. The cover was to remain undisturbed for the life of the contract, typically three, five, or ten years. By 1960, farmers had enrolled 28.7 million acres in the original CRP, but that was the last year contracts were offered, so the retired area dwindled steadily - by 1970, there were only 75,000 acres left under contract, and the last thousand acres went back into production in 1972.

Iowa's share of the original CRP was a little more than 663,000 acres in 1960. Biologists estimated that those acres pumped "between 600,000 and 750,000 juvenile pheasants into the fall pheasant population in Iowa each year." By the time I arrived on that opening day in 1969, CRP in Iowa had shrunk to about 11,000 acres, but those last scraps were still stiff with pheasants. The raw numbers speak volumes: Iowa pheasant harvest during the span of the original CRP averaged 1.9 million birds per year.

In 1972, I moved out of pheasant country to pursue more schooling. That same year, Earl Butz and America's grain magnates struck a deal with the Soviet Union that subsidized the sale of 18 million tons of wheat, corn, and soybeans to the Russians. The effects of the sale were felt in every grocery store around the world, and it ushered in an era of intense cultivation in the American heartland that was hardly slowed by the spike in diesel fuel prices in the wake of the 1973 Arab oil embargo.

Wildlife felt the change. In the decade from 1974 through 1983, average annual pheasant harvest in Iowa dropped by thirty percent. In the decade of the 1970s, average annual harvest in neighboring Nebraska dropped thirty percent; South Dakota harvest by fifty percent. Nongame grassland natives like the grasshopper sparrow, dickcissel, and bobolink suffered comparable, or even steeper declines.

I came back to the prairies in 1978, just in time to catch a three-year span that favored upland birds on the central plains, but when that halcyon stretch of weather passed, bird numbers plummeted again - between 1983 and 1984, pheasant harvest in Iowa dropped 30 percent; Kansas harvest dropped 34 percent; and South Dakota's more than 20 percent.

The Farm Security Act of 1985 arrived to staunch the bleeding. Among many other provisions, it reinstituted the Conservation Reserve Program, which provided for ten-year contracts with landholders to convert as much as 39.2 million acres from cropland to grassland. The vast majority of that habitat lay to the east of my new home in southeastern Wyoming, but even here on the highest of the High Plains, it made a difference.

There have probably always been sharptails in this corner of the High Plains, but by the time I moved here, they were so unusual that most ranchers who saw them assumed they were hen pheasants, a local favorite that had also dwindled over the previous 40 years.

By 1990, CRP had established year-round cover on 250,000 acres of Wyoming cropland. That was about when little Meg the Brittany came into my life. She was not much more than six months old when the prairie grouse season opened in September, but she'd mastered the basic field commands - "Come!" and "Stop!"- so I decided to take her out for a tour of one of the CRP fields east of Cheyenne.

It was a cool morning with a scattering of dew in the grass when we left the truck, heading south into the breeze. She was overrunning her nose, as young dogs will, but I could see she was paying attention to what she found in the air - the jumble of lingering scent from every horned lark, jackrabbit, deer mouse, and meadow vole that had passed in the last several hours.

We were halfway across the section when she swung toward a low knoll on our left, slowed down, and froze. I figured she was on a ground squirrel, but in the spirit of the moment, I swung out to one side so she could see me out of the corner of her eye and walked slowly past that pink nose.

There was an explosion of wings - seven sharptails reached a group decision and headed south at a high rate of speed. As the little 20 gauge came to my shoulder, I managed to remember to finish the swing, and two birds fell. Meg rushed out to connect the feathers with the scent.

Since then, I've followed a succession of three more bird dogs through CRP fields in six states over 30 years. We've found pheasants, sharptails, prairie chickens, bobwhite quail, Huns, mourning doves along with a host of other wild things - bald eagles, prairie falcons, rough-legged hawks, harriers, short-eared owls, a host of native sparrows, chickadees, juncos, mule deer and whitetails, coyotes, foxes, raccoons, opposums . . . pretty much all the wildlife that's left in the Corn and Wheat belts.

It would have been nice if the modern version of the Conservation Reserve Program had returned us to the abundance I saw in the last years of the original CRP, but over the years statistics have blighted that hope. Iowa's average annual pheasant harvest back in the day was 1.9 million roosters. Its average harvest from 2011 through 2020, was 229,000 - a loss of 88 percent. Nebraska's average harvest from 2011 through 2020 was only 12 percent of its average harvest in the 1960s. Kansas harvest over the same span dropped 42 percent. Even South Dakota, the acknowledged epicenter of America's pheasants, lost 20 percent of its annual pheasant kill.

And the numbers are no different for most of the rest of the heartland's birds. It's hard for a Midwestern boy like me to imagine that the population of the eastern meadowlark, a bird I saw on every third fencepost as I was growing up, has declined by almost 75 percent since 1966. The National Audubon Society estimates that numbers of grassland birds as a group have declined by 40 percent over the last 60 years. "Some, like the lesser prairie-chicken," their experts continue, "hover at the brink of extinction." The native prairie grouse began a catastrophic decline before formal records were kept. Today, a sparse population of greater prairie-chickens clings to the grasslands on the western edge of their former range. Plains sharptails have fared somewhat better on the northern plains, but research indicates that the ongoing decline of CRP and native grassland will not be kind to them either.

The difference between the effect that original CRP had in the 1960s and the new CRP had in the modern era is worth considering. In the 1960s, 28.7 million acres of CRP were an influential addition to a farm landscape that already offered a rich mosaic of cultivated fields with a wide variety of crops, including many small grains, weedy ditches and corners, pastures, and wetlands that supported thriving populations of many wild species.

Here in the 21st century as our demands for food, fiber, and fuel continue to escalate, working land in America is closer to a factory than a garden. We don't grow as many different crops on the prairie as we once did, and the ones we do grow are kept free of weeds and insects with an arsenal of highly effective chemicals. Soybeans have become a staple in crop rotations far out onto the Great Plains - anyone who thinks soybeans offer much in the way of wildlife habitat on the prairie should take a look at a harvested Iowa soybean field after a January snowstorm. And the assault on grasslands continues. Between 2016 and 2020, more than seven million acres of grass on the Great Plains have gone under the plow.

On this landscape, CRP isn't just an additional source of food and shelter for wildlife - it has become the mainstay of wildlife habitat in the Corn and Wheat belts - but as authorization and funding have been slashed in Washington D.C., CRP has been melting away just when wildlife needs it most. The area in CRP cover rose to more than 30 million acres in 1990, peaked at just under 37 million acres in 2007, and has been declining steadily ever since, leaving a little less than 22 million acres today.

Outlander though he is, the ring-necked pheasant has been the most recognized and sought-after bird in the Midwest for more than a century. Tough, resourceful, adaptable, pheasants have managed to eke out an existence on a landscape where many native species have struggled or even disappeared, a naturalized resident that has become a gaudy miner's canary, bearing mute witness to the condition of our farm country. When even a pheasant has trouble making a living, I think it's time to strike a different balance on the land.

It's worth remembering what another generation had to say about that in 1956. Their commitment to "protect the national soil, water, and forest and wildlife from waste and depletion" is even more important today than it was then. CRP helps farmers do the right thing. We need a lot more of it.

More than ever.

Improving the Next Farm Bill for Ranchers, Farmers, and Grouse

Lew Carpenter, North American Grouse Partnership

When it comes to wildlife conservation in America, challenges run deep. Take the Farm Bill for example. It is the largest multi-year, conservation title in the United States, responsible for agricultural production, food security, wildlife conservation, and climate mitigation. Most of the funding goes to nutrition programs, crop insurance, and commodity programs. And just six percent goes to conservation, though that amount in dollars is still significant. For voluntary, incentive-based conservation programs like the Conservation Reserve Program (CRP), Conservation Stewardship Program (CSP), and the Environmental Quality Incentives Program (EQIP), a projected $60 billion will be included in the upcoming Farm Bill.

Yet with all this funding, private landowners are still left wanting when it comes to turning portions of their land into wildlife-friendly habitat strongholds. One challenge is that CRP rates have dwindled over time and may not offer enough incentive for a landowner to turn profitable agricultural land into suitable and sustainable habitat. Other issues include transient staff and a subsequent lack of trust for federal programs as employees managing the work move from place to place.

Jim Weaver owns a 30,000-acre ranch in eastern New Mexico on what used to be prime lesser prairie-chicken habitat. Recently, that subgroup of chickens was listed as "endangered" under the Endangered Species Act. Weaver knows that with the right work and reasonable incentives by the Farm Bill, the lesser chicken has a chance to recover.

"This ranch is in a really dry part of the country, and we obviously needed help down here since these soils are more erodible than anywhere else," Weaver said, referring to both eastern New Mexico and West Texas. "Everything is just completely plowed up, and it blows so bad in the summertime you can't even see the telephone poles as you're going down the road one to the next."

Weaver explained that in the early days of the Farm Bill they did all they could getting folks to remodel their grasslands, plant natives, etc. It turned out the early programs were not as beneficial for producers, but the programs changed into a more productive model where acreages left in CRP began to improve. "Over time, those CRP grasslands mature and the first three or four years of a CRP grass plant, even if it is native, doesn't have enough forbs in it to really be diverse enough to bring wildlife back into it. You know, songbirds and game birds in particular," Weaver said. "So, that's been improved upon regularly. And you know, we were perfectly happy with that. Things were going pretty well until we woke up one morning and our payment rate after 30 years was reduced by more than half, and that became a little problematic down here."

Unfortunately, CRP rates still do not adequately meet needs to incentivize landowners to enroll acreages in the program. The going rate is $18 per acre in Weaver's part of New Mexico and should be closer to the $42 mark to make sense and get landowners back involved in conservation. Weaver estimates the acreage loss due to the decline in payment rates to be near 30 percent going back under the plow.

Weaver did much to improve his land during the better payment years of CRP and took advantage of EQIP programs. "I was in the first go around for EQIP habitat improvement and water, you know, pipelines and all that kind of stuff," he said. "We put a hundred miles of pipeline and on this ranch, we have more than 100 wildlife drinkers."

At the end of the day, Weaver admits folks are not asking for all that much. "If we could just secure a million acres down here — which is a postage stamp in this part of the country — we'd probably be okay, and the chicken would be ok. But without some program changes and people actually deciding they care enough to do something…it's a little disheartening."

As folks advocate for the next round of Farm Bill funding and connect with local politicians and decision makers, please remember these greatest needs in the upcoming Farm Bill:

- Direct conservation funding to impact more acres and provide more technical assistance to farmers and ranchers in key areas for sage-grouse and prairie grouse.
- Restore CRP payment rates and incentives, and increase annual payment limits to ensure farmers and ranchers are fairly compensated and will continue to enroll land.
- Ensure CRP wildlife benefits are maintained by restoring the reasonable limits on haying and grazing that were unintentionally stricken in 2018.
- Raise the CRP acreage cap to account for the loss of 9 million acres of traditional CRP that made way for Grassland CRP. The latter has less habitat benefit since hayed and or grazed more frequently.
- Establish a program and/or a modification to one or more existing programs to support ranches in incorporating rest into their grazing systems.
- Allow enrollment of land in both CRP and the Environmental Quality Incentive Program (EQIP) for more wholistic management, to support both establishment of grasslands and their management through practices such as grazing, burning, periodic rest, and tree removal.
- Maintain at least 10 percent of EQIP funding dedicated to wildlife conservation practices and contracts.
- Modernize and streamline the Regional Conservation Partnership Program process while adding wildlife corridors and connectivity as a priority resource concern.
- Retain strong conservation compliance provisions, including Swampbuster and Sodsaver to protect native grasslands and wetlands. Expand Sodsaver nationwide and strengthen disincentives for native sod breaking.

A Strategy to Recover Lesser Prairie-Chickens Through A New or Modified Farm Bill Conservation Program

Terry Z. Riley, North American Grouse Partnership, and Steven P. Riley, American Bird Conservancy

The lesser prairie-chicken (*Tympanuchus pallidicinctus*) serves as an indicator for healthy grasslands and prairies. The species needs large, un-fragmented parcels of intact native grasslands and shrublands to maintain self-sustaining populations, primarily sand shinnery oak shrublands and sand sagebrush shrublands. Historical estimates suggest lesser prairie-chickens (LPC) once numbered in the hundreds of thousands, or even millions, across nearly 100-million acres. Currently, the bird occurs on only four million acres of land. Shortgrass prairies, sandy soil, sand shinnery oak, sand sagebrush, and native bluestem grasses make up their primary preferred habitats. Populations declined dramatically in the mid-20th century as native grasslands and shrublands were overgrazed, converted to agriculture, and invaded by trees. Resource developments, such as oil and natural gas wells and related infrastructure and industrial-scale wind energy developments, continue to degrade and fragment LPC habitats and increase threats to the species.

Lesser prairie-chicken management is a controversial topic with widespread implications for land use and energy development across five western states. The U.S. Fish and Wildlife Service (FWS) listed the bird as threatened under the Endangered Species Act in 2014, but the listing was voided a year later when a federal court ruled that the agency failed to properly take into consideration state and private conservation efforts. On November 24, 2022, the FWS published a final rule adding the lesser prairie-chicken to the list of threatened and endangered species. The southern distinct population segment (DPS), which ranges in west Texas and New Mexico, was listed as endangered and the northern DPS, which ranges in southeastern Colorado, Kansas, western Oklahoma, and northern Texas, was listed as threatened.

Most (>90%) LPC habitat is found on private land. Federal, state, and private conservation programs currently are limited in scope and their widespread and dispersed applications have not been measurably effective at restoring these habitats. We believe there is a need to focus application of existing and new conservation programs if LPC populations are to be recovered. Farmers and ranchers need technical assistance and financial incentives for habitat restoration. These producers cannot be expected to implement conservation practices for the LPC without adequate compensation for lost production or income.

Lesser prairie-chickens need large landscapes of relatively unbroken and undisturbed native grasslands and shrublands. Tree invasion into these vast habitats often renders them unsuitable for LPC. Scientific research has shown that prairie grouse will abandon grassland habitats with only a few trees present per acre. We proffer that the bird needs relatively unbroken and treeless habitats of at least 50,000 contiguous acres (20,234 hectares) to maintain healthy populations. These grassy and shrubby habitats must have minimal human disturbances (e.g., haying or livestock grazing) during the primary nesting and early brood-rearing seasons. We believe several of these "habitat concentration areas" are needed across the current (and perhaps even the historic) range of the species. Large, restored landscapes will serve as population strongholds so that the species may endure human disturbances, as well as natural pressures from the arid environment in which they live. Occupied habitats are often difficult to define, but areas within 5 miles of active leks should be considered as occupied and should serve as the primary focus for establishing and maintaining population strongholds.

Traditional public conservation programs, such as the Farm Bill's Conservation Reserve Program (CRP) and the Environmental Quality Incentives Program (EQIP), have potential to encourage producers to adopt practices that can be used to patch together the desired landscapes. Trees can be removed and cropland converted back to grassland with these programs by providing financial incentives to willing landowners within each concentration area. At present, these programs are not doing enough and require improvements. Recent modifications to the CRP, specifically Grassland CRP, which allow normal livestock grazing practices may reduce program value for grassland birds. We believe there is need for a new conservation program, or at least effective changes within the current programs that provide adequate financial incentives to ranchers to restore rangeland health and maintain native grassland and shrubland cover. No adequate alternative to the highly successful Conservation Reserve Program for croplands exists for rangelands. Nor does it exist within other existing programs managed by the U.S. Department of Agriculture. Livestock producers and our citizens need a program that incentivizes annual rental payments in exchange for voluntarily delivering conservation benefits and associated loss of income needed to pay for these services in rangelands. Rangelands are highly diverse and provide forage for domestic livestock. They also provide habitat for wild herbivores, prairie grouse, meadowlarks, and countless other birds, which unfortunately continue to suffer from major, long-term declines.

We recommend establishing a conservation program and/or a modification to one or more existing programs to allow most ranches in the Great Plains to incorporate rest into their grazing systems. In simple terms, rest means that one or more pastures are left un-grazed and unutilized for at least one year. Annual rest is best achieved in a cyclic, rotational pattern throughout a ranch. Periodic rest increases and improves plant species diversity, heterogeneity, soil health, stability, resilience, and sustainability, and adds stored carbon. We envision this approach to work with multi-pasture grazing systems in which pastures in a grazing system are rested in a sequence for up to three years.

Additional best management practices compiled for the lesser prairie-chicken using the best available science and expert opinion are:

- **Avoid converting native grasslands to other uses.**
- **Restore health and plant diversity of existing and converted native grasslands and shrublands within 5 miles of active leks through use of high-diversity mixes of native grasses, forbs, and shrubs.**
- **Manage existing and restored grasslands with periodic disturbance regimes (e.g., grazing, fire) that encourage growth of diverse communities of native grasses, forbs, and shrubs.**
- **Manage livestock with a rest-rotation system where each pasture receives 12 to 36 months of rest from grazing.**
- **Maintain residual grass height and density necessary to achieve 8 − 12 inches of visual obstruction during nesting and brood-rearing seasons (April 1-July 31).**
- **Measure visual obstruction of nesting cover prior to peak nest initiation.**
- **Control noxious weeds by selectively spot-spraying herbicide, versus by field-level application.**
- **Delay grassland haying and mowing until after the primary nesting and early brood-rearing seasons (after July 31).**

Photo by Stacy Hoeme

Lesser Prairie-Chicken Landowner Alliance – Saving Ranching and Chickens in the Southwest Great Plains

Ted Koch, North American Grouse Partnership

I recently spoke with a landowner in Texas, one of the Lesser Prairie-Chicken Landowner Alliance (LPCLA) members, about his latest challenges to hold onto his generational ranching heritage and lesser prairie-chickens in the face of new threats. This time, the threat growing around him is sponsored by the federal government.

Organic peanut subsidies mean tens of thousands of acres around this landowner are being broken and planted in peanuts. New hardware gleams in the sun and new vehicles drive the properties. Well drilling rigs abut the border of his land, seeking water that is meager enough it will not sustain peanut farming for long. It will only make it harder for him to get water from his wells for ranching. When the wind blows now, more dirt flies and buries his fences.

As another colleague recently said, "Haven't we learned anything over the last 90 years?" It was during the Dust Bowl days in the 1930's that dirt from this part of the country blew all the way to Washington, D.C. This precipitated the Farm Bill conservation title programs we have today to help conserve soil, wildlife, and other ecosystem services that Americans and landowners need.

Conserve we will. The reason the LPCLA exists is to do just that. In 2021, when the North American Grouse Partnership (NAGP) was trying to save lesser prairie-chickens by influencing state and federal agencies to do more to conserve chicken habitat, one agency staffer cogently asked me, "Well Ted, where are the landowners in this?"

That stung a bit, I suppose because the truth hurts. If NAGP really wanted to move the needle for conserving chickens, we needed to go directly to the people who own the habitat, who participate in conservation programs, and most importantly, who care about the land and wildlife as much as you and me. So, we did. Hence the LPCLA was born.

The mission of the LPCLA is to save ranching and chickens. It is a group of roughly a dozen conservation leader landowners across the lesser prairie-chicken five-state region. Like NAGP they are small but mighty.

The LPCLA and NAGP have since been successful in engaging the Biden Administration all the way to Department of Agriculture Secretary Vilsack and Department of Interior Secretary Halland. Even better, we've received enthusiastic support from Department and Agency staffers every step of the way. And state wildlife agencies have also been very helpful and supportive.

With all this support and agreement, why hasn't progress already happened? It has and we are close to growing that progress many times over. Per direction from Secretary Vilsack, we have been working closely with five State Conservationists with the Natural Resource Conservation Service to design an approach for focusing ample new funding and policy flexibility through the Farm Bill, including from the Inflation Reduction Act and the Bipartisan Infrastructure Law.

We hope to come together soon on an approach across the five states, get support from the Biden Administration and others, and begin implementing it.

Key partners include Pheasants Forever, National Wildlife Federation, Theodore Roosevelt Conservation Partnership, American Bird Conservancy, The Nature Conservancy, and the Playa Lakes Joint Venture, as well as our private partner, Common Ground Capital. They have all steered and supported our "small but mighty" team.

At the end of the day, NAGP exists because of you. Our Board has been incredibly supportive of this work for over two decades. Your membership has helped us along. And we will need a lot more support going forward to see this through.

Prairie ecosystems are the most threatened ecosystem type on the planet. With lesser prairie-chickens now listed under the Endangered Species Act, nowhere else are those threats more acute than in the southwestern Great Plains of the United States. You and I can stand with the heroic landowners and willing partners that are beginning to move the needle back in the right direction.

Two male greater prairie-chickens fight on a lek in Mitchell County, Kansas

Photo by John L. Dengler

The Endangered Species Act Turns 50 Years Old – Let's Celebrate This Landmark Legislation, Not Weaken It

Jackie Augustine, Audubon of Kansas

2023 should be a year of celebration. A landmark piece of legislation is turning 50 years old, the Endangered Species Act. Ratified on December 28, 1973, it sparked a conservation movement focused on our nation's most imperiled species. This act allows for a scientific assessment of population size and threats, a declaration of listing status, the formation of a recovery plan, and funding to enact the plan. One of the first species listed was the American bald eagle and by 2007, populations had recovered sufficiently to warrant delisting of the species. Other species that have recovered due to the Endangered Species Act include least tern, Hawaiian hawk, Kirtland's warbler, black-capped vireo, brown pelican, and peregrine falcon. Unfortunately, listing was not enough to save some species - the dusky seaside sparrow has gone extinct.

The lesser prairie-chicken was added to the Endangered Species List in November 2022, but that was not its first appearance on the list. Following drastic population declines in the late 1980s and early 1990s, the Department of the Interior added lesser prairie-chickens to the list of "candidate species" in 1998. It claimed that official listing was not warranted because there were species in greater need of protection. In 2008, Lesser Prairie-Chickens moved up in the list of candidate species reflecting threats to their habitat that increased from moderate to high. In 2014, the U.S. Fish and Wildlife Service announced its decision to list the lesser prairie-chicken as a threatened species. A federal court vacated the listing after a lawsuit by a Texas oil trade group in 2015, and lesser prairie-chickens were removed as a threatened species in 2016.

The current listing recognizes that a lot of prairie-chicken habitat was destroyed after the listing was removed in 2016, and that threats to their habitat continue to be high. The currently listing acknowledges these changes by dividing lesser prairie-chickens into two populations with different listing statuses: the southern population inhabiting eastern New Mexico and western Texas is "endangered," whereas the northern population in Kansas, Colorado, Oklahoma, and northern Texas is "threatened."

Virtually all lesser prairie-chicken habitat is on private lands. Ranchers in the western third of Kansas can be proud that lesser prairie-chicken populations increased in the area in the early 2000s. Part of the increase in population size has been attributed to the Conservation Reserve Program (CRP), a federal program that provides cash payments to landowners who convert agricultural fields to grasslands. These areas were generally not grazed, so they provided ideal cover for nesting prairie-chickens. Western Kansas is also the only area where lesser prairie-chicken populations are stable today.

If populations are stable in western Kansas, why were they put on the Endangered Species List? First, not all parts of the prairie-chicken range have had the same success as western Kansas. Populations have been virtually wiped out in southern Kansas, New Mexico, Texas, Oklahoma, and Colorado. Second, threats to lesser prairie-chickens are increasing. The birds are extremely sensitive to development. They are very unlikely to nest within a half mile of a road or cross a high-power transmission line. They avoid any tall structures including wind turbines and houses. I have personally witnessed two leks disappear following the installation of an oil well in western Kansas. Energy development from oil, wind, and solar will continue to fragment the remaining habitat if not stopped now. Third, low population sizes combined with the species' vulnerability to drought increases the risk of extinction. The average prairie-chicken life span is two years. Prairie-chicken chicks do not live to become adults if extreme drought causes heat stress and reduces insect availability.

Fourth, not all ranching practices are good for the birds. Instead of spot-spraying (spraying only areas with infestation), some ranchers spray entire fields with herbicide to eliminate noxious weeds. The herbicide not only kills the noxious weed, but also eliminates many native forbs which provide a source of insects for chicks and seeds for adults to survive the winter. Other ranchers intensively stock cattle. When the cattle are taken off the pasture, there is little residual grass cover for the birds to overwinter or to provide nesting habitat in the spring.

Fifth, many CRP contracts, which are typically for 10-20 years, are expiring. High commodity prices are luring many ranchers to return CRP land to agricultural uses. Sixth, encroachment of woody plant species, like cedar and salt cedar, is making grasslands uninhabitable for prairie-chickens. Seventh, voluntary conservation measures have not increased lesser prairie-chicken populations to the point where they could withstand prolonged drought and other impacts of climate change.

Now is the time to list lesser prairie-chicken under the Endangered Species Act. Listing them will encourage energy development to locate their facilities outside of the range of the lesser prairie-chicken by requiring habitat restoration for every acre destroyed (often at a rate of 2.5x the area that was destroyed). Additional resources will be funneled to ranchers through federal programs like CRP to help them take steps to improve the health of their grasslands through changes in grazing management and the removal of woody vegetation. The history of the Endangered Species Act has shown that targeted conservation works.

However, not everyone sees the listing as an opportunity. Opponents paint it as a dichotomy: economic development versus habitat preservation or federal government versus landowner autonomy. In Kansas, legislators are doing everything they can to fight the listing and are not being shy about it. Kansas Resolution SCR 1602 "Disapproving the designation of the lesser prairie chicken as a threatened species in Kansas by the United States Fish and Wildlife Service" passed both the Kansas House and Senate. At the national level, numerous bills, amendments, and resolutions have been introduced to condemn the listing or defund the protections it provides (Senate Joint Resolution 9, HR 4821, HR 248, Senate Amendment 175).

The focus on politics and economics distracts from the critical problem: the increased threats to our vanishing grassland landscapes. Lesser prairie-chickens are not the only birds suffering. Numbers of pheasants and quail are also declining in many parts of the Great Plains. A scientific study has recently reported that populations of grassland birds are down 53% since 1970. Birds are telling us that our grassland habitat is degrading rapidly. We should be doing all we can to increase the protections for declining grassland species and the habitat they depend upon.

Photos by Alyce Bender

Finding Balance with Fire in Montana's Sagebrush Country

Low-intensity fire has kept ecosystems in southwest Montana in balance for thousands of years. The Southwest Montana Sagebrush Partnership is working to maintain that balance.

Megan McGrath, Intermountain West Joint Venture

In June, the spider web of mountains and valleys that traverse Beaverhead County in southwest Montana are in a full bloom of wildflowers. In this high, cold place in the northern Rockies, the longest river system in the United States emerges from the meltwater that seeps off the mountainsides in this season—especially this year, after an abnormally wet Spring. The air is crisp and clear, the hillsides lush and gray-green with sagebrush shrubs and, higher up, dark green with stands of Douglas fir and juniper trees.

And amidst this landscape, under the enormous blue bell of a sky scraped by mountains, Sean Claffey shakes his head in disappointment at a baby tree.

Claffey is the Conservation Coordinator for the Southwest Montana Sagebrush Partnership (SMSP)*, and a Sage Capacity Team member representing Partnering to Conserve Sagebrush Rangelands, a conservation effort between the Intermountain West Joint Venture (IWJV) and the Bureau of Land Management (BLM).

This three-foot-tall Douglas fir has grown here within the past couple of years, despite the best efforts of a coalition of federal, state, and local agencies to stop it.

"They're not a surprise," Claffey said of the sapling. "Honestly, what I see here is opportunity."

Claffey and his colleagues working in sagebrush conservation have nothing against trees like this little Douglas fir, and Western conifer forests are important habitat in their own right. But Claffey and other members of the SMSP are attempting to combat a problem that conifer trees like this present in southwest Montana and across the West: a slow invasion into neighboring sagebrush shrubland, which is home to many sagebrush-obligate species including the Greater Sage-grouse.

"We're seeing site conversion of sagebrush steppe, essentially," said Greg Schenk, Fire Management Specialist at the BLM field office in nearby Dillon, MT, and Claffey's close collaborator. "It's pretty drastic when you look at old aerial imagery from the 1950s. For example, in some places where we used to have sage and grass parks intermixed with conifer woodland, we now see 50-70% of those parks overgrown by conifer expansion. Trees have filled in those areas."

Historic aerial imagery showing conifer infill and expansion from 1954 to present day on the slopes of Medicine Lodge Peak in Beaverhead County, southwest Montana. Conifer infill is evident in the increased darkness of tree-dominated areas, while conifer expansion has occurred especially north of the peak as woodlands slowly expand into sagebrush rangelands at lower elevation. This boundary was historically mediated by frequent low-intensity wildfires. Imagery courtesy of Working Lands for Wildlife's Landscape Explorer.

A southwest-facing view of Medicine Lodge Peak. Sean Claffey holds a printed and flipped copy of historic aerial imagery showing conifer infill and expansion from 1954 to present day; the top of the paper is oriented south, the bottom north, and historic imagery is on the right while current imagery is on the left. The Southwest Montana Sagebrush Partnership (SMSP) recently collaborated to restore conifers on this slope to within their historic range. Aerial imagery courtesy of Working Lands for Wildlife's Landscape Explorer.

This young Douglas fir has sprouted in one of the 45,000 acres of historic sagebrush rangeland that the SMSP has treated for conifer encroachment since the partnership's inception in 2018. Their working group is one of many across the West that will benefit from infusions of funding from Biden Administration investments like the Bipartisan Infrastructure Law and Inflation Reduction Act. This funding is instrumental in the effort to keep sagebrush ecosystems from being overtaken by trees as they grow further down mountain slopes.

Typically, young invading conifers are removed using mechanical means: teams with chainsaws and earth-moving vehicles are deployed to prune trees back into their historic ranges, giving native shrubs and perennial grasses a chance to thrive once more. But in cooler and wetter sites, like those in portions of southwest Montana, trees often start to grow back within a few years after the treatments take place.

Sean Claffey, Southwest Montana Conservation Coordinator for the Southwest Montana Sagebrush Partnership, stands in


Photo by Megan McGrath


Photo by Megan McGrath

A southwest-facing view of Medicine Lodge Peak. Sean Claffey holds a printed and flipped copy of historic aerial imagery showing conifer infill and expansion from 1954 to present day; the top of the paper is oriented south, the bottom north, and historic imagery is on the right while current imagery is on the left. The Southwest Montana Sagebrush Partnership (SMSP) recently collaborated to restore conifers on this slope to within their historic range. Aerial imagery courtesy of Working Lands for Wildlife's Landscape Explorer.


Photo by Megan McGrath

This downed log from a Douglas-fir in the wake of a prescribed burn shows the carbonized blackening that is the typical first-order effect of fire. Though these burn marks may look alarming, BLM Fire Management Specialist Greg Schenk has seen that a refreshed wave of biodiversity reliably emerges in sagebrush rangelands that have been treated with low-intensity prescribed burns as part of conifer removal work in southwest Montana.

a plot of sagebrush rangeland from which expanding conifer woodlands were recently removed. Despite the efforts of the partnership, Douglas fir seedlings like this one have re-emerged in just a few years.

Claffey diagnoses the problem in this particular plot in an instant. The mechanical removal of conifers that occurred here was successful, yes. But *this* plot, unlike others, was not burned afterwards.

"It's really evident in this region that when we use mechanical means only—no matter how good a job the crew does—at some sites we see conifer regeneration above the sagebrush canopy height within five to ten years," Claffey said. "All it takes is for one branch on one tree to survive."

In this landscape, this problem can be addressed by following up the initial mechanical treatments with prescribed fire, also known as controlled burns. In service of their collective ecosystem restoration goals, the SMSP is currently teaming up with the BLM Fuels Program to implement controlled burns in springtime, after mechanical removal of conifers. Significant progress has also been made to work with partners like the Montana Department of Natural Resources and Conservation to scale up the use of prescribed fire across all land ownerships.

"It's a pretty stark difference in the success of the projects," Claffey said. "When you walk through an area that's been burned, there's *no* conifer regeneration. The seed source from those conifers, those saplings, was all consumed in the fire. The only thing you see coming up is forbs, native perennial bunchgrasses, and, within a year or two, baby sagebrush. But you walk out of that to a plot where you haven't seen fire, and it's almost overwhelming, the amount of Douglas fir seedlings."

This stark difference in outcomes hints at the ecological history of sagebrush steppe, conifer woodlands, and the ever-flexing boundary between them. Before the era of European colonization, low-intensity wildfires were frequent in this region of Montana, with fire occurring on average every 35 to 40 years. This high fire frequency regularly cleansed the boundary of sagebrush steppe and grasslands of young trees, restarting the clock of ecological succession while returning nutrients to the soil.

Additionally, indigenous communities stewarded this process by managing prescribed burns, for a variety of ecological and social benefits, for thousands of years. But in the late 1800s European settlers began suppressing wildland fires, and historic tribal fire management practices were also disrupted as part of the forced removal of Native people from many parts of Montana. In this post-settlement era, wildland fire has been rendered much less frequent—and one of the effects is that sagebrush rangelands are yielding to encroaching conifer woodlands.

At this ecotone, or boundary, between sagebrush steppe and conifer woodlands in Beaverhead County in southwest Montana, these young Douglas fir have slowly grown up between perennial shrubs and grasses. Given enough time, more conifers will grow here and out-compete the sagebrush steppe vegetation, converting this landscape fully to woodland. This ecotone was historically mediated by frequent low-intensity wildfires.

"We're restoring a natural process that would have kept conifers and forests in their historic range," Claffey said of SMSP's prescribed burn management in collaboration with BLM Fire. "We're at the ecotone between high elevation moist sagebrush and low elevation dry forests. It turns out that they're both fire-adapted ecosystems."

The use of prescribed burning as a tool to mitigate conifer encroachment into sagebrush rangelands has been a topic of extensive research, and even controversy. The effects of fire in sagebrush ecosystems vary greatly depending on an array of factors including climate, the region's temperature and levels of moisture, elevation, the composition of the plant community and the soil's seed bank, the presence of invasive species, and more.

In many neighboring regions—including Nevada's Great Basin, southwest and considerably downslope of Montana's High Divide Headwaters region—researchers and land managers caution against the use of fire in sagebrush rangelands. The climate is warm, dry, and arid, and the locally dominant species of sagebrush—Wyoming big sagebrush (*Artemesia tridentata* var. *wyomingensis*) and basin big sagebrush (*Artemesia tridentata* var. *tridentata*)—can take between 50 and 200 years to regenerate after fire. This leaves rangelands susceptible to takeover by invasive annual grasses like cheatgrass, which can be a death knell for the ecosystem resulting in plummeting biodiversity and frequent, intense wildfires as a monoculture of flammable invasive grass establishes itself.

But the sagebrush ecosystem, while imperiled, is also vast, and it is not a monolith.

"That's something that's eye-opening to a lot of folks—I know it was for me!" Claffey said. "Sagebrush isn't just sagebrush! In southwest Montana alone there are thirteen species and subspecies of sagebrush, each in their own niches and habitats, preferred precipitation levels, and preferred soil types."

In the high mountains and valleys of southwest Montana, mountain big sagebrush (*Artemesia tridentata* var. *vaseyana*)—rather than Wyoming big sagebrush, or basin big sagebrush—dominates. This species thrives in this cool, moist, high-elevation landscape, and regenerates from fire on average within about 30 years. And ironically, because this mountain sagebrush-dominated ecosystem is historically dependent on the disturbance of fire, land managers believe that low-intensity burns here can actually make the system *more* resilient to the influx of invasives like cheatgrass.

Silvery lupine (*Lupinus argenteus*) blooms in sagebrush upland.

Given the array of factors that contribute to ecological change, it can be difficult for researchers to pin down a clear answer to cut-and-dried, yes-or-no questions about best practices in ecological management across biomes. That's especially true when those questions consider what effects a management decision like implementing a prescribed burn will have on the landscape in 25, 50, or 100 years. But the local knowledge and long-term memory of on-the-ground observation by landowners and managers can sometimes amount to a wealth of decision-making power.

Having seen the outcomes of the prescribed burns he manages with BLM Fire time and time again, Schenk has observed the flush of growth that emerges when fire resets the successional clock in southwest Montana sagebrush.

"There are the first-order effects the day after the fire: It's all black, right?" Schenk said. "But you just wait: Two weeks, and lo and behold, those spring rains come in. We start seeing grass. Then we start seeing lupine and other flowers and forbs: the purples, the yellows, this complete array of biodiversity. In the following years it just gets more and more full."

This downed log from a Douglas-fir in the wake of a prescribed burn shows the carbonized blackening that is the typical first-order effect of fire. Though these burn marks may look alarming, BLM Fire Management Specialist Greg Schenk has seen that a refreshed wave of biodiversity reliably emerges in sagebrush rangelands that have been treated with low-intensity prescribed burns as part of conifer removal work in southwest Montana.

And according to Claffey and Schenk's observations, this trend continues for years after a low-intensity prescribed burn. Biodiversity flourishes—and, importantly, the recurrence of young conifers is markedly delayed.

"With the use of fire we can expect 50 years or more of this treatment effect of conifer reduction," said Claffey. "Whereas using chainsaws or mechanical means alone, you may only have about 25 years until the conifers return to the same canopy cover as when you started."

Ecosystem restoration is all about balance: No treatment lasts forever. Boundaries of ecosystems like sagebrush rangelands and conifer woodlands grow and shrink over hundreds of years like the slow movement of a breath, dependent on long-term trends like climate change. Land managers are charged with the difficult task of determining what will be the best practice for stewardship of a landscape *now*—within the short scope of one person's life, one person's career.

The skeleton of a long-dead sagebrush stands amidst a conifer woodland in Beaverhead County, southwest Montana. Though this woodland appears old, it has overtaken sagebrush rangeland within the past 50 years, crowding out perennial shrubland vegetation.

On this clear June day in southwest Montana, Claffey climbs slightly higher up slope, away from the recent mechanical treatment plot where tiny Douglas fir saplings are thrusting their three-foot crowns up past the tops of neighboring sagebrush, winning the battle of ecological succession in a fire-suppressed rangeland. He climbs from knee-high shrubland and into the woodland proper. Established Douglas fir trees tower overhead, and their distinctive feathered cones crunch underfoot.

It may feel like this near-silent woodland has been here for eternity, but the understory tells a different tale. The shade of these towering trees is littered with the gnarled skeletons of dead sagebrush that once dominated here. A mere 50 years ago, this was a sagebrush rangeland. The trees have overtaken them.

Across the West, as biomes slowly wax and wane with the passage of time, decisive action in our lifetimes informed by the wisdom of locals—and aided by working coalitions like the SMSP—can help to keep habitats and landscapes in balance, working for wildlife and people for generations to come.

"If we're truly working on an ecosystem, we can't remove humans from that," Claffey concluded. "Part of the ecosystem is our stewardship."

Photo by Seth Owens

Where Trees ARE the Problem

Greg M. Peters, Western Working Lands for Wildlife

As coordinator of the Bruneau-Owyhee Sage-grouse Habitat (BOSH) Project, Connor White is no stranger to cutting juniper trees from sagebrush rangeland.

The BOSH landscape, like so much of sagebrush country, lies in the Great Basin, a vast sweep of western range that's seen a 600% increase in tree cover since the 1860s. White's job is to coordinate the removal of these intruders and he's got a lot of work to do. "Just through BOSH, we're treating 617,000 acres," he shares. "We're highly targeted, first focusing and timing our efforts to remove trees near leks without disrupting the birds. Then we expand out."

"There are a lot of reasons to cut invading trees from sagebrush habitats," explains Jeremy Maestas, an ecologist with the USDA-Natural Resources Conservation Service. "Benefitting imperiled sage-grouse populations is just one. Maintaining a functioning sagebrush ecosystem that supports over 350 species of conservation concern is another."

Maestas is part of the NRCS' Working Lands for Wildlife (WLFW) efforts, and over the last 15 years, he's become a proponent of strategic tree removal.

"I'm from Las Vegas. I love shade," he jokes. "But trees don't belong everywhere. These landscapes have way more trees than they had a couple hundred years ago. Over that same timeframe, shrubland and grassland birds have declined significantly. Expanding trees are among the primary drivers of those declines."

Fire: Friend, Foe, Friend

Fire was once a frequent visitor in the Great Plains and an infrequent, but regular feature of the sagebrush sea. Commonly set by indigenous tribes, fires helped limit trees, like juniper and pinyon-pine in sagebrush country and eastern redcedar in the Plains, to ridgetops, mountainsides, creek bottoms, and coulees. Fires also maintained grassland health, provided higher quality food for bison and big game, increased native medicinal plants, and reduced the risk of nomadic settlements to more serious wildfires. As Euro-Americans moved west, natural fire regimes were largely eliminated, allowing trees to expand into productive shrub and grasslands.

"When we removed fire from the landscape and then planted millions of eastern redcedars as windbreaks, we set the stage for what we're seeing now," says Dirac Twidwell, a professor of rangeland ecology at the University of Nebraska and a Western WLFW science advisor. "Expanding redcedars are consuming as much prairie each year as crop expansion. They're pushing Great Plains grasslands towards collapse."

In the Great Plains, where 95% of the land is privately owned, conducting large-scale prescribed burns is challenging. But as trees continue their march into grasslands, landowners are partnering up and creating burn associations to share resources and burn more acres.

Twidwell notes that there are now more than 60 prescribed burn associations across the Great Plains. These efforts are restoring a "fire culture" that's been absent since the displacement of indigenous tribes in the region, but the Great Plains are a vast landscape. "We still need way more fire in way more places if we're going to reclaim our grasslands at scale."

Fast Facts:

- **North America's grassland birds have experienced a 53% population decline since the 1970s, the largest decline in any single terrestrial biome.**
- **90% of tree expansion in the Intermountain West has occurred at the expense of sagebrush range.**
- **Working rangelands better support wildlife than crops or other development, but tree expansion has reduced forage production in sagebrush and Great Plains rangelands by $4.1-$5.6 billion from 1990-2019.**

Resources and Tools:

- **Through WLFW, the NRCS produced two Frameworks for Conservation Action, one for the Sagebrush Biome and one for the Great Plains Grasslands Biome outline threats and guide investments from 2021-2025. Tree expansion is a major threat addressed in both biomes.**
- **Landscape Explorer a new online mapping tool developed by WLFW that uses historical and modern aerial imagery to highlight changes, like tree expansion, in the western U.S. since the 1950s.**
- **The new "Reducing Woody Encroachment in Grasslands: A Pocket Guide for Planning and Design" provides new guidance and resources for planners in grasslands. It was co-produced by WLFW and the Great Plains Grasslands Extension Partnership.**

Photo by Jeremy Roberts, Conservation Media

Photo by Jeremy Roberts, Conservation Media

From a grassland ecology standpoint, well-managed prescribed fire at the right time of year, is often the best way to remove encroaching trees because it consumes seed sources that other methods leave behind. It also improves grassland productivity, recycles nutrients, and reduces the risk of future fires.

Photo by Connor White, Pheasants Forever, BLM, NRCS

Mastication is one method of removing encroaching trees. Heavy machinery, equipped with special masticators, grinds up encroaching trees where they grow.

White agrees that using fire as part of the restoration process is critical. "I've realized that prescribed fire is really important, even in sagebrush country, and especially at higher elevations," he acknowledges. "It really helps kills more trees and eliminates seed sources."

Spreading the Word

Better communication is also helping folks recognize the extent of the problem and the solutions needed to tackle it. Twidwell developed the Eastern Redcedar Science Literacy Project and Maestas helped with the Pinyon-Juniper Encroachment Education Project, both of which provide science-backed education and resources about tree expansion. More than 20,000 copies of Twidwell's Vulnerability Guide, aimed at reducing grassland risk to woody encroachment, have been distributed since it came out in 2022. And in July 2023, partners, including WLFW, released a field-ready pocket guide for addressing woody plant expansion.

To reach an even broader audience, WLFW recently unveiled Landscape Explorer, a website that allows users to seamlessly swipe between historical and modern aerial imagery to see how trees (and other land-use changes) have altered landscapes from the Great Plains to the Pacific coast.

For the Birds

For ground-dwelling birds like sage-grouse and lesser and greater prairie-chickens, trees are a major threat. Predators like raptors and ravens perch in trees. At higher densities, trees crowd out forbs and grasses that the birds, other wildlife, and livestock rely on for food and habitat; they suck moisture from the soil, further impacting native vegetation; and they fuel more destructive wildfires.

It is well documented that these grouse species avoid areas with trees. A 2010 study by WLFW-affiliated scientists showed that sage-grouse abandon otherwise suitable habitat when trees cover just 4% of the landscape – that's only a few trees per acre! A similar study for lesser prairie-chickens showed the same.

Fortunately, the converse is also true. A long-term WLFW-supported study from Oregon showed that sage-grouse quickly return to areas where trees have been removed. Even better, the birds had a 12% higher population growth rate as compared to the control site where no trees were cut.

Defend the Core

It's taken a decade or so for scientists like Twidwell and agency officials like Maestas to figure out the best way to tackle woody species' relentless encroachment.

"For years we chased the problem, treating the most infested areas first," says Maestas. "But it was expensive and time-consuming, and we realized it didn't really have much of an impact. Trees kept sprouting up and degrading even more habitat."

Over the last several years, aided by advances in remote sensing technology that show where trees are expanding at scales from an individual pasture to an entire biome, Twidwell and Maestas have developed, and spread, a new strategy for managing trees: Defend the Core.

This approach identifies large and intact, "core" shrublands and grasslands and focuses management actions on defending them from early encroachment. Then managers and landowners work outwards, expanding the core. In areas where trees have completely taken over, managers help communities mitigate effects and adapt to new realities. The approach works at nearly any spatial scale, whether a single ranch or an entire biome, and it's the approach White and partners use at BOSH.

"Despite the extent of this problem, two of the largest intact grass and shrublands in the world are here in the U.S. - the Sandhills in Nebraska and the central Wyoming Basin," says Twidwell. "We're starting to see groups really come together to defend these last grasslands from trees and other threats. It's an exciting time to be working in grassland conservation."

Ruff Country – The northern and central Rockies have their own ruffed grouse . . . with their own ways.

Chris Madson, North American Grouse Partnership

Ruffed grouse and aspen. For almost a century, there has been a consensus among wildlife managers emphasizing the connection between the bird and the tree. In 1955, a group of researchers in Pennsylvania crystallized what was already an accepted fact among conservation professionals with this observation: "When the range of quaking aspen is plotted on a map for the United States and Canada and is compared with the range of the ruffed grouse, the two are analogous."

Since then, the body of evidence has grown. The landmark work of Gordon Gullion and his colleagues at the Cloquet Research Station in northern Minnesota has described a relationship between ruffed grouse and quaking aspen that not only shows the bird's dependence on second-growth "popple" in that region but suggests a mechanism for booms and busts in grouse populations — a mechanism that's at least partly driven by changes in the taste of aspen buds as large numbers of grouse continue to eat them.

Photo by Anna Richard

Research from Alberta to New York has shown, beyond doubt, that ruffed grouse dote on aspen in the northeastern United States, through the Lake States, and on into the aspen bluff country of southern Canada.

So, of course, my acquaintance with the king of game birds has unfolded on two landscapes that have ruffed grouse but don't have enough aspen to matter.

In the 1970s, I spent four years in scenic Madison, Wisconsin, as a starving graduate student with neither the time nor the cash to exploit the hunting in the state's classic Northwoods habitat that remains one of the ruff's strongholds to this day. Instead, my colleagues and I made day hunts into the unglaciated southwestern corner of the state, a broken landscape with extensive stands of mature oak-hickory timber with alder and willow scattered along the creek bottoms and occasional patches of prickly ash. There weren't a lot of grouse in these woods, but there were enough to lure us out of town. In those days, it didn't take much.

A succession of jobs led me eventually to Wyoming where I threw in with a group of highly motivated nimrods to convene an annual elk camp on the backside of the Tetons just south of Yellowstone Park. Some folks call that timber the "asbestos forest" because it never burns— the clouds off the Pacific hit the Tetons and drop more rain and snow than the rest of Wyoming ever sees.

In his book, *Yellowstone Vegetation*, ecologist Don Despain comments that "aspen is not a major forest species in Yellowstone. It occurs throughout the park in various contexts but seldom in extensive stands of more than ten acres." That certainly described the country we hunted. Outside the wilderness, there were recovering clearcuts in pine and spruce; inside, spruce and fir dominated the north-facing slopes while old stands of lodgepole took over on the south slopes. There were rocky openings and ephemeral ponds on some of the ridges and lush sedge and rush meadows along the creeks. Great elk country but not what the textbooks describe as prime ruffed grouse habitat. That didn't seem to matter to the grouse. Up high, we saw dusky grouse; down lower, there were ruffs. They were never there in anything like the numbers that are reported in the aspen strongholds that attract researchers and hunters in other places, but they seemed to make a living, year in, year out. Occasionally,

I might see one hanging out under three or four mature aspen next to a spring seep, but, just as often, they were on the rocky scablands along the ridges or in the ancient spruce-fir, nipping at aster seeds under the lodgepoles or picking gravel on the back roads.

About a third of them lived up to their sporting reputation back East, exploding out of the cover and rocketing through the timber to disappear almost before I had a chance to react. Another third would fly but only to perch on a branch just out of reach of any ground-based predator, even the two-legged variety. The last third were classic fool's hens, standing ten feet away, heads bobbing, trying to decide whether there was reason for alarm. Numbers seemed to drop from time to time, not because of the famous "cycle"— of which there was no sign — but because the previous winter had been unusually difficult. For a ruffed grouse, that probably meant that there wasn't enough deep powder snow to provide cozy roosts, out of reach of the minus 30- or 40-degree nights that are common in that part of the world. In spite of the revealed wisdom inherited from three generations of grouse specialists, I'd found ruffed grouse with no aspen.

And, just to the south, I was faced with the opposite conundrum — aspen with no grouse. The state of Colorado is internationally famous for its aspen. People come from around the world to catch the display of aspen color in October. Colorado, by itself, has 15 percent of all the aspen in the lower 48 states. Almost three-fourths of all the aspen in the West can be found in Utah and Colorado.

But, until 1988, Colorado had no ruffed grouse. That fall, a hunter killed a ruff in about a mile from the Utah border in far northwestern Colorado. Two more were taken by researchers on the same mountain later that year. Before those immigrants, there had never been a dependable report of ruffed grouse in the state.

It's been argued that ruffs simply hadn't managed to find their way across the sagebrush to the huge aspen groves on the Front Range and Sangre de Cristos to the east. I wonder about that. Other northern grouse found their way south sometime during the last glaciation. A population of white-tailed ptarmigan is marooned on the mountaintops in central Colorado, 400 miles south of the nearest ptarmigan population in southwest Montana. Likewise, the dusky grouse, a bird that prefers the coniferous forest of the northern and central Rockies, is found in the high timber across central and western Colorado and as far south as New Mexico. If ruffed grouse didn't follow their cousins as the great continental glaciers pushed entire ecosystems to the south, it seems likely that the ruffs were simply unimpressed with the habitat they found in the sunny south.

Whatever the reason for the ruff's failure to move into Colorado, it's clear from food-habits studies of ruffed grouse as far north as southern Maine and Wisconsin that the birds survive in forests where there are no aspen. In some of these woods, the catkins of other trees and shrubs take the place of aspen blossoms during the winter; in others, acorns are the winter staple. Research in Idaho shows that ruffed grouse dote on aspen when they can find it, but in central Idaho where there is little or no aspen, they scratch out a living in the conifers, eating mountain ash, serviceberry, and maple. Those grouse sound like the ones I know on the west slope of the Tetons, just east of the Idaho-Wyoming border.

If there's a common denominator among all ruffed grouse habitats, it may be interspersion. In the heart of ruff country, that probably means dense stands of young aspen near older trees, either mature aspen or conifers. In the southern Appalachians, it may be thickets of second-growth timber with enough mature oaks to provide a dependable crop of acorns.

In the Rockies, aspen is generally a ruffed grouse mainstay where it's found, but there are other forest types that continue to support ruffs, generally in far lower numbers than are sometimes found among the aspens, but still sustaining themselves.

When I think of those other forests, there is a lingering impression of diversity. Some of that is due to timber harvest regimes, but most of it has nothing to do with human activity. The slopes in these places support stands of lodgepole pine, Doug fir, spruce, and fir with an understory of huckleberry and snowberry, grouse whortleberry, or pinegrass. Some of the ridgetops don't have enough soil to support trees— these rocky openings have sparse stands of grass and broad-leafed plants like wild rose, fall asters, or pussytoes. Down in the valleys, the creeks are lined with willow and alder, winding through expanses of sedges and reedgrass. Underlying geology, topography, and microclimate combine to produce an almost aspen-less mosaic of timber and smaller plants the ruffs seem able to exploit.

The overwhelming majority of these forests are managed by the U.S. Forest Service and the Bureau of Land Management. These agencies have shown increasing interest in managing aspen on federal land, especially as a syndrome called "sudden aspen decline" has tightened its hold in the Rockies. If they find a way to reverse this trend among aspen clones, it may well benefit western ruffed grouse.

If we don't find a cure for aspen decline, a better understanding of other kinds of ruffed grouse habitat in the West may prove to be critical to the future of the species in this corner of its range. And, even if the quakies are cured, it seems sensible to encourage variety in the habitat of any species. Widely regarded as the king of American game birds, the ruffed grouse rules the roost in a bewildering variety of places — the more we know about all those places, the more secure his domain will be.

2023 Upper Midwest Prairie Grouse Summit

Addressing Fragmented Greater Prairie-Chicken and Sharp-tailed Grouse Populations

Jodie Provost, North American Grouse Partnership

Photo by Jodie Provost

The Upper Midwest Prairie Grouse Summit was attended by about forty greater prairie-chicken and sharp-tailed grouse managers and researchers on August 1-2, 2023. Here participants are pictured behind metal art of displaying sharp-tailed grouse outside the Crex Meadows Wildlife Area visitor center. It was created in honor of Jim Evrard, long-time Wisconsin Sharp-tailed Grouse Society leader.

Last March, a call went out from managers of Minnesota, Wisconsin, and Michigan. They were concerned about the state of sharp-tailed grouse and greater prairie-chicken populations, their common issue of fragmented populations from loss and degradation of habitat (primarily from natural succession, fragmentation, and conversion), and lack of awareness of the birds and the issue. Thus, the idea of an Upper Midwest Prairie Grouse Summit was "hatched".

The North American Grouse Partnership (NAGP) proceeded to gauge interest from the Minnesota Sharp-tailed Grouse Society (MSGS), Minnesota Prairie-Chicken Society (MPCS), Wisconsin Sharp-tailed Grouse Society (WSGS), Wisconsin prairie-chicken population and festival managers, and Michigan Sharp-tailed Grouse Association (MSGA). Then invited each state's Department of Natural Resources (DNR) to also be involved on a planning team to craft the agenda. WSGS and NAGP teamed up to co-host, tackling logistics and securing speakers.

The Summit occurred on August 1-2 at the Crex Meadows Wildlife Area in the Northwest Sands of Wisconsin. Its primary purpose was to serve as a forum for professionals to share management and research information, learn from one another, and initiate a more collaborative approach to determine and implement strategies to sustain and recover prairie grouse populations across our ecoregion. A secondary purpose was to raise awareness and understanding among the public for the birds and their habitats to increase support for their management. The agenda consisted of one and a half days with twenty presentations and three designated open group discussions, and a half-day, morning tour of habitat projects on Crex Meadows Wildlife Area.

The Summit was launched by a welcome from WSGS and NAGP, population and management overviews from each state's DNR, and history, accomplishments, and challenges from each grouse organization. A presentation regarding the "Conservation Strategy for the Greater Prairie-Chicken and the Plains and Prairie Subspecies of Sharp-tailed Grouse" then framed the event and noted why fragmented populations are a concern. The Strategy, completed in 2022, was developed by an interstate work group of fourteen states and endorsed by the Western and Midwestern Associations of Fish and Wildlife Agencies. The intent is to use greater prairie-chicken and sharp-tailed grouse as flagship species to conserve and restore large blocks of grasslands and shrublands, ideally a network of 50,000 acre blocks, because the status quo is not working, and their habitat continues to be lost.

The remaining agenda was broken into population (the birds), habitat (the places), and outreach (the people) management-related presentations, along with three designated times for

Literature cited can be requested by emailing jodie@grousepartners.org.

open group discussion and brainstorming. Topics included translocation, hybridization, 'rolling barrens', prescribed fire, conservation ranching, private land biologists, a festival, Farm Bill policy, and ramping up conservation delivery. All presentations and the program are available on the NAGP website as pdf files under the "Lakes States Collaborators & Resources" tab. The program has the agenda and abstracts of each presentation along with e-mail addresses for speakers.

A morning tour of Crex Meadows Wildlife Area focused on challenges and management approaches to creating and enhancing barrens habitat. Local staff described how Wisconsin DNR uses a comprehensive set of management tools, including prescribed fire, mechanical treatment, chemical treatment, and commercial timber harvest, to restore and maintain it. They also shared how the property's management contributes to habitat connectivity for sharp-tailed grouse and other barrens species at the landscape scale within the Northwest Sands. Managers, researchers, and grouse enthusiasts asked questions of local staff and provided insights from their own experience elsewhere in the Upper Midwest.

Key take-home messages from the presentations, discussions, tour, and parting questionnaire included:

Population Management

- Urgency exists in turning population declines around, such as sharp-tailed grouse in east-central Minnesota and greater-prairie chicken in North Dakota.
- At a minimum, a goal should be populations that support limited hunt seasons to maintain hunter interest and support. Many hunters simply appreciate the opportunity to see birds and experience the hunt.
- Translocation is costly, time consuming, and should only be used if the receiving habitat is of high enough quantity and quality to sustain a population. It is much more efficient to sustain and recover populations while they still exist.

Habitat Management

- Most managers struggle to meet their prescribed burn acreage goals due to factors such as weather and ground conditions (e.g., drought, too wet, no frost), restrictions from poor air quality due to wildfires, and lack of qualified burn bosses.
- All habitat management tools are needed in an array of space and time to mimic the natural disturbances under which prairie grouse evolved, including burning, mechanical, selective herbicide, grazing (and rest), and biomass harvest treatments. Each site/plant community and landscape are different.
- More creative methods are needed, such as Bayfield County's 'rolling barrens' and their incredible cooperation, and Michigan's hunting access program that incentivizes farming practices for sharp-tailed grouse.
- Prairie grouse can move long distances if needed, but large blocks of habitat should be present and connected enough to increase the likelihood they will find and use them. The birds should not be forced to move long distances to meet their habitat needs.
- Collaboration across landownerships is essential to attaining large habitat blocks such as the 50,000 acre blocks recommended in the Conservation Strategy.
- Landscape-scale conservation programs, such as the Farm Bill's Conservation Reserve Program and Environmental Incentives Quality Program with adequate incentives and ability to meet landowner and wildlife needs, are critical for positive, broad-reaching habitat impacts across private lands.

A morning tour of projects on Crex Meadows Wildlife Area gave a glimpse of its 30,000 acres of wetlands, brush prairies and forests that area scattered across a gently rolling landscape in the Northwest Sands of Wisconsin.

Kyle Anderson, Crex Meadows Wildlife Area Property Supervisor, showed participants a roller chopper and discussed its use in maintaining barrens habitat.

Outreach

- Public and professional awareness, understanding, and support must be raised about grasslands, shrublands, and prairie grouse. Social media can be instrumental, as evidenced by WSGS recent growth in support, as well as festivals and viewing blinds, especially those that engage youth.
- Partnerships and community/private landowner support are critical, take much work, and require a designated care taker. Great opportunity exists in collaborating with Indigenous nations.
- Sufficient local, on-the-ground staff, such as Farm Bill Biologists, to deliver assistance to private landowners is essential. Pay and benefits should be high enough for them to stay in positions long-term, to build relationships and a projects base.
- Volunteers can play an important role in habitat management and provide in-kind support to leverage grants, such as through Adopt-A-WMA and Brush Cut Habitat Days.

Overall

- The states have a great deal in common, all struggling to hang on to habitat and prairie grouse populations. Yet they do not communicate or collaborate regularly.
- Management plans to sustain and recover populations are key communication tools and guides for securing and directing resources to targeted areas. Each state should have a plan and designate priority open landscapes. A coordinator is needed to implement the plan and serve as a liaison with partners.
- Attendees appreciated the array of speakers and stakeholders at the Summit and opportunity to exchange information, hear what has worked and what has not, and network. They would like to stay connected and gather again in two years.
- A work group should be formed to explore Summit ideas and collaboration, implement strategies, and organize the next Summit.

Thank you immensely to WSGS, especially Ken Jonas their president, for co-organizing this event with NAGP. And to all that shared information and attended from local grouse and conservation societies, universities, and agencies. Our shared knowledge is power for a better tomorrow for grouse, their habitats (and the multiple benefits they bring), and grouse enthusiasts.

Grassland Conservation

A Solution for Climate Change, Grouse, and More

Marissa Ahlering, The Nature Conservancy

A male greater prairie-chicken puffs his air sacs, lifts his pinnae, and begins to boom and dance. It's springtime, and he's using his display to defend his place on the lek and attract a mate.

Habitat of this greater prairie-chicken—the tallgrass prairie—needs conserving. Anyone familiar with prairie grouse, and particularly prairie-chickens, knows this story too well. Grasslands, which span the northern to southern central U.S., have been converted for agricultural use or urban development at an alarming rate, making them one of the most endangered and least protected ecosystems in the country.

At The Nature Conservancy, we are focused on the dual challenges of climate change and the loss of fish and wildlife. What many do not know is that grasslands hold solutions to both of these challenges. Keeping grasslands intact and healthy can simultaneously fight climate change and support biodiversity and ranching livelihoods. This is critical because for many species of plants, insects, and animals, grasslands are home.

Grassland conservation as a climate solution

Climate change is warming the earth and increasing the frequency of extreme weather events. This summer we recorded the hottest day on record on the globe, until we broke that record again the very next day. In Minnesota, where I'm located, the majority of the state faced drought conditions for the third year in a row.

Grassland conservation can help us address the challenges of climate change in multiple ways. First, grasslands can store a lot of carbon. When people think about nature storing carbon, they probably imagine a forest of big, tall trees. It is true that trees store a lot of carbon, and that carbon is easy to see because it can take the shape of big, beautiful oak, pine, or maple trees.

Grassland carbon is often overlooked, probably because grasslands store almost all their carbon below ground in the soil and roots. The incredible root systems of grassland plants are like an upside-down forest growing into the ground. The roots themselves of these perennial plants store carbon, and their interactions with the soil microbes and fungi in the soil can pump even more carbon into storage below ground. The root systems of many grassland plants are extensive. For example, switchgrass (*Panicum virgatum*) roots can extend down 8-11 feet, big bluestem (*Andropogon gerardi*) 5-7 feet, and Canada goldenrod (*Solidago canadensis*) 9-11 feet.

In addition to these deep roots, many species also have underground stems called rhizomes that can become very dense in the topsoil and aid in the carbon storage process. Big bluestem has been recorded to have 319 feet of rhizomes in a single square meter of soil. That distance is over the length of a football field coiled up into 10 square feet. Conversion or plowing of these grasslands releases much of this carbon into the atmosphere. If the plant communities in these grasslands are allowed to thrive, it can be a stable source of carbon storage because below ground carbon is less susceptible to loss through natural disasters such as wildfire. Protecting these grasslands from conversion avoids further CO2 emission to our atmosphere.

With the planet warming at an increasing pace, climate adaptation is no longer an optional part of conservation. Adaptation is a critical tool to combat the impacts of climate change. In addition to storing carbon, grassland plant and animal communities have demonstrated past resilience that will aid in climate adaptation efforts moving forward. They are well adapted to historic disturbances such as fire, grazing and drought, but changes in weather patterns are increasingly outside the range of variability within which these ecosystems evolved to cope.

The depth and density of grassland plant roots systems are some of the adaptations that contribute to resilience. However, for animals like prairie grouse, being able to move to find suitable nest sites or food sources is a critical part of persistence and resilience. With only around 1% of the tallgrass prairie remaining in places like Minnesota, conserving what remains and restoring grassland are critical for prairie grouse to thrive and adapt.

In fact, restoring grasslands has dual benefits for combating climate change. Reestablishing long-lived plant communities in places that have been converted to annual row crops, such as corn or soybeans, begins to build back the root and microbe community in the soil and sequester carbon. This process will begin to remove CO2 from the atmosphere and store it below ground again.

Additionally, restoring habitat is an important tool for mitigating some of the worst effects of climate change. Restoring grassland habitats in places that enlarge existing grasslands or create stepping stones or corridors between existing grasslands allows for grassland species, like prairie grouse, who need that connectivity to move and adapt to climate change.

Grasslands provide a multitude of benefits

Not only can grassland conservation be part of a climate solution by storing carbon, sequestering more carbon, and helping plants and animals adapt to climate change, but they also improve water quality through natural filtration, store excess water to prevent flooding, and provide resources for pollinators. Finally, grasslands can also achieve many of these benefits alongside serving as sustainable working lands for livestock producers.

Across the Great Plains, The Nature Conservancy and our partners support ranchers and livestock producers using land stewardship practices that support their livelihoods while promoting healthy grasslands.

Among the biggest threats to prairie grouse today are habitat loss and climate change. When we conserve and restore grasslands, we also mitigate some of the worst effects of climate change while protecting the habitat of many species of plants, insects, and animals. Through conservation, restoration, and adaptation strategies, we can support the healthy co-existence of grasslands, people, and grouse.

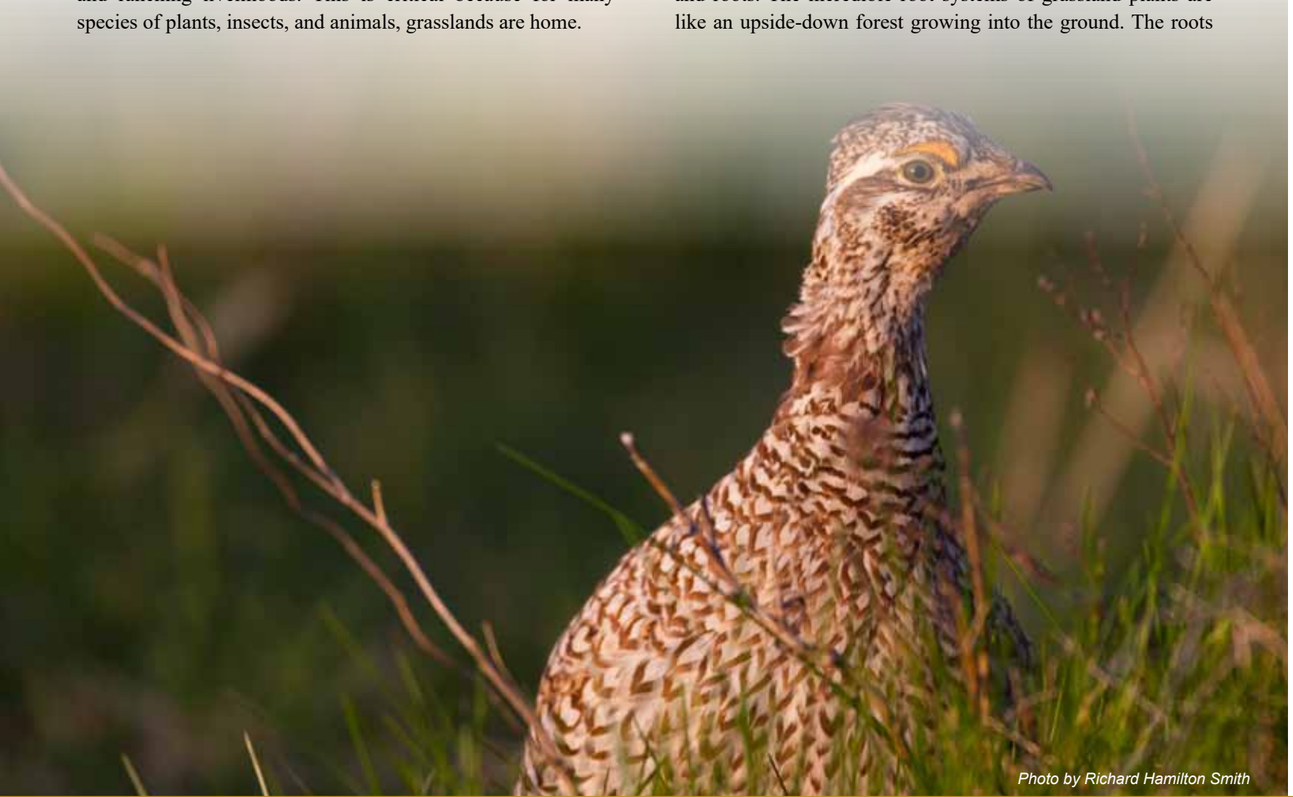


Photo by Richard Hamilton Smith

Photo by David Charles

Sharptails!
A Tribute to Montana's Ultimate Free-Range Chicken

Don Thomas

Although the events took place nearly 50 years ago, I still remember them as vividly as yesterday.

A warm September sun hung suspended in the endless prairie sky, reminding me why my new Montana license plates seemed so proud of the sobriquet they bore. To the north of the bluff where I stood, the Missouri wound its way through the breaks like a rattlesnake on the move. If anything in sight had changed since Lewis and Clark passed this way in 1805, it was well hidden.

Although I'd been shooting shotguns since early childhood and was hardly new to upland bird hunting, this was my first hunt on the prairie. Several species of legal game birds were out there somewhere, but I had no idea where to look for them in the sea of grass stretching away to the south. That knowledge would come, but it would take its own sweet time.

Bogey, the young Lab at my side, would prove to be the least talented of the dozens of hunting dogs I eventually raised and trained, but I didn't know that yet either. On the opening day of my first Montana bird season, I just let him romp through the cover. It had been an exceptionally wet summer - another point I was still too new to appreciate - and the foliage stood as thick and lush as I have ever seen it since.

A two-mile random walk, as a theoretical mathematician might have called it, yielded nothing more than sweat and increased fascination with my new environment. Then Bogey screeched to a halt on the downwind side of a wild rose tangle and went on point. The concept of the pointing Lab had barely been invented then, and I never saw Bogey point again. But there he stood frozen like a statue, and I wasn't about to ignore him.

When I waded into the thorns the stillness of the prairie shattered, first with a chorus of rich, reedy chuckles and then with the roar of powerful wings. Mottled gray birds erupted in staggered rises. Bogey ran off in pursuit, while I stood, stared, and feinted with my shotgun's barrels, first in one direction and then another. I had never seen birds of this kind before and was anxious to avoid shooting an illegal hen pheasant. (That distinction becomes instinctive with experience.) Finally, I correctly identified them as sharp-tailed grouse.

By the time I had this figured out, just one bird remained in range. The shot was easy, and Bogey even returned in time to retrieve the bird. I spent several minutes studying the fascinating patterns in its plumage. Then I placed it in my game vest, gave Bogey some water, reloaded my one empty chamber, and set off across the prairie again.

That was my initial introduction to sharptails, and my enthusiasm for them has only grown in the decades since.

As long as I've been around the eastern Montana prairie, sharptails (*Tympanuchus phasianellus*) have been know colloquially as "chickens." This misnomer can lead to biological confusion, for no true prairie-chickens (*T. cupido*) inhabit Montana. The first observers to describe both birds for western science had no trouble with the distinction. On September 12, 1804 William Clark encountered what were clearly sharptails in what is now South Dakota and noted that "The Prairie fowl common to the Illinois are found as high up as the River Jacques above which the Sharpe tailed Grows (Clark's spelling was atrocious) commence." Meriwether Lewis later noted that the tail of the grouse found farther west had "feathers in it's center much longer than those on the sides," while "those of the Illinois had tails composed of feathers of equal length." Oh, well - in eastern Montana, sharptails will always be "chickens."

These reports from the Lewis and Clark expedition emphasize an important point. Of Montana's three major prairie upland species, two - ring-necked pheasants and Hungarian partridge - are Old World imports. Discounting real prairie-chickens, which don't live here, and sage-grouse, which are more interesting as biological marvels than game birds, leaves sharptails as the only native gamebirds on the prairie during upland hunting season. I have nothing against hunting pheasants and Huns, but there is something intangibly appealing about birds native to the habitat.

Like all our native prairie grouse, sharptails engage in complex lekking behavior during the spring. At a typical lek, several dozen birds gather at first light in locations that remain constant from year to year. After inflating their lilac-colored throat sacs, males begin to posture, stutter-step in circles, and make eerie cooing noises. Courtly bows, as if greeting royalty, and rattling tail feathers add to the weirdness of the display. Meanwhile, the hens stand around and watch with a remarkable lack of interest. Eventually they get bred, but the ritual courtship that precedes each such event must be among the most intricate in nature.

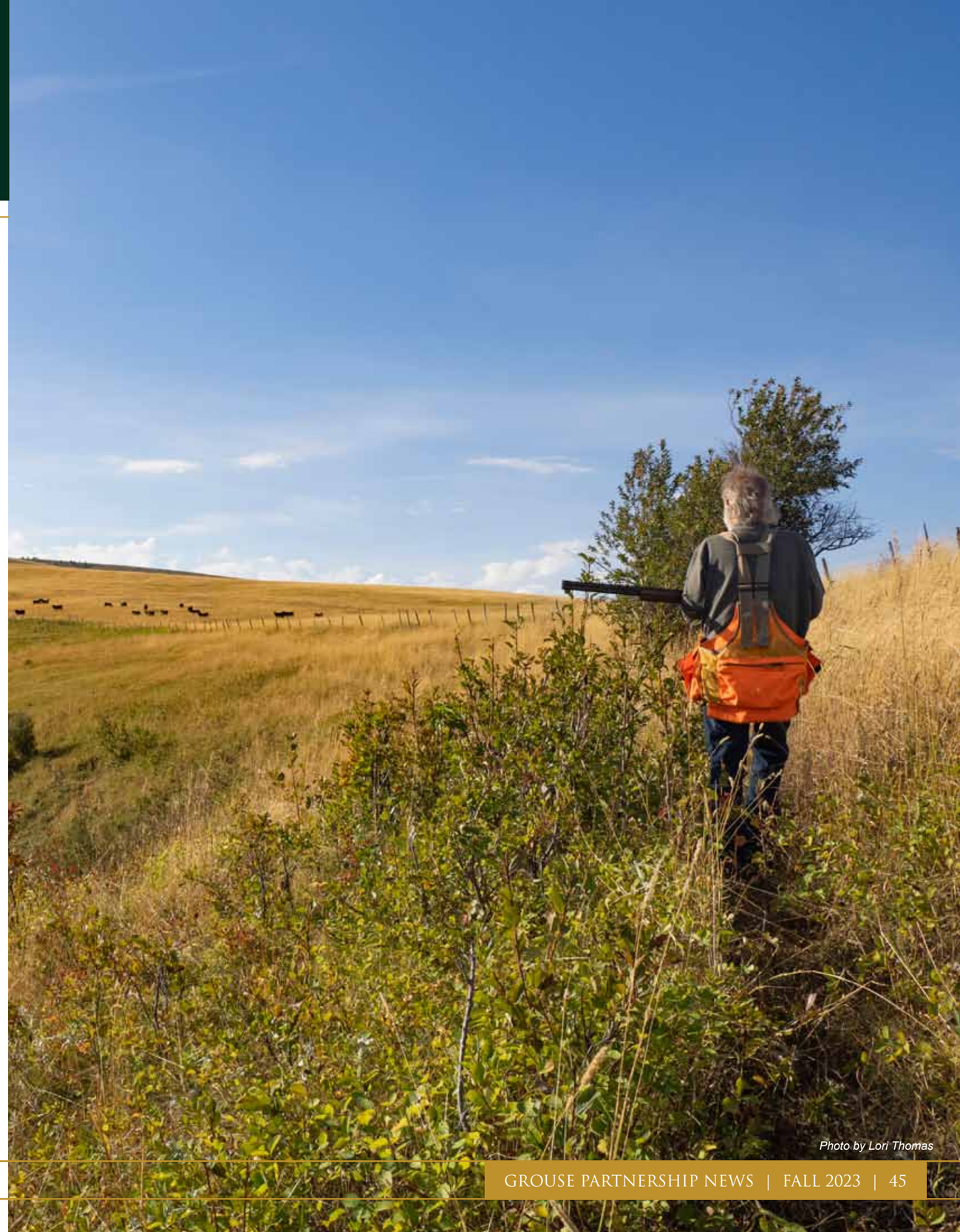


Photo by Lori Thomas


Photo by Lori Thomas

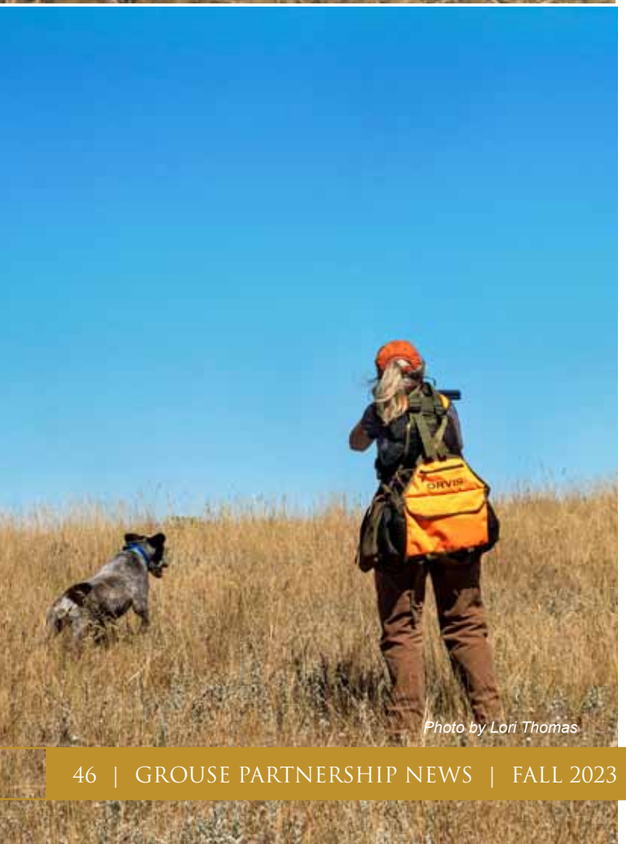


Photo by Lori Thomas

Sharptails enjoy the fruits of human agriculture - alfalfa, grain in stubble fields - but they can thrive without them. Their natural diet includes a wide variety of leaves, seeds, and berries, supplemented by insects in season. Grasshoppers are a particular favorite. Some of my favorite sharptail cover lies far from grain. Hunting there lets me imagine myself as a member of the Lewis and Clark expedition, a consistently pleasant fantasy.

For whenever I'm hunting sharptails, I'm gathering dinner for a mixture of family and friends. Sharptails likely arouse more culinary controversy than any other Montana gamebird. Most hunters agree that sage hens fare poorly on the table, while Huns, pheasants, and mountain grouse earn rave reviews (which they deserve). Confusion about sharptails arises because their table quality varies so much over the course of Montana's generous four-month season. In September and October, young birds are excellent—tender and succulent, with a distinctive yet subtle flavor. Later on, they become dark, livery, and tough. They're still edible then - I wouldn't hunt them then if they weren't - but they do best breasted, cut up, and cooked low and slow with heavy sauces, reserving the chewy legs for stock. Either way, sharptails makes a healthy, nutritious meal - the ultimate free-range chicken.

With all respect to Bogey and better flushing Labs I've trained since, sharptails are made to be hunted with pointing dogs. Upland birds that like to run, like pheasants, can frustrate pointers and be especially confusing for young dogs. Sharptails hold beautifully for dogs on point, at least for the first month or two of the season. Once snow starts to fly, they often congregate in large flocks and become much more difficult to approach, which is why I usually concentrate on pheasants and waterfowl then.

Montana and the Dakotas represent the heart of American sharptail country, but they range as far east as Michigan and north through the Canadian prairie provinces to Alaska. While most experienced sharptail hunters have trouble visualizing them near the Arctic Circle, they are abundant in parts of Alaska's interior. They share cold weather adaptations with the closely related ptarmigan, right down to the feathers on their feet that help them walk on snow.

Unlike ptarmigan however, sharptail plumage doesn't turn white in winter. Once snow covers the ground, the intricately patterned feathers that provided such superb camouflage in September fail to conceal them. More vulnerable to predators of all kinds then, sharptails gather in large, wary flocks and always seem to have sentries posted in strategic positions, making approach to shotgun range difficult or impossible.

It's December now, and the year's darkest day is nearly upon us. The wind is blowing 10 to 15 from the northwest, and I didn't have the courage to look at the thermometer on the porch when I left the house. New snow blankets the countryside, making it look like a color photograph that has been converted to black and white on a computer. While common sense dictates that I spend the day in front of the fireplace with a good book, I've started to experience flashbacks of the serious cabin fever that plagued me when I lived in Alaska. I'll do anything to avoid that. Besides, the dogs haven't been anywhere other than the house and the kennel for nearly a week, and they're getting as squirrely as I am.

An hour's drive brings us to a friend's ranch containing some great pheasant cover. I pull cautiously off a familiar two-track, right where I once drove into an irrigation ditch buried beneath a fresh layer of snow. After gearing up - heavy coat, wool stocking cap, shotgun, leather shooting gloves, game vest, whistle - I walk to the back of the truck, drop the tailgate, and prepare for an eruption of canine enthusiasm as I fumble with the latches on the dog box.

My kennel has come a long way since the days when Bogey was its sole occupant. Maggie is a neurotic but highly capable female German wirehair with eight years of experience to her credit. Another wirehair, Max is a gorgeous horse of a dog still too young to know much but bubbling with promise. I've trained Rosy, my four-year-old female yellow Lab, as a waterfowl specialist, but I often hunt her from heel in upland cover in case I face a tough recovery that might exceed the wirehairs' retrieving capabilities.

The heart of the pheasant cover here consists of a long ribbon of brush bordering a spring-fed creek, with stubble fields on either side. After allowing the dogs an initial frolic in the snow, I whistle the wirehairs in and head toward the willows with Rosy at my side. Then something catches my eye across the field. Further examination reveals a lone sharptail sitting high in a barren cottonwood like an angel atop a Christmas tree.

Where there's one sharptail there's usually more, and at this time of year there could be a lot more. However, any time you can see a sharptail before it flies, you probably aren't going to get a shot at it. Oh, well… a bird in the hand. Besides, this could serve as the first day of Christmas, and a grouse is very like a partridge even if a cottonwood isn't much like a pear tree.

The grouse sits quiet and motionless while we cross the field. As we draw nearer, I can see a dozen more sharptails silhouetted against the snow as they scratch for leftover grain. The wind as at our backs, so the birddogs can't smell anything to point. I'm still 20 yards short of shotgun range when the sentry in the tree sounds an alarm chuckle and takes wing. This initiates a chain reaction on the ground as grouse begin to flush wildly, a dozen at first and then so many I can't count them.

The cottonwood sits along a ditch that contains enough brush to hold birds that would rather hide than fly. The best one can hope for in this situation is a straggler or two that choose to do just that. Maggie and Rosy are steady to wing and shot, but young Max hasn't reached that point in his education yet. While he gallops across the field in a futile attempt to outrun the flying grouse, I run Maggie through the cover in search of birds left behind. There aren't any.

There are pheasants back along the creek though, and by the time we head for home to thaw out three of them are resting in my game vest. After all their hard work in the cold I've let the dogs ride up front with me in the truck's heated cab, but they're too tired to laugh at my jokes. An honest limit of late season roosters is always an accomplishment, but I already know that my memories of the day will focus on those clouds of sharptails.

The fact that I didn't get a shot at any of them scarcely matters.


Photo by Lori Thomas

Sunrise Over Sagebrush

Seth Owens, North Dakota Pheasants Forever

I'm often frustrated by that prehistoric, instinctual, fight-or-flight response that all humans have in the 21st century. Not because it was crucial to our ancient ancestors, who were constantly at risk of being preyed upon by a big animal with pointy teeth, but because of the sinking pit in our stomach that we feel when anxious or excited. Here I was, walking through a sea of swishing sagebrush, feeling like I was about to vomit, and I couldn't tell if it was from the excited apprehension or the 2:00 a.m. gas station breakfast burrito.

The prairies look different before daybreak. That gnarled old fencepost that you keyed your location on melts into the inky pool of darkness that exists just outside of your flashlight's glow. In between GPS checks and sweeps of my headlamp, I did find my fencepost. I also found my camouflage belly-blind about 10 yards west of it. I kneeled down into the layer of prairie dust, slung my pack from my shoulders, and quietly set up my camera gear.

The first whispers of dawn dusted the clouds in shades of rose and amber contrasting the endless prairie sky. Time feels slower at daybreak, each second must pass through a drop of pine pitch to pass into eternity. I took every moment, watching the rising sun breathe life into the land. The sun splashed its color onto the summit of an opposing butte, and the signal fire was lit for the morning's show to begin.

A resounding explosion reverberated off the distant valley walls, and several male sage grouse thundered over the sagebrush prairie, landing within a stone's throw of the front of my blind. Their winged descent sent dust billowing below them. Sparing no time for socialization, these goliath grouse quickly began the morning's displays.

I've heard the machine-gun foot fire of sharp-tailed grouse, and I've encountered the resonating booms and hoots of greater prairie-chicken, but nothing could have prepared me for the churning and popping sounds of the greater sage-grouse. Tail feathers shook, stretched, and stood tall, and a dark star haloed their impressive stature. Their feathered chests billowed and expanded, like a giant prairie thunderhead. At maximum capacity, no lightning was emitted, but two large yellow air sacs thrust forward and exploded with sound.

Swish-wala-WOOMP
Swish-wala-WOOMP

After each chest shot sound across the prairie landscape, each male momentarily rested. A nearby bird, finishing up his first round of displays, paused, and stood still. He gasped in air, the same way you or I would gasp to hold our breath as we sunk underwater. With each desperate inhalation, his chest swelled, and yellow air sacs began to sink lower. He puffed his chest forward, strutted a few steps closer, and repeated his display.

Swish-wala-WOOMP
Swish-wala-WOOMP

This symphony of several avian timpani drummers continued through the morning, only interrupted periodically by possible threats, which were often me coughing or sneezing. About an hour and a half after full sunrise, the displays began to slow. The steady drumbeat that set the cadence at dawn was ending. The fervor was replaced by hunger as the males began picking stems, leaves, and seeds from the ground instead of constantly throwing their air-filled chests. The prairie's winged mercenary, a massive golden eagle, soared overhead, slowly descending on monstrous wings. The fearful tension in the remaining grouse finally snapped, and the heavy birds erupted from the sagebrush, once more thundering across the open plains. One by one, they dropped into the taller vegetation of an adjacent field. It was incredible how this colossal grouse disappeared into the grass, not to return to their lekking grounds until tomorrow morning.

That golden eagle, frustrated with his lack of breakfast, lazily floated on the morning's breeze in search of less vigilant prey. As if in sync, my stomach let out an annoyed grumble, convincing me that it was time to make tracks. It took mere moments to pack up my blind and my camera gear and to sling my backpack, containing my whole life for the week, onto my back, and I walked back to my vehicle. A rumble reminded me of my hunger. I snatched the granola bar from my waist pocket and snacked with a smile as I recalled the morning's show.

The churn of that ever-reliable Honda engine escorted me from my two-track path through the prairie to a gravel county road and eventually onto the asphalt, where bumpy and noisy sounds were replaced by the whine of rubber on pavement.

"A real breakfast would be good," I told myself as I opened my second granola bar of the morning. I headed to the nearest cafe with an SD card full of photos to share and a brain full of memories that I get to keep with me for the rest of my life.

Photo by Seth Owens

“Life membership was a no brainer.” - An Interview with Ben Loss

Jodie Provost, North American Grouse Partnership

Ben Loss was first introduced to outdoor adventures in Alaska on trips with his father. He started with fly fishing, then moved to hunting in his teen and college years, preferring waterfowl and small game to big game pursuit. After his first trip to Nebraska for grouse, he was hooked.

Now, if Ben could do just one hunting trip a year, it would be for prairie grouse. A financial analyst from Illinois, he looks forward to each fall’s adventures, with three dogs to assist - a pointing lab, German shorthair, and a golden retriever. After hunting frequently in the Midwest, he began traveling to the West about seven years ago, trying to go somewhere new each time. “Pheasant hunting is fun, but there’s something about native birds. It’s a more authentic experience,” pondered Ben. Last year he hunted the Fort Pierre National Grasslands. This year he is going to Montana in hopes of finding sage grouse.

Mostly self-taught, Ben likes to make his mistakes himself and feel the satisfaction when it all comes together. He shares outings with friends and family, easing them in to it so it is a fun experience. But he also enjoys it when it’s just him and the dogs. One especially memorable hunt that “put him on the (grouse) path” was one in which he didn’t think too hard, just headed out walking to hunt sharptail and chickens, not seeing another soul in a very expansive landscape. He saw the better part of fifty grouse and shot his limit in 1.5 hours.

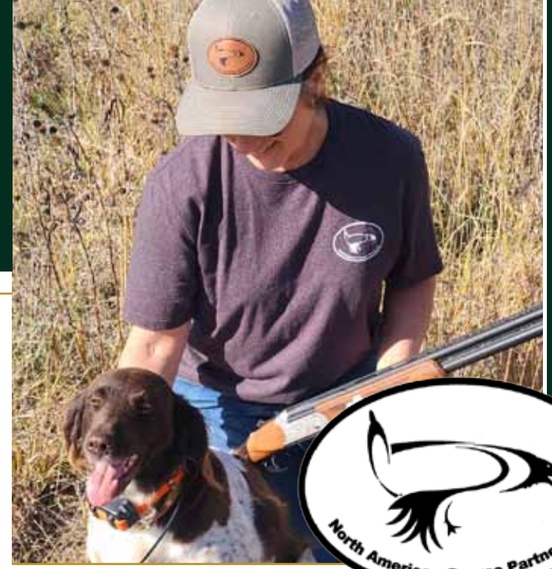
As each year passes, Ben says he gets more thoughtful about the future of grouse, the challenges they face, and how he can help with the overall health of grouse habitats. While surfing the internet to learn about impacts of wind farms that he saw encroaching on prairie grouse habitat, he came across the Noth American Grouse Partnership (NAGP) website. “The website and organization seemed down to business, not bombarding you with a lot of stuff. It connected with me as something I’d like to support. I felt confidence in their mission.” So, Ben joined.

Now a few years later, Ben believes it was a “no brainer” to recently renew at the Life Member level. His reason? “There’s a selfish aspect because grouse are the most fun bird to chase, but also I see a disproportionate lack of concern for grouse, like they’ve been moved to the side of the stage. They are an important part of the American legacy. I don’t want to see it (habitat and population declines) get any worse.”

Ben wants more people to experience what it’s like to hunt over wild places with little or no human-made influence. “There’s a deep connection with the natural history of North America and a re-winding of time. The birds are a good barometer species that let you know if an ecosystem is intact and balanced. You will be pleasantly surprised by the other wildlife you find too, like mule deer, pronghorn, and random potholes with ducks. You won’t realize what you’ve been missing until you see it. You’ll see what an elevation grouse hunting is compared to the rest of small and big game hunting.”

Join or renew with NAGP on our website at grousepartners.org or use the membership envelope or form inserted in this magazine.

Photo by Robert Siers



The North American Grouse Partnership

ADD YOUR VOICE TO GROUSE CONSERVATION

Choose the Level of Grouse Membership
(includes NAGP decal, newsletter, updates on grouse conservation)

Forest Grouse □ $35 Sharp-tailed Grouse □ $100 Prairie-Chicken □ $250
Ptarmigan □ $500 Sage-Grouse (Life Member) □ $1,000

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THE NORTH AMERICAN GROUSE PARTNERSHIP THANKS YOU FOR YOUR SUPPORT OF GROUSE CONSERVATION!

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Photo by John L. Dengler