OF PARTNERS, PROMISES AND PRAIRIE TREASURES

Before ring-necked pheasants filled a manmade habitat niche, prairie grouse teemed on America's unbroken grasslands. The work of Pheasants Forever and key partners is keeping native wings beating over the modern prairie.

Gary Kramer

BY BRIANNA RANDALL

SAGE GROUSE: A SHARED VISION OF A RESILIENT WEST

Gary Kramer

Sunset drapes across the wide-open western range, tinting the snow-covered sagebrush pink. The fading light silhouettes a herd of elk against distant peaks, while the call of cattle echoes over the whistling wind. If you zoom in closer, you'll spy coveys of football-sized birds beneath the sagebrush, eating the silvery-green leaves and staying warm during the harsh winter.

These are sage grouse, North America's largest grouse. And this scene could be taking place in any one of a dozen states in the western U.S. in winter on rangeland treasured by bird hunters.

As the snow starts to melt, sage grouse herald spring by congregating to mate in open areas called leks. Males strut and prance, inflate yellow air sacs on their white chests to make a champagne-cork pop, and fan their spiky tail feathers to entice nearby females. Some leks boast hundreds of birds. It's an impressive natural spectacle for those lucky enough to witness it.

Sage grouse might be most famous for their quirky courtship dance. But they've also become known as an indicator for how their namesake ecosystem is faring.

Characterized by a diversity of shrubs, grasses and flowering plants, the sagebrush steppe covers 250,000 square miles across western North America and is home to 350 species, including pygmy rabbits, pronghorn, mule deer, elk and golden eagles. Sage grouse are considered an "umbrella species" for all the flora and fauna in this beautiful country because these upland birds rely entirely on sagebrush-dominated landscapes to eat, mate, hide from predators and raise their chicks.

In short, without healthy sagebrush habitat there would be no sage grouse. And for a while, it was a close call for the birds.

Sage grouse have dwindled to a mere 10 percent of their historic numbers due primarily to substantial habitat loss. Over the past century, the sagebrush sea has been chopped up by invasive weeds, roads, energy and housing developments, and cultivated croplands. Sage grouse haven't adapted well to these human-generated intrusions, since the birds avoid roads, tall structures and loud noises.

The bird's decline led the U.S. Fish and Wildlife Service (USFWS) to determine in 2010 that greater sage grouse were warranted for listing under the Endangered Species Act, with a final decision on whether to list the bird due by 2015.

SAGE GROUSE INITIATIVE

Immediately following that announcement, the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) launched the Sage Grouse Initiative (SGI) to proactively conserve the private land where sage grouse roam. Ranchers, industry leaders, nonprofit organizations, and local, state and federal government agencies, formed an unprecedented coalition to voluntarily conserve sagebrush rangelands. This coordinated effort was primarily motivated by the concern that listing the sage grouse would disrupt a host of economic mainstays that rely on the sagebrush ecosystem — including hunting.

Over half of all remaining sage grouse habitat is privately owned, much of it as working agricultural lands. Recognizing that "what's good for the bird is good for the herd," SGI focuses existing Farm Bill programs to help ranchers implement sustainable ranching practices that conserve wildlife habitat while also benefiting their agricultural operations.

From the outset, Pheasants Forever has been a key partner with NRCS for efficiently converting SGI-allotted Farm Bill dollars into improved habitat for sage grouse.

"Our ethos has long been that working in harmony with agricultural producers to maintain healthy habitat is what supports healthy upland bird populations on a landscape level. With SGI, we saw an opportunity to help the NRCS — as well as ranchers and bird hunters in the West — with a habitat conservation paradigm that invites collaboration instead of conflict," says Howard Vincent, president and CEO of Pheasants Forever.

That paradigm has proven its worth and then some. Over the past decade, SGI has partnered with more than 2,100 ranchers to conserve nearly 8 million acres of sagebrush rangelands in core sage grouse habitat — an area three-and-a-half times the size of Yellowstone National Park.

"Our role is to help NRCS and other partners deliver conservation dollars, contracts and field capacity as efficiently as possible, so that grouse get the best bang for the buck," says Ron Leathers, a wildlife biologist who also serves as Pheasants Forever's director of public finance and has been involved with SGI since its inception.

FARM BILL BIOLOGISTS

Leathers points to PF's investment in hiring and managing biologists across sage grouse range as one example of the organization's long-term commitment to improving habitat. PF employs more

Pheasants Forever has been a key partner with NRCS in implementing the Sage Grouse Initiative. What's good for the birds is also good for the herd, meaning grazing cattle.

Gary Kramer

PF Farm Bill biologists across the West will play a key role in keeping healthy, huntable populations of sage grouse in the wide-open western sagebrush steppe.

Gary Kramer

Gary Kramer

than Farm Bill biologists across the country who work with landowners to protect and restore wildlife habitat, and 20 of them are based in sagebrush country. Many of these positions are cost-shared by the NRCS, state wildlife agencies or other nonprofits.

"Our field biologists are local 'boots on the ground' who can help farmers and ranchers plan conservation projects that boost their agricultural operations while also improving wildlife habitat," says Michael Brown, the SGI field capacity coordinator for Pheasants Forever.

These local field staff help establish habitat improvement projects ranging from sustainable grazing systems, to marking barbed-wire fences to prevent bird collisions, to conservation easements.

CONSERVATION EASEMENTS

Habitat loss through development is the most irreversible threat to sage grouse. Conservation easements are an important tool for keeping sagebrush rangeland intact. In Wyoming, estimates show that a $250 million investment in targeted easements can slow grouse declines by nearly two-thirds within population strongholds.

Through NRCS Farm Bill programs, partners have now secured over 200 individual easements that permanently conserve 620,000 acres of working western ranchlands. In Montana alone, partners have protected 198,000 acres of at-risk range through SGI since 2010, a six-fold increase in easements over all years prior. These voluntary, incentive-based agreements with private landowners also maintain working ranches and keep this vast landscape whole for future generations.

GRAZING SMART

In addition to permanently protecting land from development, SGI has also helped ranchers improve range health across 3.6 million acres of prime sagebrush habitat through sustainable grazing strategies. By working with individual landowners to adjust the timing, intensity and duration of livestock use, grazing strategies promote diverse, native plant communities that provide food and shelter for grouse and other animals. This makes the land more resilient to drought and wildfires, and increases its productivity for livestock too.

"SGI's win-win approach provides solutions that are good for ranchers and good for grouse," says Tim Griffiths, the western coordinator for

Riparian zones, with their extra greenery, serve as key brood-rearing areas for sage grouse in late summer.

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NRCS Working Lands for Wildlife, which includes SGI. "That means we're not only working to improve wildlife habitat, we're also helping sustain rural communities and maintain our way of life out West."

ELIMINATING WOODY COVER

Another big threat to sage grouse is the encroachment of woody species. Typically found in higher-elevation forested areas, trees like juniper have steadily marched across historically open sagebrush range over the past century due to fire suppression efforts.

Sage grouse hate trees and research shows that they avoid nesting in areas where there's more than a single tree per acre. Invading trees provide perches for predators like raptors. Trees also crowd out the native low-to-the ground plants and shrubs that sage grouse prefer for brooding, nesting and chick-rearing.

SGI has helped landowners strategically remove encroaching trees to restore over a half-million acres of sagebrush habitat. Projects on private lands are often paired with complementary conifer removal work on adjacent federal- or state-owned land, which restores big chunks of habitat to health — to the advantage of everyone who values clean water, healthy soils and open horizons.

"Sage grouse don't stop at fences, so we try to work across entire watersheds by including multiple property owners in conservation actions," explains Brown. "At the end of the day, what's most important is to build resilient, functioning landscapes that also work for agricultural families."

The science indicates that this watershed-scale conservation is working. For instance, research shows that in southern Oregon, sage grouse populations were 12% higher in areas where advancing trees had been removed. Plus, 29% of GPS-tagged sage grouse hens were nesting in or near restored sagebrush rangelands within three years of conifer treatments.

WATER IS CRITICAL

Speaking of nests, research also shows that sage grouse cluster 85% of their breeding sites within 6 miles of wet habitats so that hens and chicks can feed on the "green groceries" found near water. As the sagebrush uplands dry out in the late summer, the birds seek out protein-rich plants and insects found along streams, springs and wet meadows. More than 80 percent of vital wet places in the West are located on privately owned ranchlands; but many of them are degraded.

SGI helps resource managers and landowners use simple, cost-effective methods that restore these precious wet habitats. NRCS, PF and other partners have led 11 hands-on field workshops that trained over 400 people in low-tech methods of restoring wet habitat (such as hand-built stone structures, mimicking beaver dams or grazing management). Once implemented, these restoration projects have been proven to increase vegetation productivity by up to 25 percent and keep riparian areas greener longer. That's another win-win for grouse and ranchers.

BIG COUNTRY, BIGGER VISION

All these habitat improvements stem from one source: a shared vision of wildlife conservation through sustainable ranching. This vision, endorsed and practiced by Pheasants Forever and its partners, is undoubtedly working to revitalize sage grouse populations: In September 2015, the USFWS announced that sage grouse no longer warranted listing under the Endangered Species Act.

This positive news didn't spur conservation partners to close shop though.

Instead, PF has partnered with NRCS to scale up the sage grouse model to benefit other at-risk animals. Working Lands for Wildlife — the umbrella for SGI — now allocates Farm Bill resources to conserve 23 other keystone species and their habitats across 48 states. Partnership-based efforts are enhancing private farms, forests and ranches from coast to coast, and are being replicated globally too. Through Working Lands for Wildlife, PF is now involved in 9 landscape-scale conservation initiatives across the country, including bolstering habitat for prairie chickens and bobwhite quail.

"We're in this for the long term," says Howard Vincent, president & CEO of Pheasants Forever. "It's about more than saving birds. It's about saving the beautiful wide-open spaces that define America."

SAGE GROUSE BY THE NUMBERS

200,000-500,000 sage grouse estimated to remain today
44% decline in distribution
30% population decline since 1985
165 million acres occupied by sage grouse in the West
83% of the population found in Wyoming, Montana, Nevada and Idaho
31% of sage grouse habitat in private ownership
80% of habitat for raising young birds is on private land
7.9 million acres conserved though SGI
2,100 ranchers enrolled in Farm Bill conservation programs
$480 million invested by NRCS Farm Bill programs since 2010
$194 million invested by conservation partners since 2010

BY BRIANNA RANDALL

LESSER PRAIRIE CHICKENS: PLACES FOR GROUSE ON THE SOUTHERN GREAT PLAINS

Gary Kramer

It's dawn on the prairie, and the grass-scented spring air is alive with birdsong and butterflies. Rocky red buttes rise through the undulating waves of green, while tall oaks shade winding streams. These are America's Great Plains, which cover one-third of the country and support grazing animals, burrowing critters and millions of birds.

As the sun peeks over the grass on a mild spring morning, bubbling sounds ring across the land — lesser prairie chickens are "booming." Males with dashing yellow eyebrows call in the plainer brown-and-white-striped females by inflating balloon-like red pouches on their necks. These grouse also stomp their feet, flutter-jump and lunge in hopes of luring in one of the hens. Alas, the ladies are picky: they often visit two or three dancing grounds before selecting their mate.

DIMINISHING HABITAT

Similar to sage grouse, this once-popular game bird used to number in the millions, booming on leks across our nation's southern prairies. But this quirky chicken-like bird has declined precipitously due to dwindling habitat.

Only an estimated 38,000 lesser prairie chickens remain.

The Great Plains are some of the most at-risk landscapes on our continent, threatened by conversion of native grassland to cultivated farmland, invasive weeds and encroaching woody species. Because much of their native habitat has disappeared, the lesser prairie chicken now occupies just 17 percent of its original range. Today, this upland bird is found in portions of Colorado, Kansas, New Mexico, Oklahoma and Texas, where short- to mid-grass prairie is dominated by shinnery oak and sand sagebrush.

Gary Kramer

Over 95 percent of land in the lesser prairie chicken range is privately owned. The Lesser Prairie Chicken Initiative helps ranchers and farmers implement sustainable grazing and production activities that help both profits and the birds.

PRIVATE LANDS KEY

Over 95 percent of the land in the southern Great Plains is owned by farmers and ranchers — the economic mainstays for hundreds of rural communities. With nearly all its habitat under private ownership, conserving the lesser prairie chicken for future generations depends on voluntary actions by private landowners.

Pheasants Forever is partnering with the United States Department of Agriculture (USDA), local conservation groups and state resource agencies to work with landowners on putting in place practices that are mutually beneficial for these birds and for agricultural producers alike. Farm Bill biologists, cost-shared by PF, offer ranchers and farmers technical know-how for creating more productive and resilient grasslands.

"The range of the lesser prairie chicken also overlaps with several species of quail, and pheasants too, so our work to restore resilient prairie grasslands helps a whole host of upland birds," says Jordan Menge, lesser prairie chicken coordinator for Pheasants Forever and Quail Forever.

LESSER PRAIRIE CHICKEN INITIATIVE

Historically, natural disturbances such as frequent wildfires and grazing by bison herds helped maintain healthy prairie habitat. The removal of these large-scale forces from the Great Plains has led to a shift from grasslands to woodlands, which diminishes the productivity of the prairie for both wildlife and livestock.

Sustainable ranching activities can restore grasslands by helping deter invasive annual grasses (such as cheatgrass) and woody plants (such as red cedar or juniper) from taking over native prairie … and crowding out grouse.

Pheasants Forever is a key partner in the Lesser Prairie Chicken Initiative (LPCI), led by USDA's Natural Resources Conservation Service (NRCS). LPCI works with ranchers to restore large blocks of prairie in the Southern Great Plains by: reintroducing fire to the landscape; rotating the timing and duration of livestock grazing to conserve native vegetation; and installing a host of other sustainable ranching practices.

CRP MATTERS

Pheasants Forever also helps broaden landowner participation in USDA's Conservation Reserve Program (CRP), which pays landowners to replant native vegetation on former crop lands to restore grasslands.

"Pheasants Forever has been a staunch advocate of USDA's Conservation Reserve Program since its inception in 1985 because it helps us enact our mission to conserve upland bird populations through habitat improvements," says Howard Vincent, president and CEO of Pheasants Forever.

A new study released from Bird Conservancy of the Rockies shows that these voluntary Farm Bill-funded programs do indeed work, and produce outcomes that matter. Lands enrolled in CRP or prescribed grazing programs produced 3 million more birds in the southern Great Plains, boosting populations of 24 species of grassland birds, 17 of which are in decline.

WORKSHOPS AND TOOLS

Pheasants Forever partners with NRCS and others to share research results like these in order to bridge the gap between science and on-the-ground implementation. That means hosting workshops that share the most recent research with ranchers and land managers so they can more effectively conserve habitat.

It also means creating easy-to-use tools (like the free online mapping application at *rangelands.app*) that allows people to track changes in natural resources over time. These science-based tools help partners quickly measure the results of past conservation work and plan future projects.

"Our goal is to measure the big-picture scientific outcomes from investing Farm Bill dollars to ensure conservation practices are successful and cost-efficient," says Dr. David Naugle, science advisor for NRCS Working Lands for Wildlife, which includes the LPCI. "This science-based approach allows us to provide the biggest benefits for people and wildlife."

Brianna Randall grew up in southern California but found herself in Montana and has never looked back.

LESSER PRAIRIE CHICKENS BY THE NUMBERS

38,000 lesser prairie chickens estimated to remain today
83% decline in range-wide distribution
95% of habitat on private land in the southern Great Plains
1.6 million acres conserved via NRCS-led Lesser Prairie Chicken Initiative
800+ ranchers enrolled in LPCI
$42.6 million invested by NRCS Farm Bill programs since 2010
$14.2 million invested by conservation partners since 2010

BY TORI J. MCCORMICK

SHARP-TAILED GROUSE: ICON OF THE NORTHERN GREAT PLAINS

Gary Kramer

Sharp-tailed grouse once so dominated the landscape across the Northern Great Plains that pioneers said their innumerable flocks could blot out the sun as they flushed across the horizon.

But populations of this charismatic, native bird have hit hard times as their preferred grassland and brushland habitat keeps disappearing over the last several decades in several states and provinces.

The good news: Through creative habitat initiatives and partnerships, as well as providing policy advice to landowners on how to access and implement certain Farm Bill conservation programs, Pheasants Forever is positively impacting sharp-tailed grouse and, by extension, the upland hunters who pursue them.

"Sharptails are my favorite upland game to hunt … there's just something incredibly appealing to walking that big, open prairie after a bird that's always been here," says Matt Morlock, Pheasants Forever's South Dakota state coordinator in Brookings. "That's why working with landowners and our partners is so important."

SOUTH DAKOTA GRASSLAND

One new cost-share partnership program for grassland producers in western South Dakota is targeting expired and or expiring Conservation Reserve Program (CRP) land to maintain those acres as grassland. PF has teamed up with the South Dakota Game, Fish and Parks, the South Dakota Grassland Coalition and others to promote such CRP acres as "working lands" for sustainable livestock grazing. PF and its partners provide roughly 50 percent of cost-share funding for fencing and water infrastructure for approved participants. To date, 29 ranchers have signed 10-year contracts impacting nearly 40,000 acres.

"This partnership benefits producers, livestock, and habitat for sharptails and other grassland birds," says Morlock, adding PF is a partner in a similar initiative as part of the Northern Great Plains Joint Venture.

NORTH DAKOTA PROJECT

Another PF initiative helping maintain and improve grassland in southwest North Dakota is the Southwest Grazing Improvement Project.

Rachel Bush, PF North Dakota State Coordinator in Dickinson, said the project works with livestock producers to improve the overall health of their grasslands, soil and water. A major project feature uses fencing and water infrastructure to install rotational grazing systems that nurture grassland regeneration.

One section, or paddock, is grazed for a short period of time and then allowed to rest for a longer period. Project funding comes from North Dakota's Outdoor Heritage Fund, as well as matching dollars from PF and individual landowners. Seven projects have been completed, improving nearly 3,500 acres.

"It's a win-win for producers and wildlife," says Bush. "Beef is good for birds like sharptails."

CRP EFFECT

A centerpiece of U.S. farm policy for more 30 years and a PF national policy priority, Conservation Reserve Program (CRP) grasslands are a well-documented boon for pheasant production. But the program's mix of native grasses and forbs also benefits sharp-tailed grouse as nesting and brood-rearing habitat, say Morlock and state upland biologists.

For example, plains sharp-tailed grouse populations — one of six subspecies — in parts of southwestern Wyoming, northeastern Colorado and the Nebraska Panhandle showed strong increases, including some range expansion, after establishment of CRP grasslands, according to the U.S. Department of Agriculture.

CRP also benefits rare Columbian sharp-tail grouse in several states. In one study in northwestern Colorado, 26 percent of all known courtship leks were in CRP, though such areas comprised just 3 percent of the study area.

"PF's advocacy for habitat programs like CRP impacts a broad spectrum of grassland birds, including sharptails," says Morlock.

A dancing sharp-tailed grouse.

Gary Kramer

BY TORI J. MCCORMICK

GREATER PRAIRIE CHICKENS: PARTNERSHIPS AND PROGRAMS PRODUCE HABITAT

Gary Kramer

The greater prairie chicken was once a resident across the northern Great Plains, and its range extended east as far as Ohio, Kentucky and Tennessee.

Revered by chefs for its succulent meat and by hunters for its evocative ways afield, this iconic, open-country native bird flourished in the undisturbed grasslands of America's pre-settlement era. The greater prairie chicken has long been extirpated from several states in the eastern part of its range, but small remnant populations still exist where adequate grassland habitat hasn't been converted to row-crop agriculture. Today the bird's primary range is found in portions of Kansas, Nebraska and South Dakota, all of which have hunting seasons.

"The greatest limiting factor for greater prairie chickens is the loss of contiguous tracts of grasslands — big blocks of habitat they need for nesting, brood-rearing and roosting," says Ryan Lodge, working lands coordinator for Pheasants Forever in Nebraska. "Prairie chickens do have challenges, but the good news is that we're finding opportunities to work with landowners to improve their bottom lines and prairie chicken habitat at the same time."

Over the past decade, PF's Farm Bill biologist program has expanded from 4 employees to almost 150 across 30 states, including those in greater prairie chicken country. Farm Bill biologists make the complex world of federal conservation programs understandable for landowners. Lodge says they serve as "one-stop shops to find the best programs to match landowner needs."

One such program for greater prairie chickens is CP-38E SAFE, a continuous Conservation Reserve Program (CRP) practice available to landowners in Nebraska's tallgrass prairie region. The program pays landowners, primarily ranchers, to enroll land (from 40 to 160 acres) and plant it back to grass. The more diverse the planting, the better it serves the birds' specific lifecycle needs.

"It's been a very successful program, in a region that's lost 98 percent of its tallgrass prairie," says Lodge. "It's helped greater prairie chickens and a host of other wildlife."

Another popular program is Working Lands for Wildlife (WLFW), which targets cattle ranches in a 10-county area in Nebraska's eastern Sandhills. Through prescribed burns, brushland management (primarily for invasive red cedar), sustainable grazing and other conservation practices, the program restores existing grasslands to improve livestock production as well as habitat for greater prairie chickens and other grassland birds.

The PF-led initiative has several partners, including the federal Natural Resources Conservation Service (NRCS), Nebraska Cattlemen, The Nature Conservancy, the Nebraska Game and Parks Commission and others.

From 2017 to 2019, 29 WLFW projects have impacted nearly 33,000 acres. "Demand is high," says Lodge. "It's a great partnership program."

Chris McLeland, south region director for Pheasants Forever, said the federal Farm Bill offers the single largest source of funding for conservation on private lands, some of which, through various programs, directly benefits greater prairie chickens.

"It's one thing to have the programs, but it's quite another to get landowners enrolled into them," says McLeland. "I can't stress enough how important our Farm Bill biologists are to achieving that goal. It's certainly benefitted greater prairie chickens. You have to work with private landowners if you want to improve habitat for wildlife."

Dan Svingen, a U.S. Forest Service district ranger at South Dakota's 116,000-acre Fort Pierre National Grassland, a popular destination for greater prairie chicken hunters, agrees. "I support any organization that works with private landowners to keep grass on the ground for prairie chickens and other wildlife," he says. "Pheasants Forever has done good work. It has a lot to be proud of."

Tori McCormick writes about the environment and the outdoors from his home in Shakopee, Minnesota.

A male greater prairie chicken shows off on the lek.

Gary Kramer