

GRASSLANDS

PRAIRIE POTHOLE REGION BY JIM RINGELMAN

At a Glance

- Grasslands cover 358 million acres of the U.S., 85% of which are privately owned and serve as important habitat for 29 breeding obligate grassland bird species.
- Livestock production can be compatible with grassland bird management. Managed cattle grazing that creates diverse mosaics of grassland habitat are beneficial to livestock and grassland birds.



BOBOLINK BY JASON CROTTY

- Grasslands provide important wetland buffers that improve water quality and watershed health for human communities.
- As crop prices soared between 2008 and 2011, about 23.7 million acres of grasslands, shrublands, and wetlands were converted to crop production.

Grassland Birds on Private Lands

Grasslands (including prairie and pasturelands) in the U.S. are 85% privately owned. These 302 million acres of privately owned grasslands are critical to 29 breeding obligate grassland bird species that have 82% of their distribution on private lands, one of the largest percentages for any habitat. Most grasslands also function as working landscapes for livestock grazing. These working grasslands provide wetland buffers that improve water quality and watershed health, as well as sequester carbon to reduce atmospheric greenhouse gas accumulation and mitigate climate change.

Grassland birds are dependent on healthy, intact grasslands. Seven obligate species, including Dickcissel, have more than 90% of their breeding dis-

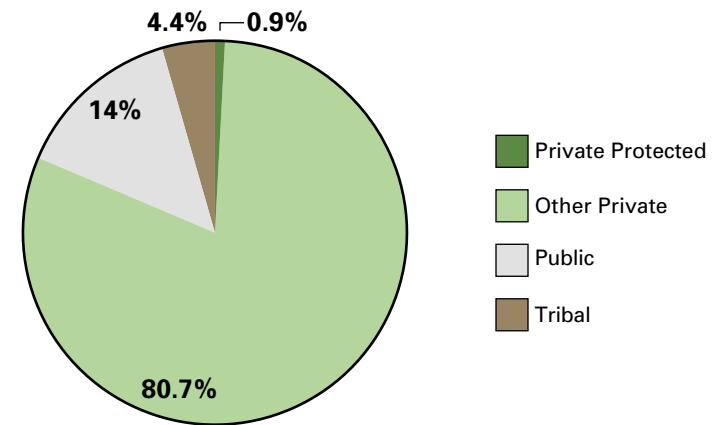
tributions on private lands. Wintering grassland birds are similarly dependent on private lands: 22 obligate grassland species average 83% of their winter distribution on private lands.

Some grassland bird species have habitat requirements for short grasses with heavy disturbance; others require undisturbed, thick patches of taller grasses. Ranchers can model cattle grazing to mimic the historic, variable grazing patterns of bison (with which grassland birds evolved), so that some areas are grazed intensely (preferred by Mountain Plover and McCown's Longspur) while other areas are lightly grazed or untouched (for Bobolink and Upland Sandpiper). This variable grazing creates diverse grasslands that are also a more beneficial food resource for livestock. Management that both



With 97% of their distribution on private lands, Eastern Meadowlarks depend on the grassland habitat provided by pastures and farm fields. Six other obligate grassland breeding bird species also have distributions greater than 90% on private lands. Eastern Meadowlark by Joshua Clark, www.momentsinature.com.

Grassland Bird Distribution



meets the economic bottom line for agriculture and promotes healthy wildlife habitat is essential for sustaining grassland bird populations.

Conservation Successes

Conservation programs are proving that ranchers can sustain a livelihood and sustain grassland birds at the same time. The Wineinger-Davis Ranch has worked with Colorado Parks and Wildlife to establish a conservation easement on 14,000 acres of shortgrass prairie. The easement allows the family to continue raising livestock for future generations, while managing their grasslands for Mountain Plover, Ferruginous Hawk, Lark Bunting, and Western Meadowlark. The ranch owner is thrilled with the easement, and now several neighboring ranches have entered into similar agreements, conserving large grassland blocks of tens of thousands of acres. This kind of contagious conservation is growing among many landowners.

In America's Corn Belt, the Farm Bill's Conservation Reserve Program is restoring grassland habitat for breeding birds. Henslow's Sparrow populations, which have declined more than 95% since the mid-1960s, have rebounded in some areas through CRP. In Illinois, the regional Henslow's Sparrow population has significantly increased; spring bird counts for the species are now about 25 times greater than 30 years ago, prior to CRP. The increase strongly coincides with CRP lands; counties with the highest percentage of CRP acreage also have the highest Henslow's Sparrow population gains.

The Kansas Department of Wildlife, Parks and Tourism uses State Wildlife Grants to provide cost-sharing assistance to private landowners for restoring native grasslands for Lesser Prairie-Chickens. As of December 2012, Kansas' State Wildlife Grant Private Land-

owner Program has partnered with 21 landowners to restore 11,155 acres of Lesser Prairie-Chicken habitat. CRP lands seeded with forbs and legumes are also helping Lesser Prairie-Chicken populations to hold steady in western Kansas.

Conservation Challenges

Grassland bird species are experiencing rapid population declines. The McCown's Longspur population—with 73% of its distribution on private lands—has declined an estimated 92% over the last 45 years.

Habitat loss is a driver of these declines. Increasing crop prices have increased pressure to put land into production. According to an Environmental Working Group study ("Plowed Under," 2012), about 23 million acres of grasslands, shrublands, and wetlands were converted to crop production between 2008 and 2011 (including 8.4 million acres converted for corn and 5.6 million acres converted for soybeans). Grasslands enrolled in CRP have dropped from over 30 million acres in 2007 to just over 20 million acres today. Energy development and residential development pose additional threats to grasslands.

Fear of regulation often deters landowners from participating in conservation programs that address these threats. Many landowners rely on their lands to make a living, and they are sensitive to state or federal regulations on land management.

However, conservationists and landowners can work together on proactive, voluntary efforts that conserve private grasslands and preclude the need for regulations to protect declining species. Conservation programs from the U.S. Department of Agriculture, such as CRP, compensate a landowner for restoring grasslands and reserving them from agricultural pro-

duction. Cost-share programs defray a landowner's expenses for enhancing grassland habitat. Easement programs are another way to protect grasslands from being plowed up or developed.

Making conservation-friendly technical assistance on land management readily available to private landowners is key to sustaining grassland bird populations, as well as fostering a community conservation ethic. Given the compatibility of grasslands birds and sustainable agricultural production, maintaining healthy communities for birds, farms, and ranches is a real and achievable conservation goal.



UPLAND SANDPIPER BY BARB D'ARPINO, WWW.NATURETHROUGHMYEYES.COM

"I am very proud to be the fourth generation to live on, and manage, my family's ranch. I shudder to imagine a grassland ecosystem devoid of the sights and sounds of its unique and melodic bird species."

—Jeff Smeenk, Center of the Nation Cattle Company, Butte County, South Dakota.

Fourth generation Rancher and National Cattlemen's Beef Association Region VII Environmental Stewardship Award winner

PRIVATE LANDS CONSERVATION SPOTLIGHT:

Farmers Make Room for Mountain Plovers



A biologist from Nebraska Prairie Partners shows a local landowner the radio transmitter that will be used to track Mountain Plovers and evaluate their habitat use and survival rates. Biologists have helped farmers with plover-friendly practices such as tilling around nests in crop fields. In the past decade, 672 Mountain Plover nests have been located and protected on Nebraska farms. Photo by Seth Gallagher.

American prairie landscapes have undergone tremendous changes—from massive conversions of grass into croplands and development to the widespread eradication of prairie dogs. These changes have caused steep population declines for many bird species, including the Mountain Plover, which dropped to the point of being proposed for listing as Threatened under the Endangered Species Act. But farmers in Colorado and Nebraska took voluntary action to make room for nesting Mountain Plovers in their crop fields, and the proposed listing was removed.

Mountain Plovers, despite their name, are prairie birds. They depend on bare ground for nesting, such as recently burned shortgrass prairie or prairie dog towns. Due to habitat loss, the Mountain Plover population declined by around 66% over the past 25 years. This decline inspired government agencies, private landowners, and nonprofit organizations to work together to protect Mountain Plovers.

More than 50% of remaining Mountain Plovers breed in eastern Colorado and southwestern Nebraska, so conservation efforts focused there. In

2003, Colorado Parks and Wildlife, the Colorado Farm Bureau, and the Rocky Mountain Bird Observatory joined forces to form the Prairie Partners Mountain Plover Nest Conservation Program. A parallel conservation effort in the neighboring state, Nebraska Prairie Partners, formed via a partnership between the Nebraska Game and Parks Commission and Rocky Mountain Bird Observatory.

In this region dominated by agricultural production and private ownership, the program sought to identify plover nests on farmlands. At first, many landowners were skeptical of allowing nest surveys on their land, since Mountain Plovers were proposed for Endangered Species Act listing in 1993. But over time, landowners developed a strong sense of pride and ownership about plovers nesting on their land.

The programs succeeded because the teams demonstrated the compatibility of nesting plovers with working lands. Once a nest was marked with brightly colored stakes, a farmer just needed to till around that small patch by inches to protect the nest, without hindering crop production.





LEFT TO RIGHT: MOUNTAIN PLOVER CHICKS IN NEST BY DANNY MARTIN, COLORADO; MOUNTAIN PLOVER BY SETH GALLAGHER

Over the past 10 years, the program has partnered with nearly 250 private landowners and located and protected more than 1,000 Mountain Plover nests, including 672 nests in Nebraska. (Before the project began, experts expected to find just a few plovers nesting in Nebraska.) Eventually the project evolved into a landowner-driven program, with 42% of known plover nests in Nebraska located and marked by landowners last year.

A project milestone occurred in 2008, when the U.S. Fish and Wildlife Service removed the Mountain Plover from consideration for listing under the Endangered Species Act. Landowners are now joining other conservation efforts, such as a program to install nesting platforms for Ferruginous Hawks on private lands.

Robust programmatic support from private, state, and federal partners—and financial support from the Nebraska Environmental Trust, state wildlife grants for Colorado and Nebraska, and the USFWS Neotropical Migratory Bird Conservation Act—are crucial to Mountain Plover nest conservation over the long term. But the program's success stems from the willingness of private landowners and state agricultural groups (such as the Colorado Farm Bureau) to become directly involved in Mountain Plover conservation.

The program is a model for bird conservation on private lands: a deep understanding of species habitat requirements—combined with productive partnerships with private landowners—leads to sustainable, cooperative conservation practices.

Grassland Easements: Conserving Nesting Habitat in the Prairie Pothole Region

The Prairie Pothole Region of the northern Great Plains may be known as America's "Duck Factory," but it's also a critical region for breeding grassland birds. Much of that breeding occurs on grasslands on national wildlife refuges in the Dakotas and Montana managed by the U.S. Fish and Wildlife Service. The agency is also protecting grassland habitat on private lands via conservation easements.

Since 1989, the USFWS has purchased more than 1.2 million acres of grassland easements from landowners in the Prairie Pothole Region. Sellers receive a payment in exchange for agreeing to keep their land in permanent grass cover. Grazing is allowed on grassland easements, however landowners agree to delay haying until after July 15 to avoid disturbing ground-nesting birds.



PHOTO BY JIM RINGELMAN

At a time when grassland losses are outpacing the rate of grassland conservation (it is estimated that between 105,000 and 340,000 acres of grasslands are converted to croplands each year in the Prairie Pothole Region), these grassland easements protect vital nesting habitat for grassland-nesting birds, such as Dickcissel and Upland Sandpiper, in perpetuity.