

Grassland Conservation in Mexico:

How and why the International Programs Office of the Forest Service, an agency of the U.S. Department of Agriculture, supports sustainable ranching to conserve a critically important and shared ecosystem.

The USFS works both domestically and internationally to sustain the health, diversity, and productivity of forests and grasslands to meet the needs of present and future generations.

In Mexico we are supporting grassland conservation to protect and conserve the most endangered, transboundary ecosystem in North America. Over the past twenty years, the USFS has worked alongside partners in Mexico to support grassland conservation and climate resilience activities. Migratory grassland birds, for example, seek breeding habitat in the US and wintering habitat in Mexico. The survival of these feathered friends requires partners to protect habitat across borders. Collaboration is the key ingredient for species survival, and not only for migratory birds—many community livelihoods, like ranching, equally depend on grasslands. The USFS and Mexican partners support grassland conservation by exchanging technical information, providing training and resources for sustainable ranching and habitat management activities, as well as raising awareness of migratory species' habitat and grasslands' ecological functions through environmental education. Together, these initiatives are unlocking a way to coexist and cooperatively conserve grasslands while living in harmony with nature.

What are grasslands and where are they located?

Natural and native grasslands are dominated by grass and shrub vegetation and maintained by a variety of factors. These include wild grazers (such as bison and pronghorn), sustainable grazing of livestock, wildfire, and climatic conditions like low rainfall. Grasslands occur both naturally and as the result of land use change. They are located around the world and are broadly divided into temperate or tropical. In North America, the grasslands extending from southern Canada to northern Mexico are known as the Great Plains (Audubon, 2019).

Why are grasslands important to society?

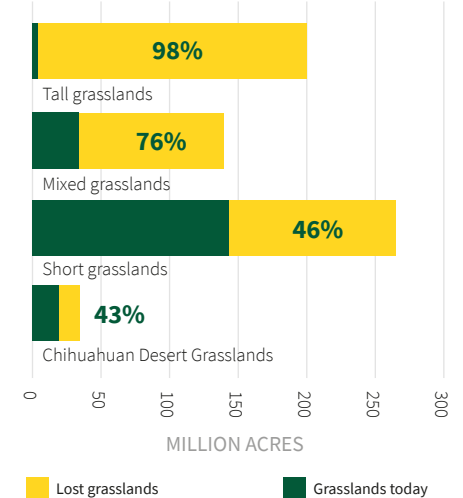
Grasslands provide invaluable ecosystem services (benefits to society) including:

- Storing carbon, 80% below the ground
- Conserving and purifying water resources
- Enhancing biodiversity
- Providing habitat to migratory species and resting places throughout the flyway
- Supporting sustainable livelihoods, like ranching
- Restoring and conserving soil
- Mitigating the impacts of climate change
- Providing recreational, cultural and spiritual benefits



Historic Grasslands Of North America from Audubon, 2019

Lost Grasslands of North America



Prepared from information from Audubon, 2019



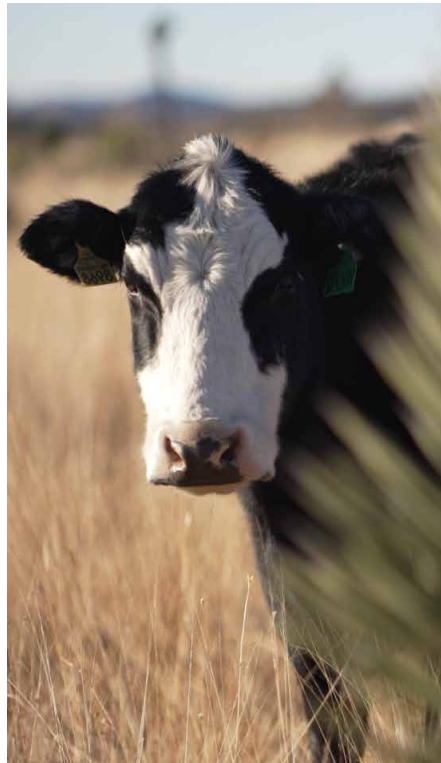
Rancho El Ojo

Why does USFS care about habitat conservation for Migratory Birds?

Mexican grasslands provide wintering habitat for almost 90% of migratory grassland birds that travel across the Northamerican Flyway each year. Some bird species, like the Bobolink and Upland Sandpiper, even travel as far south as Colombia in the Southern Cone Grasslands. These birds spend around eight months in wintering grounds before returning north to summer. Protecting winter habitat in Mexico is essential to ensure species survival.

How ranching supports grassland conservation and sustainable livelihoods

Sustainable ranching is a win-win that supports local livelihoods while conserving and promoting biodiversity within the ecosystem. Grazing is one of the best ways to avoid grassland oxidation that triggers desertification. Ranching in the Western US and Northern Mexico grasslands is a celebrated family tradition. Ranchers have long relied on large animals, like cattle or bison, to generate an income and keep grasses health and break apart the soil to enhance soil aeration. Bison and Pronghorn, in particular, are endemic to the Great Plains and play an important ecological role in grassland management.



Rancho El Ojo - Alberto Peschard

In partnership with key stakeholders, such as the Bird Conservancy of the Rockies and Mexico's National Commission for Natural Protected Areas, the USFS supports grassroot-community work, science-based grassland management, and environmental education in Northern Mexican grasslands.

USFS Highlighted Partner Projects in Mexico:

Bird Conservancy of the Rockies (BCOR) conserves over 600,000 high-priority and declining wintering grassland birds from the US and Canada across their full annual cycle.

Since 2012, the BCOR has engaged landowners in northern Mexico to build the Sustainable Grazing Network (SGN) to manage grasslands to preserve and improve wintering habitat for migratory grassland bird species. Today they work with 34 properties around 30 landowners encompassing over 500,000 acres in 4 Grassland Priority Conservation Areas (GPCAs) in northern Mexico.

The Northern and Occidental Sierra Madre Natural Protected Areas National Commission (CONANP-NySMOCC) is a Mexican government agency that protects and manages around 988,421 acres of grasslands.

CONANP-NySMOCC connects to landowners within protected areas using a "Conservation Culture" approach that encompasses environmental education, community monitoring, and restoration and management plans to improve livelihoods. Through a USNORTHCOM project, USFS-IP is partnering with CONANP-NySMOCC to strengthen their capacities through technical exchanges and the development of the ranching plans in 4 protected areas in the state of Chihuahua.

Key grassland migratory bird species

- Baird's Sparrow (*Centronyx bairdii*)
- Sprague's Pipit (*Anthus spragueii*)
- Upland Sandpiper (*Bartramia longicauda*)
- Dickcissel (*Spiza americana*)
- Grasshopper Sparrow (*Ammodramus savannarum*)
- Bobolink (*Dolichonyx oryzivorus*)
- Lark bunting (*Calamospiza melanocorys*)
- Thick-billed Longspur (*Rhynchophanes mccownii*)
- Chestnut-collared Longspur (*Calcarius ornatus*)



Lark bunting - José Hugo Martínez

Key grassland migratory bird species

- Bison (*Bison bison*)
- Pronghorn (*Antilocapra americana*)
- Mule deer (*Odocoileus heremicus*)
- Mexican and Black tailed prairie dogs (*Cynomys mexicanus* and *C. ludovicianus*)
- Bolson tortoise (*Gopherus flavomarginatus*)
- Golden eagle (*Aquila chrysaetos*)



Bison and pronghorn - Steve Frederick