



Midwest
Landscape
Initiative

Developing Models with Species Data to Inform Landscape-Scale Grassland and Sagebrush Conservation

The U.S. Fish and Wildlife Service (Service) is working with the Western Association of Fish and Wildlife Agencies, the Midwest Landscape Initiative, and Migratory Bird Joint Ventures to advance species conservation and recovery in grassland and sagebrush ecosystems. This effort builds upon our collective existing work in these ecosystems to proactively maintain species populations and habitats that are or could be impacted by drought, invasive species, altered fire regimes, human land uses, climate change, and other threats. In coordination with the ongoing collaborative work in grassland and sagebrush ecosystems, this project will produce vital information for

our adaptive landscape-scale conservation partnerships.

The project will assemble data for over 60 aquatic, semi-aquatic, terrestrial, and pollinator species, including species of greatest conservation need. These data will be used to develop species distribution models to complement associated threat-based models. Together, the models will inform where we might realize the highest return on investment from interjurisdictional and private lands conservation efforts. We intend to work with all data providers to ensure appropriate use and protections for the data exist.

The project has three primary phases:

1 Acquire Species Data

We will contact state wildlife agencies and/or Natural Heritage programs to discuss data holdings (e.g., wildlife sightings, creel surveys, annual sampling efforts) and the data acquisition process, including data sharing agreements. The states we will contact are California, Colorado, Idaho, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, Nevada, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming.

2 Assemble Species Data and Build Models

Upon receiving species data, we will assemble it in a single scientifically valid and secure database. Through an inclusive, iterative conservation design approach, we will use these data to develop spatially explicit models to link species persistence over time given habitat conditions and threats.

3 Develop Conservation Strategies

Building upon our existing work, the models will inform our development of strategies for conservation and recovery. We will produce decision-support tools and biome-wide maps that depict areas where actions (e.g., threat abatement, vegetation community restoration, easements) are most likely to deliver high return on conservation investments. We will also identify species hotspots to ensure that working across programs and partners, we target species that most need conservation.



We will collectively develop a shared framework to identify strategies and implement actions to maintain species populations and habitats in these nationally significant landscapes. Our goal is to “keep common species common” and avoid future regulatory intervention.

Pam Sponholtz/USFWS

Who do I contact if I want to learn more or get involved?

Pam Sponholtz
U.S. Fish and Wildlife Service
pamela_sponholtz@fws.gov

Tom Remington
Western Association of Fish and Wildlife Agencies
remingtontom@msn.com

Kelley Myers
Midwest Landscape Initiative
kelley_myers@fws.gov