

Montana Natural Heritage Program 2025 Partner's Meeting



December 11, 2025

<https://mtnhp.mt.gov>



Housekeeping Details

1. Please keep yourself muted and your video off when you are not talking
2. When speaking (e.g., questions, partner sharing) please turn your video on
3. Partner updates – Please coordinate who is giving updates for your organization. Order will be approximately alphabetical with federal, state, local, then NGOs. Send Bryce a note in the chat if you need to go earlier, later, or need to pass on materials.
5. Partners are welcome to post links and documents for materials that might be of general interest to the group in the chat
6. Materials and presentations for individual speakers will be posted in the chat
7. For technical difficulties, please contact Braden Burkholder bburkholder@mt.gov
8. If you want to set up a focal training for staff in your organization or need information products specific to your organization to help with your workflows, send an email to bmaxell@mt.gov
9. We will send a recording of the main meeting as well as materials provided during the iNaturalist session to all invitees and attendees we have emails for (please provide your email in the chat if you received the meeting invite from someone else).



O'Connor Center for the
Rocky Mountain West

Agenda



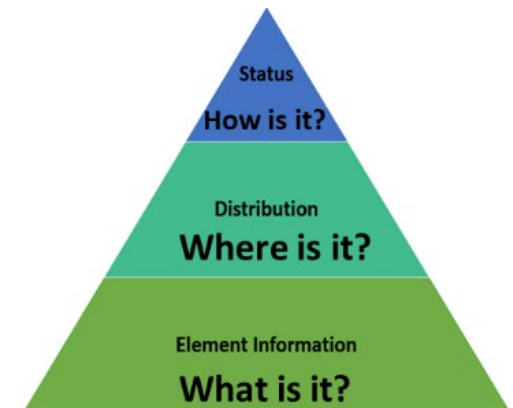
9:00 – 9:25	Welcome, State Library, and Heritage Program General Updates (Bryce Maxell & Jennie Stapp)
9:25 – 9:45	Montana Spatial Data Infrastructure, Water Information, LiDAR, and other State GIS Updates – Evan Hammer
9:45 – 10:45	MTNHP Program Updates <ul style="list-style-type: none">• Information Services –Braden Burkholder (20 minutes)• Botany Program – Andrea Pipp (20 minutes)• Zoology Program – Dan Bachen (20 minutes)
10:45 – 11:00	Questions, Answers, and Polls for morning presentations
11:00 – 11:15	Land Cover and Spatial Analysis Lab updates – Bryce Maxell and Jessica Mitchell
11:15 – 11:30	Wetland/Riparian Mapping & Rangeland Monitoring– Kay Hajek, OCRMW
11:30 – 11:45	Questions, Answers, and Polls for land cover and wetland presentations
11:45 – 12:00	Break
12:00 – 1:00	Lunch and Data Submission/iNaturalist Training - Bryce Maxell
1:00 – 2:30	Partner Sharing - Updates from Partner Representatives (not recorded) <ul style="list-style-type: none">• Staffing• Funding• Structural Updates• Initiatives• Information Needs <p>*Let Bryce know if you want to share <u>powerpoint</u> slides.</p>
2:30 – 3:00	2025 State Wildlife Action Plan - Kim Szcodronski <ul style="list-style-type: none">• SGCN, SGIN, HGCN• Draft Plan• Other Resources

Celebrating 40 years of Service!

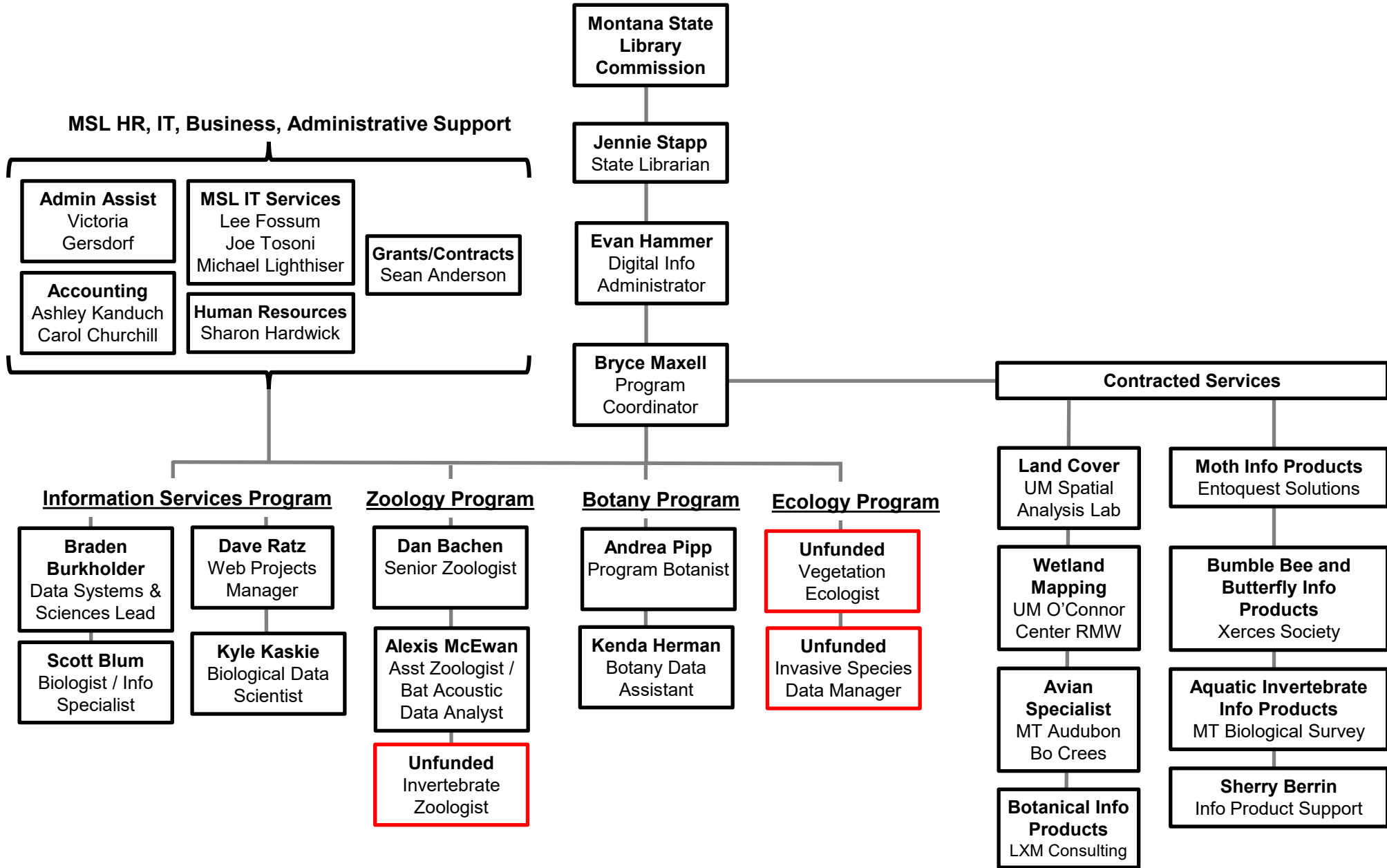


Important Events in Program History

- 1974 - Nature Conservancy Begins Establishing Heritage Programs
- 1982 – Montana Governor’s Council notes need for quick centralized access to natural resource information
- 1983 – Montana Legislature establishes NRIS & MTNHP (MCA 90-15) under Montana State Library (36th)
- 1985 – First MTNHP staff are hired in October. Program is operated by The Nature Conservancy.
- 1988 – First computer used by program to start making data digital
- 1991 – Point observation database initiated
- 1994 – First website released
- 1999 – First release of Montana Field Guide
- 2003 – Biotics software allows for digital exchange of taxonomy and conservation status ranks
- 2005 – Program begins managing info on all native species (previously focused on Species of Concern)
- 2006 – Program is operated by the University of Montana
- 2007 – First version of Map Viewer. First predicted habitat suitability models. Wetland mapping begins.
- 2008 – Program centralizes 1 million observation records for species in Montana
- 2017 – First standardized Environmental Summary Report for all review processes
- 2018 – Program begins managing info on non-native species. First Survey123 forms
- 2021 – Program staff are hired directly by State Library
- 2022 – First predicted biodiversity layers released
- 2025 – New mobile friendly MTNHP website. 6 million point observations



2025 Montana Natural Heritage Program Organization Chart



FY26 Natural Heritage Program Funding Overview



State Library Funding

\$593,473

Partner Support for Core Info Management

Federal (\$222,002)

Bureau of Land Management (\$99,002)

US Forest Service (\$75,000)

Natural Resource Conservation Service (\$42,000)

Bonneville Power Administration (\$6,000)

State Agencies (\$55,025)

Dept. of Agriculture (\$35,000)

Dept. of Natural Resources (\$20,025)

Private/NGO (\$29,907)

NatureServe (\$19,907)

The Nature Conservancy (\$10,000)

+

\$306,934

=

\$900,407*

Thank you to our partners who helped us greatly reduce administrative costs by moving numerous agreements to multiple year agreements that span state fiscal years and meet new MSL guidelines for minimal amounts of \$50,000 and \$30,000 for Federal and State agreements, respectively!

*Additional funding from partners funds project work with specific deliverables.

New Website

<https://mtnhp.mt.gov>

Montana Natural Heritage Program

Explore Data

View species and habitat information

Montana Field Guide

Map Viewer

Dashboards and Tools

Request Data

For environmental reviews, permits, or planning

Submit Request

Data Use Terms and Conditions

Collect and Submit Data

Contribute data to MTNHP

iNaturalist / Citizen Science

MTNHP Forms

Report Invasive Species

Additional Resources

Explore program-specific information

Zoology / Animals

Botany / Plants and Fungi

Ecology / Wetlands and Land Cover

About Us

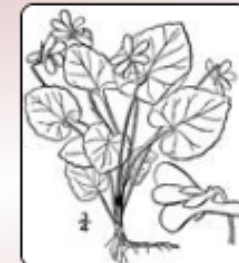
Learn about MTNHP or Contact Us

Program Info

Staff Contacts

Partners

A Species of Concern



Great-spurred Violet

Viola selkirkii

New Data Request System

<https://mtnhp.mt.gov/requests>

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Data Requests

Consultants, private organizations, and the general public may request Environmental Summary Reports, geodatabases, or other data. Natural resource managers in government agencies can self-serve this information from our [Map Viewer](#).

All requests are free of charge. Before submitting a request, note that we make a variety of information on species and habitats available.

Questions about submitting a request? Email us: mtnhp@mt.gov

Request Submission

To submit a request, you will need a State of Montana account:

- Click the **Submit Request** button below.
- Choose **Citizen Login**, unless you work for a State Agency in Montana.
- **Log in** to your account (or create an account).
- If prompted, choose "I am **not** representing a business" at the start of the request form.
- Fill out the **Data Request form** as directed.

Need an account with the State of Montana/Okta? Use these instructions to [create an Okta account](#) or see the [FAQs](#).

Submit Request

View Examples of Data and Information Requests

Our [examples](#) page will give you an idea of the type and range of information we can provide.

- [Example Environmental Summary Report](#)
- [How to Interpret and Use MTNHP Environmental Summary Reports](#)

Data Use Terms and Conditions and Data Use Acknowledgments

New Citizen Science and Report Invasives Pages

https://mtnhp.mt.gov/submit/Citizen_Science

Montana Natural Heritage Program

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iNaturalist / Citizen Science

MTNHP Forms

Report Invasive Species

iNaturalist

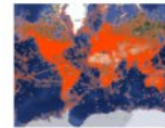
Download the iNaturalist app



Take a Photo or Record a Sound



- App will suggest an identification
- Accept that or suggest your own identification
- iNaturalist users around the globe can confirm your identification or suggest another



iNaturalist is a widely used global platform that allows users to report observations of any species using photos or sound recordings. The application includes algorithms that suggest species identifications, which users can accept or provide their own identification. Members of the iNaturalist community, including global experts for specific species groups, can then verify or refine these identifications. The following resources were created to help users get started with iNaturalist:

How to Use - Videos

How to Use - Presentation

Business Cards - Print and Share

eBird

Most popular application for reporting bird observations, photos, and sound files around the globe. Find birding hotspots and keep life lists of birds.



Montana Invasive Species Council

Report known or suspected aquatic invasive species, noxious weeds, tree pests, feral hogs, livestock diseases, and other non-native species.



EDDMapS Apps

Early Detection and Distribution Mapping System applications allow users to document invasive species in the United States and Canada.



4 New Dashboard Tools

<https://mtnhp.mt.gov/webapps/dashboards>

Explore Data

View species and habitat information

Montana Field Guide

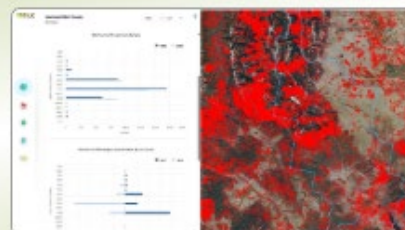
Map Viewer

Dashboards and Tools

Conservation Status Summary for Species



USGS NLCD Land Cover 1984-2024 Change By County



Grazing Boundary Information



BRAT - Full Application



Guides For Efficient Use

BRAT Quick Guide

Component Model Dashboard Guide

BRAT Tools Overview Video

BRAT StoryMap Overview

Montana Beaver Restoration

Beaver Restoration Assessment Tool (BRAT) for Montana

Dam Building Capacity



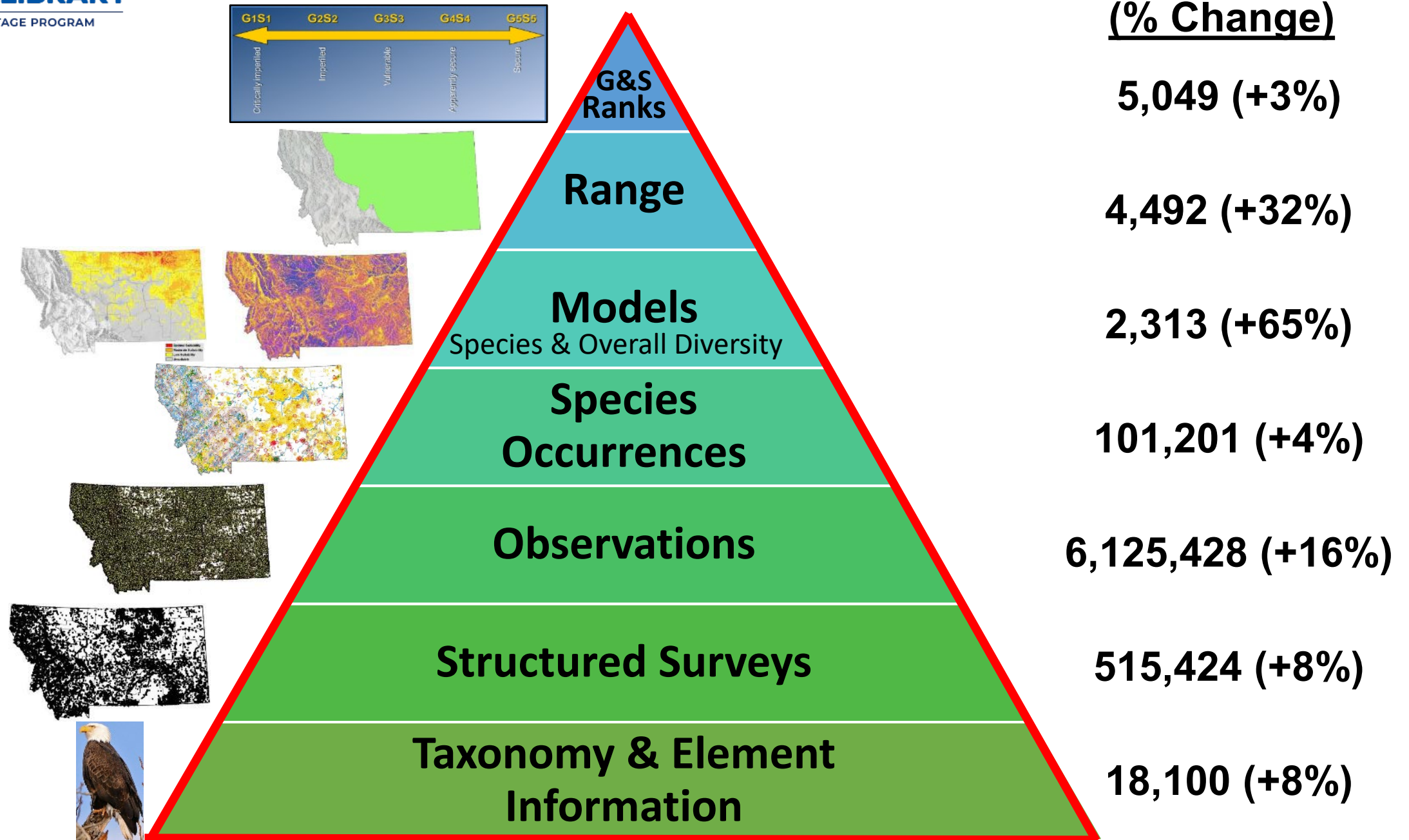
Potential for Conflict



Management Options



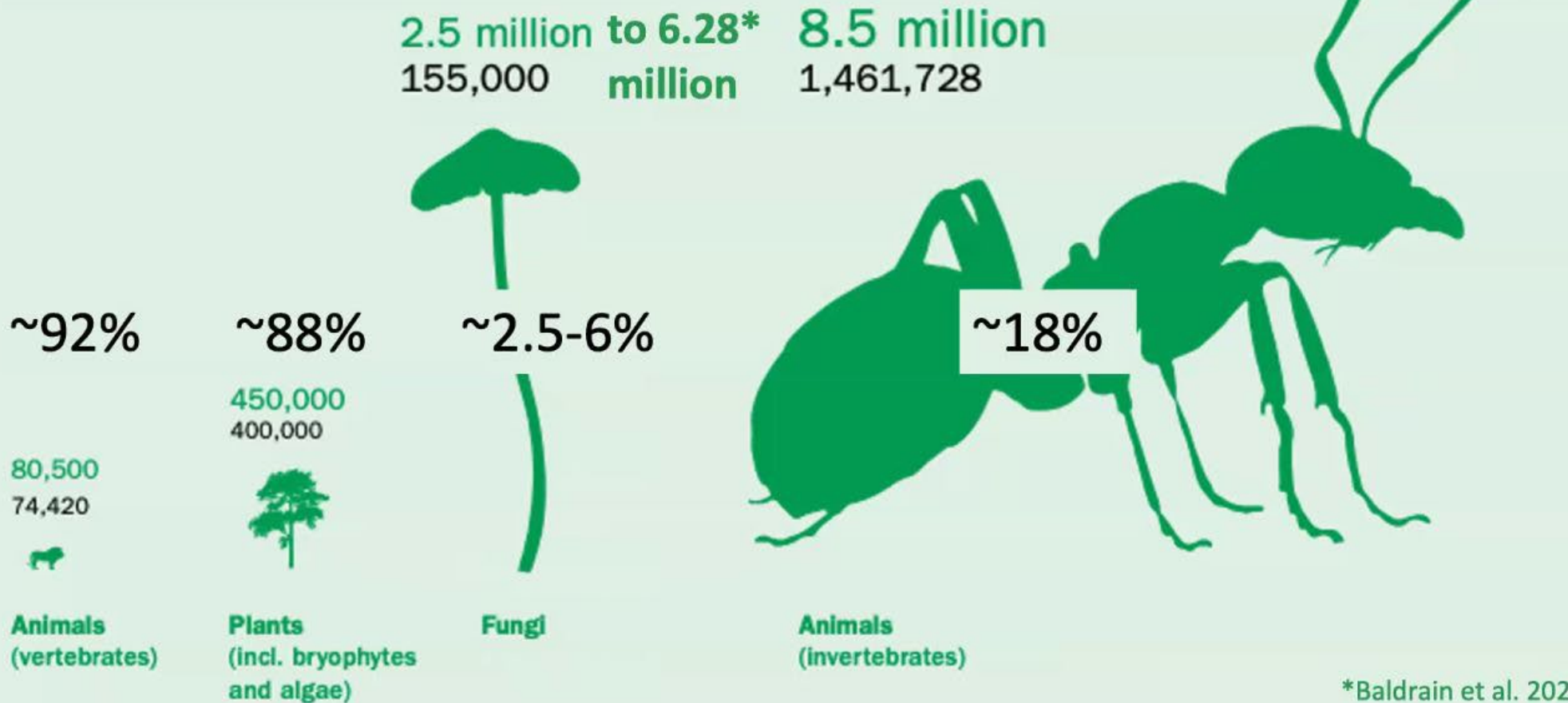
Species Data Products



Unrepresented Biodiversity - Keeping it Real!

FIGURE 1: How species diversity differs between animals, plants and fungi

An updated estimate confirms fungi as second only to invertebrate animals with regards to species diversity. Here, the total estimated number of species for four major groups is shown in green, and the current number of scientifically described species is shown in black.



*Baldrain et al. 2022
Fungal Diversity

Habitat Data Products

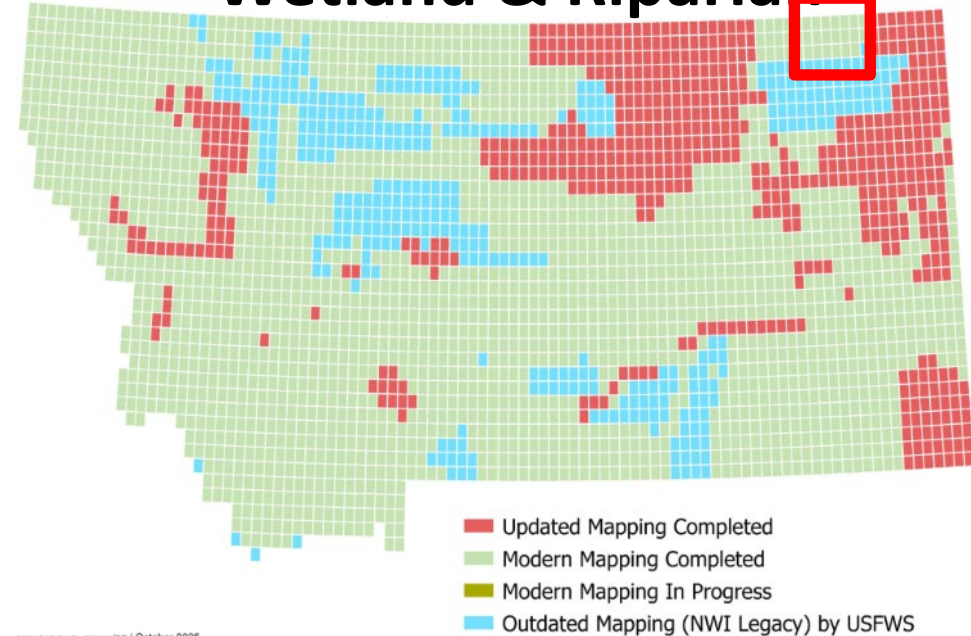
NVC-Based Land Cover



- Now based on National Vegetation Classification Groups
- New Ecological Communities Field Guide
<https://fieldguide.mt.gov/>
- Spatial Data Infrastructure Homepage
https://msl.mt.gov/geoinfo/msdi/land_use_land_cover/
 - Downloads and Web Service
 - Ecological Site Reviewer
 - Land Cover Validation Tool Kit



Wetland & Riparian



Created by E. Unessing | October 2025

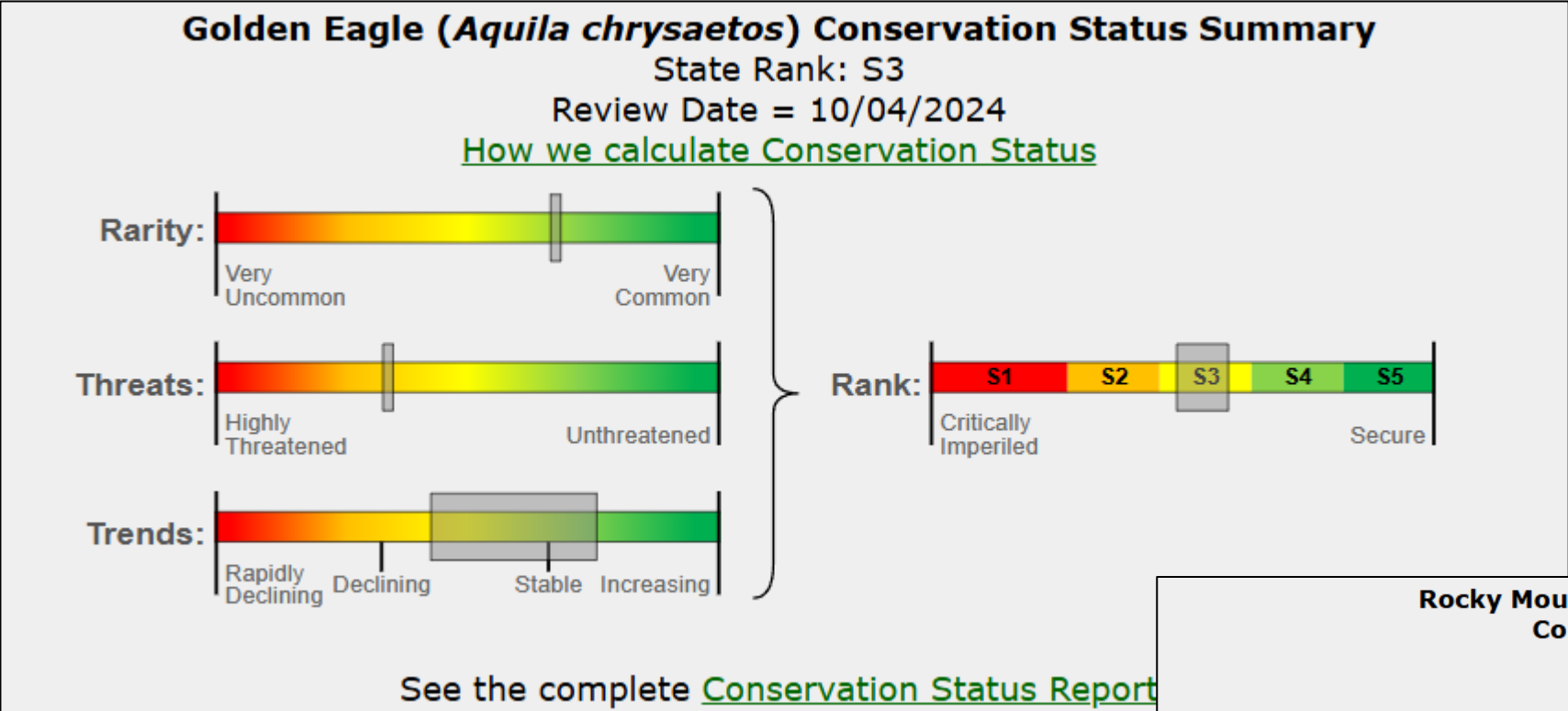
- 3.4 million + acres mapped
- 87% of state is mapped
- 15 quads mapped in northeast Montana in 2025
- 370 quads still to be mapped at ~\$3,000/quad



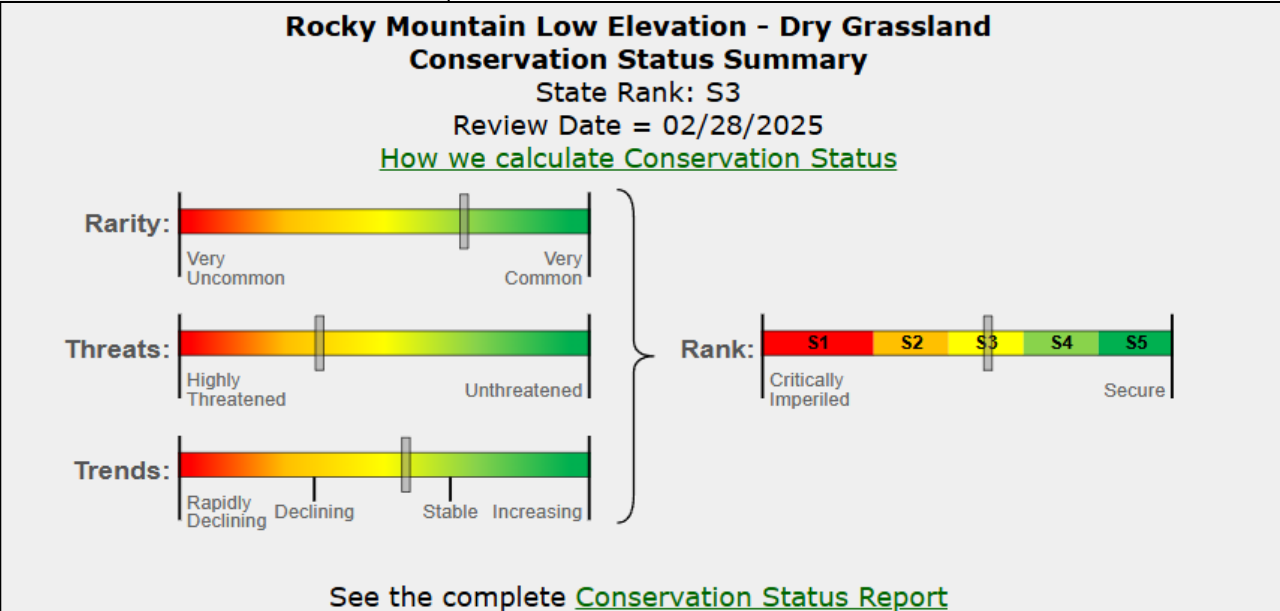
<https://storymaps.arcgis.com/stories/77e6bf223649419c95c596cbc2da9529>

New Conservation Status Rank Reports and Summaries

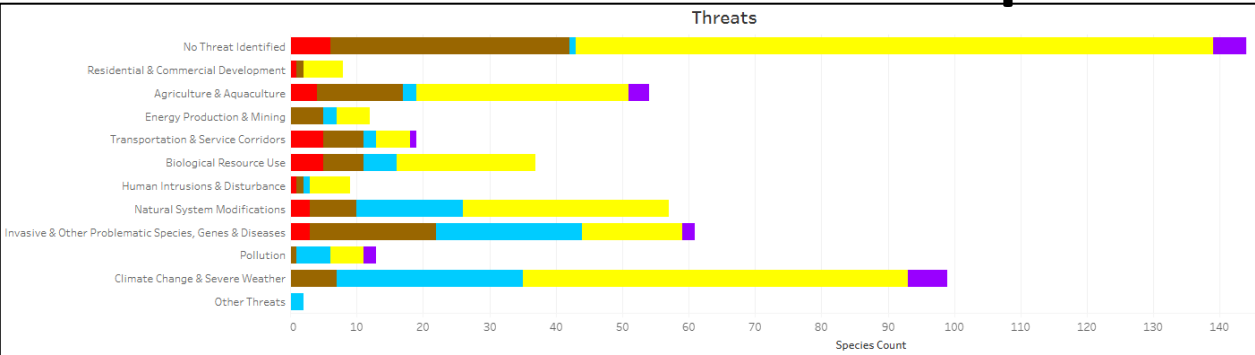
Species – all vertebrates, some plants, some invertebrates



Habitats



Rank Factor Patterns Across Species



Environmental Summary Report

Standard report for all NEPA,
MEPA, and permitting processes

Video on How to Interpret and Use Environmental Summary Reports

<http://tinyurl.com/bdz5ayk8>

Table of Contents

- Introduction to Environmental Summary Report
 - Native Species
 - Structured Surveys
 - Land Cover
 - Wetland and Riparian
 - Land Management
 - Biological Reports
 - Invasive and Pest Species
 - Appendix
 - Introduction to Montana Natural Heritage Program
 - Data Use Terms and Conditions
 - Suggested Contacts for Natural Resource Agencies
 - Introduction to Native Species
 - Introduction to Land Cover
 - Introduction to Wetland and Riparian
 - Introduction to Land Management
 - Introduction to Invasive and Pest Species
 - Additional Information Resources
- *Companion Excel**
****Field Guides**



**MONTANA
STATE LIBRARY**

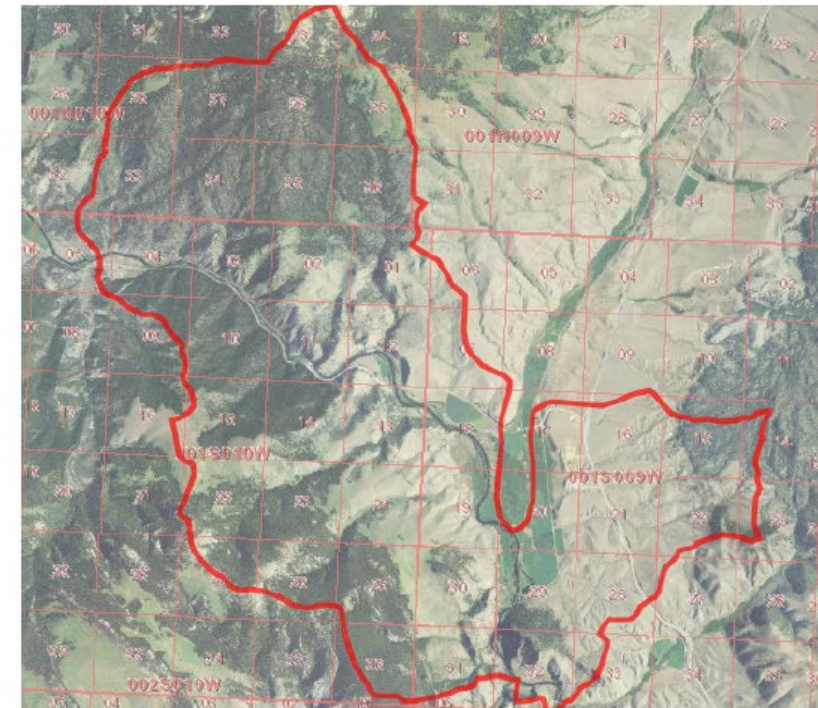
NATURAL HERITAGE PROGRAM mtnhp.org

1201 11th Ave • P.O. Box 201800 • Helena, MT 59620-1800 • fax 406-444-0266 • phone 406-444-3989



Latitude	Longitude
45.69648	-112.68861
45.82961	-112.86051

Summarized by:
Charcoal Creek-Big Hole River
(100200041104 - 6th Code Watershed)



Suggested Citation

Montana Natural Heritage Program. Environmental Summary Report.
for Latitude 45.69648 to 45.82961 and Longitude -112.68861 to -112.86051. Retrieved on 4/1/2024.

The Montana Natural Heritage Program is part of the Montana State Library's Natural Resource Information System. Since 1985, it has served as a neutral and non-regulatory provider of easily accessible information on Montana's species and biological communities to inform all stakeholders in environmental review, permitting, and planning processes. The program is part of the NatureServe network that is composed of over 60 member programs across North America that work to provide current and comprehensive distribution and status information on species and biological communities.



Environmental Summary

Help Us Improve Environmental Summary Reports

Suggested Contacts – Pages 23-25

Additional Information Resources – Page 34

Anything else we should link to?

<https://mtnhp.mt.gov/requests>

Request Data

For environmental reviews, permits, or planning

[Submit Request](#)

[Data Use Terms and Conditions](#)

Montana Natural Heritage Program

Data Requests

Consultants, private organizations, and the general public may request Environmental Summary Reports, geodatabases of species information, and other data products for environmental review, permitting, and planning processes. Natural resource managers in government agencies can self-serve this information from our [Map Viewer](#) web application by creating an account and receiving elevated permissions.

All requests are free of charge. Before submitting a request, note that we make a variety of information on species and habitats readily available in our [web applications](#) and other online [resources](#).

Questions about submitting a request? Email us: mtnhp@mt.gov

Request Submission

To submit a request, you will need a State of Montana account:

- Click the **Submit Request** button below.
- Choose **Citizen Login**, unless you work for a State Agency in Montana.
- **Log in** to your account (or create an account).
- If prompted, choose **"I am not representing a business"** at the start of the request form.
- Fill out the **Data Request form** as directed.

Need an account with the State of Montana/Okta? Use these instructions to [create an Okta account](#) or see the [FAQs](#).

[Submit Request](#)

View Examples of Data and Information Requests

Environmental Summary Reports are the most common type of information we provide. These reports include a PDF [\(example\)](#) with summaries of species and habitat information (including a list of Species of Concern), a spreadsheet with those data in tabular form, Species of Concern Occurrence reports for select species if present, and custom field Guide snapshots for the species highlighted in the report.

- [How to Interpret and Use MTNHP Environmental Summary Reports](#)

Our [examples](#) page lists other types of requests and the data or information we can supply to fulfill them.


Data Use Terms and Conditions and Data Use Acknowledgments

How is MTNHP Information Used?

<https://mtnhp.mt.gov/about/information-uses>



State, Federal, & Local Laws, Executive Orders, Rules & Regulations, Processes & Policies, Permits, and Industry Certifications & Standards



Montana Natural Heritage Program

Search MTNHP

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- Request Data
- Submit Data
- Resources
- About Us
 - Staff
 - Partners
 - Botany
 - Ecology
 - Zoology
 - Information Services
 - Information Uses**
 - Announcements
 - News
 - Statutes


Information Uses

The Montana Natural Heritage Program (MTNHP) manages information on the distribution and status of species and habitats of Montana to inform stakeholders in a variety of environmental review, permitting, and planning processes. Below is a list of laws, orders, rules, regulations, processes, policies, and permits that are informed by information from the MTNHP. If you are aware of something missing from this list, please submit it to this [form](#).

Laws

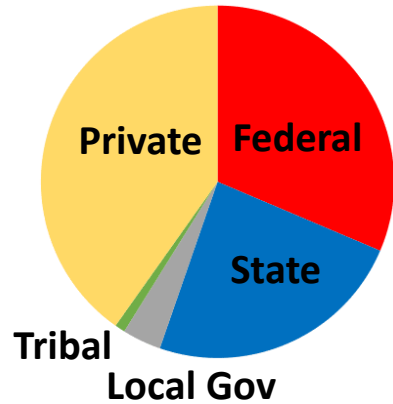
State Laws

- [Acquisition of Wildlife Habitat - Rules of 1987](#) - ([MCA 87-1-241](#))
Provides rules for the acquisition of wildlife habitat by Montana Fish, Wildlife, and Parks, including comprehensive analysis of wildlife populations associated with the property, the value of the land for protection, preservation, and propagation of wildlife, and management goals for the land and wildlife populations.
- [Aquatic Invasive Species Act of 2009](#) - ([MCA 80-7-10](#))
Established the state's invasive species program and authorized the use of invasive species check stations to prevent the movement of invasive species from infested to uninfested areas.
- [Development of Soil and Water Conservation Plans](#) - ([MCA 76-15-402](#))
Outlines the requirements of conservation districts to develop soil and water conservation plans for the conservation of soil resources and for the control and prevention of soil erosion and for flood prevention and conservation, development, utilization, and disposal of water within the district.
- [Environmental Impact Statements](#) - ([MCA 75-1-2](#))
Requires state agencies for proposals of projects, programs, and other major actions of state government significantly affecting the quality of the human environment in Montana provide a detailed statement on (1) the environmental impacts of the proposed action, (2) any adverse effects on Montana's environment that cannot be avoided if the proposal is implemented, and (3) alternatives to the proposed action.
- [Grass Conservation Act of 1939](#) - ([MCA 76-16](#))
Provides for the conservation, protection, restoration, and proper utilization of grass, forage, and range resources of the state of Montana.
- [Importation, Introduction, and Transplantation of Wildlife Act of 1985](#) - ([MCA 87-5-7](#))
Protects Montana's native wildlife and plant species, livestock, horticultural, forestry, agricultural production, and human health and safety by regulating the importation, transplantation, possession, and sale of exotic wildlife.
- [Kelly Flynn Wildlife Habitat Improvement Act of 2017](#) - ([MCA 87-5-8](#))
Provides funding for projects to restore, rehabilitate, improve, or manage land as wildlife habitat through noxious weed management and maintain native plants after project completion.

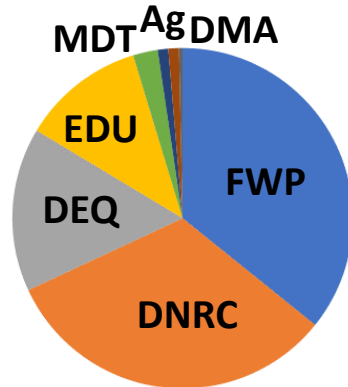
Please submit additions at this link! 

Map Viewer Use

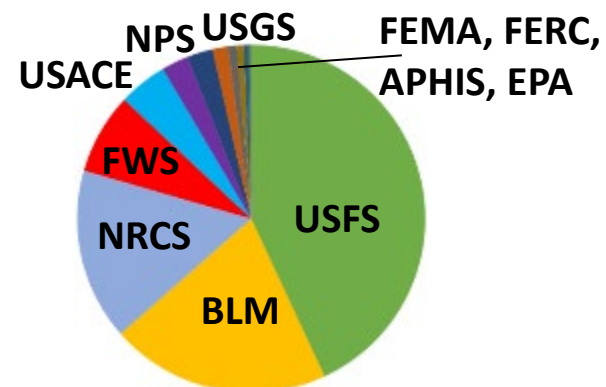
Overall Users



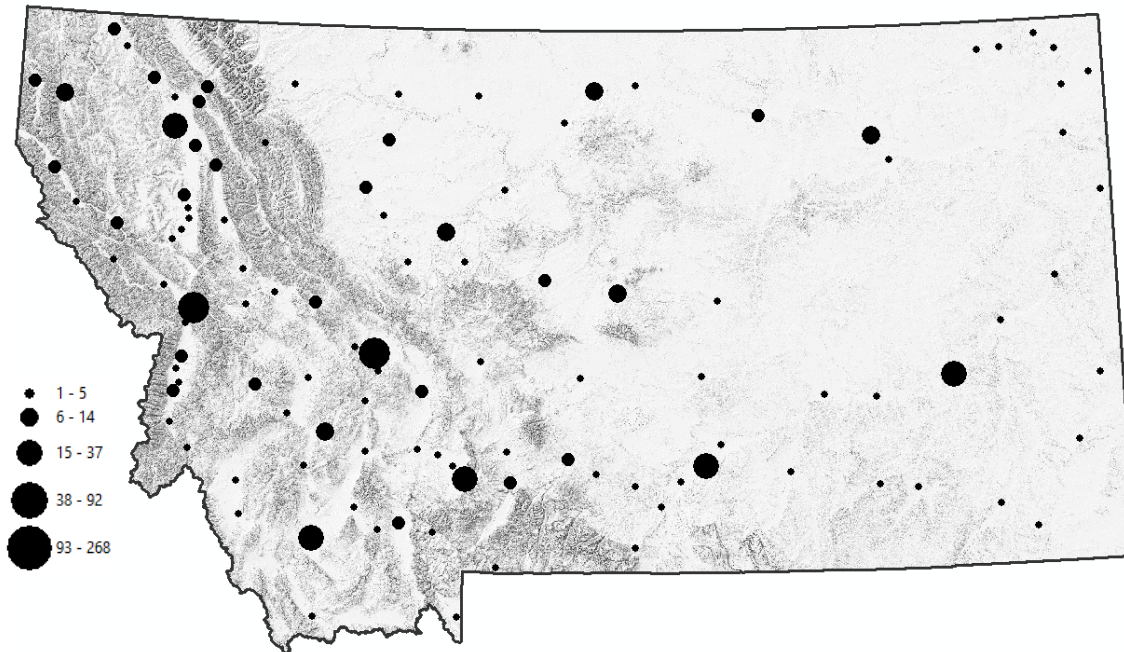
State Users



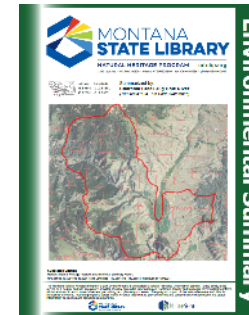
Federal Users



Spatial Distribution and Number of Agency Accounts



- 3,008 total accounts (+13%)
- 1,776 agency accounts (+8%)
- 2,512 Environmental Summary Report downloads in FY25



Agency	No. of Accounts
USFS	378
FWP	225
DNRC	216
BLM	173
NRCS	147
DEQ	104
County	80
USFWS	63
University	60
USACE	43
MSL	39
Tribal	22
NPS	21
USGS	20
City	18
FEMA	16
MDT	16
Dept of Ag	9
FHA	8
FERC/WAPA/BPA	6
Military Affairs	6
APHIS	5
BIA	4
EPA	3
DOC	2

Montana Field Guide Use

<https://fieldguide.mt.gov>

FY25 Use Statistics

- 471,000 users
- 660,000 sessions
- 1.5 million page views
- 10,850 hours of use
- 7,115 PDF Downloads

Montana Field Guides

Animals

Multicellular organisms that develop from the fertilization of an egg by a sperm. Heterotrophic - obtain food by ingestion.



Plants

Multicellular organisms that are autotrophic or make complex carbohydrates from basic constituents. Most use photosynthesis.



Fungi

Lichens, Mushrooms, Molds, Yeasts, Chytrids



Multi- or single-celled organisms that have chitin in their cell walls, reproduce by spores, do not photosynthesize, and acquire food primarily by secreting digestive enzymes into their environment. Some fungi, called Lichens, develop symbiotic relationships with green algae and/or cyanobacteria.

Ecological Communities

Accounts for: (1) natural vegetation communities as described under the **National Vegetation Classification** scheme at the Group level; (2) aquatic communities occurring in different stream sizes and flow regimes in four geographic regions; and (3) areas recently disturbed by fire and insect outbreaks or that are heavily modified for human land uses.



Invasive and Pest Species

Species

Species not native to a specific location, which has a tendency to spread to a degree believed to cause damage to the environment, human economy, or human health.



Swift Fox - *Vulpes velox*



Swift Fox- 4 juvenile

Species of Concern

Native Species

Global Rank: **G3**

State Rank: **S3**

(see State Rank Reason below)

Agency Status

USFWS:

USFS:

BLM: **SENSITIVE**

FWP SWAP: **SGCN**

iNaturalist

Submit MT Observations

Submit MT Animal

Observations

External Links

Map Viewer

Montana Observations

Google

for more Images

NatureServe

Species Report

Google

for more Web Pages

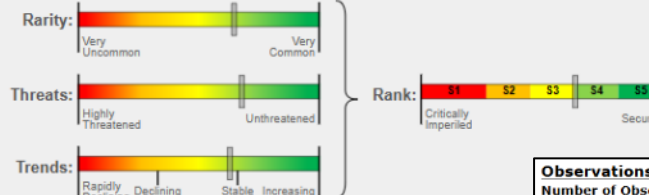
[Image Copyright and Usage Information](#)

Swift Fox (*Vulpes velox*) Conservation Status Summary

State Rank: **S3**

Review Date = 12/15/2023

[How we calculate Conservation Status](#)



See the complete [Conservation Status Report](#)

Observations in Montana Natural Heritage Program Database

Number of Observations: 722

(Click on the following maps and charts to see full sized version)

[Map Help and Descriptions](#)

