



SEARCH:

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HOME | ANIMALS | PLANTS | ECOLOGY | PUBLICATIONS | DATA | ABOUT

## NEWS

Introducing the Natural Heritage *TRACKER* (formerly our Information Portal)...View statewide distributions for all Montana's animals.

Natural Heritage Program in the News

New Land Cover Information for the [Centennial Valley](#) & the [Rocky Mountain Front](#)

## Recent Publications

Prairie Bird Species of Concern - Ecology and Management Summary

Surveys of Significant Plant Resources in SE and SC Montana on the Billings and Miles City Field Offices of the Bureau of Land Management



The Montana Natural Heritage Program is part of the [Natural Heritage Network](#).

Our data are linked to similar programs in all 50 states, most Canadian provinces, and many Latin American countries. Access species and ecological data from this network at [NatureServe Explorer](#).

## MONTANA NATURAL HERITAGE PROGRAM

- [▶ NATURAL HERITAGE TRACKER](#)
- [▶ SEARCH SPECIES OF CONCERN](#)
- [▶ VIEW ANIMAL GUIDE !\[\]\(f9e62ae797645c5367e33d9390832789\_img.jpg\)](#)
- [▶ VIEW PLANT GUIDE !\[\]\(3ae06528cbf191565604ae076c36537e\_img.jpg\)](#)
- [▶ VIEW COMMUNITIES GUIDE !\[\]\(1c1752aff31fb3ae93f0f9295ffb3f4c\_img.jpg\)](#)
- [▶ AQUATIC INFORMATION](#)
- [▶ SUBMIT YOUR OBSERVATIONS](#)

The Montana Natural Heritage Program is the state's source for information on the status and distribution of our native animals and plants, emphasizing species of concern and high quality habitats such as wetlands. We collect, validate, and distribute information, and assist natural resource managers and others in applying it effectively. Established by the Montana State Legislature in 1983, the program is located in the [Montana State Library](#), where it is part of the [Natural Resource Information System](#).

# <http://mtnhp.org>

## OTHER RESOURCES



### NatureServe Explorer

Search NatureServe's award-winning database of 50,000 species & ecosystems of the U.S. & Canada ▶



Montana Stewardship Data & Maps ▶



The University of **Montana** The Natural Heritage Program is operated by the Office of the Vice-president for Research and Development at the University of Montana. [Read more...](#)

Montana State Library, 1515 East Sixth Ave., Helena, MT 59620-1800 • 406-444-5354 • fax 406-444-0581 • email: [mtnhp@mt.gov](mailto:mtnhp@mt.gov)



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# Public Queries of General Distribution, Breeding, & Overwintering Records



Query / Reports

Search by Animals

- Mammals
- Birds
  - Northern Flicker (Red-sha...
  - Northern Flicker (Yellow...
  - Northern Goshawk**
  - Northern Harrier
  - Northern Hawk Owl
- Reptiles
- Amphibians
- Fish
- Invertebrates

Search by Species Status

- Global
- State
- USFWS
- USFS
- BLM
- Heritage

search reset

[Add Observations](#)

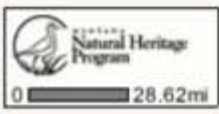
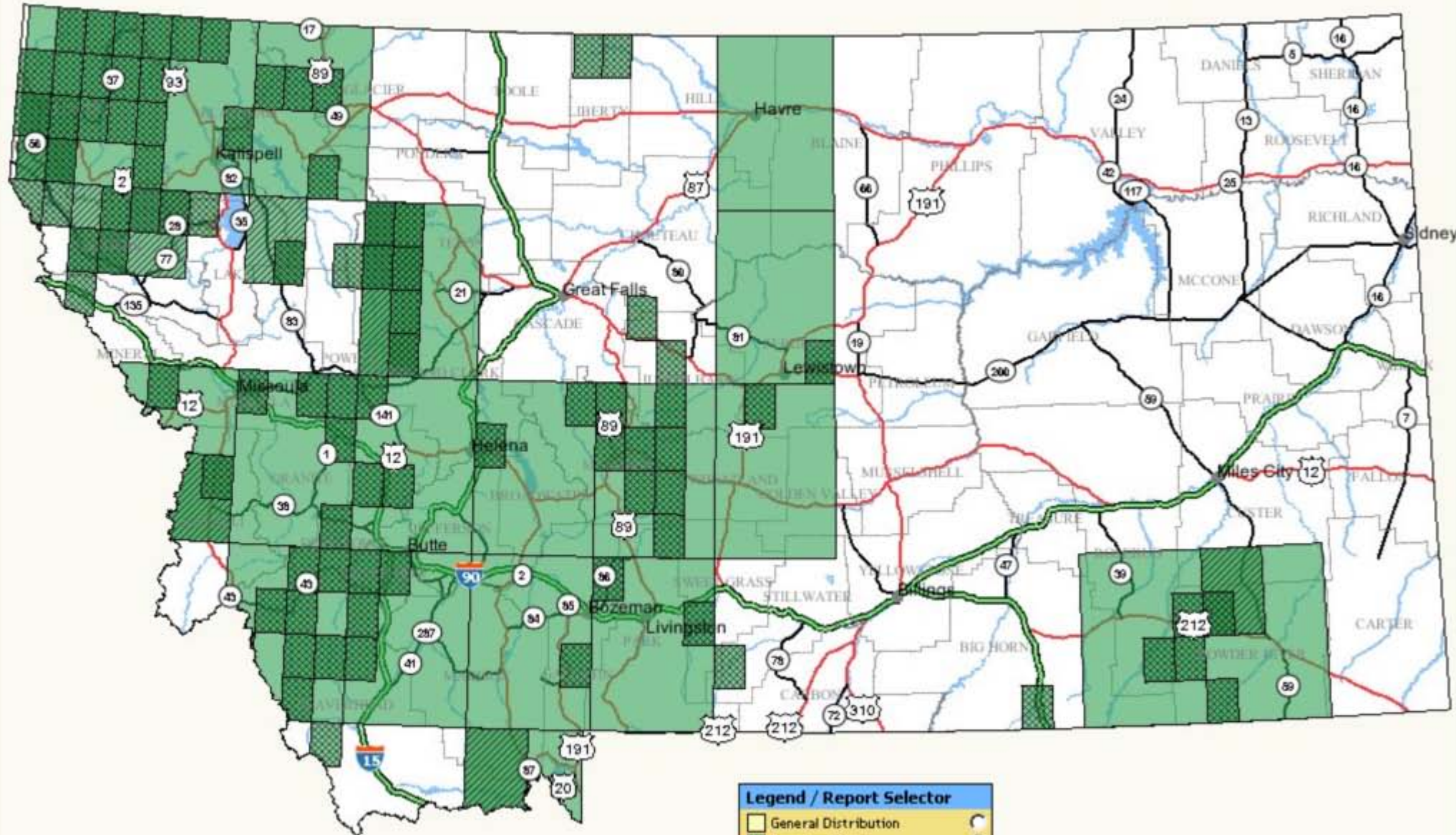
[Photo Viewer](#)

[Map Layers](#)

[Search for Location](#)

Northern Goshawk - Breeding Direct

<http://mtnhp.org>



Lat: 46.30796  
Long: -110.33258

Tabular Report



# Agency Level Access to Point Observation Data

**NATURAL HERITAGE TRACKER** Home File Edit View Tools Help Sign Out Maxell, Bryce

**Query / Reports**

- Search by Animals
  - Mammals
  - Birds
    - Northern Flicker (Red-sha...
    - Northern Flicker (Yellow...
    - Northern Goshawk**
    - Northern Harrier
    - Northern Hawk Owl
  - Reptiles
  - Amphibians
  - Fish
  - Invertebrates
- Search by Species Status
  - Global
  - State
  - USFWS
  - USFS
  - BLM
  - Heritage

search reset

**Add Observations**

**Photo Viewer**

**Map Layers**

**Search for Location**

**Northern Goshawk - Points**

<http://mtnhp.org>

**Legend / Report Selector**

- General Distribution
- Breeding Direct
- Breeding Indirect
- Transient
- Overwintering Confirmed
- Overwintering Not Confirmed
- Bird Points
- Pending Points

Lat: 44.07419  
Long: -107.66802

0 28.62mi

Expand All Collapse All  
Fade NoFade

**Tabular Report**

0 Internet



# View Tabular Data, Summary Graphs, & Different Map Layers

**NATURAL HERITAGE TRACKER** Home File Edit View Tools Help Sign Out Maxell, Bryce

**Query / Reports**

- Search by Animals
  - Mammals
  - Birds
    - Northern Flicker (Red-sha...
    - Northern Flicker (Yellow...
    - Northern Goshawk**
    - Northern Harrier
    - Northern Hawk Owl
  - Reptiles
  - Amphibians
  - Fish
  - Invertebrates
- Search by Species Status

search reset

**Add Observations**

**Photo Viewer**

**Map Layers**

- Map Layers
  - Towns
  - County
  - LL / QLL / QQLL
  - Highways
  - Township and Range
  - Lakes/Streams
  - Public Lands
    - BLM
    - BOR (BuRec)
    - USFWS
    - NPS
    - USFS
    - Other USDA
    - CoE & DoD
    - State Trust
    - DFWP
    - Univ & Inst
    - County & City
    - BIA Trust
    - Tribal
    - Plum Creek
    - Other Private
    - Priv Conservtn
- Base Map
  - Air Photos (color 2005)
  - Air Photos (b/w)
  - Topographic (hillshade)

Expand All Collapse All  
Fade NoFade

**Northern Goshawk - Points**

Legend / Report Selector

- General Distribution
- Breeding Direct
- Breeding Indirect
- Transient
- Overwintering Confirmed
- Overwintering Not Confirmed
- Bird Points
- Pending Points

**Tabular Report**

**Northern Goshawk summary for selected extent**

[Link to Field Guide](#)

**Verified Sightings** QLL

Earliest:	Feb 12	14B				
Latest:	Nov 25	28D				
<b>B</b>	b	t	<b>W</b>	w	?	Tot
12	36	15	60	52	0	180

**Observation Records**

**Survey Records**

Latitude = 46.90063 to 47.83670  
Longitude = -113.30164 to -112.03094

**Group Header**  
sub header

TYPE		SCIENTIFIC NAME	COMMON NAME	ECO RANK	OBS. DATE	FIELDA	FIELDB
Bird	Hilite	Habeas corpus	Bobolink	G4 S2B	02/04/2007	blah	blah
Bird	Hilite	Habeas corpus	Bobolink	G4 S2B	02/04/2007	blah	blah
Bird	Hilite	Habeas corpus	Bobolink	G4 S2B	02/04/2007	blah	blah
Bird	Hilite	Habeas corpus	Bobolink	G4 S2B	02/04/2007	blah	blah
Bird	Hilite	Habeas corpus	Bobolink	G4 S2B	02/04/2007	blah	blah
Bird	Hilite	Habeas corpus	Bobolink	G4 S2B	02/04/2007	blah	blah

Internet



# Viewing Georeferenced Digital Photos in Context of Animal Observations and Aerial Photos

The screenshot displays the 'NATURAL HERITAGE TRACKER' web application interface. The top navigation bar includes 'Home', 'File', 'Edit', 'View', 'Tools', 'Help', and 'Sign In'. A left sidebar contains menu items: 'Query / Reports', 'Add Observations', 'Photo Viewer', 'Photosets' (with a checked 'Amphibian Inventory Photos' sub-item), 'Map Layers', and 'Search for Location'. The main map area shows a satellite view of a mountainous region with several yellow camera icons and labels: '7038064', '7038065', '7038066', and '7038018'. A large photo viewer window on the right shows a landscape with a pond and green fields, which is a zoomed-in view of the area around the '7038065' marker. Below the map is a 'Tabular Report' section titled 'PHOTOS' with the following entries:

Photo ID	Description	Photo Date	View Photo
7038018	Pond, 3.3 miles NE of Monument Peak	8/10/2005	<a href="#">View Photo: 7_038_018.jpg</a>
7038064	Pond, 2.6 miles NE of Haystack Peak	8/10/2005	<a href="#">View Photo: 7_038_064.jpg</a>
7038065	Pond, 2.4 miles NE of Haystack Peak	8/10/2005	<a href="#">View Photo: 7_038_065.jpg</a>
7038066	Pond, 2.6 miles NE of Haystack Peak	8/10/2005	<a href="#">View Photo: 7_038_066.jpg</a>

At the bottom left of the report, there are controls: 'Expand All', 'Collapse All', 'Fade', and 'NoFade'. The bottom of the browser window shows the taskbar with an 'Internet' icon.



# Enter Observations Online

<http://mtnhp.org>

Maxell, Bryce

NATURAL HERITAGE TRACKER Home File Edit View Tools Help Sign Out

Query / Reports

Add Observations

By Point (on map)

[Add New Observations](#)

Click the link above then click on the map. After you click, you will be given a form where you may enter multiple observations / species. When mapping your observation, please zoom in and click as close to your observation site as possible.

By QQL / TRS (from list)

By Excel Spreadsheet



NATURAL HERITAGE TRACKER Help Feedback

### Enter New Observation(s)

TIME/PLACE ANIMALS SPECIES INFO CONFIRM Back Next Cancel

Enter numbers of sightings:  
(at least one number per species is required)

#### BIRDS

Northern Goshawk ([Accipiter gentilis](#)) \*  
*Montana Species of Concern*

(B) Direct evidence of breeding

How Close to Selected Location?

- Exact Location
- Within 50 meters
- Within 100 meters
- Within 200 meters
- Within 500 meters
- Within 1,000 meters
- Within 10,000 meters

<input type="text"/>	# of Unknown Sex	<input type="text"/>	# of Nestlings / Fledglings
<input type="text"/>	# of Males	<input type="text"/>	# of Subadults
<input type="text" value="1"/>	# of Females	<input type="text"/>	# of Eggs
<input type="text"/>	# of Pairs	<input type="text" value="1"/>	# of Nests

Species Observation Notes (required for this sighting)  
(e.g., Observed pair copulating and cooperatively building a nest)

Female on nest.

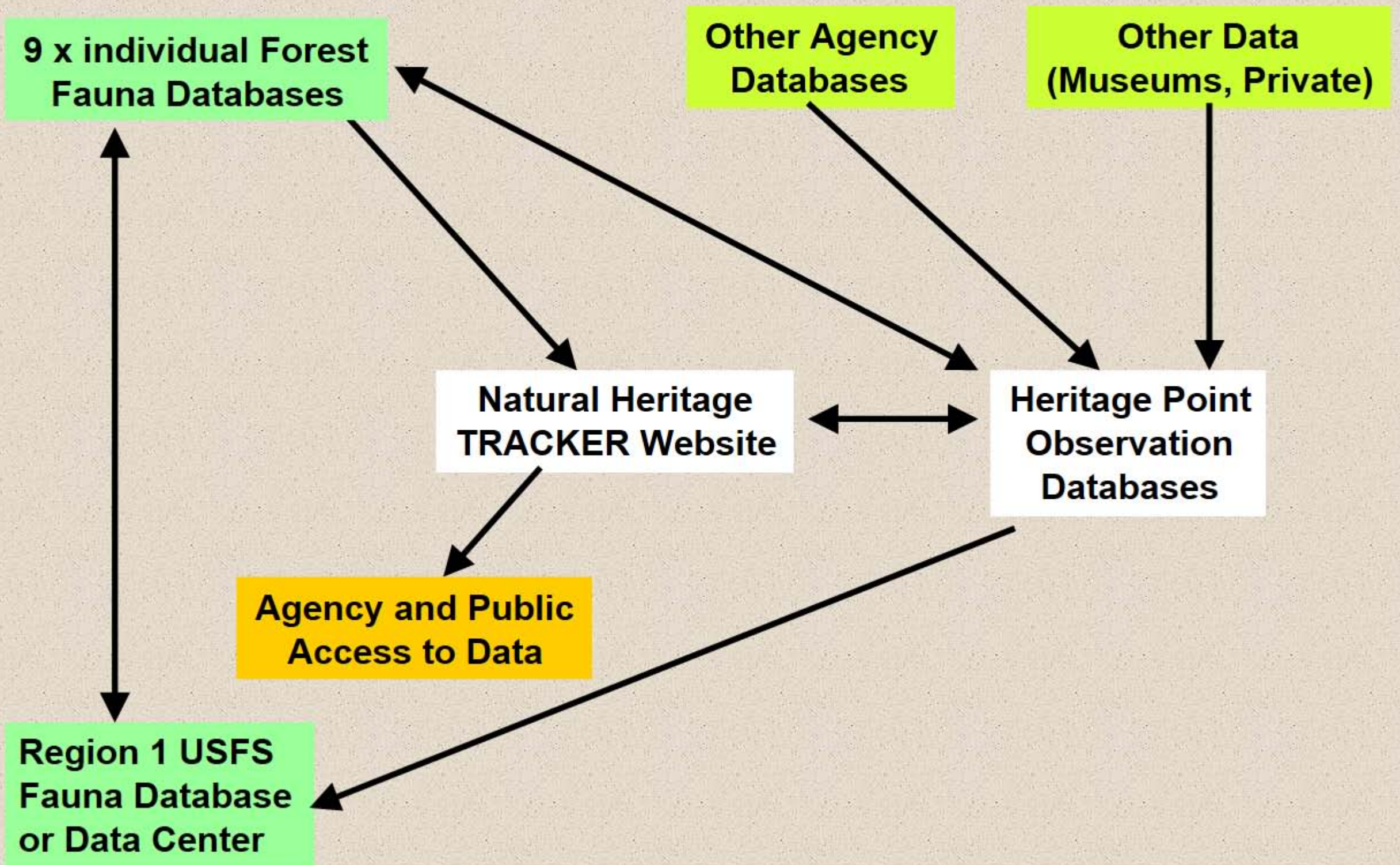
Habitat Observation Notes (required for this sighting)  
(e.g., Nest was found in a Ponderosa Pine woodland with an understory of wildflowers)

Dense conifer forest with meadow nearby.

Lat: 47.56590  
Long: -113.78076



# Data Exchanges - USFS Fauna and Montana Natural Heritage Program





# Digital Data Exchange Basics

- Central databases are typically simplistic flat table structures with widely used data fields while monitoring databases have more complex structures and information completely unique to that database
  - Exchange on common data fields
  - Data fields not held in common can either not be exchanged or can be loaded into memo fields
  - Link on data source and unique record ID for that data source to allow for data updates between databases as well as addition of new records
  - Exchange data on annual, semiannual, or other appropriate time schedule
- \* Please email [bmaxell@mt.gov](mailto:bmaxell@mt.gov) for POD data structure and data entry forms