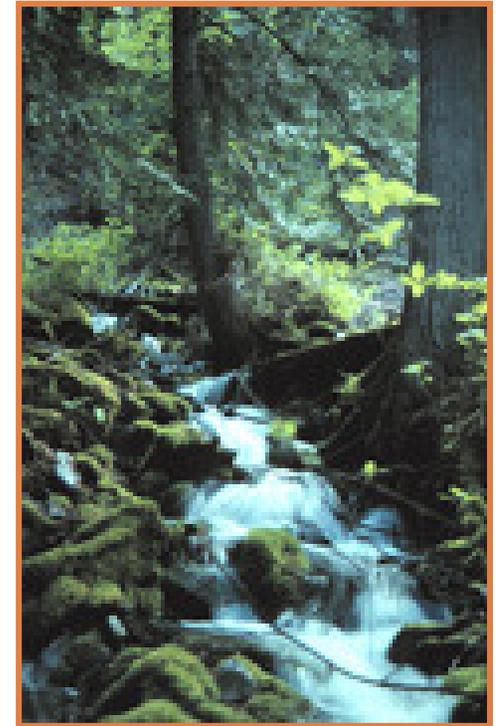


# The Montana Natural Resource Information System



Presented by Sibyl Govan

January 15, 2008

## Environmental Quality Council



The screenshot shows the nris.mt.gov website. At the top, there is a navigation bar with the 'mt.gov' logo and the text 'Montana's Official State Website'. Below this is a green header with the title 'NATURAL RESOURCE INFORMATION SYSTEM'. A secondary navigation bar contains links for 'Geographic Information', 'Natural Heritage Program', 'Water Information', 'Request Tracker', and 'Library Home'. The main content area is divided into three columns. The left column features search boxes for the 'Library Catalog' and 'Library Website', and a 'Browse' section with links to 'Montana Maps', 'Interactive Map and Data Applications', 'Animal Field Guide', 'Plant Field Guide', and 'Drought Information'. Below this is a 'Request information or data from NRIS' section with an information icon. The middle column has a 'What's New' section with three news items: 'A Multi-scale Analysis Linking Prairie Breeding Birds to Site and Landscape Factors Including USFS G...', 'Post-fire Recovery of Wyoming Big Sagebrush Shrub-steppe in Central and Southeast Montana', and 'Helena Students to Celebrate GIS Day at the Montana State Library'. Below the news is a 'More NRIS news...' link and a photograph of an autumn willow. The right column features a 'State Librarian Darlene Staffeldt' section with a portrait and a welcome message. Below that is a 'Features' section with icons for 'Water Information', 'Geographic Information', and 'Natural Heritage Program'. At the bottom right, there are two buttons: 'MONTANAVIEW Remotely Sensed Data' and 'Fire Response Data Page'.

**mt.gov**  
Montana's Official State Website

**NATURAL RESOURCE INFORMATION SYSTEM**

Geographic Information | Natural Heritage Program | Water Information | Request Tracker | Library Home

**Search Library Catalog**  
(Books, Videos, etc.)

**Search Library Website**  
(Web pages, PDFs, etc.)

**Browse**

- Montana Maps
- Interactive Map and Data Applications
- Animal Field Guide
- Plant Field Guide
- Drought Information

**Request information or data from NRIS**



**What's New**

- [A Multi-scale Analysis Linking Prairie Breeding Birds to Site and Landscape Factors Including USFS G...](#)
- [Post-fire Recovery of Wyoming Big Sagebrush Shrub-steppe in Central and Southeast Montana](#)
- [Helena Students to Celebrate GIS Day at the Montana State Library](#)

[More NRIS news...](#)



**Autumn willow**  
Salix serissima  
Image from the [Montana Field Guide](#), a collaborative effort between the [Montana Natural Heritage Program](#) and [Montana Fish, Wildlife and Parks](#)

**State Librarian Darlene Staffeldt**  
Welcome to the Natural Resource Information System and the Montana State Library! More...



**Features**

-  Water Information
-  Geographic Information
-  Natural Heritage Program

**MONTANAVIEW**  
Remotely Sensed Data

 **Fire Response Data Page**



## **Water Information System**

**Water Quality**

**Climate**

**Surface Water**

**Ground Water**

**Water Rights**

**Wetlands**

## **Natural Heritage Program**

**Plant & Animal Data**

**Natural  
Communities**

**Online Field Guides**

**Record Your  
Observations**

**Geographic Area  
Reviews**

## **Geographic Information System**

**Maps**

**GIS Data**

**Analytical Services**

**Technical Assistance**

**Help with Metadata**

# Water Information System

Water-related topic guides with relevant links, maps and information.

## Ground Water

- NRIS Ground Water Resources Page
- USGS Groundwater Data for Montana
- Montana Ground Water Atlas (pdf)
- Montana Bureau of Mines and Geology
- Search for Well Information with the Montana Thematic Mapper

Water Information

## Surface Water

- USGS Stream Flow Data
- NRCS Streamflow Forecasting
- NRCS Surface Water Supply Index (SWSI)
- NRCS Water Supply Forecast Maps
- US Bureau of Reclamation Reservoir Storage
- DNRC Reservoir Storage
- Army Corp of Engineers Stream and Wetlands Permits
- Stream Corridor Assessment Screening Tool
- Center for Riverine Science and Stream Re-naturalization

Water Information

## Water Rights

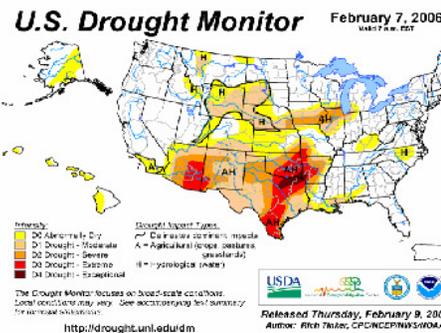
- Water Rights Adjudication (House Bill 22)
- Montana Water Rights Query System
- DNRC Water Rights Bureau
- "Water Rights in Montana" (2004)
- "Wading into Montana's Water Rights" by Michael...

Water Information

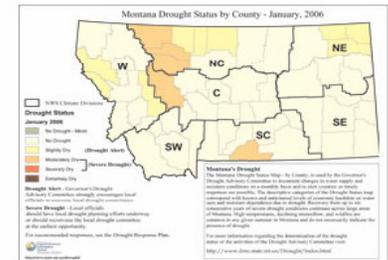
## Drought Information



Navigation menu with icons for: Current Conditions & Statistics, Drought Responses, Publications & Catalog Search, History & Public Awareness, and Drought Advisory Committee.



### Montana County Drought Status



Click on this image for a printable version of this map and associated drought histories created by the [Montana Drought Advisory Committee](#)

### CURRENT CONDITIONS

1. [Montana County Drought Status](#) map and county table.
2. [U.S. Drought Monitor](#) map updated weekly includes text summary.
3. [U.S. Drought Monitor Current Condition](#) maps of indices on one page.
4. [Current Year Water Data](#)
5. [Montana Snow and Water maps 2001-2005](#) of Mountain Snow Water Equivalents, Monthly Stream Flow Prospects, and Surface Water Supply Index.
6. [U.S. Soil Moisture Monitoring](#)
7. [Stream flow in Montana](#)
8. [Surface Water in Montana](#)
9. [Montana Bureau of Mines and Geology Ground Water-Information Center](#)
10. [Montana Moisture Status](#)
11. [Drought Information-Billings, MT area](#)
12. [Drought Information-Great Falls, MT area](#)

# Natural Heritage Program

mtnhp.org

The screenshot shows the homepage of the Montana Natural Heritage Program website. At the top left is the logo featuring a bird and the text "MONTANA Natural Heritage Program". To the right is a horizontal strip of five images: a river, a white flower, a green field, a bird, and pink flowers. Below the logo is a search bar with a "GO" button. A navigation menu includes links for HOME, ANIMALS, PLANTS, ECOLOGY, PUBLICATIONS, DATA, and ABOUT. The main content area is divided into three columns. The left column, titled "WHAT'S NEW", contains text about the "Natural Heritage TRACKER" and a "Montana Plant Conservation Conference". Below this is a "Recent Publications" section with three article titles. The middle column, titled "MONTANA NATURAL HERITAGE PROGRAM", features a vertical list of five menu items: "NATURAL HERITAGE TRACKER", "SEARCH SPECIES OF CONCERN", "MONTANA FIELD GUIDE" (with icons of a sun and a cow), "VIEW ECOLOGY INFORMATION", and "REQUEST INFORMATION". Below this is a section for "A Montana Species of Concern" featuring a photograph of a small plant with a coin for scale, identified as "Island Koenigia" (*Koenigia islandica*). The right column, titled "OTHER RESOURCES", includes the "MONTANA Natural Resource Information System" logo, a link to "Montana Stewardship Data & Maps", the "NatureServe" logo with the text "We're part of the Natural Heritage Network-- NatureServe .", and a paragraph about data linking to other programs. At the bottom right, it mentions "The University of Montana" and "The Natural Heritage Program is operated by the University of Montana." A footer at the very bottom provides contact information: "Montana State Library, 1515 East Sixth Ave., Helena, MT 59620-1800 • 406-444-5354 • fax 406-444-0581 • email: mtnhp@mt.gov".

**SEARCH:**  **GO**

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

**WHAT'S NEW**

Introducing the Natural Heritage *TRACKER*  
View statewide distributions for all Montana's animals.

Montana Plant Conservation Conference:  
Feb. 27-78, Bozeman. [Read more...](#)

**Recent Publications**

Post-fire Recovery of Wyoming Big Sagebrush Shrub-steppe in Central and Southeast Montana

A Multi-scale Analysis Linking Prairie Breeding Birds to Site and Landscape Factors Including USFS GAP Data

Aquatic Invertebrate Species of Concern on USFS Northern Region Lands

[More Publications...](#)

The Natural Heritage Program provides information to support stewardship of our native species & habitats, emphasizing those of conservation concern. The program is located in the [Montana State Library](#), where it is part of the [Natural Resource Information System](#).

**MONTANA NATURAL HERITAGE PROGRAM**

- [▶ NATURAL HERITAGE TRACKER](#)
- [▶ SEARCH SPECIES OF CONCERN](#)
- [▶ MONTANA FIELD GUIDE](#) 
- [▶ VIEW ECOLOGY INFORMATION](#)
- [▶ REQUEST INFORMATION](#)

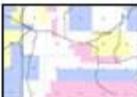
**A Montana Species of Concern**



**Island Koenigia** *Koenigia islandica*  
Image from the [Montana Field Guide](#)

**OTHER RESOURCES**

  
MONTANA Natural Resource Information System

 [Montana Stewardship Data & Maps ▶](#)

 **NatureServe** We're part of the Natural Heritage Network-- NatureServe .

Our data are linked to similar programs in all 50 states. Find species and ecological data for North America at [NatureServe Explorer](#).

The University of **Montana** The Natural Heritage Program is operated by 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

## **Natural Heritage Program**

### **Species of Concern:**

**Species that are at-risk or potentially at-risk due to rarity, restricted distribution, habitat loss or other factors.**

- **US Bureau of Land Management: Special Status and Watch**
- **US Forest Service: Sensitive and Watch**
- **US Fish and Wildlife Service: Threatened, Endangered and Candidate**

At least 14 species have had their designations removed or lowered due to Natural Heritage Program research.

# Natural Heritage Program

# Publications



MONTANA  
Natural Heritage  
Program

A program of the Natural  
Resource Information System,  
Montana State Library

## Plant Species of Concern

April 2003

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MONTANA  
Natural Heritage  
Program

A program of the  
Natural Resource Information System,  
Montana State Library

## Animal Species of Concern

January 2003



Montana Fish,  
Wildlife & Parks



Piping Plover (*Charadrius melodus*)  
Photo by C. M. Carlson

**Introduction**

This species of concern report is issued jointly by the Montana Fish Wildlife and Parks (MFWP) and the Montana Natural Heritage Program (MTNHP) and is the result of an agreement between MFWP and MTNHP to determine the status of and manage the data associated with Montana Animal Species of Concern (MASC). Previously, separate species of concern lists created independently by MFWP and MTNHP caused confusion for the public and agency personnel. In November of 2000 MFWP and MTNHP agreed to create one list of Montana Animal Species of Concern.

The list and ranks assigned to animal species of concern in Montana are used to prioritize data acquisition by MTNHP and MFWP, and provide information to others on the current status of these species. Species are considered "species of concern" if they have particular threats, declining population trends, or restricted distribution that warrant special attention.

Montana Natural Heritage Program (MTNHP) serves as the state's information source on Species of Concern — plants and animals potentially at risk in Montana. This report, which updates information, identifies 330 vascular plant Species of Concern, Potential Concern in the state, based on information from field observations, publications and reports, herbarium specimens, and taxonomists. Also included are the preliminary status ranks assigned to 114 lichen species currently considered rare or threatened based on recent work by experts studying these groups; updated from the 2001 publication.

Seven Species of Concern. Seven have been downgraded from Potential Concern (rank 2); two other species were added as Potential Concern (rank 2). Also, as of this update, state ranks are assigned to all Species of Concern have ranks of S1 through S2S3 (rank 3), whereas the Potential Concern list includes those with uncertain status.

Montana Natural Heritage Program continuously reviews and updates status of Species of Concern. Updated insights are generated by field surveys, research, and taxonomists or rank changes, and information supporting them, are provided to the public and agency personnel, and taxonomists and resource specialists throughout the state, who provide any additional information to guide the biological management of these species. Information that we receive from botanists and others is used in this process, and contributes to more accurate status assignments. We continue to ask that all observations of these species be reported to the Montana Natural Heritage Program, with as much detail as possible. Field observations and information that should be submitted are available on the Montana Natural Heritage Program website.



Ute Ladies' Tresses  
(*Spiranthes diluvialis*)  
Illustration by Carolyn Crawford

# Natural Heritage Program

# Online Field Guide

## MONTANA PLANT FIELD GUIDE

*Spiranthes diluvialis*

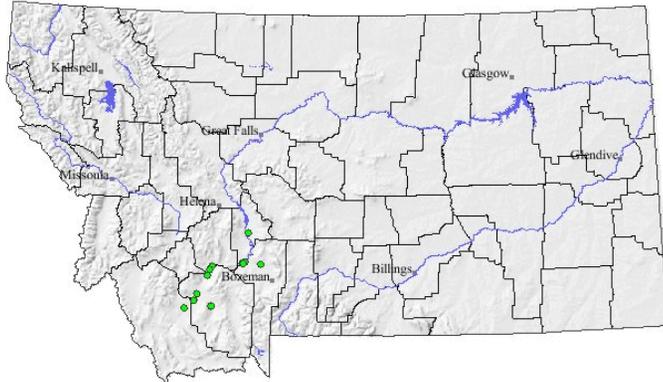
Ute Ladies' Tresses (Orchidaceae)



Photo by Kristi Du



### Known Occurrences



### Global Distribution

SPIRANTHES DILUVIALIS occurs in three general areas of the interior western United States where it is sparse and highly restricted on the landscape: (1) near the base of the e. slope of the Rocky Mountains and intermontane valleys in nc. and c. Colorado., eastcentral Idaho, sw. Montana, and ec. and se. Wyoming; also downstream in w. Nebraska; (2) the Uinta Basin and elsewhere in the upper Colorado River drainage of e. Utah; and (3) near the w. base of the Wasatch Mountains and elsewhere in the e. Great Basin of w. UT (historically in e. Nevada); also disjunct in the Okanogan Highlands of Washington. Counties of distribution include Colorado: Clear Creek, Jefferson, Boulder, and Larimer cos., possibly in Moffat County too. Utah: Daggett, Garfield, Wayne, Utah, Salt Lake, Weber and Toole cos. Nevada: Lincoln county (historical record), Montana: Beaverhead, Gallatin, Jefferson, and Madison cos. Idaho: Bonneville, Jefferson cos., Wyoming: Converse, Goshen, Laramie and Niobrara cos., Nebraska: Sioux County, and Washington: Okanogan Co.

**Status**  
Heritage Prog  
Species of Con  
Global Rank: G  
State Rank: S2  
**Agency Status**  
USFWS: LT  
USFS:  
BLM: WATCH

NRIS Home | NatureServe Explorer | MT Bird Distribution | MT State Library | NHP Home |

ANIMALS | PLANTS | COMMUNITIES | REPORTS | GET DATA | ABOUT NHP |

**MONTANA Natural Heritage Program**

home » animal field guide

### ANIMAL FIELD GUIDE

This guide provides information on identification, habitat, ecology, reproduction, range, and distribution of Montana's animal species of concern, along with references and photographs.

in Partnership with  
Montana Fish, Wildlife & Parks.

SEARCH FIELD GUIDE

Find

OTHER FIELD GUIDES

- ▶ Rare Plant Field Guide
- ▶ Community Field Guide
- ▶ Montana Bird Distribution Database

Select a Category Above to Browse or Search

Click Here to learn how to use this guide

- AMPHIBIANS
- BIRDS
- FISH
- INVERTEBRATES
- MAMMALS
- REPTILES

NRIS Home | NatureServe Explorer | MT Bird Distribution | MT State Library | NHP Home |

ANIMALS | PLANTS | COMMUNITIES | REPORTS | GET DATA | ABOUT NHP |

**MONTANA Natural Heritage Program**

home » animal field guide » birds » loons » loons » common loon

### ANIMAL FIELD GUIDE

## Common Loon

*Gavia immer*  
(Gaviidae)

Montana Species of Concern  
Global Rank: G5  
State Rank: S2B

Agency Status  
USFWS: none  
USFS: SENSITIVE  
BLM: SPECIAL STATUS

Common Loon, Closeup of Head

General Description  
The Common Loon is a large and mainly aquatic bird. Males are generally larger than females. Adult body length ranges from 71 to 92 cm (28 to 36 inches) with wingspans to 147 cm (58 inches). Weight varies ranging from 1.6 to 8 kg (3.5 to 17.6 lb) with an average of about 3 to 4 kg (6.6 to 8.8 lb). (McIntyre 1988, McIntyre and Barr 1997). The feet are located far back on the body and are large, webbed, and sweep to the side rather than forward under the belly. This trait makes it difficult for loons to walk on land but allows more efficient swimming underwater.

Sexes are indistinguishable based on plumage. The head and neck of breeding adults are black with a green gloss. The back, wings and sides are also black. Scapulars and wing-coverts have large white markings, which is a distinctive field mark. The eye is red. Common Loons have a broad patch of vertical white stripes on the side of the neck and a smaller patch on the upper foreneck. The breast and belly are white and the bill is straight, heavy and black (McIntyre and Barr 1997). In the non-breeding plumage, the head, neck and upper parts are dark gray to dark brown. The cheeks, throat, and underparts are white. The bill is brownish-gray to pale bluish-gray or horn colored. The iris is brown. The tail is dark brown, tipped with white (Bent 1919, Johnsgard 1987, McIntyre 1986, 1988). Juvenile plumage is similar to the adult non-

SEARCH FIELD GUIDE

Find

ADDITIONAL MEDIA  
(click on image to view)

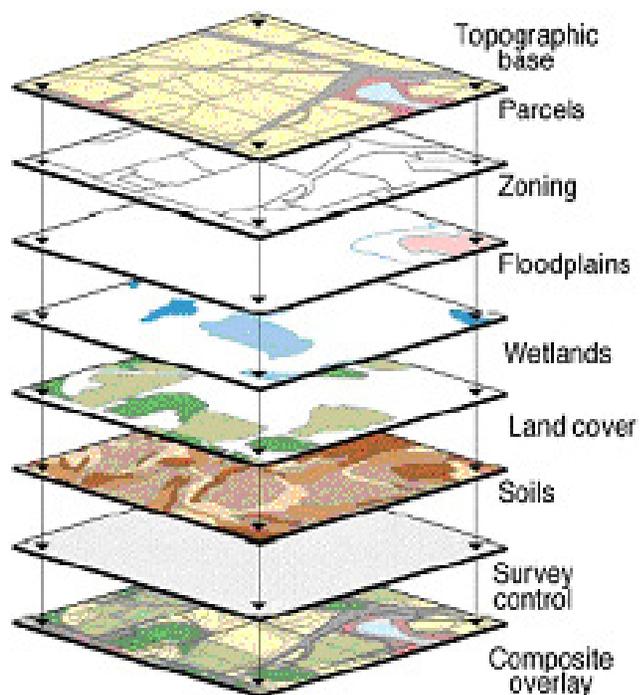
OTHER FIELD GUIDES

- ▶ Rare Plant Field Guide
- ▶ Community Field Guide
- ▶ Montana Bird Distribution Database



# Montana Geographic Information Clearinghouse

Maps  
GIS Data  
Aerial photographs  
Web Applications  
Staff-assisted research  
State and Federal Partnerships



Selected Attributes of Well Depth													
MINUM	DNR	SITE NAME	LATITUDE	LONGITUDE	GEOMETHOD	DATUM	TOWNSHIP	RANGE	ISP_SE	TRACT	COUNTY	TYPE	TOT_L
120655		MEWALD LUCY	48.1732	-109.8913	TRS-TVM	NAD07	28N	14E	23	BE0	CHOTEAU	WELL	100.000000
120665		MATTHEWS BELLE M	48.2036	-110.4667	TRS-TVM	NAD07	28N	10E	7	BE0	CHOTEAU	WELL	400.000000
120673		BALAZC FRANK T	48.2125	-110.0007	TRS-TVM	NAD07	28N	13E	2	AD	CHOTEAU	WELL	187.000000
120674		KALANCK STEVE	48.1837	-110.0188	TRS-TVM	NAD07	28N	13E	14	BE0	CHOTEAU	WELL	100.000000
120675		KALANCK STEVE	48.1837	-110.0188	TRS-TVM	NAD07	28N	13E	14	BE0	CHOTEAU	WELL	100.000000
121093		SEVOK ADOLPH	47.7365	-109.7974	TRS-TVM	NAD07	22N	14E	4	AD	CHOTEAU	WELL	30.000000
121766		DAVIS DAVID L AND BARBARA	47.5	-110.7272	MAP	NAD07	20N	06E	17	BA00	CHOTEAU	WELL	181.000000
121768	7511	DICKHANS JOSEPH	47.607	-110.526	TRS-TVM	NAD07	21N	09E	1	BCA	CHOTEAU	WELL	80.000000
121779	7585	I-X RANCH CO	48.1544	-110.084	TRS-TVM	NAD07	28N	13E	29	CAA	CHOTEAU	WELL	75.000000
121777	7585	I-X RANCH CO	48.1362	-110.061	TRS-TVM	NAD07	28N	13E	33	BE0	CHOTEAU	WELL	25.000000
122838		BENNETT ARTHUR S	47.8238	-110.888	MAP	NAD07	24N	08E	23	AC00	CHOTEAU	WELL	50.000000
122855	0377	REEVES ROGER AND WANDA Z	47.818										
122387		ANDERSON EDWARD	47.5009										
122697		CHOTEAU TEST HOLE MMV-4	47.8235										
123989		CHOTEAU TEST HOLE MMV-5	47.8235										
123990		CHOTEAU TEST HOLE MMV-6	47.8235										
123992		CHOTEAU TEST HOLE MMV-8	47.8189										
123994		MSCA *SEDLER DENNIS AND ARL	48.0397										
123995		MSCA *SEDLER DENNIS AND ARL	48.0396										
123996		MSCA *SEDLER DENNIS AND ARL	48.0396										
123997		MSCA *SEDLER DENNIS AND ARL	48.0414										
123998		MSCA *SEDLER DENNIS AND ARL	48.0415										
123999		MSCA *SEDLER DENNIS AND ARL	48.0442										
123900		MSCA *SEDLER DENNIS AND ARL	48.0414										
123903		MSCA *SEDLER DENNIS AND ARL	48.0444										
123670		ELLIOTT CHARLES R SR	47.8763										
123763		ROBERTSON OIL CO *MONITORING	48.1788										
123807		POPE HENRY O	47.8347										
124155		ROCKY BOY INDIAN RESERVATIO	48.2986										
124156		ROCKY BOY INDIAN RESERVATIO	48.2986										
124157		ROCKY BOY INDIAN RESERVATIO	48.2987										
124158		LODGE POLE SHARON	48.2582										



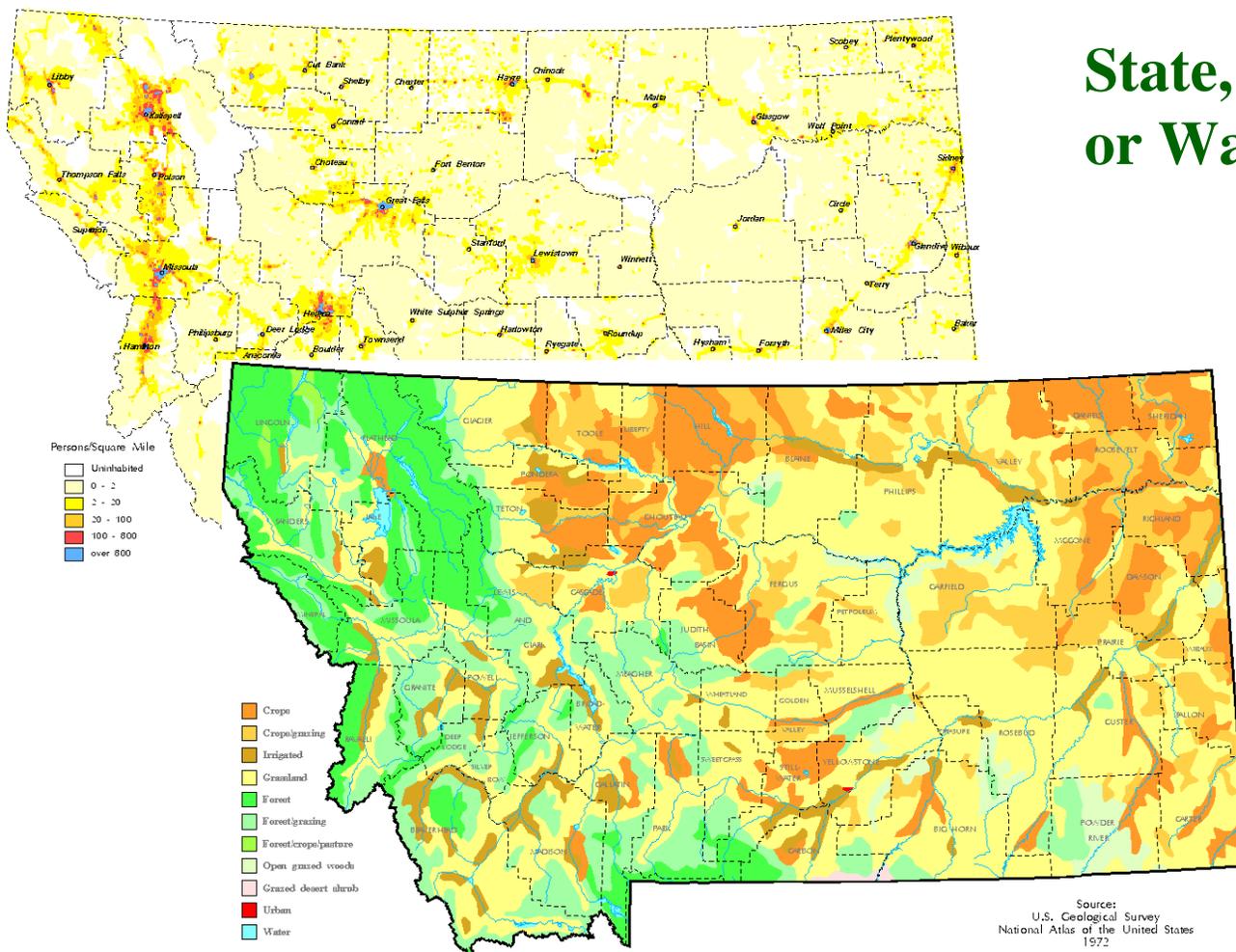
# Montana Maps Collection

**State, County, Region  
or Watershed**

**Variety of  
themes.**

**Easy to find  
and  
download.**

**.pdf format**



# Services for GIS Users

category	description	source	type	metadata	data
	Admin and Political Boundary <b>American Indian reservations</b>	USFS			
	Admin and Political Boundary <b>Antelope Hunting Districts - 2004/2005</b>	FWP			
	Admin and Political Boundary <b>Bighorn Sheep Hunting Districts - 2004/2005</b>	FWP			
	Admin and Political Boundary <b>Black Bear Hunting Districts - 2004/2005</b>	FWP			
	Admin and Political Boundary <b>BLM Administrative Districts</b>	BLM			
	Admin and Political Boundary <b>BLM Special Management Areas</b>	BLM			
	Admin and Political Boundary <b>Conservation Districts</b>	DNRC			



## GIS Data List

Choose from an extensive collection of statewide or regional datasets. Download in shapefile format to use with GIS software.



## GIS Data Bundler

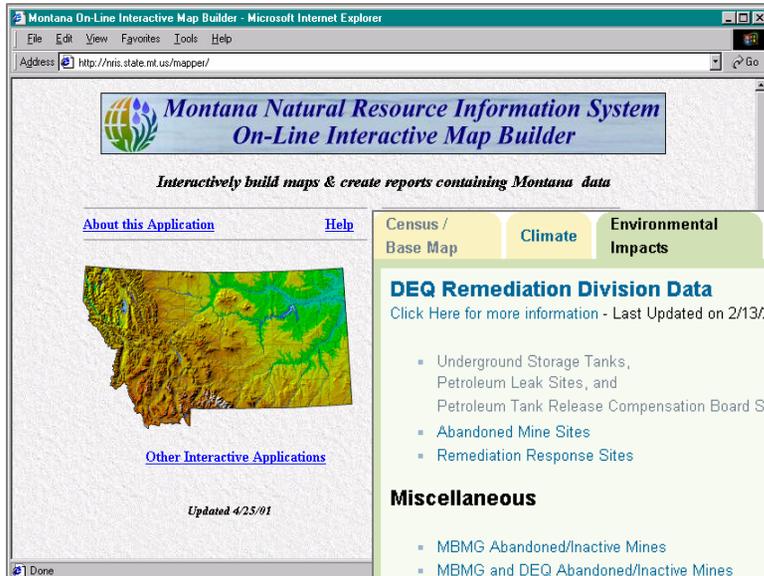
Pick and Choose from an extensive collection of GIS datasets to prepare a zip file of data clipped to your chosen area of interest.

Business and Economic	Cadastral and Land Descs	Cultural and Demographic	Elevation and Derived Prods	Imagery and Base Maps	Inland Water Resources	Locations and Geodetic Nets	Transportation Networks
Administration and Political Boundaries	Agriculture and Farming	Atmospheric and Climatic	Biologic and Ecologic	Environmental	Facilities and Structures	Geologic and Geophysical	Human Health and Disease
<input type="checkbox"/> American Indian reservations (polygons)				<input type="checkbox"/> DEQ - Septic Land Application Sites (points)			
<input type="checkbox"/> BLM Administrative Districts (polygons)				<input type="checkbox"/> DEQ Abandoned Mines Inventory (points)			
<input type="checkbox"/> Counties, U.S. Census Bureau (polygons)				<input type="checkbox"/> DEQ Non-Facility Petroleum Leak Sites (points)			
<input type="checkbox"/> Land Ownership / Stewardship (Ownership, Easements, and Leases) (polygons)				<input type="checkbox"/> DEQ Remediation Response Sites (points)			
<input type="checkbox"/> Legislative Districts 1994-2004 (polygons)				<input type="checkbox"/> DEQ Underground Storage Tank Facilities (points)			
<input type="checkbox"/> Legislative Districts 2004-2014 (polygons)				<input type="checkbox"/> DEQ Underground Storage Tank Facility Leak Sites (points)			
<input type="checkbox"/> Mining Districts (polygons)				<input type="checkbox"/> EPA Superfund National Priority Sites (CERLIS 99) (polygons)			
<input type="checkbox"/> National Forests (polygons)				<input type="checkbox"/> EPA Toxic Release Inventory (TRI) sites (points)			
<input type="checkbox"/> Public Land Survey Section Lines - 1:100,000 scale (polygons)				<input type="checkbox"/> Landfills (1996) (points)			
<input type="checkbox"/> Township boundaries -1:100,000 scale (polygons)				<input type="checkbox"/> Mines - Priority Abandoned Hardrock Mine Sediment Sample Sites (points)			



## Web Services

Connect directly to the data using desktop GIS application software. No downloading massive images!



## Montana Digital Atlas

Census / Base Map   Climate   **Environmental Impacts**   Land Information   Water   Biological Data   Cultural Data

**DEQ Remediation Division Data**  
Click Here for more information - Last Updated on 2/13/2006

- Underground Storage Tanks, Petroleum Leak Sites, and Petroleum Tank Release Compensation Board Sites
- Abandoned Mine Sites
- Remediation Response Sites

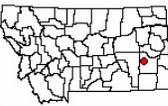
**Miscellaneous**

- MBMG Abandoned/Inactive Mines
- MBMG and DEQ Abandoned/Inactive Mines
- 2000 Septic Tank Density
- 1990 Septic Tank Density
- Septic Application Permits
- Railroad Right-of-Way
- Crude Oil Pipelines
- Landfills
- RV Dump Sites, with Fishing Access Sites and State Parks.

Back To Data List   Zoom IN OUT   Zoom Factor 2   Pan   Full Extent



This map is 3.27 miles wide. Photo Date: 7/10/1998

Location Map	Data Reports	Description
	<a href="#">Underground Storage Tank Facilities</a>	<a href="#">Click Here</a>
	<a href="#">Underground Tank Leaks</a>	<a href="#">Click Here</a>
	<a href="#">Other Leaks (Non-UST)</a>	<a href="#">Click Here</a>
	<a href="#">Petroleum Compensation Sites</a>	<a href="#">Click Here</a>

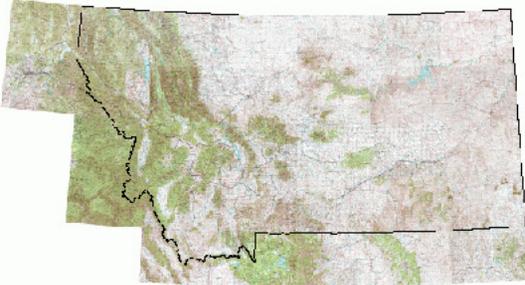
## Topofinder I

## Topofinder II

**Montana Topographic Map Finder**

The map is 674.8 miles wide.

If you make a map less than three miles wide, you may choose to view aerial photographs instead of topographic maps.



Select a Map Control, then click on the map

**Map Controls**

ZoomIn    Zoom Factor:

ZoomOut

New Center   

**Map Center Coordinates at Red +**

Datum:  NAD83     AD27

**Decimal Degrees**

Lat: 46.64    Long: -110.83

**State Plane**

E 498000    N 267000

**UTM Zone 12**

E 513000    N 5166000

**US National Grid**

12T    W5    13    66

**TRS**    T10N    R7E    S10

**Hydrologic Unit**    10030103  
Smith River

Download 24K quadrangle:

Download 100K quadrangle:

Click the small map to move main map center.



Green squares show areas 2004 hi-resolution color photo available.

[Legend / Help](#)

Map Size:

[Click Here](#) to view other map data for this area.

**New Improvements to the Topofinder I -- May 15, 2006!!!**

- 2005 Color Air Photos are now available
- 24k Map display is now seamless
- US National Grid Coordinate for map center is given
- Half-Townships and Ranges (such as 27N 21.5 W) are now supported

MONTANA Natural Resource Information System **Topofinder II**

getting started  
help  
feedback

Show raster

Topos (DRGs)

Photos (DOQs)

Show PLSS

Show highways

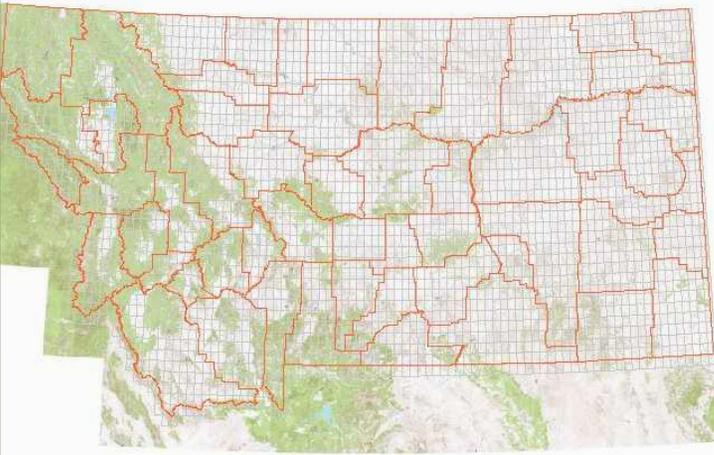
**image quality - What's this?**

maximum (85%)

high (65%)

medium (45%)

low (25%)



# NRIS Partnerships on the Web



## Montana Fisheries Information System

Detailed fisheries and stream information on over 4,500 streams and lakes.



## Montana Fishing Guide

Easy to use guide packed with angling and recreation information on Montana's fishable waters.



## Environet

EnviroNet provides detailed information on the Department of Environmental Quality's Water Quality Program, including 303(d), 305(b), and TMDL data. Data are available for 1996, 2000, 2002, and 2004.



Water Rights

## Water Right Query System

Query, report, and map Department of Natural Resources and Conservation Water Right Data.



## Montana Hunting Planner

Easy access to Montana hunting district maps, statistics, and regulations.



## Montana Department of Environmental Quality Online Query Service

This service allows you to search DEQ Remediation Division, Permitting and Compliance Division (Waste and Underground Tank Management Bureau) and Petroleum Tank Release Compensation Board databases for information on sites which may contain potentially hazardous substances and/or petroleum products.



## Public Water Supplies

Search the Department of Environmental Quality's Source Water Protection Program database for Source Water Assessments and maps of Montana's public water supplies.



US Army Corps of Engineers

## 404 Permit Finder

Interactive query and mapping of Army Corps of Engineers stream and wetland permits since 1990.



## MT Water Quality Tracker

This database contains information about all the water quality monitoring sites available from 12 Federal, State, Tribal, and Private agencies in Montana. The application contains links to data about each site and maps of the site areas.

# MSDI Imagery Stewardship



All modern mapping systems use imagery as a base layer.

Ideally, high resolution, geo-referenced aerial photographs are acquired on a 3-5 year cycle to support work in natural resources management, environmental protection, agriculture and economic development.

One of the 14 priority data layers in the Montana Spatial Data Infrastructure.





# NEW! Natural Heritage Tracker

The screenshot displays the Montana Bird Distribution website interface, which includes a map of Montana with bird sightings, a data table, and various interactive tools.

**Montana Bird Distribution - Microsoft Internet Explorer**

**Layers:**

- (No Base)
- Topographic
- Hill Shade
- Highway Map
- Air Photos
- Public Lands
- County
- Town Range Sect.
- LL / QLL
- Lakes/Streams
- Highways

**USER TOOLS**

**BIRD DISTRIBUTION**

American White Pelican

Bird Distribution

Specific Sightings

Breeding

**Number of Records Submitted in Current Map Area**

COMMON NAME	HIGHEST STATE	BREEDING			OVERWINTERING	
		DIRECT	INDIRECT	TRANSIENT	CONFIRMED	NOT CONFIRMED
Alder Flycatcher	B	0	10	12	0	0
American Avocet	B	46	92	134	0	0
American Bittern	B	4	42	34	0	0
American Black Duck	W	0	0	4	0	1
American Coot	B	88	153	144	9	10
American Crow	B	36	317	200	7	17
American Dipper	B	62	88	72	12	23
American Golden Plover	T	0	0	33	0	0
American Goldfinch	B	21	353	160	16	25
American Kestrel	B	81	385	225	6	15
American Pipit	B	11	22	73	2	0
American Redstart	B	9	196	73	0	0
American Robin	B	187	826	225	16	31
American Three-toed Woodpecker	B	13	85	41	2	5
American Tree Sparrow	W	0	0	97	25	37

**Montana Bird Distribution - Enter Sighting - Mic...**

**Enter numbers of sightings:**

(AT LEAST ONE NUMBER PER SPECIES IS REQUIRED)

American Bittern (Excellent Sighting!)

Direct (evidence of breeding)

Individuals of Unknown Sex: 2

# of Males: 0

# of Females: 0

# of Pairs: 0

# of Nestings / Flightings: 0

# of Subadults: 0

# of Eggs: 0

# of Nests: 0

Comments: (optional)

few birds on seas

American Avocet

(No indirect evidence of breeding)

Individuals of Unknown Sex: 0

# of Males: 0

# of Females: 0

# of Pairs: 0

# of Nestings / Flightings: 0

# of Subadults: 0

# of Eggs: 0

# of Nests: 0

Comments:

American Coot

(No Transient ( migrant))

Individuals of Unknown Sex: 0

# of Males: 0

# of Females: 0

# of Pairs: 0

# of Nestings / Flightings: 0

# of Subadults: 0

# of Eggs: 0

# of Nests: 0

Comments:

**Montana Bird Distribution - Enter Sighting - Mic...**

**USER TOOLS**

**BIRD DISTRIBUTION**

Select Species

Bird Distribution

Specific Sightings

Breeding

Overwintering

Government

New Sighting

Sightings: QLL

Earliest: Latest:

[Add a new Bird Observation](#)

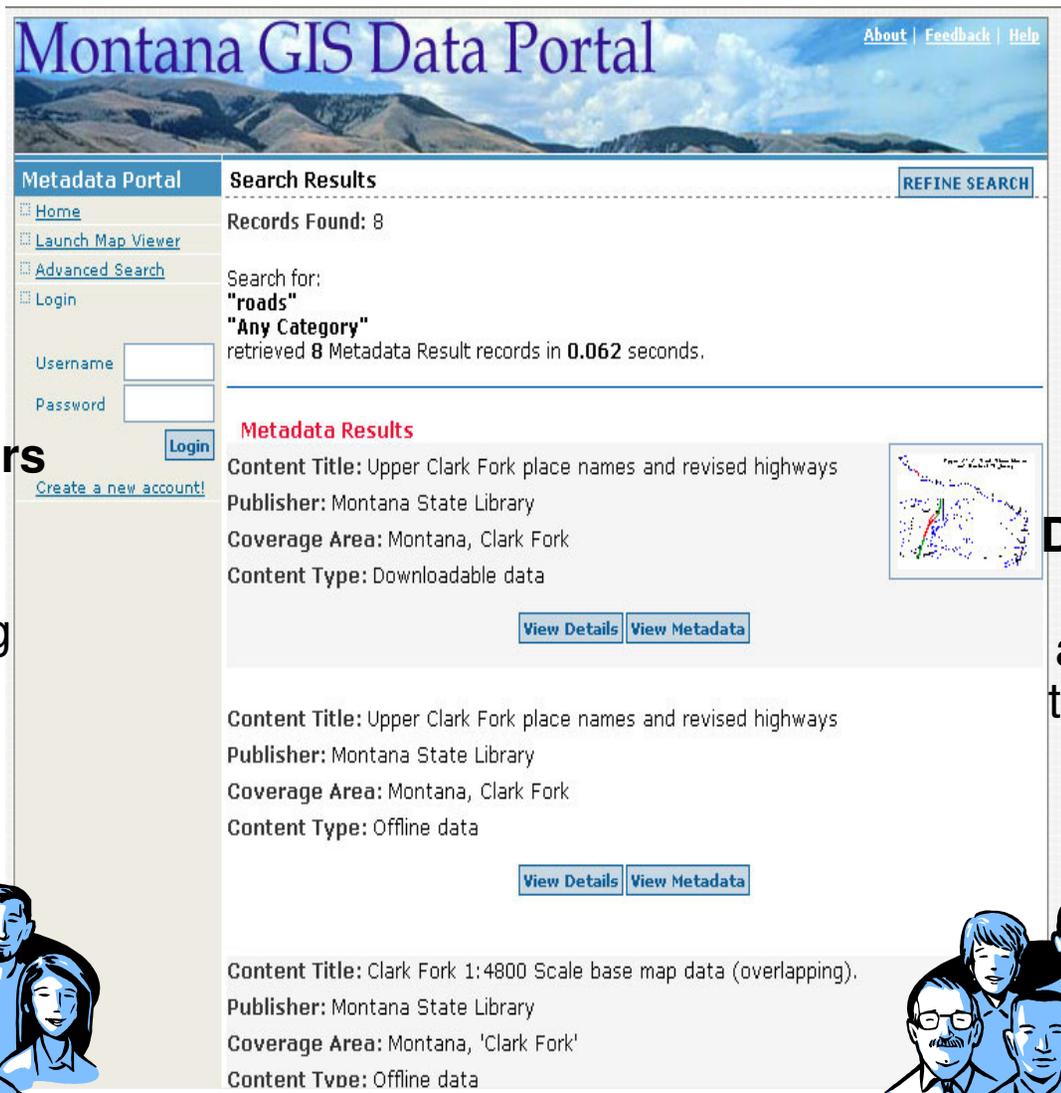
**ADMINISTRATORS**

**SPECIES OF CONCERN**

Internet

Provides interactive access to a wealth of animal and plant observation data.

# Coming Soon! Montana GIS Portal



Montana GIS Data Portal

About | Feedback | Help

Metadata Portal

- Home
- Launch Map Viewer
- Advanced Search
- Login

Username

Password

Login

[Create a new account!](#)

**Search Results** [REFINE SEARCH](#)

Records Found: 8

Search for:  
"roads"  
"Any Category"  
retrieved 8 Metadata Result records in 0.062 seconds.

**Metadata Results**

Content Title: Upper Clark Fork place names and revised highways  
Publisher: Montana State Library  
Coverage Area: Montana, Clark Fork  
Content Type: Downloadable data

[View Details](#) [View Metadata](#)

Content Title: Upper Clark Fork place names and revised highways  
Publisher: Montana State Library  
Coverage Area: Montana, Clark Fork  
Content Type: Offline data

[View Details](#) [View Metadata](#)

Content Title: Clark Fork 1:4800 Scale base map data (overlapping).  
Publisher: Montana State Library  
Coverage Area: Montana, 'Clark Fork'  
Content Type: Offline data

**Data Producers**  
publish  
metadata  
in the catalog



**Data Consumers**  
discover and  
access GIS data  
that is relevant to  
their needs.



# CONTACT NRIS



## R e q u e s t   T r a c k e r

[Main menu](#) [Login](#) [Requests](#) [New Request](#) [User profile](#) [User guide](#)

Use this application to make requests for maps, data, and other information from the Montana Natural Resources Information System and the Montana Natural Heritage Program.

You can keep track of all your requests here and at any time can view the status of requests and staff notes to you regarding a request. You can also reply to the staffer handling the request.

If you haven't used this application before, please [create a new user profile](#).

We have also created a [guide for using the application](#).

[Note about browser compatibility](#)

[Problems logging in or creating a user profile?](#)

Call us:  
444-5354

Visit us on  
the web:  
[nris.mt.gov](http://nris.mt.gov)