

DRAFT

ENVIRONMENTAL ASSESSMENT

CHECKLIST



Black Bridge FAS Road Replacement

10/10/2023



Table of Contents

I.	Compliance with the Montana Environmental Policy Act	2
II.	Background and Description of Proposed Project	2
III.	Purpose and Need	6
IV.	Other Agency Regulatory Responsibilities	6
V.	List of Mitigations, Stipulations	7
VI.	Alternatives Considered	7
VII.	Summary of Potential Impacts of the Proposed Project on the Physical Environment and Human Population ...	8
VIII.	Private Property Impact Analysis (Takings).....	20
IX.	Public Participation	21
X.	Recommendation for Further Environmental Analysis	22
XI.	EA Preparation and Review	22
XII.	Appendix A – Wildlife Species of Concern Present in Affected Area	23

I. Compliance with the Montana Environmental Policy Act

Before a proposed project may be approved, environmental review must be conducted to identify and consider potential impacts of the proposed project on the human and physical environment affected by the project. The Montana Environmental Policy Act (MEPA) and its implementing rules and regulations require different levels of environmental review, depending on the proposed project, significance of potential impacts, and the review timeline. § 75-1-201, Montana Code Annotated (“MCA”), and the Administrative Rules of Montana (“ARM”) 12.2.430, General Requirements of the Environmental Review Process.

FWP must prepare an EA when:

- *It is considering a “state-proposed project,” which is defined in § 75-1-220(8)(a) as:*
 - (i) a project, program, or activity initiated and directly undertaken by a state agency;*
 - (ii) ... a project or activity supported through a contract, grant, subsidy, loan, or other form of funding assistance from a state agency, either singly or in combination with one or more other state agencies; or*
 - (iii) ... a project or activity authorized by a state agency acting in a land management capacity for a lease, easement, license, or other authorization to act.*
- *It is not clear without preparation of an EA whether the proposed project is a major one significantly affecting the quality of the human environment. ARM 12.2.430(3)(a));*
- *FWP has not otherwise implemented the interdisciplinary analysis and public review purposes listed in ARM 12.2.430(2) (a) and (d) through a similar planning and decision-making process (ARM 12.2.430(3)(b));*
- *Statutory requirements do not allow sufficient time for the FWP to prepare an EIS (ARM 12.2.430(3)(c));*
- *The project is not specifically excluded from MEPA review according to § 75-1-220(8)(b) or ARM 12.2.430(5); or*
- *As an alternative to preparing an EIS, prepare an EA whenever the project is one that might normally require an EIS, but effects which might otherwise be deemed significant appear to be mitigable below the level of significance through design, or enforceable controls or stipulations or both imposed by the agency or other government agencies. For an EA to suffice in this instance, the agency must determine that all the impacts of the proposed project have been accurately identified, that they will be mitigated below the level of significance, and that no significant impact is likely to occur. The agency may not consider compensation for purposes of determining that impacts have been mitigated below the level of significance (ARM 12.2.430(4)).*

MEPA is procedural; its intent is to ensure that impacts to the environment associated with a proposed project are fully considered and the public is informed of potential impacts resulting from the project.

II. Background and Description of Proposed Project

Name of Project: Black Bridge FAS Road Replacement

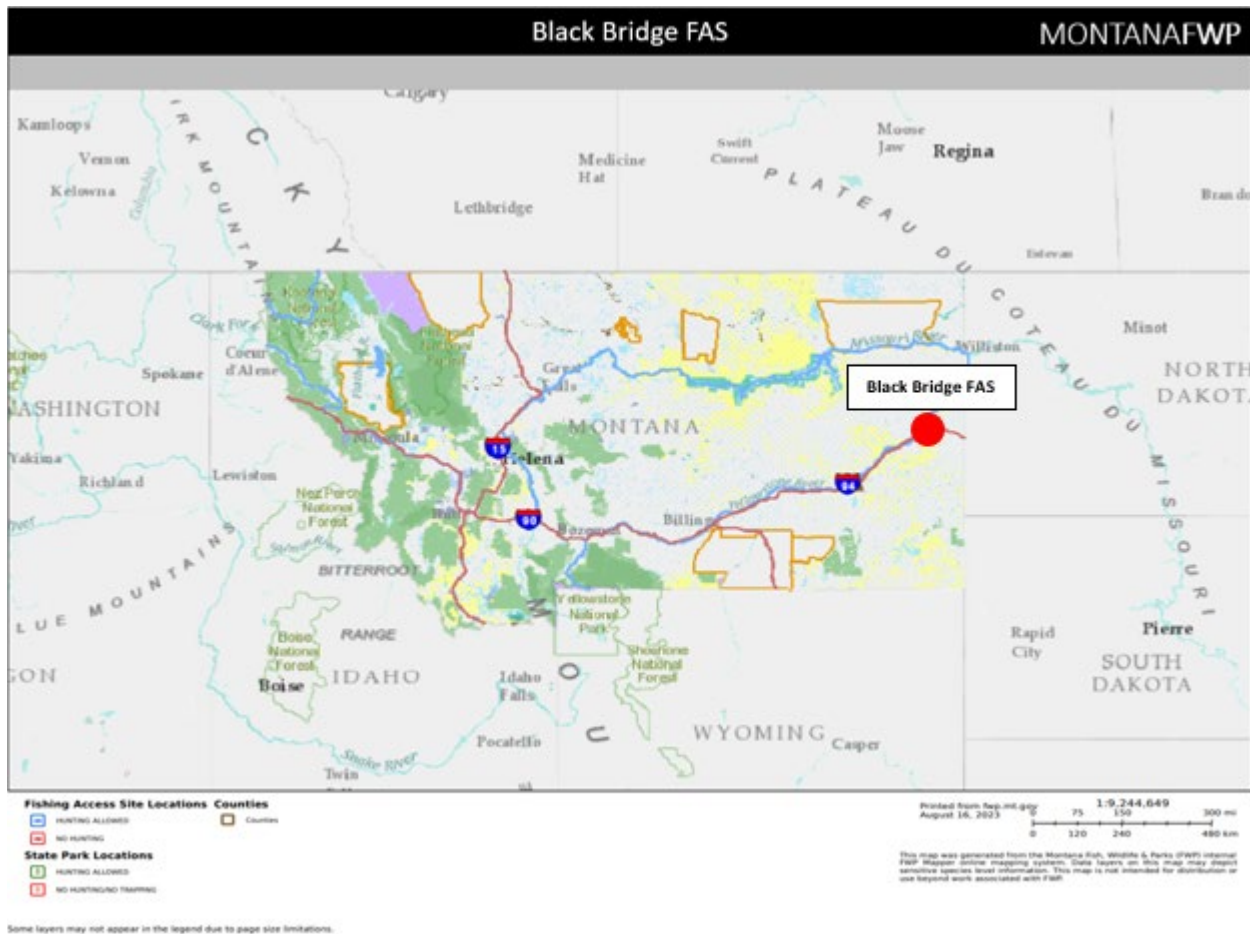
Black Bridge FAS (Black Bridge) is a popular site along the Lower Yellowstone River in Glendive, Montana. The area receives moderate to heavy use and is visited daily by individuals wanting to hike, fish or relax. There are three separate parking areas connected by an access road for the public to utilize.

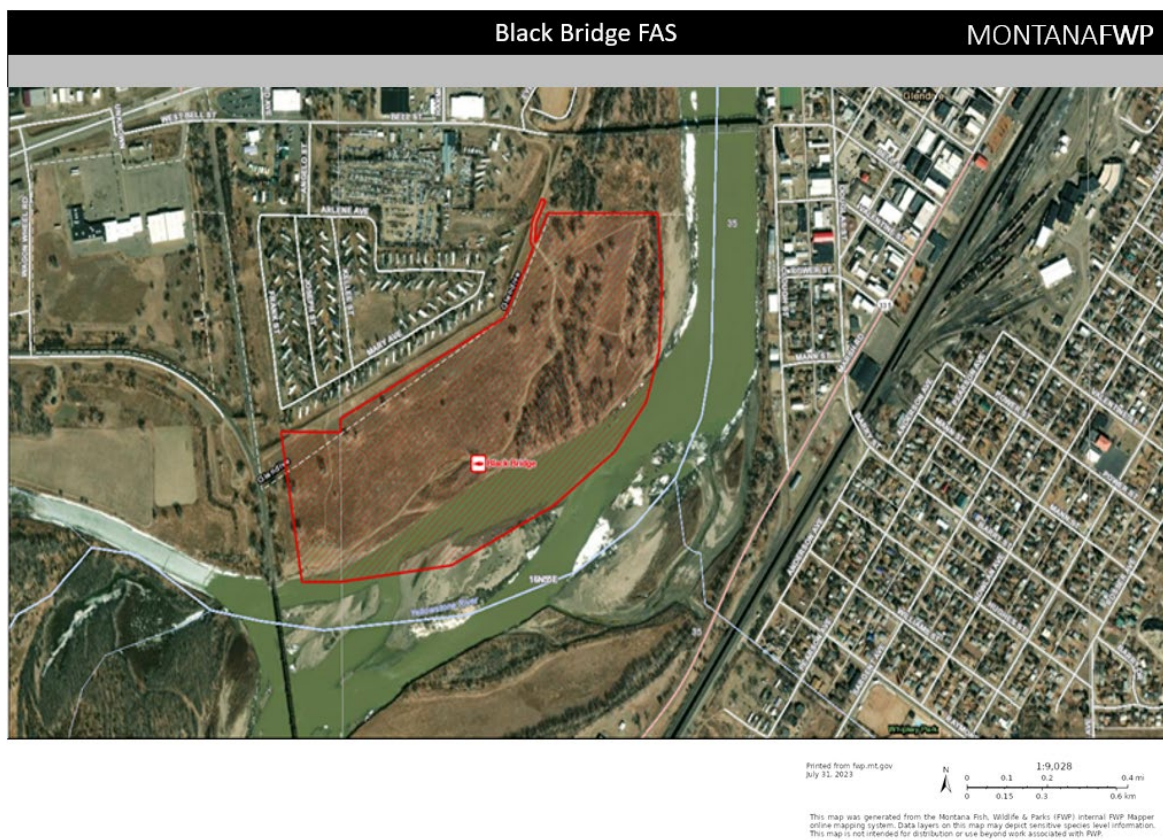
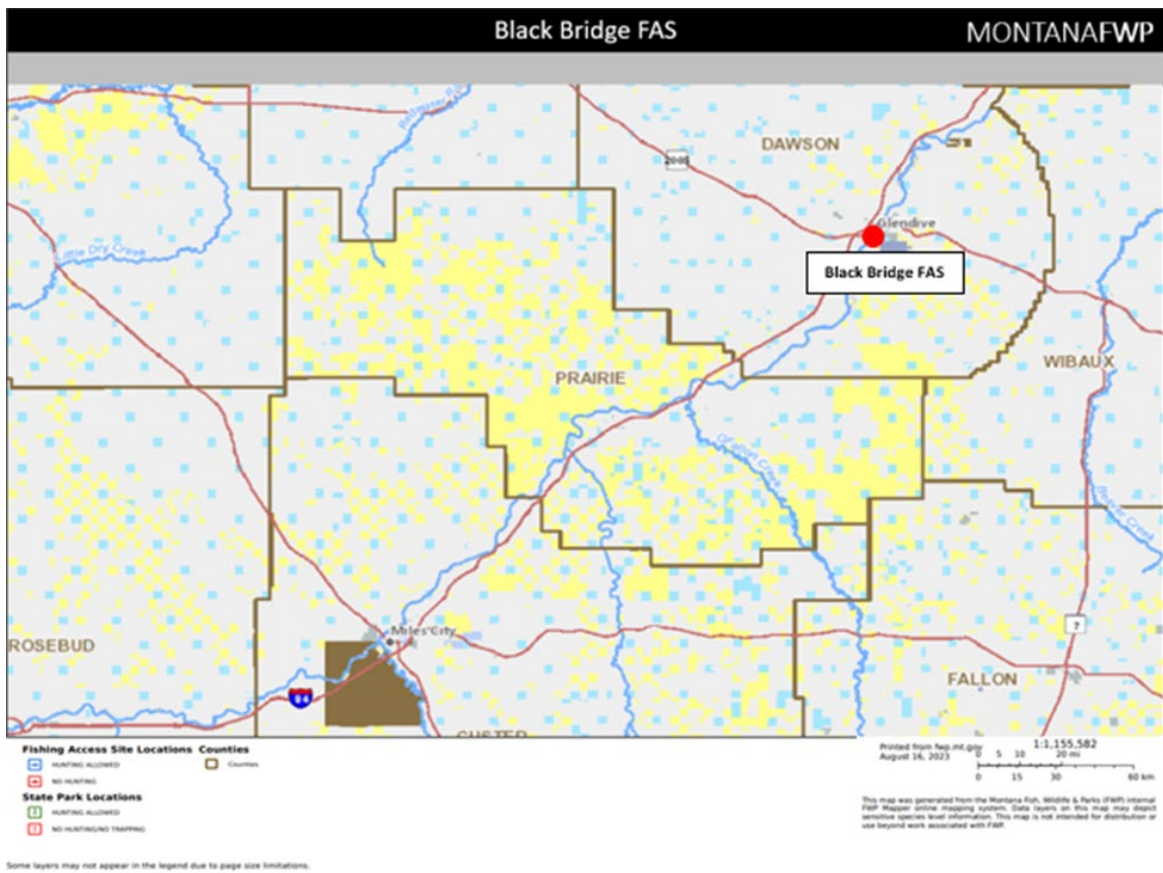
FWP proposes to replace 700’ of the access road at Black Bridge. A portion of the existing road is situated along the Yellowstone River and was damaged by erosion during spring runoff. With the road now damaged it is unsafe to drive to the upstream parking lot. Currently only pedestrian traffic is permitted in that part of Black Bridge. The project would permanently close the unsafe section of the road and a new 700’ section of road

would be constructed to restore safe vehicular access to the upstream areas of the site. Due to the limited scope of this project FWP proposes to design the work in September and October of 2023 and complete construction by 12/31/2023.

Affected Area / Location of Proposed Project:

- Legal Description
 - Latitude/Longitude: 47.102104, -104.724497
 - Section, Township, and Range: S35, T16N, R55E
 - Town/City, County, Montana: Glendive, Dawson County, Montana
- Location Map





III. Purpose and Need

The EA must include a description of the purpose and need or benefits of the proposed project. ARM 12.2.432(3)(b). Benefits of the proposed project refer to benefits to the resource, public, department, state, and/or other.

Shoreline erosion along the Yellowstone River at Black Bridge FAS damaged the access road to the upstream parking lot, making it unsafe for vehicular traffic. FWP proposes the following:

- Decommission the portion of the road that is damaged.
- Design and construct 700' of new road that will bypass the damaged portion of road. When complete, safe vehicular access to the upstream parking area will be restored.
- FWP intends to design the project in September and October of 2023 and construct the road by 12/31/2023.
- This project supports access to the Lower Yellowstone River and recreation opportunities and improves public safety.

If FWP prepared a cost/benefit analysis before completion of the EA, the EA must contain the cost/benefit analysis or a reference to it. ARM 12.2.432(3)(b).

	Yes*	No
Was a cost/benefit analysis prepared for the proposed project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* If yes, a copy of the cost/benefit analysis prepared for the proposed project is included in Attachment A to this Draft EA

IV. Other Agency Regulatory Responsibilities

FWP must list any federal, state, and/or local agencies that have overlapping or additional jurisdiction, or environmental review responsibility for the proposed project, as well as permits, licenses, and other required authorizations. ARM 12.2.432(3)(c).

*A list of other required local, state, and federal approvals, such as permits, certificates, and/or licenses from affected agencies is included in **Table 1** below. **Table 1** provides a summary of requirements but does not necessarily represent a complete and comprehensive list of all permits, certificates, or approvals needed for the proposed project. Agency decision-making is governed by state and federal laws, including statutes, rules, and regulations, that form the legal basis for the conditions the proposed project must meet to obtain necessary permits, certificates, licenses, or other approvals. Further, these laws set forth the conditions under which each agency could deny the necessary approvals.*

Table 1: Federal, State, and/or Local Regulatory Responsibilities

Agency	Type of Authorization (permit, license, stipulation, other)	Purpose
FWP Heritage Program in consultation with the Montana State Historic Preservation Office	Cultural Assessment/Survey	Identification of historic and/or archaeological sites located within or near the proposed project area

V. List of Mitigations, Stipulations

Mitigations, stipulations, and other enforceable controls required by FWP, or another agency, may be relied upon to limit potential impacts associated with a proposed Project. The table below lists and evaluates enforceable conditions FWP may rely on to limit potential impacts associated with the proposed Project. ARM 12.2.432(3)(g).

Table 2: Listing and Evaluation of Enforceable Mitigations Limiting Impacts

Are enforceable controls limiting potential impacts of the proposed action? If not, no further evaluation is needed.			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
If yes, are these controls being relied upon to limit impacts below the level of significance? If yes, list the enforceable control(s) below			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Enforceable Control	Responsible Agency	Authority (Rule, Permit, Stipulation, Other)	Effect of Enforceable Control on Proposed Project	
Identification and Protection of Cultural Resources	FWP Heritage Program in consultation with State Historic Preservation Office	Montana Antiquities Act	Prior to implementation, the FWP Heritage Specialist would coordinate a cultural resource inventory of the project site. If cultural resources warranted for protection are discovered, FWP would protect these areas. If cultural artifacts were to be discovered during the implementation of this project, the FWP Heritage Specialist would cease activities and plan mitigation in consultation with the State Historic Preservation Office.	
Noxious Weed Monitoring and Mitigation	FWP	Noxious Weed Management Plan	Limit the spread of noxious weeds on state lands.	
TB				

VI. Alternatives Considered

In addition to the proposed project, and as required by MEPA, FWP analyzes the "No-Action" alternative in this EA. Under the "No Action" alternative, the proposed project would not occur. Therefore, no additional impacts to the physical environment or human population in the analysis area would occur. The "No Action" alternative forms the baseline from which the potential impacts of the proposed Project can be measured.

No action alternative would not allow us to replace the roadway and the site would be a walk-in site from the parking area.

	Yes*	No
Were any additional alternatives considered and dismissed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* If yes, a list and description of the other alternatives considered, but not carried forward for detailed review is included below

VII. Summary of Potential Impacts of the Proposed Project on the Physical Environment and Human Population

*The impacts analysis identifies and evaluates **direct, secondary, and cumulative impacts**.*

- **Direct impacts** are those that occur at the same time and place as the action that triggers the effect.
- **Secondary impacts** “are further impacts to the human environment that may be stimulated or induced by or otherwise result from a direct impact of the action.” ARM 12.2.429(18).
- **Cumulative impacts** “means the collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures.” ARM 12.2.429(7).

*Where impacts are expected to occur, the impact analysis estimates the **extent, duration, frequency, and severity** of the impact. The duration of an impact is quantified as follows:*

- **Short-Term:** impacts that would not last longer than the proposed project.
- **Long-Term:** impacts that would remain or occur following the proposed project.

The severity of an impact is measured using the following:

- **No Impact:** there would be no change from current conditions.
- **Negligible:** an adverse or beneficial effect would occur but would be at the lowest levels of detection.
- **Minor:** the effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- **Moderate:** the effect would be easily identifiable and would change the function or integrity of the resource.
- **Major:** the effect would irretrievably alter the resource.

Some impacts may require mitigation. As defined in ARM 12.2.429, mitigation means:

- *Avoiding an impact by not taking a certain action or parts of a project;*
- *Minimizing impacts by limiting the degree or magnitude of a project and its implementation;*
- *Rectifying an impact by repairing, rehabilitating, or restoring the affected environment; or*
- *Reducing or eliminating an impact over time by preservation and maintenance operations during the life of a project or the time period thereafter that an impact continues.*

*A list of any mitigation strategies including, but not limited to, design, enforceable controls or stipulations, or both, as applicable to the proposed project is included in **Section VI** above.*

FWP must analyze impacts to the physical and human environment for each alternative considered. The proposed project considered the following alternatives:

- **Alternative 1: No Action. Evaluation and Summary of Potential Impacts on the Physical Environment and Human Population**

Under the “No Action” alternative, the proposed project would not occur. Therefore, no additional impacts to the physical environment or human population in the analysis area would occur. The “No Action” alternative forms the baseline from which the potential impacts of the proposed Project can be measured.

The No Action Alternative would result in no road construction occurring and vehicular access to the upstream portion of Black Bridge FAS would not be restored. The upstream portion of Black Bridge FAS would be walk in only.

- **Alternative 2: Proposed Project. Evaluation and Summary of Potential Impacts on the Physical Environment and Human Population**

See **Table 3** (Impacts on Physical Environment) and **Table 4** (Impacts on Human Population) below.

Table 3 - Potential Impacts of Proposed Project on the Physical Environment

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
Terrestrial, avian, and aquatic life and habitats	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to terrestrial, avian, and aquatic life and habitats would be expected because of the proposed project. All threatened and endangered species (T&E), as well as species of concern that are known to be in the vicinity of Black Bridge FAS are listed in Appendix A. The Northern long eared myotis (endangered) occupies trees near the project site during the summer. This project will be completed in the fall or early winter after the Northern long eared myotis has migrated out of the area. Additionally, no trees will be impacted by the project. Other wildlife species located within or using the affected area include: white-tail deer, mule deer, turkeys, rattlesnakes, and a variety of bird species. This list is representative but does not constitute a complete list of wildlife species present in the affected area. The proposed project would add a new road section to access the Fishing Access site and remove an existing road section that is unsafe in current conditions. Construction activities associated with the proposed project will temporarily prevent certain wildlife from using the affected area. No net habitat loss will occur as the old roadbed will be decommissioned after the new road section is constructed. Therefore, all impacts to terrestrial, avian, and aquatic life and habitats would be short-term and negligible.
Water quality, quantity, and distribution	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to water quality, quantity, and distribution would be expected due to the proposed project. The project will move a section of road away from the riverbank due to bank erosion. The project will not affect the river or shoreline. Therefore, the project will not impact water quality, quantity, and distribution.
Geology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to geology would be expected due to the proposed project. The proposed project would replace a 700' section of road. The

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
									proposed project would result in ground disturbance to facilitate construction of this section of road; however, no unique geologic formations are located within the affected area. Therefore, ground disturbance associated with the proposed project would not affect any geologic features and no impacts to geology would be expected because from the proposed project.
Soil quality, stability, and moisture	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to soil quality, stability, and moisture would be expected due to the proposed project. The proposed project would result in a limited improvement to water drainage along the road, which would improve affected soil quality, stability, and moisture content. Construction activities would disturb some existing vegetation and expose bare ground for the road section footprint (700' X 20'). Soils disturbed by construction would be re-seeded with native vegetation. Therefore, impacts from the proposed project would be short term, long term and negligible.
Vegetation cover, quantity, and quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to vegetation cover, quantity, and quality would be expected due to the proposed project. Ground disturbance associated with construction activities may adversely impact existing vegetation cover however the current road section will be decommissioned. Following construction, areas that are disturbed, including the decommissioned roadbed would be reseeded with native grass and forbs including native species found in the project area. Therefore, any adverse impacts would be short-term and minor. Public use of the site could lead to increased opportunity for noxious weeds infestations. FWP would monitor and manage noxious weeds at the site according to the Noxious Weed Management Plan. Therefore, any adverse impacts would be long-term and minor.

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
Aesthetics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to aesthetics would be expected due to the proposed project. The proposed project would improve existing infrastructure thereby improving the visual experience for visitors. Any impacts would be long-term, beneficial, and minor. Some adverse impacts may result from construction activities due to increased levels of noise, odors, fugitive dust, and the presence of equipment and construction materials. Any impacts would be short-term and minor, lasting only as long as the construction phase of the proposed project.
Air quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to air quality would be expected due to the proposed project. Air quality in the area affected by the proposed project is currently unclassifiable or in compliance with attainment for the applicable health and welfare based national ambient air quality standards (NAAQS). Existing sources of air pollution in the area are limited and generally include fugitive dust associated with high wind events and exposed ground, vehicle travel on unpaved roads, vehicle exhaust emissions, and various agricultural practices (vehicle exhaust emissions and fugitive dust). No significant point-sources of air pollution exist in the area affected by the proposed project. Fugitive dust emissions resulting from construction activities associated with the proposed project may adversely impact air quality. However, no air quality restrictions exist for the affected area; therefore, the proposed project would not be expected to cause or contribute to a violation of the applicable NAAQS for particulate matter (fugitive dust). Any impacts would be short-term and negligible, consistent with existing impacts, and mitigated by best management practices
Unique, endangered, fragile, or limited	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to any unique, endangered, fragile, or limited environmental resources would be

PHYSICAL ENVIRONMENT		Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Resource		None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
environmental resources										expected due to the proposed project. The presence of any animal and/or plant species of concern and/or any Threatened or Endangered species located within the affected area were assessed. Please see Terrestrial, Avian, and Aquatic Life and Habitats (Table 3, page 10) for discussion on the Northern long eared myotis (endangered). The proposed project would occur entirely within existing state land and any adverse impacts to affected species would be short-term, negligible, and consistent with existing and historic impacts.
Historical and archaeological sites		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to historical and/or archaeological sites would be expected due to the proposed project. In keeping with the Montana Antiquities Act and related regulations (ARM 12.8.501-12.8.510), all projects on state lands are assessed by a qualified archaeologist or historian for their potential to affect cultural resources. The process for this assessment may include a cultural resource inventory and evaluation of cultural resources within or near the project area, in consultation with the State Historic Preservation Office. FWP also consults with all Tribal Historic Preservation Offices affiliated with each property in accordance with FWP's Tribal Consultation Guidelines. If cultural resources within or near the project area are recorded and are eligible for the National Register of Historic Places, they will be protected from adverse impacts through adjustments to the project design or cancellation of the project if no design alternatives are available. If cultural resources are unexpectedly discovered during project implementation, FWP would cease implementation and would contact FWP's Heritage Program for further evaluation. Therefore, no impacts to any historical and archaeological sites would be expected because of the proposed project.

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
Demands on environmental resources of land, water, air, and energy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>No significant adverse impacts to demands on the environmental resources of land, water, air, and energy would be expected due to the proposed project. Fuel may be required to operate equipment used for the construction phase of the proposed project. However, any impacts would be limited by the anticipated short timeline for the construction phase of the proposed project and, as such, the amount of fuel used would be relatively limited. Therefore, any impacts to the demands for energy would be short-term and negligible. As identified previously through the analyses of potential impacts to water quality, quantity, and distribution; soil quality, stability, and moisture; vegetation cover, quantity, and quality; and air quality; some impacts to the environmental resources of land water, and air may occur because of the proposed project. However, any such impacts would be short-term and negligible or minor (see cited impacts analyses above). No other impacts would be expected because of the proposed project.</p>

Table 4 - Potential Impacts of Proposed Project on the Human Population

HUMAN POPULATION	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
Social structures and mores	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to social structures and mores would be expected due to the proposed project. The proposed project would remove part of the existing road and build a new road 700 feet in length to move it further away from the river's edge resulting in improved safety. This FAS is along the Yellowstone River which has a quality fishery and provides other recreational opportunities for the public. As such, fishing and related services support existing social structure, customs, values, and conventions in the affected area. Therefore, improving existing FAS infrastructure by providing a safe road system for public use would be beneficial, long term, and minor impacts.
Cultural uniqueness and diversity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to cultural uniqueness and diversity would be expected due to the proposed project. The proposed project would construct 700' of new road and remove the existing road that has partially fallen into the river. This action would not result in any relocation of people into or out of the affected area. Therefore, no impacts to the existing cultural uniqueness and diversity of the affected area would be expected because of the proposed project.
Access to and quality of recreational and wilderness activities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to access and quality of recreational and wilderness activities would be expected due to the proposed project. No wilderness areas currently exist in the affected area; therefore, no impacts to Wilderness recreation activities would occur because of the proposed project. The proposed project would construct a new road to improve access and safety at the FAS. Because the proposed project would improve the access at an existing FAS it would likely increase the quality of the recreational experience. Noise, odors, and

HUMAN POPULATION	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
									fugitive dust resulting from construction activities could briefly impact the quality of the recreational experience for some individuals. After the construction phase is complete no additional impacts would occur. Therefore, any impacts would be long-term, beneficial, and minor. Negative impacts during construction would be and short-term and minor.
Local and state tax base and tax revenues	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to demands on local and state tax base and tax revenues would be expected due to the proposed project. The proposed project would improve the road system at the FAS and could increase use of the site and possibly increase state and local tax revenues from the sale of fuel and other items to visitors. During the construction phase of the project tax revenue could be generated through the sale of supplies and/or equipment needed to complete the project. Any impacts would be short-term and negligible. Further, the project may result in a minor increase in tourism to the area. Minimal increased tourism could result in beneficial, long-term, and minor impacts to the local tax base.
Agricultural or Industrial production	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to agricultural or industrial production would be expected due to the proposed project. The affected area is an existing FAS and is not used for agricultural or industrial production. Because the affected area is not used for agricultural or industrial production, the proposed project would not impact such practices.
Human health and safety	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to human health and safety would be expected due to the proposed project. Affected government staff and/or contractors hired to complete the project may realize increased risk to human health and safety during construction activities; however, FWP would require affected staff and/or contractors to operate in a safe manner and utilize best management practices,

HUMAN POPULATION	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
									including the use of available and appropriate safety precautions. Therefore, any potential adverse impacts to staff or contractors completing the work would be short-term and negligible. Human health and safety would likely improve for users of the FAS as the project would increase access to recreation facilities and the opportunity for outdoor activity. Therefore, any impacts would be long term, minor, and beneficial.
Quantity and distribution of employment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to quantity and distribution of employment would be expected due to the proposed project. Contractors would be hired to complete this small project, however since it would be completed in under one week any impacts would be short-term and negligible.
Distribution and density of population and housing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to distribution and density of population and housing would be expected due to the proposed project. The proposed project is not expected to result in the movement of existing or new populations into or out of the affected area. Therefore, no impacts would be expected because of the proposed project.
Demands for government services	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to demands for government services would be expected due to the proposed project. The proposed project would replace 700' of road at the FAS resulting in no net gain of infrastructure. If completed, FWP staff would continue to monitor the area for maintenance needs or resource damage as they are now. The time commitment to complete that work would be the same as it is currently, so no additional long-term demands for government services would be expected because of the proposed project. During construction additional FWP staff time would be required to administer the project however those demands would be short-term and negligible because the project is small and should be completed in

HUMAN POPULATION	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
									under one week. Therefore, any impacts would be short-term, and negligible.
Industrial, agricultural, and commercial activity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to demands on industrial, agricultural, and commercial activity would be expected due to the proposed project. The proposed project would improve the road system at the FAS and would not disturb or otherwise impact any industrial, agricultural, or commercial properties or operations in the affected area. Therefore, no impacts would be expected because of the proposed project.
Locally adopted environmental plans and goals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to locally adopted environmental plans and goals would be expected due to the proposed project. The goal of the proposed project is to replace 700' of road and improve access to existing recreation facilities. This project is to restore a previously existing access so no new impacts to environmental plans and goals will occur.
Other appropriate social and economic circumstances	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to other appropriate social and economic circumstances would be expected due to the proposed project. The proposed project would be expected to improve public access and recreational opportunities. The impact to the local economy due to the improved recreational access is expected to be minimal. Therefore, any impacts from the proposed project to other appropriate social and economic circumstances would be long-term, minor, and beneficial.

Table 6: Determining the Significance of Impacts on the Quality of the Human Environment

If the EA identifies impacts associated with the proposed project FWP must determine the significance of the impacts. ARM 12.2.431. This determination forms the basis for FWP's decision as to whether it is necessary to prepare an environmental impact statement. An impact may be adverse, beneficial, or both. If none of the adverse effects of the impact are significant, an EIS is not required. An EIS is required if an impact has a significant adverse effect, even if the agency believes that the effect on balance will be beneficial. ARM 12.2.431.

According to the applicable requirements of ARM 12.2.431, FWP must consider the criteria identified in this table to determine the significance of each impact on the quality of the human environment. The significance determination is made by giving weight to these criteria in their totality. For example, impacts identified as moderate or major in severity may not be significant if the duration is short-term. However, moderate or major impacts of short-term duration may be significant if the quantity and quality of the resource is limited and/or the resource is unique or fragile. Further, moderate or major impacts to a resource may not be significant if the quantity of that resource is high or the quality of the resource is not unique or fragile.

Criteria Used to Determine Significance

1	<p>The severity, duration, geographic extent, and frequency of the occurrence of the impact</p> <p>"Severity" describes the density of the potential impact, while "extent" describes the area where the impact will likely occur, e.g., a project may propagate ten noxious weeds on a surface area of 1 square foot. Here, the impact may be high in severity, but over a low extent. In contrast, if ten noxious weeds were distributed over ten acres, there may be low severity over a larger extent.</p> <p>"Duration" describes the time period during which an impact may occur, while "frequency" describes how often the impact may occur, e.g., an operation that uses lights to mine at night may have frequent lighting impacts during one season (duration).</p>
2	The probability that the impact will occur if the proposed project occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur
3	Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts
4	The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values
5	The importance to the state and to society of each environmental resource or value that would be affected
6	Any precedent that would be set as a result of an impact of the proposed project that would commit FWP to future actions with significant impacts or a decision in principle about such future actions
7	Potential conflict with local, state, or federal laws, requirements, or formal plans

VIII. Private Property Impact Analysis (Takings)

The 54th Montana Legislature enacted the Private Property Assessment Act, now found at § 2-10-101. The intent was to establish an orderly and consistent process by which state agencies evaluate their proposed projects under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation..."

The Private Property Assessment Act applies to proposed agency projects pertaining to land or water management or to some other environmental matter that, if adopted and enforced without due process of law and just compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agencies to assess the impact of a proposed agency project on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and checklist indicates that a proposed agency project has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act.

Table 7: Private Property Assessment (Takings)

PRIVATE PROPERTY ASSESMENT ACT (PPAA)			
Does the Proposed Action Have Takings Implications under the PPAA?	Question #	Yes	No
Does the project pertain to land or water management or environmental regulations affecting private property or water rights?	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action result in either a permanent or an indefinite physical occupation of private property?	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action deprive the owner of all economically viable uses of the property?	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 4a and 4b and continue with question 5)	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there a reasonable, specific connection between the government requirement and legitimate state interest?	4a	<input type="checkbox"/>	<input type="checkbox"/>
Is the government requirement roughly proportional to the impact of the proposed use of the property?	4b	<input type="checkbox"/>	<input type="checkbox"/>
Does the action deny a fundamental attribute of ownership?	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action have a severe impact of the value of the property?	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public general? (If the answer is NO, skip questions 7a-7c.)	7	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the impact of government action direct, peculiar, and significant?	7a	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?	7b	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?	7c	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the proposed action result in taking or damaging implications?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Taking or damaging implications exist if YES is checked in response to Question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to question 4a or 4b.			

If taking or damaging implications exist, the agency must comply with MCA § 2-10-105 of the PPAA, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.

Alternatives:

The analysis under the Private Property Assessment Act, §§ 2-10-101 through -112, MCA, indicates no impact. FWP does not plan to impose conditions that would restrict the regulated person's use of private property to constitute a taking.

IX. Public Participation

The level of analysis in an EA will vary with the complexity and seriousness of environmental issues associated with a proposed action. The level of public interest will also vary. FWP is responsible for adjusting public review to match these factors (ARM 12.2.433(1)). Because FWP determines the proposed action will result in limited environmental impact, and little public interest has been expressed, FWP determines the following public notice strategy will provide an appropriate level of public review:

- *An EA is a public document and may be inspected upon request. Any person may obtain a copy of an EA by making a request to FWP. If the document is out-of-print, a copying charge may be levied (ARM 12.2.433(2)).*
- *Public notice will be served on the Montana Fish, Wildlife and Parks website at: <https://fwp.mt.gov/news/public-notices>*
- *Copies will be distributed to neighboring landowners to ensure their knowledge of the proposed project and opportunity for review and comment on the proposed action.*
- *FWP maintains a mailing list of persons interested in a particular action or type of action. FWP will notify all interested persons and distribute copies of the EA to those persons for review and comment (ARM 12.2.433(3)).*
- *FWP will issue public notice in the following newspaper periodical(s) on the date(s) indicated.*

Newspaper / Periodical	Date(s) Public Notice Issued
Glendive Ranger Review	Twice, TBD by paper
Miles City Star	Twice, TBD by paper

- *Public notice will announce the availability of the EA, summarize its content, and solicit public comment.*
 - ***Duration of Public Comment Period:*** *The public comment period begins on the date of publication of legal notice in area newspapers (see above). Written or e-mailed comments will be accepted until 5:00 p.m., MST, on the last day of public comment, as listed below:*

Length of Public Comment Period: 15 days

Public Comment Period Begins: 10/10/2023

Public Comment Period Ends: 10/25/2023

Comments must be addressed to the FWP contact, as listed below.

- ***Where to Mail or Email Comments on the Draft EA:***

Name: Brian Burky

Email: Brian.Burky@mt.gov

Mailing Address:

Montana Fish, Wildlife & Parks

PO Box 1630

Miles City, MT 59301

X. Recommendation for Further Environmental Analysis

NO further analysis is needed for the proposed action	<input checked="" type="checkbox"/>
FWP must conduct EIS level review for the proposed action	<input type="checkbox"/>

XI. EA Preparation and Review

	Name	Title
EA prepared by:	Riley Bell	Recreation Manager
EA reviewed by:	Brian Burky	Recreation Manager



MONTANA STATE LIBRARY

mtnhp.org

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

NATURAL HERITAGE PROGRAM

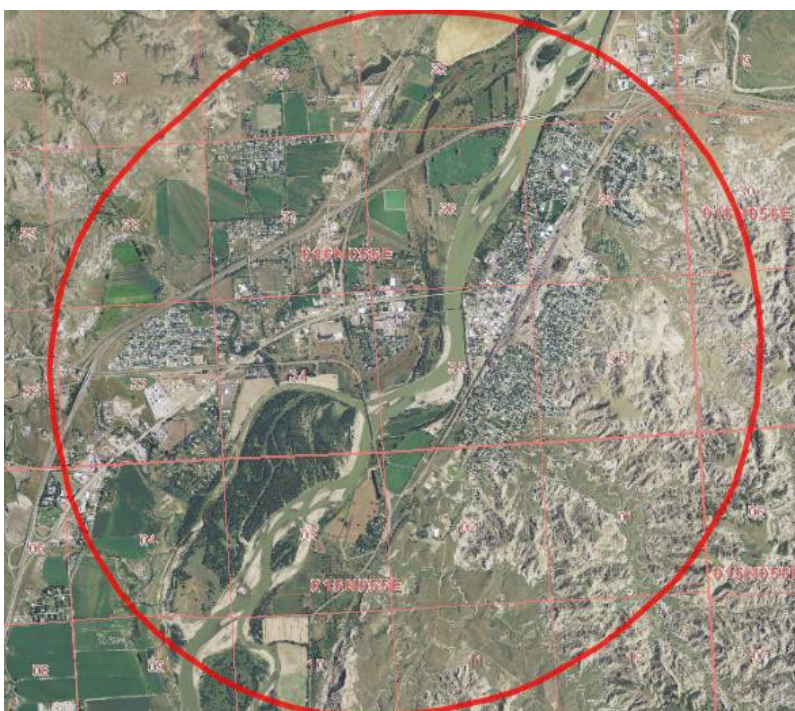
Species Occurrences from Environmental Summary



Latitude	Longitude
47.07077	-104.67634
47.13145	-104.77741

Summarized by: Black Bridge (Fishing Access Site)

Filtered by: Species with MT Status = Species of Concern, Special Status, Important Animal Habitat, Potential SOC



Suggested Citation: Montana Natural Heritage Program. Environmental Summary Report. Custom Field Guide. Summarized by: Black Bridge (Fishing Access Site). Filtered by: Species with MT Status = Species of Concern, Special Status, Important Animal Habitat, Potential SOC. Retrieved on 9/6/2023.

Note: This PDF version of the Montana Field Guide is intended to assist in offline identification and field work. It is not intended to replace the online Field Guide, as that version contains more information and is updated daily. For the most up-to-date information on Montana species, please visit FieldGuide.mt.gov

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.



© Wilford Miller

Species of Concern Native
Species Global Rank: G5
State Rank: S1

Agency Status USFWS:

USFS:

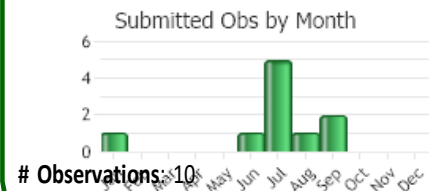
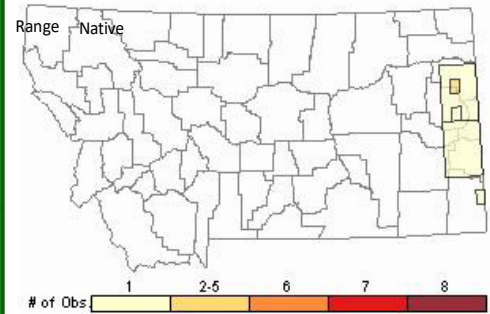
BLM:

State Threat Score: Low

CCVI: Moderately

Vulnerable

C-value:



Observations: 10

Celastrus scandens

General Description

Bittersweet is a climbing woody vine with twisting stems that reach up to 18 m long. The alternate, elliptic leaf blades, 5-10 cm long, taper to a pointed tip and have finely serrated edges and petioles reaching up to 3 cm long. The greenish, unisexual flowers are borne in narrow inflorescences which are 3-8 cm long at the end of the stems. The flowers have a cup-shaped calyx which is 2-3 mm high and composed of 5 sepals that are united at the base and of 5 spreading petals that are 3-6 mm long. Male flowers have 5 stamens, while female flowers have a single 3-parted ovary. Fruit is an orange or yellowish capsule, 1 cm in diameter, that splits along three lines to expose the single, large, bright orangish red seed.

Phenology

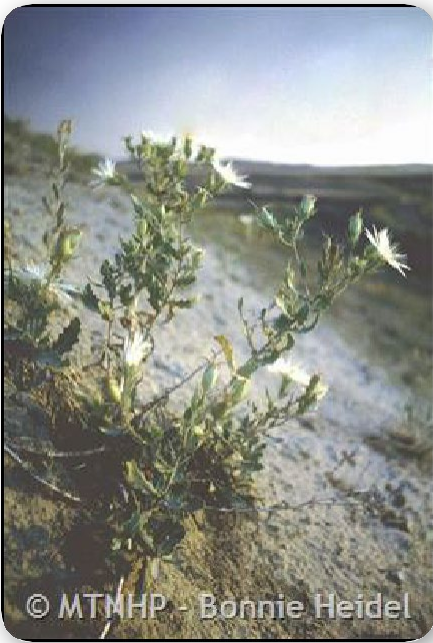
Flowering and fruiting May-July; fruits persisting in fall.

Diagnostic Characteristics

The combination of alternate leaves, lack of tendrils, and orange fruits with red seeds distinguish this species from all other vines in our area.

Habitat

Riparian woodlands, green ash woodlands, and thickets on the plains.



Species of Concern Native
Species Global Rank: G5
State Rank: S1S2

Agency Status USFWS:

USFS:

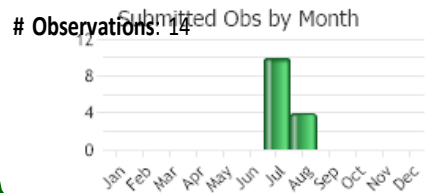
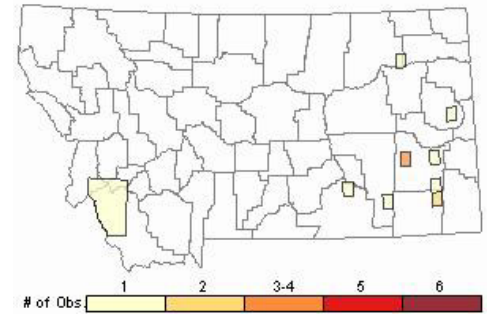
BLM:

State Threat Score: No
Known Threats CCVI:

C-value:



Range Native



Mentzelia nuda

General Description

Bractless *Mentzelia* is an herbaceous biennial or short-lived perennial with one to a few erect, branched stems that arise from a taproot and are up to 1 m high. The lance-shaped, alternate leaves are 4-10 cm long, have deeply-toothed margins, and are petiolate below but sessile above. Foliage is covered with short, barbed hairs that cause it to stick to clothing like velcro. Flowers that open in late afternoon are borne on short stalks arising from the axils of reduced upper leaves, or bracts. Each flower is 4-9 cm across and has 10, non-overlapping, white petals and numerous exserted stamens. The calyx forms a deep bowl with 5

narrow, pointed lobes that are 10-25 mm long; it also contains the ovary and bears the stamens. The cylindrical seed capsules are 2-3 cm long.

Phenology

Flowering in July.

Diagnostic Characteristics

Mentzelia decapetala has ten white petals, its larger flowers are 8-15 cm across, and its petals overlap.

Habitat

Sandy or gravelly soil of open hills and roadsides on the plains.



Species of Concern Native
Species Global Rank: G5
State Rank: S2

Agency Status USFWS:

USFS:

BLM: SENSITIVE

FWP SWAP: SGCN2

Sander canadensis

General Description

The Sauger is one of two native percoid species to Montana east of the Continental Divide closely resembling the introduced walleye. It inhabits both large rivers and reservoirs, but is mainly a river fish. In the spring, Sauger broadcast their spawn over riffles in rivers. Sauger are a highly prized sport fish and in some areas outside Montana are also commercially fished. Their major food items are insects and small fish.

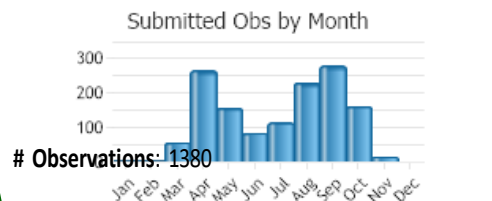
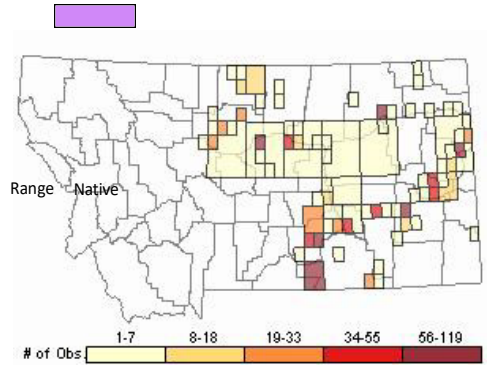
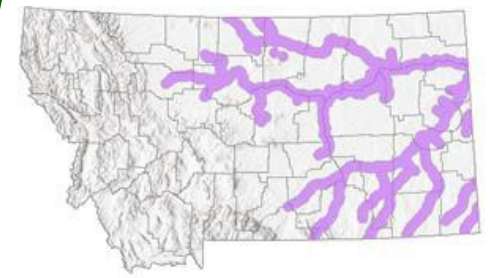
For a comprehensive review of the ecology, conservation status, threats, and management of this and other Montana fish species of concern, please see Montana Chapter of the American Fisheries Society Species of Concern Status Reviews.

Diagnostic Characteristics

One of the most important features to differentiate sauger from walleye is the spotted dorsal fin, which has a spiny appearance. Sauger jaws and the roof of the mouth have large canine teeth. The body is almost round in cross section. The anal fin has 2 spines and 11 to 14 (usually 12 or 13) soft rays. The body often has a grayish hue with dark blotches.

Habitat

Sauger inhabit the larger turbid rivers and the muddy shallows of lakes and reservoirs. They spawn in gravelly or rocky areas in shallow water and seem to prefer turbid water.





© MTNHP - David Stagliano

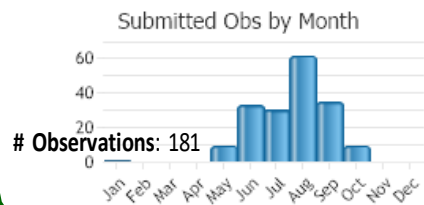
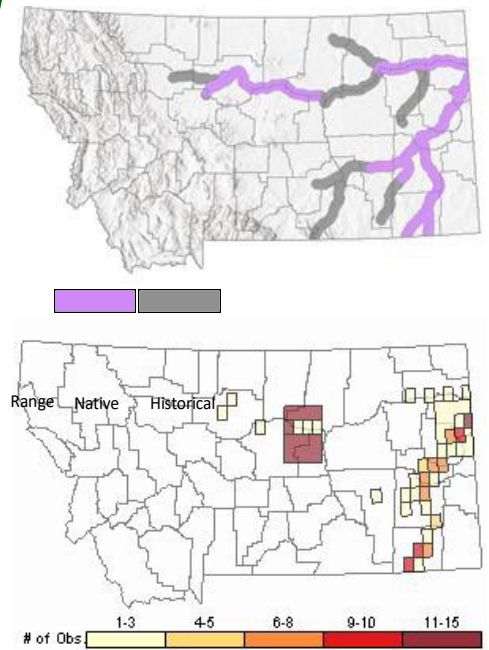
Species of Concern Native
Species Global Rank: G3
State Rank: S2S3

Agency Status USFWS:

USFS:

BLM: SENSITIVE

FWP SWAP: SGCN2-3



Macrhybopsis gelida

General Description

The Sturgeon Chub is one of several native minnows found in the eastern MT prairie river drainages (Missouri, lower Yellowstone and Powder Rivers) and is an indicator species of the Large Mainstem Warmwater River Fish Assemblage that includes other big river species- the Sicklefin Chub, Shovelnose Sturgeon, Freshwater Drum and Blue Sucker. This fish is so named because its mouth is ventral and its snout is long and overhangs the mouth, somewhat like the snout of the sturgeon. Sturgeon Chubs have been rarely collected in the past and were placed as a candidate on the Endangered Species list in 1994, but were removed from consideration in 2001 with more collection efforts. They are a Fish Species of Special Concern in Montana (and 9 other states) due to extensive loss of habitat in the Missouri and Bighorn River systems. They are typically found in the rapid, gravelly turbid waters in larger, plains rivers. They are benthic invertivores using their ventral mouth to feed on bottom-dwelling insects; a short intestine also indicates they do not consume plant materials to a large degree. Sturgeon chubs attain a maximum length of about 4 inches and spawn over gravels in June to July.

Diagnostic Characteristics

Sturgeon Chub have small eyes and many external papillae on their bodies and fins, probably to aid in locating food (Cross 1967, Pflieger 1975, Montana AFS Species Status Account).

The back is brownish to blueish, and the sides and underparts are silvery to white. The overhanging snout on their ventral mouth is the classic characteristic and there is a conspicuous barbel at each corner of the mouth.

Habitat

Sturgeon Chub are found in turbid water with moderate to strong current over bottoms ranging from rocks and gravel to coarse sand (Brown 1971, Holton 1980).



Species of Concern Native

Species Global Rank:

G3G4 State Rank: S2S3

Agency Status USFWS:

USFS:

BLM:

FWP SWAP: SGCN2-3

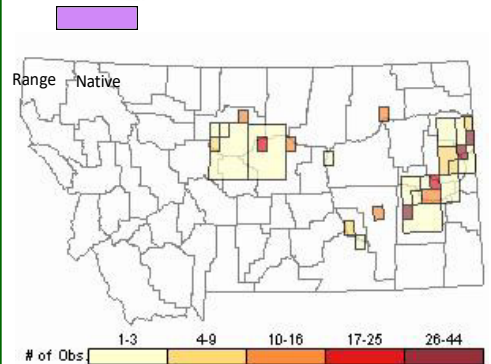
Cycoreptus elongatus

General Description

Eastern Montana is the home of the Blue Sucker. This species appears to inhabit only the larger streams, primarily the Missouri and Yellowstone rivers. It is easily recognized by its elongate shape, long dorsal fin, and slate-blue coloration. The largest weight for this species in Montana is slightly over 10 pounds. It was once taken commercially from the Mississippi River but is now too rare.

Montana populations appear to be stable and fairly abundant with a healthy size structure. Although the Blue Sucker populations appear to be healthy and stable, special recognition is warranted because this species may be susceptible to population declines due to its unique biological characteristics (longevity, low recruitment, migratory nature and reliance on high flows in tributary streams for spawning). Montana has some of the finest habitat for Blue Suckers found in their range and losses of Montana populations would be significant to the overall gene pool (Montana AFS Species Status Account).

For a comprehensive review of the ecology, conservation status, threats, and management of this and other Montana fish species of concern, please see Montana Chapter of the American Fisheries Society Species of Concern Status Reviews.



Diagnostic Characteristics

The Blue Sucker has a back and sides that are dark blue to dark olive, and a white underside. Its most distinctive features are its elongated head/snout and the tall, sickle-shaped dorsal fin.

Habitat

Blue Suckers prefer waters with low turbidity and swift current (Brown 1971).



Species of Concern Native
Species Global Rank: G4
State Rank: S2

Agency Status USFWS:

USFS:

BLM: SENSITIVE

FWP SWAP: SGCN2

Polyodon spathula

General Description

The Paddlefish is an ancient, mostly cartilaginous fish with a smooth skin. It is a close relative of sturgeons. Although it is sometimes called a spoonbill or spoonbill cat, it is not closely related to catfish. Most species of Paddlefish are now extinct, and fossil Paddlefish from 60 million years ago have been found in the Missouri River basin near Fort Peck Reservoir, Montana (Montana AFS Species Status Account).

Montana is home to one of the few remaining self-sustaining populations of Paddlefish, and harbors the largest individual fish as well. Specimens have been taken weighing up to 150 pounds.

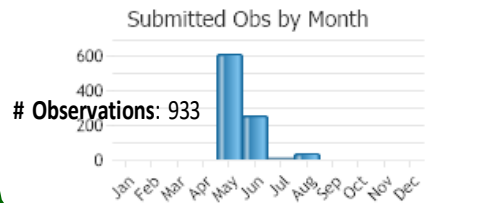
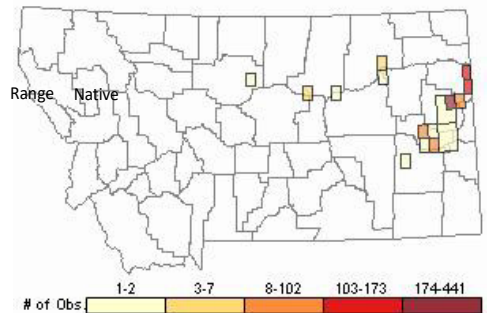
For a comprehensive review of the ecology, conservation status, threats, and management of this and other Montana fish species of concern, please see Montana Chapter of the American Fisheries Society Species of Concern Status Reviews.

Diagnostic Characteristics

Paddlefish are readily identified by the long paddle-like snout, long, tapered gill covers, and the "backbone" bent up into the upper lobe of the tail fin. The body is smooth and virtually scaleless (Holton and Johnson 2003).

Habitat

Habitat includes slow or quiet waters of large rivers or impoundments. They spawn on the gravel bars of large rivers during spring high water. Paddlefish tolerate, or perhaps seek, turbid water (Holton and Johnson 2003).





Species of Concern Native
Species Global Rank: G2
State Rank: S1

Agency Status USFWS:
LE USFS:

BLM: ENDANGERED

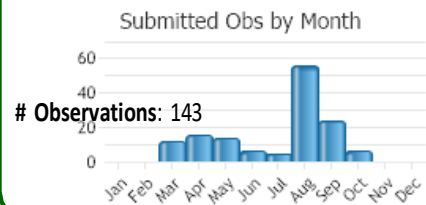
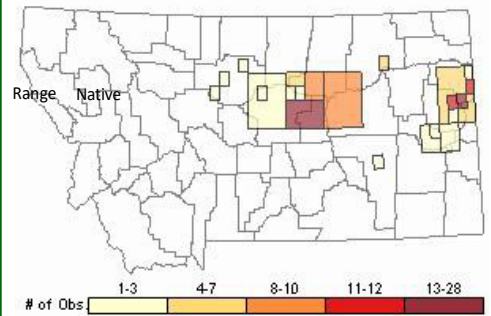
FWP SWAP: SGCN1

Scaphirhynchus albus

General Description

The Pallid Sturgeon is the larger of the two species of sturgeon found east of the Continental Divide. Both sturgeon species, Pallid and Shovelnose, co-occur in the Missouri and Yellowstone Rivers. Pallid sturgeons have a unique dinosaur-like appearance and have been swimming around since the dinosaurs. They have a flattened snout, long slender tail and are armored with lengthwise rows of bony plates instead of scales. Their mouth is toothless and positioned under the snout for sucking small fishes and invertebrates from the river bottom. Pallid sturgeon can weigh up to 80 pounds and grow to about 6 feet long.

For a comprehensive review of the ecology, conservation status, threats, and management of this and other Montana fish species of concern, please see Montana Chapter of the American Fisheries Society Species of Concern Status Reviews.



Diagnostic Characteristics

The Pallid Sturgeon is a large fish (to 186 centimeters) with a heterocercal tail, a long slender caudal peduncle, a flat shovel-shaped snout, four fringed barbels on the snout, a ventral mouth, and large bony scutes on the head, back, and sides; 37 to 43 dorsal rays; 24 to 28 anal rays (Page and Burr 1991). The Pallid Sturgeon is similar to the Shovelnose Sturgeon but has no scale-like scutes on the belly, the bases of the outer barbels usually are posterior to the bases of the inner barbels, the inner barbels are shorter, the head is larger, the mouth is wider, the eye is smaller, and the color is usually paler (gray-white above and on sides) (Page and Burr 1991).

Habitat

Pallid Sturgeon use large, turbid rivers over sand and gravel bottoms, usually in strong current; also impoundments of these rivers (FWP). In Montana, Pallid Sturgeon use large turbid streams including the Missouri and Yellowstone rivers (Brown 1971, Flath 1981). They use all channel types, primarily straight reaches with islands (Bramblett 1996). They primarily use areas with substrates containing sand (especially bottom sand dune formations) and fines (93% of observations) (Bramblett 1996). Stream bottom velocities ranged between 0.0 and 1.37 meters per second, with an average of 0.65 meter per second (Bramblett 1996). Depths used were 0.6 to 14.5 meters and averaged 3.30 meters, and they appeared to move deeper during the day (Bramblett 1996). Channel widths from 110 to 1100 meters are used and average 324 meters (Bramblett 1996). Water temperatures used ranged from 2.8 to 20 degrees C. (Tews 1994, Bramblett 1996). Water turbidity ranged from 12 to 6400 NTU (Turbidity Units) (Tews 1994).



Species of Concern Native
Species Global Rank: G5
State Rank: S3

Agency Status USFWS:

USFS:

BLM:

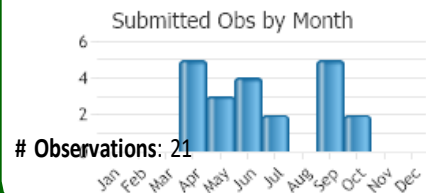
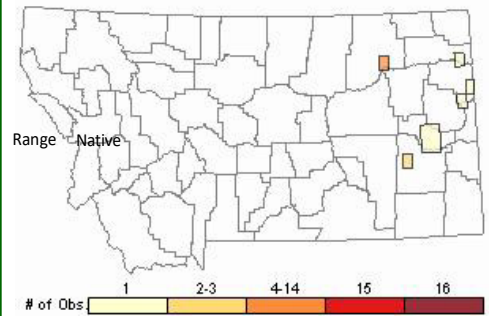
FWP SWAP: SGCN1

Lepisosteus platostomus

General Description

The gar family has only one representative in Montana, the Shortnose Gar. This fish is native to Montana and has been previously found at only one location--the dredge ponds below Fort Peck Reservoir. But more recent collections (2010-2015) have reported this species in the Milk and the Yellowstone Rivers. Because of its restricted distribution and limited population size, it has been named a Montana state Fish of Special Concern. Gars are predaceous. They are spring, broadcast spawners. They have several unusual features including rectangular scales found only in primitive fishes, and a gas bladder that can function like a lung. All fish have gas bladders, which they use to regulate their buoyancy, but the gas bladder of a gar can extract the oxygen from air that is swallowed. Consequently, gars can survive in waters that have very little oxygen where most other fish would perish. Gar eggs are poisonous to humans.

For a comprehensive review of the ecology, conservation status, threats, and management of this and other Montana fish species of concern, please see Montana Chapter of the American Fisheries Society Species of Concern Status Reviews.



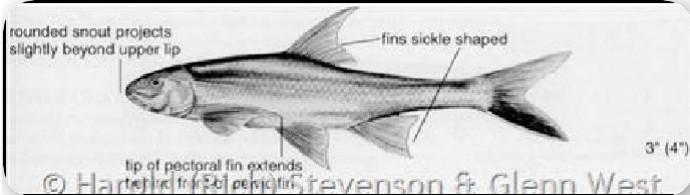
Diagnostic Characteristics

This prehistoric-appearing fish is cylindrically shaped, with an elongated bony head and snout containing one row of sharp, conical teeth. The dorsal fin is located well posterior and the pectoral and pelvic fins have no spots (Marshall 1966). The skin is covered with diamond shaped ganoid scales arranged in oblique rows, providing a very protective surface armor (Moyle 1993). Scales number 60 to 64 along the lateral line. Color varies from brownish or olive-green on the dorsal surface lightening to yellow on the sides and white on the belly (Holton and Johnson 1996). Young gar less than 10 inches in length process a black stripe along the midline. Shortnose Gar may reach a size and weight of about 31 inches and about 3.5 pounds (Montana AFS Species Status Account).

Habitat

Shortnose Gar are typically found in large rivers, quiet pools, backwaters, and oxbow lakes. It has a higher tolerance to turbid water than the other four gar species found in North America (Montana AFS Species Status Account).

They are found in dredge cuts below Fort Peck Dam (Holton 2003).



Species of Concern Native
Species Global Rank: G3
State Rank: S1

Agency Status USFWS:

USFS:

BLM:

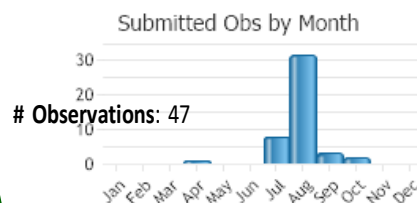
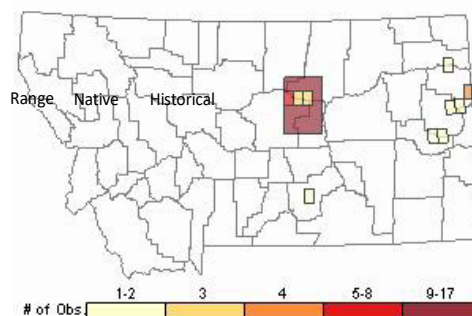
FWP SWAP: SGCN1

Macrhybopsis meeki

General Description

The Sicklefin Chub is a rare, large-river minnow species found in the lower Missouri and Yellowstone Rivers (Large Valley River Ecosystems) of Montana. It was first collected in 1979, and to date has only been found in about a dozen river segments. Because it is rare and specialized to this large river system, it is a Montana Fish of Special Concern. Its general habitat and distribution is much like that of the Sturgeon Chub. The Sicklefin Chub is found in large, turbid streams in the plains region of Montana. This species is very similar in appearance to the Sturgeon Chub except that its pectoral fins are strikingly long. The life history features and maximum size of the Sicklefin Chub are similar to those of the Sturgeon Chub.

For a comprehensive review of the ecology, conservation status, threats, and management of this and other Montana fish species of concern, please see Montana Chapter of the American Fisheries Society Species of Concern Status Reviews.



Diagnostic Characteristics

Sicklefin Chub are light brown on the back and upper sides and silvery-white below. There is a conspicuous barbel at each corner of the mouth.

Habitat

Sicklefin Chub are strictly confined to the main channels of large, turbid rivers where they live in a strong current over a bottom of sand or fine gravel (Pflieger 1975).

Unlike the Sturgeon Chub, all of the Montana captures have been from only the Missouri and Yellowstone rivers, indicating a strong preference for large turbid rivers (Montana AFS Species Status Account).



Species of Concern Native
Species Global Rank: G5
State Rank: S3

Agency Status USFWS:

USFS:

BLM:

FWP SWAP: SGCN3

Chrosomus eos

General Description

The Northern Redbelly Dace is one of Montana's small native minnows found in small cool, prairie streams. During the spawning season, the males of this species become quite colorful with red flanks. Its maximum size is approximately 3 inches.

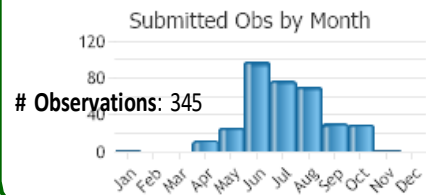
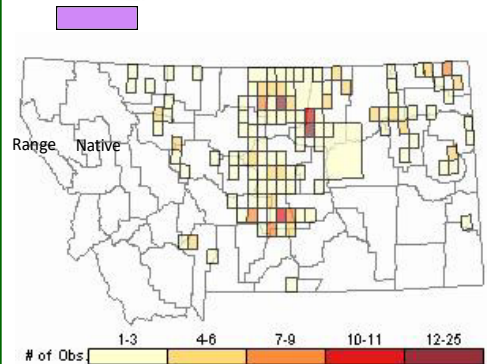
For a comprehensive review of the ecology, conservation status, threats, and management of this and other Montana fish species of concern, please see Montana Chapter of the American Fisheries Society Species of Concern Status Reviews.

Diagnostic Characteristics

The Northern Redbelly Dace is olive to dark brown above; the lower side and belly are yellow or silvery except on adult males during summer when the lower side is red. The side has two dark stripes with a light band between them; the upper stripe often breaks into spots toward the tail. The lower stripe is broader and extends from the snout to the base of the tail fin where it may end in a spot. These two lateral stripes are sometimes connected by a dark, oblique line or crossband. The eyes are large. The body is almost round in cross section. The front of the dorsal fin is behind the front of the pelvic fins. The lateral line is incomplete and not distinct and there are no barbels (Brown 1971, Holton and Johnson 1996).

Habitat

Northern Redbelly Dace are found in clear, cool, slow-flowing creeks, ponds and lakes with aquatic vegetation, including filamentous algae, and sandy or gravelly bottoms interspersed with silt (Brown 1971). In Montana, this species is an indicator species of the Northern Glaciated Prairie Stream Ecological System and may occur in the intermittent prairie stream systems. In Stink Creek of northern South Dakota (Morey and Berry 2004), dace were found in a single unconstrained and low-gradient prairie channel with little surface flow at the time (early June). Pools were 26 to 84 cm (1.0 to 3.3 inches) deep in a wetted area about 1.3 m (4.3 ft) wide. Water temperature was 16.6 C, filamentous algae and rooted macrophytes were abundant. In western South Dakota, the range of this species appears to be limited to perennial streams with slow, clear water and abundant macrophytes and algae (Morey and Berry 2004). In Colorado (Bestgen 1989), the presence of cool springs or cool tributary flow was a consistent feature of Northern Redbelly Dace habitats in prairie streams and marshes. Strong thermal stratification existed in some heavily vegetated ponds. In water < 0.3 m (0.9 ft) deep, surface temperature was 27 C when bottom temperature was 18 C; water < 22 C was present in all occupied habitats. Individuals were usually found in water 0.25 to 1.3 m (0.8 to 4.3 ft) deep and congregated near the shores of ponds >3.0 m (9.8 ft) deep. Substrate in all habitats ranged from black anoxic silt to sand.





Species of Concern Native
Species Global Rank: G5
State Rank: S2

Agency Status USFWS:

USFS: SENSITIVE BLM:
SENSITIVE FWP SWAP:
SGCN2

Lampropeltis gentilis

General Description

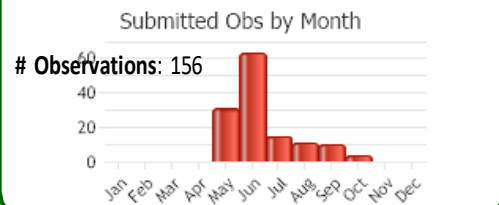
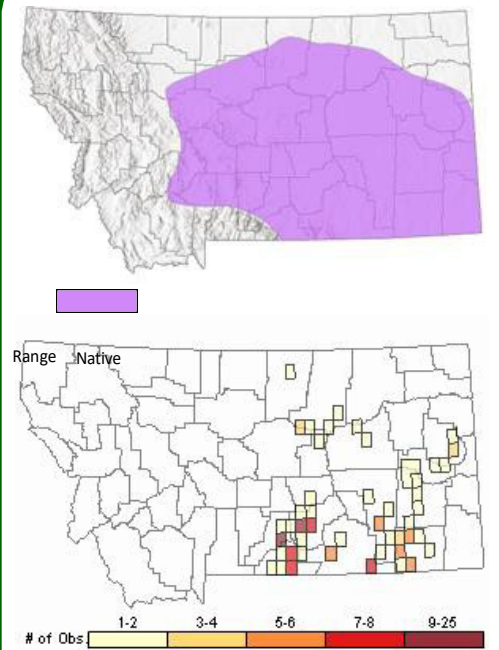
The back and sides of the body of the Milksnake are marked with whitish, black, and reddish or orange bands, with the reddish-orange bands bordered by the black; the snout is blackish and sometimes with whitish flecking. The bands often extend across the belly, but sometimes may be incomplete or absent, in which case the belly is whitish. Dorsal scales are smooth (unkeeled). The anal scale is not divided, as are most of the scales on the ventral surface of the tail. The neck is relatively short and thick. Total length of adults in the western Great Plains is usually 39 to 85 centimeters. Hatchlings are similar in appearance to adults, and 16 to 29 centimeters in total length. Eggs are slightly granular and range from 29 to 44 millimeters by 13 to 16 millimeters in length and breadth, depending on locality.

Diagnostic Characteristics

The whitish, black, and reddish to orange banding or rings around the body, an undivided anal scale, and smooth (unkeeled) dorsal scales distinguish the Milksnake from all other snakes native to Montana.

Habitat

Little specific information is available. Milksnakes have been reported in areas of open sagebrush-grassland habitat (Dood 1980) and ponderosa pine savannah with sandy soils (Hendricks 1999), most often in or near areas of rocky outcrops and hillsides or badland scarps, sometimes within city limits.





© Tom Bowler

Species of Concern

Native Species

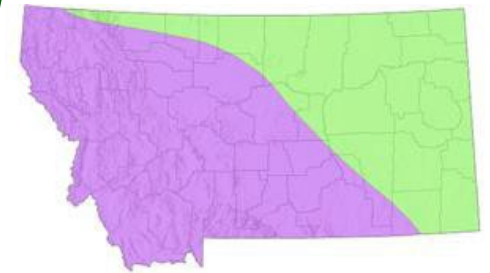
Global Rank: G5

State Rank: S3

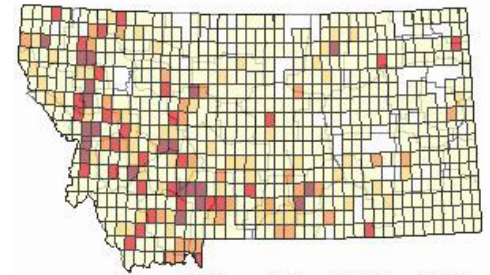
Agency Status USFWS:

MBTA USFS:

RI M-

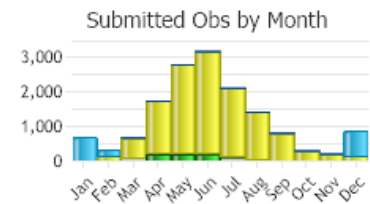


Range **Year-round** **Summer** **Migratory**



of Obs 1-21 22-42 43-69 70-130 131-951

Observations: 17207



Ardea herodias

General Description

Largest heron in North America, 60 cm tall, 97 to 135 cm long, 2.1 to

2.5 kg mass. Wings long and rounded, bill long and tapered, tail short. Upper parts are gray, fore-neck is streaked with white, black, and rust- brown. Bill yellowish. Legs brownish or greenish. In flight, folds neck in an "S" shape and extends legs along the body axis.

Diagnostic Characteristics

No other heron in Montana is the size or color of the Great Blue Heron, nor are other herons likely to be encountered in Montana during winter.

Habitat

Great Blue Herons are equally at home in urban wetlands and wilderness settings. Most Montana nesting colonies are in cottonwoods along major rivers and lakes; a smaller number occur in riparian ponderosa pines and on islands in prairie wetlands. Nesting trees are the largest available. Active colonies are farther from rivers than inactive colonies. The number of nests in the colony corresponds to the distance from roads (Parker 1980).



Species of Concern Native/Non-native Species (depends on location or taxa) **Global Rank:** G5

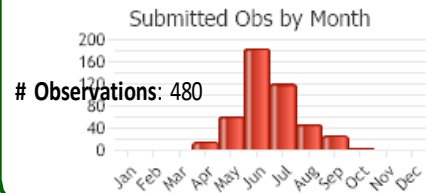
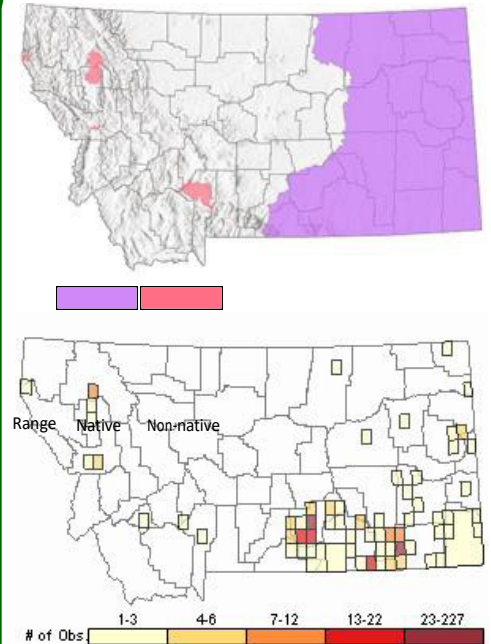
State Rank: S3

Agency Status USFWS:

USFS:

BLM: SENSITIVE

FWP SWAP: SGCN3, SGIN



Chelydra serpentina

General Description

EGGS:

Eggs are white and round. They range from 23-33 mm in length, averaging 27-28 mm. The shell is leathery and is somewhat pliable. Clutch size ranges from 6-109 eggs (Werner et al. 2004).

HATCHLINGS:

Hatchlings are dark brown to black with conspicuous ridges on their carapace. The carapace measure 2.5-3.8 cm (1-1.5 inches) in length (Ernst et al. 1994, Werner et al. 2004).

JUVENILES AND ADULTS:

This species are large, stout turtles with an adult carapace length (CL) typically 20-35 cm

(8-14 inches), but grow larger in populations of the southern United States (Degenhardt et al. 1996).

Adults usually weigh 4.5-16 kilograms (10-35 lbs). However, one Montana individual found in the

Redwater River reached 32 pounds (Aderhold 1980) and another Montana specimen

reportedly reached 48 pounds (Werner et al. 2004). Their tails are long about the length of the carapace (dorsal shell), with three rows of distinct sawtooth-shaped projections. They have long necks with tubercles on the dorsal surface. They have webbed toes and powerful claws (Hammerson 1999).

Diagnostic Characteristics

The Snapping Turtle is the only turtle in Montana with a reduced plastron covering less than half of the ventral surface, keeled scutes on the carapace, and a tail approximately as long as the carapace. There is no bright orange or yellow coloration as found on the Painted Turtle (*Chrysemys picta*).

Habitat

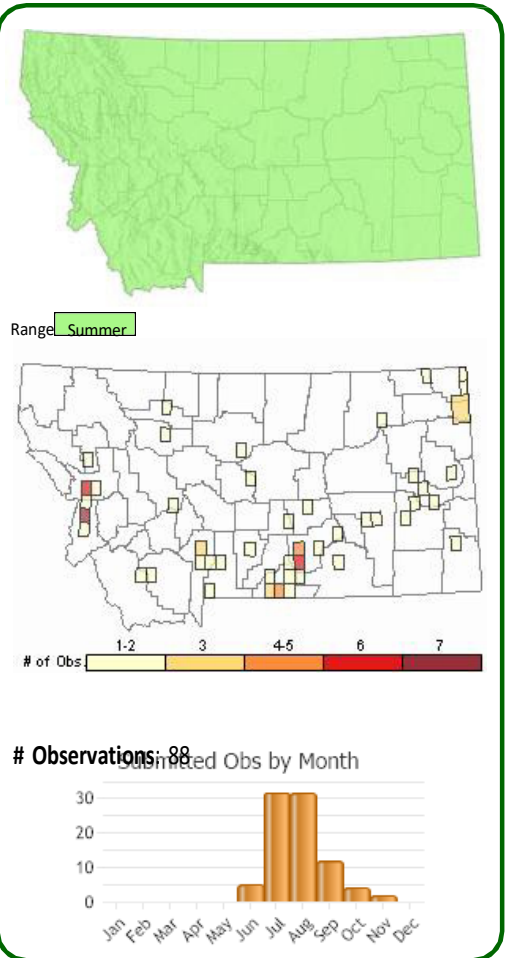
Habitats used in Montana are probably similar to other areas in their range, but local studies are lacking and there is little qualitative information available. They have been captured or observed in backwaters along major rivers, at smaller reservoirs, and in smaller streams and creeks with permanent flowing water.



Species of Concern Native
Species Global Rank: G4
State Rank: S2S3

Agency Status
USFWS: C USFS:

BLM:



Danaus plexippus

General Description

[From Ferris and Brown 1981; Scott 1986; Opler and Wright 1999; Glassberg 2001; Pyle 2002] Forewing 5.2-5.8 cm. Large, forewing long and drawn-out. Uppersurface with large orange ovals in tip of forewing, males bright orange with black scent patch in middle of hindwing, females duller orange with thicker black scaling of veins and no black scent patch; black border has two rows of tiny white spots; hindwing lacks black postmedian line.

Phenology

Five or more flights, all year in California and southern Florida; several flights, March to November in New Mexico and southern Nevada; one or two flights, May to October (Scott 1986). Mainly March/April to October/November (Glassberg 2001); early June to early October in Oregon and Washington (Pyle 2002).

Diagnostic Characteristics

Distinctive; best told by color and large size, black border with two rows of tiny white spots, hindwing lacking black postmedian line.

Habitat

Open places, native prairie, foothills, open valley bottoms, open weedy fields, roadsides, pastures, marshes, suburban areas, rarely above treeline in alpine terrain during migration (Scott 1986; Opler and Wright 1999; Glassberg 2001; Pyle 2002). Reported in Glacier National Park, Montana in mesic montane meadows (Debinski 1993).



Species of Concern Native
Species Global Rank: G4
State Rank: S1B

Agency Status USFWS:
DM; MBTA USFS:

BLM: ENDANGERED

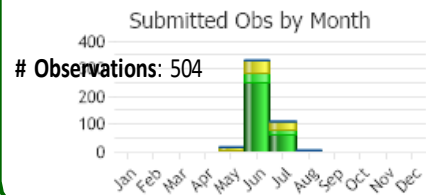
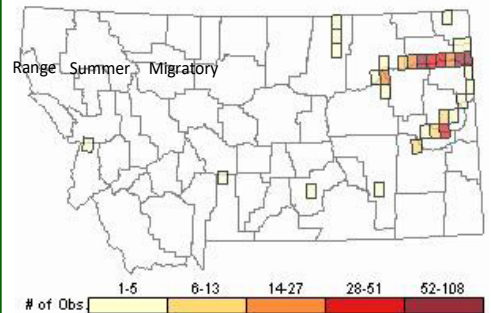
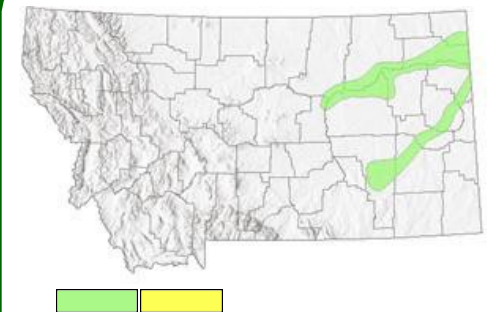
FWP SWAP: SGCN1, SGIN

PIF: 1

Sternula antillarum

General Description

The smallest tern in North America, the Least Tern averages 21 to 24 cm long and has a wingspan of 51 cm (Thompson et al. 1997). In breeding plumage the species is characterized by a black cap and stripe through the eye that contrast sharply with a white forehead (Thompson et al. 1997). The underparts of the bird are white, while the upperparts are gray. The outer primaries of their long, narrow wings are black. They have a short, slightly notched tail, and a slightly decurved and tapered yellow bill (unique from other tern species) with a small black tip. The sexes are virtually identical, although Whitman (1988) notes some subtle differences; the male bill is described as orange to bright yellow, while the female's is light, dull yellow, or straw-colored. The iris is dark brown (Thompson et al. 1997); the feet and legs of the male are bright orange and generally bright to pale yellow on the female (Whitman 1988).



Vocalization of the Least Tern is described as a shrill, rapid, sharp "*piDEEK-adik*" or "*keDEEK*" as well as a weak, nasal sounding "*whididi*" and high, sharp "*kweek*" or "*kwik*" squeaks. The alarm call is a sharp, rising "*zreek*" (Sibley 2000).

For a comprehensive review of the conservation status, habitat use, and ecology of this and other Montana bird species, please see Marks et al. 2016, Birds of Montana.

Diagnostic Characteristics

It is unlikely for the Least Tern to be confused with any other tern species in Montana. Its diminutive size, yellow bill, and white forehead are distinctive. Another tern species found in the state, the Forster's Tern, also has a black cap, but it lacks the white forehead. Also, the Forster's Tern is larger than the Least Tern, has a large orange, not yellow, bill and lacks black primaries in breeding plumage (Sibley 2000).

Habitat

Least Terns nest on unvegetated sand-pebble beaches and islands of large reservoirs and rivers in northeastern and southeastern Montana, specifically the Yellowstone and Missouri river systems (Christopherson 1991). These wide, open river channels, and lake and pothole shorelines provide the preferred characteristics for nesting Least Terns. Sites with gravel substrate provide the most suitable sites for nesting (Montana Piping Plover Recovery Committee 1994). One of the most limiting factors to nesting site selection is vegetational encroachment; Least Terns avoid areas where relatively thick vegetation provides cover for potential predators. Fine-textured soils are easier to treat mechanically than rocky or gravelly soils when vegetation is determined as a limiting factor in an area's ability to provide suitable nesting habitat, but fine soils are not typically a preferred nesting substrate (Montana Piping Plover Recovery Committee 1994).

In Montana, as in other areas, another and more important limiting factor in nest site selection is the location of nesting sites in relation to surrounding water levels. Nests are often inundated because water levels are kept unnaturally high throughout the breeding season (and high winds can cause nests to be flooded) or nesting sites are not available (either because of encroaching vegetation or because water levels are so high that beaches are under water during the early part of, and possibly throughout, the nesting season) (Montana Piping Plover Recovery Committee 1994).



Species of Concern Native
Species Global Rank: G5
State Rank: S2

Agency Status USFWS:

USFS: SENSITIVE

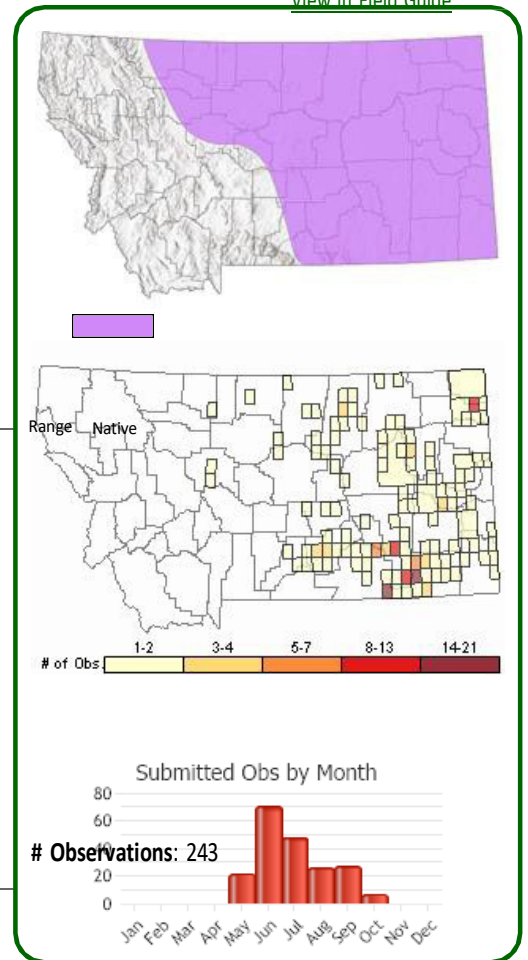
BLM: SENSITIVE

FWP SWAP: SGCN2, SGIN

Heterodon nasicus

General Description

This is a heavy-bodied snake with a broad neck and dark blotches on the back extending from the back of the head onto the tail. There is a large amount of black pigmentation on the underside of the body, with contrasting patches of white, yellow, and orange. The anal scale is divided. The snout is upturned, with an enlarged rostral scale that is spade-like and keeled. The dorsal scales are also keeled. There are enlarged ungrooved teeth near the rear of the upper jaws. The maximum total length is about 90 centimeters, but most individuals are less than 65 centimeters. Hatchlings are similar to adults in appearance and about 17 to 20 centimeters total length. Eggs are smooth and elongate (usually 26 to 38 millimeters by 14 to 23 millimeters in length and breadth).



Diagnostic Characteristics

The presence of an upturned snout that is spade-like and keeled, in combination with keeled dorsal scales, a dark-patterned belly, a divided anal scale, and the absence of tail rattles and facial pit, distinguishes the Western Hog-nosed Snake from all other snakes native to Montana. The color pattern is described as similar to both the Gophersnake and the Prairie Rattlesnake, but neither of these, nor any other snake in Montana, has an upturned nose like the Western Hog-nosed Snake.

Habitat

Little specific information for the state is available. They have been reported in areas of sagebrush-grassland habitat (Dood 1980) and near pine savannah in grassland underlain by sandy soil (Reichel 1995, Hendricks 1999).

In other locations, their apparent preference for arid areas, farmlands, and floodplains, particularly those with gravelly or sandy soil, has been noted. They occupy burrows or dig into soil, and less often are found under rocks or debris, during periods of inactivity (Baxter and Stone 1985, Hammerson 1999, Stebbins 2003).



Special Status Species Native Species

Global Rank: G5

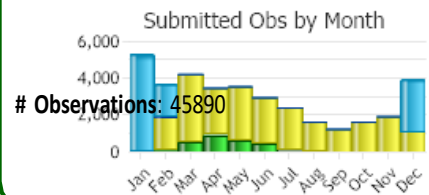
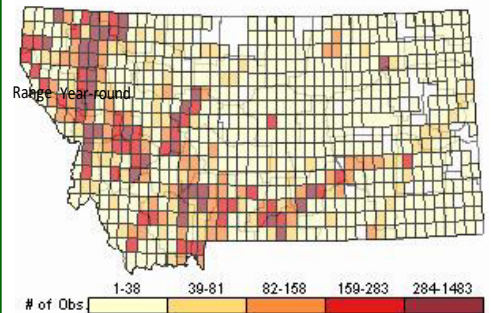
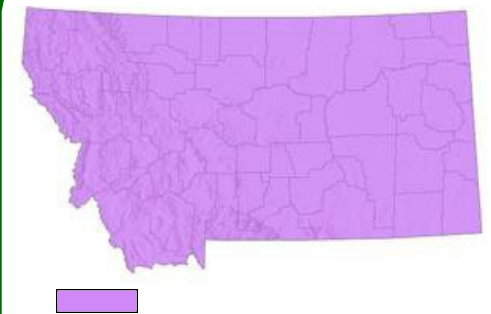
State Rank: S4

Agency Status USFWS:

BGEPA; MBTA USFS:

SENSITIVE BLM: SENSITIVE

PIF: 2



Haliaeetus leucocephalus

General Description

With a white head and tail contrasting with a dark brown body and wings, the adult plumage of the Bald Eagle, attained at approximately 5 years of age, is unmistakable. In addition to the obvious white head and tail, other distinguishing features include the yellow bill, cere, iris, legs and feet. Second in size of North American birds of prey only to the California Condor (*Gymnogyps californianus*), the Bald Eagle ranges in total length from 71 to 96 cm, with an average wingspan of 168 to 244 cm and a body mass ranging from 3.0 to 6.3 kg (Buehler 2000). In general appearance the sexes are similar with females approximately 25

percent larger than males. The plumage of the juvenile birds is much less distinct, being dark brown overall. The head, body, wings, and tail are dark brown with limited mottling on the underside of the wings and on the belly. While the legs and feet of the young bird are yellow like those of adults, the bill and cere are dark gray and the iris is dark brown.

The voice of the Bald Eagle is a weak series of chirps. The vocalization is described as flat chirping, stuttering whistles, given in a halting fashion, with the immature calls generally harsher and more shrill than those of the adults (Buehler 2000, Sibley 2000).

For a comprehensive review of the conservation status, habitat use, and ecology of this and other Montana bird species, please see Marks et al. 2016, *Birds of Montana*.

Diagnostic Characteristics

In adult plumage, the Bald Eagle is unlikely to be confused with any other species. Juvenile Bald Eagles may be confused with Golden Eagles (*Aquila chrysaetos*), especially with adult Golden Eagles. A few characteristics differentiate these two species. The Bald Eagle has unfeathered legs, while those of the Golden Eagle are feathered. During flight, the head and neck of the Bald Eagle extend to about half the length of the tail, while the Golden Eagle is considerably less. This distinction is true for all age classes of both species. The terminal tail band on the Golden Eagle is dark and well defined, especially on the juveniles. In addition, the underwing and belly of the Bald Eagle show a greater amount of white compared to the Golden Eagle, whose white feathering is restricted to the base of the flight feathers (Buehler 2000).

Habitat

In Montana, as elsewhere, the Bald Eagle is primarily a species of riparian and lacustrine habitats (forested areas along rivers and lakes), especially during the breeding season. Important year-round habitat includes wetlands, major water bodies, spring spawning streams, ungulate winter ranges and open water areas (Bureau of Land Management 1986). Wintering habitat may include upland sites. Nesting sites are generally located within larger forested areas near large lakes and rivers where nests are usually built in the tallest, oldest, large diameter trees. Nesting site selection is dependent upon maximum local food availability and minimum disturbance from human activity (Montana Bald Eagle Working Group 1994). See the Montana Bald Eagle Management Plan (1994) for further details including home range sizes and habitat requirements of fledgling birds.



Species of Concern

Native Species

Global Rank: G5

State Rank: S3

Agency Status USFWS:

IUCN:

Apalone spinifer

General Description

EGGS:

The eggs are hard and white with a smooth and spherical shape. The shell is thick and brittle, approximately 24-32 mm (0.94-1.26 inches) in diameter. Clutch size can range from as few as 4 eggs to as many as 40 (typically 12-18), with eggs deposited in flask-shaped nests that are covered with soil (Webb 1962, Miller et al. 1989, Ernst et al. 1994, Hammerson 1999).

HATCHLINGS:

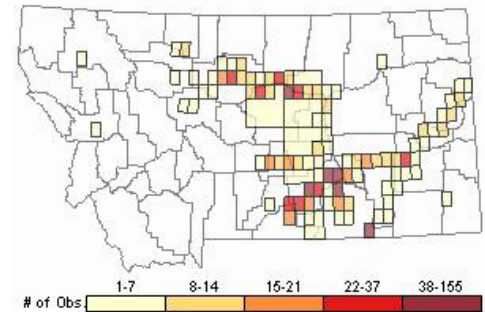
The carapace is olive to tan, with small dark circles, spots, or dashes, and a yellowish margin bordered by a black line. Carapace is approximately 3-4 cm (1.2-1.6 inches) in length.

The shell is flattened (pancake-like), with flexible edges and covered with leathery skin. The tail is thick and long, with the vent well beyond the rear edge of the carapace. Small conical tubercles or "spines" are present on the front edge of the carapace above the neck. The snout is tubular and flexible, with a ridge along the inner margin of each nostril. This allows this species to remain beneath the surface with just the snout exposed. The lips are fleshy and cover sharp-edged jaws. Limbs are flat, and the toes are broadly webbed. Carapace coloration is olive-brown, brown, or grayish, with a cream or yellowish margin. The plastron is unmarked and cream to yellowish in coloration (Webb 1962, Ernst et al. 1994, Hammerson 1999, Stebbins 2003).

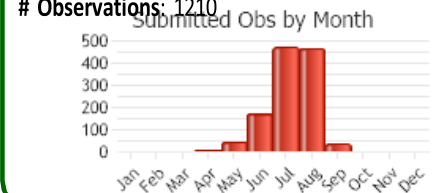
In mature males, the carapace has the texture of sandpaper, and marked with small dark spots or circles. The tail is thick and long, with the vent well beyond the rear edge of the carapace. In mature females, the carapace does not have the texture of sandpaper with more mottled or marked with blotches. Tubercles at the front edge of the carapace are more prominent than in males, and the tail is relatively short. Adult females can reach 54 cm (21.3 inches) in carapace length (CL), while males are smaller by an average of 10 cm (3.9 inches) and reach about 22 cm (8.7 inches) in carapace length. For example, a study in southeastern Montana produced fourteen males ranging from 14.8-21.6 cm (5.8-8.5 inches) CL (290-730 grams), and 23 males ranging from 28.3-43.8 cm (11.1-17.2 inches) CL (2080-6700 grams) (Gates 2005).

Diagnostic Characteristics

The Spiny Softshell (*Apalone spinifer*) differs from other Montana turtles by having a flattened and leathery shell that is soft and by the presence of a pointed snout with tubular nostrils. The Smooth Softshell (*A. muticus*), which occurs in the Missouri River in South Dakota and southern North Dakota (Hoberg and Gause 1989, Ballinger et al. 2000), differs from the Spiny Softshell by lacking the ridge on the inner margin of each tubular nostril and the absence of tubercles or spines along the front edge of the carapace (Ernst et al. 1994).


Range ☒ Native ☐ Historical


Observations: 1210



Habitat

The Spiny Softshell is primarily an animal of riverine systems, but also inhabits marshy creeks, bayous, oxbows, lakes, irrigation canals, and impoundments (Webb 1962, Ernst et al. 1994, Hammerson 1999, Stebbins 2003). A soft bottom in permanent bodies of water with some aquatic vegetation appears to be essential, and sandbars and/or mudflats, as well as partially submerged debris (trees, fallen logs, brush), are usually present. In shallow water, young Spiny Softshell bury themselves in soft sand and silt to seek refuge and concealment (Baxter and Stone 1985). In Iowa, females seemed to prefer open water more than males (Williams and Christiansen 1981). Eggs are laid in nests dug in open areas in sand, gravel, or soft soil near water (Baxter and Stone 1985, Ernst et al. 1994, Hammerson 1999, Stebbins 2003).

Habitat use by Spiny Softshell in Montana is probably similar to elsewhere in the range, but studies are lacking and there is little qualitative information available. They are encountered most often in the larger rivers and their tributaries. Adult males and females have been observed basking together on partially submerged logs in backwater sites of slow-moving water, on sandy and muddy riverbanks, and on partially submerged rocks in shallow water along major rivers. Hatchlings have been found in shallow water at the edge of rivers, burrowing into silty substrate with emergent vegetation present (Paul Hendricks, personal observation). A small-scale trapping and visual encounter survey conducted on a six-mile stretch of the upper Tongue River in southeastern Montana concluded that the most successful trapping locations were near sandbar islands adjacent to pools with a soft organic bottom. Additionally, stretches of river with exposed boulders and basking logs produced the most visual observations (Gates 2005).



Species of Concern Native
Species Global Rank: G5
State Rank: S3

Agency Status USFWS:

USFS: BLM:

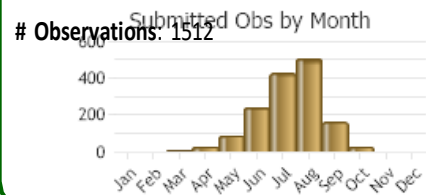
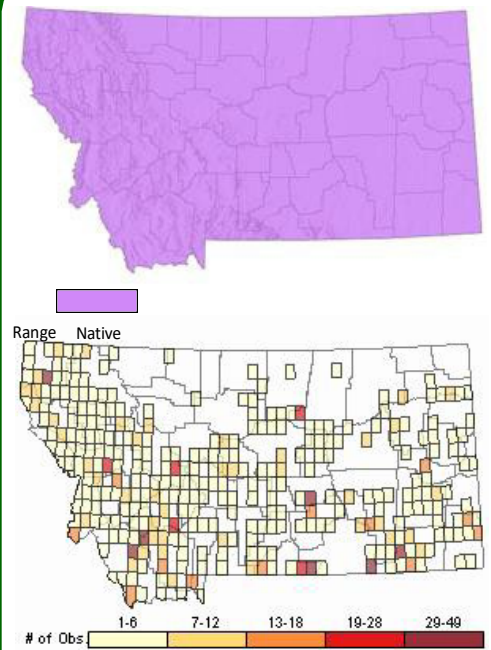
Myotis evotis

General Description

Ears are black and the longest of any other North American bat in the genus *Myotis*; > 0.84 inches (>21 millimeters). When bent forward, ears extend > 5 millimeters beyond the tip of the nose. Wingspan of 10-12 inches (25-30 centimeters) and weighs 0.2-0.3 inches (5-8 grams). Coat color is dull brown to straw-colored with individual hairs black at the base (Adams 2003).

Habitat

Occupy a wide range of rocky and forested habitats over a broad elevation gradient (Jones et al. 1973). Summer day roosts include abandoned buildings, bridges, hollow trees, stumps, under loose bark, and rock fissures. Hibernacula include caves and abandoned mines. The species has been located hibernating in a mine in riverbreaks habitat in northeastern Montana (Swenson and Shanks 1979).





Species of Concern Native
Species Global Rank:
G3G4 State Rank: S3B

Agency Status USFWS:

USFS:

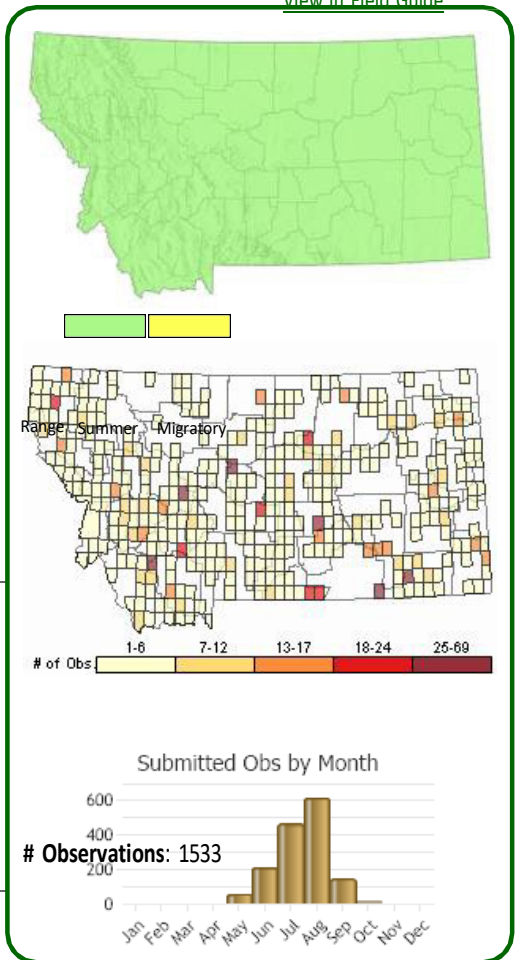
BLM: SENSITIVE

FWP SWAP: SGCN3

Lasiurus cinereus

General Description

The Hoary Bat is a large lasurine (20 to 35 g) with long pointed wings and heavily-furred interfemoral membrane. Pelage overall is frosted or hoary (mixed brownish and grayish with white-tipped hairs, wrist and shoulder patches whitish), yellowish on the throat, forearm length about 46 to 55 mm. Ears are short and rounded, rimmed in dark brown or black, tragus short and broad. It has large teeth; dental formula I 1/3, C 1/1, P 2/2, M 3/3 (Shump and Shump 1982, Adams 2003).



Diagnostic Characteristics

Hoary Bat is the largest bat species found in Montana, and only one of two with an interfemoral membrane completely furred on the dorsal surface, the other being the Eastern Red Bat. The Hoary Bat has a distinctive appearance along with its large size (35 g in weight, to about 140 mm in total length): dorsal pelage in is a mixture of browns and grays, tinged with white, giving the bat a frosted or hoary appearance (Shump and Shump 1982), unlike the reddish dorsal pelage of the smaller Eastern Red Bat. Definitive Hoary Bat calls are also of lower characteristic frequency and appearance: < 23 kHz lasting up to 20 milliseconds for Hoary versus 38-50 kHz lasting > 10 milliseconds for Eastern Red.

Habitat

During the summer, Hoary Bats occupy forested areas. A female with two naked pups was found in mid-July using a wooden bridge in Stillwater County as a temporary day roost (Hendricks et al. 2005) but no other Montana roosts have been reported. Often captured foraging over water sources embedded within forested terrain, both conifer and hardwood, as well as along riparian corridors. Reported in Montana over a broad elevation range (579 to 2774 m; 1900 to 9100 ft) during August, the highest record from treeline along the Gravelly Range road (Madison County), the lowest from the Yellowstone River near Sidney (Richland County); probably most common throughout summer in Montana at lower elevations.



© Dick Dede, Jr.

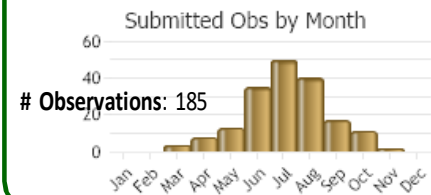
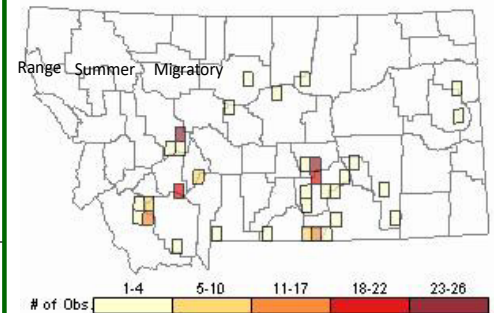
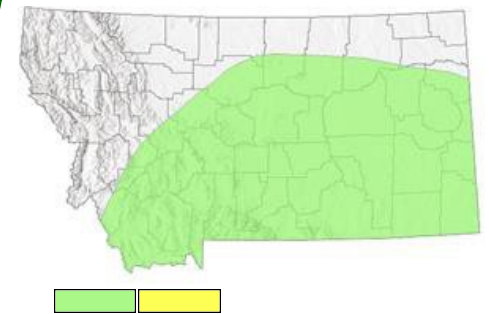
Species of Concern Native
Species Global Rank: G4
State Rank: S3

Agency Status USFWS:

USFS: SENSITIVE

BLM: SENSITIVE

FWP SWAP: SGCN3, SGIN



Euderma maculatum

General Description

Spotted Bats have huge pink ears (37 to 50 millimeters long), the dorsum is blackish with a large white spot on each shoulder and on the rump, and white patches at the posterior base of each ear. Total length is 107 to 115 millimeters, forearm length is 48 to 51 millimeters, and weight is 16 to 20 grams. The greatest length of the skull is 18.4 to 19.0 millimeters (small sample). The supraorbital region of the skull is sharply ridged, but a median sagittal crest is absent; 34 teeth are present (Watkins 1977). The newborn young lack any indication of having the adult color pattern (Van Zyll de Jong 1985). Four hours after birth, a male weighed 4 grams and measured 59 millimeters in length; tail length was 20 millimeters, hind foot 11 millimeters, ear 12 millimeters, and forearm 21 millimeters.

Diagnostic Characteristics

Spotted Bats differ from other bats in Montana by the unique patterning of the fur and the extremely large ears. Their echolocation calls (an insect-like clicking) are audible to the unaided human ear.

Habitat

Spotted Bats have been encountered or detected most often in open arid habitats dominated by Utah juniper (*Juniperus osteosperma*) and sagebrush (*Artemisia tridentata* and *A. nova*), sometimes intermixed with limber pine or Douglas-fir, or in grassy meadows in ponderosa pine savannah (Fenton et al. 1987, Worthington 1991a, Hendricks and Carlson 2001). Cliffs, rocky outcrops, and water are other attributes of sites where Spotted Bats have been found (Foresman 2012), typical for the global range. Spotted Bats have been captured foraging over an isolated pond within a few kilometers of huge limestone escarpments in the Big Horn Canyon National Recreation Area, Carbon County (Worthington 1991a, 1991b), and the first record for the state was of an individual that flew in an open window at a private residence in Billings, Yellowstone County (Nicholson 1950). Roost habitats and sites have not been documented in Montana.



Species of Concern Native
Species Global Rank: G4
State Rank: S3B

Agency Status USFWS:
MBTA USFS:

BLM: SENSITIVE FWP
SWAP: SGCN3 PIF: 2

© John C. Carlson

Lanius ludovicianus

General Description

Slightly smaller than the American Robin (*Turdus migratorius*), the total length of this bird averages 23 cm. Males and females are similar in appearance. This species has a stout, hooked bill that has dark upper and lower mandibles. It has a broad black mask extending above the eye and thinly across top of bill. Its head and back are covered with a bluish-gray cowl, while its underparts and rump are white or grayish-white (underparts are very faintly barred in adults). It has a black tail with white tip and large white patches on black wings. Juveniles are paler and barred overall, with brownish-gray upperparts and buffy wing patches (Miller 1931, Fraser and Luukkonen 1986). Most nests are made of coarse twigs with a lining of plant material and animal hair (Fraser and Luukkonen 1986).

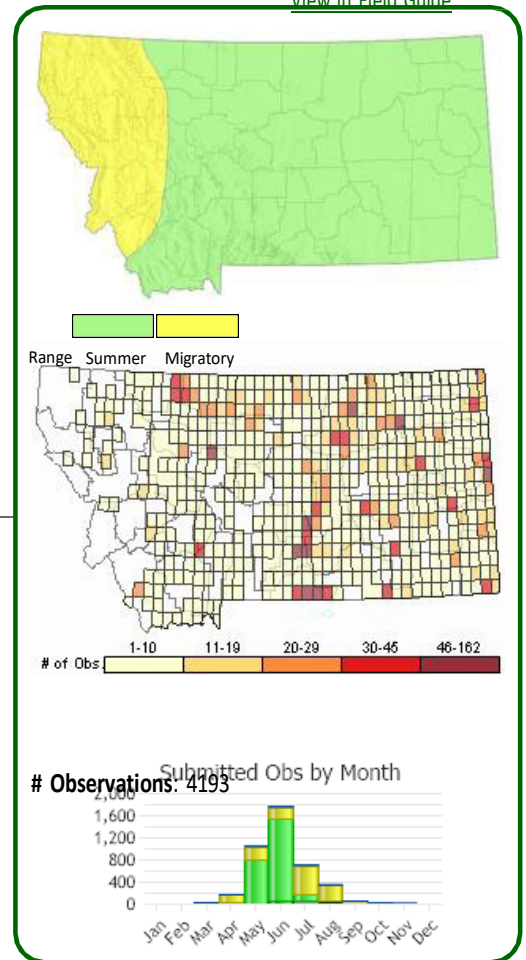
For a comprehensive review of the conservation status, habitat use, and ecology of this and other Montana bird species, please see Marks et al. 2016, Birds of Montana.

Diagnostic Characteristics

Loggerhead Shrikes differ from Northern Shrikes (*Lanius excubitor*) by having the base of the lower mandible black instead of pale, unbarred or barely barred underparts (adults), a shorter and less hooked bill, a darker head and back, and a more extensive black mask. They differ from the Northern Mockingbird (*Mimus polyglottos*) by having a black mask and a shorter, less curved bill.

Habitat

Open landscapes with short vegetation, including pastures with fence rows, mowed roadsides, agricultural fields, riparian areas, and open woodlands (Yosef 1996). In Idaho, nests are found in sagebrush (65%), bitterbush, and greasewood, and are equally successful in all three (Woods and Cade 1996).

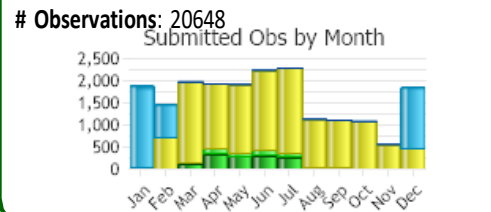
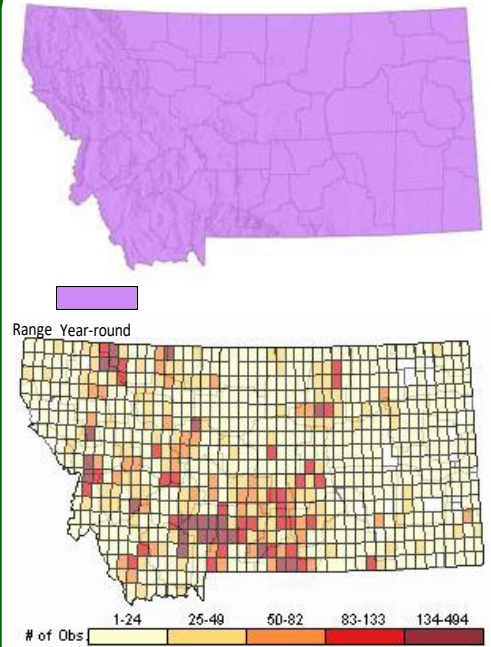




Species of Concern Native
Species Global Rank: G5
State Rank: S3

Agency Status USFWS:
 BGEPA; MBTA USFS:

BLM: SENSITIVE FWP
SWAP: SGCN3 PIF:



Aquila chrysaetos

General Description

Adults are brown overall, gold on head and neck feathers, with light brown bands in the tail. Immature birds have white patches on the wings and white at the base of the tail feathers. Golden Eagles often soar with their wings held nearly flat, but slightly upturned. The legs are heavily feathered down to the tops of the toes. Golden Eagles range in length from 33 to 38 inches, and have a wingspan of 6-1/2 to 7-1/2 feet. A very large raptor with mostly brown plumage, a golden wash on the back of the head and neck, and a mostly horn-colored bill; tail is faintly banded; immatures have white at the base of the primaries and and white tail with a dark terminal band; total length 76 to 102 cm, wingspan 203 to 224 cm.

Diagnostic Characteristics

Bald Eagles have feathers only part way down the leg, and usually soar with wings held completely flat. Immature Bald Eagles usually have a strip of white along the underside of the wing, rather than in a round patch on the flight feathers like the immature Golden Eagle. Older immature Bald Eagles have irregular patches of white on their bodies, instead of the sharply defined patterns on Golden Eagles. Turkey Vultures soar with wings held in a more pronounced "V".

Habitat

Golden Eagles nest on cliffs and in large trees (occasionally on power poles), and hunt over prairie and open woodlands; some nest sites in the Fallon area include scoracious badland pillars (Cameron 1905), another near Knowlton was in a ponderosa pine (Cameron 1907). In the Livingston area 62% of 92 nests were on cliffs, 29% in Douglas-fir, and 2-3% each in ponderosa pine, cottonwood, snags, and on the ground (McGahan 1968). About 70% of cliff nests were oriented to the south or east, most nests were found between 4000-6000 ft elevation, and sites were associated with sagebrush/grassland hunting areas (McGahan 1968). In the Bozeman area, Golden Eagles move from mountains to valleys in the winter (Skaar 1969).

**Species of Concern****Native Species** Global Rank:

G4T4 State Rank: S3

Agency Status USFWS:

USFS:

BLM:

State Threat Score: No

Astragalus ceramicus* var. *filifolius**General Description**

PLANTS: Perennial from rhizome-like caudex-branches (Barneby 1964). The root-crown is deeply buried but can become exposed by shifting sand of mobile dunes (Barneby 1964). Plants are densely strigose (Lesica et al. 2012). Stems solitary, lax to ascending, 10–25 cm

LEAVES: 1–12 cm long. Mostly pinnate with 1-7 leaflets; the terminal leaflet is longest and confluent with the rachis (Lesica et al. 2012). Stipules are lanceolate, 2–6 mm long, and often united basally.

INFLORESCENCE: Racemes of 2-10(25) white to light purple flowers. Racemes with spreading to ascending flowers grow among the leaves (Lesica et al. 2012).

In Montana two varieties are present, *filifolius* and *apus*. Refer below to Diagnostic Characteristics and Range Comments.

Diagnostic Characteristics

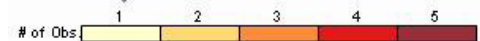
Astragalus ceramicus is unique in being diffusely cryptophytic (bears its buds below the soil), with confluent terminal leaflets, and an inflated pod that does not lose its red mottling (Barneby 1964). Its pods (fruits) are balloon-shaped, large, and red-mottled.

Variety ***filifolius*** has pods that have a stipe of 1-3 mm length and grows in the counties of eastern Montana, adjacent North and South Dakota, and other regions of the Great Plains (McGregor 1986, Flora of the Great Plains). Pods are (2)3-5 cm long and 1.4-2.6 cm in diameter (Barneby 1964). Some lower leaves may have 1-2(3) pairs of lateral leaflets (Barneby 1964).

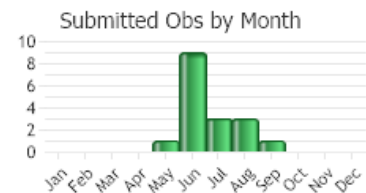
Variety ***apus*** has pods that are sessile to the stem and is endemic to Beaverhead County and adjacent Idaho (Lesica et al. 2012). Pods are 2-4 cm long and about 1.5-2.4 cm in diameter (Barneby 1964). Lateral leaflets are wanting or nearly so (Barneby 1964).

Habitat

Sand or very sandy soil of sandhills, below sandstone outcrops; plains, valleys, montane (Lesica et al. 2012).

Range **Native**

Observations: 17

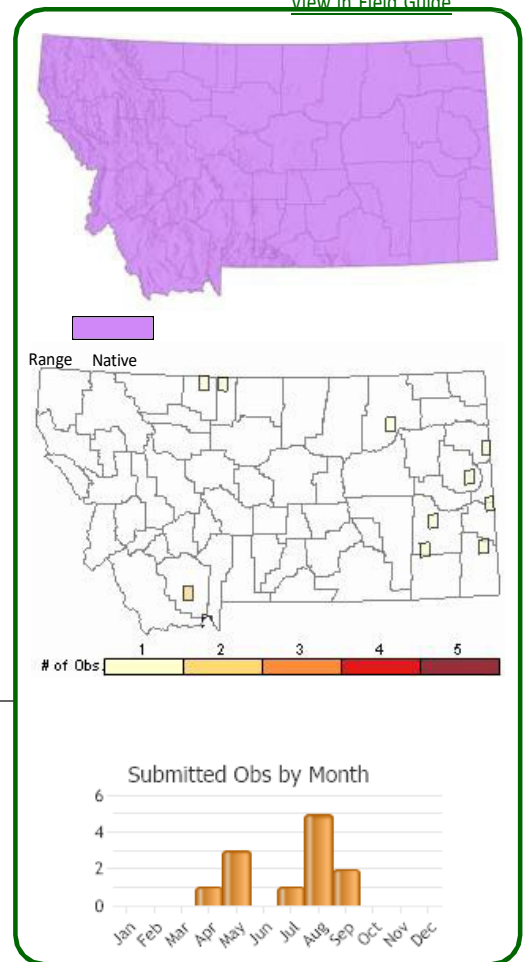




Species of Concern Native
Species Global Rank: G5
State Rank: S2

Agency Status USFWS:

USFS: BLM:



Polygonia progne

General Description

[From Ferris and Brown 1981; Scott 1986; Opler and Wright 1999; Glassberg 2001; Guppy and Shepard 2001] Forewing 2.3-2.6 cm. Upperside bright orange-brown with a wide dark border; winter form (from 2nd flight) has a border covering only about 1/4 of the wing, both enclosing a few small yellow spots; underside charcoal gray and heavily striated, outer portion of forewing whitish with 3-4 light chevrons in a dark border, silver mark in center of hindwing is small, slender, L-shaped, tapered at both ends.

Phenology

One flight, mainly June and July north of southern Canada; two flights, late June to early July then August to early September elsewhere (Scott 1986; Glassberg 2001; Guppy and Shepard 2001).

Diagnostic Characteristics

Determined by a combination of upper hindwing black border wide with small yellow spots, underwing surfaces charcoal gray and heavily striated, silver-white "comma" on the under hindwing tapered at both ends.

Habitat

Deciduous woodlands, riparian woodlands, forest openings, aspen parkland (Opler and Wright 1999; Glassberg 2001; Guppy and Shepard 2001). ed. Deciduous woodlands, riparian woodlands, forest openings, aspen parkland (Opler and Wright 1999; Glassberg 2001; Guppy and Shepard 2001).



Bat Roost (Non-Cave)

Bat Roost (Non-Cave)

[View in Field Guide](#)

Important Animal Habitat

Native Species

Global Rank: **GNR**

State Rank: **SNR**

Observations: 1624

No photos are currently available

Agency Status

USFWS:

USFS:

BLM:

General Description

Information on this species is incomplete.