

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: MK Weeden Scoria Permit	Proposed Implementation Date: 8/15/11
Proponent: MK Weeden	
Type and Purpose of Action: MK Weeden is proposing to mine scoria from the referenced section, crush the scoria and deliver it to the oil industry that is actively being developed in Roosevelt County.	
Location: S½ of S16, T 28 N Range 56 E	County: Roosevelt

I. PROJECT DEVELOPMENT

<p>1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.</p>	<p>MK Weeden has proposed to mine scoria from the referenced section of State of Montana School Trust Lands. Mining operations consist of the construction of approximately 1.2 miles of road and the disturbance of 57 acres {27.2 (DNRC Pit 1) and 29.8 (DNRC Pit 4)} of land (see attached map). Mining of the scoria is completed by scraping and stockpiling the surface material, and then removing the scoria (clinker). The landscape is then contoured and seed back to its original vegetation.</p> <p>The DRNC is responsible (MCA § 77-3-201) for permitting these activities and issues permission via a State of Montana Scoria Mining Permit (copy attached). The MT DEQ is the regulatory agency responsible for the mining and reclamation activities.</p> <p>The DEQ Open Cut is responsible for the mining and reclamation of all large pits on private and state lands. The DEQ bonds the permits in order to ensure that there are available to reclaim the land if necessary.</p> <p>MK Weeden estimates that approximately 200,000 yards of scoria is available in DRNC pit 1 and another 50,000 yards of scoria is available in DNRC pit 4.</p> <p>DNRC and DEQ staff inspected (June 7, 2011) the mine area along with <u>Charlie Johnston</u>, MK Weeden MK Weeden. A walk through of each mine area took place and discussions concerning the mining and reclamation portions of the proposal were held between participants.</p> <p>DNRC requested comments from the MTFWP and from the DNRC surface Lessee's. None of the entities commented on the project.</p>

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:	<p>Montana Department of Environmental Quality, Open Cut Mining Permit</p> <p>Montana Department of Transportation, Highway Approach Permit.</p> <p>Montana Board of Oil and Gas</p>
3. ALTERNATIVES CONSIDERED:	<p>Action: Grant permission for MK Weeden to mine the scoria using mitigation measures when necessary to minimize the impacts to the State's resources. .</p> <p>NO Action: Deny permission for MK Weeden to mine the scoria.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	[Y/N] POTENTIAL IMPACTS
<p>4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</p> <p>Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>The Tongue River Member of the Fort Union Formation forms the geology of the general project area. These deposits are characterized by yellowish orange sandstone, sandy and silty carbonaceous shale (some of which has metamorphosed into various grades of clinker [scoria] and porcellanite), and coal (Geologic Map of Montana 2007). Soils in the areas inspected are largely clay loam of the Zahill-Lambert Complex, or silt loam of the Lambert-Dimyaw Complex (NRCS n.d.)</p> <p>Action: The construction of the access road and the development of the mine will disturb approximately 57 acres of land. The natural soil profile will be permanently altered.</p> <p>Mitigation: The DEQ requires the proponent to scrap all topsoil within the root layer (6-30") of the areas to be disturbed. The topsoil will be stockpiled and safeguarded for reclamation purposes. The stockpiled topsoil will be redistributed across the landscape with the final goal to have a minimum of 1 foot of topsoil spread across all areas of the disturbed areas. All topsoil will have suitable actions take place to prevent any and all soil loss due to erosion.</p> <p>No-Action: There will be no impacts to these attributes of the landscape.</p>
<p>5. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of</p>	<p>This area has one reservoir that is present on the State land. The reservoir is dry.</p> <p>A water well used for livestock drinking is located in the NW¼ of the tract.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT									
water quality?	<p>Action: The mining activities are not anticipated to impact the water quality, quantity or distribution.</p> <p>No-Action: Water resources are anticipated to exist as they are today.</p>								
6.AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	<p>The region has good air quality. The development of the Bakken formation has increased foreign air particle pollutants. The DNRC is not aware of any local air quality regulations that are presently in effect.</p> <p>Action: Scoria mines and the removal of scoria from the site contribute to foreign particles being added to the air. The foreign particles sources are primarily from dust created by the crushing and/or by the trucks that remove the scoria from the mine site.</p> <p>Mitigation: The MK Weeded will be required to apply water to the road and mine area to minimize the addition of dust particles to the air.</p> <p>No-Action: No action will take place therefore there will be no air particles added to the air.</p>								
7.VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?	<p>This area is classified as a thin-hilly (TH) range site with current species composition being classified as native. Plant species observed on the TH range are typical TH range species (Grasses compose the majority of the dry matter weight of this range site. These range sites are known for their thin and fragile soil profile. Draws have woody and shrubby species present with a deep soil profile of 30-60".</p> <p>Action: The mining of the area will affect the vegetation cover of this area. All vegetation growing in the mine and road areas will be permanently destroyed. Presently the areas to be mined support low vegetative (estimated at < 500 #lbs /ac) plant growth due to the thin A-horizon soil structure. The building up of approximately 1-foot of topsoil will increase the productivity of this tract of land.</p> <p>Mitigation. All disturbed areas will be reseeded to the following seed mix:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Species</u></th> <th style="text-align: right;"><u>lbs PLS/AC</u></th> </tr> </thead> <tbody> <tr> <td>Slender wheatgrass</td> <td style="text-align: right;">2</td> </tr> <tr> <td>Western wheatgrass</td> <td style="text-align: right;">2</td> </tr> <tr> <td>Thickspike wheatgrass</td> <td style="text-align: right;">2</td> </tr> </tbody> </table>	<u>Species</u>	<u>lbs PLS/AC</u>	Slender wheatgrass	2	Western wheatgrass	2	Thickspike wheatgrass	2
<u>Species</u>	<u>lbs PLS/AC</u>								
Slender wheatgrass	2								
Western wheatgrass	2								
Thickspike wheatgrass	2								

II. IMPACTS ON THE PHYSICAL ENVIRONMENT	
	<p>Bluebunch wheatgrass 2</p> <p>Green needlegrass 2</p> <p>Western Yarrow 0.5</p> <p>No-Action: The vegetation will continue to exist as it is today.</p>
<p>8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</p> <p>Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>Wildlife utilizes this ground at different times of the year. Use is not deemed to be substantial. During the spring and early summer neotropical migrants are anticipated to be nesting on ground that will be disturbed.</p> <p>Action: The neotropical migrants should be completed with the nesting season. Numerous animals will be displaced by the development of the mine and ongoing extraction of the scoria resources.</p> <p>No-Action Animal use of the land will continue as it is today.</p>
<p>9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Sensitive Species or Species of special concern?</p>	<p>The Montana Natural Heritage database list zero(0) plant Species of Concern and five (5) animal Species of Concern for this region. The listing of plants or absence of the listing, in this database does not indicate that the plants are present or absent, but rather the habitat is present to support their existence.</p> <p>Action: None of the Species of Concern are documented to exist on this state parcel of ground. If animal species were to utilize this ground, they will be displaced by construction activities. After the reclamation is completed, they will be able to utilize the ground again.</p> <p>No-Action</p>
<p>10. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>The DNRC staff archaeologist conducted a Class III inventory of cultural and paleontologic resources in the area of potential effect. No cultural or paleontologic resources were identified. A cultural and paleontologic resources inventory report has been prepared concerning proposed developments and is on file with the DNRC, (Helena) and the Montana State Historic Preservation Office (Helena). The State Historic Preservation Officer concurred with the DNRC's field methods and findings:</p> <p>Rennie, Patrick J.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT	
	<p>2011 Cultural Resources Inventory of a Series of Proposed Scoria Quarries in Richland and Roosevelt Counties, Montana. Report prepared for the DNRC (Helena, MT). Report dated June 2011.</p> <p>Action</p> <p>No-Action No cultural artifacts or resources will be disturbed.</p>
<p>11.AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>State Highway # 16 crosses this tract of land in the NW¼ of the tract and provides legal access to the State section. Travelers of this highway have a view of the majority of the State land.</p> <p>Action: The project will be highly visible by people traveling the highway. Construction activities will be continuous with artificial light making the project area visible. Dust plumes will be visible from the highway and from the city of Culbertson.</p> <p>Implementation of the project will change the natural topography of the landscape. This change will be present henceforth. The land will be contoured and shaped to as much as natural landscape as possible.</p> <p>No-Action: There will be no change in aesthetic values.</p>
<p>12.DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?</p>	<p>Scoria has become a very valuable commodity in this region of the Bakken development. This resource has become limited and has drastically increased in value over the past year.</p> <p>Action: The mining of this material will extract the scoria resources. There is limited amount of scoria resources in NE Montana and the mining of these resources will further reduce the availability of this resource.</p> <p>No-Action: The Scoria resource will stay in the ground.</p>
<p>13.OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract?</p>	<p>This region is primary deeded land used for farming and ranching industries. Oil development is increasing in this area. This tract is used in association with adjacent private land. The DNRC is not aware of any studies, plans or projects other than ranching, farming and mineral development.</p> <p>Action: The implementation of this project is not anticipated to alter any plans, projects or studies in this area.</p> <p>No-Action: The no action is not anticipated to alter</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT	
	any plans, projects or studies in this area.

III. IMPACTS ON THE HUMAN POPULATION	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
14.HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	<p>Human Health and safety are being driven by the oil industry.</p> <p>Action: The DNRC decision to proceed wto this project may slightly increase human health and safety rist. This increase is very small in comparison to the overall oil and gas industry along with the existing farming and ranching operations. If mining does not occur on State land, it will and is occur on deeded land.</p> <p>No-Action No human health and safety risk will be present.</p>
15.INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	<p>Presently this land is used for ranching activities and supports livestock during the summer months.</p> <p>Action Ranching operation will be temporarily decreased by 20 AUMS.</p> <p>Mitigation: During the first year of operation, the MK Weeden will be required to compensate the surface lessee for the loss of AUMs that he as already paid the state for. During the second year of operation and during the existence of the operation the State will reduce the AUMs that the tract can support and therefore the bill will reflect the reduction.</p> <p>The industrial operations will be slightly increased. The area is witnessing intense oil development and this project will enhance this development.</p> <p>No-Action There is a loss in industrial operations and the ranching operations will stay the same.</p>
16.QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	<p>This region has one of the lowest unemployment rates in MT. High hourly pay rates are being given to entry grade workers at fast food restaurants. Help wanted signs exist in the majority of the business located n this region.</p> <p>Action The implementation of this project will increase jobs and further enhance the oil industry. Overall, the area is short of workers and the majority of the workers are imported into the region.</p> <p>No-Action Low unemployment rates will continue to</p>

	exist.
17.LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	<p>All proceeds generated from the State section are required by law to be deposited into the Common School Trust. Sale of this commodity is at \$3.00 per yard.</p> <p>Action: Implementation of this action is estimated to generate \$750,000 into the common school account. Additional tax revenues may be received by the county and state through the enhanced oil and gas activities that this scoria will support.</p> <p>No-Action NO revenue will be generated.</p>
18.DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?	<p>The average semi can haul approximately 18-20 yards of material. These pits will have approximately 250,000 yards requiring approximately 12,500 trucking events take place.</p> <p>Action Increased traffic will take place. Large numbers of trucks are presently traversing these roads and the addition of these trucks is rather small to the overall picture.</p> <p>No-Action No activities will take place resulting in no increase in services.</p>
19.LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	<p>The Roosevelt County plan classifies this land as agriculture/ranching lands. No additional management plans or zoning plans are known to exist on this parcel. .</p> <p>Action Implementation of the action will not effect the local planning zone, State county, City, Federal or tribal plans.</p> <p>No-Action No effect.</p>
20.ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	<p>This state parcel is not adjacent to wilderness areas. The tract is primarily used by recreationist for hunting opportunities.</p> <p>Action During mining and trucking activities hunting opportunities will be decreased through the displacement of game.</p> <p>No-Action Recreational opportunities will continue as they are today.</p>
21.DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	<p>The area has limited housing or motel opportunities today as the oil development has occupied any and all existing living structures. People are presently migrating from as far away as Glendive and Wolf Point.</p> <p>Action No increase to the population and housing</p>

	<p>will take place because there is no opportunity for them to increase.</p> <p>No-Action No increase to the population and housing will take place because there is no opportunity for them to increase.</p>
<p>22.SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>Traditional lifestyles exist in this area. Disruption of these lifestyles is taking place by the development of the oil industry.</p> <p>Action This project will not enhance the disruption of the ongoing traditional lifestyles of communities.</p> <p>No-Action No effect.</p>
<p>23.CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?</p>	<p>Cultural uniqueness and diversity is a region wide issue in NE MT. This eastern edge of Roosevelt County is not unique within NE MT. The intense oil development is causing shifts to the unique diversity of this area.</p> <p>Action This project will not add to the shifts that are presently taking place.</p> <p>No-Action The lack of this project will not deter from the ongoing shifts that are taking place.</p>
<p>24.OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</p>	<p>The region is witnessing intense oil and gas development. The development of the Bakken oil field is one of the most intense oil and gas developments presently taking place within the US. The State of Montana's Trust lands is a very small component of this development as it pertains to the Bakken field. The decision that the State makes has minor impacts on the overall development of this region.</p> <p>Action: The purpose of the scoria is to provide material for well pads and roads. If the scoria material is not mined on State Trust lands, it would be continued to be mined from other land owner entities and therefore the overall impact is not at the discretion of the DNRC. Cumulative impacts of the overall development of this region are not at the discretion of the DNRC. The DNRC's decision will not affect the off-sight impacts that will take place in this region. The impacts will take place on other land regardless of the DNRC's decision.</p> <p>No-Action the intense oil and gas development will continue to take place regardless of the State's action.</p>

EA Checklist Prepared By: s/Hoyt Richards/s Date: July 26, 2011

IV. FINDING	
25. ALTERNATIVE SELECTED:	Action
26. SIGNIFICANCE OF POTENTIAL IMPACTS:	No significant impact.
27. Need for Further Environmental Analysis: <input type="checkbox"/> EIS <input type="checkbox"/> More Detailed EA <input checked="" type="checkbox"/> No Further Analysis	

EA Checklist Approved By:

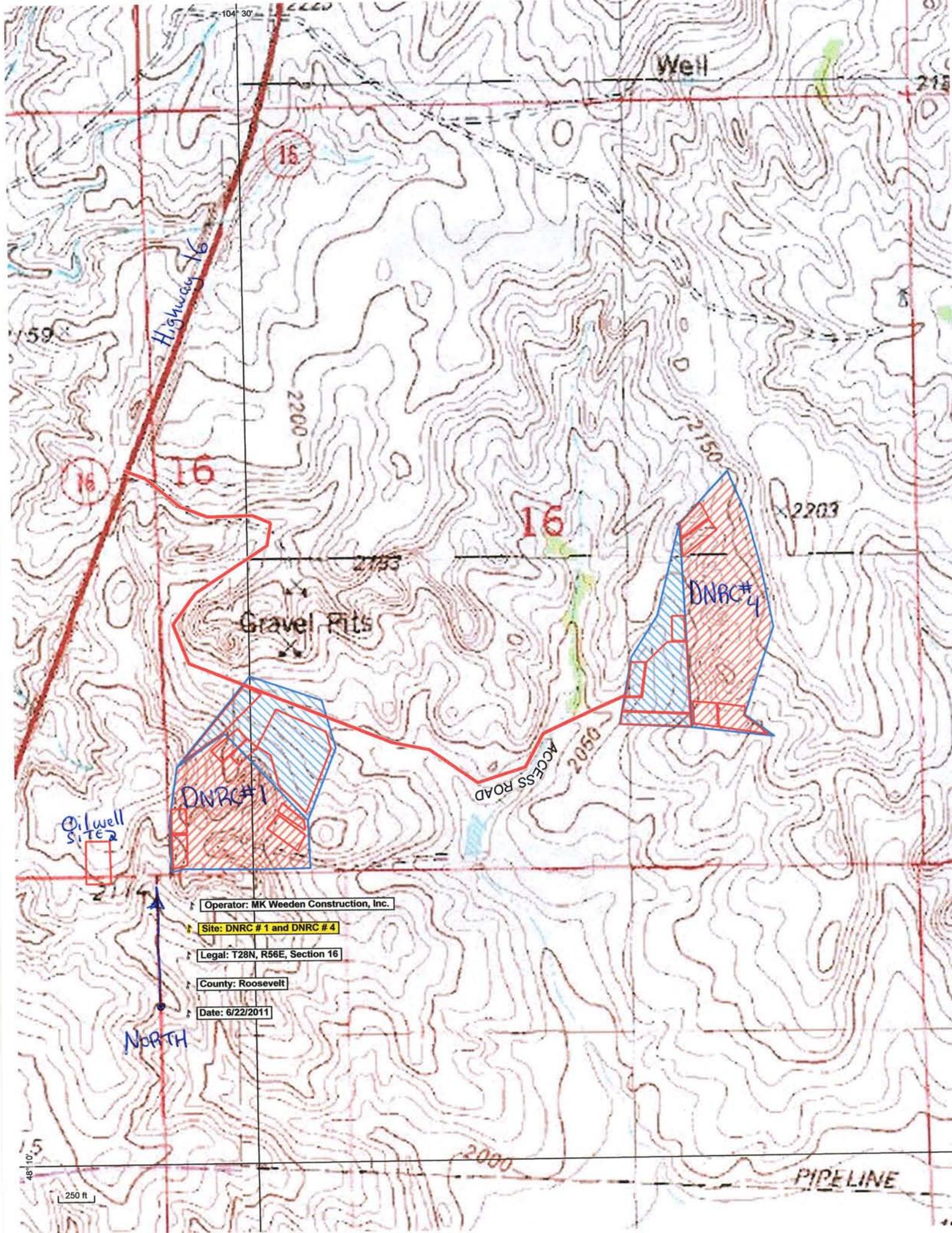
Name

Title

s/Clive Rooney/s

Signature

Date: July 26, 2011



Operator: MK Weeden Construction, Inc.
Site: DNRC # 1 and DNRC # 4
Legal: T28N, R56E, Section 16
County: Roosevelt
Date: 6/22/2011

NORTH

250 ft

Plant Species of Concern

447 Species of Concern
 51 Potential Species of Concern
 All Records (no filtering)

Species List Last Updated 04/22/2011



A program of the University of Montana
 and Natural Resource Information Systems,
 Montana State Library

Species of Concern

447 Species
 All Records (no filtering)

FERNS AND FERN ALLIES (PTERIDOPHYTA)

30 SPECIES
 ALL RECORDS (NO FILTERING)

SCIENTIFIC NAME COMMON NAME TAXA SORT	OTHER NAMES	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	MNPS THREAT CATEGORY	HABITAT
Asplenium trichomanes Maidenhair Spleenwort		Aspleniaceae Spleenwort Family	G5	SH					Rock/Talus
			Species verified in these Counties: Flathead State Rank Reason: Known from one 1895 collection with imprecise location data near "Columbia Falls" in Flathead County.						
Botrychium adnatum Adnate Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G1?	S1					Grasslands (Fescue)
			Species verified in these Counties: Flathead State Rank Reason: A recently described species currently known only from northwest Montana.						
Botrychium ascendens Upward-lobed Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G2G3	S2S3		SENSITIVE		2	Various Mesic Sites
			Species verified in these Counties: Flathead, Glacier, Lake, Lewis and Clark, Lincoln, Sweet Grass State Rank Reason: This moonwort species is restricted in Montana to the northwest corner of the state where it is known from 19 extant occurrences, almost all on federally-managed lands. Most occurrences are small in size and occupy roadsides or other similarly open or disturbed habitats. As such, it is vulnerable to activities such as weed invasion, weed spraying and road maintenance.						
Botrychium campestre Prairie Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G3G4	S1S2				0	Various Mesic Sites
			Species verified in these Counties: Flathead, Glacier, Lincoln State Rank Reason: Reported from a very small number of sites in Montana. All occurrences are small with the largest population count at a single site being approximately 2 dozen plants. All known sites are in northwest Montana.						
Botrychium crenulatum Wavy Moonwort	Botrychium dusenii	Ophioglossaceae Adder's-Tongue / Moonworts	G3	S3		SENSITIVE		2	Various Mesic Sites
			Species verified in these Counties: Flathead, Glacier, Granite, Lake, Lincoln, Missoula, Sanders State Rank Reason: This moonwort species is known from numerous observations in western Montana. Most populations are located on either National Forest or State lands. Populations are generally small in size and occupy roadsides or other similarly open or disturbed habitats. As such, it is vulnerable to activities such as weed invasion, weed spraying and road maintenance.						
Botrychium gallicomontanum Frenchman's Bluff Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G1G2	S1					Grasslands (Fescue)
			Species verified in these Counties: Flathead State Rank Reason: A globally rare species, recently documented in Montana from Glacier National Park						
Botrychium hesperium Western Moonwort	Botrychium matricariifolium , Botrychium michiganense [in part]	Ophioglossaceae Adder's-Tongue / Moonworts	G3G4	S3		SENSITIVE		2	Various Mesic Sites
			Species verified in these Counties: Deer Lodge, Flathead, Glacier, Lincoln, Sweet Grass State Rank Reason: This moonwort species is known from 25-30 extant sites in western Montana, almost all are in Glacier National Park or on National Forest lands. Many sites are poorly documented in terms of population size or are small in size, though several sites have been observed with >100 plants. Many populations occur on roadsides or other similarly open or disturbed habitats. As such, the species is vulnerable to activities such as weed invasion, weed spraying and road maintenance.						
Botrychium lanceolatum Lanceleaf Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G5	S3					
			Species verified in these Counties: Deer Lodge, Flathead, Glacier, Granite, Lincoln, Missoula, Park, Sanders State Rank Reason: Reported from ~ two dozen sites. Population levels are poorly documented. As this species was not previously tracked in the state, it may be under-reported.						
Botrychium lineare Linearleaf Moonwort	Slender Moonwort	Ophioglossaceae Adder's-Tongue /	G2?	S1S2				0	Various Mesic Sites
			Species verified in these Counties: Glacier, Lake, Lincoln						

		Moonworts	State Rank Reason: This moonwort species is known to occur in western Montana from 6 locations, 5 of which are on federally-managed lands and the remaining site is located in a tribal wilderness area. However, occurrences are generally small in size and occupy roadsides or other similarly open or disturbed habitats. As such, it is vulnerable to activities such as weed invasion, weed spraying and road maintenance.					
Botrychium lunaria Common Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G5	S3				
			Species verified in these Counties: Deer Lodge, Flathead, Glacier, Granite, Lake, Lewis and Clark, Lincoln, Park, Ravalli, Sanders, Teton					
Botrychium michiganense Michigan Moonwort	Botrychium hesperium s.l.	Ophioglossaceae Adder's-Tongue / Moonworts	G1G2	S1S2				Various Mesic Sites
			Species verified in these Counties: Flathead, Glacier, Lincoln					
			State Rank Reason: This taxa has recently been split from B. hesperium. Some of the sites for B. hesperium almost certainly belong here. See B. hesperium for additional information on habitat and characteristics which are very similar.					
Botrychium montanum Mountain Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G3	S3				Forests (Mesic bottmlands)/Open sites
			Species verified in these Counties: Flathead, Glacier, Lake, Lincoln, Missoula, Sanders					
			State Rank Reason: This moonwort species is known from numerous observations in western Montana. Populations are often small and most have been found in old growth Western Red Cedar forest, though some have been documented from second growth forests. Populations occur on a mix of federal, state and private ownerships.					
			Montana supports a significant percentage of the species range-wide populations.					
Botrychium pallidum Pale Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G3	S1S2			2	Grasslands (Fescue)
			Species verified in these Counties: Flathead, Lincoln					
			State Rank Reason: Reported from a very small number of sites in Montana. All occurrences are small with the largest population count at a single site being approximately 30 plants. All known sites are in northwest Montana.					
Botrychium paradoxum Peculiar Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G2	S2		SENSITIVE	SENSITIVE	2 Meadows (Mesic Montane/Subalpine)
			Species verified in these Counties: Deer Lodge, Flathead, Glacier, Granite, Jefferson, Lincoln, Pondera, Powell, Sweet Grass, Teton					
			State Rank Reason: This moonwort species is known to occur in western Montana from over two dozen extant occurrences, almost all of which are on federally-managed lands. Many occurrences are small in size and occupy mesic meadows and bunchgrass communities. Potential impacts to the these sites include livestock grazing, weed invasion and recreational uses. Though some threats exist to individual occurrences, the species as a whole is not highly threatened by any single or combination of potential impacts in the state. As such, more thorough and increased observation data may eventually show that an S3 rank is more appropriate for the species.					
Botrychium pedunculosum Stalked Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G2G3	S1S2		SENSITIVE		3 Forests (Mesic bottmlands)/Open sites
			Species verified in these Counties: Flathead, Granite, Lincoln, Sanders					
			State Rank Reason: This moonwort species is known to occur in western Montana from approximately a dozen extant occurrences, almost all of which are on National Forest lands. Many occurrences are small in size and occupy western redcedar forests and roadsides or other similarly open or disturbed habitats. Several site records are based specimen collections with no available population data; almost all other sites have population counts with <10 plants observed. One site has been observed with 125 plants. Sites could be impacted by timber harvesting or road-related activities.					
Botrychium pinnatum Northern Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G4?	S3				
			Species verified in these Counties: Deer Lodge, Flathead, Glacier, Granite, Lincoln, Park, Ravalli					
Botrychium simplex Least Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G5	S2				
			Species verified in these Counties: Deer Lodge, Flathead, Lincoln, Ravalli, Sanders					
Botrychium spatulatum Spoon-leaf Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G3	S1				Forests (Mesic bottmlands)/Open sites
			Species verified in these Counties: Glacier, Lake					
			State Rank Reason: One of the rarest moonwort species in Montana, currently reported from 2 sites in northwest Montana. Population levels at these sites are undocumented.					
Botrychium tunux Moosewort		Ophioglossaceae Adder's-Tongue / Moonworts	G1G2	S1				
			Species verified in these Counties:					
			State Rank Reason: A globally rare species, recently documented in Montana from Glacier National Park.					
Botrychium yaaxudakeit Yakutat Moonwort		Ophioglossaceae Adder's-Tongue / Moonworts	G2	S1				Open sites (mesic)
			Species verified in these Counties: Glacier					
			State Rank Reason: A globally rare species, recently documented in Montana from Glacier National Park.					
Cystopteris		Dryopteridaceae	G5	SH				Rock/talus

montana Mountain Bladder Fern		Wood Fern Family	Species verified in these Counties: Flathead, Glacier State Rank Reason: Reported for Montana from one collection in 1932 near Gunsight Pass in Glacier National Park.						
Dryopteris cristata Crested Shieldfern		Dryopteridaceae Wood Fern Family	G5	S3		SENSITIVE		3	Wetland/Riparian
			Species verified in these Counties: Flathead, Lake, Lincoln, Missoula, Ravalli State Rank Reason: Rare to uncommon in Montana where it is known from scattered occurrences across the western portion of the state. Most documented occurrences are on National Forest lands, though State Trust Lands and private lands also host significant populations.						
Lycopodium dendroideum Treelike Clubmoss	Lycopodium obscurum var. dendroideum	Lycopodiaceae Club-moss (Lycopod) Family	G5	S2		SENSITIVE		3	Forests (Mesic valley and montane)
			Species verified in these Counties: Flathead, Glacier, Lincoln State Rank Reason: Rare in Montana where the species has been documented from only a few sites in the northwest corner of the state. Trend data are unavailable. Known populations do not appear to be immediately threatened by any activities. Populations may be susceptible to negative impacts from fire.						
Lycopodium inundatum Northern Bog Clubmoss	Lycopodiella inundata	Lycopodiaceae Club-moss (Lycopod) Family	G5	S2		SENSITIVE		3	Fens
			Species verified in these Counties: Flathead, Missoula State Rank Reason: Rare in Montana where it is known from only a few occurrences in the western portion of the state. Trend data are unavailable. One population may be negatively impacted or extirpated in the future by proposed activities and all populations are susceptible to changes in hydrology.						
Lycopodium lagopus Running-pine	Lycopodium clavatum var. lagopus	Lycopodiaceae Club-moss (Lycopod) Family	G5	S2		SENSITIVE		3	Alpine
			Species verified in these Counties: Flathead, Glacier, Lincoln State Rank Reason: Rare in Montana. Currently known from two occurrences in the northwest portion of the state. Trend data are unavailable. The known sites do not appear likely to be negatively impacted or threatened from human activity at the current time.						
Ophioglossum pusillum Adder's Tongue	Ophioglossum vulgatum [misapplied]	Ophioglossaceae Adder's-Tongue / Moonworts	G5	S3		SENSITIVE		3	Fens, Wet meadows
			Species verified in these Counties: Flathead, Lake, Lincoln, Missoula State Rank Reason: Rare in Montana, where it is known from a couple dozen fens and wet meadows in the northwest corner of the state. Its viability in the state generally does not appear to be at risk from any human-caused impacts at this time.						
Phegopteris connectilis Northern Beechfern	Thelypteris phegopteris	Thelypteridaceae Beechfern-Marsh Fern Family	G5	S2S3		SENSITIVE		2	Forests (Mesic valley to subalpine)
			Species verified in these Counties: Flathead, Glacier, Lincoln, Sanders State Rank Reason: Rare in Montana where it is known from the extreme northwest corner of the state, east to Glacier National Park. Past timber harvesting likely led to declines in the species' abundance and distribution. Invasive weeds (Orange and Meadow Hawkweeds) proposed mining activity, timber harvesting and fires all have the potential to detrimentally impact the species in the future.						
Polystichum kruckebergii Kruckeberg's Swordfern		Dryopteridaceae Wood Fern Family	G4	S1					Alpine
			Species verified in these Counties: Deer Lodge, Flathead, Gallatin, Lake State Rank Reason: Sparsely distributed across western Montana on alpine and subalpine cliffs and talus slopes. Very little data are available for the locations in Montana, though the habitats occupied by the species are not generally impacted by human activities or disturbance.						
Polystichum scopulinum Mountain Holly-fern		Dryopteridaceae Wood Fern Family	G5	S1					Rock Crevices
			Species verified in these Counties: Ravalli, Sanders State Rank Reason: Only two known locations from western Montana. Very little data are available for the known occurrences.						
Selaginella selaginoides Low Spike-moss		Selaginellaceae Spike-mosses	G5	S2S3				3	Wet, mossy soil (montane/subalpine)
			Species verified in these Counties: Beaverhead, Deer Lodge, Granite, Madison State Rank Reason: Rare in Montana, where it is known from a few occurrences from the southwest portion of the state. Little survey data are available for known occurrences.						

GYMNOSPERM (CONIFERS)

1 SPECIES

ALL RECORDS (NO FILTERING)

SCIENTIFIC NAME COMMON NAME TAXA SORT	OTHER NAMES	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	MNPS THREAT CATEGORY	HABITAT
Pinus albicaulis Whitebark Pine		Pinaceae Fir / Hemlock / Larch / Pine / Spruce	G4	S2	C				
			Species verified in these Counties: Powell State Rank Reason: Whitebark pine is a common component of subalpine forests and a dominant species of treeline and krummholtz						

habitats. It occurs in almost all major mountain ranges of western and central Montana. Populations of whitebark pine in Montana and across most of western North America have been severely impacted by past mountain pine beetle outbreaks and by the introduced pathogen, white pine blister rust. The results of which have been major declines in whitebark pine populations across large areas of its range. Additionally, negative impacts associated with encroachment and increased competition from other trees, primarily subalpine fir have occurred as a result of fire suppression in subalpine habitats.

FLOWERING PLANTS - DICOTS (MAGNOLIOPSIDA)

247 SPECIES
ALL RECORDS (NO FILTERING)

SCIENTIFIC NAME COMMON NAME TAXA SORT	OTHER NAMES	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	MNPS THREAT CATEGORY	HABITAT
Adoxa moschatellina Musk-root		Adoxaceae Moschatel Family	G5	S3		SENSITIVE			Rock/Talus
			Species verified in these Counties: Carbon, Granite, Jefferson, Madison, Meagher, Park, Stillwater State Rank Reason: Sparsely distributed across sw Montana. Populations are generally small, though they occur in habitats not generally impacted by human disturbance or invasive weeds. Building of roads and trails may potentially impact populations.						
Agastache cusickii Cusick's Horsemint		Lamiaceae Mints	G3G4	S2S3		SENSITIVE	SENSITIVE		Rock/Talus
			Species verified in these Counties: Beaverhead State Rank Reason: This species is known in Montana from only a few locations in the Tendoy and Beaverhead Mountains. The steeply sloping habitat and relative remoteness of most populations minimizes its vulnerability to grazing and timber harvest -- the principle current land uses. However, these slopes can be vulnerable to destabilization if impacted by activities such as mining or road maintenance; the largest occurrence is in an area that is quarried for rock/gravel.						
Alnus rubra Red Alder		Betulaceae Birch / Alder	G5	S1				3	Forest (Mesic)
			Species verified in these Counties: Lincoln, Sanders State Rank Reason: Rare in Montana, where it occurs only in the extreme western portion of the state. The species is at the eastern end of its range in the state.						
Ammannia robusta Scarlet Ammannia	Ammannia coccinea ssp. robusta	Lythraceae Loosestrife Family	G5	S1					Wetland/Riparian
			Species verified in these Counties: Phillips, Valley State Rank Reason: Known from at several extant populations and 3 historical collections in northeastern Montana.						
Amorpha canescens Lead Plant		Fabaceae Pea Family	G5	SH					Prairie
			Species verified in these Counties: Carter, Rosebud State Rank Reason: Known from three historical collections from southeast Montana.						
Antennaria densifolia Dense-leaved Pussytoes		Asteraceae Aster / Sunflowers	G3	S1		SENSITIVE			Alpine
			Species verified in these Counties: Deer Lodge, Granite State Rank Reason: Known from one high elevation site in the Anaconda-Pintler Wilderness on the border of Deerlodge and Granite counties. The single occurrence is in a designated wilderness, which should protect it from most human-caused disturbance. However, it is susceptible to trail-building and maintenance activities.						
Aquilegia brevistyla Short-styled Columbine		Ranunculaceae Buttercup Family	G5	S2		SENSITIVE			Forest (Mesic)
			Species verified in these Counties: Judith Basin, Sweet Grass State Rank Reason: Known in Montana from the Little Belt Mountains of central Montana. Several populations are known. However, information on potential threats and trends are limited.						
Aquilegia formosa Sitka Columbine		Ranunculaceae Buttercup Family	G5	S1S2			SENSITIVE		Forest (Mesic)
			Species verified in these Counties: Beaverhead, Madison State Rank Reason: Known from eight occurrences in southwest Montana. However, only four of these are large, high quality populations. Effects of human disturbance, such as logging, on the species are uncertain.						
Arabidopsis lyrata Lyre-leaf Rockcress	Arabis lyrata, Arabis kamchatica	Brassicaceae Mustards	G5	SH					NA
			Species verified in these Counties: Flathead State Rank Reason: Known from one 1952 collection near Mount Brown in Glacier National Park.						
Arctostaphylos patula Green-leaf Manzanita	Arctostaphylos x media	Ericaceae Heath Family	G4	S1				1	Forest (Montane)
			Species verified in these Counties: Lake, Ravalli, Sanders State Rank Reason: Known from two or three separate locations in Montana. Population sizes are very small and are susceptible to the negative effects associated with such. Additional negative impacts from timber harvesting, invasive weeds and development are possible. Primarily a species of the Great Basin and California, and disjunct in Montana. Not known from either Idaho or Wyoming.						
Asclepias incarnata		Asclepiadaceae	G5	S1?					Wetland/Riparian

Swamp Milkweed		Milkweeds	<p>Species verified in these Counties: Carbon State Rank Reason: Known in Montana from Carbon County. One of the known sites is likely extirpated. Additional information is needed on the species' distribution, abundance, potential trends and threats within Montana.</p>						
Asclepias ovalifolia Ovalleaf Milkweed		Asclepiadaceae Milkweeds	G5?	S1S2		SENSITIVE		Prairie	
			<p>Species verified in these Counties: Carter, Sheridan State Rank Reason: Known in the state from two sites in extreme eastern Montana. Additional information on population levels, threats and trends are needed.</p>						
Asclepias stenophylla Narrowleaf Milkweed		Asclepiadaceae Milkweeds	G4G5	S2		SENSITIVE		Sandy sites	
			<p>Species verified in these Counties: Carter, Rosebud State Rank Reason: In Montana, <i>Asclepias stenophylla</i> is known from only a few occurrences in two southeastern counties. So far, surveys in Montana have documented a total population that numbers only several hundred plants. Trends are unknown.</p>						
Astragalus aretioides Sweetwater Milkvetch	Astragalus sericoleucus var. aretioides	Fabaceae Pea Family	G4	S2S3		SENSITIVE	3	Exposed ridges and slopes	
			<p>Species verified in these Counties: Big Horn, Carbon State Rank Reason: Sweetwater milkvetch is a regional endemic known in Montana only from exposed ridges and outcrops in the Pryor Mountains / Bighorn Canyon area. Threats to the species' viability in Montana appear to be minimal. Trend data are unavailable.</p>						
Astragalus barrii Barr's Milkvetch		Fabaceae Pea Family	G3	S3		SENSITIVE	SENSITIVE	2	Sparsely vegetated knobs and buttes
			<p>Species verified in these Counties: Big Horn, Carter, Powder River, Rosebud State Rank Reason: Barr's Milkvetch is endemic to southwestern South Dakota, northeastern Wyoming, Nebraska and southeastern Montana. In Montana, it is known from over three dozen occurrences, many of these are large, expansive populations. The habitat occupied by this species is not typically suitable for grazing, and the location of its habitat makes it less vulnerable to all but large-scale developments. Proposed resource extraction in southeast Montana may eventually impact the species. Invasive weeds have the potential to be a threat but currently are not posing problems to the species.</p>						
Astragalus ceramicus var. apus Painted Milkvetch		Fabaceae Pea Family	G4T3	S1		SENSITIVE	2	Sandy sites	
			<p>Species verified in these Counties: Beaverhead State Rank Reason: Painted milkvetch is known only from the upper Snake River Plains of southeast Idaho and adjacent Montana, where it is restricted to the Centennial Valley of Beaverhead County. The disruption of natural disturbance regimes, including fire, ungulate grazing and pocket gopher activity, can lead to dune stabilization, reducing the extent of blowout areas with early successional vegetation, upon which this species depends. Portions of its habitat lie on private or public lands without sensitive species management policies in place.</p>						
Astragalus convallarius Lesser Rushy Milkvetch		Fabaceae Pea Family	G5	S3		SENSITIVE	2	Grasslands (Intermountain)	
			<p>Species verified in these Counties: Beaverhead, Broadwater, Jefferson, Lewis and Clark State Rank Reason: The distribution of <i>A. convallarius</i> in Montana is limited to two disjunct localities in the state: the Helena Valley vicinity and an area in extreme southwest Montana in Beaverhead County. The species has been and continues to be negatively impacted by development in the Helena area. Past development in the Helena Valley likely eliminated extensive areas of previously occupied habitat resulting in the more fragmented distribution seen today. The grassland habitats this species occupies are also being invaded by several noxious weeds, particularly in the Helena vicinity. However, the species appears to tolerate some levels of disturbance and degradation of habitat quality. Several large occurrences are presently known and some areas of potentially suitable habitat remain unsurveyed.</p>						
Astragalus gezeri Geyer's Milkvetch		Fabaceae Pea Family	G4	S2		SENSITIVE	3	Sandy sites	
			<p>Species verified in these Counties: Carbon, Garfield State Rank Reason: Geyer's milkvetch has a very limited distribution in Montana, primarily limited to Carbon County. Size of the population in Montana is estimated to be in the thousands, but population levels likely fluctuate significantly from year to year. Approximately half the populations occur entirely or partially on federally managed lands.</p>						
Astragalus grayi Gray's Milkvetch		Fabaceae Pea Family	G4?	S2?		SENSITIVE		Sagebrush-Grassland	
			<p>Species verified in these Counties: Carbon State Rank Reason: Rare in the state. Locally restricted to Carbon County and possibly Big Horn County. Population levels, trends and threats to the species are poorly documented. Additional information is needed for the species within Montana.</p>						
Astragalus lackschewitzii Lackschewitz' Milkvetch		Fabaceae Pea Family	G2G3	S2S3		SENSITIVE	3	Alpine	
			<p>Species verified in these Counties: Teton State Rank Reason: Montana endemic restricted to high elevation, gravelly and rocky slopes and ridges. Several of the known occurrences are in designated wilderness and the habitats occupied by the species are not generally subject to human disturbance.</p>						
Astragalus oreganus Wind River Milkvetch		Fabaceae Pea Family	G4?	S2		SENSITIVE	1	Sandy sites/Sagebrush-Grassland	
			<p>Species verified in these Counties: Carbon State Rank Reason: Wind River milkvetch is a regional endemic known in Montana only from southern Carbon County. Although populations are relatively large, there are few known occurrences in the state and negative impacts or potential impacts to the species</p>						

			from livestock grazing, ORV use and extractive industries have been noted.						
Astragalus racemosus Raceme Milkvetch		Fabaceae Pea Family	G5	S2S3				3	Grasslands (Clay soils)
			Species verified in these Counties: Carter, Fallon State Rank Reason: Raceme milkvetch occurs near the margin of its range in Montana, where several, mostly small populations have been found in Carter and Fallon counties. Its response to grazing is unknown, however it accumulates selenium and may be toxic to livestock. Accurate population and trend data are lacking.						
Astragalus scaphoides Bitterroot Milkvetch		Fabaceae Pea Family	G3	S3		SENSITIVE	SENSITIVE	3	Sagebrush-grassland
			Species verified in these Counties: Beaverhead State Rank Reason: Bitterroot milkvetch occurs only in Lemhi County, Idaho and Beaverhead County, Montana. In Montana, the documented occurrences are confined to an area from the Grasshopper Creek drainage south to the Tendoy Mountains. The total number of individual plants has been estimated in the tens of thousands, but occupied habitats likely less than 700 acres.						
Astragalus terminalis Railhead Milkvetch		Fabaceae Pea Family	G3	S2S3			SENSITIVE	3	Sagebrush steppe
			Species verified in these Counties: Beaverhead, Madison State Rank Reason: <i>Astragalus terminalis</i> is a regional endemic known from southwest Montana, east-central Idaho and northwest Wyoming. In Montana it is documented from Beaverhead County and the Upper Madison River Valley. The species appears to be vulnerable to intensive grazing and competition from noxious weeds, at least in low-elevation areas.						
Athysanus pusillus Sandweed		Brassicaceae Mustards	G4	S1		SENSITIVE		1	Rock/talus-Mesic
			Species verified in these Counties: Ravalli State Rank Reason: Known in Montana from a limited area of the Bitterroot Mountains. Only three occurrences have a large number of individuals and several occurrences have populations of spotted knapweed and/or cheatgrass established. Invasive weeds may threaten the long-term viability of the species in Montana.						
Atriplex truncata Wedge-leaved Saltbush		Amaranthaceae Amaranth (Pigweed) Family	G5	S1				3	Wetland/Riparian
			Species verified in these Counties: Beaverhead, Deer Lodge, Jefferson, Lake, Lewis and Clark, Park State Rank Reason: Known from two extent occurrences; one in the Centennial Valley and the other near Warm Springs. Also, known historically from four collections in the western half of the state.						
Bacopa rotundifolia Roundleaf Water-hyssop		Plantaginaceae Plantain Family	G5	S1S3				3	Wetland/Riparian
			Species verified in these Counties: Cascade, Fergus, Garfield, Phillips State Rank Reason: A rare species known in Montana from only a few observations in the central and eastern portions of the state. However, the species is widely distributed and appears tolerant of brackish waters as well as some degree of nutrient enrichment. As such, it is unclear to what extent the species' viability is at risk in the state and whether it responds negatively to human-induced impacts to water quality. Additional populations of the species likely occur in Montana.						
Balsamorhiza hookeri Hooker's Balsamroot		Asteraceae Aster / Sunflowers	G5	S3				3	Sagebrush-grassland
			Species verified in these Counties: Beaverhead, Deer Lodge State Rank Reason: Known in Montana only from the vicinity of Monida and within the Mount Haggin WMA.						
Balsamorhiza macrophylla Large-leaved Balsamroot		Asteraceae Aster / Sunflowers	G3G5	S3		SENSITIVE	SENSITIVE	3	Sagebrush-grassland
			Species verified in these Counties: Beaverhead, Gallatin, Madison State Rank Reason: This species occurs in Montana at the edge of its range where it is known from three southwestern Montana mountain ranges. Most of the known populations are moderate to large in size and in generally good-quality habitat. One occurrence in Gallatin County is only known from a 1931 collection. Invasive weeds are not a problem at sites occupied by <i>B. macrophylla</i> and livestock grazing at some of the sites does not appear to be negatively impacting the species.						
Bidens beckii Beck Water-marigold	Megalodonta beckii	Asteraceae Aster / Sunflowers	G4G5	S2		SENSITIVE		3	Aquatic
			Species verified in these Counties: Flathead, Lake, Lincoln, Missoula State Rank Reason: Known from ten occurrences in the western valleys of the state, including 6 moderate to large populations and one historical occurrence from Salmon Lake dating to 1937. However, the species may be more abundant in the state than what current data suggests. Threats and impacts to populations in Montana include boating activity, lake shore development, aquatic weeds and use of aquatic herbicides.						
Boechera demissa Daggett Rockcress	Arabis demissa	Brassicaceae Mustards	G5	S1S3			SENSITIVE	3	Open woodland and sagebrush steppe
			Species verified in these Counties: Carbon State Rank Reason: Daggett rockcress is at the northern edge of its range in Montana, where it is known only from the vicinity of the Pryor Mountains and adjacent Bighorn Canyon. Detailed survey information for most occurrences is lacking.						
Boechera fecunda Sapphire Rockcress	Arabis fecunda	Brassicaceae Mustards	G2	S2		SENSITIVE	SENSITIVE	1	Rocky, calcareous, montane slopes
			Species verified in these Counties: Beaverhead, Ravalli, Silver Bow State Rank Reason: Sapphire rockcress is a state endemic known from several locations in southwest Montana where it is restricted to specific and localized habitats. Encroachment of spotted knapweed threatens several populations, particularly in Ravalli County. It is unclear whether grazing has significant negative impacts						

Brasenia schreberi Watershield		Cabombaceae Watershields	G5	S1S2		SENSITIVE	0	Aquatic
			Species verified in these Counties: Flathead, Lake, Lincoln, Missoula State Rank Reason: Restricted in Montana to shallow waters in the valleys of the northwest corner of the state where it is known from eight occurrences, including six relatively high quality populations. Potential threats to the species include boating activity, aquatic weeds, and several populations are subject to runoff from adjacent agricultural fields, though it is uncertain if this has negatively impacted any populations.					
Braya humilis Low Braya		Brassicaceae Mustards	G5	S1		SENSITIVE	2	Alpine
			Species verified in these Counties: Beaverhead State Rank Reason: Known from only two occurrences in the state, including one site in which only one plant was observed. The second population occurs in an area with historical mining activity.					
Brickellia oblongifolia Mojave brickellbush		Asteraceae Aster / Sunflowers	G5	S1S2		SENSITIVE	1	Rock/Talus
			Species verified in these Counties: Park, Silver Bow State Rank Reason: Few collections known for Montana. Only known extant occurrences are all near Melrose. The current status of one historical occurrence near Wilsall is unknown. Invasive weeds do not appear to be a threat at this time and the rocky, sparsely-vegetated slopes that the species occupies are not generally subject to human impacts. Livestock grazing may be negatively impacting the species at one site. Updated population and site data are needed for the known occurrences. Other occurrences of the species are likely to be found in Montana.					
Camissonia andina Obscure Evening-primrose	Oenothera andina	Onagraceae Evening-primrose Family	G4	S2		SENSITIVE	3	Sandy sites
			Species verified in these Counties: Carbon, Missoula State Rank Reason: This species is at the edge of its range in Montana, where it has been documented from just a few locations. All known extant locations are from Carbon County. These populations collectively cover less than 20 acres, but they can vary greatly in size from year to year. It tolerates grazing well, and moderate grazing may be important in maintaining a suitable seedbed of exposed soil. Invasive weeds may pose the greatest risk.					
Camissonia parvula Small Camissonia	Oenothera parvula	Onagraceae Evening-primrose Family	G5	S1S2		SENSITIVE	3	Sandy sites
			Species verified in these Counties: Carbon State Rank Reason: <i>Camissonia parvula</i> is currently known from one extant location in Montana on the southern edge of the Pryor Mountains in Carbon County. Populations are thought to be small, but may vary widely from year to year. As an annual plant, it may tolerate - or even respond positively to - moderate levels of disturbance. Additional population and site data are needed for this species in Montana.					
Cardamine oligosperma var. kamtschatica Few-seeded Bittercress		Brassicaceae Mustards	G5T3T5	S1?			3	Alpine
			Species verified in these Counties: Flathead State Rank Reason: Only known from 1 collection in Montana. Additional data are needed to reliably determine the species' conservation status and needs in Montana.					
Cardamine rupicola Cliff Toothwort		Brassicaceae Mustards	G3	S3			3	Alpine
			Species verified in these Counties: Flathead, Lake, Lewis and Clark, Missoula, Powell State Rank Reason: State endemic known from 3 population clusters. These are in the Mission Mtns, Swan Range and the Rocky Mtn Front Range. Many occurrences have not been surveyed for 30 or more years and many are based on a single herbarium specimen. However, the species grows at high elevations in rock and scree fields that generally are not subject to disturbance or other threats. Many populations also occur in designated wilderness areas which offer further protection. Additional occurrences likely exist across the known range of the species.					
Castilleja cervina Deer Indian Paintbrush		Orobanchaceae Broomrape Family	G4	SH				Wetland/Riparian
			Species verified in these Counties: Flathead, Missoula, Powell State Rank Reason: Known from 3 widely separated collections in western Montana, including a 1901 collection in Missoula County near "Sunset Hill", a 1960 collection near Deer Lodge and an 1894 collection near Columbia Falls.					
Castilleja covilleana Coville Indian Paintbrush		Orobanchaceae Broomrape Family	G3G4	S3		SENSITIVE	2	Subalpine slopes
			Species verified in these Counties: Ravalli State Rank Reason: This species is known in Montana, primarily from the West Fork of the Bitterroot River on the Bitterroot National Forest. 5 occurrences are known from historical collections or have unknown status. A few occurrences contain minor amounts of spotted knapweed and others occur in habitats that are susceptible to invasion by knapweed and other invasive species. Timber harvest activities may also pose a threat to some populations.					
Castilleja exilis Annual Indian Paintbrush	Castilleja minor ssp. minor	Orobanchaceae Broomrape Family	G5	S2		SENSITIVE	2	Wetland/Riparian
			Species verified in these Counties: Broadwater, Deer Lodge, Gallatin, Jefferson, Madison, Park State Rank Reason: Annual Indian Paintbrush is known from a half dozen counties in southwest Montana with the majority of documented locations on private lands. Many areas of suitable habitat have been converted to agricultural uses and/or are used for livestock grazing. Additionally, populations are susceptible to hydrologic changes and may be negatively impacted by invasive weeds.					
Castilleja gracillima Slender Indian Paintbrush	Castilleja miniata ssp. miniata	Orobanchaceae Broomrape Family	G3G4Q	S2				Wetland/Riparian
			Species verified in these Counties: Gallatin, Madison, Park					

			State Rank Reason: This plant is a regional endemic, known in Montana from a limited number of populations, with most being relatively small. No threats have been observed, though it could be vulnerable to hydrologic alterations or noxious weeds.				
Castilleja nivea Snow Indian Paintbrush		Orobanchaceae Broomrape Family	G3	S3			Alpine
			Species verified in these Counties: Beaverhead, Carbon, Madison, Park State Rank Reason: Currently known from a few collections from the Beartooths, Crazy Mtns, Tobacco Root Mtns and the Centennial Range. It is very likely that additional occurrences exist in the known mountain ranges as well as additional mountain ranges. Additionally, the high elevation habitat generally limits the potential for impacts to the species.				
Ceanothus herbaceus New Jersey Tea		Rhamnaceae Buckthorn Family	G5	SH			Forests (Dry. Open)
			Species verified in these Counties: Powder River State Rank Reason: Known from one 1948 specimen collection with imprecise location data in Powder River County that noted a "few" plants. Subsequent surveys have not been able to relocate this species.				
Celastrus scandens Bittersweet		Celastraceae Bittersweet Family	G5	SH			Wetland/Riparian
			Species verified in these Counties: State Rank Reason: Rare in Montana, where it is currently known from only 1 collection from the eastern portion of the state. Exact locality unknown.				
Centaurium exaltatum Western Centaury		Gentianaceae Gentians	G5	SH			Wetland/Riparian
			Species verified in these Counties: State Rank Reason: Known from one 1890 collection with imprecise location data from Big Horn County, "seven miles south of Custer Station".				
Centunculus minimus Chaffweed	Anagallis minima	Primulaceae Primrose Family	G5	S2			Wetland/Riparian
			Species verified in these Counties: Lake, Missoula, Phillips, Powell, Ravalli, Sheridan, Valley State Rank Reason: Known from scattered locations across the state, though it is rare to uncommon in Montana. May be susceptible to some adverse impacts from human-caused disturbance due to its preference for vernal moist habitats in valley loctions.				
Cercocarpus montanus Alderleaf mountain-mahogany		Rosaceae Rose Family	G5	S1S2		3	Open, stony slopes
			Species verified in these Counties: Treasure State Rank Reason: This widespread western species is only known in the state from one area of Treasure County where it is reported to be fairly extensive.				
Chenopodium subglabrum Smooth Goosefoot	Chenopodium leptophyllum var. subglabrum	Amaranthaceae Amaranth (Pigweed) Family	G3G4	S2			Sandy sites
			Species verified in these Counties: Carter, Cascade, Custer, Powder River, Sheridan State Rank Reason: Smooth goosefoot is known from just a few locations in Montana, one of which may be extirpated. It occupies an early-succession habitat that is vulnerable to loss of natural disturbance regimes such as fire and flooding. Invasion of exotic plants may also pose a threat. Trend monitoring data are lacking though the populations likely fluctuate widely from year to year.				
Cirsium brevistylum Short-styled Thistle		Asteraceae Aster / Sunflowers	G4	S1S2			Meadows and disturbed forests
			Species verified in these Counties: Flathead, Mineral, Missoula, Sanders State Rank Reason: Rare in Montana, where it is currently known from only the northwest portion of the state. The species may benefit from some natural and human-caused disturbances such as fire and timber harvesting, resulting in some uncertainty as to its conservation status in the state.				
Cirsium longistylum Long-styled Thistle		Asteraceae Aster / Sunflowers	G2G3	S2S3		1	Meadows (Montane-subalpine)
			Species verified in these Counties: Broadwater, Cascade, Fergus, Judith Basin, Lewis and Clark, Meagher, Wheatland State Rank Reason: Population estimates of approximately 30,000 plants, including seven high quality populations, scattered over four mountain ranges are promising for the long-term viability of the species. Habitat in the largest populations is generally of high quality with few if any problem weeds posing significant and immediate threats. In the near future, little change in habitat quality is expected in these populations. Sites are mostly on National Forest lands that provide a degree of protection and two large populations on private lands that have a history of light to moderate grazing appear stable. Also of benefit at this time is the active weed control program employed by the private landowners on their lands. Long- and short-term population trends are difficult to gauge due to the lack of good survey data over many years. However, available data and observations provide some evidence that population levels have at least remained fairly stable over the past decade, with significant yearly fluctuations possible. Threats posed by invasive weeds and the introduced bio-control agent do provide reason for concern.				
Cirsium pulcherrimum Wyoming Thistle		Asteraceae Aster / Sunflowers	G5	S1			Sparsely-vegetated soils
			Species verified in these Counties: Powder River State Rank Reason: Known conclusively in Montana from one badlands area of Powder River County with a small number of scattered				

			individuals observed in 2006. Also, reported for Dawson and Garfield Counties by Flora of the Great Plains.					
Clarkia rhomboidea Diamond Clarkia		Onagraceae Evening-primrose Family	G5	S2		SENSITIVE	2	Forests (Open, montane)
			Species verified in these Counties: Lincoln, Ravalli, Sanders State Rank Reason: Rare in Montana, where it is known from only a small portion of the northwest corner of the state, primarily along the lower Clark Fork River drainage. Some detrimental impacts from invasive weeds and subsequent herbicide treatments are possible as are loss of habitat due to fire suppression.					
Claytonia arenicola Sand Springbeauty	Montia arenicola	Portulacaceae Purslane Family	G4	S2		SENSITIVE	3	Mesic, rocky slopes
			Species verified in these Counties: Sanders State Rank Reason: Rare in Montana, where it is currently known from only one localized area in the western portion of the state. As an annual, populations likely fluctuate widely from year to year.					
Cleome lutea Yellow Beeplant		Capparaceae Caper Family	G5	S1S2		SENSITIVE	3	Sagebrush-grassland (Low-elevation)
			Species verified in these Counties: Big Horn, Carbon State Rank Reason: Rare in Montana, where it is currently known from only a small area in the south-central portion of the state. Current population levels and trends are undocumented, though populations likely fluctuate widely from year to year. Additional monitoring is needed.					
Collomia debilis var. camporum Flexible Collomia		Polemoniaceae Phlox Family	G5T2	S1				Rock/Talus (Valleys to Montane)
			Species verified in these Counties: Missoula, Ravalli State Rank Reason: Only known from a couple of sites in western Montana from low elevation scree, talus or rocky slopes which are susceptible to disturbance and weed invasion. Current status of the documented locations is unknown.					
Collomia tinctoria Yellow-staining Collomia		Polemoniaceae Phlox Family	G5	S1				Grasslands/Rocky slopes (Valleys to Montane)
			Species verified in these Counties:					
Corydalis sempervirens Pale Corydalis		Fumariaceae Fumary family	G4G5	S2		SENSITIVE	0	Forests/Meadows (Recently-burned)
			Species verified in these Counties: Flathead, Glacier, Lincoln, Powell State Rank Reason: Known to occur in northwest Montana from approximately a dozen recently (past 25 years) documented occurrences. Another 5 historical occurrences are also known. This species occurs in disturbed habitats, predominantly burned forests and it depends heavily on historical fire regimes to maintain populations. Thus, the main threat to this species' viability appears to be from fire suppression activities. Invasive weeds also threaten habitat occupied by the species.					
Cryptantha fendleri Fendler Cat's-eye		Boraginaceae Borage Family	G4	S2		SENSITIVE	2	Sandy sites
			Species verified in these Counties: Beaverhead, Sheridan State Rank Reason: Fendler cat's-eye is restricted to very localized sandhills habitat in the far southwestern and northeastern corners of Montana where it is known from a total of three moderate to large-sized populations. It responds positively to disturbance that maintains its sparsely vegetated habitat. Fire suppression and dune stabilization efforts have likely had an adverse effect on populations of this species.					
Cryptantha humilis Round-headed Cryptantha		Boraginaceae Borage Family	G4?	SH				Sagebrush Steppe (low-elevation)
			Species verified in these Counties: Beaverhead State Rank Reason: Known from 3 historical collections in the state, including a 1955 collection west of Dillon in the Grasshopper Valley, a 1952 collection 3 miles south of Lima and an undated collection from the Yellowstone Valley in Park County.					
Cryptantha scoparia Miner's Candle		Boraginaceae Borage Family	G4?	S1		SENSITIVE	3	Sagebrush Steppe (low-elevation)
			Species verified in these Counties: Carbon State Rank Reason: This species is documented from a single area in Carbon County, where it is widely disjunct from the nearest known occurrences in southwest Wyoming and central Idaho. In 1991 about 1,000 plants were reported occupying less than one acre. The habitat is subject to grazing, and may be affected by exotic weed encroachment.					
Dalea enneandra Nine-anther prairie clover		Fabaceae Pea Family	G5	S1S2			3	Grasslands (Plains)
			Species verified in these Counties: Big Horn, Custer, Fallon, Richland State Rank Reason: In Montana, known from a few poorly documented occurrences in the eastern half of the state. Additional surveys and updated population data are needed.					
Dalea villosa Silky prairie clover	Petalostemon villosus	Fabaceae Pea Family	G5	S1S2				Sandy sites
			Species verified in these Counties: Carter, Richland, Sheridan State Rank Reason: In Montana, known from a few, small occurrences in the extreme eastern portion of the state. Current population levels and trends are unknown.					
Delphinium burkei	[including] Delphinium	Ranunculaceae	G4	S1S2				Meadows (Moist, low-

Meadow Larkspur	distichum	Buttercup Family						elevation)
Douglasia conservatorum Bloom Peak Douglasia		Primulaceae Primrose Family	G2G3	S2S3				Ridges (Open, subalpine)
Downingia laeta Great Basin Downingia		Campanulaceae Bellflower Family	G5	S1S2			3	Wetland/Riparian (Shallow water ponds, lakes)
Draba crassa Thick-leaf Whitlow-grass		Brassicaceae Mustards	G3	S2S3			3	Alpine
Draba daviesiae Bitterroot Draba	Draba apiculata var. daviesiae	Brassicaceae Mustards	G3	S3			3	Alpine
Draba densifolia Dense-leaf Draba		Brassicaceae Mustards	G5	S2			2	Alpine
Draba fladnizensis White Arctic Draba		Brassicaceae Mustards	G4	S2?				Alpine
Draba globosa Round-fruited Draba	Draba apiculata	Brassicaceae Mustards	G3	S2S3			SENSITIVE	Alpine
Draba macounii Macoun's Draba		Brassicaceae Mustards	G3G4	S2			3	Alpine
Draba porsildii Porsild's Draba		Brassicaceae Mustards	G3G4	S2S3			3	Alpine
Draba ventosa Wind River Draba		Brassicaceae Mustards	G3	S1S2			SENSITIVE	3 Alpine

Species verified in these Counties: Beaverhead, Flathead
State Rank Reason: Only known from a few collections from the western half of the state.

Species verified in these Counties: Sanders
State Rank Reason: Described as a new species in 2010 from a single location along the Idaho/Montana border. The population of this newly described species is apparently closely allied to *Douglasia idahoensis*, *D. laevigata* and *D. nivalis* (Bjork 2010). Additional research may be needed to determine if this population warrants recognition at the specific level or if it should be treated as conspecific with *D. idahoensis* or *D. nivalis*. However, the discovery of this population is significant in that it is a new addition to the state flora no matter if it is treated as a distinct species or as a population of one of the previously mentioned species.

Species verified in these Counties: Beaverhead, Lewis and Clark, Teton
State Rank Reason: Rare in Montana, where it is currently known from a few scattered sites in the western half of the state, most of these sites were documented several decades ago and are in need of follow-up surveys. Current population levels and trends are unknown.

Species verified in these Counties: Beaverhead, Deer Lodge, Granite, Madison, Park
State Rank Reason: Scattered across southwest Montana where it is known from alpine slopes in several mountain ranges. Overall abundance and distribution is still poorly known, though it is likely to be more common than collections indicate.

Species verified in these Counties: Ravalli
State Rank Reason: A Montana endemic, known from several occurrences in alpine areas of the Bitterroot Mountains. Overall abundance and distribution are still poorly known though the high elevation habitat would likely limit most potential impacts.

Species verified in these Counties: Beaverhead, Flathead, Glacier, Jefferson, Lewis and Clark, Park, Pondera, Powell, Silver Bow, Sweet Grass
State Rank Reason: *Draba densifolia* is distributed in the western half of the state in four moderate to large populations, six small occurrences and nine historical or poorly documented occurrences. Occupied habitats are at moderate to high elevation which help to minimize disturbance to some of the populations. However, livestock grazing, invasive weeds and off-road ATV use impact some populations.

Species verified in these Counties: Deer Lodge, Madison, Stillwater
State Rank Reason: Rare in Montana, where it is currently known from a few scattered alpine locations in the southern half of the state. Additional sites are likely to be documented in the future and the species does not appear to be at significant risk due to the remoteness of its habitat.

Species verified in these Counties: Beaverhead, Madison
State Rank Reason: Round-fruited draba is a regional endemic, known from widely separated sites in Colorado, northeastern Utah, northwest Wyoming and adjacent Montana. It has been found in three southwest Montana mountain ranges. Current population levels and trends are unknown. However, its high-elevation habitat is relatively inaccessible, and there are no obvious threats. Additional sites are likely to be documented.

Species verified in these Counties: Flathead, Glacier
State Rank Reason: Known in Montana from only a few occurrences in Glacier National Park. Current population levels and trends are unknown. However, its high-elevation habitat is relatively inaccessible, and there are no obvious threats. Additional sites are likely to be documented.

Species verified in these Counties: Carbon, Madison
State Rank Reason: Only known in Montana from a few collections on the Beartooth Plateau and the Madison Range. Current population levels and trends are unknown. However, its high-elevation habitat is relatively inaccessible, and there are no obvious threats. Additional sites are likely to be documented.

Species verified in these Counties: Madison
State Rank Reason: *Draba ventosa* is known from one site in the Madison Range and has been reported from a second site in the Snowcrest Range. Current population levels and trends are unknown. However, its high-elevation habitat is relatively inaccessible, and there are no obvious threats. Additional sites are likely to be documented.

Drosera anglica English Sundew		Droseraceae Sundew Family	G5	S3		SENSITIVE		2	Fens
			Species verified in these Counties: Flathead, Granite, Lake, Lewis and Clark, Lincoln, Madison, Missoula, Park, Powell, Ravalli, Sanders State Rank Reason: Known from over two dozen populations in the state, most of these are moderate to large-sized, healthy populations. Most occurrences are on federally managed lands with several of these in designated wilderness areas, research natural areas or Glacier National Park which help to protect the occurrences from many potential threats. However, one population is vulnerable to ski area expansion and activity, and the species may be negatively impacted by fire as observations at one location appear to indicate. Plants are also sensitive to and negatively impacted by trampling of peat mats on which the species grow.						
Drosera linearis Linear-leaved Sundew		Droseraceae Sundew Family	G4	S2		SENSITIVE		3	Fens
			Species verified in these Counties: Flathead, Lewis and Clark, Powell State Rank Reason: Only known from four populations in Montana though all are moderate to large-sized occurrences that are located in either the Bob Marshall Wilderness or Indian Meadows Research Natural Area which afford all known populations some protection from disturbance.						
Dryas integrifolia Entire-leaved Avens		Rosaceae Rose Family	G5	S1S2					Alpine
			Species verified in these Counties: Fergus, Golden Valley State Rank Reason: known in Montana from the Big Snowy Mountains and possibly from the Tobacco Root Mountains, though location of this latter specimen collection is unknown and cannot be confirmed. Current population levels and trends are unknown. However, its high-elevation habitat is relatively inaccessible, and there does not appear to be any significant threats.						
Epilobium densiflorum Dense Spike-primrose	Boisduvalia densiflora	Onagraceae Evening-primrose Family	G5	SH					Wetland/Riparian
			Species verified in these Counties: Sanders State Rank Reason: Known from one historical collection in Sanders County from 1938.						
Ericameria discoidea var. discoidea Whitestem goldenbush	Haplopappus macronema var. macronema	Asteraceae Aster / Sunflowers	G4G5T4	S1S2		SENSITIVE		3	Rock/Talus
			Species verified in these Counties: Beaverhead, Gallatin State Rank Reason: Rare in Montana where it is only known from a couple of sites in the southwest corner of the state. Current population levels and trends are unknown. One site is relatively inaccessible and not likely to be threatened by human impacts.						
Ericameria nana Dwarf Goldenweed	Haplopappus nanus	Asteraceae Aster / Sunflowers	G5	SH					Rock/Talus
			Species verified in these Counties: State Rank Reason: Known from one 1952 collection south of Upper Red Rock Lake.						
Ericameria parryi var. montana Parry's Mountain Rabbitbrush	Chrysothamnus parryi ssp. montanus	Asteraceae Aster / Sunflowers	G5T1	S2				3	Grasslands (subalpine)
			Species verified in these Counties: Beaverhead State Rank Reason: A globally rare endemic, restricted to a small area of southwest Montana and adjacent Idaho. Though only known from one population in Montana with an estimated couple hundred plants, its habitat is remote and there are no apparent threats to its viability in the near future. Additional data on population levels and trend should be collected.						
Erigeron allococtus Big Horn Fleabane		Asteraceae Aster / Sunflowers	G3	S3				3	Rock outcrops/Ridges (low-elevation)
			Species verified in these Counties: Big Horn, Carbon State Rank Reason: A regional endemic of Montana and Wyoming. In Montana, it is known only from the Pryor Mountain Desert - Bighorn Basin area of Carbon and Big Horn Counties. The species can be common in areas where it is found.						
Erigeron asperugineus Idaho Fleabane		Asteraceae Aster / Sunflowers	G4	S2		SENSITIVE	SENSITIVE	3	Alpine
			Species verified in these Counties: Beaverhead, Madison State Rank Reason: Idaho fleabane is a regional endemic that has been documented from a few locations in Montana. It grows in alpine habitats, which tend to be relatively isolated from anthropogenic disturbance. Updated population data are needed for most occurrences and it is likely that a few additional occurrences will be documented.						
Erigeron eatonii Eaton's Fleabane		Asteraceae Aster / Sunflowers	G5	SH					Sagbrush/Woodlands (Open, Montane)
			Species verified in these Counties: Sweet Grass State Rank Reason: This species has only been collected once in Montana, several decades ago. The population where this specimen was collected is likely still extant, but no surveys have been conducted to try and re-locate it.						
Erigeron evermannii Evermann Fleabane		Asteraceae Aster / Sunflowers	G4	S2?		SENSITIVE			Alpine
			Species verified in these Counties: Ravalli State Rank Reason: Rare in Montana, where it is currently known from two alpine peaks in the Bitterroot Mountains. Available data are based on specimen collections from the 1960's and 1970's, though there is no reason to believe that these populations no longer exist or that they have been negatively impacted. More current data are needed.						
Erigeron flabellifolius Fan-leaved Fleabane		Asteraceae Aster / Sunflowers	G3	S3				3	Alpine
			Species verified in these Counties: Carbon, Park, Sweet Grass State Rank Reason: Restricted to rocky, alpine habitats in the mountains of south-central Montana. Though uncommon and restricted in distribution, the high elevation habitat tends to reduce the potential for any impacts to the species						

Erigeron formosissimus Beautiful Fleabane		Asteraceae Aster / Sunflowers	G5	S1S3				Meadows (Montane/subalpine)
			Species verified in these Counties: Madison, Park State Rank Reason: Species has been documented for southern Montana from a few collections. Additional data are needed for this species to more precisely determine its conservation status and need.					
Erigeron grandiflorus Large-flower Fleabane		Asteraceae Aster / Sunflowers	G4	S1S3				
			Species verified in these Counties: Carbon State Rank Reason: Only 2 collections from Carbon Co. at MONTU.					
Erigeron lackschewitzii Lackschewitz' Fleabane		Asteraceae Aster / Sunflowers	G3	S3		SENSITIVE	3	Alpine
			Species verified in these Counties: Flathead, Glacier, Granite, Lewis and Clark, Pondera, Powell, Teton State Rank Reason: Endemic to Montana and adjacent Alberta though the large majority of the species' range is in Montana. Though many of the individual occurrences are small in size, the species is distributed over a relatively wide area along the Rocky Mtn Front south to the Flint Creek Range. The high elevation habitat reduces the potential for detrimental impacts.					
Erigeron leiomerus Smooth Fleabane		Asteraceae Aster / Sunflowers	G4	S2			3	Alpine
			Species verified in these Counties: Beaverhead, Madison State Rank Reason: Rare in Montana, where it is currently known from only a couple of alpine sites in the southwest portion of the state. Current population levels and trends are unknown. However, its high-elevation habitat is relatively inaccessible, and there are no obvious threats. Additional sites are likely to be documented if surveys were to be conducted.					
Erigeron linearis Linear-leaf Fleabane		Asteraceae Aster / Sunflowers	G5	S2		SENSITIVE	2	Sagebrush/Grasslands (Foothills to Montane)
			Species verified in these Counties: Beaverhead, Lewis and Clark, Missoula, Park, Ravalli, Silver Bow State Rank Reason: <i>Erigeron linearis</i> is a peripheral species known from a few small and moderate-sized, localized occurrences. Almost all populations are on federally-managed lands or lands under conservation easement. However, development on adjacent lands may fragment some areas of suitable habitat. Two historical locations are also known. The occupied habitats and population are susceptible to negative impacts from invasive weeds.					
Erigeron parryi Parry's Fleabane		Asteraceae Aster / Sunflowers	G2G3	S2S3		SENSITIVE	3	Slopes and ridges (Open, Montane)
			Species verified in these Counties: Beaverhead, Jefferson, Madison State Rank Reason: <i>Erigeron parryi</i> was first described over 100 years ago based on a single collection made by Frank Tweedy along Grasshopper Creek in Beaverhead County, Montana. Over 50 years ago Arthur Cronquist recognized <i>E. parryi</i> in his monograph on the genus <i>Erigeron</i> (Cronquist 1947). He stated that the species was similar to <i>E. ochroleucus</i> , but the hair of leaves and stems was strikingly different. He hinted that <i>E. parryi</i> might be better considered a variety of <i>E. ochroleucus</i> , but since there was still only one collection, he did not formally propose a new nomenclatural combination. Eight years later Cronquist merged <i>E. parryi</i> into <i>E. ochroleucus</i> , stating that it was a rare form with spreading-hairy herbage (Cronquist 1955). Since that time several additional populations of <i>E. parryi</i> have been located in southwest Montana. Though the species is restricted to southwest Montana, it is locally common at many of the sites it occupies. Additionally, threats to the species appear to be low as a result of the rocky, sparsely vegetated habitat it prefers.					
Erigeron tener Slender Fleabane		Asteraceae Aster / Sunflowers	G4	S2?			3	Slopes (Open, limestone, montane)
			Species verified in these Counties: Beaverhead State Rank Reason: Rare in Montana, where it is currently known from a single locality in the southwest corner of the state. Current population levels and trends are unknown.					
Eriogonum caespitosum Mat Buckwheat		Polygonaceae Buckwheat Family	G5	S2S3		SENSITIVE	3	Sagebrush steppe (Montane)
			Species verified in these Counties: Beaverhead State Rank Reason: Rare in Montana, where it is has been documented from a few sites from Beaverhead County. Trends are unknown, though the potential for negative impacts to known populations appears to be low.					
Eriogonum capistratum var. muhlickii Muhlick's Buckwheat	Eriogonum crosbyae, Eriogonum chrysops [misapplied]	Polygonaceae Buckwheat Family	G4T3	S3				Alpine
			Species verified in these Counties: Deer Lodge, Granite, Ravalli State Rank Reason: Rare to Uncommon. This entity is restricted to high elevation sites in the Bitterroot Range and in the Anaconda-Pintlers, where it may be locally common in some areas. Good population data are lacking for most occurrences, though it's long-term viability does not appear to be a major concern at this time due, in part, to the remoteness of its habitat.					
Eriogonum salsuginosum Smooth Buckwheat	Stenogonum salsuginosum	Polygonaceae Buckwheat Family	G4?	S1		SENSITIVE	2	Clay Barrens
			Species verified in these Counties: Carbon State Rank Reason: This species is on the northern edge of its range in south-central Montana, where it has been documented from only two small areas on the south side of the Pryor Mountains. There is active bentonite mining in the immediate vicinity of one of the known occurrences. Follow-up visits are needed to document the extent of the populations and to monitor population trends.					
Eriogonum soliceps		Polvaonaceae	G2	S2		SENSITIVE	3	Ridges/slopes (Open,

Railroad Canyon Wild Buckwheat		Buckwheat Family						Montane)
Eriogonum visheri Visher's Buckwheat		Polygonaceae Buckwheat Family	G3	S1		SENSITIVE	3	Clay Barrens
			<p>Species verified in these Counties: Beaverhead, Deer Lodge State Rank Reason: Railroad canyon wild buckwheat is a newly described species (Reveal and Bjork, in press 2004) that is confirmed extant at only two locations, one in southern Beaverhead County, Montana and the other in adjacent Lemhi County, Idaho. Herbarium specimens also exist from about 10 other localities in southwest Montana. It does not appear to be strongly impacted by cattle grazing, but its habitat would be vulnerable to off-road vehicles.</p>					
Eupatorium maculatum Spotted Joepywe-weed	Eupatoriadelphus maculatus	Asteraceae Aster / Sunflowers	G5	S1S2			0	Wetland/Riparian
			<p>Species verified in these Counties: Big Horn, Carbon State Rank Reason: Widespread species known in Montana from a few occurrences in the south-central part of the state on a variety of ownerships. Four of the occurrences are moderate to large-sized populations.</p>					
Eupatorium occidentale Western Joepywe-weed	Ageratina occidentalis Western Boneset	Asteraceae Aster / Sunflowers	G4	S2		SENSITIVE	SENSITIVE	Rock/Talus
			<p>Species verified in these Counties: Beaverhead, Mineral, Ravalli State Rank Reason: This peripheral species in Montana is known from a handful of small to large populations in the extreme western part of the state. Minor impacts associated with a rock quarry at one location and rock climbing at another site are possible. Otherwise, few threats have been documented for the species in Montana.</p>					
Euphrasia subarctica Arctic Eyebright	Euphrasia arctica var. disjuncta, Euphrasia disjuncta [misapplied]	Orobanchaceae Broomrape Family	G5	S2			3	Alpine
			<p>Species verified in these Counties: Glacier State Rank Reason: In Montana, only known from a few locations in Glacier National Park, including one historical collection from 1897. Some plants in at least one population are subject to trampling by hikers. Current population levels and trends are unknown. However, its high-elevation habitat is relatively inaccessible, and there are no significant threats. Additional sites are likely to be documented.</p>					
Gentiana glauca Glaucous Gentian		Gentianaceae Gentians	G4G5	S2S3			3	Alpine
			<p>Species verified in these Counties: Flathead State Rank Reason: Rare in Montana, where it is has been documented only from Glacier National Park. Current population levels and trends are unknown, though it was described as locally common at the collection sites. Its high-elevation habitat is inaccessible, and there are no obvious threats. Additional sites are likely to be documented if surveys were to be conducted.</p>					
Gentianopsis macounii Macoun's Gentian	Gentiana macounii, Gentianella crinita ssp. macounii, Gentianopsis procera ssp. macounii, Gentiana detonsa	Gentianaceae Gentians	G5	S2		SENSITIVE	2	Fens
			<p>Species verified in these Counties: Glacier, Teton State Rank Reason: Rare in Montana, where it is known from several sites just east of the Continental Divide.</p>					
Gentianopsis simplex Hiker's Gentian	Gentiana simplex, Gentianella simplex	Gentianaceae Gentians	G5	S2		SENSITIVE	SENSITIVE	3 Fens, wet meadows, seeps
			<p>Species verified in these Counties: Beaverhead, Carbon, Missoula State Rank Reason: Rare in Montana, where it is known from several widely scattered locations. Current population levels and trends are unknown, though potential threats to known populations appear to be minimal or non-existent at this time. Additional sites are likely to be documented if surveys were to be conducted.</p>					
Githopsis specularioides Common Blue-cup	Githopsis calycina	Campanulaceae Bellflower Family	G5	S1S2			3	Cliffs
			<p>Species verified in these Counties: Sanders State Rank Reason: This plant is known from only one location in Montana -- more than 150 miles disjunct from the nearest documented populations in eastern Washington. The Montana population is small, however its cliff habitat is not thought to be particularly vulnerable to human disturbance.</p>					
Glossopetalon spinescens Spiny Greasebush	Glossopetalon nevadense	Crossosomataceae Greasebush	G5	S1		SENSITIVE	1	Rock/Talus
			<p>Species verified in these Counties: Ravalli State Rank Reason: A peripheral species in Montana where it is only known from one small occurrence on the Bitterroot National Forest. Population is vulnerable to human impacts as it occurs adjacent to a road.</p>					
Gratiola ebracteata Bractless Hedge-hyssop		Plantaginaceae Plantain Family	G4	S2			3	Wetland/Riparian
			<p>Species verified in these Counties: Flathead, Glacier, Teton State Rank Reason: Rare and peripheral in Montana. Currently known from approximately a half-dozen wetlands along the Rocky Mtn Front and from a couple historical collections. Available data for the species are limited. However, threats to existing populations appear to be minimal. As an annual, population levels likely fluctuate widely from year to year.</p>					

Grayia spinosa Spiny Hopsage		Amaranthaceae Amaranth (Pigweed) Family	G5	S2			SENSITIVE	0	Shrublands (Dry)	
			Species verified in these Counties: Big Horn, Carbon, Park State Rank Reason: <i>Grayia spinosa</i> is located in Montana primarily in the Pryor Mountain Desert with a couple additional records from southwest Montana. In the Pryor Mountain area, it is known from less than a dozen, generally small occurrences. The total population of the species in the state likely numbers less than 2,000 individuals. As the plant is highly palatable, negative impacts associated with heavy grazing are possible. Cheatgrass invasion may also pose a threat to the species by reducing seedling establishment and increasing fire frequency.							
Grindelia howellii Howell's Gumweed		Asteraceae Aster / Sunflowers	G3	S2S3			SENSITIVE	SENSITIVE	1	Vernally moist sites (Open, Low-elevation)
			Species verified in these Counties: Missoula, Powell State Rank Reason: In Montana, <i>Grindelia howellii</i> is known from over 100 mapped occurrences. However, most populations are small and many occur on roadsides or other similarly disturbed habitat. This habitat preference in conjunction with the short-lived nature of the species means occurrences may drift from place to place or from year to year and as a result many occurrences may be ephemeral. These attributes make determination of population numbers as well as the number of extant populations at any given time difficult to assess. Invasive weeds are a threat to many occurrences, as the habitat occupied by <i>G. howellii</i> is also favorable for many weedy species. Application of herbicides to control these weeds, especially along roadsides may also have a direct, negative impact.							
Gymnosteris parvula Small-flower Gymnosteris		Polemoniaceae Phlox Family	G4	S1					3	Grasslands/Sagebrush steppe
			Species verified in these Counties: Beaverhead State Rank Reason: Known in Montana from one 1932 collection near West Yellowstone and one recent collection from Beaverhead County.							
Halimolobos perplexa Puzzling Rockcress	Sandbergia perplexa	Brassicaceae Mustards	G4	S2					2	Shrubland/woodland slopes (Open, Montane)
			Species verified in these Counties: Ravalli State Rank Reason: Rare in Montana, where it is known only from the very southern end of the Bitterroot Valley on the Bitterroot National Forest. Spotted knapweed is known from at least one of the populations and further spread of invasive weeds at the known occurrences is likely without control measures. Trend data and repeat observations of the known occurrences are lacking.							
Heterocodon rariflorum Western Pearl-flower		Campanulaceae Bellflower Family	G5	S2			SENSITIVE		2	Vernally moist habitats
			Species verified in these Counties: Lincoln, Ravalli, Sanders State Rank Reason: Over a dozen known occurrences, including a half-dozen moderate to large-sized populations, a few small populations and several occurrences that need further survey work to document population sizes. Most populations are on National Forest lands. Invasive weeds infest several populations and are likely infest others. Hiking and ORV trails occur though or adjacent to a few populations and associated use may impact <i>H. rariflorum</i> plants.							
Hornungia procumbens Hutchinsia	Hutchinsia procumbens	Brassicaceae Mustards	G5	S2				SENSITIVE	3	Sagebrush Steppe
			Species verified in these Counties: Beaverhead, Carbon, Flathead, Powell State Rank Reason: Rare in Montana. Currently known from approximately a half-dozen occurrences scattered across the mountainous portion of the state. Trend and population data are generally lacking, though it is an annual and populations probably fluctuate widely from year to year. Threats to the species' viability in Montana appear to minimal.							
Howellia aquatilis Water Howellia		Campanulaceae Bellflower Family	G3	S3	LT		THREATENED		2	Aquatic
			Species verified in these Counties: Lake, Missoula State Rank Reason: Water howellia is restricted in Montana to depressional wetlands in the Swan Valley, typically occupying small basins where the water level recedes partially or completely by the Fall. Montana contains the largest number of occupied ponds and wetlands though the total occupied area is small and it is clustered in a small portion of the state, making it vulnerable to localized events and management actions. Reed canary grass (<i>Phalaris arundinacea</i>) has invaded into some wetlands in the Swan Valley and it has the potential to form dense monocultures, thereby decreasing the amount of available habitat, though it has only been found in a small percentage of occupied water howellia sites so far. Additionally, water howellia is an annual species, which is solely dependent on recruitment from seed; and it has very narrow habitat and moisture requirements which leaves it vulnerable to extirpation as a result of consecutive years of unfavorable growing conditions.							
Idahoia scapigera Scalepod		Brassicaceae Mustards	G5	S1			SENSITIVE		1	Vernally moist, rock ledges
			Species verified in these Counties: Flathead, Ravalli State Rank Reason: Rare and peripheral in Montana. Currently known from approximately a half-dozen sites in western Montana, mostly along the lower slopes of the Bitterroot Mountains. Populations are highly susceptible to negative impacts from invasive weeds, primarily spotted knapweed and cheatgrass. Data on population trends are lacking, though levels likely fluctuate widely from year to year.							
Ipomoea leptophylla Bush morning-glory		Convolvulaceae Morning-glory Family	G3G5	S1S2						Prairie
			Species verified in these Counties: Big Horn, Rosebud, Treasure, Yellowstone State Rank Reason: Known in Montana from only a few collections in the southeastern part of the state, only 1 of these collections was							

			in the last 2 decades. This is a very conspicuous, attractive species, so it is probably not undercollected.						
Ipomopsis congesta ssp. crebrifolia Ballhead Gilia	Gilia congesta var. crebrifolia	Polemoniaceae Phlox Family	G5T3T4	S3			SENSITIVE	3	Sagebrush Steppe
			Species verified in these Counties: Beaverhead State Rank Reason: Rare and peripheral in Montana. Currently known from only a small geographic area encompassing parts of the Centennial Mountains to the Monida Pass area in southwest Montana. Additional data on population levels are needed, though it is expected that populations are stable. Potential threats to the known occurrences appear to be minimal or non-existent at the current time.						
Ipomopsis minutiflora Small-flower Standing-cypress	Gilia minutiflora	Polemoniaceae Phlox Family	G4	S1					Sagebrush (Open)
			Species verified in these Counties: Ravalli State Rank Reason: Rare and peripheral in Montana. Currently documented in the state from one collection from the Bitterroot Valley.						
Kelloggia galioides Kelloggia		Rubiaceae Bedstraws / Madder Family	G5	SH					Forest (Open/low-elevation)
			Species verified in these Counties: Mineral State Rank Reason: Known in Montana from one 1971 collection in the South Fork Fish Creek valley approximately 12 miles west-northwest of Alberton and a 0.5 mile north of the junction with Deer Creek.						
Kochia americana Red Sage	Bassia americana	Amaranthaceae Amaranth (Pigweed) Family	G5	S2			SENSITIVE	2	Saline/Alkaline Sites
			Species verified in these Counties: Beaverhead State Rank Reason: The species is at the periphery of its range in Beaverhead County where it is known from one large extant population on BLM and private lands, two historical locations and two other locations that need additional survey work. Agricultural conversion has significantly reduced available habitat. Additional impacts to <i>K. americana</i> from agriculture, grazing and/or invasive weeds are possible.						
Koenigia islandica Island Koenigia		Polygonaceae Buckwheat Family	G4	S2				3	Alpine
			Species verified in these Counties: Carbon State Rank Reason: Rare in Montana, where it is only known from several, high elevation sites on the Beartooth Plateau. Data are insufficient for accurately determining population levels and trend, though populations probably fluctuate widely from year to year. The known occurrences and their habitat do not appear to be at any significant risk of adverse impacts from human activities.						
Lagophylla ramosissima Slender Hareleaf		Asteraceae Aster / Sunflowers	G5	S1				2	Grasslands (Dry/Valley)
			Species verified in these Counties: Sanders State Rank Reason: Species is poorly documented in Montana where it is known from three occurrences in close proximity to each other. More survey work for the species is needed to determine sizes of existing populations at a minimum. Invasive weeds occur at or near existing sites, though impacts of invasive weeds on <i>L. ramosissima</i> are unknown.						
Lathyrus bijugatus Latah Tule Pea		Fabaceae Pea Family	G4	S1		SENSITIVE			Forest (Open/Valley)
			Species verified in these Counties: Flathead, Lincoln State Rank Reason: Rare and peripheral in Montana. Currently documented from three, widely scattered sites in the valleys-lower mountains of northwest Montana.						
Leptodactylon caespitosum Leptodactylon		Polemoniaceae Phlox Family	G4	S2			SENSITIVE	3	Sandy Breaks/Outcrops
			Species verified in these Counties: Carbon State Rank Reason: This plant occurs in Montana at the edge of a broad but patchy range. It is known from only a dozen or so mostly small populations, all in the Pryor Mountains - Bighorn Canyon area, and is confined to a very specific substrate. The habitat of this plant receives little human disturbance and there are no evident threats.						
Lewisia columbiana Columbia Lewisia		Portulacaceae Purslane Family	G4	S1S2				3	Rock Crevices
			Species verified in these Counties: Ravalli State Rank Reason: Rare and peripheral in Montana, where it is known from only one location in the Bitterroot Mountains. Its relatively inaccessible habitat reduces the potential for negative impacts.						
Lobelia spicata Pale-spiked Lobelia		Campanulaceae Bellflower Family	G5	S2?			SENSITIVE		Moist meadows
			Species verified in these Counties: Dawson, Richland, Sheridan State Rank Reason: Rare and peripheral in Montana, where it is known from a few locations in the northeast corner of the state. Additional data on population levels and trends are needed. Unclear if any of the documented occurrences are subject to negative impacts or disturbances.						
Lomatium attenuatum Taper-tip Desert-parsley		Apiaceae Parsley / Carrot Family	G3	S2			SENSITIVE	3	Slopes and Scree (Dry)
			Species verified in these Counties: Beaverhead, Madison State Rank Reason: <i>Lomatium attenuatum</i> is restricted to northwest Wyoming and southwest Montana, with most of its range in Montana. It is known from several locations in Beaverhead and Madison counties. Some populations may be vulnerable to impacts from mining activities and noxious weed invasion.						
Lomatium geyeri Geyer's Biscuitroot		Apiaceae Parsley / Carrot Family	G4	S2		SENSITIVE		0	Rocky sites (Mesic)
			Species verified in these Counties: Lincoln						

			State Rank Reason: Geyer's biscuitroot occurs in northwest Montana in less than a dozen occurrences, including several large, extensive populations. Encroachment of invasive weeds from nearby infestations into habitat occupied by the species is the primary concern.						
Lomatium nuttallii Nuttall Desert-parsley		Apiaceae Parsley / Carrot Family	G3	S1S2			SENSITIVE	2	Rocky, pine woodlands
			Species verified in these Counties: Big Horn, Rosebud State Rank Reason: The few populations of Nuttall's desert-parsley in the upper Tongue River drainage of Montana are disjunct from the main range of the species in southeastern Wyoming and adjacent Nebraska and Colorado. Its position on mid and lower slopes along drainages in conjunction with its occurrence on private land may make it susceptible to negative impacts from development activities. Potential future coal and/or coalbed methane development could eventually impact the species. Weeds are not currently a problem at any of the known sites. Additional locations are likely to be found in the vicinity of the known occurrences with additional surveys.						
Lomatogonium rotatum Marsh Felwort		Gentianaceae Gentians	G5	S1S2			SENSITIVE	2	Wetland/Riparian
			Species verified in these Counties: Beaverhead State Rank Reason: Only two known occurrences in Montana on BLM and private lands, including one moderate-sized population. Livestock grazing occurs in the occupied habitat, though it is unclear what effect it may have on <i>L. rotatum</i> . Changes in the hydrology, particularly lowering of the water table may adversely affect populations.						
Malacothrix torreyi Desert Dandelion		Asteraceae Aster / Sunflowers	G4	S1S2			SENSITIVE	3	Open slopes (low-elevation)
			Species verified in these Counties: Carbon State Rank Reason: Desert dandelion is limited in Montana to a few localized sites on the south side of the Pryor Mountains. Impacts of grazing are unknown, but it may respond positively to moderate levels of disturbance. Additional data on population levels and trends are needed.						
Mentzelia nuda Bractless blazingstar		Loasaceae Blazingstar / Stickleaf Family	G5	S1S2			SENSITIVE		Open areas (sandy or gravelly soils)
			Species verified in these Counties: Custer, Powder River, Roosevelt, Rosebud, Valley State Rank Reason: Rare and peripheral in Montana, where it is known from a few locations in the eastern half of the state. Additional data on population levels and trends are needed.						
Mentzelia pumila Dwarf mentzelia		Loasaceae Blazingstar / Stickleaf Family	G4	S2S3			SENSITIVE	3	Shrublands (Dry, sandy soils)
			Species verified in these Counties: Carbon State Rank Reason: Rare in Montana, where it is known only from sandy sites within the Bighorn Basin area. Additional data on population levels and trends are needed.						
Mertensia bella Oregon Bluebells		Boraginaceae Borage Family	G4	S2S3		SENSITIVE		2	Vernally moist soil (Montane)
			Species verified in these Counties: Missoula State Rank Reason: Rare in Montana, where it is known only from the Lolo National Forest. Some disturbance may be beneficial or at least tolerated. Mining activity occurs near one site though it is unknown if this has had any impact on <i>M. bella</i> . Additional monitoring of the populations is needed to determine trends.						
Micranthes apetala Tiny Swamp Saxifrage	Saxifraga integrifolia Hook. var. apetala, Saxifraga apetala	Saxifragaceae Saxifrage Family	G3Q	S2?				3	Alpine
			Species verified in these Counties: Beaverhead, Carbon State Rank Reason: Known from two occurrences, one in the East Pioneers and one in the Absaroka-Beartooth Wilderness. Both occurrences are known from single specimen collections. Though little data are available for the species in Montana, the alpine habitat in which it grows is not generally subject to negative impacts from human disturbance.						
Micranthes tempestiva Storm Saxifrage	Saxifraga tempestiva	Saxifragaceae Saxifrage Family	G2	S2		SENSITIVE		3	Alpine
			Species verified in these Counties: Beaverhead, Deer Lodge, Granite, Ravalli State Rank Reason: State endemic known from approximately a dozen extant sites in southwest Montana. The high elevation habitat of the species in conjunction with approximately half of the populations in designated wilderness areas minimize the potential for negative impacts to the species.						
Mimulus ampliatus Stalk-leaved Monkeyflower	Mimulus patulus, Mimulus washingtonensis	Phrymaceae Lopseed Family	G4	S3		SENSITIVE			Vernally moist soil (Valleys to subalpine)
			Species verified in these Counties: Flathead, Glacier, Lincoln, Missoula, Ravalli, Sanders						
Mimulus breviflorus Short-flowered Monkeyflower		Phrymaceae Lopseed Family	G4	S1S2		SENSITIVE		3	Rock/Talus (Mesic, Montane)
			Species verified in these Counties: Flathead, Lincoln State Rank Reason: Rare in Montana, where it is known from a few, scattered locations in the northwest corner of the state.						
Mimulus clivicola North Idaho Monkeyflower		Phrymaceae Lopseed Family	G4	S1S3		SENSITIVE			
			Species verified in these Counties:						

Mimulus floribundus Floriferous Monkeyflower		Phrymaceae Lopseed Family	G5	SH					
			Species verified in these Counties: Flathead, Ravalli						
Mimulus hymenophyllus Thinsepal monkeyflower		Phrymaceae Lopseed Family	G1	S1					
			Species verified in these Counties: Lake						
Mimulus nanus Dwarf Purple Monkeyflower		Phrymaceae Lopseed Family	G5	S1		SENSITIVE	SENSITIVE	2	Open slopes (low-elevation)
			Species verified in these Counties: Gallatin, Ravalli State Rank Reason: <i>Mimulus nanus</i> is only known from a few extant occurrences in the state, plus two historical collections. Populations are generally small and in habitats susceptible to weed invasion. At least a few of the occurrences are infested have scattered spotted knapweed plants.						
Mimulus primuloides Primrose Monkeyflower		Phrymaceae Lopseed Family	G4	S2		SENSITIVE	SENSITIVE	3	Fens and wet meadows
			Species verified in these Counties: Beaverhead, Ravalli State Rank Reason: Known from about ten extant occurrences in southwest Montana entirely on National Forest lands. Eight of the occurrences are moderate to large-sized populations. Two historical locations are also known. Fire may adversely impact <i>M. primuloides</i> though more study is needed. It is also vulnerable to changes in hydrology and one population could be adversely affected by activity at an adjacent ski area.						
Mimulus ringens Square-stem Monkeyflower		Phrymaceae Lopseed Family	G5	S1			SENSITIVE		Wetland/Riparian
			Species verified in these Counties: Cascade, Chouteau, Fergus State Rank Reason: Rare. Currently known from a few riparian sites along the Missouri River in central Montana.						
Nama densum Nama		Hydrophyllaceae Waterleaf Family	G5	S1			SENSITIVE	3	Sagebrush (Sandy soil)
			Species verified in these Counties: Carbon State Rank Reason: <i>Nama</i> occurs in Montana on the northeastern edge of its range. It has been found at a single location on the south side of the Pryor Mountains in 1991, occupying less than one acre of habitat.						
Noccaea parviflora Small-flowered Pennycress	Thlaspi parviflorum	Brassicaceae Mustards	G3	S2S3			SENSITIVE	3	Meadows (Moist, Montane to alpine)
			Species verified in these Counties: Beaverhead, Carbon, Madison, Park, Silver Bow State Rank Reason: <i>Noccaea parviflora</i> is a regional endemic, known in Montana from several southwestern counties. It is a small, short-lived plant that likely requires some disturbance to maintain its habitat.						
Nuttallanthus texanus Blue Toadflax	Linaria canadensis var. texana	Plantaginaceae Plantain Family	G4G5	S1			SENSITIVE	2	Grasslands/woodlands (sandy to clay soils)
			Species verified in these Counties: Carter, Dawson State Rank Reason: Known from one extant occurrence in southeastern Montana near Alzada and another occurrence from Makoshika State Park that may or may not still be extant.						
Nymphaea leibergii Pygmy Water-lily	Nymphaea tetragona ssp. leibergii	Nymphaeaceae Water-lily Family	G5	S1				3	Aquatic
			Species verified in these Counties: Flathead, Lake, Missoula State Rank Reason: Known from 4 extant occurrences in western valleys and one historical collection from Salmon Lake in the Seeley Lake area. Populations are susceptible to impacts from development, recreation, siltation and aquatic weeds.						
Oenothera pallida ssp. pallida Pale Evening-primrose	Oenothera pallida var. idahoensis	Onagraceae Evening-primrose Family	G5T4Q	S1					Sandy sites
			Species verified in these Counties: Beaverhead State Rank Reason: Limited in Montana to the sandhills of the Centennial Valley in Beaverhead County. A reduction in natural disturbances, including fire, ungulate grazing and pocket gopher activity has led to greater dune stabilization and reduced the extent of early successional (blowout) habitat in the area.						
Oxytropis campestris var. columbiana Columbia Locoweed	Oxytropis columbiana	Fabaceae Pea Family	G5T1	S1				1	Wetland/Riparian (Gravelly shorelines)
			Species verified in these Counties: Lake State Rank Reason: Originally known in Montana from six occurrences all around Flathead Lake. However, two of the occurrences are now extirpated. Private lands, which are subject to development in the area, play a vital role in maintaining viable populations of this plant in Montana.						
Oxytropis deflexa var. foliolosa Nodding Locoweed		Fabaceae Pea Family	G5T3T5	S1				3	Alpine
			Species verified in these Counties: Madison State Rank Reason: Rare in Montana, where it has been documented from a few, alpine sites in the mountains of the southwest portion of the state.						
Oxytropis lagopus var. conjugens Hare's-foot Locoweed		Fabaceae Pea Family	G4G5T3	S3				3	Sagebrush (low-elevation)
			Species verified in these Counties:						

Oxytropis parryi Parry's Locoweed		Fabaceae Pea Family	G5	S1			3	Alpine
			Species verified in these Counties: Beaverhead					
Oxytropis podocarpa Stalked-pod Locoweed		Fabaceae Pea Family	G4	S1		SENSITIVE	3	Alpine
			Species verified in these Counties: Teton State Rank Reason: Rare in Montana, where it is known from a small area of the Rocky Mountain Front. The remote habitat should limit the possibility of negative impacts.					
Papaver pygmaeum Alpine Glacier Poppy	Papaver radicum var. pygmaeum	Papaveraceae Poppy Family	G3	S2S3			3	Alpine
			Species verified in these Counties: Flathead, Glacier State Rank Reason: Rare in Montana, where it is known only from Glacier National Park and surrounding mountains. Though populations generally are not large, the remote, alpine habitat does not appear to be at significant risk. Trends are unknown, as are potential impacts associated with climate change.					
Papaver radicum ssp. kluanensis Alpine Poppy	Papaver kluanense, Papaver kluenensis	Papaveraceae Poppy Family	G5T3T4	S1			3	Alpine
			Species verified in these Counties: Carbon, Park, Sweet Grass					
Pedicularis contorta var. ctenophora Pink Coil-beaked Lousewort		Orobanchaceae Broomrape Family	G5T3	S2S3			3	Slopes (Montane/Subalpine)
			Species verified in these Counties: Beaverhead, Madison State Rank Reason: Restricted to extreme southwestern Montana where it is documented from a few populations. Limited data is available for the species and it may be more common than the few collections indicate.					
Pedicularis contorta var. rubicunda Selway Coil-beaked Lousewort		Orobanchaceae Broomrape Family	G5T3	S2S3				Ridgetops and meadows (subalpine and alpine)
			Species verified in these Counties: Ravalli State Rank Reason: Restricted in Montana to the Bitterroot Mountains where it is documented from several occurrences. Limited data is available for the species and it may be more common than the few collections indicate.					
Pedicularis crenulata Scallop-leaf Lousewort		Orobanchaceae Broomrape Family	G4	S1		SENSITIVE	1	Wetland/Riparian
			Species verified in these Counties: Beaverhead State Rank Reason: Two known populations in Montana. Much of the riparian meadow habitat occupied this species has been covered to agriculture or used as hay meadows.					
Pediomelum hypogaeum Little Indian Breadroot		Fabaceae Pea Family	G5	S2S3		SENSITIVE	3	
			Species verified in these Counties: Carter, Cascade, Chouteau, Fergus, Golden Valley, Petroleum, Powder River, Rosebud					
Penstemon angustifolius Narrowleaf Penstemon		Plantaginaceae Plantain Family	G5	S2		SENSITIVE	3	Sandy sites
			Species verified in these Counties: Carter, Dawson, Fallon State Rank Reason: Over a dozen, small extant and/or presumed extant occurrences are known in southeast Montana, plus a few historical collections from the same area. Only one of the known populations appears to be relatively large. Additional suitable, but unsurveyed habitat likely exists in eastern Montana.					
Penstemon caryi Cary's Beardtongue		Plantaginaceae Plantain Family	G3	S3			3	Grasslands and slopes (Open, montane)
			Species verified in these Counties: Carbon State Rank Reason: Restricted in Montana to the Pryor Mountains.					
Penstemon flavescens Yellow Beardtongue		Plantaginaceae Plantain Family	G3	S3			3	Rocky slopes (Open, montane)
			Species verified in these Counties: Mineral, Ravalli State Rank Reason: Restricted in Montana to the Bitterroot Range primarily in Ravalli County but also documented from Mineral County. The species can be relatively common or widely scattered in areas of suitable habitat, though detailed information on the abundance of the species is lacking. More detailed information documenting the abundance, distribution and any potential threats is needed.					
Penstemon grandiflorus Large Flowered Beardtongue		Plantaginaceae Plantain Family	G5?	S1				Sandy soils
			Species verified in these Counties: Custer State Rank Reason: Rare in Montana, where it is known from only a few sites on the plains of eastern Montana.					
Penstemon humilis Low Beardtongue		Plantaginaceae Plantain Family	G5	S1S3				Sagebrush steppe (Montane)
			Species verified in these Counties: Beaverhead State Rank Reason: Known in Montana from 1 collection from Beaverhead County					

Penstemon lemhiensis Lemhi Beardtongue		Plantaginaceae Plantain Family	G3	S3		SENSITIVE	SENSITIVE	2	Sagebrush-grasslands
			Species verified in these Counties: Beaverhead, Deer Lodge, Ravalli, Silver Bow State Rank Reason: <i>Penstemon lemhiensis</i> is a regional endemic that occurs only in southwest Montana and adjacent Idaho. There are numerous occurrences in Beaverhead and Ravalli Counties with a few additional occurrences located in Deer Lodge and Silver Bow Counties in Montana, but most are small to moderate in size. The number of plants in Montana is estimated at approximately 10,000 individual plants based on recent survey efforts. Plants occur on a mix of federal, state and private ownerships with National Forest lands supporting the majority of the occurrences. The species is primarily sensitive to negative impacts associated with drought conditions and fire suppression, both of which are believed to have played a significant role in the species' decline. Additional impacts to populations are occurring from noxious weed invasion, primarily spotted knapweed in the Bitterroot region. Heavy livestock grazing also negatively impacts the species. Several occurrences are found adjacent to roadsides and thus may be impacted by activities associated with road construction, maintenance and use.						
Penstemon payettensis Payette Beardtongue		Plantaginaceae Plantain Family	G4	S1		SENSITIVE		1	Slopes (Open, Montane)
			Species verified in these Counties: Ravalli State Rank Reason: Known in Montana from only two small occurrences in close proximity on the Bitterroot National Forest. Spotted knapweed invasion, fire suppression and road construction/maintenance are all concerns for the viability of the species in Montana. Additional data on the species in Montana are needed.						
Penstemon whippleanus Whipple's Beardtongue		Plantaginaceae Plantain Family	G5	S1			SENSITIVE		Open areas (subalpine and alpine)
			Species verified in these Counties: Beaverhead, Gallatin, Madison State Rank Reason: Whipple's beardtongue occurs at the edge of its range in Montana, and is known here from just two collections, only one of which is recent. The species occupies high elevation, rocky habitat that is relatively unthreatened.						
Petasites frigidus var. frigidus Arctic sweet coltsfoot		Asteraceae Aster / Sunflowers	G5T5	S1				2	Wetland/Riparian
			Species verified in these Counties: Flathead, Glacier State Rank Reason: Rare in Montana, where it is at the southern edge of its range. Known from less than ten sites in the northwest corner of the state.						
Phacelia incana Hoary Phacelia		Hydrophyllaceae Waterleaf Family	G3G4	S2			SENSITIVE	3	Rocky slopes (foothills)
			Species verified in these Counties: Beaverhead State Rank Reason: <i>Phacelia incana</i> occurs in Idaho, Nevada, Utah, Colorado and Montana. In Montana, it is known from approximately ten occurrences in Beaverhead County. It is difficult to estimate the size of populations because the plant is an annual, and seed germination varies greatly with climate. Habitat is probably not threatened by anthropogenic sources.						
Phacelia scopulina Dwarf Phacelia	Phacelia lutea var. scopulina	Hydrophyllaceae Waterleaf Family	G4	SH					Alkaline sites
			Species verified in these Counties: Beaverhead, Madison, Silver Bow State Rank Reason: Known in Montana from one 1885 collection by P.A. Rydberg near Melrose, probably in Silver Bow County.						
Phacelia thermalis Hot Spring Phacelia		Hydrophyllaceae Waterleaf Family	G3G4	S1			SENSITIVE		Barren clay slopes
			Species verified in these Counties: Fergus, Garfield, Phillips, Valley State Rank Reason: Hot spring phacelia is known from a very small number of sites in northeastern Montana, where it is disjunct from its primary range (northern California to southwestern Idaho). The species is an annual and may be vulnerable to competition from invasive exotics, particularly sweet clover, which is widespread in the type of habitat where hot spring phacelia has been found.						
Phlox andicola Plains Phlox		Polemoniaceae Phlox Family	G4	S3			SENSITIVE	3	Open sites (Sand to clay soils)
			Species verified in these Counties: Carter, Dawson, Powder River, Rosebud, Sheridan State Rank Reason: Plains phlox reaches the western margin of its range in Montana's eastern counties. It has been documented from relatively few locations, but surveys during its early blooming season have been few, and additional spring inventory work may locate more populations. It likely tolerates grazing and may benefit from some level of disturbance.						
Phlox kelseyi var. missoulensis Missoula Phlox	Phlox missoulensis	Polemoniaceae Phlox Family	G2G3	S2S3		SENSITIVE	SENSITIVE	2	Slopes/ridges (Open, foothills to subalpine)
			Species verified in these Counties: Cascade, Granite, Jefferson, Judith Basin, Lewis and Clark, Meagher, Missoula, Powell State Rank Reason: Missoula phlox is a state endemic known from over 2 dozen occurrences in west-central Montana, most of which are moderate to large-sized. Populations occur on a mix of ownerships, including private lands which host several occurrences. The Waterworks Hill population is infested with several noxious weeds and heavy recreational trail use also occurs within the occupied habitat. Other populations appear to be at much less risk though some impacts from invasive weeds, recreational use and development are possible.						
Physaria brassicoides Double Bladderpod		Brassicaceae Mustards	G5	S3			SENSITIVE	3	Breaklands/badlands
			Species verified in these Counties: Carter, Custer, Petroleum, Powder River State Rank Reason: Double bladderpod is endemic to a restricted area of the northern Great Plains, and is known in Montana only from a handful of populations. Populations occur on a mix of federal, state and private ownerships. Impacts to the species from livestock grazing and invasive weeds are minimal at this time as the typically steep, sparsely-vegetated habitat is not conducive to grazing. Yellow sweetclover was observed at one location and it may eventually have a negative impact on the species.						

Physaria carinata Keeled Bladderpod	Lesquerella carinata, Lesquerella carinata var. languida, Lesquerella paysonii	Brassicaceae Mustards	G3G4	S1		SENSITIVE	SENSITIVE	1	Grassland slopes (low-elevation)
Species verified in these Counties: Beaverhead, Granite State Rank Reason: <i>Physaria carinata</i> is restricted to areas of calcareous limestone substrates on low elevation, south-facing grasslands of Granite and Beaverhead Counties. Population numbers appear to have declined significantly in at least several of the occurrences in the Garnet Mountains from the time they were first documented in the 1980's and early 1990's. During this time period, spotted knapweed densities have increased in the area and the noxious weed is now a dominant plant in most of the keeled bladderpod sites. At least one previous study has documented decreased vigor and survivorship of keeled bladderpod in knapweed infested areas.									
Physaria didymocarpa var. lanata Woolly Twinpod		Brassicaceae Mustards	G5T2	S1			SENSITIVE	2	Grasslands/Shrublands (Open, plains)
Species verified in these Counties: Big Horn, Rosebud State Rank Reason: Only five known occurrences in Montana, including two large populations. However, lots of relatively unsurveyed potential habitat exists. Both BLM and private lands are important to the viability of the species in Montana. Livestock grazing may negatively impact some populations, though additional monitoring is needed. Weeds have only been noted at one population though invasive weeds may pose a threat in the future. Potential coal mining and coalbed methane development may eventually impact populations of the plant.									
Physaria douglasii Douglas Bladderpod	Lesquerella douglasii	Brassicaceae Mustards	G4?	S1				2	Woodlands (Sandy soils, low-elevation)
Species verified in these Counties: Lincoln State Rank Reason: Known from one population in northwest Montana at the edge of Lake Koocanusa. Impacts to the population from ORV use, recreation and erosion of the sandy bluffs are possible, though additional monitoring is needed to determine what impacts if any are occurring.									
Physaria humilis Bitterroot Bladderpod	Lesquerella humilis	Brassicaceae Mustards	G2	S2		SENSITIVE		2	Alpine
Species verified in these Counties: Ravalli State Rank Reason: Montana endemic restricted to a very small area of the Bitterroot Mountains with only a few known occurrences. All occurrences are in the Selway-Bitterroot Wilderness. However, activity related to hiking trails and a lookout tower may adversely impact <i>P. humilis</i> plants or its habitat.									
Physaria klausii Divide Bladderpod	Lesquerella klausii	Brassicaceae Mustards	G3	S3				3	Slopes (Open, Montane/subalpine)
Species verified in these Counties: Broadwater, Lewis and Clark, Meagher State Rank Reason: State endemic restricted to central-Montana with the majority of populations occurring in the Big Belt Mountains and extending north to the southern end of the Rocky Mountain Front. Many large populations exist and the species typically occurs on gravelly slopes that are not usually subject to human disturbance.									
Physaria lesicii Lesica's Bladderpod	Lesquerella lesicii	Brassicaceae Mustards	G2	S2			SENSITIVE	1	Woodlands/Grasslands (Montane)
Species verified in these Counties: Carbon State Rank Reason: Lesica's bladderpod occurs only in Montana, where it is restricted to a few areas of limestone outcrops in the eastern Pryor Mountains. All known populations are on federal lands. While it occurs largely on steep terrain that is relatively inaccessible to humans, trampling and terracing through its habitat by wild horses may be negatively impacting the plant.									
Physaria ludoviciana Silver Bladderpod	Lesquerella ludoviciana	Brassicaceae Mustards	G5	S2S3					Sandy sites
Species verified in these Counties: Carter, Fallon State Rank Reason: Rare in Montana. Primarily a plains species which barely enters eastern Montana where it is restricted to sandy sites. Locally common at one site and threats to the species' viability appear to be minimal at this time.									
Physaria pulchella Beautiful Bladderpod	Lesquerella pulchella, Physaria carinata ssp. pulchella	Brassicaceae Mustards	G3	S3		SENSITIVE	SENSITIVE	3	Open slopes (Calcaeous soils, foothills to alpine)
Species verified in these Counties: Beaverhead State Rank Reason: Beautiful bladderpod is a state endemic - occurring only in Montana - and is known only from a few locations, where it is restricted to small areas of sparsely vegetated habitat.									
Physaria saximontana var. dentata Rocky Mountain Twinpod		Brassicaceae Mustards	G3T3	S3					Gravelly slopes/talus (Montane/subalpine)
Species verified in these Counties: Fergus, Flathead, Gallatin, Glacier, Lewis and Clark, Madison, Park, Pondera, Silver Bow, Teton State Rank Reason: State endemic known from several counties scattered across central and western Montana.									
Plagiobothrys leptocladus Slender-branched Popcorn-flower		Boraginaceae Borage Family	G4	S1			SENSITIVE		Wetland/Riparian (low-elevation)
Species verified in these Counties: Beaverhead, Custer, Phillips State Rank Reason: Rare in Montana, where it is known from a few widely scattered sites in th state. Additional data on population levels, trends and threats to the known ocourences are needed to evaluate its status.									

Pleiacanthus spinosus Spiny Skeletonweed	Stephanomeria spinosa, Lygodesmia spinosa	Asteraceae Aster / Sunflowers	G4	S2		SENSITIVE	3	Grasslands (low-elevation)
			Species verified in these Counties: Madison State Rank Reason: This plant occurs in Montana at the northeastern edge of its range, where it is known only from grasslands in the Madison Valley. Currently, there are only a few extant occurrences and three historical collections from this area. No specific threats have been reported. Trend data are not available. However, parts of the Madison Valley are being subdivided and habitat is likely to be negatively impacted.					
Polygonum austiniiae Austin's Knotweed	Polygonum douglasii ssp. austiniiae	Polygonaceae Buckwheat Family	G5T4	S2S3		SENSITIVE	2	Rock/Talus
			Species verified in these Counties: Broadwater, Flathead, Glacier, Granite, Lewis and Clark, Madison, Meagher, Park, Pondera, Powell, Teton State Rank Reason: This annual knotweed is sparsely distributed in mountainous areas of Montana from the Rocky Mountain Front to the Madison and Gallatin Ranges. Sites are usually on open, gravelly, sparsely-vegetated slopes with shale-derived soils and as such are not generally impacted by human activity. Some sites however, are along forest roads and are susceptible to weed invasion and other disturbances. The probability of finding additional occurrences appears to be good since large areas of suitable habitat across western and central Montana remain unsurveyed for the species.					
Potentilla brevifolia Short-leaved Cinquefoil		Rosaceae Rose Family	G4	S2S3			3	Alpine
			Species verified in these Counties: Madison State Rank Reason: Rare in Montana, where it is currently only from a few collections from the Madison Range. The remote, high-elevation habitat should greatly minimize the potential for any negative impacts to the viability of the species in the state. Accurate estimates of population levels are lacking.					
Potentilla hyparctica Low Arctic Cinquefoil	Potentilla nana, Potentilla flabellifolia var. emarginata	Rosaceae Rose Family	G4G5	S2			3	Alpine
			Species verified in these Counties: Carbon State Rank Reason: Rare in Montana, where it is currently only from a couple collections from the Beartooth Mtns. The remote, high-elevation habitat should greatly minimize the potential for any negative impacts to the viability of the species in the state. Accurate estimates of population levels are lacking.					
Potentilla nivea var. pentaphylla Five-leaf Cinquefoil	Potentilla quinquefolia	Rosaceae Rose Family	G5T4	S3		SENSITIVE	0	Alpine
			Species verified in these Counties: Flathead, Glacier, Madison, Park, Pondera State Rank Reason: Rare in Montana, though several large populations are known and most populations, as well as the species' habitat, are not being negatively impacted.					
Potentilla plattensis Platte Cinquefoil		Rosaceae Rose Family	G4	S2		SENSITIVE	0	Grasslands/Sagebrush (Mesic)
			Species verified in these Counties: Beaverhead, Carbon, Judith Basin, Valley State Rank Reason: Rare in Montana, where it is known from several collections, particularly from Beaverhead County.					
Primula alcalina Alkali Primrose		Primulaceae Primrose Family	G2	S2		SENSITIVE	1	Wetland/Riparian
			Species verified in these Counties: Beaverhead State Rank Reason: <i>Primula alcalina</i> is a regional endemic, occurring only in east-central Idaho and adjacent Montana, where it is known from just one recently documented population in Beaverhead County on BLM and National Forest lands. Another population documented by a historical collection from 1920 by F. Rose has not been relocated. The extant location is actively grazed and the species may be vulnerable to impacts associated with cattle grazing and activities that alter the hydrology (irrigation, diversions).					
Primula incana Mealy Primrose		Primulaceae Primrose Family	G4G5	S2		SENSITIVE	2	Wetland/Riparian
			Species verified in these Counties: Beaverhead, Broadwater, Carbon, Deer Lodge, Gallatin, Jefferson, Madison, Sheridan, Teton State Rank Reason: <i>Primula incana</i> is known from approximately 15 extant occurrences in Montana, including several moderate to large populations. However, most known populations are small, and the status of several populations is uncertain. Ownership of the occupied areas is varied and includes federal, state and private lands, including several locations managed or protected for their conservation values. However, unprotected private lands host many occurrences. Cattle grazing may have some negative effects on the species including the direct effects of herbivory and trampling. The species is also vulnerable to activities that alter the hydrology of the wetlands it occupies.					
Prunus pumila Sand Cherry		Rosaceae Rose Family	G5	S1			2	Sandy or rocky soils (Plains)
			Species verified in these Counties: Fallon State Rank Reason: The sole known extant location in Montana occurs along a county road and is susceptible to road construction and maintenance activities. A 1960 collection with vague locational data has not been relocated but it apparently occurred in native habitat.					
Psilocarphus brevissimus Dwarf woolly-heads		Asteraceae Aster / Sunflowers	G4	S1		SENSITIVE	3	Wetland/Riparian
			Species verified in these Counties: Cascade, Petroleum, Phillips, Sanders					
Pyrrocoma carthamoides var. subsquarrosa Beartooth Large-flowered	Haplopappus carthamoides var. subsquarrosus	Asteraceae Aster / Sunflowers	G4G5T2T3	S2		SENSITIVE	3	Sagebrush-Grassland
			Species verified in these Counties: Carbon State Rank Reason: The Beartooth large-flowered goldenweed is a regional endemic that is restricted in Montana to the eastern front of the Beartooth Mountains and the foothills of the Pryor Mountains. Although several populations are large and the species may benefit					

Goldenweed			from cattle grazing, it is vulnerable to increased shrub and tree cover due to fire suppression and to competition from invasive plants.						
Quercus macrocarpa Bur Oak		Fagaceae Beech / Oaks	G5	S1			SENSITIVE	1	Shale ridges
			Species verified in these Counties: Carter State Rank Reason: Bur oak is at the extreme western edge of its range in Montana, and has been documented only from a single, though fairly large, occurrence in Carter County. Bentonite mining is active in this area and exotic weeds are prevalent though potential for negative impacts to bur oak are uncertain.						
Ranunculus cardiophyllus Heart-leaved Buttercup		Ranunculaceae Buttercup Family	G4G5	S2?				2	Grasslands (Moist, Montane)
			Species verified in these Counties: Chouteau, Glacier, Sweet Grass, Toole State Rank Reason: Rare in Montana. Documented in the state from several collections. Additional data are needed to more precisely determine the species' status.						
Ranunculus grayi Arctic Buttercup	Ranunculus karelinii, Ranunculus verecundus, Ranunculus gelidus	Ranunculaceae Buttercup Family	G4G5	S2				3	Alpine
			Species verified in these Counties: Deer Lodge, Flathead, Glacier, Madison, Stillwater State Rank Reason: Also includes <i>R. verecundus</i> which was formerly tracked as a separate Species of Concern.						
Ranunculus hyperboreus High-arctic Buttercup	Ranunculus natans	Ranunculaceae Buttercup Family	G5	S3					Wetland/Riparian (Montane)
			Species verified in these Counties: Beaverhead, Carbon, Deer Lodge, Gallatin, Madison, Missoula, Silver Bow State Rank Reason: Known from several southwest and south-central counties in Montana. May be more widespread and abundant than the current collections indicate. Additional review and data collection is needed to determine if Species of Concern status is warranted.						
Ranunculus orthorhynchus Straightbeak Buttercup		Ranunculaceae Buttercup Family	G5	S1S2				1	Wetland/Riparian (Montane)
			Species verified in these Counties: Deer Lodge, Flathead, Glacier, Granite, Lake, Mineral State Rank Reason: Rare in Montana, where it is known from the western portion of the state based upon several specimen collections. However, only one collection has been made in the past two decades. Additional data are needed to determine this species' status.						
Ranunculus pedatifidus Northern Buttercup		Ranunculaceae Buttercup Family	G5	S2?			SENSITIVE	2	Meadows/Woodlands (Montane to Alpine)
			Species verified in these Counties: Flathead, Glacier, Liberty, Teton State Rank Reason: Rare in Montana. Documented in the state from several collections. Additional data are needed to more precisely determine the species' status.						
Ribes laxiflorum Trailing Black Currant		Grossulariaceae Currants / Gooseberries	G5	S2?					Shrublands (Rocky, montane)
			Species verified in these Counties: Lincoln State Rank Reason: Rare in Montana, where it is known from a single collection from Lincoln County. The documented population does not appear to be at risk. Additional data are needed.						
Ribes triste Swamp Red Currant		Grossulariaceae Currants / Gooseberries	G5	S2?					Forest openings (Mesic, montane/subalpine)
			Species verified in these Counties: Granite, Mineral, Ravalli State Rank Reason: Rare in Montana, where it is known from a few collections from the western portion of the state. Additional data are needed.						
Rorippa calycina Persistent-sepal Yellow-cress		Brassicaceae Mustards	G3	S1			SENSITIVE		Wetland/Riparian
			Species verified in these Counties: Big Horn, Custer, McCone, Rosebud, Treasure, Yellowstone State Rank Reason: <i>Rorippa calycina</i> is a regional endemic currently known only from four Montana records, three of which are historical. Recent surveys have failed to locate any populations, and it may be extirpated in the state, though outliers of Wyoming's Yellowtail Reservoir populations may extend downstream into Montana. This species' habitat is vulnerable to altered flooding regimes, bank stabilization and encroachment of exotic weeds, especially salt-cedar, tamarisk and leafy spurge.						
Rotala ramosior Toothcup		Lythraceae Loosestrife Family	G5	S1S2				0	Wetland/Riparian
			Species verified in these Counties: Lake, Missoula, Ravalli State Rank Reason: Rare in Montana, where it is known from approximately a half-dozen wetland sites in the valley bottoms in the western portion of the state. Potential threats and impacts to the known occurrences, as well as population trends, need to be evaluated.						
Sagina nivalis Arctic Pearlwort		Caryophyllaceae Pink Family	G5	S2S3				3	Alpine
			Species verified in these Counties: Carbon, Glacier State Rank Reason: Rare in Montana, where it is known from Glacier National Park and the Beartooth Plateau. The remote, high-elevation habitat should greatly minimize the potential for any negative impacts to the viability of the species in the state. Accurate						

			estimates of population levels are lacking.						
Salix barrattiana Barratt's Willow		Salicaceae Willows / Poplar	G5	S2		SENSITIVE		3	Alpine
			Species verified in these Counties: Carbon, Glacier State Rank Reason: Rare in Montana. Known from two disjunct sites, one in Glacier National Park and one on the Beartooth Plateau. Populations are small, but the remote, high-elevation habitat should greatly minimize the potential for any negative impacts to the viability of the species in the state.						
Salix cascadenis Cascade Willow		Salicaceae Willows / Poplar	G4G5	S2					Alpine
			Species verified in these Counties: Deer Lodge State Rank Reason: Rare in Montana. Species is known in Montana only from a small area of the Anaconda-Pintlers. The remote, high-elevation habitat should greatly minimize the potential for any negative impacts to the viability of the species in the state. Accurate estimates of population levels are lacking.						
Salix serissima Autumn Willow		Salicaceae Willows / Poplar	G4	S3				3	Wetland/Riparian
			Species verified in these Counties: Glacier, Meagher, Teton State Rank Reason: This willow is primarily found in Montana along the Rocky Mountain Front. Approximately half the occurrences are on lands managed in part for their conservation value. The species is primarily susceptible to impacts associated with heavy grazing and changes in the hydrology of the fens and wet meadows which it occupies.						
Satureja douglasii Yerba Buena	Clinopodium douglasii	Lamiaceae Mints	G4	S3					Forest (Moist, montane)
			Species verified in these Counties: Missoula, Ravalli, Sanders State Rank Reason: Rare in Montana, where it is known from several sites near the Idaho border. It is primarily a coastal species, disjunct in western Montana. Population levels appear healthy and may be increasing in some areas.						
Saussurea densa Dwarf Saw-wort	Saussurea nuda var. densa	Asteraceae Aster / Sunflowers	G4	S2S3				3	Alpine
			Species verified in these Counties: Flathead, Lewis and Clark, Pondera, Teton State Rank Reason: Known from a handful of small occurrences along the Rocky Mountain Front, primarily in the Bob Marshall Wilderness Complex. Limited data are available for most occurrences leading to the uncertainty in the species' rank.						
Saussurea weberi Weber's Saw-wort		Asteraceae Aster / Sunflowers	G2G3	S2		SENSITIVE		3	Alpine
			Species verified in these Counties: Deer Lodge, Granite State Rank Reason: Known from one large occurrence in the Anaconda-Pintler Range in the alpine zone. The remote, high-elevation habitat should greatly minimize the potential for any negative impacts to the viability of the species in the state. Population estimates from the single, documented occurrence vary widely. Additional population data are needed.						
Saxifraga hirculus Yellow Marsh Saxifrage		Saxifragaceae Saxifrage Family	G5	S1S2				3	Alpine
			Species verified in these Counties: Carbon State Rank Reason: Known from one small population in the Absorka-Beartooth Wilderness. Though little data are available for the species in Montana, the alpine habitat in which it grows is not generally subject to negative impacts from human disturbance.						
Senecio amplexens Clasping Groundsel	Ligularia amplexens	Asteraceae Aster / Sunflowers	G4	S1				1	Alpine
			Species verified in these Counties: Carbon State Rank Reason: In Montana, only known from the Beartooth (Line Creek) Plateau. Little data are available for the species in Montana. More information is needed.						
Senecio elmeri Elmer's Ragwort	Senecio spribillei	Asteraceae Aster / Sunflowers	G4	S2					Alpine
			Species verified in these Counties: Lincoln, Sanders State Rank Reason: Rare in the state. Known from only one high-elevation site in the Cabinet Mountains. Its location in a designated wilderness and its high-elevation habitat should prevent most detrimental impacts to the species' viability in Montana.						
Senecio eremophilus Desert Groundsel		Asteraceae Aster / Sunflowers	G5	S1S2					Wetland/Riparian
			Species verified in these Counties: Big Horn, Hill State Rank Reason: Known from at least 5 occurrences, including two historical collections. Little data are available for this species in Montana. More information is needed. May be more common than collections indicate.						
Shoshonea pulvinata Shoshonea		Apiaceae Parsley / Carrot Family	G2G3	S2		SENSITIVE	SENSITIVE	3	Rock Outcrops
			Species verified in these Counties: Carbon State Rank Reason: Known in Montana only from the Pryor Mountains and the eastern slope of the Beartooth Plateau. Occurrences are located mostly on federal lands.						
Sidalcea oregana Oregon Checker-mallow		Malvaceae Mallow Family	G5	S1				1	Grasslands (low-elevation)
			Species verified in these Counties: Gallatin, Lake State Rank Reason: Known from two widely separate sites in Gallatin and Lake Counties. Habitats occupied by the species are susceptible to weed invasion and both locations have a large component of weedy species. However, <i>S. oregana</i> appears capable of tolerating at least some competition from these weedy species. The Lake County population occurs near and along Highway 93 and has the potential to be significantly negatively impacted by highway construction.						
Silene spaldingii	Spalding's Champion	Carvophyllaceae	G2	S1	LT			1	Grasslands

Spalding's Catchfly		Pink Family						(Intermountain)
			<p>Species verified in these Counties: Flathead, Lake, Lincoln, Sanders</p> <p>State Rank Reason: <i>Silene spaldingii</i> exists in only a few locations in the northwest corner of the state. Extant occurrences are known in the following areas: Tobacco Plains area, Lost Trail National Wildlife Refuge, the Niarada area and on Wild Horse Island. The majority of occurrences have less than 100 individuals, though the largest population range-wide occurs in the state and is estimated to contain several thousand plants. One historical occurrence exists from the Columbia Falls area. Several threats affect the long-term viability of the species in the state. Invasive weeds are the most widespread threat and are negatively impacting the bunchgrass habitat occupied by <i>S. spaldingii</i>. Housing development and subdivision are directly impacting one occurrence and has the potential to further isolate other populations. Cattle grazing is affecting five populations and two other occurrences have apparently been extirpated recently from the severe impacts associated with llama grazing. Fire exclusion and the successive build-up of litter compared to historical conditions appears to be having negative impacts on survival and reproduction. Populations are also at risk due to the small numbers of individuals and their isolated nature, which reduces the chances of cross-pollination and gene flow between populations.</p> <p>Long- and short-term trends are difficult to gauge due to the lack of survey and monitoring data. Estimates of trends and population size are also compounded by <i>S. spaldingii</i> plants exhibiting summer dormancy at rates that vary widely from year to year.</p>					
Solidago ptarmicoides Prairie Goldenrod	Oligoneuron album, Aster ptarmicoides	Asteraceae Aster / Sunflowers	G5	S1				Grasslands (Plains)
			<p>Species verified in these Counties: Carter, Richland</p> <p>State Rank Reason: Rare in Montana, where it has only been documented from two locations on the eastern plains.</p>					
Solidago velutina Three-nerved Goldenrod	Solidago sparsiflora	Asteraceae Aster / Sunflowers	G5?	S1			SENSITIVE	NA
			<p>Species verified in these Counties:</p> <p>State Rank Reason: Few-flowered goldenrod is known in Montana from 1 specimen collection from the Stillwater River Valley, which lacks precise locality data. Other reports of this species from the state are based on mis-identified specimens which are referable to other species.</p>					
Sphaeralcea munroana White-stemmed globemallow		Malvaceae Mallow Family	G4	S1			SENSITIVE	3 Sagebrush-Grasslands (low-elevation)
			<p>Species verified in these Counties: Beaverhead</p> <p>State Rank Reason: Only known from Montana in a localized area of Beaverhead County in the southwest corner of the state.</p>					
Sphaeromeria argentea Chicken-sage	Tanacetum nuttallii	Asteraceae Aster / Sunflowers	G3G4	S2S3			SENSITIVE	3 Sagebrush steppe (low-elevation)
			<p>Species verified in these Counties: Beaverhead</p> <p>State Rank Reason: <i>Sphaeromeria argentea</i> occurs in east-central Idaho and adjacent Beaverhead County, Montana with disjunct populations in Nevada as well as southwest Wyoming and adjacent Colorado. There are nearly 20 known locations south of Dillon; many populations are sparse but spread over large areas, so population estimates are difficult. All known populations are subject to livestock grazing; however chicken sage is aromatic and most likely unpalatable to cattle.</p>					
Sphaeromeria capitata Rock-tansy	Tanacetum capitatum	Asteraceae Aster / Sunflowers	G3	S3				3 Open sites (low-elevation, limestone soils)
			<p>Species verified in these Counties: Beaverhead, Big Horn, Carbon, Madison</p> <p>State Rank Reason: This species is a regional endemic with limited distribution in limestone foothills of southwest Montana (upper Beaverhead River drainage) and Pryor Mts - Big Horn Canyon. It is reported to be locally common in the Big Horn Canyon area (Lesica & Shelly, 1991)</p>					
Stellaria crassifolia Fleshy Stitchwort		Caryophyllaceae Pink Family	G5	S1				Wetland/Riparian
			<p>Species verified in these Counties: Beaverhead, Carbon</p> <p>State Rank Reason: Sparsely distributed in Montana with only a few known locations.</p>					
Stellaria jamesiana James Stitchwort	Pseudostellaria jamesiana	Caryophyllaceae Pink Family	G5	S1			SENSITIVE	Woodland slopes (foothills and montane)
			<p>Species verified in these Counties: Beaverhead</p> <p>State Rank Reason: Two known occurrences from extreme southwest Montana. Very little data are available for these locations.</p>					
Suckleya suckleyana Poison Suckleya		Amaranthaceae Amaranth (Pigweed) Family	G5	S1			SENSITIVE	Wetland/Riparian
			<p>Species verified in these Counties: Dawson, Petroleum, Roosevelt, Valley</p> <p>State Rank Reason: Known from one extant occurrence in Dawson County and three historical collections in eastern Montana. Very little is known about these site locations or the distribution, abundance and threats to the species in Montana.</p>					
Sullivantia hapemanii Wyoming Sullivantia		Saxifragaceae Saxifrage Family	G3	S2				3 Rock/Talus
			<p>Species verified in these Counties: Big Horn, Carbon</p> <p>State Rank Reason: Wyoming sullivantia is regional endemic known in Montana only from a few, clustered locations. It grows in small, fragile aquatic habitats that may be vulnerable to hydrologic changes from water development or diversion, or trampling.</p>					
Symphotrichum molle Soft Aster		Asteraceae Aster / Sunflowers	G3	S1S3				
			<p>Species verified in these Counties: Big Horn</p> <p>State Rank Reason: Known in Montana from 1 collection from the Bighorn Mtns. Though its exact status is uncertain, its rarity warrants</p>					

			its inclusion as a Species of Concern.						
Synthyris canbyi Mission Mountain kittentails		Plantaginaceae Plantain Family	G3	S3				3	Alpine
			Species verified in these Counties: Lake, Missoula State Rank Reason: State endemic with 10 occurrences restricted to high elevation, open, rocky slopes in the Mission and Swan Ranges. As such, habitat is not generally prone to human disturbance and most occurrences are in designated wilderness areas. Additional occurrences likely exist across the known range of the species.						
Thalictrum alpinum Alpine Meadowrue		Ranunculaceae Buttercup Family	G5	S2		SENSITIVE	SENSITIVE	2	Wetland/Riparian
			Species verified in these Counties: Beaverhead, Deer Lodge, Granite State Rank Reason: Rare in Montana, where it is known from approximately two dozen sites mostly on public land. Its habitat is vulnerable to hydrological alteration. Grazing can be beneficial, except where it leads to stream downcutting and loss of riparian habitat.						
Thelypodium paniculatum Northwestern Thelypody		Brassicaceae Mustards	G2	SH					Wetland/Riparian
			Species verified in these Counties: Beaverhead State Rank Reason: Known only from an 1899 collection in Beaverhead County, although Dorn (1984) also reports it for Madison County.						
Thelypodium sagittatum Slender Thelypody		Brassicaceae Mustards	G4	S2			SENSITIVE	3	Alkaline meadows (Valleys and Montane)
			Species verified in these Counties: Beaverhead, Gallatin State Rank Reason: Known from numerous occurrences in extreme southwestern Montana.						
Tonestus aberrans Idaho Goldenweed	Haplopappus aberrans, Triniteurybia aberrans	Asteraceae Aster / Sunflowers	G3	S2S3			SENSITIVE	1	Rock/Talus
			Species verified in these Counties: Ravalli State Rank Reason: Known from two moderate-sized occurrences and two smaller occurrences on the Bitterroot National Forest and adjacent private land. One population occurs adjacent to a road. Construction of which may have impacted the population. No negative impacts to the populations are currently known to be occurring. However, populations are susceptible to potential impacts associated with roads and rock climbing.						
Tonestus pygmaeus Pygmy Goldenweed	Haplopappus pygmaeus	Asteraceae Aster / Sunflowers	G4	SH					Alpine
			Species verified in these Counties: State Rank Reason: Known in Montana from 1 historical collection from Lolo Peak. Other historical locations previously reported for MT have all been based on mis-identified specimens of <i>Tonestus lyallii</i>						
Townsendia condensata Cushion Townsend-daisy		Asteraceae Aster / Sunflowers	G4	S1S3				2	Alpine
			Species verified in these Counties: Flathead, Glacier, Park State Rank Reason: Cushion townsendia is known in Montana from one presumed extant occurrence in Glacier National Park and three other historical collections from GNP and the Beartooth Mountains. Risks are likely minimal given the remoteness of its alpine habitat.						
Townsendia florifera Showy Townsend-daisy		Asteraceae Aster / Sunflowers	G5	S1S2			SENSITIVE	3	Grasslands and Sagebrush
			Species verified in these Counties: Beaverhead State Rank Reason: Known in Montana from only a few, small occurrences in the southwestern corner of the state.						
Trifolium eriocephalum Woolly-head Clover		Fabaceae Pea Family	G5	S2			SENSITIVE	2	Open areas (foothills and montane)
			Species verified in these Counties: Ravalli State Rank Reason: Known from eight large occurrences on the Bitterroot National Forest. Invasive weeds, particularly spotted knapweed, are a problem in the habitat occupied by the species. Timber harvest and related road-building activities may also negatively impact populations. However, <i>Trifolium eriocephalum</i> appears capable of tolerating some level of disturbance.						
Trifolium gymnocarpon Hollyleaf Clover		Fabaceae Pea Family	G5	S2			SENSITIVE	2	Open areas (foothills and montane)
			Species verified in these Counties: Granite, Ravalli State Rank Reason: Known from many sites within the West Fork Bitterroot River drainage, which would encompass one large metapopulation. Also known in Montana from one disjunct occurrence in the Rock Creek drainage on the Lolo National Forest. Invasive weeds, particularly spotted knapweed, are a problem in some of the habitat occupied by the species. However, <i>Trifolium gymnocarpon</i> , as with other clover species, appears capable of tolerating or even benefitting from some disturbance.						
Utricularia intermedia Flat-leaved Bladderwort		Lentibulariaceae Bladderworts	G5	S2			SENSITIVE	3	Fens (Aquatic)
			Species verified in these Counties: Flathead, Lincoln State Rank Reason: Only known from a few occurrences in the western half of the state.						
Vaccinium myrtilloides Velvetleaf Blueberry		Ericaceae Heath Family	G5	S2				2	Forests
			Species verified in these Counties: Flathead State Rank Reason: Only known in Montana from several sites in the vicinity of West Glacier. Some of the known population and						

			associated habitat has been negatively impacted by development (visitor and transportation facilities) within Glacier National Park.						
Viburnum lentago Nannyberry		Caprifoliaceae Honeysuckle Family	G5	S2S3			SENSITIVE	2	Riparian forests
			Species verified in these Counties: Big Horn, Richland, Roosevelt State Rank Reason: Three known occurrences in eastern Montana.						
Viguiera multiflora Many-flowered Viguiera	Heliomeris multiflora	Asteraceae Aster / Sunflowers	G4G5	S3			SENSITIVE	3	Aspen woodlands
			Species verified in these Counties: Beaverhead, Madison State Rank Reason: Known from one extant occurrence in Beaverhead County and four historical collections from Beaverhead, Gallatin and Madison Counties.						
Viola selkirkii Great-spurred Violet		Violaceae Violets	G5?	S2			SENSITIVE		Wetland/Riparian
			Species verified in these Counties: Lincoln State Rank Reason: Only known in Montana from a few locations in the northwest corner of the state.						
Waldsteinia idahoensis Idaho Barren Strawberry		Rosaceae Rose Family	G3	S2S3			SENSITIVE		Forests (Ponderosa Pine)
			Species verified in these Counties: Missoula State Rank Reason: Only one known site in Montana on National Forest land. Population is in an area susceptible to impacts from timber harvesting and road maintenance, though population appears to be stable or perhaps increasing in size.						

FLOWERING PLANTS - MONOCOTS (LILIOPSIDA)									
76 SPECIES									
ALL RECORDS (NO FILTERING)									
SCIENTIFIC NAME COMMON NAME TAXA SORT	OTHER NAMES	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	MNPS THREAT CATEGORY	HABITAT
Acorus americanus Sweetflag	Acorus calamus [misapplied]	Acoraceae Sweetflag / Calamus Family	G5	SH					Wetland/Riparian
			Species verified in these Counties: Flathead, Lake State Rank Reason: This species occurs at the edge of its range in Montana, where it was collected from two localities in the vicinity of Flathead Lake in 1955 and 1968. Current status of these populations is unknown. It could be affected by hydrologic alterations.						
Allium acuminatum Tapertip Onion		Liliaceae Lillies	G5	S2S3		SENSITIVE	SENSITIVE		Dry Forest-Grassland
			Species verified in these Counties: Madison, Ravalli, Sanders State Rank Reason: Rare in Montana, where it is known from several widely scattered sites in the western half of the state. Trend data are lacking. Threats to populations do not appear to be significant at this time, though invasive weeds may eventually pose problems at some sites.						
Allium columbianum Columbia Onion		Liliaceae Lillies	G3	S1					Open, mesic sites
			Species verified in these Counties: Ravalli, Sanders State Rank Reason: Known from one occurrence in Camas Prairie. Part of this occurrence has been replaced by a gravelpit. Nearly all suitable habitat in the area has been converted to agriculture. Invasive weeds may also negatively impact the remaining habitat and threaten the population.						
Allium parvum Small Onion		Liliaceae Lillies	G5	S2S3		SENSITIVE			Dry Forest-Grassland
			Species verified in these Counties: Beaverhead, Ravalli State Rank Reason: Known from southwest Montana, primarily on the Bitterroot National Forest. Many of the the documented occurrences have large numbers of individuals and cover extensive areas. However, many of the sites are also infested with spotted knapweed and/or cheatgrass and continued increases in the density and spread of both invasive weeds are likely, further degrading the habitat occupied by <i>Allium parvum</i> . More information on the threats posed by invasive weeds is needed to determine if an S2 or S3 rank is most appropriate for this species.						
Allium simillimum Dwarf Onion		Liliaceae Lillies	G4	S2?					Mesic Grasslands-Meadows
			Species verified in these Counties: Gallatin, Ravalli State Rank Reason: Rare in Montana, where it is known from only a few locations in the southwest portion of the state near the Idaho border. Available survey data are limited for the species in Montana.						
Amerorchis rotundifolia Round-leaved Orchis	Orchis rotundifolia	Orchidaceae Orchids	G5	S3		SENSITIVE			Wetland/Riparian
			Species verified in these Counties: Flathead, Glacier, Lake, Lewis and Clark, Lincoln, Pondera, Powell, Teton State Rank Reason: In Montana, this species is restricted to the Rocky Mountain Front, Bob Marshall Wilderness Complex, Swan Valley and the northwest corner of the state. Several dozen occurrences are known in Montana with many being large, healthy populations. However, information on threats faced by the species, as well as trend data are lacking.						
Calamagrostis tweedyi		Poaceae Grasses	G3	S3					Montane Forest
			Species verified in these Counties: Mineral, Missoula, Ravalli, Sanders						

Cascade reedgrass			State Rank Reason: A species of limited distribution and currently considered to be globally rare. Restricted in Montana to the extreme western portion of the state.						
Calochortus bruneauis Bruneau Mariposa Lily		Liliaceae Lillies	G5	S1S3				Grasslands (Intermountain)	
			Species verified in these Counties: Beaverhead State Rank Reason: Known in Montana from one 1941 collection by M. Ownbey approximately 1.5 miles southeast of Lima and a 2009 observation from the Centennial Mtns, though specific observation and locality data are unknown.						
Carex amplifolia Big-leaf Sedge		Cyperaceae Sedges	G4	SH		SENSITIVE		Wetland/Riparian	
			Species verified in these Counties: Sanders State Rank Reason: Only known in Montana from one collection in the northwestern part of the state. A revisit of the site is needed.						
Carex chordorrhiza Creeping Sedge		Cyperaceae Sedges	G5	S3		SENSITIVE	3	Wetland/Riparian	
			Species verified in these Counties: Flathead, Lincoln, Powell State Rank Reason: Rare in Montana, where it is known from fens and wet meadows in the northwest corner of the state. Generally does not appear to be threatened by any particular activities, though populations are susceptible to hydrologic changes.						
Carex comosa Bristly Sedge		Cyperaceae Sedges	G5	S1			1	Wetland/Riparian	
			Species verified in these Counties: Flathead State Rank Reason: Only one known location in Montana on the shore of Flathead Lake. Occurrence is threatened by erosion caused by wave action and artificially high lake levels.						
Carex crawei Crawe's Sedge		Cyperaceae Sedges	G5	S2S3		SENSITIVE	2	Wetland/Riparian	
			Species verified in these Counties: Cascade, Pondera, Powell, Prairie, Teton State Rank Reason: Rare in Montana, where it is known from several areas. A few sites contain moderate to large populations. Trend data are lacking for the species. Negative impacts to populations from hydrologic changes are a potential threat.						
Carex gravida Pregnant Sedge		Cyperaceae Sedges	G5	S3			2	Wetland/Riparian	
			Species verified in these Counties: Big Horn, Carter, Powder River, Richland, Rosebud State Rank Reason: <i>Carex gravida</i> has been found at a few widely scattered locations in eastern Montana, and is not generally abundant where it occurs. However, it is likely that the species is more abundant than the current data shows. Habitats include moist, green ash woodlands, which are attractive to livestock, and it may be particularly vulnerable to moderate grazing because of its caespitose growth form. These habitats are also quite vulnerable to invasion by non-native plants.						
Carex idahoensis Idaho Sedge	Carex parryana ssp. idahoensis	Cyperaceae Sedges	G2G3	S3		SENSITIVE	SENSITIVE	2	Wetland/Riparian
			Species verified in these Counties: Beaverhead, Madison, Powell, Silver Bow State Rank Reason: Idaho sedge is a regional endemic known from several dozen sites in Montana which cluster into approx 15-20 populations, most on public lands. The estimated number of stems is in the tens of thousands, but total occupied habitat has been estimated at less than 200 acres. The species is palatable, and populations may be affected by heavy grazing. Other risks are competition from exotic species, hydrologic alterations, agricultural development and road construction/maintenance.						
Carex incurviformis Coastal Sand Sedge	Carex maritima var. incurviformis	Cyperaceae Sedges	G4G5	S2?			3	Wetland/Riparian	
			Species verified in these Counties: Deer Lodge, Glacier, Madison, Teton State Rank Reason: Five known occurrences in Montana, three are in Wilderness areas or Glacier National Park. However, all populations are apparently small to moderate in size based on limited survey data for the species. All occurrences are in alpine habitat that is not generally subject to human impacts.						
Carex lacustris Lake-bank Sedge		Cyperaceae Sedges	G5	S1S2		SENSITIVE	2	Fens and marshes	
			Species verified in these Counties: Lake State Rank Reason: A rare species in Montana, known only from a few occurrences from Lake County.						
Carex multicosata Many-ribbed Sedge		Cyperaceae Sedges	G5	S2S3				Grasslands (Montane)	
			Species verified in these Counties: Beaverhead, Gallatin, Park State Rank Reason: A rare species in Montana, scattered in the mountains of the southwest and south-central portions of the state. Very little data are available for the species in Montana. However, the potential for negative impacts to the populations appears to be low.						
Carex occidentalis Western Sedge		Cyperaceae Sedges	G4	SH				Dry, montane to alpine	
			Species verified in these Counties: State Rank Reason: Known in Montana from an 1887 collection by Tweedy near "Boulder Creek" and a 1930 collection on Willow Creek in Beaverhead County.						
Carex petricosa Rock Sedge		Cyperaceae Sedges	G4	S1S2			3	Alpine	
			Species verified in these Counties: Glacier State Rank Reason: Rare in Montana, where it is currently known from one site in Glacier National Park. Very little data are available for the species in Montana. However, the potential for negative impacts to the populations appears to be low.						
Carex plectocarpa	Carex lenticularis var.	Cyperaceae	G5T3Q	S3			2	Alpine	

Goose-grass Sedge	dolia	Sedges	Species verified in these Counties: Flathead, Glacier, Park State Rank Reason: Known in Montana primarily from Glacier National Park and from one population in the Absarokas. Some plants in the Logan Pass area are subject to trampling by hikers. Otherwise, the potential for negative impacts to the species appears to be low.					
Carex prairea Prairie Sedge		Cyperaceae Sedges	G5?	S3		SENSITIVE		Fens
			Species verified in these Counties: Flathead, Lincoln State Rank Reason: Rare in Montana, where it is currently known from a small area in the northwest corner of the state. The potential for negative impacts to the populations appears to be low.					
Carex rostrata Glaucus Beaked Sedge		Cyperaceae Sedges	G5	S2S3		SENSITIVE	3	Fens
			Species verified in these Counties: Flathead, Lincoln, Missoula State Rank Reason: This is a rare species in Montana, not to be confused with the more common <i>Carex utriculata</i> which had been mistakenly treated under the name <i>Carex rostrata</i> in many past Floras.					
Carex scoparia Pointed Broom Sedge		Cyperaceae Sedges	G5	S1S2				Wetland/Riparian (Valleys)
			Species verified in these Counties: Missoula, Ravalli State Rank Reason: Rare in Montana, where it is currently known from only a few sites in the Clark Fork and Bitterroot River drainages.					
Carex stenoptila Small-winged Sedge		Cyperaceae Sedges	G2	S2?		SENSITIVE		Grasslands (Montane)
			Species verified in these Counties: Carbon, Gallatin, Madison, Ravalli, Stillwater, Sweet Grass State Rank Reason: A globally rare species, which is known from several widely scattered locations in Montana. Very little data are available for the species in Montana, as the sites are known only from specimen collections with sparse information.					
Carex stevenii Steven's Scandinavian Sedge	Carex norvegica ssp. stevenii	Cyperaceae Sedges	G5T4?	S2?				Wetland/Riparian (Subalpine)
			Species verified in these Counties: Beaverhead, Deer Lodge State Rank Reason: Rare in Montana, where it is currently known from a few scattered sites in mountainous areas across the southern half of the state. Additional data on population levels are needed. Survey of suitable habitats will likely document additional occurrences.					
Carex sychnocephala Many-headed Sedge		Cyperaceae Sedges	G4	S1S2			1	Wetland/Riparian
			Species verified in these Counties: Cascade, Glacier, Lake, Lincoln, Sheridan State Rank Reason: Currently known in the state from three occurrences that are believed to be extant. Also, known from one 1891 collection near Great Falls and two locations in northwest Montana now believed to be extirpated or severely impacted as a result of wetland draining and construction of a dock. The remaining populations are on the Blackfeet Indian Reservation and a Nature Conservancy Preserve. Due to the habitats in which the species grows, it is vulnerable to development and hydrologic alterations.					
Carex tenuiflora Thin-flowered Sedge		Cyperaceae Sedges	G5	S2			3	Fens
			Species verified in these Counties: Flathead State Rank Reason: Rare in Montana, where it is currently known from only one site in Glacier National Park. The potential for negative impacts to the occurrence are minimal.					
Carex vaginata Sheathed Sedge		Cyperaceae Sedges	G5	S2?		SENSITIVE		Wetland/Riparian
			Species verified in these Counties: Lincoln State Rank Reason: Rare in Montana, where it is currently known from one area in the northwest corner of the state, which is at the southern edge of the species' range. Additional data on population levels and trends are needed.					
Cyperus acuminatus Short-pointed Flatsedge		Cyperaceae Sedges	G5	S1				Wetland/Riparian
			Species verified in these Counties: Sanders State Rank Reason: Rare in Montana, where it is currently known from only 1 collection in the western portion of the state.					
Cyperus bipartitus Shining Flatsedge	Cyperus rivularis	Cyperaceae Sedges	G5	S1				Wetland/Riparian
			Species verified in these Counties: Missoula, Ravalli State Rank Reason: Rare in Montana, where it is currently known from only the Bitterroot Valley.					
Cyperus erythrorhizos Red-root Flatsedge		Cyperaceae Sedges	G5	SH				Wetland/Riparian
			Species verified in these Counties: State Rank Reason: Known in Montana from an 1899 collection near Columbia Falls and an undated collection in Missoula County.					
Cyperus schweinitzii Schweinitz' Flatsedge		Cyperaceae Sedges	G5	S2		SENSITIVE	0	Sandy sites
			Species verified in these Counties: Carter, Cascade, Custer, Powder River, Sheridan State Rank Reason: Rare in Montana, where it is currently known from a few widely scattered sandy sites.					
Cypripedium fasciculatum Clustered Lady's-slipper		Orchidaceae Orchids	G4	S3		SENSITIVE	1	Forests (Montane)
			Species verified in these Counties: Lake, Mineral, Missoula, Sanders State Rank Reason: Clustered lady's-slipper is known for Montana from the northwest portion of the state, where it is documented from 10 moderate to large populations, 3 historical occurrences and many additional small occurrences. Most populations occur on					

			National Forest lands. Potential negative impacts to the species have mainly been related to timber harvesting.					
Cypripedium passerinum Sparrow's-egg Lady's-slipper		Orchidaceae Orchids	G4G5	S3		SENSITIVE	2	Forests (Mesic bottoms)
			Species verified in these Counties: Flathead, Glacier, Lake, Lewis and Clark, Lincoln, Pondera, Powell, Teton State Rank Reason: Sparrow's-egg lady's-slipper is known from over a dozen moderate to large-sized populations, a few dozen small occurrences and one historical location. Several of the occurrences are either in designated wilderness areas or in Glacier National Park. The main threat to populations appears to be from potential hydrologic changes.					
Dichanthelium oligosanthes var. scribnerianum Scribner's Panic Grass	Panicum oligosanthes var. scribnerianum, Panicum scribnerianum	Poaceae Grasses	G5T5	S1S2		SENSITIVE		Mesic, sandy woodlands (low-elevation)
			Species verified in these Counties: Lake, Powder River State Rank Reason: Scribner's panic grass is a plant of dry woodlands, known from widely separated sites in southeastern and northwestern Montana. Only one large-sized population is known in the state, two others are very small, and the fourth occurrence is known only from a historical collection. Occurrences in eastern Montana may be negatively impacted by cattle grazing. The largest occurrence in the state lies adjacent to Highway 93 and negative impacts associated with expansion of the highway is likely. Invasive weeds and forest encroachment are also problems at this site.					
Eleocharis rostellata Beaked Spikerush		Cyperaceae Sedges	G5	S3		SENSITIVE	3	Wetlands (Alkaline)
			Species verified in these Counties: Carbon, Flathead, Gallatin, Lake, Lewis and Clark, Lincoln, Madison, Meagher, Park, Sanders, Sweet Grass, Teton State Rank Reason: Known from over a dozen extant sites and a few historical locations. Private and state lands host many occurrences that are vital to the viability of the species in the state. The species is vulnerable to hydrologic alteration and development.					
Elodea bifoliata Long-sheath Waterweed	Elodea longivaginata	Hydrocharitaceae Waterweeds	G4G5	S2?		SENSITIVE	3	Wetland/Riparian (Shallow water)
			Species verified in these Counties: Beaverhead, Glacier, Liberty, Phillips, Stillwater State Rank Reason: Rare in Montana, where it is currently known from a few widely scattered locations across the state. Additional population and trend data are needed for the species within Montana.					
Elymus flavescens Sand Wildrye	Leymus flavescens	Poaceae Grasses	G4	S1S2		SENSITIVE	2	Sandy sites
			Species verified in these Counties: Beaverhead State Rank Reason: Sand wildrye occurs at the edge of its range in Montana, where it is known from one small population in the Centennial Valley sandhills. It requires early successional sandy habitats, which are localized in sand deposition areas of the dunes. This habitat is at risk from dune succession and stabilization that can result from suppression of natural disturbance regimes such as fire and grazing.					
Elymus innovatus Northern Wildrye	Leymus innovatus	Poaceae Grasses	G5	S2		SENSITIVE	3	Wetland/Riparian (mesic openings /streambanks, low-elevation)
			Species verified in these Counties: Cascade, Glacier, Pondera, Teton State Rank Reason: Rare in Montana, where it is currently known from a few scattered sites east of the Divide. Additional population data are needed for the species within Montana. Population trends are unknown and two occurrences are only known from historical collections.					
Epipactis gigantea Giant Helleborine		Orchidaceae Orchids	G4	S3		SENSITIVE	2	Wetland/Riparian
			Species verified in these Counties: Carbon, Flathead, Granite, Lake, Madison, Powell, Sanders, Teton State Rank Reason: Known from several dozen occurrences across western and southern Montana where it is associated with seeps and springs, fens, and thermal waters. Several sites are likely extirpated, while others are known only from historical collections. National Forest, state and private lands all host significant populations. The species is primarily vulnerable to hydrologic changes and development.					
Eriophorum callitrix Sheathed Cotton-grass		Cyperaceae Sedges	G5	S2S3			3	Alpine
			Species verified in these Counties: Carbon State Rank Reason: Rare in Montana, where it is has been documented only from the Beartooth Plateau. Additional population data for the species in Montana are needed. However, based on the locality and habitat of the known sites, the species does not appear to be at a high degree of risk from human impacts. Additional occurrences likely exist on the Beartooth Plateau.					
Eriophorum gracile Slender Cottongrass		Cyperaceae Sedges	G5	S3		SENSITIVE	2	Fens
			Species verified in these Counties: Flathead, Lake, Lincoln, Missoula, Powell State Rank Reason: Known from a very few large populations, several smaller populations and a half dozen historical or poorly documented locations. Populations occur on a mix of federal, state and private ownerships in northwest Montana at low to moderate elevations. Populations are vulnerable to any activities that may alter the hydrology of occupied sites.					
Festuca viviparoides Northern Fescue	Festuca vivipara, Festuca ovina var. vivipara	Poaceae Grasses	G4G5	S2?			3	Alpine
			Species verified in these Counties: Flathead, Glacier State Rank Reason: Rare in Montana, where it is only know from a few sites in Glacier National park. Population numbers are apparently very low. However, the species generally occurs in areas and habitats that either are not susceptible or not experiencing negative impacts.					

Goodyera repens Northern Rattlesnake-plantain		Orchidaceae Orchids	G5	S2S3		SENSITIVE		2	Mesic Forest
			Species verified in these Counties: Fergus, Flathead, Judith Basin, Meagher, Wheatland State Rank Reason: A widespread species that is found in Montana in the Little Belt and Big Snowy Mountains and at one site in Glacier National Park. The species occupies moist, montane forests with a mossy understory. Occurrences are vulnerable to disturbances that open or reduce the canopy such as timber harvesting and fire. Monitoring of the species in the Little Belt Mountains have documented negative impacts associated with both disturbances. However, Goodyera repens is known from approximately 20 moderate to large-sized populations and approximately a dozen smaller occurrences. If additional survey and monitoring of the species shows stable population numbers and little to no negative impacts from human-caused disturbances than a change in rank to S3 would be appropriate.						
Hemicarpha drummondii Drummond's Hemicarpha	Lipocarpha drummondii	Cyperaceae Sedges	G4G5	SH					Sandy soil (Moist)
			Species verified in these Counties: State Rank Reason: Known in Montana from a 1941 Collection by W. E. Booth near Fromberg.						
Heteranthera dubia Water Star-grass		Pontederiaceae Water-hyacinth Family	G5	S1S2		SENSITIVE		2	Aquatic
			Species verified in these Counties: Flathead, Sanders State Rank Reason: Three occurrences known in Montana, two are moderate-sized populations and the third is of undocumented size. One population is adjacent to a campground and related human activity at this site may have extirpated the population. All sites are vulnerable to changes in hydrology, water quality and recreational impacts.						
Juncus acuminatus Tapered Rush		Juncaceae Rushes	G5	S1				2	Wetland/Riparian
			Species verified in these Counties: Teton State Rank Reason: Rare in Montana. Only known in the state from one wetland site in Teton County.						
Juncus covillei Coville's Rush		Juncaceae Rushes	G5	S2S3					Wetland/Riparian
			Species verified in these Counties: Mineral, Missoula, Ravalli, Sweet Grass State Rank Reason: Rare and peripheral in Montana. Currently known from approximately a half-dozen widely scattered wetland/riparian sites in the mountainous portion of the state.						
Juncus hallii Hall's Rush		Juncaceae Rushes	G4G5	S3		SENSITIVE		3	Meadows and Parklands (Moist, Subalpine)
			Species verified in these Counties: Beaverhead, Broadwater, Jefferson, Madison, Meagher, Powell, Silver Bow State Rank Reason: Rare, though widespread across the mountainous portions of southwest and central Montana. Threats and potential negative impacts to most known occurrences appear to be minimal.						
Juncus triglumis var. albescens Three-flowered Rush	Juncus albescens	Juncaceae Rushes	G5	S3				3	Alpine
			Species verified in these Counties: Flathead, Glacier, Park, Stillwater State Rank Reason: Rare in Montana, where it is known from a few, moist, alpine sites in Glacier National Park. The potential for negative impacts from human-caused activities appears to be minimal.						
Kobresia sibirica Large-fruited Kobresia	Kobresia macrocarpa	Cyperaceae Sedges	G5	S1				3	Alpine
			Species verified in these Counties: Carbon State Rank Reason: Rare in Montana. Only known in the state from a small area of the Beartooth Plateau.						
Kobresia simpliciuscula Simple Kobresia		Cyperaceae Sedges	G5	S3		SENSITIVE		3	Alpine
			Species verified in these Counties: Beaverhead, Carbon, Glacier, Granite, Park, Teton State Rank Reason: Rare in Montana, where it is known from over a dozen sites from montane wetlands to mesic, alpine tundra. The species has a wide distribution and is scattered across the mountainous portion of the state.						
Lilaea scilloides Flowering Quillwort		Juncaginaceae Arrow-grass family	G5?	SH					Wetland/Riparian
			Species verified in these Counties: Lake State Rank Reason: Known in Montana from a 1933 collection by C. L. Hitchcock about 2 miles southeast of Charlo and a 1965 collection about 1.5 miles southwest of Ninepipe Reservoir.						
Liparis loeselii Loesel's Twayblade		Orchidaceae Orchids	G5	S2		SENSITIVE		3	Wetland/Riparian
			Species verified in these Counties: Lake State Rank Reason: Known from several occurrences clustered in a small area of the Swan Valley. Susceptible to changes in hydrology. May also be susceptible to impacts from fire.						
Listera borealis Northern twayblade		Orchidaceae Orchids	G4	S2S3					Wetland/Riparian
			Species verified in these Counties: Granite, Lewis and Clark, Madison, Mineral, Park, Powell, Ravalli State Rank Reason: Few occurrences documented for the state. It appears likely that this species is more abundant than current observations document. Habitat for the species does not appear to be uncommon, nor particularly threatened. The species is probably overlooked and under-collected. However, population numbers are likely to be quite small, as observations for the species thus far have only noted a few plants, at most, at each site.						
Maianthemum canadense		Liliaceae Lillies	G5	SH					Forests (Riparian)
			Species verified in these Counties: Carter						

Wild Lily-of-the-valley			State Rank Reason: Documented for Montana from one 1948 collection by W. E. Booth near Alzada.						
Najas guadalupensis Guadalupe Water-nymph		Najadaceae Water-nymph Family	G5	S1S2				Aquatic	
			Species verified in these Counties: Cascade, Flathead, Lake, Ravalli State Rank Reason: Rare. Currently documented from a few fresh water sites in the western and central portions of the state. Species is poorly documented in Montana and additional information on population levels, trends and threats is needed.						
Phippsia algida Ice Grass		Poaceae Grasses	G5	S2S3			3	Alpine	
			Species verified in these Counties: Carbon, Stillwater State Rank Reason: Rare in Montana, where it has been documented from only a few sites on the Beartooth Plateau. Additional surveys of suitable habitat and revisits of documented occurrences are needed to more accurately assess the species' conservation status.						
Poa laxa ssp. banffiana Banff Loose-flowered Bluegrass		Poaceae Grasses	G5?T1	S1				Alpine	
			Species verified in these Counties: Glacier						
Potamogeton obtusifolius Blunt-leaved Pondweed		Potamogetonaceae Pondweeds	G5	S3		SENSITIVE	2	Aquatic	
			Species verified in these Counties: Flathead, Glacier, Lake, Missoula, Powell State Rank Reason: Known from over a dozen occurrences in northwest Montana. Several contain moderate to large-size populations and occur in valley and foothill locations in a variety of federal, state, and private ownerships. A few populations are on lands managed specifically for their conservation value. Some populations are vulnerable to impacts associated with development, recreation and increased sediment and nutrient loads.						
Puccinellia lemmonii Lemmon's Alkaligrass		Poaceae Grasses	G4	S1S2			SENSITIVE	2	Wetland/Riparian
			Species verified in these Counties: Beaverhead State Rank Reason: Very rare in Montana where it is known only from Beaverhead County on BLM and State Trust Lands. At least one site is actively grazed, though its susceptibility and response to such activity is uncertain.						
Scheuchzeria palustris Pod Grass		Scheuchzeriaceae Pod-grasses	G5	S3		SENSITIVE	2	Wetland/Riparian	
			Species verified in these Counties: Flathead, Granite, Lake, Lincoln, Missoula State Rank Reason: Known in Montana from several dozen fens west of the Continental Divide. Several locations are known only from historical surveys or collections, or from sites that need additional surveys to document the populations. The majority of populations are on National Forest lands with MT State Trust lands, private and National Park lands supporting the remaining occurrences. Populations are primarily vulnerable to activities that change the hydrology of the occupied fen and wetland habitats.						
Schoenoplectus heterochaetus Slender Bulrush	Scirpus heterochaetus	Cyperaceae Sedges	G5	S1S2			SENSITIVE		Wetland/Riparian
			Species verified in these Counties: Lake, Phillips State Rank Reason: Information on the species is lacking within montana where it is recorded from only two poorly documented sites. However, its apparent rarity in the state warrants a high conservation status rank.						
Schoenoplectus subterminalis Water Bulrush	Scirpus subterminalis	Cyperaceae Sedges	G4G5	S3		SENSITIVE	2	Wetland/Riparian	
			Species verified in these Counties: Flathead, Lake, Lewis and Clark, Lincoln, Missoula State Rank Reason: Over a dozen known occurrences in western Montana, most of which are moderate to large-sized populations primarily on National Forest lands. Populations are potentially vulnerable to changes in water levels or increases in nutrient and sediment loads associated with development, agriculture or adjacent timber harvesting.						
Sisyrinchium septentrionale Northern Blue-eyed-grass		Iridaceae Irises	G3G4	S1S2			3	Wetland/Riparian	
			Species verified in these Counties: Sheridan State Rank Reason: Rare in Montana, where it is known from one prairie site in the northeastern corner of the state. Population information and related habitat data from the known location are lacking.						
Sphenopholis intermedia Slender Wedgegrass	Sphenopholis obtusata var. major	Poaceae Grasses	G5	S1S3				Mesic sites (low-elevation)	
			Species verified in these Counties: Big Horn, Broadwater, Gallatin State Rank Reason: Rare in Montana, where it has only been documented from a very few collections, though additional population data required to more precisely assign a conservation rank are lacking.						
Spiranthes diluvialis Ute Ladies' Tresses		Orchidaceae Orchids	G2	S1	LT		2	Wetland/Riparian	
			Species verified in these Counties: Beaverhead, Broadwater, Gallatin, Jefferson, Madison State Rank Reason: <i>Spiranthes diluvialis</i> is known from only a handful of occurrences in southwest and south-central Montana in the Missouri, Jefferson, Beaverhead, Ruby and Madison River drainages. <i>S. diluvialis</i> is restricted in area by specific hydrologic requirements. Many populations have less than 100 individuals, though a couple have over 500 plants. Sites are susceptible to hydrologic changes and weed invasion. Large areas of habitat have been converted to agricultural uses. Livestock grazing is also a common use of these habitats. Two populations occur along highway right-of-ways. Most populations occur on private lands and only one occurrence is currently provided some potential protection or management for its conservation value.						
Sporobolus compositus	Sporobolus asper	Poaceae Grasses	G5	SH				Forests/Grasslands (open, plains)	

Tall Dropseed			Species verified in these Counties: Carter, Custer State Rank Reason: Known in Montana from a 1939 collection near Ekalaka and a 1957 collection from Fort Keogh Livestock and Range Laboratory.					
Sporobolus neglectus Small Dropseed		Poaceae Grasses	G5	S1S2				Grasslands (low-elevation)
			Species verified in these Counties: Gallatin, Sanders, Wheatland State Rank Reason: Rare in Montana, where it is known from a few widely scattered and poorly documented sites.					
Stipa lettermanii Letterman's Needlegrass	Achnatherum lettermanii	Poaceae Grasses	G5	S1S3				Talus and Grasslands (low-elevation)
			Species verified in these Counties: Beaverhead, Big Horn, Carbon, Madison, Park State Rank Reason: Documented from several locations in the southern portion of the state. However, population levels, site characteristics and related information needed to determine the species' status are lacking.					
Tofieldia pusilla Small Tofieldia		Liliaceae Lillies	G5	S2			3	Alpine
			Species verified in these Counties: Flathead, Glacier State Rank Reason: Very rare in Montana, where it is known from only a very small area in Glacier National Park.					
Trichophorum alpinum Hudson's Bay Bulrush	Scirpus hudsonianus, Eriophorum alpinum	Cyperaceae Sedges	G5	S2			2	Fens and cold, wet slopes
			Species verified in these Counties: Flathead, Glacier State Rank Reason: Rare in Montana, where it is only known from a few sites in the northwest corner of the state.					
Trichophorum cespitosum Tufted Club-rush	Scirpus cespitosus	Cyperaceae Sedges	G5	S2		SENSITIVE	3	Fens and wet meadows
			Species verified in these Counties: Beaverhead, Flathead, Glacier, Lake, Lincoln, Powell, Teton State Rank Reason: Rare in Montana, where it is currently documented from over a dozen fens and wet meadows in the mountainous portion of western Montana.					
Trichophorum pumilum Rolland's bulrush	Scirpus pumilus, Scirpus rollandii	Cyperaceae Sedges	G5	S3		SENSITIVE	3	Fens
			Species verified in these Counties: Glacier, Teton State Rank Reason: Rare in Montana, where it is currently documented from only a few calcareous fens near the Rocky Mtn Front.					
Veratrum californicum California False-hellebore		Liliaceae Lillies	G5	S2		SENSITIVE		Wetland/Riparian
			Species verified in these Counties: Granite, Ravalli State Rank Reason: Rare in Montana, where it is known from a very localized area in the southwestern corner of the state.					
Wolffia columbiana Columbia Water-meal		Lemnaceae Duckweeds	G5	S2S3				Aquatic
			Species verified in these Counties: Flathead, Lake, Missoula, Ravalli State Rank Reason: Rare. Known from several water bodies in the valleys of western Montana. Additional information on the species is needed within Montana to more precisely determine the species' conservation status.					

SCIENTIFIC NAME COMMON NAME TAXA SORT	OTHER NAMES	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	MNPS THREAT CATEGORY	HABITAT
Aloina brevirostris Aloina moss		Pottiaceae	G3G5	S1					
			Species verified in these Counties: Flathead, Lincoln						
Bryum schleicheri Schleicher's bryum moss		Bryaceae	G5?	S1					
			Species verified in these Counties: Glacier						
Catocopium nigratum Black golf club moss		Catocopiaceae	G4G5	S1					
			Species verified in these Counties:						
Cinclidium stygium Cinclidium moss		Mniaceae	G5	S1					
			Species verified in these Counties:						
Cynodontium tenellum Cynodontium moss		Dicranaceae	G3G5Q	S1					
			Species verified in these Counties:						
Dichodontium olympicum		Dicranaceae	G3G5	S1					
			Species verified in these Counties:						

Olympic dichodontium moss								
Dicranella grevilleana Greville's dicranella moss		Dicranaceae	G3G5	S1				
			Species verified in these Counties: Flathead, Glacier					
Dicranum acutifolium Acuteleaf dicranum moss		Dicranaceae	G5?	S1				
			Species verified in these Counties: Ravalli					
Dicranum fragilifolium Fragile leaf dicranum moss		Dicranaceae	G4G5	SH				
			Species verified in these Counties: Flathead, Glacier, Lake					
Dicranum spadiceum Dicranum moss		Dicranaceae	G5?	SH				
			Species verified in these Counties:					
Distichium inclinatum Incline distichium moss		Ditrichaceae	G4G5	SH				
			Species verified in these Counties: Glacier					
Entosthodon rubiginosus Entosthodon moss		Funariaceae	G1G3	SH				
			Species verified in these Counties: Cascade					
Eucladium verticillatum Lime-seep Eucladium moss		Pottiaceae	G4	S1				
			Species verified in these Counties: Granite, Powell					
Fabronia pusilla Fabronia moss		Fabroniaceae	G4G5	S1				
			Species verified in these Counties: Madison					
Fissidens fontanus Fissidens moss		Fissidentaceae	G5	S1				
			Species verified in these Counties: Granite					
Grimmia brittoniae Britton's dry rock moss		Grimmiaceae	G2	S2				SENSITIVE
			Species verified in these Counties: Flathead, Sanders					
Grimmia incurva Curved dry rock moss		Grimmiaceae	G4G5	S1				
			Species verified in these Counties: Ravalli					
Grimmia mollis Dry rock moss	Hydrogrimmia mollis	Grimmiaceae	G3G5	SH				
			Species verified in these Counties: Flathead, Glacier					
Hamatocaulis vernicosus Hamatocaulis moss		Amblystegiaceae	G5	S1				
			Species verified in these Counties:					
Haplodontium macrocarpum Waterfall copper moss	Mielichhoferia macrocarpa, Bryum porsildii	Bryaceae	G2G3	S1				
			Species verified in these Counties:					
Hennediella heimii Heim's desmatodon moss	Desmatodon heimii	Pottiaceae	G5	S1				
			Species verified in these Counties:					
Hygroamblystegium noterophilum Hygroamblystegium moss		Amblystegiaceae	G4	S1				
			Species verified in these Counties:					
Hygrohypnum cochlearifolium Hygrohypnum moss		Amblystegiaceae	G4	SH				
			Species verified in these Counties: Lincoln					
Leucolepis acanthoneuron Leucolepis umbrella moss		Mniaceae	G4	S1				
			Species verified in these Counties: Lincoln					
Limprichtia	Drepanocladus	Amblystegiaceae	G4G5	S1				

revolvens Limprichtia moss	revolvens		Species verified in these Counties:				
Meesia longiseta Meesia moss		Meesiaceae	G4?	S1			
Meesia triquetra Meesia moss		Meesiaceae	G5	S2		SENSITIVE	
Meesia uliginosa Meesia moss		Meesiaceae	G4	S1S2			
Meiotrichum lyallii Lyal's polytrichum moss	Polytrichum lyallii, Polytrichadelphus lyallii, Polytrichastrum lyallii	Polytrichaceae	GU	S1			
Myurella tenerrima Myurella moss		Pterigynandraceae	G3G4	S1			
Neckera douglasii Douglas' neckera moss		Neckeraceae	G4	S1			
Orthotrichum praemorsum Orthotrichum moss		Orthotrichaceae	G2	S1			
Paludella squarrosa Angled paludella moss		Meesiaceae	G3G5	S1S2			
Paraleucobryum enerve Paraleucobryum moss		Dicranaceae	G5?	S1			
Phascum cuspidatum Toothed phascum moss		Pottiaceae	G5	S1			
Physcomitrium hookeri Hooker's physcomitrium moss		Funariaceae	G2G4	S1			
Platyhypnidium riparioides Platyhypnidium moss	Eurhynchium riparioides	Brachytheciaceae	G4	S1			
Porotrichum bigelovii Bigelow's porotrichum moss		Thamnobryaceae	G4	S1			
Pseudocalliergon turgescens Pseudocalliergon moss		Amblystegiaceae	G3G5	SH			
Pseudocrossidium obtusulum Pseudocrossidium moss		Pottiaceae	GU	S1			
Sarmenthypnum sarmentosum Sarmenthypnum moss	Calligeron sarmentosum	Amblystegiaceae	G4G5	SH			
Scorpidium scorpioides Scorpidium moss		Amblystegiaceae	G4G5	S2		SENSITIVE	
Sphagnum		Sphagnaceae	G5	S2			

angustifolium Narrowleaf Peatmoss		Peat Mosses		Species verified in these Counties:
Sphagnum centrale Sphagnum moss		Sphagnaceae Peat Mosses	G5 S1	Species verified in these Counties: Flathead
Sphagnum compactum Low Peatmoss		Sphagnaceae Peat Mosses	G5 S1	Species verified in these Counties: Granite
Sphagnum contortum Contorted sphagnum moss		Sphagnaceae Peat Mosses	G5 S1	Species verified in these Counties:
Sphagnum fimbriatum Fringed Bogmoss		Sphagnaceae Peat Mosses	G5 S1	Species verified in these Counties: Lewis and Clark
Sphagnum fuscum Brown Peatmoss		Sphagnaceae Peat Mosses	G5 S2	Species verified in these Counties:
Sphagnum girgensohnii Girgensohn's Peatmoss		Sphagnaceae Peat Mosses	G5 S1	Species verified in these Counties:
Sphagnum magellanicum Magellan's Peatmoss		Sphagnaceae Peat Mosses	G5 S1	Species verified in these Counties: Flathead, Missoula, Ravalli
Sphagnum mendocinum Mendocino Peatmoss		Sphagnaceae Peat Mosses	G4 S1	Species verified in these Counties: Missoula
Sphagnum riparium Streamside Sphagnum moss		Sphagnaceae Peat Mosses	G5 S1	Species verified in these Counties: Missoula
Sphagnum wulfianum Wulf's Peatmoss		Sphagnaceae Peat Mosses	G5 S1	Species verified in these Counties: Lake
Stegonia latifolia Widleaf stegonia moss		Pottiaceae	G4G5 S1	Species verified in these Counties:
Syntrichia bartramii Bartram's tortula moss	Tortula bartramii	Pottiaceae	G2G4 S1	Species verified in these Counties: Ravalli
Syntrichia papillosissima	Tortula papillosissima	Pottiaceae	G3G5 S1	Species verified in these Counties: Ravalli, Sanders
Thamnobryum neckeroides Necker's thamnobryum moss		Thamnobryaceae	G4 SH	Species verified in these Counties:
Tortula cernua Desmatodon moss	Desmatodon cernuus	Pottiaceae	G3G5 SH	Species verified in these Counties:
Tortula norvegica Norwegian tortula moss		Pottiaceae	G5 S1	Species verified in these Counties: Glacier, Lake, Madison
Trachybryum megaptilum Trachybryum moss		Brachytheciaceae	G4 S1	Species verified in these Counties: State Rank Reason: Endemic to western North America. In Montana it occurs on the eastern edge of its distribution.
Warnstorfia exannulata Warnstorfia moss		Amblystegiaceae	G5 S1	Species verified in these Counties:

SCIENTIFIC NAME COMMON NAME TAXA SORT	OTHER NAMES	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	MNPS THREAT CATEGORY	HABITAT
Arctomia delicatula Delicate Arctomia Lichen		Arctomiaceae	GNR	S1					
					Species verified in these Counties:				
Arctoparmelia subcentrifuga Ring Lichen		Parmeliaceae	G4G5	S1					
					Species verified in these Counties: Missoula State Rank Reason: In Montana known from a few sites in the western and central regions of the state.				
Aspicilia fruticulosa Vagrant Aspicilia Lichen		Hymeneliaceae	G3	S1					
					Species verified in these Counties: Carbon State Rank Reason: In Montana known from one location in south-central region of the state.				
Cladonia botrytes Wooden Soldiers Lichen		Cladoniaceae	G5	S1					
					Species verified in these Counties: Flathead, Lincoln State Rank Reason: This species is common northward, but is found sporadically in Montana and east to the Black Hills and south to Colorado.				
Cladonia uncialis Thorn Cladonia Lichen		Cladoniaceae	G4G5	S1					
					Species verified in these Counties: Lake State Rank Reason: Known to occur at one location in Montana.				
Collema curtisporum Jelly Lichen		Collemataceae	G3	S1				SENSITIVE	
					Species verified in these Counties: Flathead, Glacier, Lake, Mineral, Sanders State Rank Reason: In Montana this lichen occurs in a few locations and is not always present where habitat appears to be suitable.				
Dactylina ramulosa Frosted Finger Lichen		Parmeliaceae	G4G5	S2					
					Species verified in these Counties: Park, Ravalli State Rank Reason: In Montana known from several locations in the western and south-central regions.				
Dendriscoaulon umhausense Thorn Lichen		Lobariaceae	GNR	SNR					
					Species verified in these Counties: State Rank Reason: Known from one location in western Montana.				
Lobaria hallii Gray Lungwort Lichen		Lobariaceae	G4?	S2					
					Species verified in these Counties: Flathead, Lake, Lincoln, Missoula, Sanders State Rank Reason: Known from several locations in western Montana.				
Lobaria linita Cabbage Lungwort Lichen		Lobariaceae	G4G5	S1					
					Species verified in these Counties: Ravalli State Rank Reason: Known from very few locations in western Montana.				
Lobaria scrobiculata Textured Lungwort Lichen		Lobariaceae	G4	S1					
					Species verified in these Counties: Lake, Mineral State Rank Reason: Known from one location in western Montana.				
Melanelia commixta Camouflage Lichen		Parmeliaceae	GNR	S1					
					Species verified in these Counties: Flathead, Glacier State Rank Reason: Known from very few locations in northwest Montana.				
Melanelia septentrionalis Northern Camouflage Lichen		Parmeliaceae	G3G5	S1					
					Species verified in these Counties: State Rank Reason: Montana occurs on the southern edge of this species range, where it has been found occasionally.				
Nodobryoria subdivergens Foxtail Lichen	Bryoria subdivergens	Parmeliaceae	G2	S1S2				SENSITIVE	
					Species verified in these Counties: Lincoln, Ravalli State Rank Reason: Known from several locations in western Montana where its abundance is always sparse.				
Normandina pulchella Elf-ear Lichen		Verrucariaceae	G3G5	S1					
					Species verified in these Counties: Missoula, Ravalli State Rank Reason: In the Rocky Mountains, this lichen has a spotty distribution. Known in Montana from one location.				

**Parmeliella
triptophylla**
Lead Lichen

**Peltigera
hydrothyria**
Waterfan Lichen

Peltigera pacifica
Fringed Pelt Lichen

Pertusaria diluta
Wart Lichen

**Phaeophyscia
kairamoi**
Shadow Lichen

**Pseudocyphellaria
anomala**
Netted Specklebelly
Lichen

Ramalina obtusata
Hooded Ramalina Lichen

Ramalina pollinaria
Powdery Twig Lichen

Rhizoplaca haydenii
Wanderlust Lichen

**Sclerophora
amabilis**
Collared Glass Whiskers
Lichen

Solorina bispora
Chocolate Chip Lichen

Solorina octospora
Chocolate Chip Lichen

Solorina spongiosa
Fringed Chocolate Chip
Lichen

**Sphaerophorus
tuckermanii**
Coral Lichen

**Stereocaulon
paschale**
Easter Lichen

Umbilicaria hirsuta
Rock Tripe Lichen

Hydrothyria venosa

**Sphaerophorus
globosus var. gracilis**

Pannariaceae

Peltigeraceae

Peltigeraceae

Pertusariaceae

Physciaceae

Lobariaceae

Ramalinaceae

Ramalinaceae

Lecanoraceae

Coniocybaceae

Peltigeraceae

Peltigeraceae

Peltigeraceae

Sphaerophoraceae

Stereocaulaceae

Umbilicariaceae

G3G5 S1

Species verified in these Counties: Glacier, Lake, Missoula, Ravalli
State Rank Reason: Locally rare when found.

G4 S1

Species verified in these Counties: Missoula, Ravalli
State Rank Reason: Known from a few sites in western Montana.

G3 S1

Species verified in these Counties:
State Rank Reason: Known from one location in western Montana, but expected to be more present.

GNR S1

Species verified in these Counties:
State Rank Reason: This species was first recognized in Montana. The Type specimen is from the Cabinet Mountains and is currently the only Montana occurrence.

G3G4 S2

Species verified in these Counties: Flathead, Lake
State Rank Reason: This species occurs sporadically in the northern United States and southern Canada and is known from a few locations in western Montana.

G2G4 S1

Species verified in these Counties: Lake
State Rank Reason: Known in western Montana from a few locations.

G5? S2

Species verified in these Counties: Flathead, Lake, Ravalli
State Rank Reason: In Montana sporadic occurrences have been found in western Montana.

G4 S1

Species verified in these Counties: Lake
State Rank Reason: Known in western Montana from several locations.

G2G3 S1S2

Species verified in these Counties: Beaverhead, Carbon
State Rank Reason: Known from a few locations in south-central to southeastern Montana. This species is also likely to be found in appropriate habitats in southwestern Montana. Both subspecies are found in Montana: *R. haydenii* ssp. *haydenii* and *R. haydenii* ssp. *arbuscular*.

GNR S1

Species verified in these Counties: Lincoln
State Rank Reason: In Montana known from one location.

G3G5 S1S2

Species verified in these Counties: Beaverhead, Carbon, Flathead, Glacier, Missoula
State Rank Reason: Known from a few locations in western Montana.

G3G5 S1

Species verified in these Counties:
State Rank Reason: In Montana known from one location in the northwest.

G4G5 S1S2

Species verified in these Counties: Flathead, Lake, Lewis and Clark
State Rank Reason: Known from a few locations in western and central portions of Montana.

G5TNR S1

Species verified in these Counties:
State Rank Reason: Known from two locations in northwestern Montana.

G5 S1S2

Species verified in these Counties: Lake
State Rank Reason: Known from a few locations in northwest and south-central Montana.

G2G4 S1

Species verified in these Counties:

**Verrucaria
kootenaica**

Speck Lichen

Verrucariaceae

State Rank Reason: This species is apparently rare throughout its range in North America. In Montana it is known from one location.

G1?

S1S2

Species verified in these Counties: Flathead, Lake

State Rank Reason: Known in western Montana from a few locations.

Animal Species of Concern

Species List Last Updated 05/05/2011



A program of the University of Montana
and Natural Resource Information Systems,
Montana State Library

5 Species of Concern
4 Potential Species of Concern
Filtered by the following criteria:
Township = 28 N Range = 56 E

Species of Concern

5 Species
Filtered by the following criteria:
Township = 28 N Range = 56 E

MAMMALS (MAMMALIA)

2 SPECIES

FILTERED BY THE FOLLOWING CRITERIA:
TOWNSHIP = 28 N RANGE = 56 E

SCIENTIFIC NAME COMMON NAME TAXA SORT	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Corynorhinus townsendii Townsend's Big-eared Bat	Vespertilionidae Bats	G4	S2		SENSITIVE	SENSITIVE	1	5%	87%	Caves in forested habitats
Species verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Fergus, Flathead, Gallatin, Glacier, Granite, Jefferson, Lake, Lewis and Clark, Lincoln, Madison, Mineral, Missoula, Musselshell, Phillips, Powder River, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Silver Bow, Yellowstone										
Lasiurus borealis Eastern Red Bat	Vespertilionidae Bats	G5	S2S3				2	0%	46%	Riparian forest
Species verified in these Counties: Chouteau, Custer, Prairie, Richland, Roosevelt, Rosebud										

BIRDS (AVES)

2 SPECIES

FILTERED BY THE FOLLOWING CRITERIA:
TOWNSHIP = 28 N RANGE = 56 E

SCIENTIFIC NAME COMMON NAME TAXA SORT	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Ardea herodias Great Blue Heron	Ardeidae Bitterns / Egrets / Herons / Night-Herons	G5	S3				3	3%	100%	Riparian forest
Species verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Lincoln, Madison, McCone, Meagher, Mineral, Missoula, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Silver Bow, Stillwater, Sweet Grass, Teton, Treasure, Valley, Wheatland, Wibaux, Yellowstone										
Grus americana Whooping Crane	Gruidae Cranes	G1	S1M	LE	ENDANGERED	SPECIAL STATUS	1	0%	0%	Wetlands
Species verified in these Counties: Richland, Roosevelt, Sheridan, Wibaux										

REPTILES (REPTILIA)

1 SPECIES

FILTERED BY THE FOLLOWING CRITERIA:
TOWNSHIP = 28 N RANGE = 56 E

SCIENTIFIC NAME COMMON NAME TAXA SORT	FAMILY (SCIENTIFIC) FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
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Heterodon nasicus Western Hog-nosed Snake	Colubridae Colubrid Snakes	G5	S2		SENSITIVE	SENSITIVE	1	8%	63%	Friable soils
Species verified in these Counties: Big Horn, Blaine, Carter, Cascade, Custer, Dawson, Fallon, Garfield, Hill, McCone, Musselshell, Petroleum, Phillips, Powder River, Prairie, Richland, Roosevelt, Rosebud, Sheridan, Stillwater, Toole, Treasure, Valley, Yellowstone										