

MONTANA CANADIAN ROCKIES ECOREGION

G1 and G2 Species Habitat Management Guidelines

INTRODUCTION

The Sustainable Forestry Initiative (SFI) 2022 Standards include requirements that promote and conserve Forests with Exceptional Conservation Value (FECV). This fact sheet summarizes the analysis of FECV habitat within this ecoregion and provides habitat management recommendations that would benefit species potentially found here.

HABITAT TYPES

- Mixed Conifer Forest
- Riparian/Streams
- Special Sites (Alpine, Cave, Forest Edge, Shrubland, Grasslands, Bare Rock/Talus)

MIXED CONIFER FOREST MANAGEMENT

- Protect known locations
- Retain legacy trees, stumps, and logs
- Retain large diameter trees with cavities or broken tops
- Leave skips and gaps with dense shrub component
- Retain large slash into piles

RIPARIAN/STREAMS MANAGEMENT

- Protect known locations
- Maintain well vegetated riparian buffers
- Plant a diversity of both hardwood and conifer trees in the riparian zone
- Retain large diameter trees near streams and rivers
- Buffer wetlands, springs, and headwater areas

SPECIAL SITES MANAGEMENT

- Protect known locations
- Buffer special sites
- Provide floral resources such as Asters, Chrysothamnus, and Cirsium



**Northern Rocky Mountains
Refugium Caddisfly**



Britton's Dry Rock Moss



Suckley Cuckoo Bumble Bee

SCIENTIFIC NAME	COMMON NAME	HABITAT	STATUS
<i>Nodobryoria subdivergens</i>	Alpine Foxtail Lichen	Alpine	G2G3

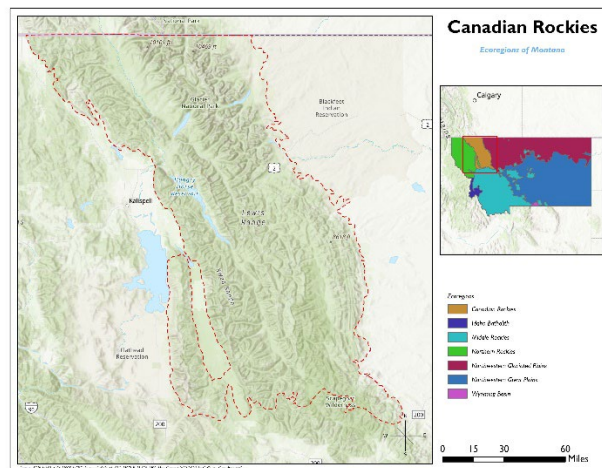
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MONTANA CANADIAN ROCKIES ECOREGION

G1 and G2 Species Habitat Management Guidelines

<i>Oreohelix alpina</i>	Alpine Mountainsnail	Bare Rock/Talus	G2
<i>Oreohelix elrodi</i>	Carinate Mountainsnail	Bare Rock/Talus	G2
<i>Synthyris canbyi</i>	Mission Mountain kittentails	Bare Rock/Talus	G2G3
<i>Stygobromus glacialis</i>	Glacier Amphipod	Cave	G1
<i>Discus brunsoni</i>	Lake Disc	Forest Edge	G1
<i>Botrychium gallicomontanum</i>	Frenchman's Bluff Moonwort	Grassland	G2
<i>Silene spaldingii</i>	Spalding's Catchfly	Grassland	G2
<i>Grimmia brittoniae</i>	Britton's Dry Rock Moss	Mixed Conifer Forest	G2
<i>Suwallia salish</i>	A Stonefly	Riparian/Streams	G1
<i>Goereilla baumanni</i>	Northern Rocky Mountains Refugium Caddisfly	Riparian/Streams	G1
<i>Zapada glacier</i>	Western Glacier Stonefly	Riparian/Streams	G1
<i>Allomyia hector</i>	A Caddisfly	Riparian/Streams	G1G2
<i>Lednia tumana</i>	Meltwater Lednian Stonefly	Riparian/Streams	G1G2
<i>Rhyacophila ophrys</i>	A Rhyacophilan Caddisfly	Riparian/Streams	G1G3
<i>Parametetus columbiae</i>	A Mayfly	Riparian/Streams	G2
<i>Rhyacophila alexanderi</i>	Alexander's Rhyacophilan Caddisfly	Riparian/Streams	G2
<i>Verrucaria kootenaica</i>	Kootenai Speck Lichen	Riparian/Streams	G2
<i>Soyedina potteri</i>	Northern Rocky Mountains Refugium Stonefly	Riparian/Streams	G2
<i>Mimulus hymenophyllus</i>	Thinsepal monkeyflower	Riparian/Streams	G2
<i>Salmasellus steganothrix</i>	A Cave Obligate Isopod	Riparian/Streams	G2G3
<i>Rhyacophila ebria</i>	A Rhyacophilan Caddisfly	Riparian/Streams	G2G3
<i>Rhyacophila unimaculata</i>	A Rhyacophilan Caddisfly	Riparian/Streams	G2G3
<i>Megaleuctra stigmata</i>	Giant Needlefly	Riparian/Streams	G2G3
<i>Bombus suckleyi</i>	Suckley Cuckoo Bumble Bee	Shrubland	G2G3

*species links provided when available



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MONTANA IDAHO BATHOLITH ECOREGION

G1 and G2 Species Habitat Management Guidelines

INTRODUCTION

The Sustainable Forestry Initiative (SFI) 2022 Standards include requirements that promote and conserve Forests with Exceptional Conservation Value (FECV). This fact sheet summarizes the analysis of FECV habitat within this ecoregion and provides habitat management recommendations that would benefit species potentially found here.

HABITAT TYPES

- Mixed Conifer Forest
- Riparian/Streams/Pools
- Special sites (Alpine, Bare Rock/Talus, Shrubland)

MIXED CONIFER FOREST MANAGEMENT

- Protect known locations
- Retain legacy trees, stumps, and logs
- Retain large diameter trees with cavities or broken tops
- Leave skips and gaps with dense shrub component
- Retain large slash into piles

RIPARIAN/STREAMS/POOLS MANAGEMENT

- Protect known locations
- Maintain well vegetated riparian buffers
- Plant a diversity of both hardwood and conifer trees
- Retain large diameter trees near streams and rivers and pools
- Buffer wetlands, springs, pools, and headwater areas

SPECIAL SITES MANAGEMENT

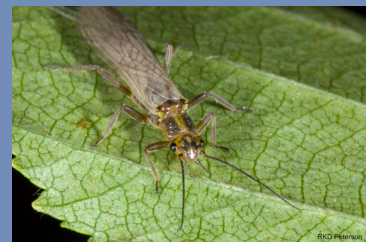
- Protect known locations,
- Provide floral resources such as Asters, Chrysothamnus, and Cirsium
- Provide buffers



Suckley Cuckoo Bumble Bee



Sapphire Rockcress



Lolo Sailfly

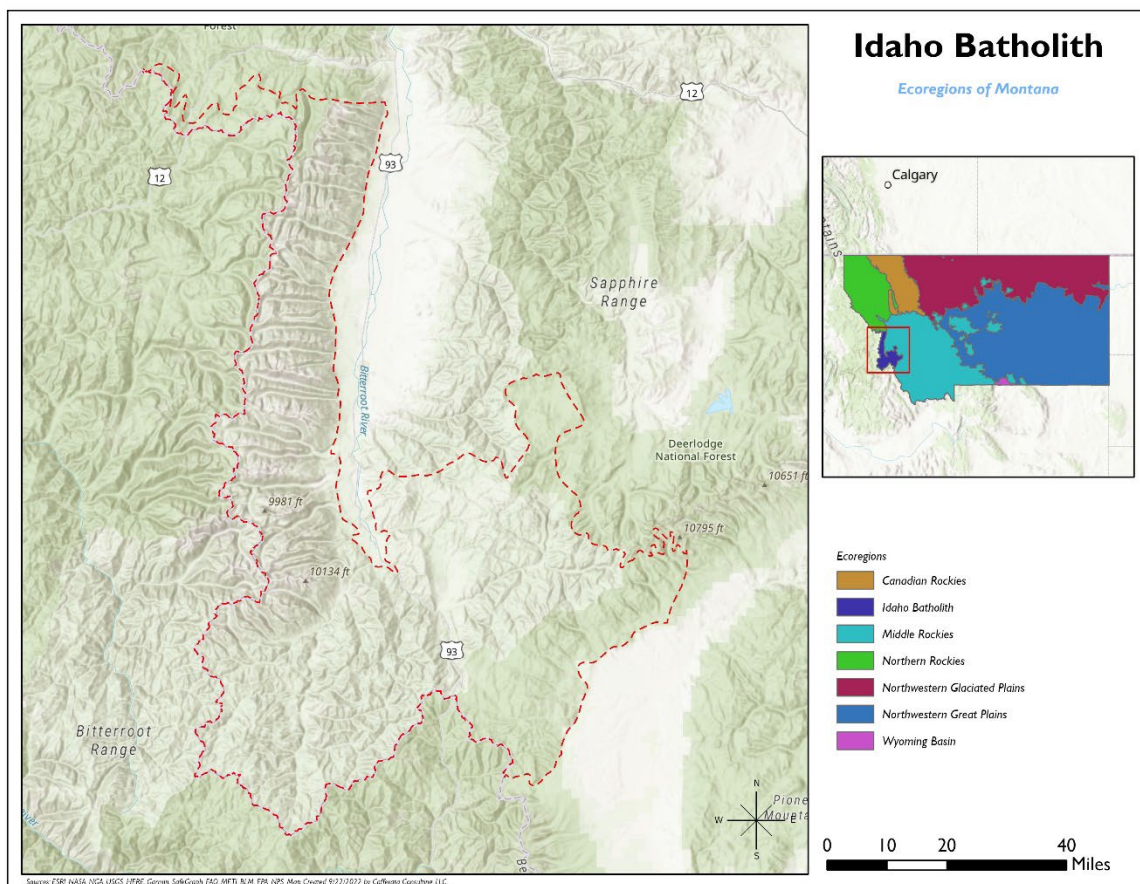
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MONTANA IDAHO BATHOLITH ECOREGION

G1 and G2 Species Habitat Management Guidelines

SCIENTIFIC NAME	COMMON NAME	HABITAT	STATUS
<i>Physaria humilis</i>	Bitterroot Bladderpod	Alpine	G2
<i>Nodobryoria subdivergens</i>	Alpine Foxtail Lichen	Alpine	G2G3
<i>Synthyris canbyi</i>	Mission Mountain kittentails	Bare Rock/Talus	G2G3
<i>Boecheria fecunda</i>	Sapphire Rockcress	Mixed Conifer Forest	G2
<i>Micranthes tempestiva</i>	Storm Saxifrage	Pools	G2G3
<i>Soliperla salish</i>	Clearwater Roachfly	Riparian/Streams	G2
<i>Sweltsa durfeeii</i>	Lolo Sailfly	Riparian/Streams	G2
<i>Bombus suckleyi</i>	Suckley Cuckoo Bumble Bee	Shrubland	G2G3

*species links provided when available



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MONTANA MIDDLE ROCKIES ECOREGION

G1 and G2 Species Habitat Management Guidelines

INTRODUCTION

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HABITAT TYPES

- Mixed Conifer Forest
- Riparian/Streams
- Special Sites (Bare Rock/Talus, Grassland, Pools, Shrubland, Soil/Organic Material)

MIXED CONIFER FOREST MANAGEMENT

- Protect known locations
- Retain legacy trees, stumps, and logs
- Retain large diameter trees with cavities or broken tops
- Leave skips and gaps with dense shrub component
- Retain large slash into piles

RIPARIAN/STREAMS MANAGEMENT

- Protect known locations
- Maintain well vegetated riparian buffers
- Plant a diversity of both hardwood and conifer trees in the riparian zone
- Retain large diameter trees near streams and rivers
- Buffer wetlands, springs, and headwater areas

SPECIAL SITES MANAGEMENT

- Protect known locations
- Buffer special sites
- Provide floral resources such as Asters, Chrysothamnus, and Cirsium



Suckley Cuckoo Bumble Bee



Ute Ladies'-tresses



Bitterroot Mountainsnail

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MONTANA MIDDLE ROCKIES ECOREGION

G1 and G2 Species Habitat Management Guidelines

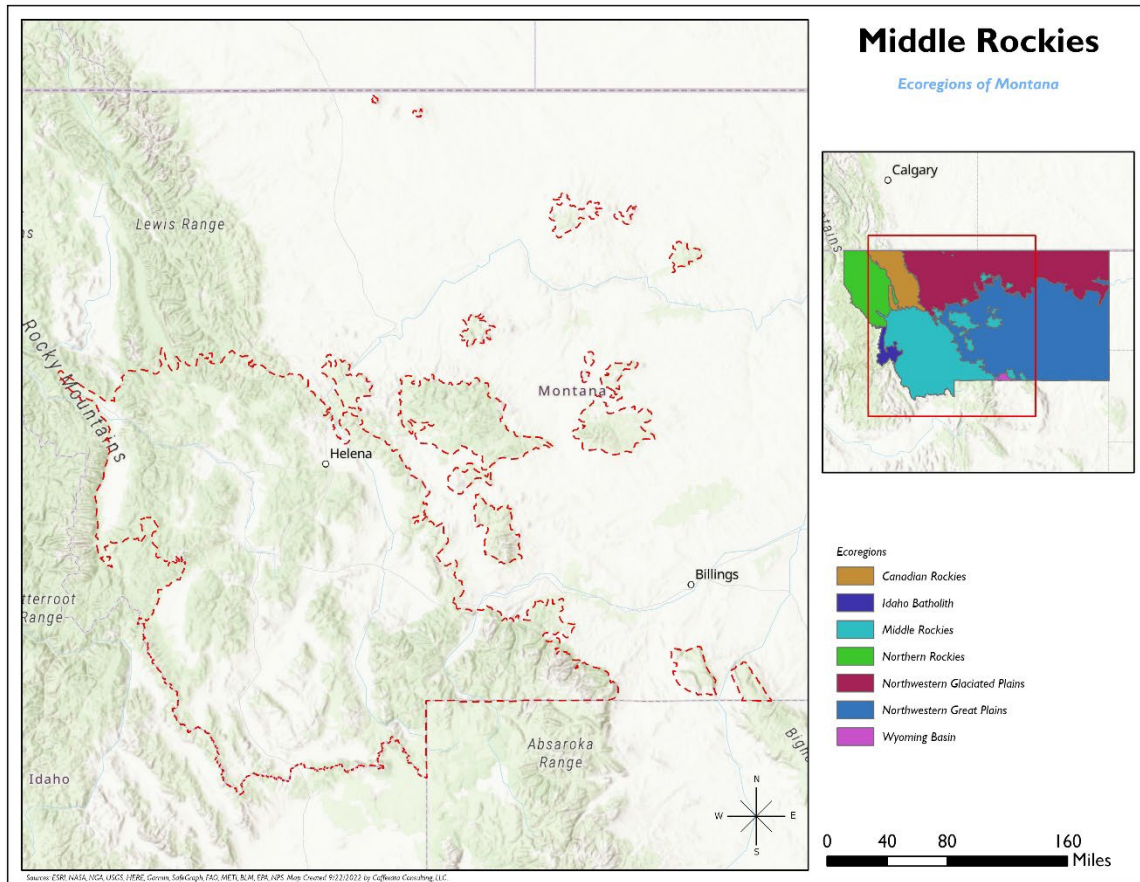
SCIENTIFIC NAME	COMMON NAME	HABITAT	STATUS
<i>Oreohelix carinifera</i>	Keeled Mountainsnail	Bare Rock/Talus	G1
<i>Corypus cochlearis</i>	A Millipede	Bare Rock/Talus	G1G3
<i>Oreohelix alpina</i>	Alpine Mountainsnail	Bare Rock/Talus	G2
<i>Oreohelix elrodi</i>	Carinate Mountainsnail	Bare Rock/Talus	G2
<i>Oreohelix haydeni</i>	Lyrate Mountainsnail	Bare Rock/Talus	G2
<i>Oreohelix pygmaea</i>	Pygmy Mountainsnail	Bare Rock/Talus	G2
<i>Synthyris canbyi</i>	Mission Mountain kittentails	Bare Rock/Talus	G2G3
<i>Erigeron parryi</i>	Parry's Fleabane	Bare Rock/Talus	G2G3
<i>Botrychium gallicomontanum</i>	Frenchman's Bluff Moonwort	Grassland	G2
<i>Cirsium longistylum</i>	Long-styled Thistle	Grassland	G2G3
<i>Oreohelix amariadix</i>	Bitterroot Mountainsnail	Mixed Conifer Forest	G1G2
<i>Adityla cucullata</i>	A Millipede	Mixed Conifer Forest	G1G3
<i>Physaria lesicii</i>	Lesica's Bladderpod	Mixed Conifer Forest	G2
<i>Boechera fecunda</i>	Sapphire Rockcress	Mixed Conifer Forest	G2
<i>Spiranthes diluvialis</i>	Ute Ladies'-tresses	Mixed Conifer Forest	G2G3
<i>Micranthes tempestiva</i>	Storm Saxifrage	Pools	G2G3
<i>Ephydatia cooperensis</i>	A Freshwater Sponge	Riparian/Streams	G1
<i>Pyrgulopsis bedfordensis</i>	Bedford Springsnail	Riparian/Streams	G1
<i>Pyrgulopsis blainica</i>	Blaine Pyrg	Riparian/Streams	G1
<i>Microcylloepus browni</i>	Brown's Microcylloepus Riffle Beetle	Riparian/Streams	G1
<i>Goereilla baumanni</i>	Northern Rocky Mountains Refugium Caddisfly	Riparian/Streams	G1
<i>Zaitzevia thermiae</i>	Warm Spring Zaitzevian Riffle Beetle	Riparian/Streams	G1
<i>Zapada glacier</i>	Western Glacier Stonefly	Riparian/Streams	G1
<i>Austrotyla montani</i>	A Millipede	Riparian/Streams	G1G3
<i>Cinygmula kootenai</i>	Kootenay Flat-headed Mayfly	Riparian/Streams	G1G3
<i>Rhyacophila newelli</i>	A Rhyacophilan Caddisfly	Riparian/Streams	G2
<i>Rhyacophila oreia</i>	A Rhyacophilan Caddisfly	Riparian/Streams	G2
<i>Rhyacophila alexanderi</i>	Alexander's Rhyacophilan Caddisfly	Riparian/Streams	G2
<i>Primula alcalina</i>	Alkali Primrose	Riparian/Streams	G2
<i>Sweltsa durfeeii</i>	Lolo Sailfly	Riparian/Streams	G2
<i>Soyedina potteri</i>	Northern Rocky Mountains Refugium Stonefly	Riparian/Streams	G2
<i>Thelypodium paniculatum</i>	Northwestern Thelypody	Riparian/Streams	G2
<i>Mimulus hymenophyllus</i>	Thinsepal monkeyflower	Riparian/Streams	G2
<i>Cinygmula gartrelli</i>	A Mayfly	Riparian/Streams	G2G3
<i>Haplodontium macrocarpum</i>	Waterfall Copper Moss	Riparian/Streams	G2G3
<i>Argiacris rehni</i>	Rehn's Slow Grasshopper	Shrubland	G2G3
<i>Bombus suckleyi</i>	Suckley Cuckoo Bumble Bee	Shrubland	G2G3
<i>Cladonia luteoalba</i>	Lemon Pixie-Cup Lichen	Soil/Organic Material	G2G3

*species links provided when available

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MONTANA MIDDLE ROCKIES ECOREGION

G1 and G2 Species Habitat Management Guidelines



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MONTANA NORTHERN ROCKIES ECOREGION

G1 and G2 Species Habitat Management Guidelines

INTRODUCTION

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HABITAT TYPES

- Bare Rock/Talus
- Mixed Conifer Forest
- Riparian/Streams
- Special Sites (Grassland, Shrubland, Alpine)

BARE ROCK/TALUS MANAGEMENT

- Protect known locations
- Buffer special sites

MIXED CONIFER FOREST MANAGEMENT

- Protect known locations,
- Retain legacy trees, stumps and logs
- Retain large diameter trees with cavities or broken tops
- Leave skips and gaps with dense shrub component
- Retain large slash into piles

RIPARIAN/STREAMS MANAGEMENT

- Protect known locations
- Maintain well vegetated riparian buffers
- Plant a diversity of both hardwood and conifer trees
- Retain large diameter trees near streams and rivers
- Buffer wetlands, springs, and headwater areas

SPECIAL SITES MANAGEMENT

- Provide floral resources such as Asters, Chrysothamnus, and Cirsium
- Protect known locations
- Provide buffers



Suckley Cuckoo Bumble Bee



**Northern Rocky Mountains
Refugium Caddisfly**



Bitterroot Mountainsnail

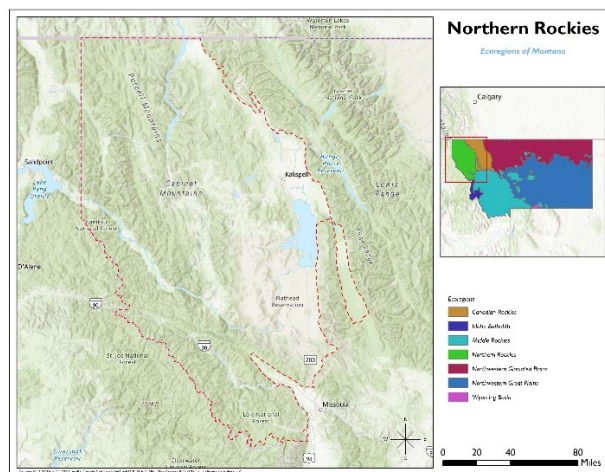
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MONTANA NORTHERN ROCKIES ECOREGION

G1 and G2 Species Habitat Management Guidelines

SCIENTIFIC NAME	COMMON NAME	HABITAT	STATUS
<i>Douglasia conservatorum</i>	Bloom Peak Douglasia	Alpine	G1
<i>Physaria humilis</i>	Bitterroot Bladderpod	Alpine	G2
<i>Nodobryoria subdivergens</i>	Alpine Foxtail Lichen	Alpine	G2G3
<i>Corypus cochlearis</i>	A Millipede	Bare Rock/Talus	G1G3
<i>Oreohelix elrodi</i>	Carinate Mountainsnail	Bare Rock/Talus	G2
<i>Oreohelix haydeni</i>	Lyrate Mountainsnail	Bare Rock/Talus	G2
<i>Silene spaldingii</i>	Spalding's Catchfly	Grassland	G2
<i>Oreohelix amariradix</i>	Bitterroot Mountainsnail	Mixed Conifer Forest	G1G2
<i>Orthogmus oculatus</i>	A Millipede	Mixed Conifer Forest	G1G3
<i>Taiyutyla curvata</i>	A Millipede	Mixed Conifer Forest	G1G3
<i>Grimmia brittoniae</i>	Britton's Dry Rock Moss	Mixed Conifer Forest	G2
<i>Suwallia salish</i>	A Stonefly	Riparian/Streams	G1
<i>Goereilla baumanni</i>	Northern Rocky Mountains Refugium Caddisfly	Riparian/Streams	G1
<i>Philocasca banksi</i>	A Caddisfly	Riparian/Streams	G1G3
<i>Austrotyla montani</i>	A Millipede	Riparian/Streams	G1G3
<i>Rhyacophila alexanderi</i>	Alexander's Rhyacophilan Caddisfly	Riparian/Streams	G2
<i>Soliperla salish</i>	Clearwater Roachfly	Riparian/Streams	G2
<i>Sweltsa durfeeii</i>	Lolo Sailfly	Riparian/Streams	G2
<i>Soyedina potteri</i>	Northern Rocky Mountains Refugium Stonefly	Riparian/Streams	G2
<i>Fisherola nuttalli</i>	Shortface Lanx	Riparian/Streams	G2
<i>Salmasellus steganothrix</i>	A Cave Obligate Isopod	Riparian/Streams	G2G3
<i>Cinygmula gartrelli</i>	A Mayfly	Riparian/Streams	G2G3
<i>Rhyacophila unimaculata</i>	A Rhyacophilan Caddisfly	Riparian/Streams	G2G3
<i>Megaleuctra stigmata</i>	Giant Needlefly	Riparian/Streams	G2G3
<i>Bombus suckleyi</i>	Suckley Cuckoo Bumble Bee	Shrubland	G2G3

*species links provided when available



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MONTANA WYOMING BASIN ECOREGION

G1 and G2 Species Habitat Management Guidelines

INTRODUCTION

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HABITAT TYPES

- Bare Rock/Talus
- Mixed Conifer Forest
- Shrubland

BARE ROCK/TALUS MANAGEMENT

- Protect known locations
- Provide buffers

MIXED CONIFER FOREST MANAGEMENT

- Protect known locations
- Retain legacy trees, stumps, and logs
- Retain large diameter trees with cavities or broken tops
- Leave skips and gaps with dense shrub component
- Retain large slash into piles

SHRUBLAND MANAGEMENT

- Protect known locations
- Provide floral resources such as Asters, Chrysothamnus, and Cirsium
- Provide buffers

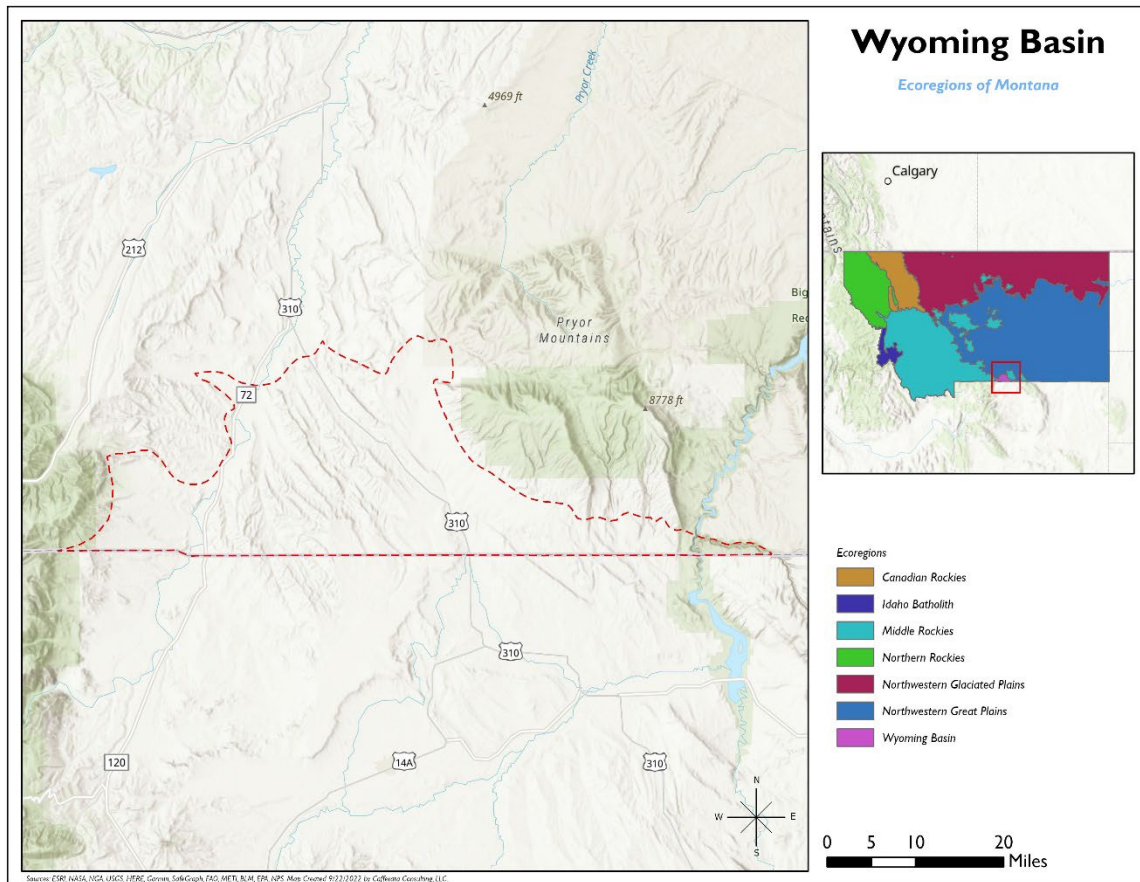


MONTANA WYOMING BASIN ECOREGION

G1 and G2 Species Habitat Management Guidelines

SCIENTIFIC NAME	COMMON NAME	HABITAT	STATUS
<i>Erigeron parryi</i>	Parry's Fleabane	Bare Rock/Talus	G2G3
<i>Physaria lesicii</i>	Lesica's Bladderpod	Mixed Conifer Forest	G2
<i>Bombus suckleyi</i>	Suckley Cuckoo Bumble Bee	Shrubland	G2G3

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