

## Blue Mountains Section

Hells Canyon of the Snake River is a major feature on this landscape. A wide, uplifted plateau occurs in the western portion, and mountains characterize the eastern portion. In addition to the Snake River, waterbodies include the lower reaches of the Salmon River, portions of the Payette and Weiser Rivers, and numerous streams, as well as several reservoirs, springs, and alpine lakes. Elevation ranges from 225 to 3100 m (750–9400 ft). Most of the mountains are 1200–2300 m (4000–7500 ft) in elevation. Soil often contains volcanic ash. An ash mantle is relatively undisturbed on gentle north slopes under forest canopies, but on southerly exposures the ash has been mostly removed by erosion.

Annual average precipitation is 23–46 cm (9–18 in) in the valleys and 43 to 254 cm (17 to 100 in) in the mountains. Annual average temperature ranges from –2–11°C (28–52°F). The growing season varies considerably with elevation and lasts for 30–130 days.

Human settlements are small and scattered, occurring primarily in valleys along rivers. Mining, timber harvest, agriculture, livestock grazing, and recreation are primary land uses.

Table 1. Blue Mountains land use and land ownership.

Land use	Area (ha)	Area (ac)	Percent
Dryland Agriculture	7277	17,983	1
Irrigated–Gravity Flow	25,961	64,151	2
Irrigated–Sprinkler	7466	18,448	1
Rangeland	575,112	1,421,127	53
Riparian	459	1134	<1
Timberland	432,504	1,068,735	40
Urban	427	1054	<1
Water	1883	4653	<1
Wilderness	35,550	87,846	3
Total	1,086,639	2,685,133	100
Land ownership	Area (ha)	Area (ac)	Percent
USDI Bureau of Land Management	158,024	390,484	15
USDI Bureau of Reclamation	674	1665	<1
USDA Forest Service	350,761	866,747	32
US Department of Defense	37	91	0
USDI National Park Service	775	1915	<1
Open water	5664	13,997	1
Private	499,496	1,234,277	46

State of Idaho	70,952	175,326	7
Total	1,086,383	2,684,501	100

***Species of Greatest Conservation Need in the Blue Mountains***

Lampreys

Pacific Lamprey *Lampetra tridentata*<sup>a</sup>

Fishes

White Sturgeon (Snake River system) *Acipenser transmontanus*<sup>a</sup>

Leopard Dace *Rhinichthys falcatus*

Umatilla Dace *Rhinichthys umatilla*

Westslope Cutthroat Trout *Oncorhynchus clarkii lewisi*

Inland Redband Trout *Oncorhynchus mykiss gairdneri*<sup>a</sup>

Steelhead (Snake River basin) *Oncorhynchus mykiss gairdneri*<sup>a</sup>

Sockeye Salmon (Snake River) *Oncorhynchus nerka*<sup>a</sup>

Chinook Salmon (Snake River fall–run) *Oncorhynchus tshawytscha*<sup>a</sup>

Chinook Salmon (Snake River spring/summer–run) *Oncorhynchus tshawytscha*<sup>a</sup>

Bull Trout *Salvelinus confluentus*<sup>a</sup>

Sand Roller Percopsis transmontana<sup>a</sup>

Amphibians

Woodhouse's Toad *Bufo woodhousii*

Northern Leopard Frog *Rana pipiens*

Idaho Giant Salamander *Dicamptodon aterrimus*

Reptiles

Ring-necked Snake *Diadophis punctatus*

Birds

Northern Pintail *Anas acuta*

Lesser Scaup *Aythya affinis*

Hooded Merganser *Lophodytes cucullatus*

Greater Sage-Grouse *Centrocercus urophasianus*

Sharp-tailed Grouse *Tympanuchus phasianellus*<sup>a</sup>

Mountain Quail *Oreortyx pictus*<sup>a</sup>

Western Grebe *Aechmophorus occidentalis*

Clark's Grebe *Aechmophorus clarkii*

Black-crowned Night-Heron *Nycticorax nycticorax*

Bald Eagle *Haliaeetus leucocephalus*

Swainson's Hawk *Buteo swainsoni*

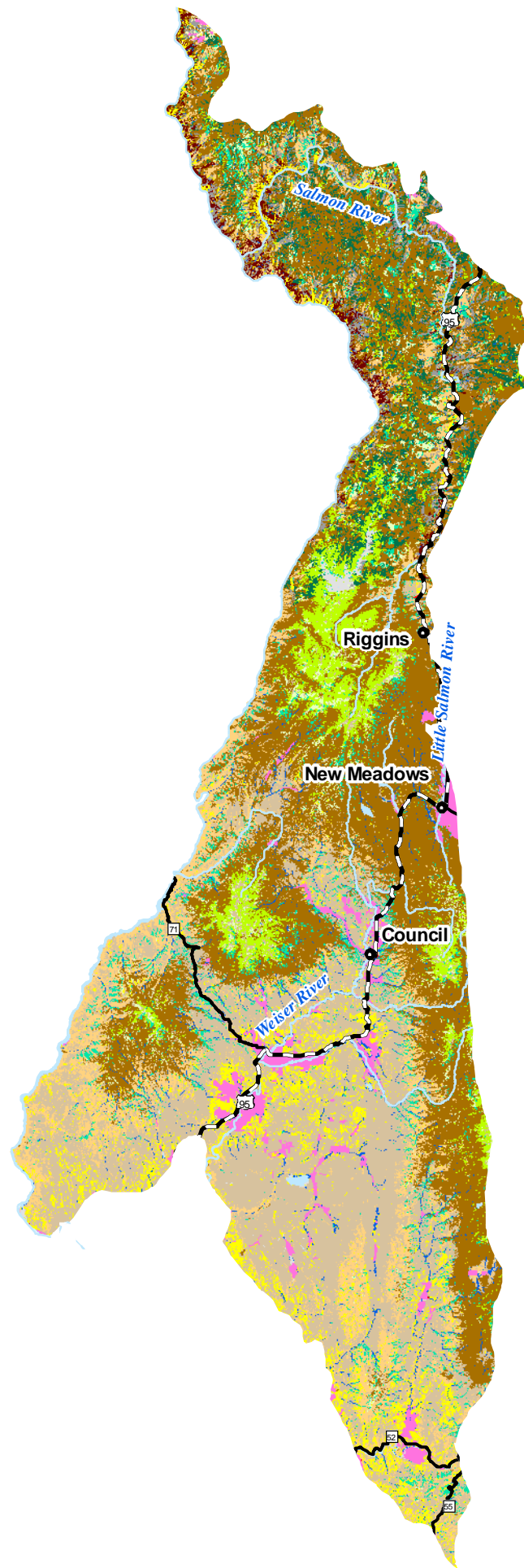
Ferruginous Hawk *Buteo regalis*

Merlin *Falco columbarius*

Peregrine Falcon *Falco peregrinus*

Sandhill Crane *Grus canadensis*

# Blue Mountains Ecological Section Habitats



## Habitats

- |                            |                                     |
|----------------------------|-------------------------------------|
| Alpine                     | Northern Mesic Conifer Forest       |
| Arableland                 | Open Water                          |
| Dry Conifer Forest         | Palouse Prairie                     |
| Dry Grassland              | Riparian Woodland                   |
| Dune, Canyon, and Rockland | Southern Wetland                    |
| Mesic Deciduous Shrubland  | Southern Woodland                   |
| Non-native Herbaceous      | Southern Xeric Shrubland and Steppe |
|                            | Subalpine Forest                    |

Subalpine Grassland

Urban

## Town Population

- 0 - 20,000
- 20,001 - 200,000

## Highways

- Interstate
- U.S. Highway
- State Route

I D A H O



25 July 2005  
Idaho Conservation Data Center, Idaho Department of Fish and Game.

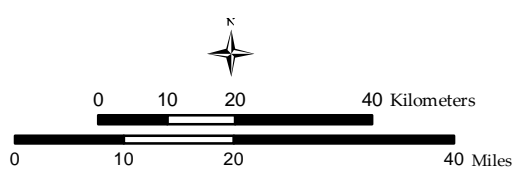


Figure 14. Blue Mountains habitats.

American Avocet *Recurvirostra americana*  
Upland Sandpiper *Bartramia longicauda*<sup>a</sup>  
Long-billed Curlew *Numenius americanus*  
California Gull *Larus californicus*  
Caspian Tern *Sterna caspia*  
Flammulated Owl *Otus flammeolus*  
Burrowing Owl *Athene cunicularia*  
Short-eared Owl *Asio flammeus*  
Boreal Owl *Aegolius funereus*  
Lewis's Woodpecker *Melanerpes lewis*  
White-headed Woodpecker *Picoides albolarvatus*<sup>a</sup>  
American Three-toed Woodpecker *Picoides dorsalis*  
Pygmy Nuthatch *Sitta pygmaea*<sup>a</sup>  
Grasshopper Sparrow *Ammodramus savannarum*  
Black Rosy-Finch *Leucosticte atrata*  
Lesser Goldfinch *Carduelis psaltria*

#### Mammals

Merriam's Shrew *Sorex merriami*  
Dwarf Shrew *Sorex nanus*  
Coast Mole *Scapanus orarius*<sup>a</sup>  
California Myotis *Myotis californicus*<sup>a</sup>  
Fringed Myotis *Myotis thysanodes*  
Townsend's Big-eared Bat *Corynorhinus townsendii*  
Pygmy Rabbit *Brachylagus idahoensis*  
Northern Idaho Ground Squirrel *Spermophilus brunneus brunneus*<sup>a</sup>  
Southern Idaho Ground Squirrel *Spermophilus brunneus endemicus*<sup>a</sup>  
Great Basin Ground Squirrel *Spermophilus mollis*  
Gray Wolf *Canis lupus*  
Fisher *Martes pennanti*  
Wolverine *Gulo gulo*  
Canada Lynx *Lynx canadensis*  
Mountain Goat *Oreamnos americanus*

#### Bivalves

Western Ridged Mussel *Gonidea angulata*<sup>a</sup>  
Western Pearlshell *Margaritifera falcata*

#### Gastropods

Pixie Pebblesnail *Fluminicola minutissimus*<sup>a</sup>  
Pristine Pyrg *Pristinicola hemphilli*<sup>a</sup>  
Shortspire Pondsnaail *Stagnicola idahoensis*<sup>a</sup>  
Mountain Marshsnail *Stagnicola montanensis*  
Shortface Lanx *Fisherola nuttalli*<sup>a</sup>  
Western Flat-whorl *Planogyra clappi*<sup>a</sup>

Fir Pinwheel *Radiodiscus abietum*  
Salmon Coil *Helicodiscus salmonaceus*<sup>a</sup>  
Marbled Disc *Discus marmorensis*<sup>a</sup>  
Pale Jumping–slug *Hemphillia camelus*  
Sheathed Slug *Zacoleus idahoensis*  
Thinlip Tightcoil *Pristiloma idahoense*  
Shiny Tightcoil *Pristiloma wascoense*  
Selway Forestsnail *Allogona lombardii*  
Dry Land Forestsnail *Allogona ptychophora solida*<sup>a</sup>  
River of No Return Oregonian *Cryptomastix mullani clappi*<sup>a</sup>  
An Oregonian (Lower Salmon River) *Cryptomastix mullani latilabris*  
Salmon Oregonian *Cryptomastix harfordiana*<sup>a</sup>  
An Oregonian (Hells Canyon) *Cryptomastix populi*<sup>a</sup>  
Humped Coin *Polygyrella polygyrella*  
Lyrate Mountainsnail *Oreohelix haydeni*<sup>a</sup>  
Costate Mountainsnail *Oreohelix idahoensis*<sup>a</sup>  
Deep Slide Mountainsnail *Oreohelix intersum*<sup>a</sup>  
Boulder Pile Mountainsnail *Oreohelix jugalis*<sup>a</sup>  
Striate Mountainsnail *Oreohelix strigosa goniogyra*<sup>a</sup>  
Whorled Mountainsnail *Oreohelix vortex*<sup>a</sup>  
Lava Rock Mountainsnail *Oreohelix waltoni*<sup>a</sup>  
Seven Devils Mountainsnail *Oreohelix hammeri*<sup>a</sup>

#### Insects

A Mayfly *Ametropus ammophilus*  
A Spur–throat Grasshopper *Melanoplus daemon*<sup>a</sup>  
A Spur–throat Grasshopper *Melanoplus digitifer*  
A Spur–throat Grasshopper *Melanoplus payettei*<sup>a</sup>  
A Stonefly *Utacapnia nedia*  
A Spring Stonefly *Malenka tina*  
Columbia River Tiger Beetle *Cicindela columbica*<sup>a</sup>

<sup>a</sup> Species for which the Blue Mountains represents a significant portion of their Idaho range.

#### ***Habitats in the Blue Mountains***

Table 2. Blue Mountains habitats.

Habitat	Area (km <sup>2</sup> )	Area (ac)	Percent
Arableland	383	94,724	4
Non–native Herbaceous	618	152,740	6
Southern Woodland	122	30,196	1
Dry Conifer Forest	3472	858,204	32
Northern Mesic Conifer Forest	387	95,648	4
Subalpine Forest	559	138,013	5
Mesic Deciduous Shrubland	438	108,185	4
Southern Xeric Shrubland and Steppe	2730	674,400	25
Dry Grassland	1273	314,520	12
Palouse Prairie	6	1552	<1
Subalpine Grassland	226	55,675	2
Alpine	34	8270	<1
Open Water	86	21,210	1
Riparian Woodland	222	55,138	2
Dune, Canyon, and Rockland	209	51,638	2
Total	10,765	2,660,113	100

***Priority Habitats and Associated Vertebrate Species in the Blue Mountains***

Non–native Herbaceous

Amphibians

Northern Leopard Frog *Rana pipiens*

Birds

Sharp–tailed Grouse *Tympanuchus phasianellus*

Upland Sandpiper *Bartramia longicauda*

Long–billed Curlew *Numenius americanus*

Burrowing Owl *Athene cunicularia*

Mammals

Merriam's Shrew *Sorex merriami*

California Myotis *Myotis californicus*

Dry Conifer Forest

Lampreys

Pacific Lamprey *Lampetra tridentata*

Fishes

White Sturgeon (Snake River system) *Acipenser transmontanus*

Westslope Cutthroat Trout *Oncorhynchus clarkii lewisi*  
Inland Redband Trout *Oncorhynchus mykiss gairdneri*  
Steelhead (Snake River basin) *Oncorhynchus mykiss gairdneri*  
Sockeye Salmon (Snake River) *Oncorhynchus nerka*  
Chinook Salmon (Snake River fall–run) *Oncorhynchus tshawytscha*  
Chinook Salmon (Snake River spring/summer–run) *Oncorhynchus tshawytscha*  
Bull Trout *Salvelinus confluentus*

#### Amphibians

Idaho Giant Salamander *Dicamptodon aterrimus*

#### Reptiles

Ring-necked Snake *Diadophis punctatus*

#### Birds

Mountain Quail *Oreortyx pictus*  
Bald Eagle *Haliaeetus leucocephalus*  
Merlin *Falco columbarius*  
Peregrine Falcon *Falco peregrinus*  
Boreal Owl *Aegolius funereus*  
White-headed Woodpecker *Picoides albolarvatus*  
American Three-toed Woodpecker *Picoides dorsalis*  
Pygmy Nuthatch *Sitta pygmaea*  
Lesser Goldfinch *Carduelis psaltria*

#### Mammals

Coast Mole *Scapanus orarius*  
Fringed Myotis *Myotis thysanodes*  
Townsend's Big-eared Bat *Corynorhinus townsendii*  
Northern Idaho Ground Squirrel *Spermophilus brunneus brunneus*  
Southern Idaho Ground Squirrel *Spermophilus brunneus endemicus*  
Gray Wolf *Canis lupus*  
Fisher *Martes pennanti*  
Wolverine *Gulo gulo*  
Canada Lynx *Lynx canadensis*  
Mountain Goat *Oreamnos americanus*

#### Southern Xeric Shrubland and Steppe

##### Fishes

Inland Redband Trout *Oncorhynchus mykiss gairdneri*

##### Amphibians

Northern Leopard Frog *Rana pipiens*

## Birds

Greater Sage–Grouse *Centrocercus urophasianus*  
Sharp–tailed Grouse *Tympanuchus phasianellus*  
Merlin *Falco columbarius*  
Peregrine Falcon *Falco peregrinus*  
Long–billed Curlew *Numenius americanus*  
Burrowing Owl *Athene cunicularia*  
Grasshopper Sparrow *Ammodramus savannarum*

## Mammals

Merriam's Shrew *Sorex merriami*  
California Myotis *Myotis californicus*  
Townsend's Big–eared Bat *Corynorhinus townsendii*  
Pygmy Rabbit *Brachylagus idahoensis* [trivially]  
Great Basin Ground Squirrel *Spermophilus mollis*

## Dry Grassland

### Fishes

White Sturgeon (Snake River system) *Acipenser transmontanus*  
Inland Redband Trout *Oncorhynchus mykiss gairdneri*  
Chinook Salmon (Snake River fall–run) *Oncorhynchus tshawytscha*  
Bull Trout *Salvelinus confluentus*

### Amphibians

Northern Leopard Frog *Rana pipiens*

### Reptiles

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