

## Snake River Basalts Section

The landscape comprises extensive plains, isolated buttes, and block-faulted mountains. The surface is a lava plateau with a thin windblown soil layer covering it. Lava flows prevalent throughout the area vary in thickness from less than 30 m (100 ft) to thousands of meters. Shield volcanoes, cinder cones, and lava ridges are common. Craters of the Moon National Monument is an example of the recent volcanic features. Elevation ranges from 900–2000 m (3000–6000 ft). The Snake River, American Falls Reservoir, Lake Walcott, and Mud Lake are major waterbodies, and few other perennial surface waterbodies are present.

Precipitation ranges from 12–30 cm (5–12 in) annually and is evenly distributed throughout the fall, winter, and spring, but is low in the summer. Precipitation during summer months is generally lost to evaporation. Average annual temperature ranges from 4–13°C (40–58°F). The growing season ranges from 60–165 days, decreasing from west to east and with elevation. Enough precipitation falls in some foothills for dry farming.

Population centers include Idaho Falls and Pocatello, and small communities are dispersed primarily along the Snake River corridor. Livestock grazing and dryland and irrigated farming are the major land uses. Recreation is also important.

Table 1. Snake River Basalts land use and land ownership.

Land use	Area (ha)	Area (ac)	Percent
Dryland Agriculture	190,303	470,247	6
Timberland	39,429	97,432	1
Irrigated–Gravity Flow	517,322	1,278,325	16
Irrigated–Sprinkler	581,625	1,437,220	18
Rangeland	1,572,615	3,886,001	49
Riparian	46,064	113,825	1
Rock	220,470	544,790	7
Urban	38,406	94,904	1
Water	25,940	64,098	1
Total	3,232,174	7,986,843	100

  

Land ownership	Area (ha)	Area (ac)	Percent
USDI Bureau of Land Management	1,196,424	2,956,416	37
USDI Bureau of Indian Affairs	66,977	165,503	2
USDI Bureau of Reclamation	16,844	41,623	1
US Department of Energy	213,052	526,461	7
USDA Forest Service	32,890	81,272	1
US Department of Defense	574	1419	<1
USDI National Park Service	18,430	45,542	1

Open water	36,841	91,037	1
Private	1,502,210	3,712,026	46
State of Idaho	138,180	341,450	4
USDI Fish and Wildlife Service	9751	24,095	<1
Total	3,232,173	7,986,843	100

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### ***Species of Greatest Conservation Need in the Snake River Basalts***

#### Fishes

White Sturgeon (Snake River system) *Acipenser transmontanus*  
Northern Leatherside Chub *Lepidomeda copei*  
Bluehead Sucker *Catostomus discobolus*  
Yellowstone Cutthroat Trout *Oncorhynchus clarkii bouvieri*<sup>a</sup>  
Inland Redband Trout *Oncorhynchus mykiss gairdneri*  
Bull Trout *Salvelinus confluentus*  
Shoshone Sculpin *Cottus greenei*<sup>a</sup>  
Wood River Sculpin *Cottus leiopomus*

#### Amphibians

Northern Leopard Frog *Rana pipiens*<sup>a</sup>

#### Reptiles

Ring-necked Snake *Diadophis punctatus*

#### Birds

Trumpeter Swan *Cygnus buccinator*<sup>a</sup>  
Northern Pintail *Anas acuta*<sup>a</sup>  
Lesser Scaup *Aythya affinis*  
Harlequin Duck *Histrionicus histrionicus*  
Hooded Merganser *Lophodytes cucullatus*<sup>a</sup>  
Greater Sage-Grouse *Centrocercus urophasianus*<sup>a</sup>  
Sharp-tailed Grouse *Tympanuchus phasianellus*<sup>a</sup>  
Western Grebe *Aechmophorus occidentalis*<sup>a</sup>  
Clark's Grebe *Aechmophorus clarkii*<sup>a</sup>  
American White Pelican *Pelecanus erythrorhynchos*<sup>a</sup>  
Great Egret *Ardea alba*  
Snowy Egret *Egretta thula*<sup>a</sup>  
Cattle Egret *Bubulcus ibis*  
Black-crowned Night-Heron *Nycticorax nycticorax*<sup>a</sup>  
White-faced Ibis *Plegadis chihl*<sup>a</sup>  
Bald Eagle *Haliaeetus leucocephalus*  
Swainson's Hawk *Buteo swainsoni*  
Ferruginous Hawk *Buteo regalis*



Merlin *Falco columbarius*<sup>a</sup>  
Peregrine Falcon *Falco peregrinus*<sup>a</sup>  
Sandhill Crane *Grus canadensis*  
Black-necked Stilt *Himantopus mexicanus*<sup>a</sup>  
American Avocet *Recurvirostra americana*<sup>a</sup>  
Long-billed Curlew *Numenius americanus*<sup>a</sup>  
Wilson's Phalarope *Phalaropus tricolor*<sup>a</sup>  
Franklin's Gull *Larus pipixcan*<sup>a</sup>  
California Gull *Larus californicus*<sup>a</sup>  
Caspian Tern *Sterna caspia*<sup>a</sup>  
Forster's Tern *Sterna forsteri*<sup>a</sup>  
Black Tern *Chlidonias niger*<sup>a</sup>  
Yellow-billed Cuckoo *Coccyzus americanus*<sup>a</sup>  
Burrowing Owl *Athene cunicularia*<sup>a</sup>  
Short-eared Owl *Asio flammeus*  
Boreal Owl *Aegolius funereus*  
Lewis's Woodpecker *Melanerpes lewis*  
American Three-toed Woodpecker *Picoides dorsalis*  
Pinyon Jay *Gymnorhinus cyanocephalus*  
Juniper Titmouse *Baeolophus ridgwayi*  
Virginia's Warbler *Vermivora virginiae*  
Brewer's Sparrow *Spizella breweri*  
Grasshopper Sparrow *Ammodramus savannarum*<sup>a</sup>  
Blue Grosbeak *Passerina caerulea*  
Lesser Goldfinch *Carduelis psaltria*

#### Mammals

Merriam's Shrew *Sorex merriami*  
Dwarf Shrew *Sorex nanus*  
California Myotis *Myotis californicus*  
Spotted Bat *Euderma maculatum*  
Townsend's Big-eared Bat *Corynorhinus townsendii*<sup>a</sup>  
Pygmy Rabbit *Brachylagus idahoensis*<sup>a</sup>  
Cliff Chipmunk *Neotamias dorsalis*  
Wyoming Ground Squirrel *Spermophilus elegans*<sup>a</sup>  
Great Basin Ground Squirrel *Spermophilus mollis*<sup>a</sup>  
Idaho Pocket Gopher *Thomomys idahoensis*<sup>a</sup>  
Townsend's Pocket Gopher *Thomomys townsendii*<sup>a</sup>  
Little Pocket Mouse *Perognathus longimembris*<sup>a</sup>  
Gray Wolf *Canis lupus*  
Grizzly or Brown Bear *Ursus arctos*  
Fisher *Martes pennanti*  
Wolverine *Gulo gulo*  
Canada Lynx *Lynx canadensis*  
Bighorn Sheep (populations south of the Snake River) *Ovis canadensis*

## Bivalves

California Floater *Anodonta californiensis*  
Western Ridged Mussel *Gonidea angulata*<sup>a</sup>  
Western Pearlshell *Margaritifera falcata*

## Gastropods

Bliss Rapids Snail *Taylorconcha serpenticola*  
Desert Valvata *Valvata utahensis*<sup>a</sup>  
Mountain Marshsnail *Stagnicola montanensis*  
Shortface Lanx *Fisherola nuttalli*  
Snake River Physa *Physa natricina*

## Arachnids

A Cave Obligate Harvestman *Speleomaster lexi*<sup>a</sup>

## Insects

A Mayfly *Centroptilum selanderorum*<sup>a</sup>  
A Mayfly *Parameletus columbiae*  
A Spur-throat Grasshopper *Melanoplus digitifer*  
Idaho Point-headed Grasshopper *Acrolophitus pulchellus*  
A Spring Stonefly *Malenka tina*  
St. Anthony Dune Tiger Beetle *Cicindela arenicola*<sup>a</sup>  
A Tiger Beetle *Cicindela plutonica*  
Blind Cave Leiodid Beetle *Glacicavicola bathyscioides*<sup>a</sup>

<sup>a</sup> Vertebrate species (except fishes) for which the Snake River Basalts represents a significant portion of their range.

### ***Habitats in the Snake River Basalts***

Table 2. Snake River Basalts habitats.

Habitats	Area (km <sup>2</sup> )	Area (ac)	Percent
Urban	293	72,610	1
Arableland	12,372	3,057,126	38
Non-native Herbaceous	3799	939,030	12
Upland Deciduous Forest	117	29,037	<1
Southern Woodland	139	34,320	<1
Dry Conifer Forest	47	11,475	<1
Subalpine Forest	84	20,755	<1
Mesic Deciduous Shrubland	43	10,629	<1
Southern Xeric Shrubland and Steppe	12,361	3,054,141	38
Subalpine Grassland	32	7940	<1
Open Water	246	60,884	1
Southern Wetland	124	30,523	<1

Riparian Woodland	362	89,629	1
Dune, Canyon, and Rockland	2287	565,213	7
Total	32,306	7,983,312	100

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**Priority Habitats and Associated Species in the Snake River Basalts**

Arableland

Fishes

White Sturgeon (Snake River system) *Acipenser transmontanus*  
Northern Leatherside Chub *Lepidomeda copei*  
Yellowstone Cutthroat Trout *Oncorhynchus clarkii bouvieri*  
Inland Redband Trout *Oncorhynchus mykiss gairdneri*  
Bull Trout *Salvelinus confluentus*  
Shoshone Sculpin *Cottus greenei*  
Wood River Sculpin *Cottus leiopomus*

Amphibians

Northern Leopard Frog *Rana pipiens*

Birds

Northern Pintail *Anas acuta*  
Greater Sage-Grouse *Centrocercus urophasianus*  
Sharp-tailed Grouse *Tympanuchus phasianellus*  
Black-crowned Night-Heron *Nycticorax nycticorax*  
White-faced Ibis *Plegadis chihi*  
Merlin *Falco columbarius*  
Long-billed Curlew *Numenius americanus*  
Franklin's Gull *Larus pipixcan*  
California Gull *Larus californicus*  
Burrowing Owl *Athene cunicularia*  
Blue Grosbeak *Passerina caerulea*

Mammals

Wyoming Ground Squirrel *Spermophilus elegans*  
Townsend's Pocket Gopher *Thomomys townsendii*

Non-native Herbaceous

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Sharp-tailed Grouse *Tympanuchus phasianellus*

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Burrowing Owl *Athene cunicularia*

Juniper Titmouse *Baeolophus ridgwayi*

Grasshopper Sparrow *Ammodramus savannarum*

Mammals

Merriam's Shrew *Sorex merriami*

Townsend's Big-eared Bat *Corynorhinus townsendii*

Wyoming Ground Squirrel *Spermophilus elegans*

Idaho Pocket Gopher *Thomomys idahoensis*

Townsend's Pocket Gopher *Thomomys townsendii*

Little Pocket Mouse *Perognathus longimembris*

Gray Wolf *Canis lupus*

Bighorn Sheep (populations south of the Snake River) *Ovis canadensis*

Southern Xeric Shrubland and Steppe

Fishes

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#### Dune, Canyon, and Rockland

##### Birds

Peregrine Falcon *Falco peregrinus*

##### Mammals

Townsend's Big-eared Bat *Corynorhinus townsendii*