Idaho Batholith Section

This area is characterized by extensive mountainous terrain; alpine ridges, cirques, and large U–shaped valleys with broad bottoms, and other features of glacial origins dominate many areas, such as the Sawtooth Mountains. Waterbodies are predominant, including major portions of the Salmon, Clearwater, Payette, and Boise rivers. Many perennial streams and lakes are present, as well as a number of reservoirs. Elevation ranges from 425 to 3400 m (1400 to 11,000 ft). Soils are generally shallow to moderately deep loam and sand. Volcanic ash accumulations in some soils have caused them to be especially productive.

Annual precipitation ranges from 51–203 cm (20–80 in), much of which falls as snow during the fall, winter, and spring. Climate is maritime–influenced with cool temperate weather and dry summers. Average annual temperature ranges from 2–7°C (35–46°F) but may be as low as –4°C (24°F) in the high mountains. The growing season lasts 45–100 days.

The northern portion of the section is primarily wilderness, with few small communities. Communities in southern areas are typically small and concentrated along rivers. Larger towns, such as Stanley and McCall are the focus of tourism and recreation. Timber harvest and recreation are dominant land uses, with livestock grazing and mining of local importance.

Table 1. Idaho Batholith land use and land ownership.

Land use	Area (ha)	Area (ac)	Percent
Dryland Agriculture	3045	7525	<1
Irrigated–Gravity Flow	48,237	119,195	1
Irrigated–Sprinkler	7253	17,921	<1
Rangeland	342,721	846,879	8
Riparian	14,258	35,232	<1
Timberland	2,400,513	5,931,774	59
Urban	469	1158	<1
Water	13,162	32,524	<1
Wilderness	1,226,135	3,029,833	30
Total	4,055,792	10,022,041	100

Land ownership	Area (ha)	Area (ac)	Percent
USDI Bureau of Land Management	52,123	128,797	1
USDI Bureau of Reclamation	16,720	41,316	<1
USDA Forest Service	3,564,471	8,807,965	88
US Department of Defense	263	650	<1
Open water	24,682	60,989	1

Private	302,986	748,693	7
State of Idaho	94,548	233,632	2
Total	4,055,793	10,022,043	100

Species of Greatest Conservation Need in the Idaho Batholith

Lampreys

Pacific Lamprey *Lampetra tridentata*[a]

Fishes

White Sturgeon (Snake River system) *Acipenser transmontanus*
Leopard Dace *Rhinichthys falcatus*
Umatilla Dace *Rhinichthys umatilla*
Westslope Cutthroat Trout *Oncorhynchus clarkii lewisi*[a]
Inland Redband Trout *Oncorhynchus mykiss gairdneri*[a]
Steelhead (Snake River basin) *Oncorhynchus mykiss gairdneri*[a]
Sockeye Salmon (Snake River) *Oncorhynchus nerka*[a]
Kokanee *Oncorhynchus nerka*[a]
Chinook Salmon (Snake River fall–run) *Oncorhynchus tshawytscha*
Chinook Salmon (Snake River spring/summer–run) *Oncorhynchus tshawytscha*[a]
Bull Trout *Salvelinus confluentus*[a]
Wood River Sculpin *Cottus leiopomus*

Amphibians

Woodhouse's Toad *Bufo woodhousii*
Northern Leopard Frog *Rana pipiens*
Idaho Giant Salamander *Dicamptodon aterrimus*[a]
Coeur d'Alene Salamander *Plethodon idahoensis*[a]

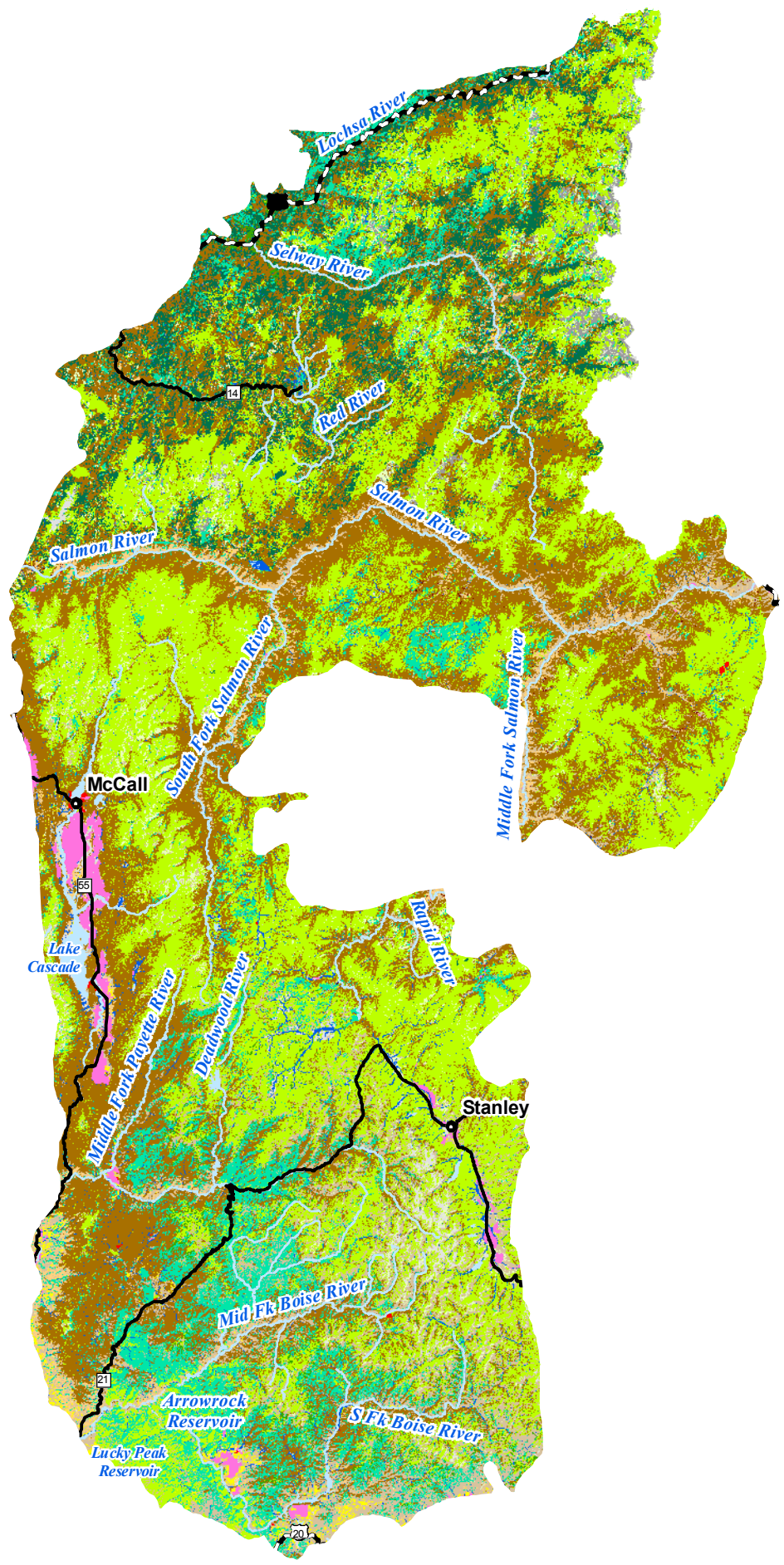
Reptiles

Ring–necked Snake *Diadophis punctatus*
Long–nosed Snake *Rhinocheilus lecontei*

Birds

Northern Pintail *Anas acuta*
Lesser Scaup *Aythya affinis*
Harlequin Duck *Histrionicus histrionicus*[a]
Greater Sage–Grouse *Centrocercus urophasianus*
Sharp–tailed Grouse *Tympanuchus phasianellus*
Mountain Quail *Oreortyx pictus*[a]
Red–necked Grebe *Podiceps grisegena*
Western Grebe *Aechmophorus occidentalis*[a]
Clark’s Grebe *Aechmophorus clarkii*[a]
American White Pelican *Pelecanus erythrorhynchos*
Great Egret *Ardea alba*

Idaho Batholith Ecological Section Habitats



Habitats

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

Town Population

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

Highways

- Interstate
- U.S. Highway
- State Route

IDAHO

Area Enlarged

N

0 12.5 25 50 Kilometers

0 12.5 25 50 Miles

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

Figure 15. Idaho Batholith habitats.

Black–crowned Night–Heron *Nycticorax nycticorax*
Bald Eagle *Haliaeetus leucocephalus*[a]
Swainson's Hawk *Buteo swainsoni*
Ferruginous Hawk *Buteo regalis*
Merlin *Falco columbarius*
Peregrine Falcon *Falco peregrinus*[a]
Sandhill Crane *Grus canadensis*
American Avocet *Recurvirostra americana*
Upland Sandpiper *Bartramia longicauda*[a]
Long–billed Curlew *Numenius americanus*
Franklin's Gull *Larus pipixcan*
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*[a]
Lewis's Woodpecker *Melanerpes lewis*
White–headed Woodpecker *Picoides albolarvatus*[a]
American Three–toed Woodpecker *Picoides dorsalis*[a]
Pygmy Nuthatch *Sitta pygmaea*[a]
Brewer's Sparrow *Spizella breweri*
Grasshopper Sparrow *Ammodramus savannarum*
Black Rosy–Finch *Leucosticte atrata*[a]
Lesser Goldfinch *Carduelis psaltria*[a]

Mammals

Pygmy Shrew *Sorex hoyi*
Merriam's Shrew *Sorex merriami*
Dwarf Shrew *Sorex nanus*[a]
Coast Mole *Scapanus orarius*
Fringed Myotis *Myotis thysanodes*[a]
Spotted Bat *Euderma maculatum*
Townsend's Big–eared Bat *Corynorhinus townsendii*
Pygmy Rabbit *Brachylagus idahoensis*
Red–tailed Chipmunk *Neotamias ruficaudus*[a]
Northern Idaho Ground Squirrel *Spermophilus brunneus brunneus*[a]
Townsend's Pocket Gopher *Thomomys townsendii*
Gray Wolf *Canis lupus*[a]
Kit Fox *Vulpes macrotis*
Fisher *Martes pennanti*[a]
Wolverine *Gulo gulo*[a]
Canada Lynx *Lynx Canadensis*[a]
Mountain Goat *Oreamnos americanus*[a]

Bivalves

Western Pearlshell *Margaritifera falcata*

Gastropods

Pristine Pyrg *Pristinicola hemphilli*
Shortface Lanx *Fisherola nuttalli*
Idaho Vertigo *Vertigo idahoensis*[a]
Fir Pinwheel *Radiodiscus abietum*
Salmon Coil *Helicodiscus salmonaceus*
Nimapuna Tigersnail *Anguispira nimapuna*[a]
Marbled Disc *Discus marmorensis*
Pale Jumping–slug *Hemphillia camelus*
Sheathed Slug *Zacoleus idahoensis*
Thinlip Tightcoil *Pristiloma idahoense*
Shiny Tightcoil *Pristiloma wascoense*
Selway Forestsnail *Allogona lombardii*[a]
River of No Return Oregonian *Cryptomastix mullani clappi*[a]
An Oregonian (Lower Salmon River) *Cryptomastix mullani latilabris*
Humped Coin *Polygyrella polygyrella*[a]
Boulder Pile Mountainsnail *Oreohelix jugalis*
Striate Mountainsnail *Oreohelix strigosa goniogyra*

Crustaceans

Idaho Amphipod *Stygobromus idahoensis*[a]

Insects

A Mayfly *Caurinella idahoensis*[a]
A Mayfly *Ameletus sparsatus*[a]
A Mayfly *Ametropus ammophilus*[a]
A Mayfly *Paraleptophlebia vaciva*[a]
A Mayfly *Parameletus columbiae*
A Spur–throat Grasshopper *Melanoplus digitifer*
A Spur–throat Grasshopper *Melanoplus papyraedus*[a]
A Spur–throat Grasshopper *Melanoplus payettei*
A Grasshopper *Argiacris keithi*[a]
A Grasshopper *Argiacris militaris*[a]
A Grasshopper *Barracris petraea*
A Stonefly *Soyedina potteri*[a]
A Stonefly *Zapada cordillera*[a]
Gillette's Checkerspot *Euphydryas gillettii*

[a] Species for which the Idaho Batholith represents a significant portion of their range.

Habitats in the Idaho Batholith

Table 2. Idaho Batholith habitats.

Habitat	Area (km²)	Area (ac)	Percent
Urban	27	6710	<1
Arableland	389	96,133	1
Non–native Herbaceous	214	52,790	1
Upland Deciduous Forest	307	75,936	1
Southern Woodland	22	5432	<1
Dry Conifer Forest	12,831	3,170,525	32
Northern Mesic Conifer Forest	2430	600,516	6
Subalpine Forest	13,796	3,409,015	34
Mesic Deciduous Shrubland	3893	961,894	10
Southern Xeric Shrubland and Steppe	3052	754,066	8
Dry Grassland	774	191,309	2
Subalpine Grassland	963	238,143	2
Alpine	287	70,905	1
Open Water	233	57,598	1
Riparian Woodland	804	198,901	2
Dune, Canyon, and Rockland	419	103,524	1
Total	40,441	9,993,397	100

Priority Habitats and Associated Vertebrate Species in the Idaho Batholith

Dry Conifer Forest

Lampreys

Pacific Lamprey *Lampetra tridentata*

Fishes

White Sturgeon (Snake River system) *Acipenser transmontanus*
Leopard Dace *Rhinichthys falcatus*
Umatilla Dace *Rhinichthys umatilla*
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*
Kokanee *Oncorhynchus nerka*
Chinook Salmon (Snake River spring/summer–run) *Oncorhynchus tshawytscha*
Bull Trout *Salvelinus confluentus*

Amphibians

Northern Leopard Frog *Rana pipiens*
Idaho Giant Salamander *Dicamptodon aterrimus*
Coeur d'Alene Salamander *Plethodon idahoensis*

Reptiles

Ring–necked Snake *Diadophis punctatus*

Birds

Harlequin Duck *Histrionicus histrionicus*
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

Pygmy Shrew *Sorex hoyi*
Fringed Myotis *Myotis thysanodes*
Spotted Bat *Euderma maculatum*
Townsend's Big–eared Bat *Corynorhinus townsendii*
Red–tailed Chipmunk *Neotamias ruficaudus*
Northern Idaho Ground Squirrel *Spermophilus brunneus brunneus*
Gray Wolf *Canis lupus*
Fisher *Martes pennanti*
Wolverine *Gulo gulo*
Canada Lynx *Lynx canadensis*
Mountain Goat *Oreamnos americanus*

Northern Mesic Conifer Forest

Amphibians

Northern Leopard Frog *Rana pipiens*
Idaho Giant Salamander *Dicamptodon aterrimus*
Coeur d'Alene Salamander *Plethodon idahoensis*

Birds

Harlequin Duck *Histrionicus histrionicus*
Lesser Goldfinch *Carduelis psaltria*

Mammals

Red–tailed Chipmunk *Neotamias ruficaudus*

Subalpine Forest

Lampreys

Pacific Lamprey *Lampetra tridentata*

Fishes

White Sturgeon (Snake River system) *Acipenser transmontanus*
Westslope Cutthroat Trout *Oncorhynchus clarkii lewisi*
Steelhead (Snake River basin) *Oncorhynchus mykiss gairdneri*
Sockeye Salmon (Snake River) *Oncorhynchus nerka*
Chinook Salmon (Snake River spring/summer–run) *Oncorhynchus tshawytscha*
Bull Trout *Salvelinus confluentus*

Amphibians

Northern Leopard Frog *Rana pipiens*
Idaho Giant Salamander *Dicamptodon aterrimus*

Birds

Harlequin Duck *Histrionicus histrionicus*
Bald Eagle *Haliaeetus leucocephalus*
Peregrine Falcon *Falco peregrinus*
Boreal Owl *Aegolius funereus*
Black Swift *Cypseloides niger*
White–headed Woodpecker *Picoides albolarvatus*
American Three–toed Woodpecker *Picoides dorsalis*
Pygmy Nuthatch *Sitta pygmaea*

Mammals

Pygmy Shrew *Sorex hoyi*
Dwarf Shrew *Sorex nanus*
Townsend's Big–eared Bat *Corynorhinus townsendii*
Red–tailed Chipmunk *Neotamias ruficaudus*
Gray Wolf *Canis lupus*
Fisher *Martes pennanti*
Wolverine *Gulo gulo*
Canada Lynx *Lynx canadensis*
Mountain Goat *Oreamnos americanus*

Mesic Deciduous Shrubland

Fishes

Leopard Dace *Rhinichthys falcatus*
Umatilla Dace *Rhinichthys umatilla*
Wood River Sculpin *Cottus leiopomus*

Amphibians

Northern Leopard Frog *Rana pipiens*
Coeur d'Alene Salamander *Plethodon idahoensis*

Birds

Sharp–tailed Grouse *Tympanuchus phasianellus*
Mountain Quail *Oreortyx pictus*
Ferruginous Hawk *Buteo regalis*
Merlin *Falco columbarius*

Mammals

Townsend's Big–eared Bat *Corynorhinus townsendii*
Pygmy Rabbit *Brachylagus idahoensis*
Red–tailed Chipmunk *Neotamias ruficaudus*