**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.

<table>
<thead>
<tr>
<th>Land use</th>
<th>Area (ha)</th>
<th>Area (ac)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dryland Agriculture</td>
<td>3045</td>
<td>7525</td>
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<tr>
<td>Irrigated–Gravity Flow</td>
<td>48,237</td>
<td>119,195</td>
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<tr>
<td>Irrigated–Sprinkler</td>
<td>7253</td>
<td>17,921</td>
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<tr>
<td>Rangeland</td>
<td>342,721</td>
<td>846,879</td>
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<tr>
<td>Riparian</td>
<td>14,258</td>
<td>35,232</td>
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<tr>
<td>Timberland</td>
<td>2,400,513</td>
<td>5,931,774</td>
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<tr>
<td>Urban</td>
<td>469</td>
<td>1158</td>
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<tr>
<td>Water</td>
<td>13,162</td>
<td>32,524</td>
<td>&lt;1</td>
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<tr>
<td>Wilderness</td>
<td>1,226,135</td>
<td>3,029,833</td>
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<tr>
<td>Total</td>
<td>4,055,792</td>
<td>10,022,041</td>
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<table>
<thead>
<tr>
<th>Land ownership</th>
<th>Area (ha)</th>
<th>Area (ac)</th>
<th>Percent</th>
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<tr>
<td>USDI Bureau of Land</td>
<td>52,123</td>
<td>128,797</td>
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<tr>
<td>Management</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>USDI Bureau of Reclamation</td>
<td>16,720</td>
<td>41,316</td>
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<td>USDA Forest Service</td>
<td>3,564,471</td>
<td>8,807,965</td>
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<td>US Department of Defense</td>
<td>263</td>
<td>650</td>
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<tr>
<td>Open water</td>
<td>24,682</td>
<td>60,989</td>
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</table>
Species of Greatest Conservation Need in the Idaho Batholith

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 fall–run) Oncorhynchus tshawytscha
- Chinook Salmon (Snake River spring/summer–run) Oncorhynchus tshawytscha
- Bull Trout Salvelinus confluentus
- Wood River Sculpin Cottus leiopomus

Amphibians
- Woodhouse’s Toad Bufo woodhousii
- Northern Leopard Frog Rana pipiens
- Idaho Giant Salamander Dicamptodon aterrimus
- Coeur d’Alene Salamander Plethodon idahoensis

Reptiles
- Ring–necked Snake Diadophis punctatus
- Long–nosed Snake Rhinocelius lecontei

Birds
- Northern Pintail Anas acuta
- Lesser Scaup Aythya affinis
- Harlequin Duck Histrionicus histrionicus
- Greater Sage–Grouse Centrocercus urophasianus
- Sharp–tailed Grouse Tympanuchus phasianellus
- Mountain Quail Oreortyx pictus
- Red–necked Grebe Podiceps grisegena
- Western Grebe Aechmophorus occidentalis
- Clark’s Grebe Aechmophorus clarkii
- 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 Grassland
- Upland Deciduous Forest
- Urban

Town Population
- 0 - 20,000
- 20,001 - 200,000

Highways
- Interstate
- U.S. Highway
- State Route

Figure 15. Idaho Batholith habitats.

25 July 2005
Idaho Conservation Data Center, Idaho Department of Fish and Game.
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*
American Avocet *Recurvirostra americana*
Upland Sandpiper *Bartramia longicauda*
Long–billed Curlew *Numenius americanus*
Franklin’s Gull *Larus pipixcan*
California Gull *Larus californicus*
Caspian Tern *Sterna caspia*
Flammulated Owl *Otus flammmeolus*
Burrowing Owl *Athene cunicularia*
Short–eared Owl *Asio flammeus*
Boreal Owl *Aegolius funereus*
Lewis’s Woodpecker *Melanerpes lewis*
White–headed Woodpecker *Picoides albolarvatus*
American Three–toed Woodpecker *Picoides dorsalis*
Pygmy Nuthatch *Sitta pygmaea*
Brewer’s Sparrow *Spizella breweri*
Grasshopper Sparrow *Ammoramus savannarum*
Long–billed Curlew *Numenius americanus*
Lesser Goldfinch *Carduelis psaltria*

Mammals

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

Gastropods
Pristine Pyrg *Pristinicola hemphilli*
Shortface Lanx *Fisherola nuttalli*
Idaho Vertigo *Vertigo idahoensis*
Fir Pinwheel *Radiodiscus abietum*
Salmon Coil *Helicodiscus salmonaceus*
Nimapuna Tigersnail *Anguispira nimapuna*
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*
River of No Return Oregonian *Cryptomastix mullani clappi*
An Oregonian (Lower Salmon River) *Cryptomastix mullani latilabris*
Humped Coin *Polygyrella polygyrella*
Boulder Pile Mountainsnail *Oreohelix jugalis*
Striate Mountainsnail *Oreohelix strigosa goniogyra*

Crustaceans
Idaho Amphipod *Stygobromus idahoensis*

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

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

**Habitats in the Idaho Batholith**
Table 2. Idaho Batholith habitats.

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

**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 pennantii*
- 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*