## Palouse Prairie Section

This section is characterized by dissected loess–covered basalt plains, undulating plateaus, and river breaklands. Elevation ranges from 220–1700 m (720–5700 ft). Soils are generally deep, loamy to silty, and have formed in loess, alluvium, or glacial outwash. The lower reaches and confluence of the Snake and Clearwater Rivers are major waterbodies.

Climate is maritime influenced. Precipitation ranges from 25–76 cm (10–30 in) annually, falling primarily during the fall, winter, and spring, and winter precipitation is mostly snow. Summers are relatively dry. Average annual temperature ranges from 45–54ºF (7–12ºC). The growing season varies with elevation and lasts 100–170 days.

Population centers include Lewiston and Moscow, and small agricultural communities are dispersed throughout.

Table 1. Palouse Prairie land use and land ownership.

| Land use | Area (ha) | Area (ac) | Percent |
|---|---|---|---|
| Dryland Agriculture | 654,399 | 1,617,050 | 81 |
| Timberland | 138,861 | 343,132 | 17 |
| Rangeland | 5082 | 12,558 | 1 |
| Urban | 4860 | 12,008 | 1 |
| Water | 3441 | 8504 | <1 |
| Total | 806,644 | 1,993,252 | 100 |

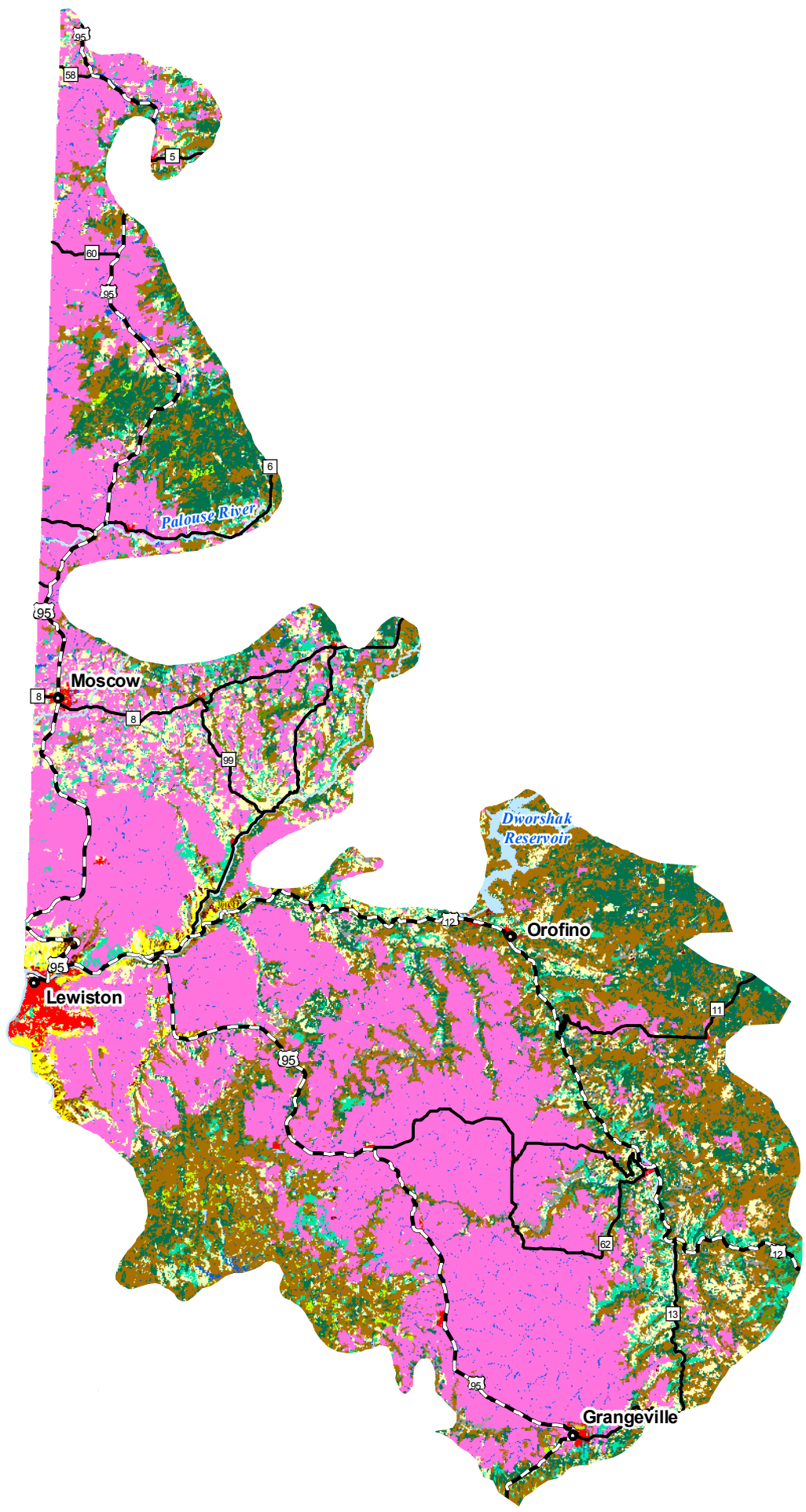
| Land ownership | Area (ha) | Area (ac) | Percent |
|---|---|---|---|
| USDI Bureau of Land Management | 9121 | 22,539 | 1 |
| USDI Bureau of Indian Affairs | 12,403 | 30,650 | 2 |
| USDA Forest Service | 10,102 | 24,963 | 1 |
| US Department of Defense | 585 | 1446 | <1 |
| USDI National Park Service | 60 | 149 | <1 |
| Open water | 5355 | 13,234 | 1 |
| Private | 725,922 | 1,793,785 | 90 |
| State of Idaho | 43,034 | 106,340 | 5 |
| Total | 806,584 | 1,993,105 | 100 |

### *Species of Greatest Conservation Need in the Palouse Prairie*

Lampreys

Pacific Lamprey *Lampetra tridentata*[a]

# Palouse Prairie Ecological Section Habitats




**Habitats**

- 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 Woodland
- Southern Xeric Shrubland and Steppe
- Subalpine Forest
- Subalpine Grassland
- Upland Deciduous Forest
- Urban

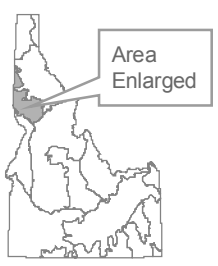
**Town Population**

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

**Highways**

- Interstate
- U.S. Highway
- State Route

I D A H O




N

0 5 10 20 Kilometers

0 5 10 20 Miles

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

Figure 18. Palouse Prairie habitats.

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*[a]
Sockeye Salmon (Snake River) *Oncorhynchus nerka*
Chinook Salmon (Snake River fall–run) *Oncorhynchus tshawytscha*[a]
Chinook Salmon (Snake River spring/summer–run) *Oncorhynchus tshawytscha*[a]
Bull Trout *Salvelinus confluentus*
Sand Roller Percopsis transmontana[a]

Amphibians

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

Reptiles

Northern Alligator Lizard *Elgaria coerulea*
Ring–necked Snake *Diadophis punctatus*[a]

Birds

Northern Pintail *Anas acuta*
Lesser Scaup *Aythya affinis*
Harlequin Duck *Histrionicus histrionicus*
Hooded Merganser *Lophodytes cucullatus*
Mountain Quail *Oreortyx pictus*
Red–necked Grebe *Podiceps grisegena*
Western Grebe *Aechmophorus occidentalis*
Bald Eagle *Haliaeetus leucocephalus*
Swainson’s Hawk *Buteo swainsoni*
Merlin *Falco columbarius*
Peregrine Falcon *Falco peregrinus*
Long–billed Curlew *Numenius americanus*
California Gull *Larus californicus*
Yellow–billed Cuckoo *Coccyzus americanus*
Flammulated Owl *Otus flammeolus*
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*
Grasshopper Sparrow *Ammodramus savannarum*
Black Rosy–Finch *Leucosticte atrata*

Mammals

Pygmy Shrew *Sorex hoyi*
California Myotis *Myotis californicus*
Fringed Myotis *Myotis thysanodes*
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*

Bivalves
Western Ridged Mussel *Gonidea angulata*

Gastropods
Fir Pinwheel *Radiodiscus abietum*
Salmon Coil *Helicodiscus salmonaceus*
Nimapuna Tigersnail *Anguispira nimapuna*
Pale Jumping–slug *Hemphillia camelus*
Lyre Mantleslug *Udosarx lyrata*
Thinlip Tightcoil *Pristiloma idahoense*
Dry Land Forestsnail *Allogona ptychophora solida*
Mission Creek Oregonian *Cryptomastix magnidentata*[a]
An Oregonian (Lower Salmon River) *Cryptomastix mullani latilabris*[a]
An Oregonian (Lower Clearwater River) *Cryptomastix mullani tuckeri*
An Oregonian (Hells Canyon) *Cryptomastix populi*
Humped Coin *Polygyrella polygyrella*[a]

Insects
A Mayfly *Paraleptophlebia traverae*[a]
A Mayfly *Parameletus columbiae*
A Spur–throat Grasshopper *Melanoplus digitifer*
A Spur–throat Grasshopper *Melanoplus payettei*
A Stonefly *Capnia lineata*[a]
A Stonefly *Capnia zukeli*[a]
A Stonefly *Perlomyia collaris*[a]
A Stonefly *Soyedina potteri*[a]
A Stonefly *Taenionema umatilla*[a]
Gillette's Checkerspot *Euphydryas gillettii*

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

### *Habitats in the Palouse Prairie*

Table 2. Palouse Prairie habitats.

| Habitat | Area (km²) | Area (ac) | Percent |
|---|---|---|---|
| Urban | 65 | 16,119 | 1 |
| Arableland | 3389 | 837,538 | 42 |
| Upland Deciduous Forest | 19 | 4792 | <1 |
| Southern Woodland | 18 | 4364 | <1 |
| Dry Conifer Forest | 1860 | 459,692 | 23 |
| Northern Mesic Conifer Forest | 1008 | 249,131 | 13 |
| Subalpine Forest | 31 | 7733 | <1 |
| Mesic Deciduous Shrubland | 352 | 87,003 | 4 |
| Dry Grassland | 6 | 1505 | <1 |
| Palouse Prairie | 799 | 197,502 | 10 |
| Subalpine Grassland | 67 | 16,656 | 1 |
| Open Water | 62 | 15,304 | 1 |
| Riparian Woodland | 193 | 47,527 | 2 |
| Dune, Canyon, and Rockland | 122 | 30,098 | 2 |
| Total | 7991 | 1,974,964 | 100 |

### *Priority Habitats and Associated Vertebrate Species in the Palouse Prairie*

Arableland

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 fall–run) *Oncorhynchus tshawytscha*
Chinook Salmon (Snake River spring/summer–run) *Oncorhynchus tshawytscha*

Birds

Northern Pintail *Anas acuta*
Merlin *Falco columbarius*
Upland Sandpiper *Bartramia longicauda*
Long–billed Curlew *Numenius americanus*
California Gull *Larus californicus*
Grasshopper Sparrow *Ammodramus savannarum*

Black Rosy–Finch *Leucosticte atrata*

Dry Conifer 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 fall–run) *Oncorhynchus tshawytscha*
Chinook Salmon (Snake River spring/summer–run) *Oncorhynchus tshawytscha*
Bull Trout *Salvelinus confluentus*

Amphibians

Idaho Giant Salamander *Dicamptodon aterrimus*
Coeur d'Alene Salamander *Plethodon idahoensis*

Reptiles

Ring–necked Snake *Diadophis punctatus*

Birds

Harlequin Duck *Histrionicus histrionicus*
Hooded Merganser *Lophodytes cucullatus*
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*
Grasshopper Sparrow *Ammodramus savannarum*

Mammals

Pygmy Shrew *Sorex hoyi*
Fringed Myotis *Myotis thysanodes*
Townsend's Big–eared Bat *Corynorhinus townsendii*
Gray Wolf *Canis lupus*
Fisher *Martes pennanti*
Wolverine *Gulo gulo*
Canada Lynx *Lynx canadensis*

Northern Mesic Conifer Forest

Fishes

Westslope Cutthroat Trout *Oncorhynchus clarkii lewisi*
Bull Trout *Salvelinus confluentus*

Amphibians

Idaho Giant Salamander *Dicamptodon aterrimus*
Coeur d'Alene Salamander *Plethodon idahoensis*

Birds

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

Mammals

Pygmy Shrew *Sorex hoyi*
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*

Palouse Prairie

Lampreys

Pacific Lamprey *Lampetra tridentata*

Fishes

Steelhead (Snake River basin) *Oncorhynchus mykiss gairdneri*
Chinook Salmon (Snake River fall–run) *Oncorhynchus tshawytscha*
Chinook Salmon (Snake River spring/summer–run) *Oncorhynchus tshawytscha*
Bull Trout *Salvelinus confluentus*

Reptiles

Ring–necked Snake *Diadophis punctatus*

Birds

Merlin *Falco columbarius*
Long–billed Curlew *Numenius americanus*

California Gull *Larus californicus*
Yellow–billed Cuckoo *Coccyzus americanus*
Grasshopper Sparrow *Ammodramus savannarum*
Black Rosy–Finch *Leucosticte atrata*

Mammals
Fringed Myotis *Myotis thysanodes*
Townsend's Big–eared Bat *Corynorhinus townsendii*
Gray Wolf *Canis lupus*

Riparian Woodland

Amphibians
Coeur d'Alene Salamander *Plethodon idahoensis*

Reptiles
Ring–necked Snake *Diadophis punctatus*

Birds
Northern Pintail *Anas acuta*
Harlequin Duck *Histrionicus histrionicus*
Hooded Merganser *Lophodytes cucullatus*
Upland Sandpiper *Bartramia longicauda*
California Gull *Larus californicus*

Mammals
Pygmy Shrew *Sorex hoyi*
Fisher *Martes pennanti*
Canada Lynx *Lynx canadensis*