

## 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 45–54°F (7–12°C). 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*<sup>a</sup>



## 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*<sup>a</sup>  
Sockeye Salmon (Snake River) *Oncorhynchus nerka*  
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*  
Sand Roller Percopsis *transmontana*<sup>a</sup>

## Amphibians

Woodhouse's Toad *Bufo woodhousii*  
Idaho Giant Salamander *Dicamptodon aterrimus*<sup>a</sup>  
Coeur d'Alene Salamander *Plethodon idahoensis*<sup>a</sup>

## Reptiles

Northern Alligator Lizard *Elgaria coerulea*  
Ring-necked Snake *Diadophis punctatus*<sup>a</sup>

## 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*<sup>a</sup>  
An Oregonian (Lower Salmon River) *Cryptomastix mullani latilabris*<sup>a</sup>  
An Oregonian (Lower Clearwater River) *Cryptomastix mullani tuckeri*  
An Oregonian (Hells Canyon) *Cryptomastix populi*  
Humped Coin *Polygyrella polygyrella*<sup>a</sup>

#### Insects

A Mayfly *Paraleptophlebia traversae*<sup>a</sup>  
A Mayfly *Parametetus columbiae*  
A Spur-throat Grasshopper *Melanoplus digitifer*  
A Spur-throat Grasshopper *Melanoplus payettei*  
A Stonefly *Capnia lineata*<sup>a</sup>  
A Stonefly *Capnia zukeli*<sup>a</sup>  
A Stonefly *Perlomyia collaris*<sup>a</sup>  
A Stonefly *Soyedina potteri*<sup>a</sup>  
A Stonefly *Taenionema umatilla*<sup>a</sup>  
Gillette's Checkerspot *Euphydryas gillettii*

<sup>a</sup> 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 (km <sup>2</sup> )	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

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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

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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*  
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### Reptiles

Ring-necked Snake *Diadophis punctatus*

### Birds

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

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Yellow-billed Cuckoo *Coccyzus americanus*  
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Black Rosy-Finch *Leucosticte atrata*

Mammals

Fringed Myotis *Myotis thysanodes*  
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Gray Wolf *Canis lupus*

Riparian Woodland

Amphibians

Coeur d'Alene Salamander *Plethodon idahoensis*

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