# The Shrub-Steppe of North Central Washington From Moses Coulee to Beezley Hills

# Location

Ecological studies of the Columbia Plateau have identified the Moses Coulee-Beezley Hills area as a top conservation priority. Containing more than 200,000 acres, it is one of the largest relatively intact shrub-steppe areas remaining in the state. It extends from the topographically dramatic Moses Coulee in Douglas County to the gently undulating Beezley Hills in Grant County. This vast expanse includes many privately owned ranch and farm lands, as well as areas owned by The Nature Conservancy (a nonprofit conservation organization), the U.S. Bureau of Land Management (BLM), the Washington Department of Fish and Wildlife (WDFW), and the state Department of Natural Resources (DNR). (See map.)

#### **Ecology**

Most of Washington's shrub-steppe, or sagebrush country, has been converted to farmland or other development. Scientists estimate that about two-thirds has disappeared entirely, and much of what is left is fragmented and weedy. The protection and restoration of this remaining shrub-steppe is thus vital.

Shrub-steppe is indeed dominated by sagebrush. But it also contains a remarkable diversity of shrubs, grasses, wildflowers, and wildlife. Bitterbrush, saltbush, and several species of sagebrush are interspersed with bunchgrasses and a colorful array of flowers, such as balsamroot, lupine, and desert parsley. Small mosses and lichens form a fragile living crust protecting the soil. Talus slopes, basalt cliffs, springs, and streams add to the diversity, creating homes for a rich mosaic of living things.

This diverse landscape supports some of the state's most imperiled wildlife. All of Washington's known populations of the pygmy rabbit, for instance, live here, as does the spotted



pygmy rabbit

bat, one of the rarest bats in North America. Several birds thrive here as well, including the loggerhead shrike, sage sparrow, and ferruginous hawk. And in the evenings, the howl of the coyote adds to the landscape's haunting beauty

#### Geology

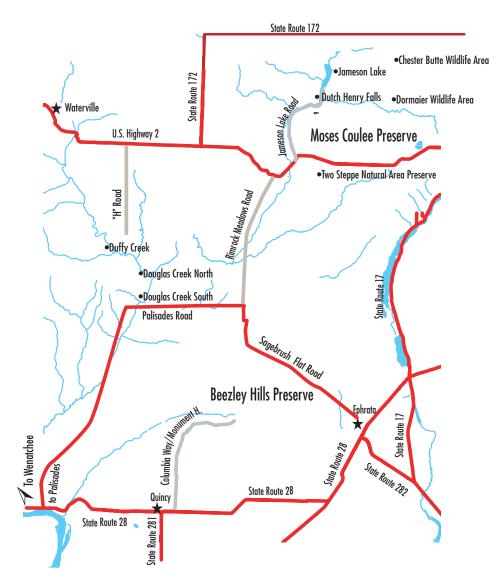
Moses Coulee's spectacular landforms reflect some of the most dramatic geological history on earth. The story began about 17 million years ago when hundreds of massive volcanic eruptions spread lava across the Columbia Plateau. Several basalt flows can be seen today in the towering walls that form Moses Coulee.

During the last Ice Age, about 15,500 to 12,500 years ago, ice dams blocking Glacial Lake Missoula gave way, sending catastrophic floods across parts of Montana, Idaho, and northeastern Washington and carving gigantic stream channels. Laden with massive loads of sand, rock, and icebergs, the floodwaters followed the course of the present-day Columbia River until the Cordilleran ice sheet blocked that flow, sending muddy torrents of water into Grand and Moses Coulees and past the Beezley Hills. Over time the Okanogan lobe of the ice sheet continued to move south, blocking any later floodwaters from entering Moses Coulee and bulldozing a 200-foot high accumulation of rock debris known as the Withrow Moraine.

Today, hanging valleys, giant ripple marks, and gravel bars in Moses Coulee help visitors see how catastrophic flooding once shaped this broad and deep coulee. Remnants of the continental glaciation that further shaped the region are visible near Dutch Henry Draw where the Withrow Moraine crosses Moses Coulee.

#### **Human history**

Tribes of semi-nomadic people began hunting, fishing, and gathering plants within the Moses Coulee-Beezley Hills region more than 11,000 years ago. In the spring, people of the Chief Moses tribe, for whom the



coulee is named, left their winter encampments along the Columbia River to follow trails throughout the Waterville Plateau in search of game and food plants.

Fur traders, explorers, freighters, and homesteaders later followed the trails the Indians had made, adopting the French word "coulee" to describe the broad, dry wash they found. By the mid-1800s, thousands of cattle were driven from Oregon through the coulees to mining areas in British Columbia. As the promise of land continued to lure more people west, dryland wheat farms and irrigated apple orchards began to spring up within the protective hills and coulee walls of the region and across the Waterville Plateau. A combination of drought, crop failure, historic overgrazing, and hard economic times forced some homesteaders to abandon

their lands in the 1920s and '30s. Many of those who farm and ranch on this land today trace their roots to the homestead era.

# The community today

Private and public landowners are working together in this shrub-steppe ecosystem to develop watershed and habitat conservation plans, to control weeds and fire, and to protect and restore the natural communities that provide homes to a rich variety of wildlife. These partners are also cooperating to provide areas where the public can experience the beauty of the shrub-steppe, learn more about its natural and cultural history, and help in its restoration.





# Places you can visit

#### Nature Conservancy Preserves

**Dutch Henry Falls Trail:** 4 mi. north of US 2 on Jameson Lake Rd. on west side of road.

#### **Beezley Hills Monument Hill Trail:**

Turn north on Rd. P east of Quincy. Travel ~ 4 mi. to top of hill and trailhead on east side of road.

#### WDFW

Fishing access at **Jameson Lake:** 6 mi. north of US 2 on Jameson Lake Rd. **Chester Butte Wildlife Area:** 5 mi. south of SR 172 on Rd. L NE to Rd. 9 NE. Turn west, go 2 mi. on Rd. 9 NE to gate.

**Dormaier Wildlife Area:** 9 mi. south of SR 172 on Rd. L. NE. Turn west on Rd. 5 NE. Go 3.5 mi. to gate.

## BLM

**Douglas Creek North:** From US 2 travel 6.4 mi. on Rd. H and turn right. Park at gate.

**Douglas Creek South:** From Palisades Rd. travel north 1.5 mi. on Wagon Rd. **Duffy Creek:** Take Waterville S. Rd. to Titchenal Canyon Rd. Follow to top of grade.

# When planning your trip and visiting this region please remember to:

- Take only photographs.
- Stay on designated roads and trails.
- Respect private property.
- Pack your trash.
- Check with contacts listed below for seasonal and use restrictions.

#### BLM

915 Walla Walla Ave. Wenatchee, WA 98801 509-665-2100

#### WDFW

54 Moe Rd. Brewster, WA 98812 509-686-4305

## DNR

713 Bowers Rd. Ellensburg, WA 98926 509-925-0908

The Nature Conservancy 610 N. Mission, Suite 1B Wenatchee, WA 98801 509-665-9920



Natural Resources