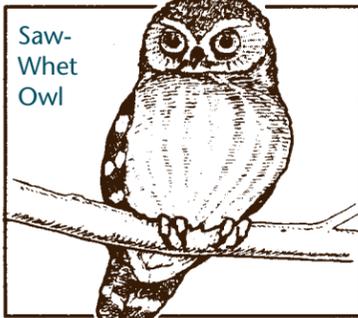


7 THE OLD SKI RUN/THE FOREST RECOVERS: This thin swath of densely packed young trees is an old ski run. Built in the 1950's, the ski run failed due to lack of snow. Nearby trees re-seeded the exposed slope naturally and produced the thick growth you see today.

This is a great place to look for owls. Both the Northern Saw-Whet and Pygmy-Owls in particular have been seen here. If you can learn to imitate the Saw-Whet you may have a special experience: a nearby Saw-Whet may answer you, or a posse of songbirds may come to scold or chase you away.

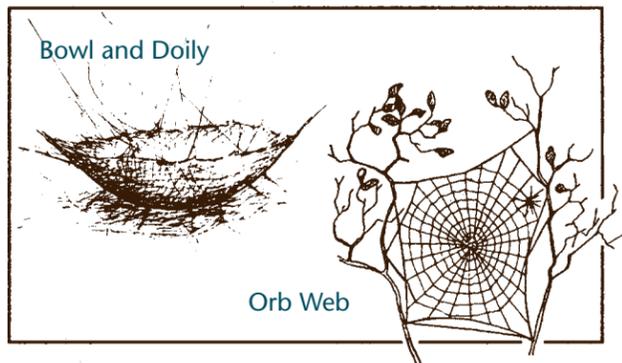


Saw-Whet Owl

Great Horned Owls are also common between here and the parking lot. With silence and a keen eye, you may spy a resting owl near the tops of the pine trees.

Have you noticed any of the numerous spiders webs along the trail? The underbrush provides good support for several species of web builders. Perhaps the most familiar of spider webs is the typical orb web that spirals around a set of radial support lines.

Another common style of spider architecture is that of the bowl and doily web. The doily provides a resting site for the spider waiting to entangle its prey in the bowl above. Near the ground you can find a third type of web – a funnel web. This spider rests deep within the funnel. A jerk of the silken threads means possible food.



Bowl and Doily

Orb Web

Consider the number of insects that must exist to feed these web builders. Then consider the many more insects that are needed to feed those spiders that do not spin webs. This thought may leave you with an appreciation for the great numbers and kinds of animals that interact within this forest habitat.

From the bench you can take the (right-hand) trail back through the thicket to the parking lot completing the Pine Ridge Trail loop or veer left and return by way of the Sunset Trail. The Sunset Trail will take about 30 minutes to complete and is a very pleasant walk through a mature Ponderosa Pine forest.

8 THE THICKET: These small trees and shrubs grow in a constant pocket of moisture, a spring. This continual source of underground water allows rich growth here. The resulting abundance of food and protective cover attract a great diversity of mammals and birds: deer, mice, voles, porcupines, chipmunks, house wrens, flycatchers, sparrows, finches, and warblers.

One easily identified bird is the Rufous-sided Towhee, with its white breast, rusty (or rufous) colored sides, black head and back, and bright red eyes. They are commonly seen in the undergrowth, kicking leaves helter skelter in search of seeds and insects. ■



Rufous-sided Towhee

Red Squirrel

Thank you for visiting Kamiak Butte County Park. Kamiak Butte has been designated a National Natural Landmark and the Pine Ridge Trail is recognized as a National Recreational Trail within the National Trails System. The Whitman County Parks Department manages the Park to protect and enhance the natural features that Kamiak Butte has to offer. We appreciate your help in keeping the Park clean, quiet and naturally beautiful. Come again and enjoy the Park with family and friends.



This brochure is presented cooperatively by:
The Whitman County Parks and Recreation Department



The National Park Service

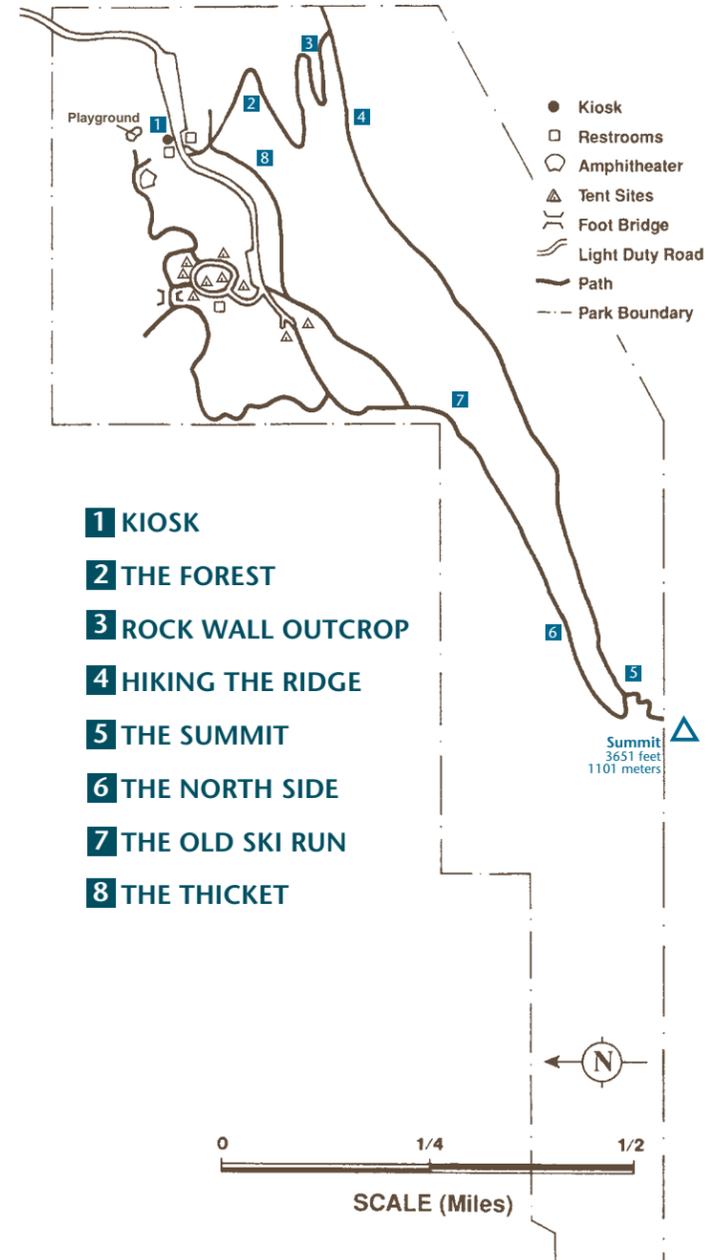


The Palouse Audubon Society
Original Drawings by Paul Catts and Lorraine Ashland

For those interested in further information we have included this suggested reading list:

Peterson's Field Guide to Western Birds, Roger Tory Peterson, Third Edition, Houghton Mifflin, 1998.
Birds of North America, Robbins, et al, Golden Press, 1983.
National Geographic Birds of North America, Jon L. Dunn, Third Edition, National Geographic Society, 1999.
Trees and Shrubs of Washington, C.P. Lyons, Lone Tree Publishing, 1999.
National Audubon Society Field Guide to North American Insects and Spiders, Lorus J. Milne, Knopf Publishing, 1980.
Insects: A Golden Guide, Zim and Cottam, Golden Books Publishing Company, 1987.
A Field Guide to Pacific States Wildflowers, Roger Tory Peterson, Second Edition, Chapters Publishing Limited, 1976.
Wayside Wildflowers of the Pacific Northwest, Dee Strickler, Falcon Publishing Company, 1993.
Roadside Geology of Washington, Alt and Hyndman, Mountain Press Publishing Company, 1986.

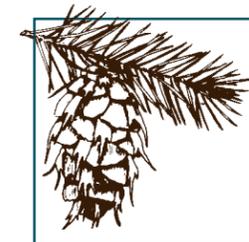
Kamiak Butte County Park



- 1 KIOSK
- 2 THE FOREST
- 3 ROCK WALL OUTCROP
- 4 HIKING THE RIDGE
- 5 THE SUMMIT
- 6 THE NORTH SIDE
- 7 THE OLD SKI RUN
- 8 THE THICKET

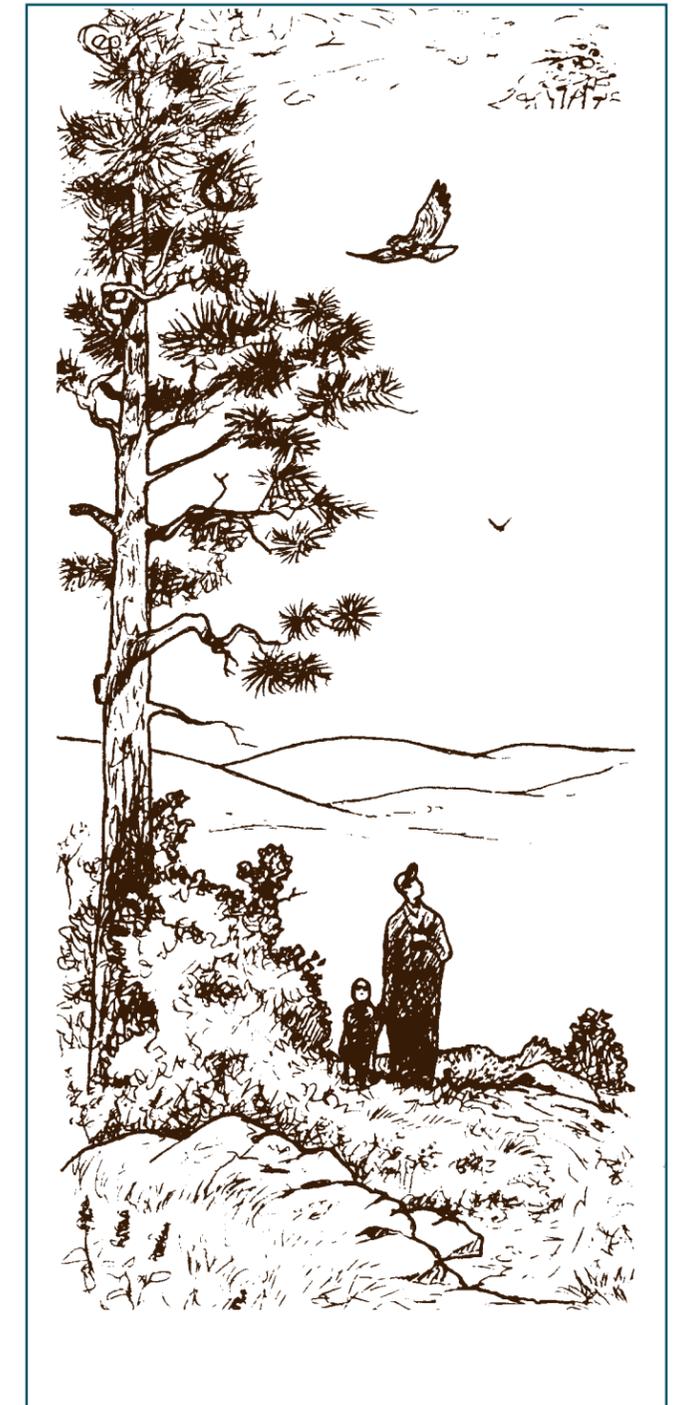


WHITMAN COUNTY
Parks and Recreation Department
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Douglas-fir cone

Self Guiding Nature Walk for the Pine Ridge Trail at Kamiak Butte





Douglas-fir cone

Self-Guided Nature Walk for the Pine Ridge Trail at Kamiak Butte

Welcome!

Use this brochure to help recognize the natural features, flora and fauna of Kamiak Butte and the surrounding area. Rising above the rolling farmlands of the Palouse, like an island in the ocean, Kamiak Butte is home to a diverse forest community of plants and animals.

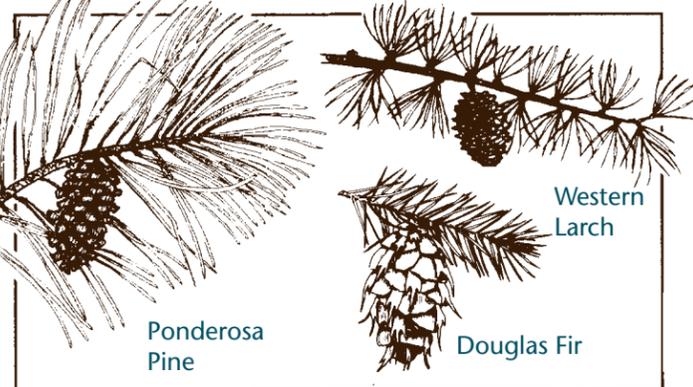
Return here often to get to know the Park and its seasons. Kamiak Butte is a 298-acre natural area, host to over 130 bird species (both migratory and permanent), more than 170 plant species, and upwards of 30 mammal species.

(Note: some plants and animals found at Kamiak Butte are endangered species. As with all plants and flowers in the Park, we ask that you only take pictures and memories, and leave only footprints.)

1 You are at point #1 on the map, the Kiosk or information center. You can hike to the ridge top (Stop # 4) in about 20 minutes or you can hike the entire 2.5 mile loop trail in an hour or two. Restrooms and water are not available along the trail.

The Self-Guiding Nature Walk is intended to begin in the day use area, near point 1 on the map, however, some hikers may want to alter their route. In which case, simply reverse the order in which you review the brochure. (You will find that beginning up the West Side of the trail is a more strenuous hike.)

2 THE FOREST: Carefully cross the road and begin hiking up Pine Ridge Trail. You have entered a forest of Ponderosa Pine, Douglas Fir, and Western Larch. Close your eyes, take a deep breath, smell the forest fragrances, listen. Perhaps you will hear the chattering alarm of the red squirrel, the nasal notes of a nuthatch, the hammering of a woodpecker, or the whisper of the wind.



Ponderosa Pine

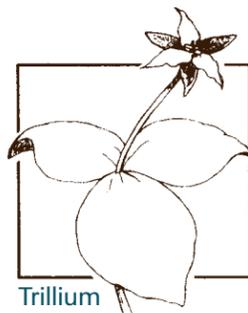
Douglas Fir

Western Larch

Look up to the treetops. Notice the long needled Ponderosa Pine (*Pinus ponderosa*), Kamiak Butte's most common tree. Compare the needles of the Ponderosa Pine with the shorter needles of the Western Larch and Douglas-fir. Needle length and arrangement are keys to plant identification.

You can also identify trees along the trail by the cones they drop. Native American legend describes bracts of the Douglas-fir cone (*Pseudotsuga menziesii*) as a mouse's tail with the back feet sticking out of each seed cavity.

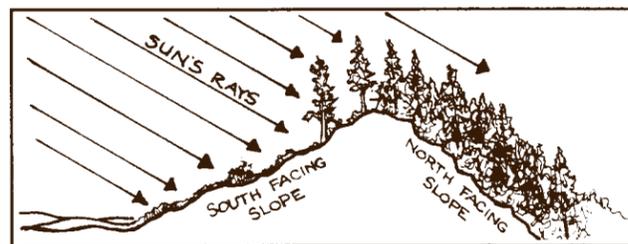
The only true deciduous (plants that shed their leaves each year) conifer (trees with cones) on Kamiak Butte is the Western Larch (*Larix occidentalis*), also known as Tamarack. In the Fall, the needles turn brilliant yellow-orange before dropping from the branches. Note the starburst-cluster arrangement of the needles as compared with the bottlebrush arrangement of the Douglas-fir.



Trillium

In the Spring, shade-loving flowers such as Trillium (*Trillium ovatum*), Yellowbells (*Fritillaria pudica*), or Fairy Slippers (*Calypso bulbosa*) can be found along the trail in the underbrush. Sensitive to disturbance, Trilliums, if picked, take up to five years to bloom again. Please do not pick any plants or flowers.

Why is the forest so dense here? The answer lies in the steepness of the slope and direction of the Sun's travel. Notice the cool air of the forest. Because of the Butte's steep north-facing slope, direct sunlight only falls on this side a couple of hours a day and during winter months doesn't reach the North Slope at all. The result of this indirect lighting is long shadows and cooler temperatures. Here the snow melts gradually. Water slowly percolates into the ground and is available to plants thus the thick forest, dense underbrush, and cooler temperatures.



3 ROCK WALL OUTCROP: Before you is a huge quartzite outcrop, which forms the heart of Kamiak Butte. This quartzite butte towers above a layer of basalt, which underlies the soil of the fields below. Millions of years ago, this area was an ancient sea floor. The floor was compressed under tremendous pressure, and pushed upward to form a mountain range. Steptoe Butte and Kamiak Butte are some of its highest peaks. If you pick up a small rock from the trail you'll notice the tiny grains of sand from the ancient sea floor.

Here the soil is too shallow and the slope too steep for large conifer trees to grow into a dense canopy. As a result, brushy plants such as Ninebark (*Physocarpus malvaceus*) and Ocean Spray (*Holodiscus discolor*) flourish and provide excellent cover for many rodents, birds, and insects.



4 HIKING THE RIDGE: As you reach the crest of the Butte, the forest thins abruptly and a grassland community thrives on the south slope. This community is a remnant of the grassland prairie that once dominated the Palouse region. What explains this drastic change from the dense forest you just hiked?

This is a south-facing slope. Shallow soil and the sun's direct rays warm the soil creating difficult growing conditions for the Douglas-fir and Western Larch. Here, even the deep-rooted Ponderosa Pines struggle for enough moisture and soil to grow and survive.

Look around you for the many different views. Far to the north unfolds the Palouse Prairie. Steptoe Butte is a prominent landmark 15 miles to the northwest. It rises to an elevation of 3,612 feet (1101 meters), 29 feet (9 meters) lower than Kamiak Butte's peak. To the South are Moscow and Pullman. Looking far to the south you can see the Blue Mountains when the weather is clear.

Nearby, the treetops provide a bird's-eye view. One can spot Ruby or Golden-crowned Kinglets as they dart with nervous activity from branch to branch. Although Kinglets are small and difficult to spot, they can be recognized by their high-pitched "tse tse" notes. Red Crossbills, Pine Siskins, Black-capped Chickadees, and Juncos are commonly seen here. While admiring the spectacular view of the rolling Palouse, consider the geologic events that formed the fertile fields below you. Fissures opened the earth's crust allowing massive basalt lava flows to fill valleys, cover small mountains, and surround the peak where you are standing. Soon after the sea of lava cooled, wind-blown silt (or loess) was blown in covering the lava fields and creating the rich soil found here today—the Palouse.



Red Cross-bill

Golden-crowned Kinglet

Hiking the backbone of this ancient ridge you may see Marsh Hawks (Northern Harriers) and Red-Tailed Hawks patrolling the fields for small mammals. Proportionately, a Red-Tailed Hawk has eyes larger than yours and is able to see eight times more clearly. This hawk can see a rabbit up to one mile away!

Frequently a Townsend's Solitaire may lead you along the trail, pausing as if to wait for you. Watch for Hummingbirds in the upper branches of shrubs. You might see a Black-chinned, Rufous, Calliope or, occasionally, an Allen's Hummingbird.

The wildflowers on the ridge bloom as early as February and reach their peak during May and June. Shooting Stars (*Dodecatheon pulchellum*), Indian Paintbrush (*Castilleja hispida*), Arrow Leaf Balsam Root (*Balsamorhiza sagittata*) and many other sun-tolerant plants carpet the southern slopes. Notice the open spaces between the wildflowers and bunch grass, far different from the more dense vegetation of the North Slope.

Midway up the ridge look for the remains of dead and damaged trees. These scars are a result of fire, a very real reminder of how fragile the ecosystem of Kamiak Butte really is. The charred remains now serve as shelters, resting areas, and a source of food for many birds and insects. One common bird at Kamiak Butte, the Northern Flicker, builds its nest in the cavities of dead trees.



Snag with Northern Flickers

5 THE SUMMIT: You are at the junction of the Pine Ridge Trail loop and a spur (out and back) trail leading to the summit of Kamiak Butte. This trail is on private land, please respect the landowner's property.

6 THE NORTH SIDE: As you descend the sunny ridge top down the cool, shaded North Slope, notice again the sudden change in vegetation. Several species of mushrooms grow here. A common variety is the Black Morel (*Morchella elata*), a mushroom which looks like the combination of a small sponge and a beehive. (Black Morels and other mushrooms make some people very sick. Please do not eat them.)

Due to the coolness of this area the tree and other shrub species are similar to those at higher mountain elevations. For example Grand Fir (*Abies grandis*), identified by its flat needle arrangement, grows here.

Stop, look, and listen for songbirds. You may hear several kinds of Warblers—Townsend's, Audubon's, and Yellow are common. Three species of Nuthatches are also found here—the Pygmy, White-breasted, and Red-breasted.