

General Information

Shadow Lake Bog

Shadow Lake Bog is located in southeastern King County and is one of the few remaining peat bogs in King County.

Shadow Lake Bog is a type of wetland that accumulates peat. A glacier formed its bowl-like depression and little water flows in or out of the bog. The bog supports acidic-loving mosses, particularly Sphagnum moss. The Sphagnum releases tannins and acids. These make the bog water acidic and oxygen poor, poisoning the bacteria that cause decomposition. These mosses grow from the edge of the bog's "eye", or center, out over the water, forming mound-like mats.

Bog Functions

Shadow Lake Bog's most important function is as a natural deterrent to flooding. The great mounds of Sphagnum moss absorb many times their weight in water.

Left wet and undisturbed, the mossy, waterlogged environment of the bog also plays a vital role in regulating the climate. Dead plants can lie in an acidic bog for thousands of years without decaying or turning into soil. By storing carbon in the form of slowly decaying plants, bogs reduce the amount of carbon dioxide released into the atmosphere.

Scientists use bogs as nature's time capsules to search for clues of the past. Pollen from trees of 10,000 years ago has been found in bogs, helping researchers discover what plants grew then and in what climate. Entire skeletons of extinct animals have been found in bogs around the world.

Bog Plants

Shadow Lake Bog's dominant tree is the Western Hemlock. The Western Hemlock provides important wildlife habitat. Stunted by lack of nutrients due to the acidic conditions and with rainwater as its sole source of water, this tree may only reach 30 to 35 feet.

Among the specialized plants that survive in Shadow Lake Bog are Labrador Tea and Bog Laurel. Bog Laurel has fungus partners around its roots enabling it to prosper in an acid environment. At the base of the Bog Laurel, thrusting up through the Sphagnum, is the tiny Bog Cranberry.

Deep in the bog, among the drier hummocks, is the diminutive insect-eating Roundleaf Sundew.

Birds

Two common birds at Shadow Lake Bog are the Bald Eagle and Pileated Woodpecker. Bald Eagles nest close by and fish in Shadow Lake. Pileated Woodpeckers use the standing dead trees to hollow out their nests. They find their food in these trees by listening to the insects under the surface. The bog also hosts Barn Owls and Red-Tailed Hawks.

Mammals

Although few animals live in a bog, many Mountain Beavers live in the upland wetlands just west of the Shadow Lake Bog. Black-tail Deer are common and Black Bear, Coyotes, Raccoons, Porcupines, Rabbits, Opossums, Squirrels and Voles are busy among the trees and undergrowth. Fox and Cougar once roamed here and recently a Bobcat took up residence. Elk still occasionally travel through the bog. The bog's abundant Little Brown Bats keep mosquitoes in check.

Amphibians

Northwestern Salamanders, Long-toed Salamanders, Pacific Chorus Frogs and Red-legged Frogs are abundant in the buffers around Shadow Lake Bog. The Frog Pond on the edge of the bog is a rich habitat for amphibians.

Insects

Bog water is acidic and burrowing insects are scarce in a bog. This same environment works fine for certain spiders and winged insects. However, the deeper into the bog one travels, the fewer insects will be present.

Shadow Lake Bog History

Duwamish Indians came to harvest wild cranberries in Shadow Lake Bog. They kept the Labrador Tea and Bog Laurel pulled out of the bog to encourage a cranberry crop. The bog Laurel and Labrador Tea (poisonous if brewed too strong) were used for medicinal teas and infusions for skin ailments and to heal open wounds.

European settlers arrived in the 1800s and cut the great trees surrounding the bog for timber and farmland. Then in the 1930s the southern area of

Shadow Lake Bog was drained and planted with potatoes. This lowered Shadow Lake and dried areas of the bog.

In the 1970s recreational lots were sold along the northwest side of Shadow Lake and gravel fill was hauled in for a paved county road. Access for the lot owners soon brought problems of vandalism, dumping, and arson.

The 1995 Watershed Community Link Stewardship Training program brought Max Prinsen and Erin Wojewodzki-Prinsen, property owners, and the Rainier Audubon Wetland Team together and they took Shadow Lake Bog under their wing. Max and Erin had 1 acre of property and Max's parents had 5 acres in the Shadow Lake area. They felt it was important to preserve one of the few remaining Sphagnum Moss Bogs in our area. SHADOW now protects bog and forested wetland totaling 94 acres!

From 1996 to the present, Shadow Lake Bog has experienced growth, restoration, and conservation through a series of grants, donations, and partnerships. Through the leadership of its Board members and dedicated individuals, the bog has become a jewel in the community and a priceless heritage for future visitors. By embracing the values of stewardship, Shadow Lake Bog hopes to instill in visitors a personal sense of commitment to ecological responsibility.