

Watershed Heroes Dennis Plank and Gail Trotter: Protecting Glacial Heritage Preserve, our Rare Prairie Ecosystem

Dennis Plank and Gail Trotter have dedicated their lives to the restoration of lowland prairie ecosystems — in the Pacific Northwest known more for its majestic old growth forests and iconic salmon runs.

Here in the lowlands of the Chehalis River Basin, we have one of the rarest ecosystems in the country --open grassy and wildflower prairie savannas created 15,000 years ago by retreating glaciers. According to the US Fish and Wildlife Service, these “fertile landscapes supplemented by glacial till, became a hotbed of ecological activity as dozens of species insects, plants, mammals and reptiles migrated to open grasslands.” And for thousands of years, native people used fire to sustain these prairie lands, and harvested the bounty of wildflowers, bulbs and wildlife for food and medicine.

Much of our prairie lands have been lost over the last couple of centuries due to a range of land use activities and fire suppression. Today, only about 2% of the areas original prairie habitat remains.

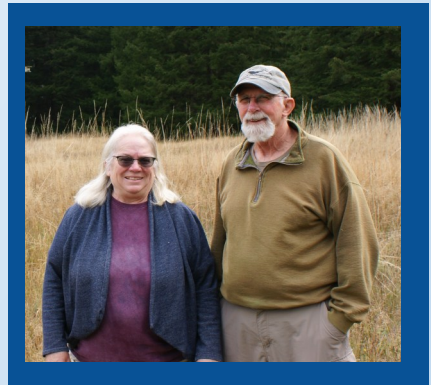
In the Chehalis Basin, dedicated volunteer conservationists have been diligently collaborating with scientists to help preserve, restore, and maintain our unique prairie lands.

Two of these enthusiastic volunteers are Dennis Plank and Gail Trotter. They have spent thousands of hours over 20+ years in the protection and restoration of prairie lands.

Gail, originally from the Seattle area volunteered with the US Forest Service, the Washington Native Plant Society, and the Nature Conservancy starting in the mid-1990's. Gail was 'hooked' and found herself spending her free time all over Washington state volunteering with the Nature Conservancy.

She discovered that 'Scotch Broom pulls' happened every second Saturday of the month at the Glacial Heritage Preserve (GHP), near Littlerock and said, "I drove down to Littlerock and GHP on and off for 15 years before I retired. When I retired, I decided on Thurston County as my new home and have been volunteering weekly for years... This ecosystem is a special place! I love that the consistency of my volunteerism has allowed me to see and know its changes."

Gail Trotter and Dennis Plank out on the prairie in the fall of 2024



Story and Photos (unless noted) by Kathy Jacobson, for the Chehalis Basin Collaborative for Salmon Habitat

In the fall of 1998, Dennis was out with his hiking group, and a friend told him about the volunteer efforts happening at Glacial Heritage Preserve. “I grew up with a love of plants and gardening” said Dennis and so he also began coming to GHP to pull Scotch Broom. “I fell in love with the prairies. That first spring seeing the wildflowers was really neat,” enthused Dennis. And while volunteering, Dennis met and married another fellow volunteer and now lives on prairie land near GHP.

Scotch Broom is an introduced plant that forms dense mats, and crowds out native plants and their habitat while reducing forage for elk, deer, and other wildlife. It's an “allopathic plant” which means that it sends out chemicals to out-compete other plants. Because of its affect on other species, human have been working to remove Scotch Broom to restore ecosystems. It must be removed before it goes to seed- as one plant can have up to 10,000 seeds! Its seeds can be viable in the soil for up to 50 years.

Invasive Scotch Broom in Bloom



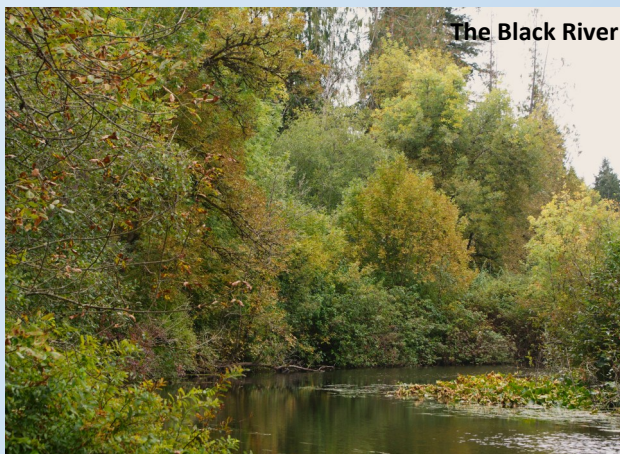
Gail noted, "When Dennis and I first started to help remove the invasive Scotch Broom here, there were fields and fields of Scotch Broom taller than us! " As Gail mused about her Scotch Broom pulling, "Even though it's hard, and I'm not athletic -- I got one more weed! The challenge is so worth it, seeing the value of my efforts, noticing the change over time, and helping to return biodiversity to the prairie." Dennis added, "Most of the weed pulling was done by volunteers while a small staff mowed the rest to keep it from setting more seed."

All of the volunteer restoration work, like that of Gail and Dennis, has paid off. GHP is now a thriving prairie oak ecosystem. Its native short-grass prairie is abundant with birds, mammals, including elk, camas and other wildflowers, and insects. Gail has seen elk on all four corners of the prairie. The biodiversity also adds value to our human lives as local tribes have intertribal gatherings here to again harvest camas bulbs for food and for gifting — the result of the work of volunteers and staff removing invasive Scotch Broom and other non-native species, controlled burns, the limited use of herbicides, and the planting of native species.

"When I first started volunteering," Dennis said, "Glacial Heritage Preserve had large patches of mature Scotch Broom and now the entire preserve (about 700 acres of formerly infested area) can be controlled by hand pulling alone."

"I just feel awe!" remarked Gail.

"There is also a direct connection between the health of the prairie and the health of the adjacent Black River," shared Dennis. "We have osprey coming back to nest and feed their young here on the prairie. The osprey collects fish from the river to feed their young and rear their young here. From the prairies point of view, it is all one big ecosystem – and keeping prairies healthy affects water quality."



Flowering Camas at Glacial Heritage Preserve

"At the beginning of our volunteering," Dennis added, "there were just three Western Meadowlark male birds singing out on the GHP prairie and now there are 8-10 male birds singing here and are spreading to Mima Mound prairies. They are coming back consistently and staying around. Some Western Meadowlarks even took baths last year in my nearby pond!"

Gail, with a smile on her face said, "It is a joy to be out pulling weeds and hear Meadowlarks sing."

Western Meadowlark



Credit: ebird.org

Many say that their songs are some of the sweetest songs to hear in nature. Male Western Meadowlarks have a complex, two-phrase "primary" song that begins with 1–6 pure whistles and descends to a series of 1–5 gurgling warbles and may have a repertoire of up to a dozen songs. Here's a link their song: https://www.allaboutbirds.org/guide/Western_Meadowlark/sounds

Dennis and Gail alongside numerous volunteers and restoration scientists have also helped to re-establish the once endangered and vital prairie flower, the Golden Paintbrush.

Golden Paintbrush



Once, one of only 13 known populations of Golden Paintbrushes was in our South Sound Prairies (now we have 48!). Prairie volunteers have helped to collect, clean, and propagate the once endangered plants. "Our South Sound Prairies now have the largest population of Golden Paintbrush in the world," noted Sanders Freed, South Puget Sound Restoration Manager with the Center for Natural Lands Management

Research scientists have discovered that several species, including the rare Taylor's checkerspot butterfly, lay eggs on Golden Paintbrush, and its larva use the plant as a food source.

"It is so fascinating how much we have learned from the scientists doing research out on the prairie, from the restoration crews, the folks collecting seeds – It all adds to the whole story of what it takes for things to thrive" noted the volunteers.

In 2004, the Friends of Puget Prairies (FOPP) was created to have a parent organization for Prairie Appreciation Day (PAD). Open to the public just one day a year, PAD is an exceptional opportunity for the public to enjoy the flowers of our native Washington prairies. Visitors are also encouraged to join and participate in PAD's iNaturalist Project.

"It's all about communicating the importance of our prairies. PAD happens each year on the second Saturday in May. This year the 30th Prairie Appreciation Day will be held on Saturday, May 10th from 10am to 2:00. "Everyone leaves PAD with a smile. It's a lot of work, but so worthwhile," said Gail. To learn more, check out: www.prairieappreciationday.org/

Young Boy in Lady Bug Costume at PAD



Today, CNLM <https://www.cnlm.org/> manages GHP (1,000+ acres) and with staff and volunteers has conducted restoration of the site since 2011. The preserve provides refuge for threatened or endangered species and protects rare and sensitive habitat. GHP is owned by Thurston County and the Washington Department of Fish and Wildlife.

CNLM and the Friends of Puget Prairies welcomes volunteers to assist in a variety of tasks including removing invasive species, monitoring native plants, collecting, and spreading seeds, and participating in PAD. Nursery volunteers assist in wild seed collection, weeding raised beds, planting, and seeding plugs, harvesting seed, and participating in native plant workshops. Website: <https://www.cnlm.org/native-seed-nursery/>

To learn more or to volunteer on the Glacial Heritage Preserve prairie, please email: ssvolunteers@cnlm.org

This publication is part of the [Chehalis Basin Collaborative for Salmon Habitat](#) "Watershed Hero" series to celebrate the work of Chehalis Basin residents for their restoration of native ecosystems that salmon and other wildlife species depend on. To learn how you can be involved in projects that support salmon recovery, visit: www.chehalisleadentity.org. Or contact Watershed Coordinator, Kirsten Harma: (360) 488-3232