

## Introduction

The objective of this proposal is to initiate the restoration of roughly six acres of forest habitat on Weaverling Spit. Our long term goal to restore degraded forest habitat on the spit envisions a more complex forest plant community capable of providing healthier wildlife habitat and native plant species traditionally used by native people. The spit is located on the western side of Fidalgo Bay in Northern Puget Sound; it includes over 2000 feet of shoreline and 22 acres of upland of which seven acres remain undeveloped.

The Samish Indian Nation purchased Weaverling Spit in 2004. It had for centuries been the site of tribal ceremonies and as such retains important cultural value for the tribe. It is our hope that by initiating this project the Samish Natural Resource Department can restore a small piece of lowland forest which will continue to provide educational, spiritual, and restorative properties for the tribe and the public, and habitat for our local wildlife.

## Current Issues

In the summer of 2006, a volunteer with the Skagit Salal Chapter of the Washington Native Plant Society provided the Samish Natural Resource Department with a list of the plant species on Weaverling Spit. One Hundred and Seventy plant species were identified. Of these, 83 (49%) are native and 87 (51%) are non native. Of the non-native species a few are aggressive invaders and pose a serious threat to the spit's native plant community. The greatest degree of infestation is from English Ivy and is in need of immediate attention.

The ivy incursion on Weaverling Spit is severe. It is affecting the ground, understory, and upper canopy layers of the forest and covers an area of approximately two acres. The invasion is particularly extensive in some areas where the forest floor is covered in a dense mat of twisted vines, a foot thick in places, creating a virtual 'ivy desert'. Many of the spit's beautiful tree species such as the madrona (*Arbutus menziesii*), Douglas fir (*Pseudotsuga menziesii*), big leaf maple (*Acer macrophyllum*), and Western red cedar (*Thuja plicata*) are immediately threatened. Within the major infestation area ninety trees were identified as threatened and roughly half of those trees are considered severely threatened. Trees were documented if they had a minimum diameter at breast height of approximately 8" (Table 1).

Table 1

Tree species	# of threatened
Western red cedar	3
Madrona	27
Douglas Fir	43
Big leaf maple	11

## What we propose to do

The immediate goal of the project is to eradicate the two acre ivy infestation. Ivy removal represents one part of the first phase in restoring this forest patch and is the primary objective at this time in requesting funding from the Mountaineers Foundation. The waxy leaves of English ivy mean herbicide is not an effective eradication option (The Nature Conservancy, 2006). Our preferred method will be hand pulling, which is widely regarded as the most effective means of removal (King County, 2006) and which allows us to avoid herbicides thus limiting ecological impact on native plants. Manual removal is labor intensive and the magnitude of the ivy infestation is simply too large for our department to handle effectively. To realize our long term goal of restoring the Weaverling Spit plant community to a native one, we must begin by removing the English ivy infestation and we will need funding and labor assistance.

### **Why it is important**

This restoration project is important as lowland habitat loss is one of the major issues facing the Puget Sound region (Puget Sound Action Team, 2004). As a lowland forest in Puget Sound, the patch on Weaverling Spit offers important coastal terrestrial habitat in an area where heavy industry and urban development stress local wildlife communities. Additionally, the spit is located in Fidalgo Bay which has been designated to become an Aquatic Reserve by the Washington Department of Natural Resources. The forest on Weaverling Spit is therefore well positioned to be part of this broader conservation attempt.

Fidalgo Bay itself is a shallow marine bay with large expanses of tidal flats, salt marsh, and eelgrass beds. The bay provides habitat for many aquatic species including Surf smelt (*Hypomesus pretiosus*), known to spawn extensively along the upper intertidal zone along Weaverling Spit. Several species of migratory waterfowl take advantage of the productivity of Fidalgo Bay and are seen around the spit throughout the fall and winter months. The forest habitat is well used by passerine species (see Appendix A, provided by the Skagit Audubon Society) and there is currently an active bald eagle (*Haliaeetus leucocephalus*) nest which successfully produced two young during the 2006 nesting season. The spit is located across the bay from March's point, which hosts the largest known great blue heron (*Ardea herodias*) colony in Puget Sound (Skagit Land Trust, 2006). Herons are regularly seen roosting in the spit's tallest trees; as many as 21 have been sighted in a collective roost at one time (personal observation). River otters (*Lutra canadensis*) have been observed in the waters off of the spit and they appear to have found denning habitat in the forest adjacent to the shoreline. A family of five otters was observed during the summer and fall of 2006 (personal observation).