



**People For Puget Sound**

**Community *Spartina* Education and Stewardship  
Program**

**2008 Skagit Marine Resources Committee Report**

**Prepared by:**

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## **Introduction:**

This report describes the results of the second year of kayak-based *Spartina* surveys in Skagit County. These surveys were conducted in partnership with the Washington State Department of Agriculture and were supported in part by funding from the Skagit Marine Resources Committee. In addition to the Skagit MRC and WSDA, People For Puget Sound has partnered with the Skagit County Noxious Weed Board, WSU Beach Watcher groups in Whatcom, Skagit and Snohomish counties, Whatcom Area Kayak Enthusiasts (WAKE), and Hole in the Wall kayak club to prioritize North Sound shorelines for surveys and conduct the surveys with trained citizen volunteers. With *Spartina* eradication across Puget Sound in sight, surveys such as these become increasingly important; all potential seed sources need to be located and controlled to prevent reinfestation. People For Puget Sound, Swinomish Tribal Community and Skagit Marine Resources Committee also hosted a community *Spartina* dig in June 2007 that focused on manual removal of *Spartina* in an area where chemical control is not an option. Volunteers were trained in manual removal techniques including digging and seedling removal with an emphasis on removing all rhizomal roots to prevent regrowth.

*Spartina* surveys were conducted using the protocol and inventory developed in 2006 in partnership with WDNR and the Skagit/Snohomish WSU Beach Watcher coordinator. It was based on the protocol developed by WDNR for creosote surveys, with additional information pertinent to *Spartina* derived from protocols that were developed and used in the mid 1990's by the Adopt-a-Beach Foundation in partnership with the Washington Water Trails Association who conducted kayak-based *Spartina* surveys.

Volunteers were recruited from local kayak clubs as well as from the general public. Experienced kayakers were invited to attend one of three training sessions that took place in the Swinomish Channel. These volunteers received formal training from the project manager that included information about *Spartina*, proper survey and identification techniques, and kayak safety issues. Each volunteer was given a packet which included all the necessary forms and guidelines to conduct surveys, including a laminated *Spartina* ID Card with detailed instructions on how to identify the plant in the wild. Surveyors were also provided with ziploc bags for storing leaf and stem samples of any potential *Spartina* specimens that needed to be verified by the project manager. Many of the volunteers had some previous experience with surveys, either through the WSU Beachwatchers program or in their professional careers- participants included a microbiologist, wetlands ecologist, botanist, and geologist.

Surveys were conducted during the daylight tidal window of a +3 to a +7 tide in order to maximize *Spartina* exposure. Surveyors recorded the latitude and longitude of any *Spartina* infestations using a GPS unit and entered this data onto the inventory forms. They also recorded additional relevant information that could aid in location and removal- including estimated patch size, dominant substrate, presence of other vegetation, and other descriptive information. Water-based surveyors were encouraged to beach their craft and proceed on foot whenever possible, however, the project manager has determined with field trials that surveys can be completed successfully from the watercraft when carried out at the appropriate tidal height.

## **Results/Progress to Date:**

**Dig Day:** People For Puget Sound partnered with the Swinomish Tribal Community for the eighth year in a row to promote public education and provide manual control options on tribal property in Skagit County. The 10th Annual Skagit Dig Days community dig, held on June 6, 2008, was co-sponsored by Skagit County Marine Resources Committee, People For Puget Sound, Swinomish Tribal Community, and Skagit County Noxious Weed Board.

The event was held at Swadabs Park on the Swinomish Community Tribal Reservation along the Swinomish Channel. This site was found by project partners to be the most appropriate site in Skagit County to host volunteers, due to amount of *Spartina* present, accessibility, and desire to avoid using herbicides at the site. Kevin Anderson at WSDA, lead entity for the North Sound *Spartina* Task Force, approved the site prior to the event and gave verbal permitting to People For Puget Sound and the Swinomish Tribal Planning Department to remove and dispose of noxious weeds from the site. Permission to use the site was acquired through the Swinomish Tribal Community.

Thirty-eight volunteers contributed 157 work hours at this year's event (see Table 1); a contribution of \$2,596.78 (volunteer hours valued at \$16.54/hr). An estimated 10 sq meters (1.5 cubic yards of *Spartina* above and below ground mass) were removed from approximately four acres of the site. The majority of the noxious grass consisted of small (seedlings to 0.5m) clones and three larger 1 sq. m clones. Digging has been shown to be an effective control technique at a site like Swadabs Park where the infestation consists of small clones spread throughout the site. The volunteers were trained in *Spartina* identification and provided with *Spartina* identification cards, handbooks, and contact information to report any future sightings.

Media alerts were sent to The Skagit Valley Herald, Anacortes American, Skagit Argus, Channel Town Press, Clamdigger, Swinomish Kee-yooks, Shelter Bay newsletter, the Skagit Valley College, Skagit Valley Co-op, Bellingham Herald, Stanwood-Camano News, Organic Press, Whatcom Watch, Cascadia Weekly, Skagit Watershed Council e-mail list, and the e-mail list of Directors and Volunteers in Agencies Assn.

***Spartina* Surveys:** This year, People For Puget Sound volunteers and staff conducted 3 trainings and 7 surveys in Skagit County. A total of 25.2 miles of Skagit shoreline was surveyed and approximately 90 square meters of *Spartina* was found. Due partially to the fact that volunteer kayakers from Whatcom and other surrounding counties where *Spartina* is scarce attended trainings in the Swinomish Channel area, Skagit County was the site for more surveys than any other county this year. As Table 1 illustrates, survey volunteer contributions amounted to 123 hours, the equivalent of \$2,034.42 at the rate of \$16.54 per hour. Dig Day volunteers contributed an additional \$2,596.78 worth of their time- bringing the total dollar value of volunteer input to our Skagit County Community *Spartina* Education and Stewardship Program to \$4,631.20.

**Table 1: 2008 Skagit County *Spartina* Program Activities**

Skagit County	Partners	Priority Area	Num. of Volunteers	Num. of Vol hours
Surveys	--Skagit Noxious Weed Board --Skagit MRC --Hole in the Wall Kayak Club -Whatcom Area Kayak Enthusiasts	--Shelter Bay --Swinomish Channel (S end) --Fidalgo Island --Samish Island --Outer Islands	11	123
Dig Day	--Skagit MRC --Swinomish Tribal Community	--Swadabs Park, Swinomish Reservation	38	157
Totals:			49	280

The program coordinator processed all inventory forms into a GIS and produced county and site specific maps that show the survey area and identify all *Spartina* infestations found (See Attached Maps). Survey data and maps have been provided periodically to the Skagit County Noxious Weed Board, the local controllers for *Spartina* infestations. Almost all the *Spartina* infestations PPS surveyers found this year have been treated by the appropriate controllers.

**Summary:**

The Community *Spartina* Education and Stewardship Program has trained over 250 volunteers in Skagit County on *Spartina* identification, removal, and survey methods since partnering with Skagit Marine Resources Committee beginning in 2003. In 2008, 49 volunteers contributed over \$4,500 worth of their time to *Spartina* identification and removal in Skagit County. The project manager also provided training to WSU Beach Watchers in Skagit County on *Spartina* identification skills to utilize during beach excursions. Additionally, members of the Hole in the Wall Kayak Club attended an educational presentation on the importance of *Spartina* identification and removal. Also, project staff continued to distribute the "Identifying *Spartina* in Puget Sound and Georgia Basin" laminated ID cards around the region to controllers, stakeholders, user groups, and the general public.

This is the eighth year of People For Puget Sound's involvement in *Spartina* survey and education efforts in the North Puget Sound and in Skagit County. The successes of this year's program, including important finds of previously unknown *Spartina* infestations in Whatcom and San Juan County, clearly indicate that there is an important role to be played by volunteer-based surveys. Additionally, our work demonstrates that kayaks are uniquely suited to penetrating some of the most challenging areas to survey by conventional methods. We believe that the vibrant sea kayaking community in Skagit County can play an important role in surveying and eradicating *Spartina* in the region. The Skagit Marine Resources Committee has provided an important source of ongoing funding to this unique program. Thank you for this support!