



Padilla Bay Newsletter

A Joint Publication of the Padilla Bay Foundation and Padilla Bay National Estuarine Research Reserve

Autumn 2005



Padilla Bay

National Estuarine Research Reserve

Padilla Bay National Estuarine Research Reserve is managed by the Washington State Department of Ecology under the National Estuarine Research Reserve System established by NOAA.

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The Padilla Bay Foundation is a membership-based non-profit organization formed in 1987. Its mission is to help preserve the Padilla Bay estuary in Skagit County, Washington, through support of Padilla Bay National Estuarine Research Reserve.

Padilla Bay Foundation
PO Box 1305
Mount Vernon, WA 98273
(360) 757-3234

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Publication No. 05-06-003

Catching Some Mud

Seagrasses affect the elevation of the seafloor and intertidal flats in several ways. The leaves of plants in large seagrass meadows slow the movement of water around the plants, causing suspended sediments to drop out of the water column. Sediments then collect around the base of plants. Organic material from eelgrass and other organisms also accumulates on this surface, further contributing to sediment accretion.

How fast are sediments building up in Padilla Bay eelgrass meadows? How have accumulation rates changed over time in Padilla Bay and are there different rates of accretion in our two species of eelgrass? How does seagrass growth and underground plant production contribute to rates of sediment accretion?

Richard Gwozdz, Master's student in the graduate program at Huxley College of the Environment at Western Washington University, is trying to answer these questions. He is a recipient of a Padilla Bay NERR Graduate Research Fellowship awarded through the Estuarine Reserves Division of NOAA.

Rich has been using core samples and filter paper traps to collect and analyze sediment from different sites in Padilla Bay. With this and other data and computer modeling, he hopes to add to our understanding of the effects of sea level rise, elevation gain, and sedimentation rates on the maintenance of Padilla Bay seagrass beds.



Measuring sediment in a field of *Zostera japonica*, or dwarf eelgrass

Padilla Bay Foundation News

Thanks to Recent Donors

The Padilla Bay Foundation is grateful for several significant contributions this past summer. The Borman Family Foundation made a \$15,000 donation to the “Benefactors for the Bay” capital campaign—the third donation in three years—with a special interest in supporting research and science. Skagit Audubon, with whom we have enjoyed a long and supportive relationship, has also generously donated to the capital campaign. And once again, the Shell Oil Puget Sound Refinery presented the foundation with a \$10,000 award to support education programs at the Reserve. We appreciate such loyal support!

Anacortes Arts Festival Grant Supports Local Artists

Padilla Bay staff and many local groups are enjoying a brand-spanking new facility for meetings, workshops, and research. But as you can see from the photos below, the walls are a little bare. Now, thanks to a grant from the Anacortes Arts Festival, the Padilla Bay Foundation has \$2500 to help with the commissioning of a piece of fine art by a local artist for display in the new meeting rooms.



New office spaces are bright and efficient.



An upstairs conference room seats 20 and offers a wonderful view of Padilla Bay and the San Juan Islands.

The large meeting room is perfect for workshops, presentations and education programs, with a spacious lobby, seating for 100, and a small kitchen.



How You Can Help

Grassroots involvement is the core of Padilla Bay Foundation’s commitment to protect Padilla Bay and support the Padilla Bay Reserve.

Membership in the Foundation means you are contributing directly to environmental education and research right here in Western Washington.

Categories of membership are:

Senior/Student	\$20
Individual	\$30
Family	\$40
School/Organization	\$50+
Supporting	\$60
Sustaining	\$100+
Small Business	\$100+
Sponsor	\$250
Patron	\$500
Steward	\$1000

Send your contribution to:
Padilla Bay Foundation
PO Box 1305
Mount Vernon, WA 98273
(360) 757-3234
a 501 (c) 3 organization

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Padilla Bay

National Estuarine Research Reserve

Autumn Events

Presentations for September, October, and November

Fall Birding by Ear

Join naturalist, Libby Mills, watching and listening for recently arrived winter birds and migrants passing through. Pack warm clothes, binoculars, field guides, and snack or lunch. Meet in the Padilla Bay parking lot. Each class limited to 15 participants. **Friday, September 16 and Sunday, September 18, 8:00-12:00.** Call to register, or register online.

Nature Poetry Workshop

This year we welcome back northwest poet and teacher, James Bertolino. Jim's work has been published in numerous magazines and international anthologies. His ninth volume of poems, *Pocket Animals*, was published in 2002 by Egress Studio Press, and he was recently featured on National Public Radio's "Theme & Variations: Music and World Literature" and in the documentary film, "Poetry in Wartime. In May, 2005, he was the lead poet for the Washington Poets Association "Poetry Road Show," and read and taught workshops at community colleges in Walla Walla, Wenatchee, Centralia and Port Angeles. He has been teaching creative writing at Western Washington University and, for 2005-06, will be Writer in Residence and Hallie Brown Ford Chair of Creative Writing at Willamette University in Salem, Oregon. **Saturday, September 17, 9:00-5:00.** Call for registration information, or check the Padilla Bay website.

Padilla Bay's First People

Padilla Bay was once the home of the Nuwaha people, whose feast hall was located near present-day Bay View. Today, descendants of the Nuwaha are members of the Samish and Upper Skagit Tribes, with whom they long had close connections. The Nuwaha were wealthy in oysters, clams, seals, salmon and trout. From the early history, ethnography, and archaeology of the Nuwaha, we can learn about the changing ecology of Padilla Bay, and about how humans have managed the bay—sometimes sustainably but often unsustainably. Join Russel Barsch, director of the Center for the Study of Coast Salish Environments, **Thursday, September 22, 7:00-9:00.** Call to register, or register online.

Mammals in Bird Communities

Northwest birds and mammals have co-evolved in their shared communities over time. This elegantly balanced energy matrix of floral and faunal life-forms is an intriguing study. Wildlife biologist and naturalist, David Drummond, will examine niche overlap, inter-actions and the interplay of humanity within the steppes of our related habitats. Learn haunts, habits and handprints of our local mammals in this image-illustrated program. Bring your critter stories to share!. **Saturday, November 5, 1:00-3:00.** Please call or register online.

Wildlife Cruise on the Viking Star

Join us once again aboard the 55 foot Viking Star: the perfect viewing platform for an amazing variety of wintering birds. Beginning in LaConner, we will look for the marine birds of the rocky shores and deep waters in Rosario Strait; the Brant Geese, Loons and Shorebirds of Padilla Bay's eelgrass meadow; and the raptors and swans of the Skagit Flats along the Swinomish Channel. The boat is enclosed and heated, with an outdoor foredeck. Hot beverages will be available, and snacks may be purchased. The \$32.50 cost of this 4 hour cruise includes a \$5 donation to the Padilla Bay Foundation. **Saturday, November 12, with boarding at 11:30 and departure at 12:00 noon.** You may visit the Viking Cruises website at www.vikingcruises.com for more information about the tour. To register, send your name, address and phone number with a check made payable to The Padilla Bay Foundation.

Mail to: Attn: Glen Alexander
Padilla Bay Reserve
10441 Bay View-Edison Road

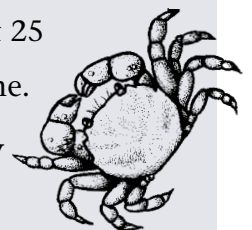
The Breazeale Interpretive Center is open
Wednesday-Sunday, 10:00-5:00.

Closed November 11, 24, & 25

Register online or by phone.

www.padillabay.gov

(360) 428-1558





Puget Sound Kids Day September 24

Since 1992 Padilla Bay has been helping kids and parents celebrate Puget Sound with its annual Kids Day celebration. The event has

been a favorite from the start, and each year a wonderful group of energetic volunteers and staff brings activities, songs, door prizes, treats, and t-shirt printing to over 100 children.

Padilla Bay will be celebrating Kids Day this year on National Estuaries Day, **September 24 from 1:00-4:00**. We need adult and high school volunteers to make it all happen, so call the Interpretive Center to help out, invite your friends and family, bring a T-shirt to decorate, and come celebrate this great Puget Sound.

Kids Day is a program of People for Puget Sound, a non-profit citizens' group working to protect and restore the health of Puget Sound and the Northwest Straits through education and action. Their vision is a clean and healthy Sound, teeming with fish and wildlife, cared for by people who live here.

Kayaking in Padilla Bay

Enjoy a fall day of on Padilla and Fidalgo Bay. An Island Outfitters guide and a Padilla Bay naturalist will lead these trips. No experience necessary, just come with a lunch, water bottle, and warm clothing (rain gear, non-cotton layers, hat). Minimum age is 12. People under 18 must be accompanied by a parent. Participants meet at 10:30 at the Island Outfitters store on 24th & Commercial, Anacortes. Fee is \$65 per person for a 5 hour trip. Call Island Outfitters at 299-2300 to register. **September 3 and October 1.**

Films and Videos:

Sundays at 1:00 & 4:00

September	4	Return of the Plankton (27 min)
	11	Forage Fish: Tiny Tails of Survival (29)
	18	Eyewitness Ocean (35 min)
	25	Fabulous Wetlands (7 min)
October	2	When the Salmon Runs Dry (60 m)
	9	The World Between the Tides (22 m)
	16	The Challenge on the Coast (58m)
	23	Spirit of the Sound (60 min)
	30	Padilla Bay (20 min)
November	6	Hawks Up Close (55 min)
	13	Jellies and Other Ocean Drifters (35)
	20	Incredible Suckers (60 min)
	27	Estuary! (15 min)

Monthly Youth Programs Offer Fun Learning

Mini Explorers are the 3-5 year old learners. We look at a new topic each month, with stories, games, hands-on observations, art projects, and plenty of action. Call no more than 2 weeks ahead to register.

September 7 & 8, 10:00 & 1:00
Wiggly Worms—We'll talk about worms, act like worms, look at worms, and even make some. If you were a bird, you could eat worms, too!

October 5 & 6, 10:00 & 1:00
Estuary!—Padilla Bay is a cool place where fresh water meets the sea. Come and find out more.

November 16 & 17, 10:00 & 1:00
Stars of the Sea—Meet a sea star face to face and find out all about these colorful creatures and their spiny friends.

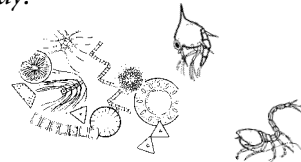
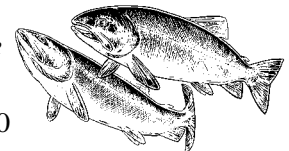


Junior Ecologists are 6-9 year olds who have fun exploring the estuary. Excursions to the beach, science experiments, games, art projects, and studying life in the bay -- this program is guaranteed fun! Call the Interpretive Center to register.

September 9 & 10, 1:00-2:30
Migration—Some animals just won't stay put! From birds that take a thousand mile trip to crabs that crawl to deeper water, lots of animals like to travel.

October 15 & 21, 1:00-2:30
Salmon—Find out all about the king of northwest fish.

November 18 & 19, 1:00-2:30
Plankton—The tiniest critters in the estuary are also the most important. Dive into the microscopic water world of Padilla Bay.



The Salish Sea: One Big Estuary

by Jonna Sloan and Susan Wood



During estuary education programs at the Brezeale Interpretive Center, educators use a map of the Northwest that emphasizes rivers that drain into the inland sea, often called the Puget Sound. The staff created the map to begin a conversation with students about where the water that we use comes from and where it goes. Without roads, place names and political boundaries, it emphasizes the geographical continuity of a watershed that has many names: the Puget Sound and Northwest Straits, the Georgia Basin, and the Salish Sea. What term can be used to refer to this place as a water body unified by a common geography, ecology, and culture?

The Puget Sound is an example of a name that is geographically well extended beyond its original intent. In May of 1792, Captain George Vancouver gave the name **Puget's Sound** (after Lieutenant Peter Puget) to waters south of Vashon Island, and Commander Charles Wilkes charted the name south of the Tacoma Narrows and Point Defiance. Since 1792, commercial, political and military interests have extended the name. In 1857, James G. Swan complained, "A strange geographical error has gained credence in the commercial world of calling all the waters on the north of Washington Territory 'Puget Sound.'" This error has been principally caused by ignorant newspaper reporters...who always report vessels arriving from any of the different harbors in Fuca Strait as from Puget Sound." Today, Puget Sound technically extends 53 miles south from Point Wilson near Port Townsend, and 30 miles southwesterly to Budd Inlet. It does not include Hood Canal, Port Susan, Bellingham Bay, or the San Juan waterways.

Draining the Georgia Basin and Puget Trough, and feeding the Pacific Ocean, one inland estuary-sea encompasses both the Northwest Straits (including the Strait of Juan de Fuca, Georgia Strait, Haro Strait, and Rosario Strait), and the Puget Sound. Formed by the same glacier, catching the same rains, and supporting the same salmon, orcas, and drifting population of planktonic larvae, the sea is one ecosystem. This geographic area corresponds with the traditional territory of the Coast Salish People, people connected by common language, customs, and dependence on the sea. This area was called Squelatses, which translates into "Home."

Salish Sea is a geographically, ecologically and culturally inclusive name for the inland waterways stretching from present day Olympia to the Johnstone Strait (between Vancouver Island and mainland British Columbia). It overlooks political boundaries and artificial lines. Salish Sea is a term for one ecosystem that recognizes the original saltwater peoples.

Coast Salish People

For more information on the Nuwaha people, the Coast Salish who have lived near Padilla Bay for thousands of years, join us for a presentation by Russel Barsch, director of the Center for the Study of Coast Salish Environments. September 22, at 7:00. Call to register, or register online at www.padillabay.gov.



Join the Stream Team

The Skagit Stream Team is once again looking for a few good folks to join volunteers across the nation in monitoring the quality of water in our streams, lakes, and estuaries. Each Team consists of 3 to 4 people who check a stream's temperature, salinity, dissolved oxygen, and depth once a month. Samples are then brought back to the Padilla Bay lab where another volunteer tests for fecal coliform and turbidity. The goal is to collect 9 months of accurate water quality data to share with interested agencies. The program provides hands-on learning about natural systems, land-use impacts, and stream/estuary health.

Orientation and training will be at the Interpretive Center on:
Wednesday, September 7th, from 6:00-8:30PM,
Thursday, September 8th, from 6:00-8:30PM
Saturday, September 10th from 9:00AM-3:00PM

All three training sessions are required for new stream team members. Training includes presentations by experts in the field as well as hands on training in the lab and in the field.

If you have any questions or concerns call David Henry, Padilla Bay National Estuarine Research Reserve, 428-1080, or Kristi Carpenter, Skagit Conservation District, 428-4313.

Note: Volunteers must be 18 or older, attend the September training, and commit one day a month through June '06.



Check Inside for the Fall Activity Schedule:

- Presentations
- Mini Explorers
- Junior Ecologists
- Films
- Kayaking



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