



Padilla Bay Newsletter

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

Summer 2008



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.

www.padillabay.gov

swood@padillabay.gov

10441 Bay View-Edison Road
Mount Vernon, WA 98273
(360) 428-1558



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

Inside

- Special Foundation Eventsp. 2
- Foundation Newsletter.....p. 3-4
- Presentations for Spring.....p. 5
- Youth and Family Classesp. 6
- Fidalgo/Padilla Bay Cleanupp. 7
- Bay View Watershed Mapping..p. 8

Publication No. 08-06-004

Volunteers Power Padilla Bay

It's a typical workweek all over the Padilla Bay Reserve campus. In the "Big Room" WSU volunteer Donald Slack is cleaning up after a Master Gardener class. Any minute Kristi and Cindy from the Skagit Conservation District will be setting up for their evening Watershed Masters class. Adria Banks and the new Skagit County Beach Watcher volunteers will be using the room the next day.

At the Breazeale Interpretive Center front desk, Sehome High School student, Teresa Smith is answering questions from out of town visitors. In the classroom, Anacortes retiree, Cathy Borman is teaching a group of 5th graders and their volunteer parents. In the library, Skagit Valley College Student, Carrie Wilcoxon is entering stewardship data on a computer. Padilla Bay Foundation Board and MRC volunteer Paul Dinnel is photocopying an agenda for an evening meeting.

Across campus in the new lab, Skagit Stream Team volunteers Pat O'Hearn and Michelle McPhee are running water samples from nearby No Name Slough. For the 10th straight year, 40 volunteers have provided data to state and local officials on the E. coli bacteria levels of Skagit County waters. Behind the Breazeale house, Americorps members Emyle Mendell, Austin Rose, and Amy Campbell are creating an organic garden bed for their service project to benefit the Skagit Food Bank.



Along the trail, Mt Vernon High School student, Nathan Minor is planting native plants as part of long tradition of Eagle scout projects at Padilla Bay.

Amazingly enough, Padilla Bay is just one place. Across the United States 65.4 million volunteers donate the economic equivalent of almost \$150 billion in services each year. In one day volunteers scoured 33,000 miles of shoreline worldwide and cleaned up 6 million pounds of debris that threaten seabirds and marine mammals. Volunteers do make a difference, and make places like the Padilla Bay Reserve as rich and productive as an estuary ecosystem.

We all benefit from the power of volunteering. Studies show that older volunteers have fewer medical problems, are in better shape, and are sharper mentally. Volunteering is an incredible opportunity for everyone, so be sure to thank a volunteer today, or better yet, volunteer yourself.

Padilla Bay Foundation Events

2008 Smith/Aguero Presentation: Tsunami Hazards in the Pacific Northwest

Washington State Department of Natural Resources geologist, Tim Walsh, is this year's speaker for the Padilla Bay Smith/Aguero Scientific Presentation. He will talk about geologic and paleoseismologic reasons to be prepared for tsunamis in the Pacific Northwest, focusing specifically on the Padilla Bay area. He will also discuss the National Tsunami Hazard Mitigation Program and plans for future tsunami risk research. **Saturday, July 26 from 1:00-3:00PM.** Light refreshments will be served. RSVP online at www.padillabay.gov or call the Interpretive Center at (360) 428-1558.



New Member Joins the Board of Directors

Padilla Bay Foundation Board is pleased to welcome new member, Don Sorensen, Plant Manger for the Tesoro Anacortes Refinery. Don recently moved to Washington from Utah, where he managed the Tesoro Salt Lake City Refinery. We're pleased and honored to have him with us.

Volunteer Opportunities

Join the Skagit Stream Team

Get intimate with Skagit County's waterways. The Skagit Stream Team monitors the quality of water in the Samish and Skagit River watersheds. Teams of 3 to 4 people 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. And it's great fun!

Orientation and training will be at the Interpretive Center on:
Wednesday, September 10th, from 6:00-8:30PM,
Thursday, September 11th, from 6:00-8:30PM
Saturday, September 13th from 9:00AM-3:00PM

If you'd like to volunteer or have any questions, call David Henry at Padilla Bay (360-428-1080), or Kristi Carpenter at the Skagit Conservation District (360-428-4313).

New Climate Change Volunteer Program

This fall, Padilla Bay Reserve is partnering with the Northwest Clean Air Agency and WSU Beachwatchers to create a new volunteer program called Climate Stewards. Climate stewards will learn about the effects of climate change and more importantly what we can do about it. They then implement climate change education projects in their communities. The trainings will be held on Mondays and Wednesdays from 9-1:30 for September 15, 17, 22, 24. Please Call 428-1558 to register.



Padilla Bay Foundation

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	\$25
Individual	\$35
Family	\$50
School/Organization	\$50+
Supporting	\$75
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

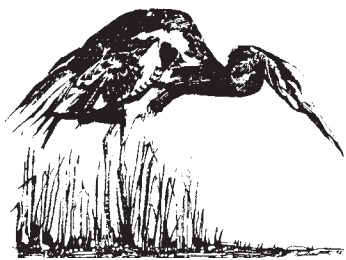
Foundation Board Members

President: Charlie O'Hara
Vice-president: Tom Richards
Secretary: Tim Manns
Treasurer: Deb Canon
Past-president: Gail Smith

Lyn Bishop
Paul Dinnel
Ed Gastellum
Brian Hanson
Kraig Kemper
Cort Liddell
Patsy Martin
Don Sorensen
Phil Teas

Terry Stevens - Advisory Member
Kay Reinhardt - Administrator

PADILLA BAY FOUNDATION NEWS



New Aquariums in Store for the Breazeale/Padilla Bay Interpretive Center

Excitement is mounting as plans get underway for new Padilla Bay aquariums. After years of limping along and patching up a 20+ year old system, staff aquarist, Mark Olson is looking forward to a state of the art system with bright new windows into the underwater world of Padilla Bay.

The reserve was awarded \$465,000 from federal NOAA funds, a good start for the project. The Foundation will seek additional monies through donations and grants to meet the federal match requirement. A 2.3-to-1 match will apply for the funds we raise. That means that each dollar donated has \$2.30 added to it.



One component of the renovation will be a Water Quality Exhibit. The Swinomish and Upper Skagit Tribal Communities, Taylor Shellfish and the Skagit Marine Resource Committee are working with Padilla Bay and private donations to demonstrate the importance of clean water to estuary bivalves, and the importance of shellfish to our local economy and culture. Look for updates on this long-overdue project, and for ways you can support the effort.

Name _____

Address _____

City/State/Zip _____

E-mail address _____

Membership Category _____

(see reverse)

Membership Amount \$ _____

Extra Donation \$ _____

Check enclosed

Charge my card

(VISA/Mastercard)

mail to:

Padilla Bay Foundation

P. O. Box 1305

Mount Vernon, WA 98273

Card # _____

Expiration Date _____

Signature _____

Looking Ahead

Mark your calendar for the Padilla Bay Foundation's Annual Meeting & Dinner, to be held **Saturday, October 4th from 3:30 - 7:30PM**. The Board of Directors will organize a potluck and seafood feast to delight your palate. The guest speaker will be Eric Anderson, Ph.D. Candidate from the University of Wyoming Department of Zoology and Physiology. Eric was the recipient of a NERRS Research Fellowship which helped fund his studies of sea birds, particularly surf and black scoters. Some of his work over the past 2 years has looked at local populations of scoters and how they use Padilla Bay for winter foraging.



Sport a New Padilla Bay Cap

We've added some great new items to our gift shop. Come and check out the cool caps and mugs. We are also looking forward to the addition of a selection of natural history books and field guides.

Here's How You Can Help

The Padilla Bay Foundation is fortunate to be an efficient, volunteer-run organization, with very low overhead and a group of talented and energetic volunteer board members. A part of annual membership dues covers the daily expenses of running a non-profit organization. This frees up your special donations to directly support the activities at the reserve. When you contribute to a special campaign such as the aquarium room renovation, 100% of your donation goes to the project—and is matched 2.3 to 1.

Contributing to the Endowment Fund is another way to see enormous benefit from your donation. Padilla Bay Foundation has received seed money and a 2-year matching pledge to establish a \$25,000 Endowment Fund with the Seattle Foundation. Padilla Bay Foundation's current challenge is to raise \$11,500 by April 2009. It will be matched by other donors, and invested through the Seattle Foundation to provide a lasting, sustaining support to Padilla Bay programs.

There are many ways to contribute to the Padilla Bay Foundation. All support the programs, special projects, and research at the Padilla Bay Reserve. Together, we can help to protect this beautiful bay. Please join us in this important work by joining the Padilla Bay Foundation. Our membership coupon is below. For more information about donating to the Padilla Bay Foundation, contact our office at (360) 757-3234 or foundation@padillabay.gov.

Padilla Bay Foundation Membership

Grassroots involvement is the core of Padilla Bay Foundation's commitment to protecting our estuaries and supporting the Padilla Bay National Estuarine Research Reserve.

Members of the Padilla Bay Foundation contribute directly to environmental education and research at Washington State's only Estuarine Research Reserve.

Memberships can be for multiple years. Please consider payment of 2 or 3 years at a time, as this will save the Foundation considerable labor and mailing costs and insure that your dues work harder supporting the programs you care about.

Please fill out the reverse side of this form and join today.

Membership Categories

Senior/Student	\$25
Individual	\$35
Family	\$50
School/Organization	\$50
Supporting	\$75
Sustaining	\$100
Small Business	\$100
Sponsor	\$250
Patron	\$500
Steward	\$1000
Benefactor	\$2000

Hand cast brass critters, mounted at the Interpretive Center, are available to donors of \$1000 and above who would like to be acknowledged in this way.



Padilla Bay

National Estuarine Research Reserve

Summer Events

Presentations for June, July and August

Great Blue Herons of the Salish Sea

The Great Blue Heron is an iconic species bridging shoreline and upland, saltwater and fresh, science and art. Herons are a familiar species which many of us take for granted. With a complex life history, sensitivity to humans and dependency on rapidly diminishing habitats, the heron represents the plight of native wildlife throughout the Salish Sea. Discover the cycles, rituals and ecology of this magnificent shoreline sentinel. Ann Eissinger is a professional Wildlife Biologist specializing in the coastal realm. Owner of Nahkeeta Northwest Wildlife Services in Bow, Ann has worked as researcher, consultant, planning advisor, educator and conservationist. **Saturday, June 7, 10:00-12:00.** Please register online or call the Interpretive Center.

Spend Solstice with the Birds

Join naturalist, Libby Mills, listening and looking for summer birds. Bring a snack and maybe even a folding chair for a slow moving exposure to the songs of our migratory birds as they begin fledging their young, or starting second broods of chicks! Meet in the Padilla Bay parking lot. Each class limited to 15 participants. Though we should begin at 4:30AM, we'll start instead at 7:30. **Friday, June 20 and Saturday, June 21, 7:30-11:30.** Please register online or call the Interpretive Center.

Pigeon Guillemot Nesting in Skagit County

For several summers, Ivar Dolph has been surveying pigeon guillemot nesting sites in Skagit County. These sea birds nest in cavities along rocky shores, cliffs and islands, and their nesting activity is often only visible from a boat. Learn about these captivating birds (Who can resist those bright orange legs?) and their nesting success in Skagit County. Mr. Dolph is a Skagit Beachwatcher, a member of the Skagit County Marine Resource Committee, and an avid birder. **Thursday, August 14, 2:00-3:00.** Please register online or call the Interpretive Center.

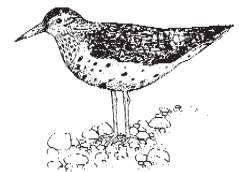


Seeing and Drawing Nature in a Field Journal

Naturalist and artist, Libby Mills will offer examples of field journals and basic drawing warm ups, and then set you loose to observe and record. You may even catch yourself writing a short poem or Haiku. Bring an example of a favorite to inspire others. A balance of image and words is a great way to enjoy creating your own record of attending to the natural world. Bring lunch and/or a snack and a sketch book or journal/diary book in which you can record your observations. Pencils or pens are recommended. The reserve has colored pencils you can borrow, or you might want to bring your own. **Saturday, July 26, 9:00-3:00.** Please register online or call the Interpretive Center.

A Shorebird Primer

Probe the world of shorebirds with David Drummond, wildlife research biologist and naturalist with the Merlin Falcon Foundation. This presentation and field trip will explore the biology, ecology, and field identification of these amazing Padilla Bay migrants. The field trip portion of the class is limited to 20, so please register early. **Saturday, July 12, 1:00-3:00.** Please register online or call the Interpretive Center.



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

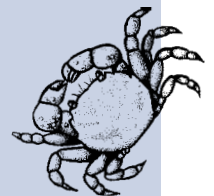
Staff are available 7 days a week.

Closed July 4

Register online or by phone.

www.padillabay.gov

(360) 428-1558



Mud Flat Safaris

When the tide goes out at Padilla Bay, it goes all the way out! Come explore this huge expanse of mud, teeming with life. Fearless guides will lead you on a trek into the seldom seen world of the estuary's mud flat. Come with old shoes that tie or snug boots. All ages welcome. The programs begin at the Padilla Bay Interpretive Center, and end at Bay View State Park. Call the Interpretive Center or register online. **July 2 from 10:00-12:00, July 22 from 1:00-3:00, August 2 from 12:30-2:30, and August 30 from 10:00-12:00.**



Beach Seines

No need to get your feet wet to see what's living out there in the bay. Just meet on the beach at **Bay View State Park** and watch while we pull a fish net through the water. Come and learn more about our fine finned friends! No registration necessary. **June 28 at 11:00, July 8 at 12:30, July 24 at 1:30, August 6 at 3:00, and August 20 at 1:00.**



Videos: Sundays at 1:00 & 4:00

June	1	Winged Migration (85 min)
	8	Seasons in the Sea (55 min)
	15	Pacific Estuaries (28 min)
	22	The Life of Birds-Fishing for Living (55min)
	29	Where Have all the Orcas Gone? (40)
July	6	The Intertidal Zone (17 min)
	13	Search for the Giant Squid (60 min)
	20	The Worlds Below (40 min)
	27	The Life of Birds-To Fly or Not to Fly (55min)
August	3	The Return of the Salmon (30 min)
	10	Padilla Bay (20 min)
	17	Eyewitness Ocean (35 min)
	24	The Story of Stuff (55 min)
	31	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 the Interpretive Center to register or register online.

June 25 & 26, 10:00 & 1:00

Wet and Wonderful Water!—Become a water drop on an amazing journey and find out why good clean water is more precious than gold.

July 16 & 17, 10:00 & 1:00

Mud Flat Safari—Head for the mud to see what lives beneath the tide in Padilla Bay. Come with a jacket and snug boots or old shoes that tie for this trek to the beach.

August 13 & 14, 10:00 & 1:00

Crabs!—Everyone's favorite critter, crabs are really amazing.



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 or register online.

June 20 & 21, 10:30-12:00

Here Comes the Sun—Celebrate the longest days of the year as we learn about how our sun gives energy to everything around.

July 18 & 19, 10:30-12:00

Bivalve Brunch—Come meet (and eat) the 2-shelled critters of Padilla Bay. We'll be going to the beach, so be ready for mud (snug boots or old shoes that tie.)

August 15 & 16, 10:30-12:00

Mud Flat Safari—Come explore all the plants and animals that the tide leaves behind.





Whitmarsh Landfill on March Point is targeted for cleanup.



Current Cleanup Sites

Information about the Fidalgo and Padilla Bay cleanup project is available at the Anacortes Public Library. You can also contact

WA State Department of Ecology
 Sandra Caldwell
 (360)407-7209
 saca461@ecy.wa.gov
<http://www.ecy.wa.gov/programs/tcp/cleanup.html>

Cleaning Up Fidalgo and Padilla Bays

The Washington State Department of Ecology has been working with local and federal agencies, the Samish and Swinomish Nations, businesses, and property owners to clean up industrial sites around Anacortes, in Fidalgo and Padilla Bays. A sediment study and clean up are part of the new Puget Sound Initiative, a major effort by the state to clean up and restore Puget Sound. The Initiative identified Fidalgo Bay as a high priority area because of its important habitat and valuable natural resources.

A sediment study was recently completed and presented to the Anacortes community in April. Surface sediment samples were taken from 118 locations and analyzed for chemistry and biological toxicity. Subsurface samples, up to 13 feet deep, were taken from 12 locations and archived for future analysis. Samples were analyzed for about 50 different chemicals, including dioxin, tributyl tin, and biological toxicity. Fish and shellfish samples were taken for tissue chemistry analysis, and results will be available by the end of July 2008. Ecology will work with local and state health agencies to evaluate these results and communicate potential health risks to the community.

Based on the results of the initial sediment testing, the Northern Fidalgo Bay and Guemes Channel sediments have the highest levels of contamination. Southern Fidalgo Bay was less impacted and the March Point area had minimal impact. In some areas, concentrations of mercury, phthalates, and PAHs (polycyclic aromatic hydrocarbons) were above Sediment Management Standards. Dioxin was detected in all four areas with the highest concentration in the Northern Fidalgo Bay area.

Cleanup has been completed at the former Cap Sante Marine site where workers removed 17,000 tons of soil contaminated by leaking gasoline and diesel tanks that supplied the former fuel dock. Restoration of the marine shoreline and public access is underway.

Other cleanup projects will include:

- removal of contaminated sediments at the Dakota Creek Shipyard,
- removal of wood debris in tidal areas at the Port of Anacortes Pier 2, used historically for log exporting,
- cleanup and shoreline restoration at Seafarers Memorial Park, former site of Scott Paper Mill and other industrial operations,
- removal of the abandoned tugboat, The Enchantress,
- investigations of The Whitmarsh Landfill on southern Padilla Bay, the former Shell Tank Farm, and the Custom Plywood mill site to determine the extent of contamination and alternatives for cleanup,
- study of creosote contamination from the causeway crossing Fidalgo Bay, now home of the Tommy Thompson Trail.

Waterfront industry plays a major role in Anacortes history, and today anchors the local economy. As contaminated sites are cleaned up and restored, marine industries can prosper, fish and marine wildlife will benefit, and people can continue to enjoy and use a clean and healthy waterfront.

Bay View-Padilla Bay Watershed Mapping

Padilla Bay staff are really happy that Jack Middleton decided to retire last year and is filling his calendar with volunteer activities. Jack worked for 15 years for Snohomish County as an Environmental Health Specialist. He often worked on site with well drillers, septic planners and site inspectors for new building projects. Last fall he joined Stream Team as a field volunteer, sampling streams in Bay View.

Jack's unbridled enthusiasm and years of field experience got him thinking about mapping the Bay View-Padilla Bay watershed. He felt the community of Bay View could use an accurate watershed map as Skagit County lays out its proposed Marine Recovery Areas. The map would give local residents an idea of how this area drains water and where it flows. His handiwork will be given to the Community Club of Bayview.

Suzanne Shull, Padilla Bay's GIS specialist, provided Jack with a 2-foot contour map on an aerial photo and he did the rest. He hit the road with the other Jack (the dog) as his co-pilot, interviewing landowners, walking their land with them and making field observations. The whole endeavor took 3 months, and produced a hand drawn map with refined details. Surprised by how big the watershed is, he delineated sub-basins within the watershed and recorded 16 culverts that drain into the bay.

All of this information will be invaluable to the Padilla Bay Reserve as we continue to study surface water drainage into the bay. A current GIS map has been produced using his data and



hand drawn map. Grass root projects like this connect a community with the natural world right outside their front door.

A Bay View resident since 1979, Jack feels connected to this beautiful corner of the world and enjoyed using his new free time to map the neighborhood. He was amazed at how helpful and interested the landowners were and learned more than could be placed on any one map. At the end of the day his energy and leadership will go a long way in creating strong local stewardship for Padilla Bay.



Padilla Bay National Estuarine Research Reserve
Breazeale Interpretive Center
10441 Bay View-Edison Road
Mount Vernon, WA 98273

PRSRT STD
US POSTAGE PAID
WA STATE DEPT
OF PRINTING 98501



Padilla Bay