



# Padilla Bay Newsletter

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

Autumn 2007



**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.

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## Retrieving Lost Crab Pots in Similk Bay

Lost or abandoned crab pots often continue to catch and kill crab for many years, which reduces the number of crab available for harvest and needlessly kills marine life. Similk Bay in Skagit County was recently the focus of the Northwest Straits Commission's work to locate and remove old gear.



A survey team spent a day in Similk Bay, covering 2.3 square kilometers. In addition to locating old crab pots, the survey team looked for eelgrass in the area. This work was done using side-scan sonar, which involves towing a sensor through the water under the boat. The sensor emits sound waves that bounce off the sea floor to create an image of what's below. When the sonar equipment is connected to a GPS (Global Positioning System) unit, a precise map of the seabed can be created.

Suspected eelgrass areas were verified by divers, and the upper bay area had the most abundant eelgrass, as well as the eastern shoreline. Patches of vegetation in the center of the bay were observed, but were found not to be eelgrass.

After the survey work was complete, a recovery boat and dive team were sent out to remove the pots that were located. Of the 59 pots that were found in the Bay, 58 were removed and disposed of. Inside the pots were 26 dead and 103 live animals including, 25 dead and 82 live Dungeness crab, 1 dead and 20 live red rock crab and 1 live starry flounder.

If you enjoy crabbing, one of the most important things you can do to help solve this problem is to always use decomposing escape cord on your pots. This narrow cotton cord decomposes to allow the pot to fall open if left in the water. For more information on using escape cord, or on the Northwest Straits Commission's derelict fishing gear removal work, go to [www.nwstraits.org](http://www.nwstraits.org)



# Padilla Bay Foundation Events

## Local Impacts of Global Warming & Sea Level Rise

The 2007 Padilla Bay Smith/Aquero Environmental Presentation will be a talk given at Breazeale Interpretive Center on Saturday afternoon, September 15<sup>th</sup> by University of Washington Professor Eric Steig on predicted local sea level rise resulting from global warming. Dr. Steig is a member of the UW's climate change program. Western Washington University Professor Juliet Crider, an expert on local tectonic rebound, will accompany Professor Steig at the presentation.

Increasing levels of CO<sub>2</sub> in the atmosphere are causing global temperatures to rise. These rising temperatures are in turn causing melting of ice caps both in the Antarctic and on Greenland. Over time, these melting ice masses will cause sea levels to rise globally. Simultaneously many land areas, such as those in the Pacific Northwest, are gradually and differentially uplifting in response to retreating glaciers from the last ice age.

What is in store for Padilla Bay? Will sea levels rise faster than the surrounding land? Will changing sea levels compromise habitat restoration efforts such as eelgrass bed mitigation projects in Fidalgo Bay? Will local residents begin experiencing increasing levels of coastal flooding? Will surrounding farmland be inundated? Professors Steig and Crider will help shed some light on questions such as these. Attendees will also have an opportunity to ask specific questions during a question and answer session immediately following the talk.

**Saturday, September 15, 1:00.** Refreshments will be provided. Please RSVP by calling (360) 428-1558 or register online at [www.padillabay.gov](http://www.padillabay.gov).

## Meet Skagit Photographer, David Grant Best

The Padilla Bay Foundation is pleased to offer a program with photographer, David Grant Best. A native Washingtonian and graduate of the University of Washington, David now lives in Anacortes. Known primarily as a fine art photographer illustrating the landscape, he has also turned his lens toward documenting small towns and rural communities. Best has exhibited at the Seattle-Tacoma International Airport along with painter Alfred Currier and sculptor Leo Osborne with work inspired by the Skagit River, entitled Spirit of the Skagit.

Best's work has been published in ViewCamera Magazine as well as Lenswork Magazine. In 1992 his first book, Portrait of a Racetrack, documented the the era of horseracing at Longacres racetrack, just prior to their closure. His photography has been exhibited or is included in collections at the Portland Art Museum, Tacoma Art Museum, Whatcom Museum of History and Art, Museum of Northwest Art, University of Oregon Museum of Art, and Silver Image Gallery, Seattle.

**Saturday, November 17, 1:00-3:00.** Refreshments will be provided. Please RSVP by calling (360) 428-1558 or register online at [www.padillabay.gov](http://www.padillabay.gov).



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  
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## Foundation Board Members

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**Padilla Bay**

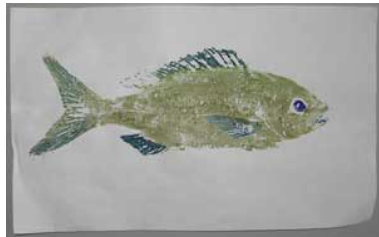
National Estuarine Research Reserve

# Autumn Events

## Presentations for September, October and November

### Padilla Bay by Kayak

Support the Padilla Bay Foundation, and enjoy paddling at the same time! Cruise along the shores of the bay with an Island Outfitters guide and a Padilla Bay naturalist. No experience necessary. Minimum age is 12, with people under 18 accompanied by a parent. Please meet at 10:30 at the Padilla Bay Reserve for a brief orientation, with launching from Bay View State Park. Fee is \$65 per person, with proceeds benefitting the Padilla Bay Foundation. **Call Island Outfitters at 299-2300 for information and to register. Saturday, September 1, 10:30.**



### Printing with Natural Objects

Capture the beauty of Nature's patterns and details in this workshop with local artist, Roxanne Grinstead.

Use natural objects to craft unique images on a variety of papers. Roxanne will show you how to create impressions with leaves, seeds, evergreen needles, feathers and more. We'll also try our hand at the ancient art of Gyotaku fish prints. **Saturday, September 8, 1:00-3:00.** Call to register, or register online.

### Songs of Autumn: Birding by Ear

Enjoy a fall morning of bird watching and listening with naturalist, Libby Mills. Many of our winter birds will be present, as well as migrants passing through. We will begin in the Padilla Bay Reserve uplands and then carpool to the Samish flats (stopping at a local bakery to warm up). This class moves slowly, so dress in warm layers. **Friday, November 9 and Saturday, November 10, 8:00-12:00.** Call to register, or register online

### Nature Poetry Workshop

This year's workshop will feature Washington poet and teacher, Joseph Green. Joseph's poems have appeared in literary magazines all over the United States, as well as



in Ireland and Germany, and have been collected in *His Inadequate Vocabulary* (1986), *Deluxe Motel* (1991), *Greatest Hits: 1975-2000*, and *The End of Forgiveness*. He was PEN Northwest's Margery Davis Boyden Wilderness Writer for 2000, in residence at the Dutch Henry Homestead in Oregon's Rogue River Canyon, and in 2002 he held a residency at Fundación Valparaiso, in Mojacar, Spain. He lives in Longview, Washington, and teaches English at Lower Columbia College. **Saturday, September 29, 9:00-5:00.** There is a \$20 fee for this workshop. Call the Center for a registration form, or download one from our website.

### Padilla Bay Birds in Motion

Enjoy watching birds in video, including many close-ups and behaviors of wading birds, waterfowl, raptors, shorebirds, gulls, and terns that frequent Western Wash-



ington and Padilla Bay. Al Wagar's career focused on recreation and urban forestry research for the U.S. Forest Service and University of Washington where he is now Research Professor Emeritus. He has been "shooting" birds out of season (with video) for about eight years. **Saturday, October 13, 1:00-2:00.** Please register online or call the Interpretive Center.

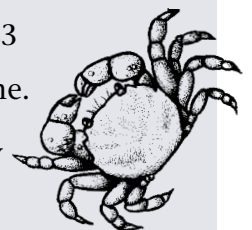
The Breazeale Interpretive Center is open Wednesday-Sunday, 10:00-5:00.

Closed November 22, & 23

Register online or by phone.

[www.padillabay.gov](http://www.padillabay.gov)

(360) 428-1558







## Volunteers and Kids Needed: Puget Sound Kids Day September 22

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 on **September 22 from 1:00-3:00**. 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.



## Videos: Sundays at 1:00 & 4:00

September	2	Search for the Giant Squid (60 min)
	9	Inland Sea: Pgt. Sound Fish Story (12)
	16	The Worlds Below (40 min)
	23	Return of the Plankton (27 min)
	30	The Return of the Salmon (30 min)
October	7	Eyewitness Ocean (35 min)
	14	Fabulous Wetlands (7 min)
	21	Spirit of the Sound (60 min)
	28	The Living Sea (40 min)
November	4	Padilla Bay (20 min)
	11	Owls Up Close (55 min)
	18	Jellies & Other Ocean Drifters (35 m)
	25	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.

September 5 & 6, 10:00 & 1:00  
Mammals—Furry and warm blooded, lots of mammals make their home around the estuary.



October 17 & 18, 10:00 & 1:00  
Cider Pressing—Turn the crank and enjoy a fall day in the Breazeale family orchard. Don't forget warm clothes!

November 14 & 15, 10:00 & 1:00  
How Animals Move—Swimming, flying, crawling, squirming—only a few estuary animals walk on two legs like you!



**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.

September 7 & 8, 10:30-12:00  
Plants are Pals—We depend on plants for all sorts of things, including our food and the air we breathe. Come investigate plants in the estuary from tiny plankton to giant kelp.

October 19 & 20, 10:30-12:00  
Cider Pressing—Spend a fall afternoon out in the orchard, and learn about the Breazeale family farm. (Wear a warm jacket.)

November 16 & 17, 10:30-12:00  
Estuary Art—Estuaries are beautiful places full of marvels. They have inspired artists for centuries, and they can inspire you, too. We'll look at beautiful examples of estuary art, and make some ourselves.



Water quality data station at Joe Leary Slough

## With Telemetry, Padilla Bay Weather and Water Quality Data Is Now Available in Real-Time

by Nicole Burnett

**What does this mean?** It means that you are now able to view some of the data collected by researchers at the Padilla Bay Reserve more quickly. In fact, you can see the data only an hour after we collect it. Padilla Bay was one of eight reserves in the National Estuarine Research Reserve System chosen in 2005 to pilot the real-time data transmission. Now most of the 27 Reserves have at least one station that is providing data real-time.

**How does it work?** The instruments collect the data with probes or sensors. The data is stored at the station on a datalogger. Once an hour the data is pulled from the datalogger and is transmitted to GOES (a geostationary weather satellite), stationed over the eastern Pacific Ocean. From the satellite the data is then sent to a data management office in South Carolina, where it is organized and displayed on a website.

**What kind of data can you see?** We have two real-time stations set up. One is our weather station which is located about two miles south of the interpretive center on Bay View-Edison Road. The weather station records air temperature, relative humidity, barometric pressure, wind speed and direction, precipitation, and light (photosynthetically active radiation). The second station is located just inside the tide gates (the fresh water side) of Joe Leary Slough, the largest direct freshwater source for Padilla Bay. This station collects physical water quality data including water temperature, depth, pH, salinity, turbidity, and dissolved oxygen.

**How Can You See the Data?** You can view our data by going to <http://cdmo.baruch.sc.edu>. Click on the "Get Data" tab on the left side and then click on the "Search Data" tab. This then brings up a map where you can easily begin the search for the Padilla Bay data or available data for any of the other reserves. We are in the process of reorganizing the research section of the Padilla Bay website ([www.padillabay.gov](http://www.padillabay.gov)) where we will have a direct link to the real-time data. Another interesting site that uses Padilla Bay's data is [www.nanoos-shellfish.org](http://www.nanoos-shellfish.org).

**What Can You Expect in the Future?** In addition to the weather station and the sampling station at Joe Leary Slough we also have three other physical water quality sites in Padilla Bay. One of these shallow water quality sites will be added as a third real-time station in the near future. Further down the line, we hope to add a fourth real-time station to our deep water quality site.

**Why is Real-Time a Good Thing?** You can see your local weather and water conditions. Previously, you had to wait a whole year to get the data. Remember those wind storms last winter? During the storm you could see just how fast the wind really was blowing! (That's assuming your power wasn't out.) Trapped inside because of the rain? Feeling like you need to get outside? Check the weather at Padilla Bay and plan your adventure...today!



Weather station at the Padilla Bay Demonstration Farm, Bay View-Edison Road



stream/estuary health. And it's great fun!

Orientation and training will be at the Interpretive Center on:  
**Wednesday, September 5th, from 6:00-8:30PM,**  
**Thursday, September 6th, from 6:00-8:30PM**  
**Saturday, September 8th 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).

### Join the Skagit Stream Team

Get intimate with Skagit County's waterways. The Skagit Stream Team is once again looking for a few good folks to monitor 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



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