



Padilla Bay Newsletter

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

Winter 2006-2007



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.

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

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Bring on the Sun

The Padilla Bay Reserve is using a little less carbon now that banks of photovoltaic collectors grace the roof of the Breazeale Barn. The panels turn solar radiation into electricity that can be used at the Reserve or sold to Puget Sound Energy. The barn roof proved to be the perfect site for solar electric panels, facing south with the right inclination for our latitude. One hundred twelve Sanyo 190 watt photovoltaic panels collect the energy and channel it to Puget Sound Energy's electrical grid through four SMA sunnyboy 6000 inverters.

Kelly Keilwitz of Whidbey Sun and Wind, one of the designers of the system, estimates that the solar electric panels should offset about 8% of the total energy used by the reserve. With current incentives available to renewable energy producers, this should translate to a savings of 25-30% of the reserve's energy cost. The panels should produce at least 22,000 KWH/year (saving about 12,000kg of CO²).

If you are interested in how the solar electric panels are performing, you can view their actual energy production on Padilla Bay's website. Click on the link for Solar Energy. A barn roof built in 1941 to keep the rain off of the Breazeale hay crop is now a source of green, renewable power.

For programs on alternative energy and climate change at the Padilla Bay Reserve, see page 5. **February 24:** workshop on renewable energy sources for homeowners and small businesses. **February 9:** teacher workshop on teaching about climate change.

Fidalgo Island Sculptor, Tracy Powell Completes Carving for Padilla Bay Meeting Room

Thanks to an Anacortes Arts Festival grant to the Padilla Bay Foundation, a beautiful new work of art now hangs in the foyer of Padilla Bay's meeting room. Called Circle of Life, the yellow cedar ring features a variety of Padilla Bay plants and animals that seem to dance in a cheerful swirl. From tiny plankton and eelgrass to a harbor seal and human, the images celebrate the interdependence of all life.



Tracy Powell carved the yellow cedar sculpture in his Shelter Bay studio near La Conner. He also works in stone at his studio at the Madrona Center on Guemes Island. His public works include the Maiden of Deception Pass at Rosario Beach and the Jasper Gates statue on First Street in Mount Vernon, and he has numerous works in galleries and private collections throughout the region. It was an honor to work with Tracy on this project, and a delight to have his art on display.



Padilla Bay Foundation Elects New Board

A new executive board is set for the 2006-07 year. Gail Smith has stepped up as president. He is an attorney in Mount Vernon with the firm Smith and Jones, and has served on the board for 4 years, offering legal and procedural advice. Charles O'Hara, with the Office of Planning and Community Development, Swinomish Indian Tribal Community will serve as vice-president. Tom Richards will serve as secretary, and Deb Canon will continue as treasurer. Thanks to the whole board for their commitment, and to Past President, Richard Treston for his work for the Foundation. We look forward to another exciting year working to support the programs of the Padilla Bay National Estuarine Research Reserve.



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	\$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

Foundation Board Members

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

Lyn Bishop
 Paul Dinnel
 Ed Gastellum
 Brian Hanson
 Kraig Kemper
 Sue Krienen
 Cort Liddell
 Tim Manns
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Terry Stevens - Advisory Member
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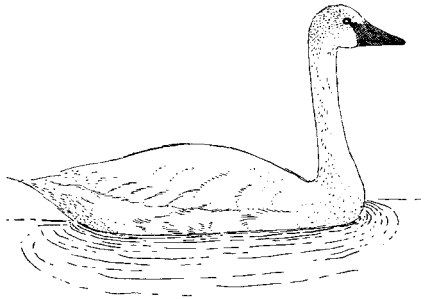


Winter Events

Presentations for December, January and February

Winter Hawks of the Skagit Flats

The Skagit Valley is an incredible area for observing wintering hawks and falcons. Learn to recognize the most common species in our area with raptor biologist, Bud Anderson. A slide presentation from 9:00-11:00 will introduce you to raptor biology, field characteristics, and common behaviors. The afternoon field trip runs until around 2:00 and is limited to 15 participants. **Saturday January 6.** Please call or register online.



Swans in the Skagit Valley

The swan as a mythical creature goes back to the earliest human cultures. Each year, the Skagit is the winter home of thousands of swans that nest in the arctic. This program by swan biologist, Martha Jordan, covers swan mythology and life history, as well as current issues. **Saturday, January 27, 10:00-12:00**, with an opportunity for viewing swans in the afternoon. Please call or register online.

Estuaries and the Entire History and Future of Humans on Earth

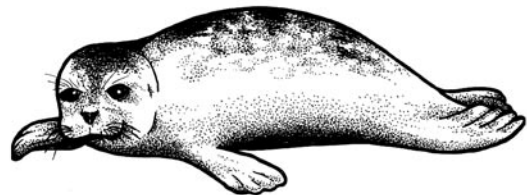
From prehistoric settlements to modern megacities, estuaries have been the gathering spot for humans for 9,000 years. Will they continue to be? If you are curious about what our past and future look like and what we can do to guarantee our continued existence, you don't want to miss this presentation. David Henry holds a M.Ed. from WWU in Environmental/Science Education and has been the Padilla Bay Watershed Outreach Coordinator for the past 12 years. **Friday, February 2, 7:00-8:30.** Please call or register online.

Listening and Watching for Winter Birds

Join naturalist, Libby Mills, using sight and sound to find winter birds. This excursion will include walking around the reserve uplands as well as carpooling to nearby flats to look for raptors. Pack warm clothes, binoculars, field guides, and warm drink or lunch. Meet in the Padilla Bay parking lot. Each class limited to 15 participants. **Friday, February 9 and Sunday, February 11, 8:00-12:00.** Call to register, or register online.

Marine Mammals of the Salish Sea

From saltwater weasels to leviathan whales, the Northwest near and off-shore habitats host a wide range of creatures evolved to this challenging environment. We will explore their adaptations, bio-ecology and intriguing behaviors in this slide program of discovery. Which animal has retractable claws? Who employs bubble nets to catch their krill? Which carnivore returned to the sea? Join David Drummond, wildlife biologist with the Merlin Falcon Foundation to learn more about this fascinating fauna from the rocky beach to briny benthos! **Sunday, January 14, 1:00-2:30.** Please call or register online.



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

Closed December 24.

Register online or by phone.

www.padillabay.gov

(360) 428-1558



Raptor Class

The Skagit Flats are nationally recognized for their hundreds of wintering birds of prey. This class will teach about different kinds of raptors, emphasizing field identification and the particularly fascinating element of winter behavior. Instructor Bud Anderson has studied raptors for over 35 years, and has an incredible knowledge of local populations and peregrine falcons. The class meets five Thursday nights, **January 18- February 15, from 7:00-9:00**, with a Saturday field trip. The class fee is \$135 per person. To register, send check or money order to the Falcon Research Group, PO Box 248, Bow, WA 98232. Class size is limited, so register early.



Videos: Sundays at 1:00 & 4:00

December	3	The Natural Forest (23 min)
	10	Spirit of the Sound (60 min)
	17	The Living Sea (40 min)
	24	closed
	31	Jellies & Other Ocean Drifters (35 m)
January	7	Eyewitness Ocean (35 min)
	14	Hawks Up Close (55 min)
	21	Yellowlegs, Eelgrass, Tideflats (60 m)
	28	Incredible Suckers (60 min)
February	4	Padilla Bay (20 min)
	11	Wild Northwest (45 min)
	18	Orcas in the Balance (40 min)
	25	Estuary! (15 min)

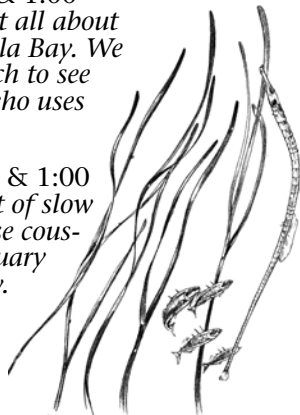
Monthly Youth Programs Offer Fun Learning

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.

December 6 & 7, 10:00 & 1:00
 Wrack and Wreath– *We'll create decorations and food for wildlife with natural treasures from the beach.*

January 10 & 11, 10:00 & 1:00
 Elegant Eelgrass–*Find out all about our favorite plant in Padilla Bay. We will take a trek to the beach to see where eelgrass lives and who uses eelgrass for a home.*

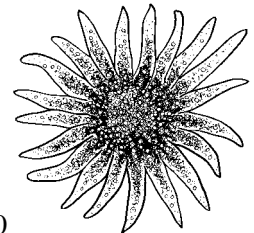
February 14 & 15, 10:00 & 1:00
 Snails and Sea Slugs–*Sort of slow and sometimes slimy, these cousins are the stars of the estuary fashion show.*



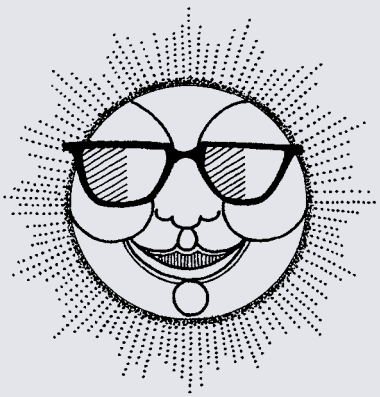
Junior Ecologists are 6-9 year olds who have fun exploring the estuary. Excursions to the beach, science experiments, games, art projects, and studying life in the bay–this program is guaranteed fun! Call the Interpretive Center or register online.

December 8 & 9, 1:00-2:30
 Wrack and Wreath– *We'll create decorations and food for wildlife with natural treasures from the beach.*

January 12 & 13, 1:00-2:30
 Echinoderms: the Sea Star Clan–*Stars, urchins, cucumbers and more, these relatives have amazing secrets to share.*

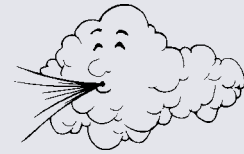


February 16 & 17, 1:00-2:30
 Camouflage: How to Hide in the Tide–*Don't wear bright pink to this program. We'll find out how camouflage works and who uses it in Padilla Bay.*



Ten Things You Can Do to Slow Climate Change

1. Save electricity by using compact florescent bulbs.
2. Conserve hot water.
3. Recycle. (Recycling one aluminum can saves enough energy to keep a 100-watt bulb burning for almost four hours.)
4. Walk, bike, carpool or take transit to get to one of your regular destinations each week.
5. Reduce your home heating use. (Turn the thermostat down, weatherproof windows, add insulation.)
6. Purchase energy-saving appliances. (New refrigerators, for example, use 40 per cent less energy than models made just 10 years ago.)
7. Be sure the next car you buy is fuel efficient and low polluting.
8. If you are moving, choose a home within a 30-minute bike, walk or transit ride from your daily destinations.
9. Encourage your work place to adopt energy efficient practices. Many businesses and industries have saved money on energy-efficiency upgrades. See the EPA website: http://www.eere.energy.gov/consumer/your_workplace/
10. Go carbon neutral. If you add polluting emissions to the atmosphere, subtract them by purchasing "carbon offsets." The David Suzuki Foundation offers one of many programs to help you go carbon neutral. See [/www.davidsuzuki.org](http://www.davidsuzuki.org) for more information.



Renewable Energy for the Homeowner

Whether you're interested in cleaner, healthier air, saving money, reducing our dependence on foreign oil, or doing your part to minimize climate change, conserving energy and switching to renewable sources makes sense.

Join local and national renewable energy expert Ian Woofenden for an introductory workshop on energy efficiency and renewable energy, including a tour of the new solar-electric system on the Padilla Bay barn and two other renewable energy systems in Skagit County. You will be introduced to these viable energy technologies: Solar-, wind-, and hydro-electricity, solar hot water and cooking, as well as energy efficiency and conservation. Participants will learn how to evaluate each resource and plan a high quality system. Printed materials will include introductory articles and resources on each of the technologies. Ian has been living and working off-grid with solar and wind energy for 25 years. He is Senior Editor with Home Power magazine, a leading journal of renewable energy options for homes. Ian also coordinates and co-teaches workshops for Solar Energy International in the San Juan Islands and in Costa Rica. He teaches and consults for a variety of organizations in the United States and Central America, as well as providing energy efficiency and renewable energy consulting for homeowners in Western Washington.

Saturday, February 24, 9:00-4:00. There is a \$10 fee for this workshop. Please call the Interpretive Center to register, or download a registration form from our website at www.padillabay.gov.

Turning Down the Heat in Your Classroom! A Free Global Warming Professional Development Workshop

Teachers of 5th – 8th grades are invited to attend this unique workshop put on by RE Sources' environmental education specialists at Padilla Bay. Learn about global warming, the greenhouse effect, human impacts, and how to bring the latest information to your students with a solution-oriented lesson plan and hands-on learning materials.

Participants will receive *Choices: You Make the Difference* – a unique and engaging global warming board game developed by Northwest Clean Air Agency and RE Sources – along with a companion teacher packet full of background information, activities, support materials, web resources, and a multimedia CD-ROM. The workshop is free, but registration is required by January 12th, 2007. To register or for more information, contact Katie Fleming at 360-733-8307 or katief@re-sources.org. **Friday, February 9, 9:00-5:00.**



For Teachers: Storming the Sound on January 19

Environmental Educators from the North Puget Sound region will be gathering for a day of workshops, networking, and information sharing. **Friday, January 19, 9:00-4:00** at Maple Hall in LaConner. Padilla Bay staff are helping to organize and sponsor this event for classroom teachers, agency staff, and educators from non-profit groups. Teachers—there is money available for substitutes. Call the Reserve at 428-1558 or check our website at www.padilla-bay.gov for more information.



Teacher Workshop on Climate Change February 9

See page 5 for details about this free workshop offered at Padilla Bay by ReSources.

Give a Gift That Supports a Great Cause

Stop by the Reserve and check out a wonderful assortment of Padilla Bay gifts. Sweatshirts, t-shirts, posters, mugs, totes, and more. We continue to add new colors and styles—and all proceeds support the research, education, and resource stewardship programs at Padilla Bay.

Check Inside for the Winter Activity Schedule:

- Presentations
- Mini Explorers
- Junior Ecologists
- Films



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