

Georgia Basin Conference Addresses Environmental Concerns

By Janice Donovan and Daniel Hull

More than 900 scientists, students, tribal members, and agency professionals gathered in Vancouver, B.C., March 23-29, for the 2007 Georgia Basin/Puget Sound Research Conference. Board members Doug and Karen Myers and Center Director Daniel Hull represented the NRNC. Doug chaired a session on shoreline restoration and a session on near-shore habitat and species restoration, Karen presented a poster exhibit on bird monitoring in the restoration area, and Daniel presented a talk on citizen science monitoring at the Center.

Doug found the conference to be the most comprehensive meeting covering Puget Sound issues he had ever attended. "The opportunities for networking between professionals in the fields of study and advocacy for a cleaner, healthier Puget Sound and Georgia Basin were tremendous, and NRNC-affiliated folks took advantage of that," he said. He also noted that the conference instills a kinship among agencies, Tribes/First Nations and academics, and participating in this invigorates the Center's continuing efforts on behalf of the South Sound. Daniel expressed similar feelings. "For me, the conference was a great way to learn and network with others about what kinds of problems we face in restoring the Sound to full health," he said.

Shoreline Restoration. At Doug's first session, presenters discussed ways to use their emerging understanding of natural shoreline processes to improve restoration.

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Biologists described techniques for removing bulkheads and other shoreline armoring, which restrict the flow of sediments onto and along beaches, and ways to add sand, gravel, and woody debris to approximate the historic natural structure.



Orca whale breaching in the Sound

To restore tidelands in salt marshes, restorationists remove levees that once maintained agricultural land. Chris Ellings of the Nisqually National Wildlife Refuge informed participants about the restoration process on the Nisqually delta and its effect on juvenile Chinook salmon. "Chris was quick to praise the efforts of NRNC volunteers in front of this international audience for our invertebrate monitoring contribution to the project," Doug noted. Chris also provided information about salmon recovery attributed to restoration, as did other speakers at the conference.

Near-shore Habitat and Species Restoration. Speakers in Doug's second session stressed the importance of understanding the historical conditions of the ecosystem as a template for restoration. Presenters addressed physical factors, such as salinity and wave exposure, that determine the distribution of intertidal invertebrates throughout the Sound. A presentation on Dungeness crab habitat and populations cited the usefulness of a citizen science project in collecting data on juvenile crab habitat

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utilization. As Doug noted, "It was rewarding to see citizen science receive such attention within this very serious study."

Citizen Science. The term "citizen science" means that volunteers mobilize to help not only scientific agencies, but they also can have an impact on others in the community by helping to connect them to things that are happening in our own backyards. "In my 17 years as an environmental educator," Daniel said, "I believe that the most effective educational programming for the environment we have had is the move towards citizen science." Anyone can do it, and each person who gets involved makes a connection—the kind of connection that has the ability to change perceptions and value systems. "I am glad to be working at the NRNC in citizen science and proud of the fact that I had the opportunity at this conference to share a bit about what we have done," Daniel said.

Doug noted that Daniel shone as the Center's representative to this conference while making a presentation on citizen science monitoring at the NRNC. Participants at the citizen science session had all kinds of questions for Daniel. "He had all the right answers," Doug said. "As a board member, I was proud to see Daniel and the Center playing such a significant role in the environmental education section of this conference," Doug commented.

Bird Monitoring. The attractive and colorful poster entitled Monitoring and Evolution: Avian response to estuarine restoration via dike removal, presented by Karen, outlined the methodology and emerging results of bird monitoring data at Red Salmon Slough. Karen was kept busy answering questions about the project from a crowded hall of poster viewers who were eating chocolate-covered fruit and other goodies.

Corrections: Luhr Lore

Winter 2007 - p. 1 para. 1: Russell Family Foundation was spelled incorrectly.

Winter 2007 - p. 3 para. 3: Chris Ellings' and Sayre Hodgson' 2007 paper is in preparation.

We apologize for any errors we have made or for incomplete information. We do our best to see that *Luhr Lore* is correct.

Doug remarked, "It was great that Karen could refer to Chris Ellings' and Daniel's presentations on the monitoring program and vice versa. We made quite a splash."

Afterthoughts.

Doug's personal highlight of the confer-



Chris Ellings' presentation

ence was the importance of making connections with folks at the University of Washington/Tacoma, connections that will likely pay benefits for the Nature Center in years to come. Doug also felt that the information shared at the conference and contacts made there would help the state of Puget Sound by allowing us to think differently, consider our own contributions as part of a greater whole, and forge ahead with a fuller understanding of the future effects of growth, climate change and technology.



Daniel presenting citizen science

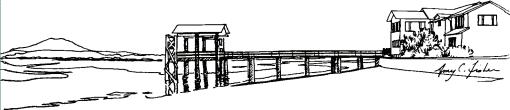
"While the details of the Puget Sound Partnership's new structure are still emerging, the conference marked a turning point from the way we've done things before to the way they'll be approached in the future," Doug commented. "It's clear that the Partnership will bring more emphasis, money, and ideas to protecting and restoring Puget Sound than at any other time in the state's history."

In Doug's view, the hard work of delivering the mission of the NRNC in recent years has paid dividends that

have increased the Nature Center's status within the greater Puget Sound/Georgia Basin community. "The city of Vancouver, B.C., displayed new ideas for accommodating growth that we can learn from in Puget Sound," he said. "The border, despite the long lines for crossing it, is truly a meaningless line when it comes to marine resources and the people dedicated to protecting them."

The poster and other details on presentations at the conference, can be viewed at our website: www.nisquallyestuary.org.







Nisqually Reach Nature Center: 25 Years of Education and Research



By Daniel Hull, NRNC Director

I am excited to say, "We Have Made It!" This year marks a quarter-century of quality education and research in the Nisqually valley at the Nisqually Reach Nature Center (NRNC). I think this milestone comes at a time when places like the NRNC are needed most. Today, it is common to hear concerns about the environment, but unfortunately it is not uncommon to hear from fishers, hunters, and wildlife viewers as they come through the Center that the Puget Sound is not what it once was.

However, there is still a large community of people who think that the Puget Sound is doing fine. In 2006, the Partnership for Puget Sound noted that 98% of people surveyed in the Puget Sound region would like to see a healthy Sound for upcoming generations, but 70% of those same people stated that the health of the Puget Sound is good right now.

Many organizations are trying to change these attitudes through education and outreach programs, and Gov. Chris Gregoire has taken steps to go forward with plans to clean up the Sound by 2020. The NRNC's education programs have specialized in getting people out on the beaches so they understand and appreciate the importance of diversity on estuarine beaches in the Puget Sound.

"I value what a healthy Puget Sound has to offer." ocmes at a page of the same of



2006 summer camp fish seining



Sunrise over Mt. Rainier from the pier at NRNC

It was not long ago that the Nisqually estuary was facing the possibility of being developed into a deep-water shipping port. If it were not for the caring people who stood up to let their voices be heard and to research and document the importance of this special habitat, we at the Center would not be looking out at one of the finest estuaries in the Northwest.

Instead, we would be looking at a port similar to the Port of Tacoma. Although a deep-water port would provide jobs and boost the economy, everything

comes at a price. However, when people are willing to say, "I value what a healthy Puget Sound has to offer," the economy can grow in other ways, such as through shellfish harvesting. Moreover, many would argue that there is no price that could be put on a resource like the Puget Sound. It has rich cultural, natural, and economic history to it. And the fact of the matter is, it's suffering and needs our help.

So now that we are coming into our 25th year, I challenge our supporters to continue to stand strong for what you believe. It is that determination that helped save places like Nisqually and it is that same determination that will gather the synergy to help save the Puget Sound.

How did NRNC Come into Being?

Bill Luhr built a house at Luhr Beach in 1932, where he lived and operated a hunting and fishing camp and guide service for nearly 30 years. After the Washington State Game Department bought the property along the shoreline from his son in 1965, the state continued to maintain the house, boat ramp and pier. The Evergreen State College operated the facility as a marine laboratory between 1973 and 1979, after which the building was vacant.

In 1981, the president of the Black Hills Chapter of the Audubon Society (BHAS), Bert Bertram, suggested that the BHAS take over operation of the facility and use it as an educational center. The BHAS subsequently signed a contract with the state, agreeing to keep the laboratory open and a resident caretaker onsite. The facility was called the Audubon Nature Center at Nisqually Reach and was first operated by a BHAS subcommittee. A non-profit corporation was later formed as an independent organization of the same name, with 90 founding members.

Ric and Darlene Zarwell, along with their son Robin, became the first caretakers, called Directors. The first President of the Board was Harrison Longshaw. To raise money, the Center sold birdseed. The first issue of the newsletter, *Luhr Lore*, appeared in the fall of 1982, with the same masthead in use today, a drawing by Amy C. Fisher. The apparent affiliation with the Audubon Society caused confusion on the part of the public, leading the organization to change its name in 1986 to the Nisqually Reach Nature Center.

Some 60 years took a toll on the building, and the Nature Center closed for a year as renovations took place. As NRNC President Doug Canning wrote just after the work started in 1996, "All of the asbestos building material including siding and some of the roofing and flooring were safely removed. Then the building was lifted off

"The building that houses our Nature Center was begun in 1932, a wing added in 1942. Bill [Luhr] and his wife lived upstairs, overlooking the delta, for 28 years. Five small 'cabins' or shelters were built on the adjacent ledge above McAllister Creek for rental to hunters and fishermen. It was Bill who built the massive log bulkheads and concrete retaining wall at our shoreline."

- Ruth Carson, founding member



Dave McNett leads a 1982 education program at NRNC

its foundations and the first floor was razed to allow for foundation repairs and a new, taller first floor." The building also got new siding and a new roof and, most important, a retaining wall was built to protect the Center from mudslides such as the one that occurred in 1986. The "new and improved" Center opened on June 21, 1997. The building's higher ceilings, panoramic views, and improvements on the second floor met with enthusiasm from attendees at the grand opening, among whom were Maxine Luhr Short, who had grown up in the original house, along with her husband and children.

Dave McNett was a draftsman and a founding member who sat on the first Board of Directors and was the second caretaker of the building. He shared his love of the environment at the Nisqually delta with many. He says he tried to "...connect the community to the many values that can be found in a healthy food web." He adds that although "birds steal the show, we need to stress...the many interconnections found in complex food webs."

Doug Canning has watched the Nature Center evolve since the early 1990s. "It's been interesting and challenging to be a part of the growth of the Nisqually Reach Nature Center from its days as a low-budget, all-volunteer organization, to what it's now become — a mature environmental education center with paid staff, research interns from local colleges, and a more-or-less stable income," he says. "The big challenge for the next 25 years will be not just sustaining what we've achieved, but meeting the challenge of climate change — the Nature Center will become quite vulnerable to sea level rise in the coming decades."

NRNC's Role in the 21st Century

The NRNC's citizen science and environmental education programs help bring important information, awareness, and opportunity to our community. In 2006, for example, these programs reached more than 3,500 people. Among these programs was a conference on citizen science, held in November. This conference provided a tremendous learning environment for scientists and the public alike. The NRNC's volunteers completed an Invertebrate Monitoring Program (see box below), and we are currently working on a new Invertebrate Monitoring Program that will focus on terrestrial invertebrates caught in fall-out sample traps.

Volunteers also conducted bird monitoring at the Nisqually Tribe's restoration site, where dikes have been removed to allow the estuary to re-establish itself, attracting more migratory shorebirds. We are currently looking at a new protocol for the estuary restoration area, and we hope to start a new monitoring program in the fall of 2007.

Our Center provides an opportunity for school children to experience the beauty of the Nisqually delta, where they learn firsthand about the incredible diversity of marine and bird life. At the NRNC summer camps, children have a chance to be out on the beach collecting fish, crabs, and other creatures, learning about predator/prey relationships, the importance of caring about our environment, and understanding the impact humans have on Puget Sound.

For more information about our programs, please visit our website at: www.nisquallyestuary.org

Timeline

Timeline						
	1922	_Luhr family buys 86 acres on McAllister				
		Creek				
	1932	Bill Luhr builds a house on the beach;				
		later adds bulkhead and retaining wall,				
		pier, rental boats				
4	1965	Bill Luhr, Jr., sells property to Washing-				
		ton Game Dept.				
4	1969	_Florence Brodie spearheads efforts to				
	br.	protect the Nisqually Delta				
	1974	_Nisqually National Wildlife Refuge				
	85.	established				
	1975	_The Evergreen State College remodels				
	1975	building, uses it as marine laboratory				
	1979	_The Evergreen State College vacates				
		building				
_	1982	Black Hills Audubon Society contracts				
		with the WA Game Dept. to operate				
		Audubon Nature Center at Nisqually				
		Reach				
_	1982	_First issue of <i>Luhr Lore</i> ; caretakers move				
		into building				
_	1986					
		Nature Ctr.; mudslide - 10 tons of debris				
		plow into building				
-		_Construction begins for renovation				
_	1997					
120	2003	First full-time, paid Director hired				

2006 NRNC Accomplishments

Environmental Education

- 1600 general public visitors came through the Center during open hours on 132 days.
- 700 students visited the Center during 27 environmental education events.
- 71 students attended summer camps.
- 250 people came to the Center during 17 events organized by other organizations.
- 800 students were reached in 5 outreach events.
- Educators came from an international near-shore salmon program based in Kamchatka, Russia, and co-sponsored by the Wild Salmon Center in Oregon.

Citizen Science

- In 2006, volunteers spent 830 hours completing an Estuary Restoration Invertebrate Monitoring Program in conjunction with juvenile Chinook salmon diet analysis. The results were presented at the 2007 Georgia Basin Conference.
- A 2-year Estuary Restoration Bird Monitoring Program was completed in 2006, with over 700 volunteer hours. During the monitoring, 102 bird species were spotted on or adjacent to the restoration area.
- Fish Seining and Quadrat Sampling Programs at the NRNC were conducted by students from primary school age through the college level participating with NRNC naturalists to help understand more about Puget Sound near-shore habitat and the macro fauna that can be found there.
- The NRNC convened a citizen science conference in November 2006.

Volunteers/Partnerships are Key to Future Success

What the Nisqually Reach Nature Center has accomplished in its 25 years is a product of the strong partnerships and committed people who believe in what we are doing and who continue to make a difference. Our volunteers and partners are the foundation of the NRNC and the key to its future as an important contributor to environmental awareness in South Puget Sound.

A big thank-you goes out to our partners, the Washington Department of Fish and Wildlife, the Nisqually National Wildlife Refuge, and The Nisqually Tribe; to our grantors, The Russell Family Foundation, US Fish and Wildlife Service, and National Fish and Wildlife Foundation and Pierce County Partnership; and to South Bay Press for many years of wonderful service and for helping to make this anniversary issue possible. And finally, special heartfelt thanks go to our generous volunteers and supporters for seeing us through to this 25-year milestone.

The NRNC eagerly welcomes new members and people who would like to volunteer some time to ensure the success of our programs. Volunteers can help in many ways—assisting at the visitor center, spending time as a counselor at summer camps, providing educational programs, as well as more mundane tasks such as aquarium maintenance, land-scaping, mailings, and general maintenance.

If you would like to volunteer, please call the Center at (360)459-0387. We'd like to meet you!!

Become a Supporter of the Nisqually Reach Nature Center

We invite you to join the Nisqually Reach Nature Center, or renew your membership, and help support marine science education programs for children and adults. All Members will receive:

- A subscription to the Center's newsletter,
 Luhr Lore
- Priority consideration for Center activities and events
- Volunteer and docent opportunities

To join, fill out this application and mail it to: Nisqually Reach Nature Center 4949 D'Milluhr Drive NE Olympia, WA 98516

We do not give out any personal information.

Yes!! I want to support the Nisqually Reach Nature Center, its goals, and educational programs. I wish to become a Member of the Center as a (check one): Name:

Address:

City, State, Zip:

Telephone:

Email:

Membership Category	Annual Dues
Senior/Student	25.00
Individual	35.00
Household	50.00
Supporting	75.00
Patron	100.00
Benefactor	250.00
Sponsor	500.00
	Senior/Student Individual Household Supporting Patron Benefactor

Please make check payable to: Nisqually Reach Nature Center

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Join us this summer for Estuarine Adventures at **NRNC Summer Camps**

Why is mud so important? Why do birds migrate and where do they go? How much is an estuary worth? What are marine mammals and where do they live? What is plankton and why is it important? To find out the answers to these and other questions about the creatures of Puget Sound, come explore Luhr Beach and the Nature Center



through indoor and outdoor projects and activities that provide an exciting look at why the Nisqually Delta is truly one of the South Sound's most valuable resources.

New, hands-on activities will introduce campers to many fundamental biological and ecological principles in a science-based curriculum that will cover such things as the difference between vertebrates and invertebrates, animal/habitat connections, food chains and webs.

NRNC Non Member Fee: \$80.00 per camper / NRNC Member Fee: \$70.00 A \$25.00 deposit is required for reservations.

Contact us at (360) 459-0387 e-mail nrnc@nisquallyestuary.org or visit us on the web www.nisquallyestuary.org and get a registration form on-line.

Summer Camp 2007 Schedule

Session #	Date's	Time	Age
Session 1	June 27 - 29	9:00 am - 4:00 pm	Age 7-9
Session 2	July 11 - 13	9:00 am - 4:00 pm	Age 10-13
Session 3	July 25 - 27	9:00 am - 4:00 pm	Age 8-10
Session 4	August 8-10	9:00 am - 4:00 pm	Age 11-14
Advanced Session 5	August 13 - 15	9:00 am - 4:00 pm	Age 10-14

Nisqually Reach Nature Center

The NRNC is a private, nonprofit organization incorporated in Washington State, and recognized as a 501(c)(3) organization under the Internal Revenue Code. All contributions are tax-deductible. The Nature Center is located at Luhr Beach on the west side of the Nisqually Delta. Our facilities are provided by the Washington Department of Fish and Wildlife. No state funds are provided for the operation of the Center.

The Center is open to the public Wednesday, Saturday, and Sunday between 12 and 4 pm.

Board of Directors

President, Douglas Canning Vice President, Doug Myers Treasurer, Jim Cubbage Secretary, Kaia Petersen Gordon Bellevue **Betsy Dickes** Deanna Donovan Karen Myers Mary Lou Peltier WDFW Liaison, Alan Rammer

Center Director, Daniel Hull

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25 years

2007—Nisqually Reach Nature Center's 25th Anniversary

Anniversary Highlights —inside this issue— Open House Events, History, Pictures, and more...

NRNC 25th Anniversary

We Did It!!! Come and join us for some fun at NRNC as we host two open house events this summer.

June 23rd from 11:00 a.m. to 5:00 p.m.

Activities will include:

- 12:00 p.m.-Citizen Science highlights and seining program
- 2:00 p.m.-History of McAllister Cr. and Luhr Beach Snacks and beverages will be provided.

August 25th from 11:00a.m. to 5:00p.m. Activities will include:

- 12:00 p.m.-Quadrat or seining
- 2:00 p.m.-Highlights of summer camp data collected during our summer camp in 2007
- Local author and historian Tim Ransom will talk about the history of the Braget Family Farm



Nisqually Delta from Old Pacific Hwy

No reservations necessary... This is a great opportunity to visit the Center and connect with some of the great people who support what we have accomplished in the last 25 years.

Nisqually Reach Nature Center 4949 D'Milluhr Rd NE Olympia, WA 98516-2311

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NISQUALLY REACH NATURE CENTER