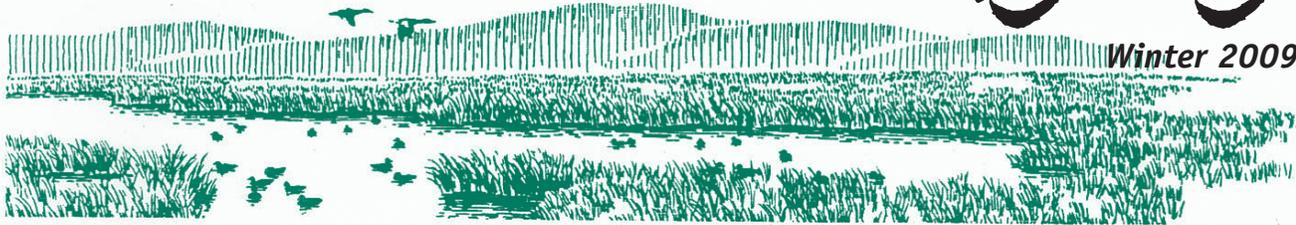


# The Flyway

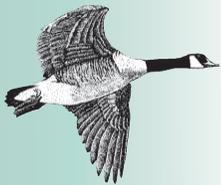
Winter 2009



Quarterly newsletter of Nisqually and Grays Harbor National Wildlife Refuges

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**Save the Date!**  
**2009**  
**Grays Harbor**  
**Shorebird Festival**  
**April 24-26**  
**Hoquiam, WA**

[www.shorebirdfestival.com](http://www.shorebirdfestival.com)



## Nisqually NWRC: Year in Review

2008 was a big year for the Nisqually National Wildlife Refuge Complex in many different ways. There were two major construction projects started, high visitation and program usage, and the creation of new programs. Here are some of the highlights:

### Nisqually National Wildlife Refuge

- ▶ Construction began on the new Education Center with expected completion in April 2009
- ▶ Construction began on the 762 acre estuary restoration project; updates can be found on line at <http://www.fws.gov/nisqually/eventnews.html>
- ▶ 550 people attended the summer interpretive programs
- ▶ 750 people attended the summer lecture series
- ▶ 1800 people attended the Nisqually Watershed Festival
- ▶ 134 students entered the Watershed Festival Poster Contest
- ▶ 168 students

entered the Washington State Junior Duck Stamp Contest and Best of Show winner, Alec Chou, won an Honorable Mention in the National Junior Duck Stamp Contest

- ▶ Junior Refuge Manager Program was created. Free activity booklet offered to children during their visit to the Refuge, and upon completion, they receive a badge and certificate
- ▶ 5,436 students participated in the environmental education program
- ▶ 25,780 people visited the Visitor Center
- ▶ Approximately 170,000 people visited the Refuge
- ▶ Volunteers donated over 16,000 hours of their time to help support the mission of the Nisqually National Wildlife Refuge

### Grays Harbor National Wildlife Refuge

- ▶ 1800 people attended the Grays Harbor Shorebird Festival
- ▶ The Shorebird Festival auction raised \$7,600 to support the Festival, the Refuge, and the education program
- ▶ 775 students entered the Shorebird Festival Poster Contest
- ▶ 445 students participated in the environmental education program
- ▶ Volunteers donated almost 3,300 hours of their time to help support the mission of the Refuge. ✎



Refuge Volunteer Phil Kelley leads visitors on a bird walk

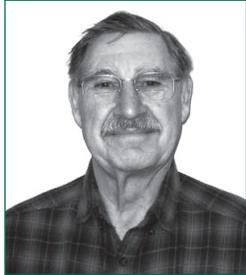
# Friends of Nisqually Board of Directors

By Shelley Carr

Seven dedicated individuals serve on the Board. Ken, Shelley, and Alan are charter board members; John and Kara have each served for eight years; Kristin Stewart six; and Fred Hellberg five, so the Friends Board has a combined total of 57 years of volunteer service since it formed in 1998. Read on and meet these committed individuals who do a lot to maximize how the Friends of Nisqually NWRC supports the Refuge.

## Ken Batker

A member of Tahoma Audubon Society, Ken was aware of the Refuge from its inception and even led trips around the dike trail for TAS. He became their representative to the Refuge under the National Audubon's Audubon Refuge



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Phone: 360.753.9467

Fax: 360.534.9302

[www.fws.gov/nisqually](http://www.fws.gov/nisqually)

[www.fws.gov/graysharbor](http://www.fws.gov/graysharbor)

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**Editor:** Jackie LaRue

**Editorial Advisor:**

Sheila McCartan

**Graphic design:**

Lee Miller

*Save trees, think green*

To receive *The Flyway*

electronically, email

[nisqually@fws.gov](mailto:nisqually@fws.gov)

Keeper (ARK) program and helped worked on creating the Friends group. In addition to his contributions at the Refuge, he is currently a Pierce County Trustee for the Cascade Land Conservancy and a member of the Board of Directors for the Morse Wildlife Preserve, about 250 acres near Graham. Ken received his BA from Wartburg College, Waverly Iowa; MA and PhD from the University of Colorado, Boulder; and spent 37 years as a teacher, mostly undergraduate-level college mathematics. The last 28 years were spent at PLU, where he also became involved in Interdisciplinary Studies Programs and initiated History of Mathematics and History of Science Programs into the curriculum. Retired in 1994 and now a Professor Emeritus, he devotes his time to his wife, grandchildren, and to conservation work - his passions rather than his profession.

## Shelley Carr

Asked to serve as a judge for the State Junior Duck Stamp Contest a few years before the Friends Board was formed, Shelley did not hesitate to accept a position on the charter board. Her background in art and education, her deep love of nature and the preservation of it, combined with her admiration for



the staff, makes her contribution of time to the Board a pleasure. As Communications/Community Relations director and Arts Coordinator, she represented the Olympia School District on many different community boards. Since retiring in 2005, her volunteer time is focused on preservation of nature and history. Shelley is also currently president of the Governor's Mission Foundation. A WSU graduate

in Art, English, and Education, she is a past president of the WSU Alumni Association. She holds her MA in Education and worked in public education for 25 years. Married to fellow Cougar, Bill, they have two grown "amazing" sons, Maclean and Cameron.

## Alan Corwin

As Chairman of the Thurston County Planning Commission and the committee that wrote the land use plan for Nisqually Valley, Alan seemed a logical choice to serve as a charter member. He signed the paperwork establishing the Friends, became its first president, and now serves as financial guru for the Board. Alan was a financial adviser until his retirement in 2002. He is an elected Public Utility District commissioner in Thurston County and currently serves as president. An active alumnus of Washington and Lee University, he served on the Alumni



Board and has been an Alumni Admissions Program representative for about 20 years, recruiting and interviewing undergraduate applicants. He has his BA in American History and also Jewish Education. He and his wife have two adult children, two doggies, and a cat. They love to travel, having visited all 50 states and more than two dozen countries.

## Fred Hellberg

Fred began serving on the Board in 2003 after retiring from the state. He began volunteering at the Refuge, so he would be actively engaged in environmental and preservation activities. Nisqually was ideal, since it was close and an area he always admired. He primarily volunteered as a Weed Warrior, which he affirms was "rewarding on so many levels" and dealt

directly with a critical problem at the Refuge – invasive plants. Shortly thereafter, he was asked to fill a vacancy on the Board. Fred finds being on the Board particularly interesting because of its committed



involvement in funding environmental education opportunities, which he believes is critical to ongoing and successful

stewardship of our natural heritage. Fred and his wife of 42 years, Margaret, former served two years in rural Panama during the late 1960s as Peace Corps volunteers, which was one of the defining moments of his life and made him a life-long volunteer. A BA in Political Science from the UW, and his MA in Latin American Studies from the University of Arizona, his career was primarily in state government - a legislative committee staffer for 10 years, then the Washington Governor's Office, and the State Office of Financial Management. He retired in 2003 and is now active in boards at the state level and two homeowner association boards. The Hellbergs have two grown children and three grandchildren.

### John Keith

John and his wife, Donna, have been visiting the Refuge ever since it was established. When they both retired, they decided this was one



of the places they wanted to volunteer. After several years as a volunteer, John was approached to also become a Board

member. He also volunteers at St. Michael Church in the Bible study program and with St. Vincent de Paul Clothing Bank. John holds a BA in Business Administration and a Doctor of Law from Gonzaga Uni-

versity. He served two years as an officer in the US Army, including a tour in Thailand. Upon release from active duty, he was appointed an Assistant Attorney General for Washington and practiced law there for 29 years. He married Donna Keith in 1969, have four grown children, "and six of the cutest grandchildren". They love to spend time with their grandchildren and also to travel, especially to Hawaii.

### Kara Larsen

Kara first became a volunteer in 1997, when she and her husband bought property on the bluff adjoining the Refuge. She volunteered in the visitor center

(in the barn at the time), did weeding, trail roving, and more. In 1998, Kara was asked to join the Board after Aaron Owada left the Board. Also a lawyer, she works for the Office of the Attorney General, practicing employment and labor law. Her husband, Greg Tolbert, is a natural resources lawyer, and they have an 8 year-old daughter, Zoe. They try to instill Zoe with an appreciation for nature and a love of the outdoors. Kara is also on the board of the Broadway Center for the Performing Arts in Tacoma.



### Kristin Stewart

When a former board member, Linda Carpenter, asked Kristin in 2002 if she might be willing to take her place on the board, Kristin said yes, and she has remained ever since. Kristin also serves on the Black Hills Audubon Society Board and the PFLAG Olympia Board. She particularly enjoys



leading field trips for beginning birders. She has a BA in English from the University of Washington and a BS in Natural History from The Evergreen State College. Kristin worked as a social worker, where she most enjoyed adoptive home finding and adoptive placements. She and her husband have two sons and a brand new granddaughter. They share their home with a dog and two cats.

### Accomplishments

When asked to consider the accomplishments of the Board during the past ten years, the Friends members shared their pride in the following:

- ▶ Diverse ways the Board supports the mission of the Refuge and the extremely hard working Refuge staff.
- ▶ Ability of the Friends group to supplement funding or totally fund positions and activities that the U.S. Fish and Wildlife is unable to do.
- ▶ The newsletter, *The Flyway*.
- ▶ Ongoing support of educational outreach efforts and the new Education Center.

### Challenges

What do these seven volunteers and Board members see as the continuing and/or future challenges?

- ▶ Finances, maintaining the current level of support for staff and programs.
- ▶ Keeping the efforts of the Friends group on environmental education and community outreach while support of the Refuge and administrative functions remain the province of the US Fish and Wildlife.
- ▶ Expanding outreach efforts with other environmental organizations.
- ▶ Increasing committee participation beyond just members of the Friends Group.
- ▶ Addressing the "disconnect" between young people today and the natural world. ✎

# Eats Like Godzilla, Sleeps Like the Mummy!

By Devorah Bennu

Equivalent to the average human consuming an entire refrigerator full of food, hummingbirds eat roughly twice their own body weight of food each day to meet their high metabolic requirements. Hummingbirds, among the smallest of all warm-blooded animals, lack the insulating downy feathers that are typical for many other bird species. Due to their small body size and lack of insulation, hummingbirds rapidly lose body heat to their surroundings. Even sleeping hummingbirds have huge energy demands that must be met simply to survive, because they cannot forage during the night.

So, how can such diminutive birds survive the long, cold winter nights in this area without eating constantly? To save energy, hummingbirds lower their internal thermostat at night, becoming hypothermic. Their night time body temperatures are maintained at a point, called a set point, that is far below what is normal during the day.

“If you try to cool an animal down below this new set point, it will generate enough heat to maintain the set point,” says Sara Hiebert, hummingbird expert and associate professor of biology at Swarthmore College in Swarthmore, Pennsylvania. This physiological phenomenon is called torpor. There are several types of torpor, classified mostly by duration and season. For example, when torpor takes place for long periods of time during

the winter, it is known as hibernation. Hummingbird torpor can occur on any night of the year, so it is called daily torpor or noctivation. Even tropical hummingbirds have rigid metabolic budgets, so they also commonly use daily



Rufous Hummingbird

Photo by Dennis Ellison, Nisqually NWR Volunteer

torpor to conserve energy.

Torpid hummingbirds exhibit a slumber that is as deep as death. In fact, awakening from torpor

**Equivalent to the average human consuming an entire refrigerator full of food, hummingbirds eat roughly twice their own body weight of food each day to meet their high metabolic requirements.**

takes twenty minutes or more. During arousal, the hummingbird's body can warm up by several degrees each minute, and the bird awakens with enough energy reserves to see him through to his next feeding bout. Interestingly, hummingbirds reliably arouse from torpor one or two hours before dawn without any discernible cues from the environment.

What are hummingbirds doing during those pre-dawn hours when they are warm but not yet

active? “One suggestion is that they might be using this time to sleep,” explains Hiebert. “Although there is some evidence that torpor is an extension of slow-wave sleep, there is also evidence that the body is too cold during torpor for the normal functions of sleep to occur.”

Torpor is not limited to hummingbirds; it has also been observed in swallows, swifts, and poorwills. Additionally, scientists think that most small birds living in cold regions, particularly chickadees, rely on torpor to survive long, cold nights. Even though rodents, bats, and other small mammals show some form of regulated hypothermia when it is cold, they can only rely upon daily torpor during the winter when they are not breeding. In contrast,

noctivation is possible on any night of the year for hummingbirds. Because daily energy balance is progressively more difficult to maintain as body size decreases, hummingbird torpor is finely tuned to preserve their daily metabolic budget.

“Hummingbirds are the ‘champions’ of this kind of energy regulation, because they have to be,” concludes Hiebert.

*Originally from Washington, Devorah Bennu is a naturalist, writer, and scientist who lives in New York City. She writes the blog, Living the Scientific Life (Scientist, Interrupted), for ScienceBlogs, an online outreach and educational project of Seed Media Group. This article was reprinted with permission from the author. ✨*

# Pass on your love of nature to the next generation!

The Refuge is looking for enthusiastic and caring adults to assist and lead field trips for young people all around the Puget Sound region. Interest and experience in education is helpful but anyone with a sense of curiosity and the desire to share their knowledge is welcome. We all hear stories about children spending less time outdoors and more in front of the TV, but you will be amazed to see the kids in your community blossom when walking the trails with a thoughtful guide—you!

We will be holding a training for new education volunteers in late March to give you all the tools you need to successfully work with groups large and small and lead activities to learn

about the history and habitats of the Nisqually watershed. To fill out an application or get more information, please call: Willa Ahlschwede, Education Coordinator 360-753-9467, or email [willa\\_ahlschwede@fws.gov](mailto:willa_ahlschwede@fws.gov)



*Arthur Schooley, Julie and Kylin Lilly and the fish they painted at the Nisqually Watershed Festival.*

## Education Center Nearing Completion

Construction continues on the new Environmental Education Center. Much of the interior work is finished and construction will soon begin on the outdoor deck and amphitheatre. Construction in the area will continue as parking is realigned to accommodate busses and the outdoor Nature Explore Classroom is developed. The Education Center will be open in early spring.

### Friends of Nisqually NWR

is a 501(c)(3) non-profit organization established in 1998 to promote conservation of the natural and cultural resources and fund education and outreach programs at **Nisqually National Wildlife Refuge Complex.**

## Join Friends Of Nisqually NWRC!

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Email \_\_\_\_\_

- Please send information on making Friends of Nisqually NWRC a beneficiary of my estate.
- Check here to receive an electronic version of *The Flyway* newsletter by email.

### Individual/Family Memberships

- \$15 Student/Senior
- \$25 Individual
- \$50 Family
- \$100 Supporting
- \$250 Partner
- \$500 Patron
- \$1000 Benefactor

### Corporate/Business Memberships

- \$250 Business Sponsor
- \$500 Community Partner
- \$1000 Sustaining Business
- \$2500 Corporate Patron
- \$5000+ Corporate Benefactor

*Please make checks payable to: Friends of Nisqually NWRC, 100 Brown Farm Rd, Olympia, WA 98516*

**Your tax deductible contribution will help preserve the unique habitats, fish, and wildlife of the Nisqually Delta and the Grays Harbor Tidelands.**

## Nisqually & Grays Harbor National Wildlife Refuges

c/o Nisqually National Wildlife Refuge  
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Olympia WA 98516



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*"...conserving, protecting and enhancing fish, wildlife and plants and their habitats for the continuing benefit of the American people..."*

## Teacher Training Workshops Scheduled

Free teacher workshops are scheduled for teachers interested in bringing students on a field trip to the Refuge. All teachers who wish to schedule a field trip from May 15 to the end of the school year must take a workshop. Dates are as follows: Saturday Feb. 28, 9am-1pm; Saturday March 14, 9am-1pm; Thursday March 26, 4:30-8:30 pm; Saturday April 11, 9am-1pm. Pre-registration is required and clock hours are available. If interested, contact Willa, Education Coordinator, at 360-753-9467 or by email at [willa\\_ahlschwede@fws.gov](mailto:willa_ahlschwede@fws.gov). Registration forms are also available on-line at [www.fws.gov/nisqually](http://www.fws.gov/nisqually) ✎

## Trails Open

With waterfowl hunting season over, all trails at Nisqually NWR are once again open. This includes the 5.5 miles Brown Farm Dike Trail which will remain open until further notice. The schedule for removal of this trail in 2009 is not yet available. For questions about trails, check the Refuge website or call the Refuge office prior to your visit. ✎

## Enter the Washington Junior Duck Stamp Competition!

**Deadline is March 15**

All children grades K-12 in public, private and home schools are invited to participate in the 2008-09 waterfowl art competition. Within each of the four different age categories, 3-1<sup>st</sup> place, 3-2<sup>nd</sup> place, 3-3<sup>rd</sup> place, and 16



Honorable Mentions are selected.

All winning artwork receives ribbons, and all 1<sup>st</sup> place winners receive special awards. A Best of Show, selected out of all the 1<sup>st</sup>

place winners, competes in the National Competition for the chance to become the 2009 Federal Junior Duck Stamp. Interested teachers and children can get more information at [www.fws.gov/juniorduck](http://www.fws.gov/juniorduck) or by calling (360)753-9467. ✎