

Willapa Tidings

Newsletter of the Friends of Willapa National Wildlife Refuge • Vol. 4, No. 1 • Fall 2003



Representative Norm Dicks (left) and Region Director Dave Allen review *Spartina* control details with Miranda Wecker of Coastal Resources Alliance. (Photo by Rudy Schuver)

Rep. Norm Dicks Visits Refuge for Close-up View of *Spartina*

by Kelly Rupp

Willapa National Wildlife Refuge hosted Representative Norm Dicks (Washington 6th district) in a close-up inspection of the *Spartina* scourge on and around the refuge in late August. Dicks journeyed by airboat and oyster barge to view firsthand the extent of the infestation and efforts to control its spread.

Representative Dicks traveled among the thousands of *Spartina* acres choking the oyster beds and tidal mudflats near the mouth of Freshwater Slough to the north of Long Island.

Dicks viewed the refuge along with Brian and Dick Sheldon of the Willapa Bay-

Grays Harbor Oyster Growers Association, Miranda Wecker of the Coastal Resources Alliance, Kim Patten of the Washington State University Extension Service, former State Senator Sid Snyder, State Representative Brian Blake, Len Barson of The Nature Conservancy, Fish & Wildlife Region 1 Director David Allen, as well as Friends members Rudy Schuver and Kelly Rupp.

Willapa Refuge Manager Terri Butler and Willapa Complex Project Leader Charlie Stenvall pointed out the weakened and dying *Spartina* that was treated during this summer's eradication program.

continued on page 2: See Refuge Visit

Snowy Plover Update

by Kirsten Brennen, Wildlife Biologist

Snowy Plovers are a small shorebird that nest on the Leadbetter Unit of Willapa National Wildlife Refuge. They are part of the Pacific Coast population that breed from Washington to Mexico and are listed as a threatened species by the U.S. Fish and Wildlife Service.

Their numbers have declined due to direct habitat loss, such as development of coastal areas, and degradation of habitat by invasive plants such as American and European beachgrasses. Human disturbance and expanding recreational use of beaches have also contributed to their decline. Nesting plovers can be affected by both obvious losses, such as people stepping on nests, or by disturbances from people (and dogs), causing the plovers to abandon nests or chicks. Also, as human numbers increase, so do predators like crows and ravens that frequently depredate plover nests.

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Refuge Visit

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Butler and Stenvall explained the treatment methods and the successes of this first year of coordinated public/private attack on the invasive Spartina. "You clearly see where we've worked," noted Stenvall. "With year-by-year attention to the comprehensive control plan, we'll make the headway we need to clear the bay of Spartina."

Dicks applauded the combined efforts of state, federal, and private interests in eradicating Spartina. "It's clear that we need to support your efforts to regain this habitat for the Refuge and the Bay," noted Dicks. "Being here gives me a direct impression of the scope of the problem and the urgency with which we need to fight this grass."

Dicks was particularly interested in the effectiveness of the different control methods on different patches of Spartina, from the efficiency of aerial treatment to the comprehensive coverage of the Refuge's amphibious tractors and the hand-spray applications from airboats. "The acreage you've got to cover demands efficient treatment methods," noted Dicks. "And yet you demonstrate great care to protect the Bay's pristine water quality and habitat in your choice of delivery methods for particular acreages and conditions."

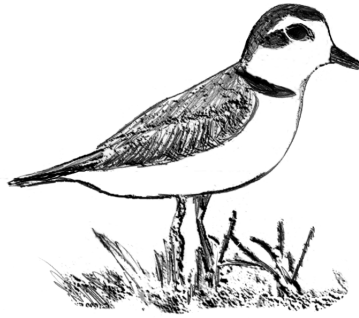
In recognition of the Congressman's support, Friends Vice-President Rudy Schuver awarded him a baseball cap emblazoned with the Friends of Willapa NWR patch. Dicks was impressed with the commitment and comradery of the volunteers, legislators, conservationists, and oystermen present for the tour. "Your efforts to protect the conservation and economic interests of the Bay and its Refuge is an encouraging demonstration of collaboration. My staff and I pledge to do our part to support your progress in wiping out this invader."



Plover Update

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Snowy Plover by Sandy Profeta



The Snowy Plover nesting season begins in mid-March and runs through September. Their nests are found in the dry sand anywhere from above the wrackline (tidal debris line) to the foredune and they typically lay three eggs. Plovers are able to renest should their initial attempts fail.

Eggs are incubated for about 28 days, and within one to three hours after hatching, chicks begin walking. A few days after hatching, the female abandons the young and the male parent tends to the chicks. The young birds fledge (take flight) when they are about a month old.

In 2001, in addition to nesting on the refuge, plovers were documented to nest within Leadbetter State Park and south of the park, only one mile north of the Oysterville Road beach access. As of the end of August, 32 nests occurred on the northern end of the Long Beach Peninsula: 23 on Willapa National Wildlife Refuge, five in Leadbetter State Park, three south of the park and one of unknown origin.

At least 15 breeding pairs were active in the area, but reproductive success was low this season. Only three of 32 nests were known to have hatched and only one chick has definitely fledged. However, the season is not over and our estimate may increase.

Enhancing productivity is key to population growth and recovery of the coastal population. We'd like to see an average of one chick produced per adult male. In an effort to increase productivity, active habitat restoration is an ongoing part of management on the refuge. To improve habitat quantity and quality, non-native beachgrass is being cleared by mechanical means at Leadbetter.

Willapa Tidings

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Sandy Profeta, *Editor*

To request an address change, to contribute items of interest (including photos), or to submit articles for publication, please contact Friends of Willapa National Wildlife Refuge.

Mailing Address
PO Box 1130, Ocean Park, WA 98640
Telephone
360-665-0115
E-mail
fwnwr@willapabay.org
Web site
www.willapabay.org/~fwnwr

Friends of Willapa National Wildlife Refuge

A nonprofit 501(c)(3) corporation, Friends of Willapa National Wildlife Refuge was established in July 2000 to provide support and assistance to Refuge programs and to enhance awareness and appreciation of the Willapa National Wildlife Refuge.

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Removing beachgrass provides more open sand for nesting pairs and reduces cover for mammalian predators that depredate plover nests, chicks, and adults. Last March, a total of six acres were cleared of beachgrass. This fall, the restoration area will be treated with herbicide to knock back the regrowth of beachgrass and an additional five to eight acres will be cleared.

Shorebirds Respond to Spartina Control Efforts

by Dr. Kim Patten, Washington State University

During the last decade, invasive *Spartina* has displaced thousands of acres of prime mudflat habitat for migratory shorebirds in Willapa Bay. Control of *Spartina* in these areas is vital to assure that the Pacific Flyway is not severely impacted. Although the science for controlling *Spartina* has developed at a significant pace in recent years, there has been no work on how to restore *Spartina*-affected mudflats specifically for shorebird usage.

Research by Washington State University, in cooperation with the Volunteers from Willapa Wildlife Refuge, has evaluated how different control programs affect shorebird usage of *Spartina*-affected mudflats. During the winter and spring of 2003, five treatment areas within the Refuge were monitored: *Spartina*-free tide flats, *Spartina* controlled by roto-tilling, *Spartina* controlled by herbicide (glyphosate), *Spartina* controlled by herbicide followed by winter mowing to remove dead stubble, and untreated *Spartina* meadow. Site size ranged from 20 to 200+ acres.

Monitoring was conducted using remote cameras, visual observations during peak migration, and on-site bird usage as

measured by footprints, fecal droppings, and beak probing density.

The results of this study confirm previous research studies of shorebird usage of invasive *Spartina* meadow in England. During thousands of hours of observations, we never recorded a single shorebird utilizing the *Spartina* meadow. In contrast, the bare mudflats averaged five shorebirds/m²/hour. Roto-tilling was effective in helping to restore mudflats for shorebird usage with a mean of 0.5 birds/hour/m² (mostly Western Sandpipers).

Herbicide alone or herbicide plus mowing was less effective, with a mean of 0.04 birds/hour/m². In contrast, waterfowl (mallards) found herbicide-treated *Spartina* meadows more attractive (0.06 ducks/m²/hour compared with 0, 0, and 0.01 ducks/m²/hour for the bare mudflat, untreated *Spartina* meadow, or roto-tilled *Spartina* respectively).

Although both the use of herbicides or tilling were useful in removing *Spartina* and providing access for shorebirds, these restoration efforts did little to restore these vital shorebird feeding grounds to their original bathymetry levels.

Consequently these *Spartina*-affected mudflats will ultimately revert (post-*Spartina* control) from mudflat to salt marsh. Immediate large-scale efforts to remove *Spartina* from Willapa Bay are required to protect against any additional permanent loss of prime shorebird habitat.

For more information on this study, contact Dr. Kim Patten, 360-642-2031 or pattenk@cahe.wsu.edu.

PLEASE DON'T FORGET...

We need you to respond to the member meeting survey!

In August, we contacted all members regarding whether or not we should host "Member Meetings".

This came in the form of a survey. I want to thank those of you who have responded and remind those who have not, to please do so. We will let you know how the vote went in the next newsletter.

If you need a copy, please contact our Volunteer Coordinator, Suzy Whittey at 360-642-2239.

Salmon Trail Opening Celebration Planned

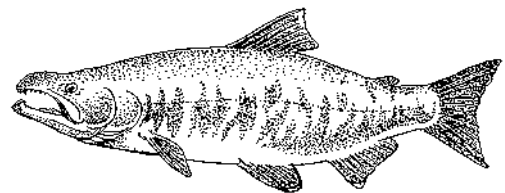
You're invited! The Refuge would like to invite all the Friends members and refuge volunteers to the Grand Opening of the new Salmon Trail on Saturday, November 15, 2003 at noon. Take the opportunity to explore the trail prior to the Annual Meeting. Lunch will be provided. The refuge will also take the opportunity to recognize volunteers at the end of the Annual Meeting. For more details, see the "Calendar of Events". Please RSVP with Kristine Massin at 360-484-3482 or kristine_massin@fws.gov.

Beginning at Refuge Headquarters, the trail winds along and across the tidal area, the restored stream, and up the short valley. Original pieces of artwork, designed and produced by students at the University of Washington, tell the story of the stream's spawning chum salmon.

Visitors enter the boardwalk near a salmon skeleton as large as a whale. As you drop down into the restored tidal area, the boardwalk winds away into the distance, echoing the shape and contours of a stream. At high tide, the water is mere inches away. At low tide, a variety of plants, invertebrates, and birds

are nearly within touching distance. An amphitheater highlights the incredible diversity of amphibians found on the refuge. Near the end of the accessible portion of the trail, a group of salmon silhouettes is visible swimming through the branches of an alder grove. At the base of the grove, look down into the stream for a few precious weeks in October and November to see the chum salmon returning from the ocean to spawn. Only inches away from your feet, they ignore your presence entirely, devoting the last of their energy to reaching their restored spawning grounds up the creek.

The trail will be open to the public 7:30 a.m. - 4:00 p.m., Monday through Friday except on federal holidays.



Chum salmon courtesy of the US Fish and Wildlife Service

Summer "Vacation" Anything but Relaxing for Refuge Staff

by Kelly Rupp

Few summer project lists can rival the accomplishments of the Willapa NWR staff during the past months. Thousands of Refuge acres have been visited by Refuge operations personnel as part of planned habitat restoration and invasive species control programs. Important infrastructure improvements are being finished at major Refuge sites. Add the acquisition of approximately 650 acres to Refuge-protected lands, and an already impressive list of year-to-date accomplishments can truly be described as Herculean! Check out the scorecard:

Spartina control. Refuge teams will meet the 2003 goals of the Comprehensive Control plan. Over 3000 infested acres bordering the south Willapa Bay and Long Island Sound were successfully

treated by a combination of amphibious tractor and airboat control methods.

Equipment problems - always expected but never welcome - were capably overcome to ensure eradication treatment per the multi-year control plan.

Reed Canary Grass control at Tarlett and Lewis. Spartina isn't the only invasive grass species attacking the Refuge. Reed Canary Grass (*Phalaris arundinacea*) is troublesome in the Tarlett and Lewis units where it attempts to shade out native vegetation with its dense growth. This prolific seed producer also spreads through rhizome growth at an amazing rate. This summer, refuge tractors disked hundreds of Reed Canary Grass-infested acres at Tarlett and Lewis to support native plant growth.

Juncus disking at Riekkola. A true wetland rush, invasive *Juncus* chokes native vegetation if unattended. The marsh areas at Riekkola were disked to clear this pest from prime waterfowl habitat.

Quarry stream restoration. In cooperation with the Willapa Regional Fisheries Enhancement Group, significant salmon spawning habitat was reclaimed on a short stream near the quarry site adjoining the Refuge. Large woody debris, necessary to slow the water flow and provide oxygen and shelter for young salmon, was introduced to the stream in anticipation of renewing the salmon run there.

Boat ramp reconstruction. The much-used public boat launch at Refuge Headquarters is being rebuilt to ensure safe

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Volunteering at the Refuge

by Kristine Massin

Volunteers are an integral part of getting things done across the entire National Wildlife Refuge System. In fact, across the U.S. Fish and Wildlife Service, volunteers donated more than 1.4 million hours last year, accomplishing 20% of the work on refuges. Willapa National Wildlife Refuge also depends on volunteers. Although many projects are available to volunteers, currently refuge staff have three projects that desperately need your help.

- The Friends of Willapa NWR have created a very successful **environmental education program** for area 4th graders. But we're in need of some new people to help teach classroom lessons and field trip stations. For a few hours of your time, you can help instill a sense of stewardship and the wonder of nature in area children. All materials, background material, program outlines, and training are provided.
- The refuge is required to staff a **hunter check station** for our waterfowl hunting program. Geese populations need to be managed, and hunter check stations help to ensure that the correct goose species are being harvested. Running a hunter check station is very time intensive for refuge staff and takes time away from other important refuge programs including the Snowy Plover project. Thorough training is provided, including on-the-job training with an experienced volunteer or refuge biologist.
- The **trails, campsites, and portable restrooms** on Long Island are in constant need of maintenance. Long Island is an awe-inspiring experience for visitors. From its old growth cedar forest to the spectacular mushrooms and fungi growth, from the magnificent elk and bear to the unusual number of salamander species, few places can match its di-



Photo by Rudy Schuwer

versity and ecological importance. Accessible only by boat, Long Island is a unique place with special meaning to many people. The refuge needs your help to keep it that way.

Thanks to volunteer funds (available for the first time at Willapa NWR), volunteer uniforms are now available. Also, volunteers who turn in their hours at the end of each month will be recognized at an annual awards ceremony. Volunteer hour pins, sported by dedicated volunteers across the Refuge System, have also arrived. The first of these pins will be handed out after the annual member meeting to those who contributed hours in the past year. If you have not yet sent your hours to Suzy Whitley, please do so right away!

If you would like to join the refuge volunteer corps, contact Kristine Massin at 360-484-3482 or kristine_massin@fws.gov.

President's Letter

With respect to the breadth and depth of volunteer efforts, this newsletter speaks for itself. We have a number of events and volunteer opportunities going on. The fourth year of the 4th grade environmental education program kicks off in October. We need volunteers to help with this program, in both assisting and teaching the lessons in the three school districts, South Bend, Naselle, and Ilwaco. See the "Calendar of Events" for details on how to help. Our middle school program is in the beginning stages of development, spearheaded by Shawn Stern, one of the high school science teachers at Ilwaco High School and an active Friends member.

We continue to work closely with the Refuge staff on volunteer activities, advocacy, and funding efforts. Recently, Representative Norm Dicks (Washington 6th district) visited the Refuge in August getting a clear vision of why future funding is critical for the success of the Spartina control program. We were also able to secure several grants and donations for the construction of a photo blind in Tarlett Slough, the construction of the Salmon Trail at the Refuge headquarters, the initiation of the middle school program, and the continuation of the 4th grade program.

Recently, Suzy Whittey, our volunteer coordinator, sent out a membership meeting survey requesting your input on member meetings (other than the annual member meeting). If you haven't responded yet, and would like to, please send her your response. We would like to know what you have to say!

And finally, the Refuge and the Friends are sponsoring two important events on the same day in November. The opening of the Salmon Trail, as well as the annual membership meeting, is scheduled for Saturday, November 15th (see Calendar of Events for exact times and location). All Friends members are invited. We hope you put this date on your calendar.

We invite all of our members to our monthly board meetings generally held on the third Thursday of each month, starting at 7 pm. Contact me for details if you are interested in attending.

-- Beverly Arnoldy



Calendar of Events

October through December 2003

Events

- October 16th: Board of directors meeting starting at 7:00 p.m. Call 360-665-0115 or send e-mail to beva@pacifier.com for location and agenda.
- November 15th: Grand opening of the Salmon Trail at Refuge Headquarters SR 101 Ilwaco, WA at noon, followed by the annual membership meeting from 1:00 to 3:00 p.m. After a short business meeting (which includes election of board members), Refuge staff and Friend board members will present a program. Presentation of volunteer recognition awards will take place from 3:00 to 3:30. Lunch will be provided. For more information, call 360-665-0115.

Volunteer Activities

To participate in any of these activities (unless otherwise indicated), contact the Friends volunteer coordinator, Suzy Whittey, 360-642-2239. For additional details, see the article "Volunteering at the Refuge."

- Teach 4th grade environmental education classes the week of November 17th. The topic is "Bird Basics". If you are interesting in volunteering at the South Bend or Naselle schools, contact Joanne Jambor at 360-875-5752. If you are interesting in volunteering at Hilltop Elementary in Ilwaco, contact Bev Arnoldy at 360-665-0115.
- Assist Refuge staff in the operation of the hunter goose check station at the Riekkola Unit during November, December, and early January. Training will be provided.
- Construct a photo blind in Tarlett Slough in September.
- Maintain trails & campgrounds.
- Monitor fall migration.

- New membership
- Renewal

Membership Form

Invite a friend to become a member!

Make checks payable to: Friends of Willapa NWR

Send to: Friends of Willapa National Wildlife Refuge
PO Box 1130
Ocean Park, WA 98640

Name: _____
Address: _____
City, State, Zip: _____
Phone: _____

Yes! I want to receive Friends e-mail announcements. My e-mail address is _____

Volunteer interests

- Community outreach
- Environmental education
- Membership recruitment
- Fund raising
- Public relations
- Habitat restoration

Amount Enclosed:

- \$10 Individual Membership
- \$15 Family Membership
- \$50 Patron Membership
- \$100 Benefactor Membership
- \$500 or over Advocate Membership

All dues and donations are fully tax deductible.

- Special Projects and events
- Trail and campground maintenance
- Shorebird and waterfowl monitoring
- Fish and amphibian monitoring



Summer

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and efficient access at low-tide levels. Environmental and public navigation regulations will carefully guide this construction effort as it proceeds to an early fall completion.

Shop-yard consolidation at Riekkola.

Operations efficiencies are boosted as a result of moving much of the Refuge's heavy equipment to a primary storage and maintenance site located on the Riekkola unit. In support of the Refuge's mission to manage its thousands of acreage for wildlife, an entire complement of construction and agricultural machinery must be maintained. Consolidation to a central equipment yard provides significant productivity benefits and cost-savings.

Land acquisition agreements completed.

Nearly 650 acres will be added to Refuge stewardship through just-completed agreements with The Nature Conservancy and a private owner. Land sections along the Bear River will be added to Refuge holdings to increase the protection for salmon, elk, and other wildlife that depend upon this habitat.

Meet Our New Board Member



Susan Fugate, new Peninsula resident, has recently been elected by the Board to be our Treasurer for the remainder of the 2003 Fiscal Year. Susan, a 15-year resi-

dent of Portland, and previously a frequent visitor to the Peninsula, now resides in Surfside Estates.

Susan was one of the volunteers for the 4th grade field trips at Tarlett Slough this past April. "I think the 4th grade education program is very important for the kids to know what's practically in their back yard. I'm very excited to be part of the Board."

Susan has been involved in several non-profit organizations, including the Volunteers for the Parry Center for Children in Portland. Her hobbies include tole painting and cross-stitch, as well as doting on her three grandchildren, ages ranging from one to eight.

MANY THANKS TO OUR BUSINESS MEMBERS FOR THEIR SUPPORT

- Astoria Real Estate
- The Bank of the Pacific—Aberdeen Branch
- The Bank of the Pacific—Naselle-Grays River Valley Branch
- Bay Center Mariculture, Inc.
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- Jolly Roger Oysters
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- Dr. Kenneth D. Nanson, DMD
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- Oysterville Sea Farms
- Pacific Oyster Co.
- Sea Tow Portland/Vancouver
- Sheldon Marine Enterprises
- Shorebank Enterprise, Pacific
- Sid's Supermarket
- The Shoalwater Restaurant

NEW MEMBERS (As of 9-7-2003)

Patron Membership

Ken Guza
James Rupp

Family Membership

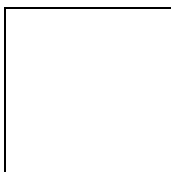
Bill & Margaret Keenan
Keith & Carolyn McDowell

Individual Membership

Barbara Bate
Lois Kincaid
James McAdoo
Ann Olsen
Fritz Weigardt

STAY INFORMED!

Sign up for the Friends e-mail list. Contact Michael McDowell at mjmcowell@qwest.net.



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Friends of Willapa National Wildlife Refuge
P.O. Box 1130
Ocean Park, WA 98640

