



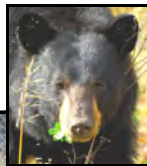
# Willapa Tidings

Vol. 9 No. 3 Spring 2009

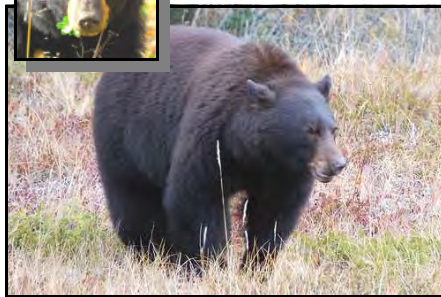
Newsletter of the Friends of Willapa National Wildlife Refuge



*Find out all about Goat Wrangling on Page 2*



*Living with Bears  
Story Page 4*



## *Goat Wrangling for Science*

Paul Meyers  
Wildlife Biologist at Julia Butler Hansen Refuge

On February 10<sup>th</sup> and 11<sup>th</sup> twenty volunteers descended on the Julia Butler Hansen National Wildlife Refuge to manage 15 domestic goats. The venture was part of a research project conducted by the refuge to improve deer population estimates.

Columbian White-tailed deer are a subspecies of White-tailed deer listed under the Endangered Species Act. Because this listing relies on the number of deer in existence, it's important to have reliable population estimates. Deer numbers are calculated using aerial infrared thermography. This technique, known as FLIR (Forward-looking Infrared thermography), picks up heat signatures of animals on the ground.

Essentially we fly over the area in a helicopter and video tape the ground with an infrared camera. Because mammals are endothermic (warm-blooded), their heat signature stands out over the background vegetation. This is much akin to what the military uses on reconnaissance flights, but at a much lower resolution. The camera then transforms the heat image into a visual image that is recorded on videotape. Deer show up as a white, oblong dot.



**Columbia Whitetail Deer and Fawn**

While this technique is an improvement over what one can see with the naked eye, we still do not know how many deer are being missed. As warm as deer may be, their heat signature cannot be picked up through dense vegetation. Hence the goats. By placing a known quantity on the ground in different habitat types, we can see what percentage of goats we pick up and what percentage we miss. We can then use that data to correct our deer estimates.

The goats used were Boer goats from a local farm. These animals weighed approximately 40–60 pounds, which is smaller than a white-tailed deer. As adults, white-tailed deer generally run from 100–150 pounds. But the shape and temperature are similar between the two species, and the goats showed up well in the videography.

The challenge was dealing with 15 goats that had never been on a leash. For this we relied on a bevy of volunteers that came from as far away as Long Beach, Lacey, and Portland. Each volunteer was given a GPS, a leash, and a goat and was asked to take the goat to a predetermined random point. Once all the goats were in place, the helicopter flew over and recorded the scene.

While we have not yet analyzed the data, initial results suggest that the goats showed up quite well, even in forested areas. Counting wild animals is never easy, and we are constantly striving to improve our methods. This data is just another step in that direction. Information from this project will be used to inform management decisions regarding the status of this species.

## *Ilwaco Saturday Market*

Patty Wood

The Friends will have a booth at the Ilwaco Saturday Market again this year. As all who have staffed the booth can tell you, being with the public there is loads of fun and the time goes by very quickly. Well, admittedly, if the wind is coming off the Bay it can get a bit chilly but, hey, we're beach people, we can take it!

For those of you who have never experienced our booth here is what we have and what we do: The Friends have a folding board with photos showing off our programs and activities kids on a field trip at the Refuge, spartina control, birds and animals and a map of the Refuge. We offer have informational brochures and membership applications, samples of spartina, and free posters and other information about Willapa NWR.

A big draw is interactive discussion featuring animal skulls and bones. This is the "Who's Who" and "What eats What" feature in the Refuge display. We use the skulls to teach children (of all ages!) about local habitat and how individual animals' behaviors are reflected in the environment. Children and adults enjoy trying to identify our bird and mammal skulls. Children often identify the elk skull as a dinosaur!

Visitors to the booth often tell stories of their encounters with various animals. Many people are very knowledgeable about our regional wildlife and its habitat. Children love telling you about their encounters with wildlife. We often learn something new and always meet nice and interesting people.



### **Many Thanks to our Business Members for their Support**

Independent Books  
Sandridge Topsoil & Bark  
Cottage Bakery & Deli  
Jack's Country Store  
Heckes Oyster  
Ekone Oysters  
Jarvis Appraisals  
Coast Seafoods Co.  
Depot Restaurant  
Okie's Sentry Market  
Port of Peninsula  
Autodesk, Inc  
Northern Oyster Co.  
Sid's Supermarket  
Taylor Shellfish Farms  
Willapa Hills Audubon Society  
Bay Center Mariculture, Inc.

This a great way to spend a couple of hours at the Ilwaco Saturday Market and help the Friends add to our membership. We have plenty of background information available about the exhibits and how to guide your discussions, so you don't need to be a biologist to participate. At least two people staff the booth at all time, so you can bring a friend!

An email will be sent out soon with the dates the Booth will be at the Saturday Market. Respond early to reserve your space!

### *Welcome New Members*

*Family*  
**Tom & Andrea Traphagen**



Sharp-shinned  
Hawk sits on a chair  
in my garden.  
Hiding & waiting for  
the songbirds to  
return.

Photo by Suzy Whittey

## Living with Bears

Nadia Gardner, Columbia Land Trust

Often seen around Willapa Bay, American black bears (*Ursus americanus*) are the most common and widely distributed bears in North America. As development of the area continues, encounters with bears are becoming more common. With care, we can live in relative harmony with these shy creatures. However, loss of habitat, access to trash, pet food, bird feeders, and improper storage of food while camping may lead to conflicts, which is bad for both people and bears.

**Preventing Conflicts:** State wildlife offices receive hundreds of black bear complaints each year regarding sightings, property damage, and bear/human confrontations. The conflicts (95% of calls) are almost all due to people allowing bears to access inappropriate food: trash, pet food, bird feeders, and human camping food.

**Don't feed bears:** Sometimes people leave food out for bears so they can take pictures of them or show them to friends. Over 90 percent of bear/human conflicts result from bears being conditioned to associate food with humans. A wild bear can become permanently food-conditioned after only one handout. The sad reality is that these bears will likely die, being killed by someone protecting their property, or by a wildlife manager having to remove a potentially dangerous bear.

**Remove other attractants:** Do not feed pets outside. Remove bird feeders (suet and seed feeders), which allow residue to build up on the ground below them, from early March through November. Bring in hummingbird feeders at night. Harvest orchard fruit from trees regularly (rotting fruit left on the ground is a powerful bear attractant). Clean barbecue grills after each use. Wash the grill or burn off smells, food residue, and grease; store the equipment in a shed or garage and keep the door closed. If you can smell your barbecue then it is not clean enough.

**Manage your garbage:** Bears will expend a great amount of time and energy to get food, including garbage. If you have a pickup service, put garbage out shortly before the truck arrives—not the night before. If you're leaving several days before pickup, haul your garbage to a dump. Keep garbage cans with tight-fitting lids in a shed, garage, or fenced area. Spray garbage cans and dumpsters regularly with disinfectants to reduce odors. Keep fish parts and meat waste in your freezer until they can be disposed of properly. If you have an on-going problem, invest in a bear-proof garbage can. Ask your local hardware store about sources or look online.

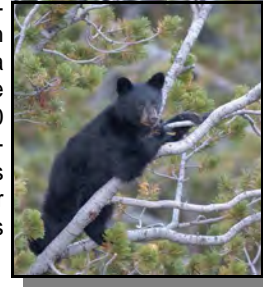


**Contact with Bears:** Black bears should be treated with respect and safely observed from a distance of at least 100 yards. This is especially important with females accompanied by offspring, as mother bears are very protective of their young. If you come in close contact with a bear:

1. Stay calm and avoid direct eye contact. Try to stay upwind and identify yourself as a human by standing up, talking and waving your hands above your head.
2. Do not approach the bear, particularly if cubs are present. Give the bear plenty of room.
3. If you cannot safely move away from the bear and the animal does not flee, try to scare it away by clapping your hands or yelling.

**Professional Assistance:** Washington Department of Fish & Wildlife responds to bear issues when there is a threat to public safety. The presence of a bear does not constitute a threat. Typically, no attempt will be made by a wildlife agency staff to remove, relocate, or destroy the animal in these cases.

**“Problem”** bears can be live trapped by wildlife professionals and moved to more remote areas; however, such removals are expensive and seldom effective. Once a bear has tasted human food, it will remember the source and return - bears have been known to return over 100 miles to a human food source after being relocated. Using tranquilizing drugs on bears to facilitate removal is not without risks to bears and humans. When other methods have failed, lethal removal of problem animals may be the only alternative.



Clearly, preventing bears from accessing inappropriate food sources is better for bears and humans alike. With care, we can continue to enjoy watching bears (at a distance!) without conflict on the Peninsula and around Willapa Bay into the future.

*Adapted from: Washington Dept. of Fish & Wildlife, <http://wdfw.wa.gov/wlm/living/bears.htm>*

### *Chum Salmon in Willapa Bay: Where are the Fish?*

Kelly Rupp

“Chum salmon are like the canary in the coal mine; if the canary dies, you know that there’s trouble with the environment.” So begins Ron Craig, Vice-President and Manager of Willapa Bay Regional Fisheries Enhancement Group (WBRFEG), in describing over fifty years of salmon management and recovery efforts on Willapa Bay. “Hundreds of thousands of chum were harvested annually from 1913 through 1953, as the salmon returned to spawn in the 745 freshwater streams flowing into the bay. Today, virtually no chum are left. Without chum, a broad ecosystem is impacted, including fish, birds, mammals, amphibians, shellfish, and even insect and microbes.”

Craig spoke to an animated crowd on February 5, at the Senior Activity Center in Klipsan Beach. Craig detailed the WBRFEG assessment of salmon management success and failure in Willapa Bay over a long history of recorded fish populations. The dramatic decline in returning chum salmon at the Nemah River Hatchery (see chart) documents the collapse of this species within Willapa Bay. Craig points out that “...in 2006, only two chum – both males – returned to the hatchery.”

Craig points to some obvious factors contributing to the falloff, including increased logging and fishing in the past fifty years that – prior to recently-enacted regulations protecting habitat and limiting catches – impacted populations through road construction that blocked stream access, timber clearing practices that allowed silt runoff to foul the gravel-bedded streams, and fishing harvests that exceeded the threshold needed to sustain the Bay’s population.

Less well-known factors are the active management practices of state and federal agencies responsible for regional fisheries. “Beginning in the 1950’s, Washington

State Department of Fish and Wildlife began destruction of chum salmon habitat in Willapa in an attempt to replace the chum with the more popular sports-fishing species of Coho and Chinook salmon,” asserts Craig. “The WDFW poisoned streams and cleared chum runs to make room for introduced Coho and Chinook, hoping at the time to increase the sports fishery here. The problem is that Willapa Bay habitat is unsuited for large Coho and Chinook populations, which both rely upon year-round clear-running streams and pools for first-year salmonid rearing. Many Willapa streams dry to a trickle in the summertime, depriving these species of cool water and reliable food sources.” “Seasonal streams are not a problem for chum,” explains Craig. “Chum enter the Willapa streams in late October and early November to dig their redd (shallow excavation in the stream’s gravel) and deposit their eggs for fertilization. The eggs hatch early in the next spring, and the resulting chum fry migrate immediately to the Bay proper for first year rearing.” This life cycle eliminates the need for a year-round freshwater nursery, and is ideally suited to the characteristics of the Willapa watershed which features plentiful stream flows during fall, winter, and spring, with drier conditions during the summer months.

The historically large numbers of chum returning to Willapa were directly responsible for supporting juvenile fish stocks, including – ironically, other salmon and trout species such as Coho, Chinook, steelhead, cutthroat as well as nearly 150 other species of fish, birds, amphibians, and mammals that also depend upon the chum salmon’s presence here in Willapa Bay.

Today, habitat is not the limiting factor. Modern conservation practices on logging activities and voluntary fishing limits, plus active stream rehabilitation programs sponsored by organizations like the WBRFEG, have established adequate recovery areas for chum spawning. “The need now is for increased salmon introduction, to begin the population renewal,” asserts Craig. The obvious solution - introduction of more chum eggs into Willapa streams – is stymied because of the “Wild Salmon” concept preferred by fisheries regulators who object to any fish being introduced to habitat from which the specific genetic stock does not already match. “There’s no chum in these restored streams. Without chum introductions, there will be no chum to populate the restored habitats,” says Craig.

“Time is running out, “ notes Craig. “Changes in policy will be required and increased collaboration from fishermen and resource management agencies will be needed to ensure sustainable populations of chum for future generations.” With our understanding now of how critical the chum are to the Willapa ecosystem, more attention to chum restoration here is encouraged by the WBRFEG.

<b>Chum Salmon returning to Nemah</b>		
Nemah watershed historically was one of the most productive watersheds		
<b>Year</b>	<b>Adults Returning</b>	
1953	20,392	(2500 eggs/female, yielding ~ 8.5 million eggs)
1963	1,253	
1973	991	
1983	3,790	
1993	1,205	
2003	232	(Prior to new forest practice regulations, the North Nemah watershed was logged destroying riparian zone needed to support chum habitat)
2005	47	
2006	2	



## Willapa Tidings

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National Wildlife Refuge  
Volume 9, Number 3  
Suzy Whittey, *Editor*

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

### Mailing Address

3888 State Route 101  
Ilwaco, WA 98624-9707  
Phone: 360-783-2699

### E-mail

[president@friendsofwillaparefuge.org](mailto:president@friendsofwillaparefuge.org)

### Web Site

[www.friendsofwillaparefuge.org](http://www.friendsofwillaparefuge.org)

## 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.

## Board of Directors

President: Katherine Driscoll  
Vice President: Amy Cook  
Treasurer: Kelly Rupp  
Directory Membership: Bill Hutton  
Director at Large: Patty Wood  
Director: Karen Hoch  
Director: Karen Brownlee

## Upcoming Events

### Deer Relocation

Watch for email with more information

### Annual Members BBQ

August 22nd, 2009  
On Long Island Plus the unveiling of new art work on the Salmon Art Trail.

### Grays Harbor Shorebird Festival

Sat. April 25, 2009

### Environmental Education Programs

4th grade Field Trip to the Refuge  
May 18-19 & 20, 2009

## Board Meetings

Third Saturday of each month at 9 am

March 21, 2009

April 1, 2009

May 16, 2009

Board meetings are held at the PUD conference room at 9610 Sandridge Road Long Beach, WA

## Volunteers Needed

The Ilwaco Saturday Market is held every Saturday from May thru August.

Volunteers are need to staff the Friends of Willapa NWR booth one Saturday of each month.

If you can help, contact Patty Woods at 665-3809 or email to: [picnic@willapabay.org](mailto:picnic@willapabay.org)

## Nature Trivia

What percentage of bear/human conflicts result from bears being conditioned to associate food with humans?

Answer: Over 90%

## *Willapa Board Members Visit Washington D. C.*

Amy Cook

*"Our challenges may be new. The instruments with which we meet them may be new. But those values upon which our success depends - hard work and honesty, courage and fair play, tolerance and curiosity, loyalty and patriotism - these things are old. These things are true. They have been the quiet force of progress throughout our history. What is demanded then is a return to these truths. What is required of us now is a new era of responsibility - a recognition, on the part of every American, that we have duties to ourselves, our nation, and the world, duties that we do not grudgingly accept but rather seize gladly, firm in the knowledge that there is nothing so satisfying to the spirit, so defining of our character, than giving our all to a difficult task."* President Barack Obama, January 20, 2009



What an exciting time to be in Washington D.C.! Karen Brownlee and I were fortunate to be able to join representatives from 161 other Friends groups from around the country February 21-23 at the 2009 National Wildlife Refuge System Friends Unite Conference. This national conference is co-hosted by the National Wildlife Refuge Association and the U.S. Fish and Wildlife Service. All in all, over 500 participants, including Friends' members and refuge staff, attended the conference.

We arrived on a Saturday evening and were warmly welcomed at a meet and greet reception in the hotel where the conference was located, the Marriott Waldman Park. This was a great opportunity to get to know some of the other Friends members that had come to the conference. On Sunday and Monday conference attendees participated in several breakout sessions that focused on one of three themes: addressing refuge system resource challenges, offering tools and strategies for successful Friends groups, or sessions on Friends capacity building. All sessions were led by experienced and knowledgeable instructors and proved to be not only a learning opportunity but also a chance to learn about Friends groups from all over the country.

On Monday and Tuesday Karen and I visited with staff from the offices of Brian Baird, Patty Murray, Maria Cantwell, Norm Dicks, and met with Greg Knadle from the House Committee on Appropriations. The main purpose of these visits was to provide updates on activities and issues at Willapa NWR. We particularly wanted to offer our thanks for their support of the spartina eradication plan and to tell them what a success these eradication efforts have been. We also discussed forest management activities, the Comprehensive Conservation Plan (CCP), and storm damage at Julia Butler Hanson NWR. We very much enjoyed all of our meetings and it was clear that our visits were appreciated.

We enjoyed several guest speakers throughout the conference, including the inspiring Dr. Mamie Parker, USFWS Assistant Director- Fisheries and Habitat Conservation, and Lynn Greenwalt, former USFWS Director. Portions of President Obama's inauguration speech, particularly "a new era of responsibility" were a

common theme in these talks. As refuges across the nation continue to face both old and new challenges due to funding, resource, and environmental challenges, the resounding consensus was that we as Friends members can make an incredible difference. This point was proven many times over, particularly with Friends of Pool 9, who had received the award of Friends Group of the Year. Friends of Pool 9 have worked very hard to clean up their portion of the Mississippi River and this recognition was well earned. While listening to the challenges that refuges across the nation face, such as ever encroaching urban boundaries and even refuges that lack any staff, we were reminded of what a treasure we have here at Willapa NWR. Not only do we bring back ideas and information for a stronger Friends group, we are inspired by the hundreds of Friends members working tirelessly to help preserve refuge lands across the nation.

## *Presidents Letter*

Katherine Mack Driscoll

It's time to welcome spring again and the magnificent migration of birds through the Willapa National Wildlife Refuge. This is an excellent time to get outdoors to watch and listen and just take in nature's season of incredible growth, beauty and change.

The 4<sup>th</sup> Grade education program is well underway with in-class sessions. By now most classes have had visits by Friends of Willapa National Wildlife Refuge volunteers and have covered the "What is a Refuge?", "Birds" and "Habitat" sessions. The "Amphibians" session is scheduled for April for all participating schools. The program culminates in May with a field trip visit to the refuge for a fun day of hands on learning.



Another spring tradition is the Annual National Wildlife Refuge System Conference in Washington, DC. This year we were well represented by Amy Cook, Vice-President and Karen Brownlee, Director. The conference provides a forum for meeting other Friends groups and the sharing of information and ideas. They also take the time to visit Capitol Hill to meet with our representatives and bring them up to date on refuge activities.

The Willapa National Wildlife Refuge has teamed up with State Parks to replace and add trail signs at Leadbetter Point. The new signs are designed to enhance the hiking experience for that area, making it much easier to identify and use the trails. They are expected to be installed in time for "Trails Month" in May.

Remember to take your camera out with you, too. This is a good time to take refuge photos and get organized to submit them for the annual photo contest. You could be a winner and have your photo(s) posted on the refuge website for a year. Good luck!

As always, a big thank to all of our members and volunteers. We could not exist or grow without you. Your contributions of time and money are always welcome and make a big difference in the quality of our projects.

*Visit Some New and Exciting Web sites*

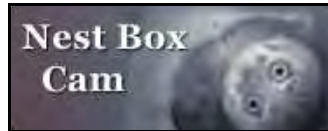
Karen Brownlee



Web Address: [www.budburst.org](http://www.budburst.org)



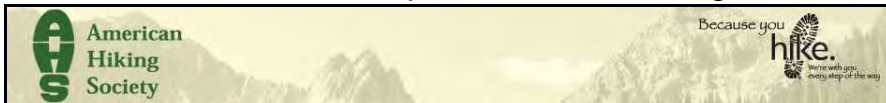
Web Address: [www.nestcams.org](http://www.nestcams.org)



Web Address: [www.landscape.org](http://www.landscape.org)

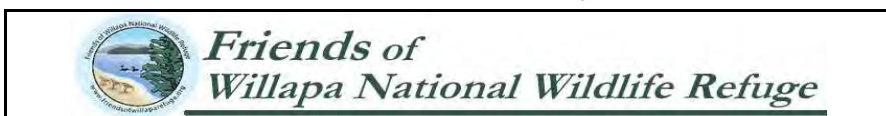


Web Address: <http://www.defenders.org/>



Web Address: [www.americanhiking.org](http://www.americanhiking.org)

*And our Favorite site of all. . .*



Web Address: <http://www.friendsofwillaparefuge.org/>

# Membership Form

- New Member  
 Renewal

*Invite a friend to Become a Member !*

Make checks payable to: Friends of Willapa NWR

Send to: Friends of Willapa NWR  
3888 State Route 101  
Ilwaco, WA 98624-9707

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Yes! I want to receive Friends e-mail announcements.

My e-mail address is \_\_\_\_\_

Contributions to FWNWR are tax deductible.  
No goods or services are provided in exchange for your donation.

## Memberships

- Individual (\$10)  
Family (\$15)  
Patron (\$50)  
Benefactor (\$100)  
Sustaining (\$250)  
Advocate (\$500)  
or more



## Scholarship Fund Donation

\$ \_\_\_\_\_

Other Donation  
(Supports education Program)

\$ \_\_\_\_\_

**Total Amount Enclosed \$ \_\_\_\_\_**

## Volunteer Interests

- |                                                      |                                                             |
|------------------------------------------------------|-------------------------------------------------------------|
| <input type="checkbox"/> Community Outreach          | <input type="checkbox"/> Public Relations                   |
| <input type="checkbox"/> Environmental Education     | <input type="checkbox"/> Habitat Restoration                |
| <input type="checkbox"/> Membership Recruitment      | <input type="checkbox"/> Trail and campground maintenance   |
| <input type="checkbox"/> Special Projects and Events | <input type="checkbox"/> Shorebird and waterfowl monitoring |
| <input type="checkbox"/> Fund Raising                | <input type="checkbox"/> Fish and amphibian monitoring      |

*Thank you for Your Membership and Support!*