

# SNOHOMISH CONSERVATION DISTRICT

## The Nexus



## Bringing the Woods Back to Woods Creek

by Ryan Williams, Habitat Restoration Specialist

Along the West Fork of Woods Creek, northeast of Monroe, two landowners and two organizations worked together this Spring to create an environmentally-friendly mixture of pasture and native trees and shrubs.

Lynn Logan and Joel Selling, next door neighbors with similar environmental goals, worked with Snohomish Conservation District and Snohomish County's Surface Water Management Division on a joint project. They planted 4,100 trees and shrubs and installed fencing to protect 1,400 feet of bank along one side of Woods Creek. This protects the creek from livestock damage, establishes shade for salmon and other aquatic life, provides food for insects and wildlife and prevents animal wastes from polluting Woods Creek.

Lynn Logan has owned her ten-acre parcel, an historic dairy, for 19 years. During this time she has worked to establish trees and shrubs along her bank to improve the stream for native fish and wildlife. Recently, with the addition of grazing cattle to the property, she began looking for help to protect her trees and exclude her livestock from the creek.

Joel Selling and his wife Nancy Truitt Pierce have owned their four-acre piece of land for 16 years. They began working with Snohomish Conservation District and Snohomish County Surface Water Management to improve their streamside area and limit erosion the first year they moved in. Over the years, Joel and Nancy have dug out one acre of invasive blackberries and planted native trees and shrubs along both sides of Woods Creek.

In 2009, Snohomish County's Surface Water Management Division had completed a habitat assessment of the Woods Creek Basin, identifying the best locations for streamside enhancement efforts. Joel's and Lynn's property were both on the list and they were very interested in participating. The District had funding available through a grant from the Washington Department of Ecology Centennial Clean Water Fund. In the late summer of 2010, the District, the County and several landowners met to discuss restoration opportunities along Woods Creek.

It was obvious that some livestock had access to the creek and that essential vegetation was lacking all along the creek banks. Everyone agreed that a fence was needed at least 35 feet back from the creek banks (50 feet back in some areas), and that the creek banks needed to regain their thick cloak of native trees and shrubs. In total, two and a half acres of streamside buffer would be planted and 1,500 feet of fencing installed to keep livestock at bay.



Blue plastic tubes help to protect young bark from rodents and sun scald.

The on-the-ground work began in February 2011. The District contracted with EarthCorps (an Americorps-supported non-profit group) to remove invasive blackberries along the creek. EarthCorps crews consist of international and American members who work together to complete environmental service projects.

Snohomish County was also able to provide their Washington Conservation Corps crew to plant the trees and shrubs provided by the County's nursery, as well as trees and shrubs purchased through the District's annual plant sale. The District contracted with a private fence company to install a four-wire fence with a hot-wire offset to keep cattle and horses out of the plant buffer zone and away from the fragile creek banks.

To make it more interesting, Mother Nature decided to throw some obstacles in our way. During initial discussions with the landowners, we agreed to start this project after the risk of flooding on Woods Creek was over. When planting new trees, we try to avoid disturbances such as floods, which can easily carry off new plants. We waited until March to plant and later discovered that Mother Nature had pushed Spring back until May.

In late March, after most plants were already in the ground for a week, a flood flowed through the newly-installed buffer area. During this flood and the high water that preceded it, a few intrepid beavers realized that some of these new plants were tasty and felled about a dozen cedar trees. This caused us to reconsider our plant protection strategy, so we installed special fencing at low points along the creek to prevent beaver from taking more trees.

If you own property along a creek and are interested in planting native plants and fencing your livestock away from the water, contact Ryan Williams at 425-335-5634, ext. 116 or [rwilliams@snohomishcd.org](mailto:rwilliams@snohomishcd.org).



Late Spring flooding brought new challenges.

### Summer 2011

Serving Snohomish County  
and Camano Island

#### We're on Flickr!

What's new at the District? We now have photos on Flickr! If you are thinking about adding a low-impact development practice like a rain garden or rain barrel, or want to see one of our restoration projects, check in periodically -- we'll be adding more photos. We will also be including before and after photos of some of our projects by summer's end.

<http://www.flickr.com/photos/snohomishcd/collections>

#### Facebook

Don't forget to 'friend us' on Facebook to keep up with the latest on events, programs, and other great stuff!

#### Photo Contest

There's still time to get your cameras out and snap some great photos and enter our photo contest. The deadline is June 30th. You can learn more at our website: [http://snohomishcd.org/Photo%20Contest%20overview\\_revised2.pdf](http://snohomishcd.org/Photo%20Contest%20overview_revised2.pdf).

Your photo may be featured in an upcoming issue of the Nexus! Contact Leif Fixen for more on our photo contest at 425-335-5634, ext. 110.

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Summer on the farm with a view of Puget Sound - lucky horses!

# Silt Sandwich Soils Create Unwanted Springs

by Derek Hann, Stormwater Engineer

No one would deny that this past winter and early spring have been exceptionally wet. As Stormwater Engineer for the Snohomish Conservation District, I visited many farm, urban and suburban properties that were suffering from holding too much water, turning their land into unusable seasonal swamps.

Typically, after examining a property, I can advise the owners about installing a drainage system that will safely help collect and drain that extra water. When I am considering on-the-ground solutions to drainage problems like these, the most important factor to understand is the type of soil on the wet property.

## Soil Types and Formations

There are many different kinds of soils (sandy, gravelly, silty, and clay to name a few), and they all affect what happens to rain (after it hits the ground) differently. For example, sandy and gravelly soils have large gaps between the individual particles that allow water to travel through it easily.

Silt and clay soils, on the other hand, have very small gaps between particles that act like a barrier, almost totally preventing water from traveling into the ground. Some water does soak in, but at a very slow rate. Most of the properties I visit that have severe flooding problems have soils that are composed of silt or clay that keep water mainly ponded on the surface, instead of allowing it to readily seep into the deeper soils.

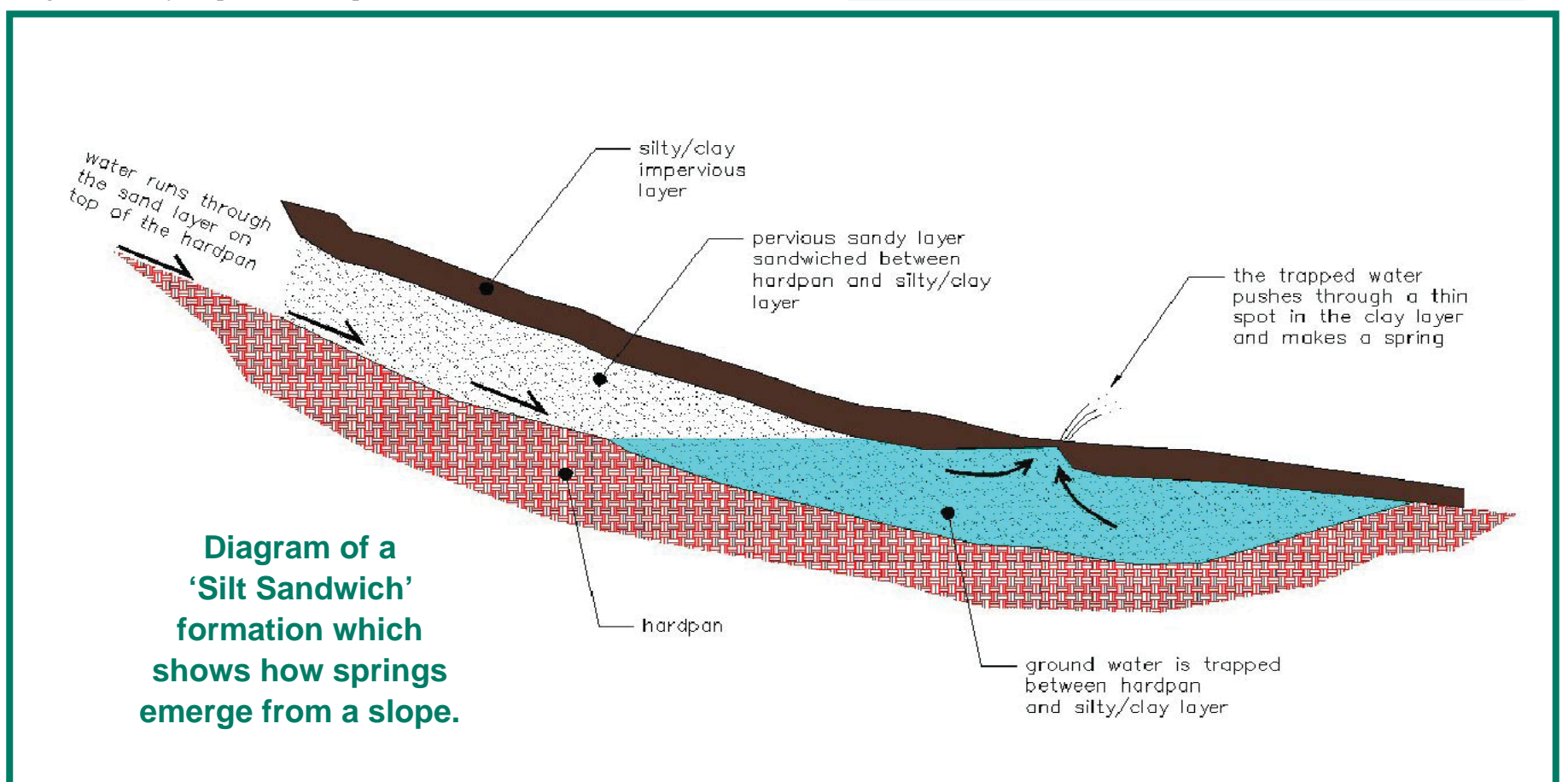
The best way to determine if this kind of soil formation is causing drainage problems on your land is to dig a small hole near any springs. As you dig you should encounter a few inches of sticky silt, then a layer of sand or gravel, and finally a very hard layer of dirt that is difficult to dig in (hardpan). The silty/clay layer will be moist and squishy. The sand should be wet with visible standing water. If you leave the hole open, it should fill with water and eventually overflow. Water will leak out of this hole and seep continuously. If this scenario is starting to sound hauntingly familiar, here are some “Do’s and Don’ts” to help fix this problem.

### “Do’s”

1. Call Snohomish Conservation District and talk with an engineer or planner. We have a variety of effective practices that can help fix drainage problems.
2. Let us create a plan for you free of charge so you know your remedy was designed by a professional who understands soils and underground water movement.

### “Don’ts”

1. Don’t dig a lot of holes -- the more you disturb the silt layer, the more it will seep.
2. Don’t cover the seeping area with rocks or cobble pathways -- this will only make the silt layer thinner than the surrounding silt and provide a larger weak area for the trapped water to leak out of.



## How a 'Silt Sandwich' Can Affect Your Property

One particular soil formation I have encountered multiple times this last year presents a unique set of challenges to property owners. I call this soil formation a 'silt sandwich'. Silt sandwich soil formations occur throughout Washington. I have seen them on many occasions on Camano Island and in South Everett. They occur on gentle slopes and are characterized by numerous tiny springs that continually seep water, making the surrounding land squishy and very wet. When one spring is plugged, a new one will pop up nearby.

There is a very simple explanation for these continuous seeps -- it has to do with the soil. The first six to 12 inches of topsoil is a silty/clay mix. If you take a clump and mix it with water to the consistency of Playdough, you can easily roll it into a ball or a 'snake' and the soil keeps this form. The next 18 to 24 inches of soil is sandy gravel. It feels gritty and if you try to make a ball with it, it crumbles instead. Under this sandy gravel is hardpan.

### What is Hardpan?

Hardpan is a very dense, deep layer of soil left over from when glaciers advanced and retreated. It can be as hard as concrete and usually only allows water to seep into it very, very slowly.

Problems arise in these situations when, somewhere upstream, water enters the sandy gravel layer, trickles downward until it hits hardpan, and then flows downhill on top of the hardpan. When this water reaches the 'silt sandwich', it builds up in the middle sandy soil layer within the sandwich of nearly impenetrable silty/clay on top and hardpan below and becomes trapped. The weight of all this trapped water applies constant pressure against the upper silty/clay layer and finds small weak spots where it can push through. Those weak spots become springs, continually leaking water onto the surface.

## Free Services Available

Snohomish Conservation District can provide free plans and design details for property owners facing stormwater problems. We also provide on-the-ground technical advice during construction.

If you have a difficult drainage issue and are worried about how to resolve it, please call us. Landowners may find they have created additional problems or that their 'fix' is actually illegal. The potential damage to your land, a neighbor's property, or a nearby stream or river can be severe if your drainage system is not properly designed. That's why these plans need to be reviewed and approved by city or county planners and engineers first.

If you don't have a 'silt sandwich' situation, but do have drainage problems or want to know your soil type, contact Derek Hann at 425-335-5634 ext. 119, Derek@snohomishcd.org, or stop by our Lake Stevens office.

Snohomish Conservation District has the expertise and resources to help you increase the function and value of your land. The District helps landowners on a voluntary, non-regulatory basis and our services are free.



Improperly trying to solve drainage issues may garner you a fine, especially if you impact nearby waterways or county ditches.

# Protecting Your Chickens from Deadly Diseases

by Donna Gleisner, *The Written Edge*

One of the buzz words you're likely to hear from the halls of Homeland Security to the walls of the Washington State Department of Agriculture's Avian Health Program is 'biosecurity'. Biosecurity is basically a set of preventive measures designed to reduce the risk of transmitting infectious diseases, quarantined pests, invasive alien species, or other organisms.



*A clean chicken coop helps keep your chickens healthy.*

With regard to commercial farm and hobby animals, animal biosecurity is all about preventing the introduction and transmission of diseases into a specific area. Animal biosecurity programs aim to protect animals from infectious diseases, toxins or pollutants, and can involve an area as large as a country or as small as a local farm.

Two of the most contagious and deadly diseases that affect chickens (as well as other domestic and wild birds) are Avian Influenza (AI or bird flu) and Exotic Newcastle Disease (END). Both of these diseases are virus-based flus that birds transmit to each other via bodily fluids, droppings, contaminated bedding, etc. And as with people, some forms of the flu are worse than others. Certain strains of these diseases are often fatal in poultry and can spread quite quickly, so quickly in fact that when poultry are infected, they may die before any symptoms even appear.

## Protection Measures to Follow

Whether you raise chickens commercially or have half a dozen in your backyard, these measures apply to everyone with chickens. Practicing these biosecurity steps keeps many domestic and wild bird species healthy and safe.

### Keep your distance

- Restrict access to your poultry and your birds. Only let caretakers have access to your birds. Your caretakers should not attend bird shows or other events where other birds are present.
- Provide visitors with boots to wear or have them clean their boots before and after their visit.
- Game birds and migratory waterfowl should not have contact with your flock.

### Keep it clean

- Keep a pair of shoes and a set of clothes to wear only around your birds or clean and disinfect your shoes and launder your clothes before you check on or work around your birds.
- Scrubbing your shoes with a long-handled scrub brush and disinfectant will remove droppings, mud and debris.
- Wash your hands thoroughly with soap, water and a disinfectant before entering your bird area.

### Don't haul disease home

- If you travel to places where other birds are present, even to the feed store, be sure to clean and disinfect vehicle tires, and other items that traveled with you.
- When returning from a fair or exhibition, keep birds that went to the exhibit separate from the rest of the flock for at least two weeks.
- New birds should be kept separate from your flock for at least 30 days.

### Don't borrow disease from your neighbor

- Don't share birds, lawn and garden equipment, tools or poultry supplies with your neighbors or other bird owners.
- If you do borrow these things, disinfect them before you bring them home and when you return them.

## Signs of Bird Diseases

### Symptoms of Avian Influenza

Swollen combs or wattles  
Bluish comb, wattle or legs  
Nasal and eye discharge  
Blood-tinged nasal or eye discharge  
Tilting head  
Lack of coordination  
Depressed/ruffled feathers

### Symptoms of Exotic Newcastle Disease

Gasping or coughing  
Depression  
No appetite  
Muscular tremors  
Drooping wings  
Twisting of head and neck  
Circling  
Complete paralysis  
Swelling of tissues around eyes and neck  
Greenish, watery diarrhea  
Misshapen, rough- or thin-shelled eggs  
Reduced egg production



In addition to the symptoms listed above, you can find more information about poultry diseases at the following websites:

- **The Poultry Site** - [www.thepoultrysite.com/diseaseinfo/](http://www.thepoultrysite.com/diseaseinfo/)
- **Washington State Department of Agriculture's Avian Health Program** - <http://agr.wa.gov/FoodAnimal/AvianHealth/>
- **US Department of Agriculture's Animal and Plant Health Inspection Service** - [http://www.aphis.usda.gov/animal\\_health/birdbiosecurity/](http://www.aphis.usda.gov/animal_health/birdbiosecurity/)

### Report Sick Birds

When you see signs of unusual illness or multiple deaths among your birds, please contact your private veterinarian or the Washington State Department of Agriculture's Avian Health Program at 1-800-606-3056.

## Is Your Pasture Ready for Summer?

by Megan O'Brian, *Farm Planner*

After what seems like a very long winter, summer is FINALLY here. Hopefully, some of your pasture's wet areas are now dry and your animals are enjoying them. Here are some tips on keeping your pastures in top condition as we move into summer.



### June

- Avoid under-grazing – don't allow grass to "get ahead of your livestock"
- Mow pastures to prevent them from going to seed and losing nutritional value, or set aside some pasture to grow hay
- Continue pulling or treating weeds, mowing and dragging

### July

*July is generally a dry month when grass may be dormant*

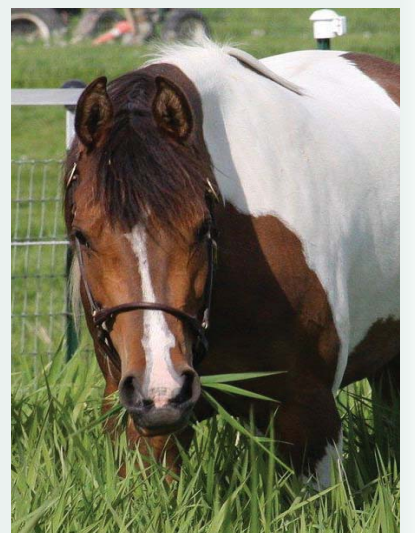
- Don't let your animals graze grass below three inches in height
- If your pasture is small, take your animals off entirely until grass begins growing again in September
- Continue to rotate, drag and/or clip pastures
- Check for erosion and bare spots where livestock congregate and move feed, water and mineral blocks away from gates and shade to evenly distribute your animals

- Plan your winter confinement area and footings
- Stay vigilant about controlling weeds—don't let weeds go to seed!
- Purchase additional feed (hay) now

### August

*August is also generally a dry month when grass is dormant*

- Avoid overgrazing as grass growth slows
- Apply remaining 25% of annual fertilizer needs
- Don't feed animals hay or grain on the ground when the soil is dry (they'll create bare spots where weeds can invade, resulting in sand colic from ingesting dirt in their feed)
- Test your soil if you didn't do this in the Spring (contact us about a free soil test!)
- Plan to reseed – order your seed, lime, and fertilizer and reserve equipment now (remember, total renovation should be a last resort, use only when your pastures are unproductive or unhealthy for your animals)



**Call any of the Conservation District farm planners to schedule a visit at 425-335-5634, ext. 4**

# Creating a Horse-Friendly Society

By Alan Shank, Farm Planner and Horse Owner



Horses live in harmony with city neighbors thanks to efforts by Alan and Mary Shank to connect with the community around their Mukilteo farm.

Have you ever considered the social and political responsibilities of horse ownership? We may think we're just an individual who loves all things horse, and not consider ourselves part of a bigger movement. But by owning and using horses, we actually do belong to a group of people who all have a mutual interest in keeping and riding horses a viable and enjoyable activity where we live.

How we care for and use our horses affects our social environment as well as our physical environment. If neighbors and government regulators are annoyed at the unintended effects of bad horse-keeping practices such as weeds, flies, odors, manure piles, dust, mud, water pollution, etc., we're already at a disadvantage when a public decision is to be made about animal ordinances or trail use.

If, however, our neighbors enjoy pastoral settings, wildlife, and beautiful horses viewed from their window, we've made a convincing argument for encouraging horsekeeping and recreation before any discussion begins.

The experiences of our non-horse neighbors and the public as they come in contact with our horse practices is vitally important for several reasons. A positive experience can: 1) prevent ordinances that are onerous to keeping horses, 2) protect equine access to trails on public and private land, and 3) garner public funds to create and maintain equine recreational areas.

## Can Cities Be Horse-Friendly?

In 2004 the Mukilteo Public Works Department was being pressured to change their animal ordinance to prohibit livestock within the City of Mukilteo and enforce more restrictive measures for keeping horses. Since 1999, my wife and I have kept two horses on our property in Mukilteo using best management practices that the Conservation District advocates.

Our eleven neighbors love having bucolic open space and lovely horses to look at. They wrote letters to the City Council and came to public meetings advocating for an animal ordinance that continued to allow horses in the city. If our practices had been annoying to our neighbors, they could just have easily testified against us or been passive about the outcome.

The Public Works Director then attended one of the Conservation District-sponsored farm tours at our home to see how horses can live in a city environment and asked Snohomish Conservation District to advise them on their animal ordinance changes ("City Horse Owners Make It Work," Oct. 22, 2004, <http://www.heraldnet.com/article/20041022/NEWS01/410220741>).

The original draft animal ordinance would have made keeping horses on our property nearly impossible, but thanks to our neighbor's support, the final ordinance accommodated our existing horse setup. By using established best management practices and having non-horse owners advocating for us, it was demonstrable that horses in the city could work.

## Being Visible Makes a Difference

Of course, it's also important to be visible in the public eye. Some effective ways to be more visible are:

1. Educate your neighbors about your good practices.
2. If you're using best management practices, contact the Conservation District and let them know your farm is available for farm tours and educational purposes.

3. Attend public meetings about parks and land use.
4. Join or form a volunteer organization like "Friends of Lord Hill" (<http://friendsoflordhill.org/>) that is active in working with Snohomish County Parks and Recreation to improve parks for equine use and building relations with other park users.

## Looking Ahead

Pilchuck Tree Farm near Arlington has generously made their private land available for equestrian use and is one of the main trail riding areas in the County. What if the tree farm is put up for sale in the near future? Would the local horse community be in good enough standing with the public, and be well organized and networked with county government to advocate for buying that land as a park that continued to welcome horses?

In response to these kinds of issues, King County horse owners formed the King County Executive Horse Council in 1985. Their primary focus is to "support the horse industry and equestrian way of life in King County by taking part in pertinent land use issues and by promoting the protection and creation of equestrian trails and facilities" ([www.kingcountyexecutivehorsecouncil.org/index.html](http://www.kingcountyexecutivehorsecouncil.org/index.html)).

Besides advocating for equine interests in King County, this council educates horse owners about responsible practices and proper trail use. An organization like this makes horse owners visible to county officials who may subsequently make decisions about parks and recreational uses and animal ordinances. This group also helps the horse community speak with one voice for clear and effective communication with county government.

In Snohomish County, the equine industry is represented on the County's Agricultural Advisory Board by horse owner Jackie Macomber of Granite Falls. The board advises the County on its Comprehensive Plan, agricultural regulations and other agricultural policy matters. Let Jackie know what equine and land use issues you're concerned about. (Contact Jackie through Snohomish County Agriculture Coordinator Linda Neunzig, [linda.neunzig@co.snohomish.wa.us](mailto:linda.neunzig@co.snohomish.wa.us) or 425-388-7170)



Alan has hosted many farm tours on his 2 acre Mukilteo farm, educating 4-H youth, horse enthusiasts, and his neighbors on the practices he uses to keep his horses healthy and his farm clean.

## First Impressions Last

Effective organization and representation is important in informing decision makers and the public about the equine community's needs. However, good first impressions from horse farms and trail riders are THE most vital and effective defense against opposition to equine ownership and recreation.

Good horse-keeping practices have the same beneficial effects on clean water, stream flow, wildlife habitat, and open space as good farming practices do. Good horse-keeping practices also mean happy neighbors. Why not do all you can (by using best management practices and joining effectively with other horse owners) to protect clean water and build strong positive relations with the non-horse owning public and local governments? If you aren't already, consider getting involved in horse and volunteer organizations working to educate horse owners and advocate for them.

If you need assistance to improve your horse farm, contact Alan Shank at the Snohomish Conservation District ([alan@snohomishcd.org](mailto:alan@snohomishcd.org), 425-335-5634 ext. 120) or attend one of our workshops or farm tours.

# SCD Hosts 2011 Washington State Envirothon

by Lois Ruskell, Outreach Director

What high school student wouldn't want to spend two sunny days at a beautiful camp along Port Susan Bay? Eighty students from around Washington State did just that when they competed in the Washington State Envirothon on May 18-19 at Warm Beach Camp south of Stanwood.

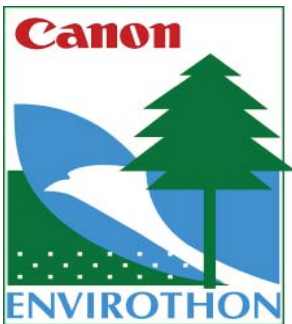


But it wasn't just a 'day at the beach'! These students had been studying for months to compete as five-member teams against other high school teams from across Washington. The teams had to answer questions on soils, forestry, wildlife, aquatics and estuaries.

The forestry station required they know their native trees and how to measure height and diameter. The aquatics station had four tanks of live fish to identify along with some tough questions on water and estuaries. The wildlife station had a host of skulls, pelts, teeth and claws to identify. The students also received a problem scenario and spent one evening creating a ten minute oral presentation that they gave in front of three judges. Check out the results in the column at right. More photos can be found at our Flickr site (see page 1).

Most of the students took advantage of a beach walk on Wednesday led by Nicole Hopper from Taylor Shellfish. They learned the benefits of eel grass and where the term 'Salish Sea' came from at a lively presentation by Glen Alexander from the Padilla Bay National Estuarine Research Reserve.

Envirothon is North America's largest high school environmental education competition where youth compete on their knowledge of soils, forestry, aquatic ecology, wildlife and a current environmental issue (Freshwater and Saltwater Estuaries in 2011). Canon sponsors the North American event where students can win scholarships. It is held at a different site in the US or Canada annually.



Getting close to a geoduck.



Small fish were a challenge to identify.

The soils station had some tough questions.



## Stanwood High School Team Heads to Canada in July

Stanwood High School's Envirothon team, led by advisor Todd Jacobsen, won first place in the Washington State Envirothon held at Warm Beach Camp and Conference Center on May 18 and 19. The second place team was Garfield/Palouse High School and third place was Union High School from Camas.

The Stanwood team will fly to New Brunswick, Canada in July to compete against teams from all over the U.S. and Canada. This is the third year that the Stanwood High School Envirothon Team has represented Washington State at the North American event.



Stanwood High School's Envirothon team members include, left to right: Jacob Flake, Aaron Olson, Brandon Nickels, Leif Small, Thor Pearson and advisor Todd Jacobsen



Garfield/Palouse High School placed second at the WA State Envirothon. Members include, left to right: Advisor Mindy Puller, Blake Slocum, Ben Weagraff, Tiona Shea, JB Lang, Chad Redman, and advisor George Landle

Union High School third place team members include: Minerva Zhou, Steven Tsai, Catherine Nguyen, Nathan So, Marcus Kwan (not pictured) and advisor John Akers (not pictured).



Find out more about Envirothon at:  
[www.envirothon.org](http://www.envirothon.org).

# Wrangling the County's Worst Weeds

by H. F. "Sonny" Gohrman, Snohomish County Noxious Weed Coordinator

What is non-native, highly destructive, invasive, competitive, and difficult to control or eliminate? No, it's not the alien-like stranger your teenager has become, nor is it that larger-than-I-thought-you'd-ever-get crazy puppy you had to have. The correct answer is noxious weeds. These foreign plant species not only reduce crop yields and destroy native plant and animal habitat, they also damage our recreational opportunities, clog our waterways, lower our land values, and poison humans and livestock.

If you'd like to stop these nasty marauders in their tracks, now's the time to join the Snohomish County Noxious Weed Control Board. There's one immediate opening (District 3, the center of Snohomish County – see map), and by the end of 2011, there will be two more openings, one in District 2 and one in District 5 (see map).

The Board consists of five appointed voting members; each member represents a different geographical area of Snohomish County. At least four of the voting members must be engaged in primarily producing agricultural products. The one nonvoting member on the board is either the chair of the County Extension agency, or an Extension representative. Each voting board member serves a four-year term with a three-term limit.

The Board's mission is to serve as responsible Snohomish County stewards by protecting and preserving the land and resources from the degrading impact of noxious weeds. Duties include administering the control program and budget, establishing policies and procedures, and adopting rules and regulations, including annual weed control plans and an updated weed list. Board members don't receive a salary but are compensated for some board-related expenses. Meetings are held in the morning on the second Thursday of February, March, April, May, July, September and December.

Applications are available online at: [http://www1.co.snohomish.wa.us/Departments/Public\\_Works/Divisions/Road\\_Maint/Noxious\\_Weeds/](http://www1.co.snohomish.wa.us/Departments/Public_Works/Divisions/Road_Maint/Noxious_Weeds/) or by mailing or calling the Noxious Weed Control Board (see contact information at end of article).



Canada thistle

## History of Weed Control

The Snohomish County Noxious Weed Board was formed in 1980 in response to requests to control Canada thistle and tansy ragwort. Canada thistle was the first weed listed for control in Snohomish County due to its invasiveness and threat to agriculture.

At the state level, noxious weeds have a long history, dating back before statehood. In 1881, the territorial legislature enacted a law "To Prevent Spread of Chinese and Canada Thistles."

The State noxious weed law holds landowners, including state, county and city landowner/managers, responsible for controlling weeds on their property. Federally owned lands are subject to the Federal Noxious Weed Act.

Since many people are unfamiliar with noxious weeds and the weed law, the state and county weed boards can provide information on identification and control options. Landowners can choose the control method they think is most appropriate for their property.

When property owners fail to comply with this state law, the Snohomish County Noxious Weed Control Board may control noxious weeds or contract for their control at the property owner's expense.

## Weed Prevention and Detection

Washington's weed program is based on prevention and early detection of noxious weed problems. Species with limited distributions are our highest priority because we can hope to effectively control or eradicate them before they spread. A recent study evaluated the benefit of controlling new invaders and found a 34:1 benefit to cost ratio.

To the non-weed specialist, there is a tendency to avoid or put off controlling weeds until weed infestations become so pronounced that they present a clear economic and/or environmental problem. In postponing action, the real cost of control increases over time. The longer a property owner waits to control noxious weeds on their land, the more damage those weeds cause and the more expensive controlling them becomes.

## Past Weed Control Strategies

In the past, most weeds had equal status. Actions taken for different classes of weeds were fairly equal. Property owners were contacted and letters were sent, but follow-up became difficult due the number of properties involved. The eradication program was primarily voluntary, and for the most part, relied on good will and education.

Exceptions to this are when control efforts were funded by grants or contracts for control of specific noxious and invasive weeds. Over the years, the County Weed Board has become more involved in control work – starting with *Spartina*, knotweed, purple loosestrife, reed sweetgrass, and giant hogweed.

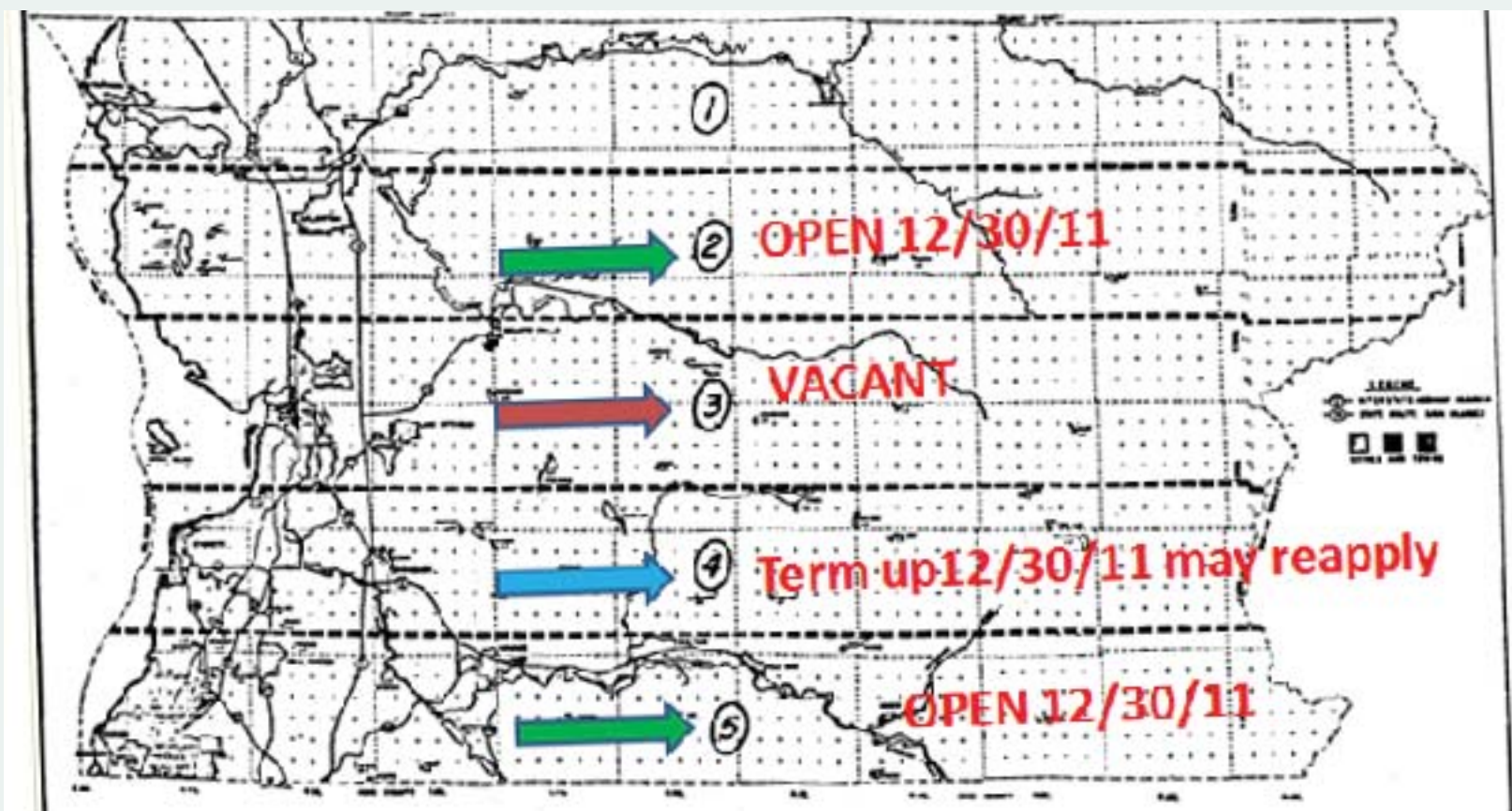
Roadside control work has always been part the program and for the past four years mitigation site weed control has been added to the Board's on-the-ground control efforts. All of these programs have been successful. Except for administration, these programs have been funded primarily by grants and contracts.

The Snohomish County Noxious Weed Control Board is located at 26718-B 115th Ave. NE, Arlington, WA 98223. You can contact Coordinator Sonny Gohrman at 360-435-7830 (office), 360-708-8166 (cell) or [sonny.gohrman@sno.co.wa.us](mailto:sonny.gohrman@sno.co.wa.us)



Bull thistle

## Snohomish County, Washington



## Noxious Weed Control Districts

# Why Control Noxious Weeds?

Adapted from the Noxious Weed Control Board website

In the U.S. alone, introduced (non-native) plants quickly become weeds that spread and invade approximately 1.7 million acres of wildlife habitat EVERY year. These plants are part of the many natural resource problems the world faces today. Noxious weeds result in U.S. crop losses estimated at \$26 billion EACH year. In addition, introduced species are the second leading cause of reductions in biological diversity. Here are six reasons to control these nasty weeds.

## 1. Noxious Weeds Affect our Economy

Noxious weed infestations can have serious economic consequences. For example, Scotch broom interferes with the regeneration of Douglas fir tree plantations. A recent study estimated that Scotch broom reduces Oregon's total personal income by about \$47 million a year. This is equivalent to 1,908 jobs lost in Oregon each year due to this noxious weed taking up space where Douglas firs could be growing.

## 2. Noxious Weeds Threaten Public Health and Safety

Several noxious weeds, such as giant hogweed, or poison hemlock, can cause severe skin burns, sickness and even death.



Poison hemlock flower and stem.

## 3. Noxious Weeds Destroy Plant and Animal Habitat

Noxious weeds can form dense stands which choke out desirable vegetation. For example, spotted knapweed infestations may reduce available winter forage for elk by as much as 50 to 90 percent. When knapweed replaces dense, native vegetation in streamside areas, it can increase soil erosion, which may ruin spawning habitat for salmon.

## 4. Noxious Weeds Threaten our Recreational Areas

Noxious weeds directly harm lakes, rivers, tidelands, and parks. Species, such as Eurasian watermilfoil, can choke out fishing areas and make swimming and boating unsafe.

## 5. Noxious Weeds Reduce Water Quality

Infestations of plants such as parrotfeather can alter lakes by shading out algae that many aquatic organisms depend on for food. In addition, these plants can lower productivity, pH, and dissolved oxygen.

Wetland weeds like purple loosestrife can also clog waterways, increasing siltation and decreasing water storage capacity. See below for a photo of what can happen when Japanese Knotweed takes over.

## And then there's Japanese Knotweed...

It can, and has, spread really fast!

Call the professionals if this one is getting away from you!



One piece of stem left on the ground can grow an entire plant. Knotweed roots can be nine feet deep!



Nothing will grow in or under knotweed.



Knotweed in flower.



You don't want to go out to feed some morning and find your animals poisoned by weeds that were in their pastures.

Photo by Julie Walker

## 6. Noxious Weeds Impact Land Use

Infestations of some species can affect property use. For example, Spartina can ruin beachfront property by altering natural interactions between land and water. Gently sloping beaches are transformed (and degraded) into high Spartina meadows that drop off into deep water. These changes may eliminate natural activities, such as shellfish production. This is especially true in the Stillaguamish River Estuary near Stanwood and Warm Beach where intense remediation has helped keep Spartina in check.

Check out the State Noxious Weed Control Board Website for more information.

<http://www.nwcb.wa.gov/>



Milfoil has taken over in this lake.

# Upcoming Events

**Rain Garden Planting Event with Ciscoe Morris**  
**Saturday, September 24**  
**10 AM - 2 PM**

**Lombard Ave & 14th St, Everett, WA**

Join Snohomish Conservation District and Stewardship Partners for a community rain garden planting event and meet garden guru Ciscoe Morris at a live broadcast of "Gardening with Ciscoe"! The project site is located just south of Everett Community College and east of the hospital. To RSVP, email [sg@stewardshippartners.org](mailto:sg@stewardshippartners.org) or call 1-206-292-9875.

**Two New Insect Pests Love Fruits and Vegetables**

**Friday, June 10, 9:30 AM to 1PM**

**WSU Snohomish County Extension, McCollum Park, 600 - 128th St SE, Everett**

Growing fresh fruits and vegetables just got more difficult with the arrival of two new voracious insect pests, the spotted wing drosophila and the brown marmorated stink bug. The spotted wing drosophila first appeared in damaging numbers in Snohomish County last summer. It is a small vinegar fly that uses a toothed ovipositor for cutting into soft-skinned fruits to lay its eggs. It attacks raspberries, blueberries, cherries, blackberries and other soft fruits. The brown marmorated stink bug arrived in SW Washington last year and is expected to move up the I-5 corridor. It attacks a variety of fruits and vegetables and often over-winters in the walls of homes.

WSU-Snohomish County Extension is offering a workshop on both pests, the newest research on their biology, host plants, and effective management of these pests. Organic and conventional methods will be covered. The cost is \$20 per person or \$25 for a couple. To register, contact Karie at 425-357-6039 or [klchristen@cahnrs.wsu.edu](mailto:klchristen@cahnrs.wsu.edu).

**Explore the Beach with WSU Beachwatchers**

**June 15 & 30**

**July 2 & 17**

**August 2, 14, 30**

**City of Mukilteo**

Beachwatchers and naturalists will be on hand to help families learn more about the beach and the amazing creatures that low tides expose. Learn more at [www.beachwatchers.wsu.edu/snohomish](http://www.beachwatchers.wsu.edu/snohomish).

**Preserving the Harvest**

**Various Saturdays in June, July or August, 10 AM - 2 PM**

**WSU Snohomish County Extension, McCollum Park, 600 - 128th St SE, Everett**

You can learn how to safely preserve fresh foods in a series of Saturday workshops over the summer. WSU Master Food Preserver Susy Hymas will share her knowledge and passion for preserving food in five workshops: June 4 (past), June 18, July 9, July 23, and August 6. Please bring a brown bag lunch. All classes demonstration and hands-on.

**Canning Specialty Items** - Sat. June 18: Learn to safely can specialty items such as jams and tomato or fruit salsa.

**Pickling** - Sat. July 9: Learn how to make great crunchy pickles of all types, not just from cucumbers.

**Drying Foods** - Sat. July 23: Learn the basics of drying and freezing foods for long- and short-term storage. Includes basic preparation steps to ensure quality and nutrition are retained.

**Pressure Canning** - Sat. Aug. 6: Learn how to safely pressure can low acid foods such as vegetables, seafood and meats.

Class size is limited. Pre-payment required. \$30 per session or save and take all five for \$125. To register, download a form at [snohomish.wsu.edu/ag/workshops/PreservingTheHarvest2011.pdf](http://snohomish.wsu.edu/ag/workshops/PreservingTheHarvest2011.pdf) and mail with your check, or contact Karie Christensen: 425-357-6039 or [klchristen@cahnrs.wsu.edu](mailto:klchristen@cahnrs.wsu.edu). For more information on the workshops, contact Kate Halstead at 425-357-6024 or [khalstead@wsu.edu](mailto:khalstead@wsu.edu).

**WSU Sound Living**

**Saturday, November 5, 2011**

**Everett Community College**

A one-day event exploring the connections between people, water, and land. Save the date, more details will be coming.

**Oops, we missed this supplier for chicks, incubators and other poultry supplies in our last issue.**

**Dayville Hay & Grain, Inc**

South of Snohomish, 11804 Springhetti Rd.  
360-568-5077 or 1-800-407-2624

<http://www.dayvillesupply.com/index.html>



# CamOcean – World Oceans Day Festival

**Saturday, June 18, 2011**

**10 AM – 4 PM**

**Cama Beach State Park**

**1880 South West Camano Drive, Camano Island**

**Join the Celebration**

Cama Beach State Park is hosting the 2nd Annual CamOcean - World Oceans Day Festival.



Come celebrate at this beautiful waterfront park on Camano Island. Stroll among the educational booths and enjoy hands-on activities, educational materials and crafts from over 30 different organizations that work to help restore and make our waters clean and healthy.

Enjoy live music from two great bands, The Home Grown Tomatoes and The Cajun Redhots, while viewing the beautiful Saratoga Passage. When the bands take a break, witness an in-water rescue demonstration by the Stanwood-Camano Fire Rescue crew. If you'd like to paddle around the Sound, rent a boat or kayak at discounted rates from The Center for Wooden Boats. If you are a landlubber, stay on shore and make a miniature boat.

**Beach Walks and Presentations**



Put on your boots and join guides from WSU Beach Watchers for a low tide beach walk to learn about the amazing plants and animals that make the shoreline their home or enjoy a nature walk with educator Holly Zox from Edmonds Community College.

Throughout the day take time to relax and enjoy presentations from a variety of guest speakers, including:

**The Invisible Shoreline**

**Shellfish Farming**

**The Magic of Tides**

**The Endangered Whales of Puget Sound**

**Exploring Our World's Oceans**

**John F. Williams, Still Hope Productions**

**Bill Dewey, Taylor Shellfish**

**Adam Lorio**

**Dr. David Bain, Cascadia Environmental Science Center**

**Barb Roy, Photojournalist**

Journey along the shoreline and enjoy storytelling with Jourdan Keith. Join the crew with Pirate Captain Fuzzy Beard as he teaches you to "Talk Like a Pirate". Shake hands with Smokey Bear and enjoy a short story from the U.S. Forest Service.

CamOcean is a great way to connect with the wonders of our oceans while having fun learning the many ways you and your family can help protect this fragile resource.

**CamOcean Sponsors**

Washington State Parks, Cama Beach Foundation, The Center For Wooden Boats, Camano Sail and Power, Josephine Sunset Home, Powder-Fab, The Home Grown Tomatoes, and TheCajun Redhots

For more Information: visit "CamOcean" on Facebook, [www.camabeach-foundation.org](http://www.camabeach-foundation.org) or contact Christine Longdon at [clongdon@frontier.com](mailto:clongdon@frontier.com).

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