



How Much is Conservation Worth?

by Alan Shank, Farm Planner

What price would you put on the view of an eagle effortlessly gliding by? How much for a blue heron launching itself from a nearby stream? Got a dollar figure for that classic 'V' formation of geese overhead trumpeting the change of seasons? What value would you put on water you can safely drink, play and fish in? How much is clean air worth?

The water we drink, the air we breathe, and the landscape around us are all valuable resources. They provide tangible benefits, and not just in terms of aesthetics. A healthy vegetated landscape filters and cools the water we drink. It protects, the soil we grow our food in and is invaluable to the air we breathe, not-to-mention providing beauty and peace.

These public benefits are critical to our health and well-being; without them, no life could exist for long. They are factors that are hard to measure, which means the free market has difficulty assigning a dollar value to them.

Economists have done extensive studies to try and capture the dollar value of the public benefits that wildlife areas; open space; fertile, healthy farmland; and functioning natural air and water systems provide. One study places the value of goods and services provided by the environment worldwide as \$38 trillion annually.

Besides drinkable water, breathable air, and edible food, natural resources preserve our sanity when we can see a distant horizon or hear the sounds of nature.

A city without a healthy landscape around it can be an undesirable place to live by any standard, and most likely not a healthy place to live either.

Conservation is the restoration, preservation, care, stewardship, and protection of our natural resources and the environment.

Several government agencies and nonprofit organizations (nationally and locally) are charged with protecting our precious water and air quality, or maintaining fish and wildlife habitat on public land. But what about conserving the natural resources on private land, such as on your own property, your neighbor's, or the land surrounding your city?

Snohomish Conservation District has been working with farmers and private landowners for decades to protect soil, water, air, and fish and wildlife habitat. As farmland is broken up into smaller properties, an increasing number of landowners new to stewardship are seeking help to manage their land in sustainable ways.



The Stillaguamish River looking east from Norman Road south of Stanwood.

In the past, the Conservation District has been able to apply for and receive a great variety of grants. These grants, plus funding from Snohomish County's Planning Department and Public Works' Surface Water Management division, have enabled us to barely keep up with the increasing demand. But grants are short-term funding, usually only lasting for two to four years. They provide seed money to work in specific watersheds or on a very specific problem, but don't include money for long-term maintenance or certain unfunded areas. They also make it difficult to maintain a stable, highly-trained workforce.

Snohomish Conservation District is asking the County Council to approve an assessment of \$5 per parcel, beginning in 2009, so that we can meet the growing demand of rural, urban and suburban landowners.

This assessment would fund technical assistance, public outreach, and general support for district services. We would also expand our urban program and be more accessible to

areas not previously funded by grants. This assessment would last for five years, and would need to be approved again after that time.

We hope that you place a high value on your environment and our efforts to conserve them, and will consider the \$5 assessment a vital investment in keeping you and your family healthy, and your home and county a safe, vibrant and attractive place to live. To learn more, visit our website at www.snohomishcd.org. Please also consider signing a letter of support, which can be downloaded from the home page of the District website.

Fall 2007

Serving Snohomish County
and Camano Island

Commercial Ag Producers Take Note - We Need to Hear From You!

Snohomish Conservation District is currently examining future work commitments to commercial agricultural facilities within our District, which includes most of Snohomish County and Camano Island. Our goal is to determine their needs (over the next four years). The District will be competing with districts all across the state for funds so we need to hear from you! What are your needs? Funds could be lost if we can't document the needs in our district.

This funding is limited to **commercial agricultural producers** who generate at least \$10,000 per year in gross livestock-product sales. Potential areas we could help with include: waste storage, confinement areas, roof runoff management, manure lagoons, and off-stream watering. Cost-share will cover up to 50 percent of the cost of a project.

Producers can call Bobbi Lindemulder at: 425-335-5634, ext. 109 or e-mail: Bobbi@snohomishcd.org

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~ Savor Fall ~



Get Your Pastures Primed and Productive!

by Bobbi Lindemulder, Lead Small Farm Planner

If you haven't thought about preparing your pastures for Fall yet, here are some things you can still do to get them ready for a productive Spring.

As Soon As Possible

Now is the time to test your soil for nitrogen, phosphorus, potassium and pH to see how healthy your soils are and if they are short of nutrients or have an excess. Gather those soils and send them to the lab for analysis. You can also contact me at Bobbi@snohomishcd.org for soil test information and a list of reputable labs.

If you're going to rest your pastures some time this season, September and October are the most important months to do so. This is when plants are starting next year's seed crop and developing more roots. So, pull your animals off to get that growth up! Remember, it's recommended to go into winter with pasture grass at least three to four inches high. You may also want to drag paddocks to break up and distribute those nutrient-rich manure piles, as well as overseed any weak areas. Seed when our rainy season starts—but don't wait until it's so wet that your seeds will wash away.

Check your fences, especially in and around your sacrifice areas. It won't be long before animals will be spending a lot of time there.

Get your hogfuel orders in early, before the rainy season begins and the ground becomes saturated. If you haven't done it already, do it SOON...the goal is to prevent muddy paddocks! This is also a great time to cut or mow those blackberry thickets down! A fall mowing or cutting seems to affect them more than at other times of the year.

How's your hay supply? It is best to get your hay in your barn NOW. Hay is expected to be scarce as well as more expensive this year. This is due to so many acres of hay being replaced by corn production for ethanol on the east side of the state. Don't be afraid to look for local hay sources as well. If you'd like to get your hay tested, contact me at the email above or at 425-335-5634, ext. 109.

October

Seeding can be done early this month as well, but don't wait. Usually our fall seeding window lasts until mid-October, but that depends on the year.

The best seeding option for our area is something basic like a general pasture mix containing orchard grass, ryegrass (annual and perennial) and tall fescue. "Endo" or "Endophyte free" is commonly recommended. Endophyte is a fungus that can live in some grasses in our area and can lead to problems with horses and other livestock. Though we don't see this happening much in our area, the safest way to protect your livestock is to use an "endophyte-free" grass mix.

Unless you're going to be grazing later in the summer, or haying a field, timothy is not needed or recommended in a grazing paddock. In most grazing situations, timothy will be out-competed. The optimal choice is a certified seed mix proven to thrive in our area.



A little guest has dropped in for dinner.

If you need to totally renovate your pasture, rototilling or plowing should be your last option. First let your pasture rest to recover from constant use (never graze below three to four inches and begin grazing again at six to eight inches). Have the soil analyzed (for nitrogen, phosphorus, potassium, pH), and finally, overseed the area before going through the time and expense of renovating an entire pasture.

Check, secure and clean out your gutters, downspouts and outlets before the rains start in earnest.

Are your compost bins empty and ready for a winter's worth of manure from your pad-

docks? Remember to put sturdy tarps over all manure piles to prevent manure run-off into nearby streams, wetlands, ditches or lakes.

Adding lime to your pastures can be done any time. It's best to do it when livestock aren't using the area but before Fall regrowth gets above four inches. At that height, grass can clog the spreader if it's dewy or wet.

Check all barn and outdoor lights for bulbs that may have burned out. Switch at least half of them to fluorescent bulbs to save money and energy. Got boots? Patch any holes or cracks, or buy a new pair.

November

Pick up manure in paddocks regularly (every day or two).

Check gutters (once the trees are bare) for leaves or debris and make sure downspouts are emptying away from the barns and paddocks to an appropriate site such as a swale or grassy area. Keep "clean water clean" by making sure roofwater does not run into livestock pens, manure piles, and muddy areas.

Check your fence lines, picking up fallen branches as you go. Piled branches make great wildlife habitat.

Keep livestock off of saturated pastures to reduce mud and harm to plant roots.

Okay, now that you've prepped your fields for the winter ahead, you can relax in front of the fire knowing that you've done all you can to keep your pastures primed for next Spring.

Saving Salmon Spawning Streams

by Christian Hoffman, Resource Management Engineer

Important habitat work in the upper watersheds of the North Fork Stillaguamish is nearing completion this fall as work wraps up on the Deer Creek

Headwaters Erosion Control Project. The Snohomish Conservation District has sponsored this project in cooperation with the US Forest Service, Mt. Baker-Snoqualmie National Forest.



This work upgrades drainage on 8.5 miles of road overlooking Deer Creek, with funding from the Washington State Recreation and Conservation Office. Poor drainage along this and other Forest Service Roads is a leading cause of sediment input into the Stillaguamish River. Fixing these drainage problems reduces the chance for sediment input and landslides, which in turn protects salmon spawning areas.

Salmon need clean gravel to make nests, called redds, where they can spawn and lay their eggs. But too much sand and sediment moving down river can bury these redds and smother the eggs. While the fish need this gravelly mix to reproduce, too much of it is a bad thing!

Once this long-term project is completed, almost 46 miles of road will have been treated across four projects spanning nearly seven years. Over 40 miles of this road system will have been updated to new and better standards of drainage so that they will be less likely to contribute sediments to streams and be maintainable for public access. Out of the nearly 46 miles of treated roads, 5.7 miles of this road system will have been placed into a safe drainage condition and then decommissioned.



A typical steep hillside found on upper watershed roads that contributes to sediment downstream.

The Many Facets of Compost

by Lois Ruskell, Public Outreach Coordinator

I don't know what you think of when someone says "compost bin", but I usually think of the three bin-type system, great for turning yard and animal waste into something useful. Three-bin systems, whether made from wood or ecology blocks, make the task of managing manure and creating compost much more efficient. One bin is used for the fresh stuff (fresh meaning having not long ago left one end of an animal). The middle bin is used for actively composting material (usually the 'hot stage'), and the last bin is for finished compost ready to use as mulch.

However, many other kinds of compost systems exist. Some are basic, such as a pile just left on the ground (the slowest form of composting). Others are complex, such as the larger, often commercial, forced-air systems we are seeing more of. Forcing air into compost speeds up the process considerably, reducing volume and giving you a usable product in as little as three to six months, instead of the more typical 12 to 18 months.

My family, many of whom were dairy farmers, used to spread pumpkin seeds along the sides of their cattle yards to 1) grow hefty pumpkins, and 2) reduce the volume of animal wastes flowing out of the yard. My brother still grows pumpkins on top of his compost pile (photo bottom right) because it gives the pumpkins lots of nutrients and lots of room to spread, while also reducing the pile's volume by around 50 percent over the summer. His sheep spend most of the summer in a pasture, so he's not adding fresh bedding to this pile.

When I took a class from Seattle Tilth last year, we built a trench compost system where we dug a little ways into the ground (a 'bed' so to speak) and then layered twigs, leaves, sheets of cardboard and then soil on top.

The Seattle Tilth garden showcases a variety of working compost systems. Some are barrel-like and turn on a crank to mix the contents. One is actually a worm bin (right) encased in a garden bench/trellis, and several are different forms of heavy plastic yard bins that are available commercially.



A combination worm bin/garden bench/trellis at the Seattle Tilth demonstration garden.

When is a Fence Not a Fence?

Compost fences are also gaining in popularity. They are attractive, functional and versatile. They are usually made using two rows of wire fence with an ever-growing sandwich filling of twigs, leaves, pine cones and cornstalks added between the wires (photo bottom center). This exposes the material to wind, rain and sun and allows for a passive yet efficient system, requiring no energy or labor to turn.

A home on Whidbey Island installed a fence around their front yard (shown at right). While brown most of the time, in late spring they added some eye-catching yellow-flowered yard debris. Most people driving by don't realize that it's an actively (albeit slowly) working compost system.

A tall, well-constructed compost fence completely surrounds the organic gardens at Sleeping Lady Resort in Leavenworth. The creators were quite

Compost Fence on Whidbey Island



artistic in adding materials, creating swirls, windows, and impressive layers with seed heads, pine cones, and corn stalks (center photo). The wire portion of the resort's fence begins about six inches off the ground, so composted materials can be harvested out of the bottom, and small animals can get through. At the bottom of the fence, twigs are stuck in perpendicular to the wire to keep materials in place while they compost.



Swirls and windows add visual interest to this compost fence at the Sleeping Lady Resort in Leavenworth.

Along one section, corn was planted at the bottom and grew right through the fence. In another section, grape vines draped over the fence and completely covered it in places.

Similarly, Jennifer Carlson (owner of Haven Illustrated in Seattle) built her compost fence with a trellis over the top so kiwi and clematis could grow up and over the fence, adding more visual interest. Jennifer's fence also serves as a divider in her yard, and shelters the house from alley noise.

Worms Eat Garbage, too

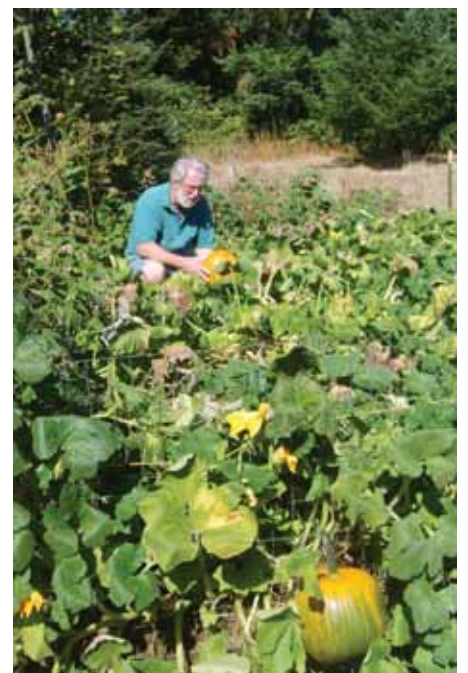
Another unique form of composting is a worm bin. These are for kitchen wastes -- veggie and fruit peelings, eggshells, coffee grounds, tea bags, and other non-meat, non-dairy scraps. Marvelous little red worms 'eat this garbage' 24/7, and as an added bonus, give you wonderful compost for your garden, not to mention more worms!

Worm bins come in all shapes and sizes. Some are merely a plastic tub with drainage holes in the bottom and a screen over the holes to prevent escape. Filled with shredded paper, food scraps, a spoonful or two of soil, and some worms, you immediately have yourself an active worm bin! There are also fancy ones that you would never know are worm bins. However you decide to create a bin, with some regular monitoring, your worms will go to work turning your kitchen scraps into 'gold'. A great book on the subject is 'Worms Eat My Garbage', by the late Mary Appleton, (aka the worm lady).

Between trying to limit the packaged materials we buy, recycling, and composting, many of us can reduce the amount of waste that we create. Instead of having garbage picked up once a week, why not aim for every other week, or maybe even once a month? Making use of technology, whether old or new, we can all limit the legacy of trash and waste materials that we produce.



Left - pinecones in a compost fence.



Ed Pickering grows pumpkins on his compost pile, letting the plants do the work in situ!

Announcements

Livestock Advisors Program Starting

Washington State University Livestock Advisor program is offering a 10-week evening class beginning Wednesday, October 3, 2007 from 6:00 – 9:00 P.M. in Burlington at the new Skagit County Extension office. The goal is to empower farm owners (both small and large acreage) with the knowledge needed to begin raising livestock for both production and hobby. Topics include pasture and weed management, forage production, fencing and housing, breeding, and nutrition alternatives for beef, sheep, horses, swine, poultry, alpacas, and llamas. All experience levels are welcome.

Contact program coordinator Joan DeVries @ 360-428-4270, ext. 240 or e-mail joanrd@co.skagit.wa.us. Cost is \$175.

Agriculture Educator Sought

Washington State University Snohomish County Extension is advertising for a Commercial Agriculture Educator. This is a full-time, tenure-track, permanent position

The educator will be responsible for the oversight, leadership, curriculum development and outreach for WSU Extension's educational programs in commercial agriculture. The position will support the economic development, commercial production, marketing and public education needs of the Snohomish County agriculture industry.

Educational programs and on-farm research will be developed and delivered to improve the economic, environmental, and/or social long-term viability of agriculture in Snohomish County by promoting sustainable practices, local and value-added markets and mitigation for global climate change.

To find out more about this position, contact Jim Kropf, NW District Director, at 253-445-4526 or e-mail jakropf@wsu.edu.

Environmental Quality Incentive Program

Agricultural producers and foresters are encouraged to sign up for the 2008 Environmental Quality Incentive Program. This program helps private farm and forest owners financially to implement conservation practices.

Practices available for cost sharing include:

- ❖ helping reduce the impact of livestock on surface and ground water
- ❖ saving water through more efficient irrigation systems
- ❖ tree planting and thinning
- ❖ road improvements for fish access and habitat restoration

To qualify, farms must have an annual gross sale of \$1,000 of agricultural products. Forestlands must have a forestry plan or a history of timber harvest and/or forestland management activities.

To be considered in 2008, applications must be received by Friday, November 2, 2007. Applications can be found at your local Natural Resources Conservation Service office at 528 91st Ave NE, Lake Stevens. Call 425-334-2828 or 425-334-3131 for more information in Snohomish County.

New Forester Hits the Ground Running

Kevin Zobrist started June 1 as the new Washington State University Extension Forest Stewardship Educator covering Snohomish and Skagit Counties.

Kevin's programs include the popular Forest Stewardship "Coached Planning" shortcourse series, workshops on a variety of forestry topics, interpretive programs, and one-on-one technical assistance for forest landowners.

Kevin has a BS in Forest Management and an MS in Forest Economics, both from the University of Washington.

Before joining WSU Extension, Kevin was researching how best to help small forest landowners stay up-to-date on relevant technological advances. He also developed ways to keep forests diverse plant-wise, and still keep them profitable.

Find out more at the WSU Forestry website:
<http://snohomish.wsu.edu/forestry>



Kevin Zobrist talks with class members at a recent forestry workshop. Duane Weston, SCD Board Chair and retired forester, is on the left.

Contact information:
Kevin W. Zobrist
Forest Stewardship Educator
425-357-6017
e-mail: kzobrist@wsu.edu

Streamside Buffers Bring Bigger Bucks

by Jenny Baker, Habitat Restoration and Water Quality Coordinator

How would you like to make extra income year after year just for keeping native plants growing along your stream or river? The Conservation Reserve Enhancement Program literally pays landowners for planting native trees and shrubs along streams and rivers where salmon and steelhead live. These planted streamside buffers are critically important to the health of a stream or river.

For example, they:

- ❖ help protect banks from erosion (which keeps the water clean)
- ❖ shade the water (to keep it cool so there's enough oxygen for fish to survive)
- ❖ drop leaves into the water (to provide food for aquatic organisms that are eaten by fish)
- ❖ provide wood (in the form of downed trees) to the stream, which helps create and maintain pools for fish and other creatures to hide in

Landowners with streamside property who enroll in this program, called CREP, receive not only an annual rental payment (which has increased) but they are also reimbursed for preparing their site, planting it, and maintaining it. This includes removing invasive weeds, preventing erosion, fencing animals away from the water, and using off-channel watering devices where livestock are present.

CREP rental payments have just increased by a whopping 32 percent in Snohomish County. Rental rates for streamside buffer areas are determined by the productivity of the soils at the site. Rental rates used to top out at \$232 per acre per year for the most productive soils, but with the recent increase are now as high as \$308 per acre per year. Property that has been designated agricultural land of significance (zoned as agricultural land) receives an additional amount, which means your streamside land could be paying you even more!

For a free, no-obligation site visit, please contact Jenny Baker, Habitat Restoration and Water Quality Coordinator at 425-335-5634, ext. 112.

Soil Surveys On-Line

Soil surveys, available for almost every area in the country, were traditionally published in limited numbers, in bound-book form. These printed surveys were often difficult to obtain and information was not easy to find. With the advent of new technologies, the National Soil Survey Center has developed an easy-to-use website for accessing soils information.

The Web Soil Survey allows users to identify an area of interest, whether it is an address or an entire county. Users can view and print soil maps with aerial photography, along with detailed reports and descriptions of soil types. The Web Soil Survey makes critical soils information much more attainable for land developers, farmers, home buyers, and city planners. The site also features a simple-to-use but powerful new tool for accessing and analyzing soils data.

The 1983 Snohomish County soil survey is available using this web tool. With the exception of some areas of public and tribal land, most of Washington State's private land can be queried for soils information. To find out more about your soil, visit <http://websoilsurvey.nrcs.usda.gov>. You can also contact Snohomish Conservation District for information at 425-335-5634, ext 4.

Plant Sale Dates

The dates for the Spring Conservation Plant sale will be March 7 and 8, 2008. Dates for pre-orders have not been determined yet. Check the website at www.snohomishcd.org in late November to learn more or order a catalog at treesale@snohomishcd.org. Color catalogs go out in late November or early December.



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