

WHATCOM CONSERVATION DISTRICT Mission Statement: To serve present and future generations of Whatcom County through a natural resource conservation program of leadership, partnership, and technical, educational & financial assistance to foster a healthy, sustainable relationship between people and the environment.

18th Annual

Native Plant Sale and EXPO



All proceeds from our sale support our education programs.

Open Sale Saturday, March 19, 2011 • 9am-2pm
On the campus of Whatcom Community College

Pre-Order deadline: Friday March 4, 2011

Pre-order pick-ups Friday, March 18, 9am-3:30pm

The native plant sale is not only a place to get low cost native plants; it is also a gathering of master gardeners, native plant enthusiasts, and conservationists. Customers of the native plant sale are as varied as the county's landscape. A farmer may be getting trees to install a windbreak on their farm. A forest land owner may be stocking up on young conifers to plant the next generation to their woodlot. A neighborhood association may be acquiring

evergreen shrubs to beautify their green spaces. A back yard gardener may be buying flowering shrubs to attract pollinators to help pollinate their small fruit trees. We all benefit from the thousands of plants installed every year in Whatcom County soil. Our sale is dedicated to supplying Whatcom County residents with a diverse selection of bare root native trees, shrubs and potted perennials. We strive to create a fun atmosphere and speedy check-out line!

Conservation District Participates in Community Energy Challenge

Whatcom Conservation District (WCD) accepted the Community Energy Challenge (CEC) to identify ways to conserve energy around our office. The CEC, a partnership between Sustainable Connections and the Opportunity Council, is helping Whatcom businesses and homes save energy and money with energy assessments and personalized recommendations.

Sustainable Connections' Commercial Conservation Specialist came out to the WCD office to perform an office energy assessment. He prepared a very comprehensive analysis and report, and then helped us develop a set of practical goals for implementing energy conservation measures. Upon his suggestion, we

replaced all of our overhead lighting, a move that has already lowered our electric bills.

The Conservation District is continuing to work towards our energy conservation goals, and with ongoing monitoring by Sustainable Connections, we are able to see whether our efforts are paying off. WCD is sincere in working to improve our energy conservation and we encourage others to contact Sustainable Connections and join the Community Energy Challenge, which is open to homes and businesses in Whatcom County. (www.communityenergychallenge.org, www.SustainableConnections.org).

Whatcom Conservation District Supervisor Election Notice

The WCD will hold its annual Supervisor Election from 9 am to 6 pm on March 8, 2011 at the WCD Office, 6975 Hannegan Road, Lynden, WA. Come vote in person.

Voting by mail is another option. Registered voters interested in participating in the District elec-

tion may request a mail-in ballot. Please use the ballot request form located on the District's website at www.whatcomcd.org. All ballots must be post marked the day of the election, March 8, 2011 to be counted.

WCD Seeks Board of Supervisor Candidates

Whatcom Conservation District is seeking board supervisor candidates for one publically elected position and one position appointed by the Washington State Conservation Commission.

Conservation District board supervisors are public officials who serve without compensation and set policy and direction for the Conservation District. An eligible candidate must be a registered voter, and may be required to own land or operate a farm. Supervisor commitments include monthly board meetings, committee meetings and special events.

If you are interested in the elect-

ed position, please contact the Whatcom Conservation District for the necessary paperwork, (Monday – Friday 8 am to 4 pm), by email at wcd@whatcomcd.org or call (360) 354-2035 x 101. Elected position candidate filing deadline is February 7, 2011.

If you are interested in applying for the **appointed** position, please contact the Whatcom Conservation District or visit the Conservation Commission website at www.scc.wa.gov or (360) 407-6200. Applications must be received by the Conservation Commission no later than March 31, 2011.



Casey Clark, the District's youngest conservationist knows, "Healthy land leads to Healthy Livestock."

Small Farm & Dairy Program Updates

Dairy Update: The Only Thing Constant in Life is Change

By Nichole Embertson, Ph.D.

The dairy industry has experienced many challenges this past year. Innovation and forward thinking remain strong and continue to transform the way dairying is done.

Recently, an infusion of young, innovative farmers are bringing fresh knowledge, progressive thinking, and an increased sense of conservation to the dairy business. In turn, they are inspiring others in the community to adopt new on-farm technologies and explore new markets for their manure. Whatcom County dairies are up-cycling their traditional “waste” products, turning manure into useful products like energy, animal bedding, and consumer goods.

Our first anaerobic digester arrived in 2005, the second just fired up its



engines, and a third is currently under construction. Digesters not only create power by harnessing methane emitted from manure, but they also keep food and other industry waste out of landfills, using it as a substrate for added methane production. Digesters can produce heat and fertilizer, power communities, and even create a product that can be used by the fiber industry.

Dairy farmers are also recycling their manure back into their barns as bedding, instead of importing sawdust or sand. Manure

solids go through a large, heated tumbler, reducing pathogens, odor, and moisture, and creating bedding that cows really like. By reusing their manure solids, farmers can reduce the transport of products onto their farms and improve the balance of nutrients that go on their fields.

Dairy farmers are adopting smart phones and “apps” for managing farm processes, and increasing their use of low impact manure application technologies and GPS tracking.

These innovations are helping farmers adapt to current and emerging water quality, climate change, and nutrient management issues. Education and cost-share programs through WCD and NRCS are here to help farmers step into the future of dairy farming.

Birch Bay Pilot Project Soon to Take Flight

By George Boggs

The Birch Bay Watershed Aquatic and Resource Management (BBWARM) District is the product of a community-initiated effort to protect and restore aquatic and water resources in Birch Bay. With the support of the BBWARM Citizen’s Advisory Committee, the Whatcom CD was able to capture significant funds from EPA to help that community realize their plan. The plan identified the importance of stormwater management and documented the community’s concern with the rapid rate of development in the

watershed and associated increase in flooding and water quality problems.

This project will implement recommendations specific to one rural (Terrell Creek) and one urban (North Central) subbasin to improve water quality, quantity and habitat for the benefit of recreational swimming and shellfish harvest. A “trusted advisor” will be contracted to work one on one with Terrell Creek residents to both inspire and help them adopt stewardship practices that will improve the environmental health of the community.

So far the CD has signed an interlocal agreement with Whatcom County to collaborate on this project, hired a social marketing professional to aid in messaging and has a number of great applicants to screen for the trusted advisor position. It is expected that the trusted advisor will be selected soon so that the project takes off with the New Year.

For follow-up information, check our website at www.whatcomcd.org.



To Conserve and Protect

Across

2. A line of closely spaced shrubs and tree species, planted in such a way as to provide shade over streams, reduce invasive species, provide wildlife movement corridors and reduce the need for ditch maintenance.
4. A person who advocates for the preservation of plants, animals and their habitats.
6. A shallow, constructed depression that collects rain water, absorbs runoff and supports a variety of native shrubs, flowers and grasses.
8. The largest of the salmon species, commonly referred to as “king”.
11. An ethic that embodies cooperative planning and management of environmental resources with organizations, communities and others to actively engage in the prevention of loss of habitat and facilitate its recovery in the interest of long-term sustainability.
13. Usually less than 15-20’ tall, a _____ is distinguished from a tree by its multiple stems and lower height.
15. An area of land whose soil is saturated with moisture either permanently or seasonally; can include swamps, marshes, and bogs, among others.
16. The gradual wearing away of land surface materials, especially rocks, sediments, and soils, by the action of water, wind, a glacier or human activity.
17. The interface between land and a river or stream.
19. In 1892, before they had the right to vote, Washington women selected this as Washington’s state flower.

Down

1. Animal which unwittingly aids a plant in its reproduction.
3. Prolific plant protector, seen in CREP buffers.
5. A Pacific Coast native tree with peeling red bark and evergreen crowns that grace rocky bluffs and seaside cliffs.
7. Large _____ debris are the logs, sticks, branches, and other wood that falls into streams and rivers, which can influence the flow and the shape of the stream channel.
8. A voluntary program that pays landowners rent, a signing bonus, and all the costs for planting buffers along creeks and ditches.
9. Himalayan blackberry and reed canarygrass are considered _____ weeds.
10. Area above the forest floor where the tree crowns meet to form an interactive web of life.
12. The area or environment where an organism or ecological community normally lives or occurs.
14. Species that occur or historically occurred within the state boundaries before European contact.
18. Tree with needles and cones not leaves that fall off.



Answers on Page 4

Make-Over Projects

THIS OLD FARM: Don and Donna Starr Take On Farm Make-Over Project

By Chuck Timblin

Don and Donna Starr live on a small farm just outside Blaine. By day, Don is an accountant and Donna a semiretired school teacher, but tending to their 35 acre property and animals is their passion. About half their land is covered with trees and water (Dakota Creek meanders through the middle of their place),

and on the farmable half, 8 head of beef cattle are grazed. About a year ago, the Starrs decided to do some remodeling. Only it wasn't their house they prioritized for fixing up, it was their land. Their first priority: Dakota Creek. They wanted to ensure they were doing their part to improve and protect habitat conditions for salmon and water quality for shellfish in Drayton Harbor. Their second priority: their pastures. Don believed that increasing pasture productivity could improve their cow's health and the profitability of their farming operation.

Since their decision, the Starrs have made significant progress. Nearly 3 acres of forest buffer, 837 feet of fencing, and a livestock watering facility (pipeline and tank) were installed to protect Dakota Creek. These improvements were completed with assistance from WCD and the Conservation Reserve Enhancement Program (CREP) which provides landowners a combination of federal and state funds to restore critical salmon habitat. At the Starr's own expense, rain gutters, downspouts and outlets were installed on the barn to reduce mud and improve water quality. They also installed 100 feet of culvert in a ditch next to the barn to keep contaminants (pathogens, nutrients) out of surface water.

In 2011, the Starrs will take on one of their biggest challenges, the wetness of the soil in the north half of their farm. Extensive ditching has helped move water off the land, but made it harder to protect all that surface water. The opportunity to improve this situation comes via two newly approved CREP practices: Hedgerows and Wetland Buffers (See sidebars on this page). In March, an acre of land along these ditches will be restored with hedgerows and wetland buffers and livestock will be excluded with 1980 feet of new fence.

Previously, the Starrs allowed their cows freedom to choose what, when and where they wanted to eat. Unfortunately, cows in charge of grazing management don't make very good decisions, especially about forage productivity, economic returns and environmental stewardship. That's about to change as the Starrs begin to employ rotational grazing, also known as prescribed grazing or intensive grazing. They will start by dividing pastures into smaller fields (paddocks). They will give cattle ac-

cess to a paddock only after the grass in that paddock is fully recovered from previous grazings. The cattle will be moved to a new paddock before they over graze and cause harm to the plants. It's a "plants first" approach, focusing on maintaining optimum productivity of forages. Transitioning to rotational grazing and gaining the



Don and Donna Starr with their CREP planner Wayne Chaudiere.

full benefits generally takes a few years, but most graziers that practice it feel it adds significantly to the profitability of their operation and the health of their animals.

Commitments to their land and a long term vision have led the Starrs down the path of environmental stewardship. This Old Farm is a shining star in the Dakota Creek Watershed. If you are interested in learning more about pasture management, call the WCD.

CREP Conservation Practices

Filter Strips

- Variable width, site specific, grass
- Improves water quality by removing nutrients, sediments, organics & pesticides from runoff.

Riparian Forest Buffers

- 35'-180' wide, native trees &/or shrubs
- Provides shade, temperature control, leaf litter & woody debris for fish & fish habitat; water quality improvements as above; streambank stabilization & runoff filtration.

*Hedgerows

- 15' wide, native shrubs
- Provides fish, wildlife, water quality improvements & stabilization benefits as above; can improve drainage & channel conditions, reducing ditch maintenance.

*Wetland Restoration

- native trees, shrubs & herbaceous plants.
- Improves fish & wildlife habitat; filtration benefits as above; floodwater storage & attenuation, maintains surface base flows; eligible only on cropped land.

*Wetland Buffers

- 20'-120' wide, native trees &/or shrubs.
- Provides fish, wildlife & filtration benefits as above; enhances & protects wetland functions.

* New 2010 Practices

Creating a Marketplace for Our Natural Resources



By Heather McKay,
FHB Consulting Services Inc.

The resource lands and watersheds of Whatcom County and their associated ecosystems represent a significant portion of the natural capital that supports our agricultural economy, tourism industry, quality of life, commercial and traditional fisheries and shellfish harvests, and essential ecosystem services. Good stewardship of our natural capital is good for business and good for our wellbeing now and in the future. But how do we balance the short term demands for economic development with the longer term imperatives of improving and protecting the state of the land, water and natural resources on which we all depend?

Market-related and incentive-based approaches have emerged in recent years as effective tools to complement our more "traditional" regulated and voluntary programs for protecting and managing natural resources. The Natural Resources Marketplace Working Group has been exploring these approaches to see how they might work for us here in Whatcom County.

The principle behind market-based tools for natural resource management is that people or groups

who go beyond the standards required by regulation to manage and protect land, water and air should be able to trade the benefits generated from their actions in exchange for regulatory relief, permits, or payments in kind, with those who seek to purchase credits to mitigate the unavoidable impacts of their actions or projects. A natural resources marketplace could offer a stable and legitimate structure for making connections between a number of currently separate market-based tools. These include, inter alia, water banks, wetland banks, habitat and conservation banks, and carbon credit markets. An innovative option that has been suggested for Whatcom County is to incorporate transactions involving development densities.

The Working Group is continuing to develop the marketplace concepts, with the aim of initiating selected pilot transactions within the next phase of work. A public symposium was held in September 2010 to share information and experiences from elsewhere in applying such tools. Find out more about the Natural Resources Marketplace Working Group at <https://www.piersystem.com/go/doctype/1579/55231>.

District Receives EPA Watershed Grant

WCD received an EPA Watershed grant in July 2010 to conduct the study: Protecting Puget Sound Watersheds from Agricultural Pollution Using a Progressive Manure Application Risk Management (ARM) System. The project, which will run from 2010-2014, addresses the environmental risks associated with manure application to farm fields. The new ARM System presents an innovative way to evaluate agricultural land use

designations and subsequent application risk for individual fields using soil and weather parameters to reduce seasonal surface water leaching and air pollution. Coupled with new technologies to help educate and inform farmers, this new system promises to reduce contaminated runoff events and significantly reduce the amount of agricultural pollution that reaches groundwater, salmonid rivers, shellfish beds, and the airshed.

Birch Bay Watershed & Aquatic Resources Management (BBWARM) District Update

By Ingrid Enschede

Whatcom County established BBWARM as a special purpose district to manage stormwater in the Birch Bay Watershed in response to citizen concerns about water quality, flooding, and loss of aquatic habitat. The BBWARM stormwater program promotes actions and implements projects that reduce the impacts of stormwater runoff.

Key BBWARM accomplishments to date include:

- Establishing an Advisory Com-

mittee that holds monthly public meetings

- Prioritizing and implementing capital improvement projects
- Supplementing County water quality monitoring
- Developing a stormwater maintenance program
- Implementing a variety of education projects

For more information please visit <http://www.whatcomcounty.us/publicworks/birchbay/index.jsp>.

CREP Milestone Approaches

In the Spring of 2011, the CREP program will plant its one-millionth tree on voluntarily restored land. We think that's a good reason to celebrate! Keep watch for more information on this momentous milestone.



Announcements & Events

George Boggs, WCD Executive Director Receives "Legacy of Conservation" Award

At the annual meeting of the Washington Association of Conservation Districts in Cle Elum in December 2010, the USDA NRCS presented awards to a few individuals who have made outstanding efforts to conserve natural resources.

Mt. Baker FFA Forestry Team Places at Nationals

Congratulations to the Mt. Baker FFA Forestry Team for placing 14th out of 40 teams at Nationals in Indianapolis, IN this past October. Team members include Aaron Leavitt, Ella Salkeld, Kyle Leech, Jarrod Snaveley and Carsen Monaghan. Once again the team had a great time and learned a lot. Congratulations on your continued success!

4-H

In the spring of 2011, 4-H Youth Development of Whatcom County will be piloting a new online activity resource to help educate youth about science and service related to our precious Whatcom County Natural Resources. This curriculum provides youth leaders with hands on learning opportunities and teaching tools to educate about the science and management of our local resources. The activities also help strengthen connections with many county-based organizations focused on Natural Resource Management. Activities are broken into categories: Water and Marine Life, Forests, Parks and the Lands We Use and Air and Energy. If you are an adult interested in helping teach youth about these important topics, or an organization that would be interested in being highlighted as a community partner on the website, please contact Michael Wallace at the WSU Extension Office 676-6736.

Small Farm

WSU Whatcom County Extension in Bellingham to offer Agricultural Entrepreneurship Classes, starting in late Jan. or early Feb. 2011. For more information visit whatcom.wsu.edu/ or email Colleen Burrows: cburrows@wsu.edu.

National Arbor Day, Plant a Tree and Watch it Grow

April 29 is National Arbor Day, plant a tree! For shade, beauty or habitat, planting even one tree can make a difference. Arbor Day can be every day, come and purchase your native trees at WCD's Annual Native Plant Sale.

2011 Calendar of Events

FEBRUARY

February 9, 2011. Raspberry Symposium. WSU Whatcom County Extension will host a symposium for growers and researchers at the Mt. Vernon Research Station. (www.whatcom.wsu.edu)

February 19-26 - National FFA Week

MARCH

Early March - Regional Envirothon, hosted by Skagit CD at Padilla Bay.

March 8 - WCD Board of Supervisors Election.

March 19 - WCD's Native Plant Sale, Whatcom Community College.

March 13-19 - National Ag Week (ag-day.org)

JULY

July 15-16 - Raspberry Festival, Lynden

AUGUST

Aug. 15-20 - Northwest Washington Fair, Lynden



Crossword Puzzle Answers

Across
2. Hedgerow
4. Conservationist
6. Raingarden
8. Chinook
11. Stewardship
13. Shrub
15. Wetland
16. Erosion
17. Riparian
19. Rhododendron

Down
1. Pollinator
3. BlueTubes
5. Madrone
7. Woody
8. CREP
9. Invasive
10. Canopy
12. Habitat
14. NativePlant
18. Conifer

District Welcomes New Employee - Emily Hirsch

Emily joined the District early in 2010 as the Plant Sale Intern and liked it so much; she asked if she could stick around. Emily has assisted the District in several programs including monitoring CREP project sites, updating internal and state database records and conducting a survey of Whatcom County Ag for the WSDA.

Emily, a Midwest native, has a BS in both Biology and Geology from Western Kentucky University and moved to Bellingham in 2000. Prior to joining the District, Emily worked as a wetland ecologist for a private consulting firm. There she assisted clients with meeting land use objectives where critical areas and species are present. She has conducted numerous field investigations to delineate and characterize wetlands and streams in a variety of environments and worked

with local, state and federal agencies. She has also served as a Remediation



System Operator and Environmental Technician for a Groundwater Extraction, Treatment and Recharge System and two Fuel Extraction Systems on Naval Air Station Whidbey Island.

She will become a full-time employee this January, and continue to provide support for a variety of projects and offer her experience as a wetland specialist to the district.

Whatcom Conservation District: Making it Count in Our Community and Beyond



Throughout the years, WCD and staff have been recognized for exemplary service and natural resource leadership in our community. The collective experience, knowledge and passion of district employees and Board members fuel their ability to assist a community that relies on their services. It's more than dedication, it takes funding to develop tools and guidance that helps producers work efficiently and improve the environment. When the right ears are listening, they deftly illustrate why funding for initiatives that solve agricultural problems by helping farmers implement environmentally sound and profitable farming practices remains important even in economically challenging times.

In 2010, WCD hosted tours, workshops and informative talks on a variety of topics to a variety of groups. Most notably, representatives and budget administrators from the US Environmental Protection Agency, WA Department of Agriculture and WA State Conservation Commission, agencies integral in developing regulation and approving funding, visited Whatcom County. They connected with producers and were given an idea of the complex issues facing farmers today.

WCD is commonly called upon for their knowledge and expertise by academia, professional and amateur groups. WWU's Huxley Agro-ecology Class toured Conservation Reserve

Enhancement Program (CREP) sites and local dairies with WCD and Natural Resources Conservation Services employees. Tours of CREP small farm sites were also given to the Farm Services Agency to demonstrate new wetland buffer and hedgerow practices. A talk about native plants in restoration was presented to the local chapter of the Washington Native Plant Society. Agriculture and Wetlands, a workshop, was developed and presented by WCD staff at the Society for Wetland Scientists Northwest Chapter meeting. Staff led a tour of CREP sites where small farm plans have been implemented to allow agricultural activities to continue in farmed wetlands. A tour of hedgerows and their design was given to Skagit and Snohomish CD's.

Tours and workshops paint a great picture for directors, policy makers and administrators, about what districts do with state and federal funds. They receive invaluable feedback from producers regarding how and who their regulations actually affect. They see funding used to improve farming practices and the environment, to provide public outreach and educational activities. Funding that not only afford improvements to our natural resources but also generates good jobs in our community. Commitment to agriculture, the environment and success makes it count.

Whatcom Conservation District

Board of Supervisors

Joe Heller, Chair
Terry Lenssen, Vice-Chair
Larry Davis, Secretary/Treasurer
Dick Yoder and Ed Stone, Supervisors

NRCS Staff

Alex Hall, Resource Conservationist
Joy Hawley, Soil Conservationist
Marty Rankin, Engineering Technician

WCD Staff

George Boggs, Executive Director
Dawn Bekenyi, Admin
Bill Bensen, Structural Design
Wayne Chaudiere, CREP

Chris Clark, Livestock
Frank Corey, Riparian Restoration
Nichole Embertson, Livestock
Emily Hirsch, Technician

Andrew Phay, GIS & IT
Sonya Schaller, CREP
Chuck Timblin, Livestock

Design & Layout: Thom Barrie Graphics & Design