



ONRC UPDATE

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A Monthly Newsletter from UW Olympic Natural Resources Center

DIRECTOR'S MESSAGE



John Calhoun

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Activity around UW ONRC's facilities is picking up. Spring and summer are busy times for those of us who become involved with the management and use of our outstanding facilities. Meeting rooms, labs, Social Hall and kitchen as well as our residences have been spruced up, inventoried and are ready for the heavy use season.

Professional conferences and educational activities make up the majority of the activity at this time of year. UW ONRC is sponsoring a regional Geographic Information System Conference on February 27 & 28. The conference, "Geospatial Information Flow, from the Field to Management" will be the second regional GIS conference sponsored by UW ONRC, continuing our leadership role in regional GIS. Practitioners, vendors, and resource managers will explore the state of GIS services in the region and ways to provide GIS services to underserved organizations. This conference should attract about 50 folks to our Forks campus, from outside the area. The second conference on

the horizon is the annual meeting of the Northwest Science Association which will be held on March 27 & 28. We expect about 100 scientists from Oregon, Washington, and Idaho to participate. UW ONRC helped with the agenda by recruiting the keynote speaker, Dr. Robert Lackey, Chief (Acting), Watershed Ecology Branch, Western Ecology Division, National Health and Environmental Effects Research Laboratory, Office of Re-

search and Development, U.S. Environmental Protection Agency in Corvallis, Oregon. Brian Boyle, three term commissioner of public lands, will deliver the banquet address.

at UW ONRC has many advantages. It provides recognition of the stature of UW ONRC in the scientific community in the Pacific Northwest. This stature allows us to participate in many areas of direct interest to UW ONRC. Regional conferences held at UW ONRC also provide economic support to West End communities. Folks come to Forks for these conferences that otherwise might not have come to this area. Many participants have remarked to me that, now that they know about Forks and La Push, they intend to return with their family for extended visits.

"Regional conferences held at UW ONRC . . . provide economic support to West End communities. "

In the next few months, this newsletter will be full of descriptions of events and activities being held at ONRC. You might find something you are interested in participating in. You can check out current and planned activities on our website <http://www.onrc.washington.edu>.

Hosting these conferences



OESF CORNER

Al Vaughan

State Lands Assistant Region Manager
Washington State Department of Natural Resources



Al Vaughan

Last month's article revealed that Washington State Department of Natural Resources (DNR) hopes to initiate research and monitoring with operations that involve cedar salvage in Northern Spotted Owl (NSO) habitat. Tracking the progress of this proposal will be one of the reoccurring items that will make up this news spot. I thought you may be interested in its progress so far.

Habitat Conservation Plan (HCP) Background –

- Studies are needed to understand the relationship between large woody debris and its contribution to NSO habitat. This is indicated in the HCP as one of four areas of "primary research interest."
- The OESF's goal is to integrate commodity (income) production for its trust beneficiaries with protection and restoration of ecological values.

Last fall, DNR management was inspecting the Anderson Ridge area, just Southwest of Forks.

DNR decided to bring forward a substantial cedar sale for income production, addressing local demand for cedar salvage opportunities. Noting this area is dotted with several hundred acres of old forest habitat for NSO, it became clear an opportunity to integrate research with a sale of valuable material was present. We contacted UW ONRC to ask for help in identifying opportunities for research and monitoring that would address the HCP's primary research interest. UW ONRC Director John Calhoun and Research Coordinator Jason Cross currently are

working to out-line alternatives to study removals of large woody debris (in the form of cedar salvage) and that operation's effect on the environment.

Once we are clear about the research opportunities, UW ONRC and DNR will work together to establish a study proposal. We are excited about the possibilities this sale offers to both the scientific and local business communities. The forest laboratory, as the OESF is defined, could not find a better opportunity to test its charge.



Fallen Cedar Tree

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SCIENCE EDUCATION REFORM

Ellen Matheny

Director, Education & Outreach
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Ellen Matheny

"H₂O is hot water, CO₂ is cold water." This statement was quoted from a middle school science test paper at a recent institute on science education reform in Washington state.

Ever since Sputnik and the dog Laika from Russia went shooting up into space in 1957, the US has accelerated its scientific programs. Washington state is joining the national movement to reform science education by calling for a new way of teaching and learning science. The trend is to emphasize inquiry and problem solving as a way of achieving knowledge and understanding about the world. And, further, to integrate basic learning skills – reading, writing and arithmetic – into science lessons rather than to look at them as somewhat mutually exclusive skills.

Supporting its continuing commitment to enhancing science education in the Forks schools, the Quillayute Valley School District sent four educators to the recent LASER (Leadership & Assistance for Science Education Reform) Institute in Seattle. I attended the Institute as a community partner with the intention of understanding how the UW and our facilities here in Forks can better support our schools.

To better understand these changes, let's take a trip down memory lane. Do you remember memorizing equations in school and then having to recall the "right" answer on a test? Listening (and falling asleep) while the teacher lectured? Working mainly by yourself on projects?

Hold on to your bootstraps because

"the times are a changin'." Classrooms, using the new inquiry-based approach, encourage group interaction, questioning, problem-solving, and listening to understand not to memorize. It's a more interactive classroom. And the payoff is students learn scientific concepts AND facts while exploring the new concept using knowledge he or she has already developed. It's like entering into a mystery or a puzzle that engages the mind while searching out the answer.

UW ONRC Public Forum Science Education Reform in Our Schools

Sherry Schaaf, QVSD Science Coordinator, and LASER Team will show us what is happening in K-8 science education reform in our schools

Tuesday, February 25 - 7:00 pm

The latest research studies in cognitive memory support this style of learning. When the brain actively engages in a new experience, a neural pathway is created. The mind needs to connect with something familiar in a new concept to create the neural pathway and therefore remember it. If the new concept is totally unfamiliar, the neural pathway won't be created and the concept will not be remembered.

To illustrate, you may be familiar with this novel technique to remember someone's name. A person introduces himself to you as "Joe" and 10 seconds later you can't remember

whether he said "Jim" or "Ted" or "John." However, if you connect his name with something you know – your Uncle Joe had the same color of red hair as this person, for example – the odds are better you will remember "Joe" the next time you see him (and his red hair).

A well-trained science educator is critically important in high quality science education. But also important is involving the community and its resources. Local experts in scientific fields can enhance classroom experiences by bringing their talents into the classroom for special lessons or by mentoring teachers in their scientific discipline. The community can provide a resource for the classroom teacher, giving him or her a contact person for new information and learning. UW ONRC is committed to helping our schools with finding needed community resources and providing expertise and assistance in program development.

As a side note, something that impressed me at the Institute is the quality of teachers we have here in Forks. The Institute participants – Sherry Schaaf, Shele Kinkead, Cari Rohrer, and Tracy Keene - were just a representative sample. What I observed were quick-thinking, creative individuals who are highly-motivated to understand the new concepts and effectively apply them in the classroom. We have many things to be thankful for here in Forks and one of them is the high quality teaching staff in our schools.

GIS INTERNSHIP

Eric Sfetku

GIS Technician

UW Olympic Natural Resources Center

Ken Santman is working at UW ONRC as a Geographic Information Systems (GIS) intern. A senior at Forks High School, Ken will be helping Teresa Zena Alcock and Eric Sfetku with Data Management, GPS, and GIS applications.

The GIS internship program at UW ONRC was created in 1999 to give local high school students exposure to the high tech tools used in today's industries. In particular, students learn about forest resource issues and how the tools used today are applied to those issues. Interns receive training in computer programs such as Microsoft (MS) Office Suite, Arcview,



GPS Handheld Receiver

and ArcGIS. They also get a chance to use tools including global positioning systems.

In the short time Ken has been at UW ONRC, he has begun work on several projects. He is creating an inventory in MS Access of historical timber sales along the Olympic Peninsula, provided to UW ONRC by Jack Zaccardo. He has also mastered the basics of Arcview and used those skills to help set up and map the GPS exercise for the UW ONRC GIS Conference. Before he graduates this year, Ken will have assisted in up-



Eric Sfetku and Ken Santman

dating several of the UW ONRC websites. These sites include the UW ONRC main page, the Spartina website, and the ONRC Clearinghouse for the Olympic Peninsula. We here at UW ONRC are happy to have Ken here and look forward to continue stimulating the enthusiasm he has shown towards GIS.

Congressional Update

In February 2003, Senator Jim Hargrove introduced Senate Bill (SB) 5215 which, when passed, will modify the personal use shellfish license fee. The money generated from the increased fee will support continued monitoring of shellfish on the Washington coast to ensure public health while increasing recreational harvest days. As you know, UW ONRC is leading a consortium interested in the improvement of razor clam harvest management. The Olympic Region Harmful Algal Bloom (ORHAB) consortium was successful in obtaining federal funding for five years of research and monitoring. The funding is predicated

on the State assuming the monitoring program once it is developed by ORHAB.

SB 5215 will add a \$1.00 surcharge to the personal use shellfish and seaweed license, generating up to \$150,000 annually which UW ONRC will apply towards the monitoring program.

Continued monitoring, based on the development work accomplished by ORHAB, will increase the razor clam recreational harvesting days by allowing more precise information about the presence of harmful algal blooms. Public health will be protected

while recreational harvesting days will be increased.



Washington State Capitol Building

The Senate Committee on Parks, Fish & Wildlife passed the bill, and it now resides in the Ways & Means Committee. If you care to contact your legislator regarding this bill you can call the toll-free legislative hotline – (800) 562-6000 – where you can leave a message for any legislator.