



ONRC UPDATE

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A Monthly Newsletter from UW Olympic Natural Resources Center

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Director's Message

The enabling legislation that created UW Olympic Natural Resources Center outlines the purposes and programs we will pursue and develop. One of the programs called for is the "Creation of a neutral forum where parties with diverse interests are encouraged to address and resolve their conflicts."

I assume the legislature included this language in hopes that UW ONRC might contribute to the resolution of conflicts over natural resources issues in a different way in which these issues are usually addressed - advocacy and conflict. A neutral forum, one not sponsored by an advocate for one position or another, creates the opportunity for issues to be informed in more credible ways than otherwise may occur.

Ellen Matheny, our new Director of Education and Outreach, has initiated a series of public forums on natural resource issues of local and regional interest. Monthly forums, held at ONRC, will address some of the most controversial and vexing subjects. Last month, Ellen presented a discussion on Forest Certification, led by Rayonier Regional Manager Bill Peach. This month (January 22 at 7 PM) we will present a program on red

tide and razor clams. Next month we will hear about the new forest policies being proposed by the Bush Administration.

As you can guess, presenting some of these subjects carries with it some risk. We select topics we feel are of high interest to our community and are not well understood. Our neutral forum brings expertise to the meetings without the advocacy that usually accompanies public debates.

People tend to get emotional about these kinds of issues. They strike a nerve and matter deeply to folks who live here. We don't want them to get mad at UW ONRC for bringing the subject up for discussion. That is the risk.

The program this month is a good example of an important, but risky, issue - red tides and razor clam digging. People around here love to dig for razor clams. In some ways, it represents the reason people choose to live here. It is a long tradition, even a part of the culture. So, when the Washington State Department of Health determines there is a human risk to eating clams harvested during certain times and the Washington State Department of Fish and Wildlife (DFW) enforce a closure, people get mad. And

suspicious, especially when they observe some others still harvesting clams and eating them with apparently no ill effects.



John Calhoun

So what is going on? Our forum will address part of that question. We can't tackle tribal harvesting vs. non-tribal harvest. And we can't tackle enforcement of closures. But we can address what UW ONRC is doing to ease the frustration and uncertainty over public health and unplanned closures.

Our objective for the forum is two fold:

1. Report to the public the work UW ONRC is doing with the Olympic Region Harmful Algal Bloom (ORHAB) group. This group is working to discover the source of what is often called "red tide" events and to predict when these events might occur. If we can do this, DFW can schedule harvest days so they will not be interrupted by these events, resulting in more harvest days per year than we now have. ORHAB is also developing a sampling method that will allow more precise application of



OESF Corner

Al Vaughn

State Lands Assistant Region Manager

Washington State Department of Natural Resources



Al Vaughn

Under the Habitat Conservation Plan (HCP), the Olympic Experimental State Forest (OESF) was designed to be the Washington State Department of Natural Resources' (DNR) primary forest laboratory with an integrated approach to timber sale production and habitat conservation in an unzoned forest. The UW ONRC is located in the heart of the OESF and is a key partner with the DNR in successfully managing a forest laboratory. My new column, OESF Corner, will seek to pass on news and accomplishments from month to month relative to OESF and UW ONRC efforts.

Lessons learned from experiments in the OESF were expected to help us

manage all of our lands under DNR's HCP. To date only a modest amount of research and monitoring has occurred, and funding this work is always a challenge. However, through a Federal grant and UW ONRC's help, we were able to install a riparian silviculture experiment in 2000 and continue to monitor its progress today. This year we hope to initiate research and monitoring with operations that involves cedar salvage in Northern Spotted Owl habitat. Another timber sale, scheduled for early 2004, will study the effects of small patch clear-cutting on habitat development.

Landscape planning remains a high priority for us. We see this as an

enabling tool, securing application of HCP habitat recovery strategies and increasing our timber harvest. Right now, we are nearing the completion of a major landscape planning effort south of Forks in four of the HCP assessment units: Goodman, Willy-Huel, Reade Hill, and Kalaloch. We have become partners with UW ONRC to test the new Landscape Management System developed by UW. A few of the exciting possibilities developing from this plan include increased harvest to support elk and deer, smarter protection for Northern Spotted Owls, and improved returns for the Washington State Trust Lands.

Upcoming GIS Conference—February 27 & 28

Eric Sfetku & Teresa Zena Alcock

In 1999, UW ONRC celebrated the "grand opening" of the "ONRC Clearinghouse for the Olympic Peninsula" with the region's first Geographic Information Systems (GIS) Conference. UW ONRC had a full house packed with representatives from federal, state, tribal, local government and other organizations from all around the region.

For our second GIS conference, entitled "Information Flow from the Field to Management," we are looking at remodeling and renovating the Clearinghouse as well as investigating other current GIS topics in the region and the state. There will be an emphasis on the

hot topic of the day - remote sensing technology. Several distinguished speakers highlight this year's conference. Among them, Chris Wayne, GIS consultant from ESRI, will be giving a tutorial in advanced spatial analysis techniques showcasing the GIS industries premier software. Miles Logsdon, Associate Professor from the College of Ocean and Fisheries at University of Washington, will also be giving a technical seminar in basic remote sensing techniques. We have an all-star cast of speakers from around the Pacific Northwest who will be discussing current projects in GIS applicable to the Olympic Peninsula.

In addition, our GIS Services Panel will discuss gaps in GIS service on the Olympic Peninsula. We'd like to bring those in need together with those that provide GIS to examine gaps in GIS information products and services. We will review the services provided by state, federal, and tribal agencies, especially in lieu of the changing mission of GIS imposed on the industry because of September 11. This is a great opportunity to see exactly what GIS has done for the Olympic Peninsula, and what it can do for you in the future.

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ONRC Public Forum to Discuss Razor Clam Closure

Miranda Wecker, Marine Program Manager

As communities up and down the coast are well aware, the razor clam season has been closed since last September due to high levels of a naturally produced toxin called domoic acid. The toxin is produced by a species of plankton that periodically blooms off the coast and is taken up by the clams on ocean beaches. While oysters and clams inside Willapa Bay and Grays Harbor have never been affected, Dungeness crab do take up the plankton in sufficient amounts to become contaminated. Levels of domoic acid are closely monitored by the Washington State Department of Health. When agency officials find the level reached 20 parts per million, recreational and commercial harvest is prohibited. This year's domoic acid outbreak is particularly disappointing because the beaches hold record-breaking numbers of very good size clams. The domoic acid has no effect on the clams themselves, but can cause permanent Alzheimer's disease symptoms in human consumers.

Toxin levels are declining off the coast, but not fast enough to make a spring clam season likely. The most recent tests show that the all five razor clam beaches have toxin levels far

above the threshold considered safe for human consumption. The economic impacts to coastal beach towns are deeply felt. Razor clamming is one of the few draws during the wet coastal winters.

UW ONRC was created to respond to both marine and forest resource management problems. After entering into an agreement with the Quileute Tribe to try to address issues of mutual concern, UW ONRC's marine program invited tribal biologists to bring forward research ideas of the highest priority. The problem of domoic acid was their first suggestion for collaboration.

Recognizing this problem affected most of UW ONRC's constituents throughout the Washington coast, UW ONRC facilitated the formation of a working group to bring all the elements together for successful applied research. In the three years Olympic Region Harmful Algal Blooms (ORHAB) has been operating, it has achieved remarkable progress. In addition to bootstrapping its own funding, it has generated very important insights into the ocean conditions that give rise to toxin outbreaks. Its fed-

eral sponsor, the National Ocean and Atmospheric Administration, now points to ORHAB

as its model of cooperation amongst tribes, state and federal agencies, academic and private organizations. UW ONRC's Marine Program continues to assist ORHAB to establish a self-sustaining ability to predict and accommodate outbreaks of the toxin. It looks very possible that in the coming years, managers will be able to maximize harvest and avoid toxin-related closures.

To hear more about the prognosis for the razor clam season, domoic acid, ORHAB and its progress in understanding the dynamics of these harmful algal blooms, please attend the UW ONRC Public Forum. The presenters include Miranda Wecker, (UW ONRC), Dan Ayres (Washington State Department of Fish and Wildlife, Frank Cox & Jerry Borchert (Washington State Department of Health), Steve Fradkin (Olympic National Park), and Jack Wekell (NOAA-Fisheries).



Miranda Wecker

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If you work in the fields of or are interested in GIS, GPS, mapping, remote sensing, forestry, oceanographic research, tribal issues, or data management this conference will be of great interest to you. Those who register will receive full admittance to all of the venues at this year's conference, dinner the first night, and brunch the next day. Potential exhibitors such as GeoNorth LLP, USGS, ESRI, Atterbury & Consult-

ants, and Rayonier will have displays available for viewing. Registrants will also have a chance to participate in our Geohunt interactive GPS exercise in which they could win one of several prizes.

We look forward to seeing you at the Conference! For additional information or to register:

<http://www.onrc.washington.edu/gis/conf2003>
(360) 374-3220 Ext 241
sfetkue@u.washington.edu



Eric Sfetku



Technical Support from UW ONRC for the Washington Virtual Classroom

Teresa Zena Alcock, GIS Specialist

Spawned from a small contract with UW ONRC GIS by the Quillayute Valley School District (QVSD) in 2001, technical support from UW ONRC continues on a limited basis for the online Washington Virtual Classroom Water Quality Database. The water quality monitoring project of the Washington Virtual Classroom (WVC) involves twelve school districts in Washington State and provides elementary, middle, and high school students with the opportunity to investigate the health of salmon spawning streams in their different areas. Using both qualitative and quantitative testing parameters,



Teresa Zena Alcock

data is maintained, compared, and evaluated throughout the year via the online shared database.

The original contract was for UW ONRC to repair and redesign the online data-entry and analysis web pages and Microsoft Access database for the WVC. Once the contract was completed and UW ONRC put the deliverables online, UW ONRC agreed to help periodically with updates and limited technical support, as a part of local community service and interaction with the local schools. Once every two months or so, Sherry Schaaf, Science Specialist at QVSD and primary contact for the WVC, requests database



Students Participating in Water Quality Testing

editing and check-ups. It's a very good example of UW ONRC using in-house talent to extend service to the local community and to help kids learn about natural resources. It also provides a long-term project through which we can cycle interns through UW ONRC to learn about information technology in natural resources. Visit the website to learn more: <http://www.wavcc.org/wvc/cadre/WaterQuality/>. Check the water quality at sites along our very own Mill Creek here in Forks!

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needed closures, again resulting in less interrupted harvest days and more clam digging for everyone.

2. Bring some state experts to the forum to respond to questions the public may have regarding harmful algal bloom, or "red tide" poison. Some folks are extremely dubious of any real human health problem.

If the clam digging public is angry at state agencies for the way razor clam harvesting is managed, they may become angry at UW ONRC as well as we bring this subject to our neutral forum. This is a risk we will take because these are the issues that folks care the most about. I think we can demonstrate that UW ONRC is making a positive contribution to this issue that will reduce the risk to human health and result in more clam harvesting days. It seems to me it is worth the risk to achieve this win-win situation.

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