

As part of WSG's Commercial Fisheries Trade and Marketing Assistance effort, **Marine Advisory Services Program Leader Pete Granger** is helping the Lummi Nation Tribal Ventures program with feasibility studies and planning for a new retail seafood market on the reservation that will sell tribal fish and shellfish products exclusively. For more information: 206.685.9261 or pgranger@u.washington.edu.

WSG's Marine Education Coordinator Sarah Fiskén and MAS Program Leader Pete Granger are exploring a partnership with Northwest Indian College's financial literacy program. The program will offer business training to qualifying tribal fishermen through the federal Intensive Technical Assistance program for Lummi, Quinault, Quileute and Makah tribes.

Jeff Bowman is WSG's new Science Writing Fellow. He is a senior at the University of Washington, studying biological oceanography, and plans to pursue a doctoral degree at the UW. Readers may recall Bowman's cover story on ships' ballast water technologies in the previous issue of *Sea Star*. "I'm pleased at the prospect of writing more for *Sea Star* and other Washington Sea Grant publications," says Bowman. "I've already learned a lot about strengthening my science writing skills."

Look for **Marine Education Coordinator Sarah Fiskén** at the Fourth Annual Wild Keta Salmon Cookoff on May 3 at Seattle's Fishermen's Terminal. At this year's event, local fishermen, restaurateurs and barbecue aficionados will compete for prizes in a cooking competition featuring wild keta salmon, albacore tuna, salmon burgers, and seafood chowder. Admission is free. For more information, contact Fiskén at 206.543.1225 or sfisken@u.washington.edu.

Shadow of the Salmon Teaching Environment Tribal Culture in Washington Schools



Scenes from *Shadow*, featuring Cody, Uncle and Salmon Woman (courtesy Three Sixty Productions)

by Carolyn White

Washington Sea Grant has joined forces with the nonprofit Pacific Education Institute to bring the recently released documentary film, *Shadow of the Salmon*, into Washington classrooms.

Over the next three years, Washington Sea Grant will fund teacher training workshops conducted by the Olympia-based Pacific Education Institute. The workshops will help teachers use *Shadow of the Salmon* and its accompanying curriculum in their classrooms. Teachers will also receive guidance in developing specific projects that will relate science and math concepts to salmon ecology and restoration.

"The teachers will then get students actively engaged in creating documentaries, outdoor monitoring projects and field investigations," says Nancy Reichley, Washington Sea Grant's Education Specialist. "By being involved in projects that directly connect to their home environments, primarily through the importance of Pacific Northwest salmon to the outer coast, students will learn how to apply academic content to relevant, real-life issues."

"In short, *Shadow of the Salmon* is a creative, forward-thinking project that addresses key educational and cultural issues of the outer coast," Reichley adds.

It is designed to promote critical thinking and civic engagement, while helping students meet rigorous educational standards for math and science. In the process, students also learn about tribal culture, natural resource management and environmental stewardship.

Produced by the Northwest Indian Fisheries Commission, the *Shadow of the Salmon* DVD tells the story of Cody, a Lakota Sioux teen who travels from South Dakota to visit his Coastal Salish relatives on Puget Sound. During his stay, Cody learns about salmon and their roles in the Northwest environment. He witnesses the annual Canoe Journey and helps respond to a fish-threatening oil spill in a river.

The DVD and an accompanying curriculum are being launched in Olympic Peninsula schools this autumn and will eventually be taught in both tribal and non-tribal schools throughout Washington. The curriculum meets Washington State's Essential Academic Learning Requirements.



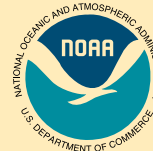
In February, **Marine Habitat Specialist Jim Brennan** attended the Green Shores workshop in Vancouver, BC, to learn more about this innovative program and to provide a lecture on the importance of marine riparian functions in coastal management strategies. The Green Shores project promotes sustainable use of coastal ecosystems through planning and design that recognize the ecological features and functions of coastal systems. This project was modeled after

the LEED Green Building program. A rating and certification system is being developed and may provide examples and incentives for development in the U.S. as well as Canada. For more information about the Green Shores project, visit www.greenshores.ca or contact Brennan at jbren@u.washington.edu or 360.337.5625.

WSG Marine Water Quality Specialist Jeff Adams and WSU Extension staff are co-coordinating the new Kitsap Beach Naturalist Program. An initial training session for Beach Naturalists is scheduled for May. Several low tide events for the new naturalists and the public will also be held on Kitsap County beaches, beginning in June. Partners in this project include the Seattle Aquarium, IslandWood, Poulsbo Marine Science Center, People for Puget Sound, Kitsap County Stream Team, WSU Extension and Washington Sea Grant.

Editor, David G. Gordon; Designer, Robyn Ricks; Web Editor, Marcus Duke; Communications Manager, Dan Williams. Photos: © Washington Sea Grant, except as noted. ©2008, University of Washington, Board of Regents. WSG-MR 08-03

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“Because the tribes have a unique relationship with the natural world, it’s important that we teach this environmental perspective to kids,” says Lynne Ferguson, Co-Executive Director at the Pacific Education Institute. “Many tribal students attending non-tribal schools aren’t often taught their own culture’s perspective in the classroom, so it’s especially important for them that their culture’s voice gets heard as well.”

Exposure to a wide variety of viewpoints is an essential ingredient of critical thinking for both tribal and non-tribal students, according to Ferguson. “When young people get a picture of interacting with the environment from many different perspectives, it better enables them to form their own opinions and make informed decisions about the environment,” she says.

By taking what they’ve learned in the classroom and applying it to real-life issues in their own environments, students will share the lessons learned from *Shadow of the Salmon* with their families and communities at-large.

New: Two Sessions of Science Camp!

NOAA Science Camp lets seventh and eighth graders explore marine and atmospheric science while having fun at the same time. At either of this year’s two sessions, from July 7 - 11 or July 14 - 18 at NOAA’s Seattle facility at Sand Point, campers can develop an understanding of the roles scientists play in solving local and global environmental problems. For the fifth consecutive year, WSG has assisted with funding and the overall coordination of the camp, as well as the crafting of posters and other promotional materials.

Each day of NOAA Science Camp will be filled with science activities and tours of NOAA departments. Activities will vary — from setting up sonar devices and tracking weather balloons to learning about sampling methods, practicing whale identification techniques and reading navigational charts. The fee for either session is \$225; scholarships are available. To register, or for more information, visit the WSG Web site, wsg.washington.edu/education/events/noaa.html, or contact Julie Hahn, Education Coordinator, 206.685.9117 or jkhahn@u.washington.edu.

Melvin Brokers Meeting of Minds

Marine Fishery Senior Scientist Ed Melvin is working with the Seattle-based Alaska fishing industry and the faculty of the UW School of Aquatic and Fishery Sciences to identify areas for collaborative research. It’s a logical partnership, according to Melvin. “Seattle-based operations harvest over 80 percent of Alaska’s groundfish, and SAFS, with its 30 faculty members, is ranked by the Chronicle of Higher Education as the top fisheries science program in the country,” he says. In January, Melvin brokered what figures to be the first of many University-industry workshops featuring UW researchers Jim and Lisa Seeb’s studies on sourcing salmon bycatch in the pollock fishery using genetic techniques.

