

OLYMPIC COAST NATIONAL MARINE SANCTUARY

A REPORT FOR SANCTUARY ADVISORY COUNCIL MEMBERS

REPORTING PERIOD: JULY 18, 2011 – SEPTEMBER 23, 2011

ABOUT THE SANCTUARY

Olympic Coast National Marine Sanctuary spans 3,310 square miles of marine waters off the rugged Olympic Peninsula coastline. The sanctuary extends 25 to 50 miles seaward, covering much of the continental shelf and several major submarine canyons.

The sanctuary protects a productive upwelling zone - home to rich marine mammal and seabird faunas, diverse populations of kelp and intertidal algae, and thriving invertebrate communities. The sanctuary is also rich in cultural resources, with over 150 documented historical shipwrecks and the vibrant contemporary cultures of Makah, Quinault, Hoh, and Quileute Nations.

OFFICE REPORT

OLYMPIC COAST NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES

Organized by OCNMS management plan priority areas

TREATY TRUST RESPONSIBILITIES

IPC Meeting Date Changed

The IPC meeting scheduled for September 21st has been changed to October 11th.

Climate Symposium Steering Committee meets in Washington DC

The Symposium Steering Committee meet at the National Museum of the American Indian to continue planning efforts for the planned July 2012.

ACHIEVE EFFECTIVE AND COORDINATED MANAGEMENT

Olympic Coast National Marine Sanctuary Advisory Council Meets

On Friday, July 15, the Olympic Coast National Marine Sanctuary Advisory Council held a public meeting in Taholah, WA. At the meeting, fisheries biologists Joe Schumacker and Scott Mazzone presented on the Quinault Nation's intertidal monitoring project. The agenda also included discussion and presentations on the progress of the sanctuary's Management Plan Review (MPR), the charter review, the potential for a youth seat on the Advisory Council, and the upcoming visit by University of Michigan graduate research students who will be studying the sanctuary's Advisory Council and Intergovernmental Policy Council. A report on the recent National Ocean Council listening session in nearby Ocean Shores was also given.

Washington State Ocean Caucus Meeting

OCNMS staff participated in a Washington State Ocean Caucus Meeting. The State Ocean Caucus (SOC) is convened and chaired by the Governor's Office and includes State Agencies with Ocean/Coastal/Marine management responsibilities. The SOC provides a way for state agencies to work together to prioritize activities and solve problems related to the ocean environment (<http://www.ecy.wa.gov/programs/sea/ocean/index.html>). The main agenda item was discussion on the creation of a Coastal Advisory Body that would provide the SOC with input on a variety of ocean policy issues, including marine spatial planning. The sanctuary has expressed interest in acting in an ex-officio role if such a body is formed.

Sanctuary Presents Its Facilities Planning Process to Chamber of Commerce

Sanctuary Staff, in partnership with the Director of the Feiro Marine Life Center, gave a joint presentation to the Port Angeles Chamber of Commerce. The presentation focused on the two organizations joint projects on educating the public and their two Port Angeles based facilities. The Olympic Coast National Marine Sanctuary (OCNMS) has a visitor center, the Olympic Coast Discover Center that is open to the public every day from Memorial to Labor Day. The Feiro Marine Life Center (FMLC) is an educational and scientific organization promoting marine education and conservation and is located on the City Pier in Port Angeles. Due to similar missions and their close proximity the two facilities collaborate on a number of projects. Both OCNMS and FMLC are currently reviewing their facility plans and will be discussing related opportunities for continued collaboration.

Department of State's International Visitor Leadership Program Visitor

Acting Superintendent George Galasso met with Mr. Wenxi Zhu, the head of IOC/UNESCO Regional Secretariat for WESTPAC. Mr. Zhu is visiting the United States under the auspices of the Department of State's International Visitor Leadership Program. The goal of Mr. Zhu's trip is to learn about U.S. ocean policy and learn about technologies and programs for monitoring, forecasting and protecting marine biodiversity. Mr. Zhu was briefed on federal, Washington State and tribal authorities, marine resource issues, and policies, with a focus on how Olympic Coast National Marine Sanctuary coordinates with other governments and agencies. Also, discussed was how OCNMS education and research programs support the sanctuary's primary mission of resource protection.

Heads up - Sanctuary plans for a Public Workshop on the Development of a Long Term Facilities Plan

The Office of National Marine Sanctuaries (ONMS) is supporting efforts of OCNMS to draft a long term facilities plan. This is called for in the Sanctuary Operations Action Plan. On October 27 from 1-4 PM, there will be a public workshop on OCNMS long-term facility planning. Facility Programming and Consulting, the firm with the contract to draft the plan, will be facilitating the meeting.

CONDUCT COLLABORATIVE RESEARCH, ASSESSMENTS AND MONITORING TO INFORM ECOSYSTEM-BASED MANAGEMENT

Deep Sea Coral Reef Cruise I Underway Aboard the RV *Pacific Storm*

Friday, July 22 marked the final day for collecting multibeam data on Leg 1 of the Olympic Coast National Marine Sanctuary leg of the Coral Reef Conservation Program survey. All areas identified in the original proposal were completed and some additional areas were mapped in exchange for data on areas within the Sanctuary that had previously been mapped by Oregon State University. There was some additional time to take some sediment grabs in the northern-most of the identified areas to groundtruth some of the data. It was a very successful survey and staff will use the already processed data for analysis of potential areas for ROV research.

Deep Sea Coral Continues

In early August, Research Coordinator Ed Bowlby facilitated another site visit by Dr. Brian Tissot, Washington State University, to continue collaboration on deep-sea coral research with the sanctuary and for proposal writing. This is part of Dr. Tissot's year-long sabbatical. A week later, Staff from Olympic Coast National Marine Sanctuary (OCNMS) joined forces with NMFS Southwest Fishery Science Center (SWFSC), NOS National Centers for Coastal Ocean Science, Washington State University, and Oregon State University (OSU) for a successful mobilization in Newport, Oregon, for a deep-sea coral and sponge investigation. OSU's R/V *Pacific Storm* used the new NOAA pier at the Marine Operations Center Pacific to transfer SWFSC's remotely operated vehicle aboard. After some deck modifications and testing of equipment, they steamed north for areas within OCNMS that had been acoustically mapped with multibeam and/or side-scan sonar. These hard bottom areas are likely habitats for deep-sea coral communities as well as groundfish Essential Fish Habitat. Unfortunately, due to equipment problems, the cruise was terminated early and the planned sites were not surveyed. This investigation is being funded by the Deep Sea Coral Research and Technology Program under NOAA's Coral Reef Conservation Program.

Sea Otter Surveys

In late July, Olympic Coast National Marine Sanctuary staff participated in the annual Washington sea otter census. Daily counts were conducted along one remote shore station simultaneous to the coast-wide aerial survey. Biologists from the following agencies and organizations participated: U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Olympic Coast National Marine Sanctuary, Seattle Aquarium, and Point Defiance Zoo and Aquarium. Results will be compiled and compared between the aerial data and the manned shore stations. Additionally, in mid August, Sanctuary staff skippered the R/V *Tatoosh* for the USGS Pacific Near shore Sea Otter Project, which is looking at the ecological health of the marine ecosystems along the Western Coast of the United States and Canada. The project was planned from August 3-19, but the USGS crew were able to capture and sample their quota of 30 sea otters in only 6 days. The project was a success and the USGS is continuing to collect foraging data along the outer coast of Washington State using small boats and shore observers.

2011 Pelagic Seabird Study Conducted

A July pelagic seabird survey was completed from the Olympic Coast National Marine Sanctuary's R/V *Tatoosh*, one of the monthly seasonal surveys initiated in 2007 along fixed transects extending 30 miles offshore. The survey was supported by an all volunteer crew, including regional seabird experts from the Audubon Society and Washington Department of Fish and Wildlife. These surveys provide systematic survey of offshore distribution of pelagic seabirds, whose distribution and

abundance can be linked with ecosystem productivity. Significance: The sanctuary uses a citizen science approach, supported by regional seabird experts, to conduct essential characterization of offshore ecosystem conditions.

New Sponge Species

Research Coordinator Ed Bowlby received word that a new species of deep-sea sponge was collected during one of Olympic Coast National Marine Sanctuary's research cruises. A remotely operated vehicle collected the specimen in 2008 at a depth of 924 meters and it has been tentatively identified as a new species of *Oopsacas*, family Leucopsacidae. There are only two species in *Oopsacas*, known only from the Mediterranean and the other one from Indonesia, so this is quite a find. Sponge taxonomist Henry Reiswig is considering the tentative name as *Oopsacas olympicus*.

Annual Intertidal Monitoring Supported by Volunteers and Tribal Biologists

An all-volunteer crew led by OCNMS staff completed the annual monitoring of sand and rocky intertidal sites on the Makah and Quinault Indian Reservations, which are adjacent to the Olympic Coast National Marine Sanctuary. This monitoring extends the intertidal area of the outer Washington Coast monitored by Olympic National Park and follows methods consistent with the Park and the Multi-Agency Rocky Intertidal Network (MARINe) methods. The Pacific Northwest MARINe coordinator, Melissa Miner, assisted the sanctuary field team. Makah and Quinault tribal biologists and summer youth interns also assisted with field efforts. Tribal interns were introduced to scientific methods and field techniques, and were integrated into sampling tasks, while biologists encouraged discussion of coastal ecology and cultural use of intertidal resources.

Nancy Foster Scholar at Olympic Coast National Marine Sanctuary

Olympic Coast National Marine Sanctuary was fortunate to have hosted Jessica Lopez, a 2010 Nancy Foster Scholar. Ms. Lopez spent six weeks processing and analyzing seabird data collected during offshore surveys between 1995 and 2007. Using GIS and database software, Ms. Lopez created an analysis protocol and the initial products for the sanctuary's first biogeographic analysis of these historic seabird transect data sets. Species abundance was correlated with oceanographic and geographic variables to analyze for influences on seabird distribution. Seabirds chosen for initial analysis are protected under the Endangered Species Act, Migratory Bird Treaty Act or Washington state law. Preliminary results identified correlations between individual species and variables such as latitude, distance from shore and water depth, findings that have implications for long-term studies of birds throughout the broader California Current. The Nancy Foster Scholarship provided a professional development opportunity for a graduate student and also assisted sanctuary research by supporting analysis of a long-term data set collected during NOAA scientific surveys.

Heads up – 2nd Nancy Foster Scholar at Olympic Coast National Marine Sanctuary

Olympic Coast National Marine Sanctuary (OCNMS) will be the recipient of a second Nancy Foster scholar for this new academic year. The Dr. Nancy Foster Scholarship Program (<http://fosterscholars.noaa.gov/aboutscholarship.html>) provides financial support for outstanding scholarship and encourages independent graduate-level research in oceanography, marine biology, or maritime archaeology, particularly by women and members of minority groups. The support includes a four to six week research collaboration at a NOAA facility. Katie Wrubel, a master's degree student with Dr. Brian Tissot at his Washington State University (WSU) Benthic Ecology Lab in Vancouver, Washington, will be working on site with the OCNMS research team for this portion. She'll be using deep-sea video data collected during remotely operated vehicle surveys in 2006, 2008, 2010, and 2011. The title of Katie's collaborative work at OCNMS is 'Determining the effects of macro- and micro-habitat on rockfish-habitat associations within the Olympic Coast National Marine Sanctuary.' Her main research questions are: 1) what are rockfishes associations with physical and biological structures across a range of spatial scales within the OCNMS; 2) do rockfish exhibit functional associations with megafaunal invertebrates; 3) can we create habitat suitability maps based on these associations that are useful for management.

IMPROVE OCEAN LITERACY

Northwest Aquatic and Marine Educators Conference

Sanctuary education staff as well as Pacific Northwest Bay-Watershed Education and Training (B-WET) grantees made a strong showing at the 36th annual conference of Northwest Aquatic and Marine Educators (NAME), at Lake Crescent, Washington. The conference was sponsored in part by B-WET and showcased many place-based and experience-based education programs throughout the Pacific Northwest. Sanctuary staff coordinated five field trips, provided introductory and closing remarks and assisted with conference details including registration and logistics. NAME is a regional affiliate of the National Marine Educators Association and represents marine, watershed and water educators from Alaska, British Columbia, Washington and Oregon. Total attendance was 120.

Education Collaboration with Seattle Aquarium

Olympic Coast National Marine Sanctuary education staff met with Seattle Aquarium CEO Bob Davidson and other senior staff to discuss strategies for continued collaboration between Olympic Coast National Marine Sanctuary and the Aquarium in field-based student activities and teacher training. The sanctuary and aquarium are wrapping up a five-year NOAA Environmental Literacy Grant and have developed a very strong network of coastal region teachers and school administrators. Both parties agreed that we should make it a priority to find opportunities to continue serving these communities.

International Tourists Visit the Olympic Coast Discovery Center

The Olympic Coast Discovery Center had over 1,600 visitors in the month of August. Visitors came from at least fourteen states as well as Chile, Mexico, Sweden and Guatemala to learn about Olympic Coast National Marine Sanctuary and plan visits to the coast.

Multibeam for Kids

Nancy Wright made a presentation on seafloor mapping at the Olympic Peninsula Institute to 75 enthusiastic 6th graders from Spokane, WA schools. The discussion topics included multibeam sonar design and application, species-habitat mapping, marine spatial planning and alternative energy sources.

Junior Oceanographer Program

In July, Olympic Coast National Marine Sanctuary education staff co-lead 25, 5-8 yrs olds in a four day Junior Oceanographer program partnered with the Feiro Marine Life Center and an instructor from the Olympic Park Institute. The theme was "Voyage to the Bottom of the Sea." Participants explored the ocean, getting a bit deeper with each day, culminating with a focus on tools for ocean exploration with a tour of the Olympic Coast Discovery Center after which boats with ROV's were crafted by the participants. In August, staff collaborated with the Olympic Park Institute to guide 23 5-7 year old participants in a 4 day Junior Oceanographer Summer Camp Program in partnership with the Feiro Marine Life Center. The theme was "Voyage across the Sea" in which predator, prey and migration were daily topics. Study animals were octopus, crab, sea turtles, jellyfish, whales, fish, and plankton. Participants gathered fish from a beach seine, collected plankton for viewing under a microscope, observed divers and the sea life treasure they brought up from under the sea surface, as well as crafted construction paper octopus, paper plate crabs, and coffee filter jellyfish. Participants also visited the Olympic Coast Discovery Center to learn about whales and ocean debris.

Ocean Change in the Classroom

In July, Olympic Coast National Marine Sanctuary and Seattle Aquarium education staff presented *Ocean Change in the Classroom and in the Field* at 2011 N.A.M.E. (Northwest Aquatic and Marine Educators) Conference. Twenty educators participated in a three-hour workshop that used hands on activities to explore the use of ocean science in teaching about ocean changes, field investigations, and conservation in a formal education setting. In August, staff presented *Ocean Change* teacher professional development workshops in Forks and Ocean Shores, WA. Thirty coastal elementary school teachers participated in hands-on, place-based Ocean Science activities related to our changing ocean. Highlights included the new West Coast Ocean Acidification Resource Kit, rocky intertidal field investigations, and guest lecturers on Traditional Ecological Knowledge and coastal geology, a visit to Olympic Coast National Marine Sanctuary aboard R/V *Tatoosh*, and a canoe journey to Copalis River ghost forest to explore evidence Cascadia tsunami of 1700.

Marine Debris Programming

Staff from Olympic Coast National Marine Sanctuary (OCNMS) led 30 students from a Bremerton high school through a 45 minute marine debris program which included dissecting Albatross bolus' and a tour of the Olympic Coast Discovery Center. The students were participating in a week-long Olympic Park Institute program part of which included a visit to the Feiro Marine Life Center and the Olympic Coast Discovery Center as an orientation to the region.

CONSERVE NATURAL RESOURCES IN THE SANCTUARY

Recent Sunken Fishing Vessel Located

Olympic Coast National Marine Sanctuary provided NOAA Office of Law Enforcement and GC-EL with a surveyed location of the FV *Vicious Fisher*, which sank in the sanctuary on February 3, 2011. The location of the wreck will also be provided to the Office of Coast Survey upon completion of field operations. The FV *Vicious Fisher* was located with OCNMS' new multibeam system. The RESON 8101 was obtained as surplus property from the Office of Coast Survey and will primarily be used by the sanctuary for habitat mapping.

Exploring sea otter and sea bird deaths for potential link to Harmful Algal Bloom

Research Coordinator Ed Bowlby agreed to cover the state-wide sea otter stranding hotline number while the primary person from U.S. Fish and Wildlife Service was away from the office. This included attempting to coordinate a response to a live but sick sea otter stranding along a wilderness beach in Olympic National Park. Although the animal returned to the sea before it could be captured, a freshly dead sea otter was collected (presumably the same animal) on the same beach two days later and was shipped to the National Wildlife Health Center laboratory in Madison, Wisconsin for a full necropsy. There is a concern that the sick behavior of the sea otter might be related to several seabirds reported as live strandings several miles to the north in roughly the same time frame and whether this may be linked to harmful algal blooms. Ed sent out notices to various agency and tribal partners to monitor and report any unusual events along the coast.

Monitoring Sea Otter Stranding Hotline

Research Coordinator Ed Bowlby completed a ten day stint at monitoring the state-wide sea otter stranding hotline reporting number while the primary person from U.S. Fish and Wildlife Service was away from the office. Fortunately only two otters were reported stranded during this time, one live that eventually died before a response was initiated and another retrieved as a dead stranding.

Essential Fish Habitat Review Committee Meeting Summary Available

Research Coordinator Ed Bowlby summarized the groundfish Essential Fish Habitat (EFH) Review Committee meeting that occurred in July at the Portland, Oregon office of the Pacific Fishery Management Council. As the west coast sanctuary representative on this committee, he distributed the summary to the research coordinators of the four California sanctuaries.

UNDERSTAND THE SANCTUARY'S CULTURAL, HISTORICAL AND SOCIOECONOMIC SIGNIFICANCE

Elevation Surveys

Education and Outreach Coordinator Robert Steelquist coordinated a visit to the Makah Reservation by Mark Armstrong, Oregon Geodetic Advisor from NOAA's National Geodetic Survey. Mr. Armstrong established four elevation stations and associated data sheets to create survey control points for Makah Cultural and Research Center and Makah Forestry Division use. The elevation surveys were made in the Waatch Valley. They provide precise data for the Makah GIS system, as well as for archaeological surveys investigating paleoshorelines and prehistoric sea level chronology and geological surveys investigating tsunami history in the vicinity of Neah Bay.

Pacific Garbage Patch Connection

Olympic Coast National Marine Sanctuary staff was contacted by representatives of Project Kaisei, Ocean Voyages Institute regarding a possible Port Angeles visit by the tall ship Kaisei sometime in August after returning from a voyage to the North Pacific Gyre ("Garbage Patch"). They are very interested in visiting and getting involved in local education activities. Possible activities include volunteer brown-bag presentation, Feiro lecture series, Jr. Oceanographer, etc. Their visit is still very much in the planning phase, and has not been confirmed. They have committed to collecting a debris water sample for ONCMS education programs. To find information about Project Kaisei go to <http://www.projectkaisei.org/index.aspx>

Olympic Coast National Marine Sanctuary and Feiro Marine Life Center staff learn about impact of Great Lakes Maritime Heritage Center on Alpena

Janet Lamont, Visitor Services Specialist for Olympic Coast National Marine Sanctuary, and OCNMS volunteers presented a summary of their recent trip to Thunder Bay National Marine Sanctuary for OCNMS staff, Feiro Marine Life Center staff and board of directors, and Port Angeles city planners. The presentation focused on the development of the Great Lakes Maritime Heritage Center, which hosts over 60,000 visitors annually, and its economic impact to the area.

Olympic Coast National Marine Sanctuary Staff participate at Makah Days

Olympic Coast National Marine Sanctuary Education Team participated in the 87th Annual Makah Days held in Neah Bay, WA, August 26-28. The event brought thousands of people out to celebrate the cultural and maritime history of the Makah Tribe. Olympic Coast National Marine Sanctuary includes traditional fishing areas for four coastal Indian tribes, the Makah, Quileute, and Hoh tribes, and Quinault Indian Nation. Each of the tribes is represented in both the Sanctuary Advisory Council and the Olympic Coast Intergovernmental Policy Council, and is an important resource management partner for the Sanctuary.

NEWS COVERAGE

7/21/2011

Cantwell demands answers on whether Coast Guard ready to handle New Canadian Oil Supertankers near Washington Shoreline

http://www.menafn.com/qn_news_story.asp?storyid={385ef0bc-def7-46b7-bdd9-efec7aaec88d}

9/20/2011

Hit Kalaloch for National Public Lands Day

http://www.sequimgazette.com/news/article.exm/2011-09-20_hit_kalaloch_for_national_public_lands_day

9/22/2011

New weather radar station operating on WA coast

<http://www.seattlepi.com/news/article/New-weather-radar-station-operating-on-WA-coast-2183219.php>

WEB SITE (<http://olympiccoast.noaa.gov/>)

Recent Updates

Visit the web pages listed below to see recently updated sections of the OCNMS web site.

- OCNMS Calendar of events <http://olympiccoast.noaa.gov/AboutUs/calendar/welcome.html>

Follow the OCNMS on Facebook and Twitter!

Please take a few moments to peruse the site. Your feedback is greatly appreciated.

Comments and suggestions can be sent to Thomas.Baker@noaa.gov.

FUN, OCEAN RELATED WEB SITES

NOAA Online Media Library

<http://sanctuaries.noaa.gov/photos>

Encyclopedia of the Sanctuaries

<http://www.ocean.com/Library/Encyclopedia/>

Oceans Live

<http://www.oceanslive.org/portal/>

Sanctuary Integrated Monitoring Network (SIMoN)

www.sanctuary-simon.org

Office of National Marine Sanctuaries

<http://www.sanctuaries.nos.noaa.gov/>

NOAA Ocean Explorer

<http://oceanexplorer.noaa.gov/>

National Data Buoy Center

<http://www.ndbc.noaa.gov/rmd.shtml>

National Ocean Service

<http://www.nos.noaa.gov/>

Learn More About Your Sanctuary

The Sanctuary Office Report is produced bi-monthly by the Olympic Coast National Marine Sanctuary in conjunction with Sanctuary Advisory Council meetings. To learn more about the Sanctuary please visit our web site at: <http://www.olympiccoast.noaa.gov>.

To learn more about the Sanctuary Advisory Council please visit:
<http://olympiccoast.noaa.gov/AboutUs/sac/welcome.html>

The Office of National Marine Sanctuaries

The Olympic Coast National Marine Sanctuary is one of 14 marine protected areas in the National Marine Sanctuary System encompassing more than 150,000 square miles of marine and Great Lakes waters from Washington State to the Florida Keys, and from Lake Huron to American Samoa. The system includes 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument. Visit the ONMS web site at: <http://www.sanctuaries.nos.noaa.gov/>

Get involved!

To learn how to get involved in the Sanctuary visit:
<http://olympiccoast.noaa.gov/AboutUs/volunteer/welcome.html>

National Oceanic & Atmospheric Administration
<http://www.noaa.gov/>



OCNMS Staff

Carol Bernthal – Superintendent (on detail)
George Galasso – Acting Superintendent
Dawn Hayes – Acting Assistant Superintendent
Patrick A’Hearn – Oceanography Specialist (contractor)
Liam Antrim – Resource Protection Specialist
Thomas Baker – Resource Protection Specialist
Ed Bowlby – Research Coordinator
Katie Brenkman – Research Technician (contractor)
Jennifer Bright – Research Technician (contractor)
Eric Evans – IT Consultant (contractor)
Rick Fletcher– R/V Tatoosh Captain (contractor)
Carey Floyd – Graphic and Web Designer (contractor)
Norma Klein – Office Administrator
Janet Lamont – Visitor Services Specialist (contractor)
Jacqueline Laverdure– Education Specialist
Heidi Pedersen –Education Specialist (contractor)
Robert Rountree – Visitor Services Specialist (contractor)
Robert Steelquist – Education & Outreach Coordinator
Nathan Witherly – Operations Officer (NOAA Corps)
Nancy Wright - Geographer

- Contact Information -

Olympic Coast National Marine Sanctuary

115 East Railroad Ave
Port Angeles, WA
Phone (360) 457-6622
Fax (360) 457-8496