



OLYMPIC COAST NATIONAL MARINE SANCTUARY

ABOUT THE SANCTUARY

Olympic Coast National Marine Sanctuary spans 3,188 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 numerous marine mammal and seabird species, 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 the Makah, Quileute, and Hoh Indian Tribes and the Quinault Nation.

OFFICE REPORT OLYMPIC COAST NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES

Organized by Olympic Coast National Marine Sanctuary (OCNMS) management priorities

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TREATY TRUST RESPONSIBILITIES

Native, indigenous, and tribal collaboration survey for National Marine Sanctuary System

Collaboration with tribal or indigenous cultures is an integral part of the management of our sanctuaries and monuments. To accomplish this, the Office of National Marine Sanctuaries Maritime Heritage Program is seeking to comprehensively identify our level of engagement with tribal and indigenous partners where we share the responsibility for preserving cultural heritage in our sites. The goal of this internal ONMS survey is to expand and enhance our recognition of the full spectrum of tangible and intangible underwater cultural heritage within our stewardship responsibility and implement effective management strategies to preserve them. Olympic Coast National Marine Sanctuary's experiences working with the Hoh, Makah, and Quileute Tribes, and the Quinault Nation will be an important contribution to this effort.

COLLABORATIVE AND COORDINATED MANAGEMENT

Law enforcement discussed at Olympic Coast National Marine Sanctuary

The NOAA Office of Law Enforcement (OLE) and Olympic Coast National Marine Sanctuary (OCNMS) hosted a meeting of the OCNMS Law Enforcement Technical Advisory Committee (LETAC), a group of agency law enforcement professionals with the responsibility for enforcing regulations within the sanctuary. In addition to NOAA OLE and OCNMS, NOAA Office of General Counsel, Washington Department of Ecology, U.S. Coast Guard, and Olympic National Park participated. Discussions included a review of agencies roles, jurisdiction, and activities; a review of select ongoing investigations; and joint enforcement strategies. The LETAC meets twice a year.

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

First deployment of “SoundTrap” acoustic recorders recovered at Olympic Coast National Marine Sanctuary

Research team members from Olympic Coast and Channel Islands national marine sanctuaries spent two days at sea this week swapping out “SoundTraps” equipment designed to record underwater sound as part of a larger system-wide “Sanctuary Soundscapes” project co-managed by Office of National Marine Sanctuaries and the U.S. Navy. The team was able to recover and redeploy two of the three target moorings. The third (OC02) experienced technical issues during ascent, while Olympic Coast National Marine Sanctuary (OCNMS) mooring anchors are routinely recovered to prevent accumulation of gear on the seafloor. However, occasionally at-sea safety and logistical concerns preclude anchor recovery so alternative gear known to become rapidly buried is used to reduce fisheries interactions and other impacts. Numerous factors contributed to anchor recovery concerns at OC02 - a challenging deepwater site within active international shipping lanes. The team was grateful to be able to discuss the situation with leadership from the Makah Tribe, as OC02 is located within their treaty-protected harvest areas. With tribal permission for a permit amendment, the team returned to sea to recover and redeploy the OC02 mooring with a non-recoverable anchor. All four of the OCNMS SoundTrap moorings will be replaced again in the fall in an effort to collect year-round data on underwater sound.



When deployed on the seafloor in Olympic Coast National Marine Sanctuary, these acoustic moorings extend ~5m off the seafloor; both include a silver “SoundTrap” designed to record underwater noise for months at a time. Although both of these moorings were deployed in mid-March 2019 in the northern part of OCNMS, they clearly experienced different conditions while in the ocean. The mooring on the left was recovered from a shallow (~14m), nearshore site just inside the Strait of Juan de Fuca, while the mooring on the right was recovered from a deeper (~100m), offshore location in the international shipping lanes.

Olympic Coast National Marine Sanctuary and Northwest Fisheries Science Center staff team up for a fifth year of kelp forest dive surveys

July 2019 marks the fifth summer of kelp forest dive surveys in Olympic Coast National Marine Sanctuary. The collaboration among NOAA Northwest Fisheries Science Center, Olympic Coast (OCNMS), and Monterey Bay (MBNMS) national marine sanctuaries documents changes to fish, invertebrate, algal, and benthic communities within robust kelp forests at five locations extending from Destruction Island to the Strait of Juan de Fuca. The team uses quantitative Partnership for Interdisciplinary Studies of Coastal Oceans transect protocols for compatibility with other west coast monitoring efforts, and benefits from the support of MBNMS to provide protocol guidance and taxonomic expertise.

Olympic Coast completes annual intertidal monitoring using Multi-Agency Rocky Intertidal Network (MARINE) Protocols

Very low tides in early August provided Olympic Coast National Marine Sanctuary (OCNMS)’ research coordinator an opportunity to work with University of California Santa Cruz’s Dr. Melissa Miner and former Quinault Indian Nation Coastal Ecologist, Ron Coleman, to monitor intertidal habitats at two



sites along the Olympic Coast shoreline. Both locations are on tribal land and require advance permission from the sovereign nations of the Makah Tribe and the Quinault

Indian Nation. Annual monitoring data collected at these sites using consistently applied protocols at sites stretching from Mexico to Alaska allows OCNMS to evaluate and assess the condition of key resources and enables spatial and temporal comparisons with other west coast locations. Past data has been used to document impacts of sea star wasting disease, a coast-wide epidemic that has declined in the recent past but is still found in some of individuals. More information about the MARINE program and links to associated publications are available at: <https://marine.ucsc.edu/index.html>.

West Coast Region sanctuaries help shape new coast-wide ocean acidification project to support future decision making and wise ocean management

Olympic Coast NMS research coordinator represented west coast sanctuary sites at a kickoff meeting for a multi-year project funded by the Lenfest Ocean Program. The project focuses on refining geospatial patterns of changing ocean chemistry on the west coast through broad data synthesis and then overlaying the results to predict impacts to sea urchins, abalone, crabs, and clams. Additional project components will test the effects of changing ocean chemistry on Dungeness crab, which support one of the largest fisheries in the region, and assess the vulnerability of three coastal fishing communities to changing ocean conditions anticipated in the coming decades. <https://www.lenfestocean.org/en/research-projects/geospatial-patterns-and-species-impacts-of-changing-ocean-chemistry-on-the-west-coast>

Olympic Coast joins new 3-year project to expand the Marine Biodiversity Observing Network to the Pacific Northwest

Recent funding decisions by the National Oceanographic Partnership Program have provided significant support for a fascinating new multi-year project in Oregon and Washington state that will be led by Oregon State University and involve NOAA's Northwest Fisheries Science Center, Olympic Coast National Marine Sanctuary, and the Pacific Northwest's regional Integrated Ocean Observation System node (NANOOS). The project seeks to establish a Marine Biodiversity Observing Network for the northern California Current, and using a seascape approach, will leverage existing ecological surveys and ocean observing assets to test specific hypotheses regarding the drivers and roles of biodiversity in a changing environment. The three-year project will build on and integrate many disparate existing data sources, including remote sensing data, and also collect additional ecological data along four cross-shelf transects during spring and fall research cruises. The project will employ sophisticated flow through imaging systems to quantify phytoplankton, zooplankton, and ichthyoplankton communities, in addition to other standard oceanographic sampling sensors and equipment.

IMPROVE OCEAN LITERACY

New Marine Discovery Center starts to shape up

The second of three scheduled workshops to develop a conceptual design for a proposed new marine discovery center in Port Angeles, Washington was attended by staff from Olympic Coast National

Marine Sanctuary, Feiro Marine Life Center, and Olympic Coast National Marine Sanctuary Foundation. Staff are also working on refining an operational budget for the center, working with consultants from MIG Portico, an architectural design firm based in Seattle, Washington. Public outreach, visitor services, and marine education are important parts of OCNMS goals. Partnering with other entities to deliver these services provides a cost effective way to deliver these services to local and regional communities. A third workshop was held July 29 to discuss components of a business operating plan and financial structure for a proposed new marine discovery center in Port Angeles that then will be used to undertake a capital campaign to raise funds for the project. Work on the conceptual plan should be completed by the end of September, 2019.



Everything is tide together for Junior Oceanographer campers

Junior Oceanographer summer youth program for 10-12 year olds allowed campers to learn about the similarities and differences within the sanctuary system. Campers engaged in presentations with Olympic Coast National Marine Sanctuary staff, as well as virtual presentations with Florida Keys National Marine Sanctuary and National Marine Sanctuary of American Samoa. Campers selected organisms such as jellyfish, humpback whales, eels/eel-like fish, and octopus to present on and asked sanctuary guests specific questions about their organisms to learn more about each sanctuary.

Quileute Tribal School students balance plankton, food webs, and underwater robots

Olympic Coast National Marine Sanctuary staff, in partnership with Northwest Indian College, brought ocean investigations to the Quileute Tribal School (QTS) summer program as part of the annual STEAM (Science, Technology, Education, Art, and Math) days at summer school. Twenty-six QTS summer school students in grades kindergarten through 5th grade played games and activities looking at impacts of our changing ocean on habitats and organisms and the relationship to the marine food web. Sanctuary staff helped students investigate plankton anatomy and ecology through the “Great Plankton Race” to see who could create the most neutrally buoyant plankton out of craft materials. Students also tapped into their engineering skills, building and operating their own underwater robots. Summer school students were eager to try their hands at “flying” as they prepare to join the QTS ROV competition team once they reach middle and high school.



Teacher workshop explores ocean health and marine debris for inspiration to action.

Olympic Coast National Marine Sanctuary (OCNMS) staff met with Olympic National Park (ONP) and NatureBridge Olympic staff along with 23 regional teachers at Rialto Beach to explore ocean health and marine debris. The week-long teacher workshop focused on distant learning, encouraging the use of public lands and waters as a teaching tool even when their school isn't located next to these resources. Through the partnership of OCNMS and ONP and visits to the amazing protected resources within federally protected land and waters, teachers explored marine debris using NOAA Marine Debris survey protocols and microplastic sampling protocols for the field. Following the investigations, the group discussed available resources for classroom learning, as well as ways to inspire action from individuals, classrooms, and school communities. Teachers will be implementing marine debris lessons with their

classrooms, ranging from K-12 over the next school year using the introduced resources.

New York City YMCA students explore Olympic Coast for learning, inspiration, & action!

Olympic Coast National Marine Sanctuary (OCNMS) education staff met with nine high school students and two mentors from a New York City YMCA summer program. The students were preparing for a backpacking trip to Shi Shi Beach within the wilderness coastline of OCNMS and Olympic National Park. The group came with a focus on the United Nations Sustainable Development Goals, with number 14, Life Below Water, rising to the top for their upcoming trip. Following an overview of the local and other national marine sanctuaries, students dove into marine debris by looking at albatross bolus and the common man-made items found in the stomachs of these seabirds. Discussions led to the students realizing communities disconnect to their waste once out of their hands. They embraced the importance of good management of this essential global resource for a sustainable future. The students will be taking their experiences back to their hometown to share their inspiration and ideas with their peers.

AmeriCorps member Christine VanDeen completes 2nd year service term at OCNMS

July 15th marked the last day of the 2018-2019 AmeriCorps service term for Olympic Coast National Marine Sanctuary AmeriCorps members, Christine Vandeen and Gabby Genhart-Stiehler. Christine completed her second service term. Over the past two years, Christine has implemented multiple programs including Sanctuary Splash/Big Mama, Discover the Olympic Coast, and NOW Science. Christine spent over 3,400 hours within 21 months working as an AmeriCorps member and served an estimated total of 2,372 surveyed students within Port Angeles, Sequim, and along the Olympic Coast. This AmeriCorps service position allowed Christine to make contacts and grow a working relationship with staff at her new position at Nature Bridge Olympic as well as many other essential environmental education partners along the Olympic Peninsula. Olympic Coast staff will miss Christine in the office, yet happy for her success.



Pacific Northwest environmental educators “Voyage Through Changing Waters”

The 2019 Northwest Aquatic and Marine Educators (NAME) Conference “Voyaging Through Changing Waters” in Port Townsend, Washington, brought together educators, researchers, students, and resource professionals from Washington, Oregon, Alaska, and British Columbia. Olympic Coast National Marine

Sanctuary (OCNMS) co-presented two sessions during the conference. Forks High School, Pacific Education Institute, and OCNMS looked at program successes and challenges when building relationships and being persistent in using our outdoor classrooms to enhance student learning in “Building Capacity for Place-based Education on the West End” while Fund Your Project: Dissecting Grant Proposals” presented by Pacific Northwest Bay Watershed Education and Training (B-WET) and Viriditas Grants Consulting demonstrated techniques and skills to assist new and returning applicants to successfully write their way to a funded project.



Vets fish in their sanctuary!

Olympic Coast National Marine Sanctuary honored U.S. Veterans and their families with full day fishing trips during Get Into Your Sanctuary weekend. Thirty veterans and family members fished in their sanctuary and within the Usual and Accustomed Hunting and Fishing Area of Makah Tribe aboard the Neah Bay charter boat *Windsong*. Rockfish and lingcod made up the majority of the catch. Wildlife watchers took in the scenic beauty of the coastline, visited a common murre rookery, a Steller sea lion haul out, plus caught glimpses of harbor porpoises and gray whales.

Olympic Coast volunteers, partners and supporters Get Into Your Sanctuary

Olympic Coast National Marine Sanctuary Research Vessel *Tatoosh* took a few days off from monitoring to Get Into Your Sanctuary. Sanctuary staff and volunteers, along with staff, volunteers and advocates from Feiro Marine Life Center, Olympic National Park, and Olympic Coast National Marine Sanctuary Foundation enjoyed appreciation tours with spectacular scenic and wildlife watching, as well as rich discussion about research and conservation efforts in the region. Some highlights of the trips were humpback whales, sea lions, harbor porpoises, tufted puffins, and brown pelicans! All agreed – Olympic Coast is a magnificent sanctuary!



Olympic Coast National Marine Sanctuary welcomes Washington Service Corps AmeriCorps members

Olympic Coast National Marine Sanctuary (OCNMS) welcomes two Washington Service Corps AmeriCorps members, Gabrielle (Gabby) Genhart-Stiehler (second year of service with OCNMS) and Melanie (Mel) Swick. Gabby and Mel will be with OCNMS until July 15, 2020, serving as Environmental Education and Stewardship Specialists. Originally from San Francisco, California, Gabby obtained her Bachelor of Science degree in Natural Science with an emphasis in Biology and a minor in Communication Studies from the University of Puget Sound. Melanie graduated with a Bachelor of Science in Geology and Bachelor of Arts in Anthropology from St. Lawrence University, New York. She recently received her Masters of Science in Geological Studies at Central Washington University. She is excited to dive into the marine sciences and to provide environmental education, outreach, and stewardship for the local communities surrounding Olympic Coast



National Marine Sanctuary. Both Gabby and Mel will support K-12 educational programs, including Ocean Science, North Olympic Watershed (N.O.W.) Science Program in partnership with Feiro Marine Life Center, Discover Olympic Coast, Sanctuary Splash, and Remotely Operated Vehicle (ROV) clubs. Both Gabby and Mel will also promote Olympic Coast beach cleanups and stewardship activities in partnership with Washington CoastSavers Program.

Inspiration, exploration, and art engage Get Into Your Sanctuary visitors at Olympic Coast

Olympic Coast National Marine Sanctuary (OCNMS) staff along with Olympic Coast National Marine Sanctuary Foundation staff celebrated Get Into Your Sanctuary at Kalaloch, Washington in partnership with Olympic National Park (ONP) and Kalaloch Lodge. The low tides were too good to miss, and we kicked off the celebration with a sanctuary take-over of regularly scheduled ONP tidepool walks, on Friday August 2nd and Saturday August 3rd. More than 85 people participating in the tidepool walks, exploring the magic of the intertidal world and the amazing organisms revealed as the tide pulls away from the land. On Friday evening, Olympic Coast National Marine Sanctuary Foundation and Kalaloch Lodge hosted a sanctuary inspired Sip and Paint with local artist Todd Fischer, with participants overlooking the sanctuary as they painted their inspired scenes. The weekend events engaged over 100 individuals, bringing awareness to the sanctuary while enjoying recreation compatible with long-term sustainability.



Youth Creation Care Pilgrimage focuses on sanctuaries

The former Presiding Bishop of the Episcopal Church, the Rt. Rev. Katharine Jefferts Schori, who also has a Ph.D. in Oceanography, led a group of 15 youth and eight adults from Seattle to Olympic Coast National Marine Sanctuary to carry a message of hope. Mid-way through the pilgrimage, the group stopped off in Port Angeles to participate in hands-on activities with Olympic Coast National Marine Sanctuary (OCNMS) and Feiro Marine Life Center where they were welcomed, followed by breakout groups at Feiro Marine Life Center and the Olympic Coast Discovery Center, for lessons on plankton and ocean acidification. On their final day, the group hiked to OCNMS where they met with the deputy superintendent to learn more about the sanctuary



and reflect on their journey. Read more about the pilgrimage at <https://youthpilgrimage.ecww.org/>

Olympic Coast National Marine Sanctuary celebrates 95th Annual Makah Days

Olympic Coast National Marine Sanctuary education team participated in the 95th Annual Makah Days, held in Neah Bay, Washington, August 23-25, 2019. The event brought thousands of people out to celebrate the cultural and maritime history of the Makah Tribe. Makah Days activities included traditional dancing and singing, as well as canoe races, a street fair, and parade.



Sanctuary staff provided Oculus Virtual Reality Goggles for visitors to “dive” into sanctuary waters within the usual and accustomed areas of the Makah Tribe.

CONSERVE NATURAL RESOURCES IN THE SANCTUARY

Humpback whale rescued in Olympic Coast National Marine Sanctuary

On August 8, a charter fishing boat contacted the U.S. Coast Guard after discovering an entangled humpback whale in the waters off Tatoosh Island in Olympic Coast National Marine Sanctuary. The Pacific Northwest Large Whale Entanglement Response Program mobilized a response and successfully released the whale from several wraps of $\frac{3}{8}$ ” potline, which passed through its mouth and around its tail. Multiple cooperating parties are credited for the successful outcome including Todd’s Extreme Fishing, which stood by the whale until relieved by a Makah team assisted by U.S. Coast Station Neah Bay. Prompt reporting is the best way to help entangled whales. Report entangled whales by calling the NOAA Fisheries Entanglement Reporting 24/7 Hotline 1-877-SOS-WHALE (1-877-767-9425) or hailing the U.S. Coast Guard on VHF Channel 16. For more information and photos go to <https://www.fisheries.noaa.gov/feature-story/entangled-humpback-whale-freed-washington-coast>

Whale Trail dedicates new sign with the help of Governor Inslee



A new land-based whale watching sign, part of The Whale Trail, was dedicated at Deception State Park by Governor Inslee and his family in a ceremony on July 26. The Whale Trail, NOAA, state parks, Washington Department of Fish and Wildlife, Friends of Deception Pass, and local conservation groups attended. Over 100 locations spanning British Columbia to California provide land based opportunities to observe killer whales and other marine mammals. The Whale Trail educates people about orcas and other marine mammals, and ways they can help conserve these species. NOAA Protected Resources presented Governor Inslee with an award for his leadership

in creating a strategy to help recover imperiled Southern Resident killer whale populations in Washington state. Southern killer whales are listed under the Endangered Species Act and the focus of efforts to recover the population and protect critical habitats, including Olympic Coast National Marine Sanctuary.

SANCTUARY PERMITTING

Issued Permits and Authorizations

OCNMS-2019-008 – Jenny Waddell, Olympic Coast National Marine Sanctuary

Project Title: Patterns in deep sea coral and sponge communities of Olympic Coast

Permitted Activity: Deep sea corals and sponges voucher specimens will be collected within OCNMS using a remotely operated vehicle (ROV) deployed from the NOAA Ship *Bell M Shimada*.

Project Location: Throughout the sanctuary, concentrated in the Juan de Fuca Canyon

Permit Duration: September 6, 2019 through September 20, 2019

Comment: This project is being led by Olympic Coast National Marine Sanctuary on behalf of the Deep Sea Coral Research and Technology Program's FY18-FY21 west coast campaign. The request has been coordinated with numerous partners in advance to ensure it is complementary to similar projects being conducted by other west coast sanctuaries, NOAA Fisheries, and NOAA/NCCOS and will yield comparable data.

OCNMS-2019-009 – Jeff Harris, National Marine Fisheries Service Marine Mammal Laboratory

Project Title: Aerial surveys of Olympic Coast National Marine Sanctuary for large cetaceans (Grey and Humpback Whales) using unmanned aerial systems (UAS) to assess body conditions and behavior during a declared unusual mortality event

Permitted Activity: Low altitude overflights with an unmanned aerial system (APH-22) over water, within 1 nautical mile of the shore or offshore islands of the Washington Maritime National Wildlife Refuge Complex. Overflights of grey and humpback whales at no lower than 150 feet, in accordance with MMPA permit #20465 are authorized.

Project Location: Within 1 nautical mile of the sanctuary shoreline

Permit Duration: August 31, 2019 through June 15, 2020

Comment: NMFS has declared an unusual mortality event (UME) for gray whales in 2019 due to higher levels of stranding deaths and emaciated whales. As part of the data gathering and documentation of this event, the Marine Mammal Laboratory in collaboration with Cascadia Research Collective, and Makah Fisheries intend to fly drone surveys in U.S. waters along the coasts of Washington and possibly Oregon in order to collect imagery to assess body condition of local feeding whales in the Pacific NW.

Pending Permits

OCNMS-2017-009-A1 – Brad Hanson, Northwest Fisheries Science Center

Project Title: Determining the distribution of killer whales and other cetaceans in the coastal waters of the U.S. using acoustic recorders

Permitted Activity: Requested deployment of three bottom-anchored moorings acoustic recorders.

Project Location: The proposal is to reoccupy the currently occupied locations.

Permit Duration: While the requested period is from September 4, 2019 through December 31, 2021, the current permit is valid through December 31, 2019 allowing additional time to process the permit.

Comment: Little is known about the coastal movements of cetaceans, particularly the Southern Resident killer whale community, in the winter months. This data gap has been identified as a key element in better understanding the role of potential risk factors to this cetacean population. This project will study all cetaceans but the focus will be Southern Resident killer whales. Southern Resident killer whales have been observed in the Olympic Coast, Greater Farallones, and Monterey Bay national marine sanctuaries in the winter.

OCNMS-2019-007 John Mickett, University of Washington Applied Physics Laboratory

Project Title: Deployment of a subsurface, near real-time, HAB-detection mooring at the UW-NANOOS Mooring Site

Permitted Activity: Deployment of a mooring for four consecutive spring-to-fall periods starting in the spring of 2021, with the mooring positioned at the UW-APL/NANOOS mooring site.

Project Location: 13 miles WNW of La Push

Permit Duration: Requested from January 1, 2020 through December 31, 2025

Comment: Observations from this mooring will be displayed in near-real time on the NANOOS Real-time HABs website: <http://www.nanoos.org/products/habs/real-time/home.php>. Additionally, email notifications will be sent for any toxin levels detected above a set threshold.

LEARN ABOUT YOUR SANCTUARY / NATURAL HISTORY

Olympic Coast has their cake and eats it too!! Happy 25th!

Olympic Coast National Marine Sanctuary (OCNMS) kicked off its 25th anniversary celebration as the stage sponsor for the City of Port Angeles’s Concert on the Pier. OCNMS’ superintendent spoke of the mission and programs, and presented the award for the sanctuary’s 2018 Volunteer of the Year to Jim Jewell. OCNMS provided hands-on crafts for families as well as cake for the crowd. “Sanctuary Sam” the sea lion mascot greeted and danced with guests enjoying the fun sounds of the local band “Three Too Many,” while OCNMS staff, many who were dressed in ocean animal costumes, engaged with the crowd. Family friendly games, hands-on activities, appearances by Sanctuary Sam, and cake were also offered at Olympic Coast Discovery Center. Twenty Jr. Oceanographer campers, along with sanctuary staff and volunteers and community members stopped by the visitor center to share in the celebration. 25th anniversary celebrations will continue with the upcoming Get Into Your Sanctuary events and enjoying this special place while looking forward to the next 25 years of ocean conservation, education, recreation, and resource protection.



Expanding the “Virtual Dive” gallery for Olympic Coast National Marine Sanctuary

This summer, divers were able to use a special 360° camera to collect new imagery from Koitlah Point, at the northeastern boundary of the sanctuary to expand the gallery of “virtual dives” available to anyone with a smart phone or virtual reality goggles. Although it will take time to process the new imagery, viewers currently can link to images on their smartphone by texting “OCNMS” to the number: 24-587 or visit <https://sanctuaries.noaa.gov/vr/olympic-coast/> to access six virtual dives from Tatoosh Island.

Speaker series event to spotlight photos of “Father of Ecology”

Speaker Michael Hemp leads an exploration of the origins of ecology in the Pacific Northwest in the 1930s with “A Whole New Tide Pool in Pacific Northwest Ecology: The Role of Cannery Row’s Edward F. Ricketts,” a presentation co-hosted by Feiro Marine Life Center and NOAA’s Olympic Coast National Marine Sanctuary set for 6-7:30 p.m. Tuesday, Sept. 17, in the Hendricks Room at the John Wayne Marina, 2577 W. Sequim Bay Road.

<http://www.sequimgazette.com/life/speaker-series-event-to-spotlight-photos-of-father-of-ecology/>



REGIONAL / NATIONAL MARINE SANCTUARY SYSTEM NEWS

Congressional office briefings on NOAA’s Office of National Marine Sanctuaries

Office of National Marine Sanctuaries (ONMS) staff met with staff from New York delegations to discuss the proposed national marine sanctuary in Lake Ontario. An additional briefing with other congressional members discussed expansion of Monitor National Marine Sanctuary. ONMS’ director and deputy director met with staff from the offices of Washington, Hawai’i, and American Samoa to discuss ONMS priorities and provide updates on the sanctuary in their state and district, sanctuary nominations, designations, and expansions.

National Marine Protected Areas Center participates at an MPA Network Twinning Workshop

National Marine Protected Areas (MPA) Center international activities coordinator represented ONMS and the North American Marine Protected Area Network at the 2nd Workshop of the MPA Network Twinning Project coordinated by the Transatlantic MPA Network and funded by the European Union. Participants reported on the progress and activities of the different MPA networks they represented and plans for future collaboration activities. The group also developed and submitted proposals to the 2020 World Conservation Congress to highlight the Transatlantic MPA Network and specific activities under this program.

Researchers observe coral reef damage and invasive alga in Papahānaumokuākea Marine National Monument

<https://sanctuaries.noaa.gov/news/aug19/coral-damage-invasive-alga-papahanaumokuakea.html>

NOAA and partner scientists recently completed a 22-day expedition aboard the NOAA Ship *Rainier* in Papahānaumokuākea Marine National Monument in the Northwestern Hawaiian Islands. Researchers documented several new species of algae as well as an entirely new form of coral reef habitat. However, while conducting research dives, they observed reef destruction from Hurricane Walaka at French Frigate Shoals, and an invasive alga overgrowing native corals and other algae at Pearl and Hermes Atoll. Monument staff are now working to understand and respond to these impacts to the monument.

Channel Islands National Marine Sanctuary faring well despite changing seascape

<https://sanctuaries.noaa.gov/news/jul19/channel-islands-national-marine-sanctuary-faring-well.html>

Set at the confluence of the California Current and the Southern California Counter-Current, Channel Islands National Marine Sanctuary's waters support extraordinary biodiversity of marine mammals, fish, invertebrates, and more. While the health of the ocean worldwide is under threat, a new condition report shows that the sanctuary is doing quite well in comparison to other areas, especially with regard to abundance and diversity of wildlife. Read the report at

<https://sanctuaries.noaa.gov/science/condition/cinms/welcome.html> .

Help shape the future of Florida Keys National Marine Sanctuary

<https://sanctuaries.noaa.gov/news/aug19/shape-the-future-of-florida-keys-national-marine-sanctuary.html>

Each year, more than 5 million people come to the Florida Keys to enjoy the sun and the surf. But its iconic status also poses a risk for the Florida Keys: these important ocean habitats are in jeopardy of being “loved to death.” To survive for future generations, the Keys need to change, and there's no time to lose. That's where Florida Keys National Marine Sanctuary's new Restoration Blueprint comes in. It synthesizes what sanctuary staff and partners have learned from 30 years of on-the-ground experience in science, management, education, and community outreach. Provide public input about the future of Florida Keys National Marine Sanctuary at <https://www.regulations.gov/docket?D=NOAA-NOS-2019-0094> .

E/V *Nautilus* expedition in NOAA's National Marine Sanctuary of American Samoa

NOAA's Office of National Marine Sanctuaries, in partnership with Ocean Exploration Trust aboard the E/V *Nautilus*, led an expedition to acquire baseline information on deep-sea and mesophotic habitat in National Marine Sanctuary of American Samoa. Education and outreach for national marine sanctuaries was also an important objective for the expedition. Live telepresence interactions were held with organizations around the world where local community members could interact and learn about what's happening below the surface in their sanctuary. Additional ship-to-shore interactions were broadcasted live on Facebook to increase awareness of the E/V *Nautilus*' expedition in American Samoa. Viewers from around the world tuned in, reaching more than 11,100 people.

Earth Is Blue webpage and Stories from the Blue campaign awarded honorable mentions in the 2019 Adobe Government Creativity Awards

The redesigned [Earth Is Blue webpage](#) and overall [Stories from the Blue campaign](#) were both awarded honorable mentions in the 2019 Adobe Government Creativity Awards (AGCA). The AGCA “recognizes talent and creativity in government” and showcases government graphics, videos, websites, and campaigns made using Adobe software. A total of 530 entries were submitted to this year's AGCA.

REGIONAL / NATIONAL MARINE SANCTUARY FOUNDATION NEWS

Collaboration is key to new study of local fisheries near Stellwagen Bank

<https://marinesanctuary.org/news/collaboration-is-key-to-new-study-of-local-fisheries-near-stellwagen-bank/>

A group of scientists from the Center for Coastal Studies and the Woods Hole Oceanographic Institution are working with commercial fishermen to understand bycatch and depredation in gillnet fishing gear. The cost of damaged gear and lost catch that results from this depredation have immeasurable economic impacts on the fisheries. The ultimate objective of this study – to build collaboration, trust, and community among local fishermen, researchers, and managers – bolsters efforts

to maintain sustainable fisheries and practices while addressing the impacts of conservation and management measures.

Foundation study finds Florida Keys National Marine Sanctuary contributes \$4.4 billion annually to Florida’s economy

<https://marinesanctuary.org/news/foundation-study-finds-florida-keys-national-marine-sanctuary-contributes-4-4-billion-annually-to-floridas-economy/>

The National Marine Sanctuary Foundation released a study showing that economic activity generated in Florida Keys National Marine Sanctuary is responsible for contributing \$4.4 billion and 43,000 jobs across the state of Florida. Understanding the economic impact of Florida Keys National Marine Sanctuary is critical as future decisions are made about its management at the federal, state and local levels. The sanctuary is an irreplaceable treasure that will require careful management and community support to maintain and enhance its splendor.

OCNMS Online

Visit our website at: <http://olympiccoast.noaa.gov/>.

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

Comments and suggestions can be sent to:
jacqueline.laverdure@noaa.gov.

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Ocean-Related Websites

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| National Oceanic and Atmospheric Administration http://www.noaa.gov/ | National Data Buoy Center http://www.ndbc.noaa.gov/rmd.shtml | Washington’s Ocean Resources http://www.ecy.wa.gov/programs/sea/ocean/index.html |
| National Ocean Service http://oceanservice.noaa.gov/ | NOAA Pacific Marine Environmental Laboratory http://www.pmel.noaa.gov/ | Northwest Association of Networked Ocean Observing Systems http://www.nanoos.org/ |
| Office of National Marine Sanctuaries http://sanctuaries.noaa.gov/ | CoastWatch – West Coast Regional Node http://coastwatch.pfel.noaa.gov/ | NOAA Online Media Library http://sanctuaries.noaa.gov/photos |
| NOAA Ocean Explorer http://oceanexplorer.noaa.gov/ | NOAA Marine Debris Program http://marinedebris.noaa.gov/ | Encyclopedia of National Marine Sanctuaries http://www8.nos.noaa.gov/onms/park/ |

OLYMPIC COAST NATIONAL MARINE SANCTUARY

OCNMS STAFF

LEARN MORE ABOUT YOUR SANCTUARY

The Sanctuary Office Report is produced bi-monthly by Olympic Coast National Marine Sanctuary in conjunction with sanctuary advisory council meetings. To learn more about the sanctuary, please visit our website at:

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

To learn more about the sanctuary advisory council, please visit:

http://olympiccoast.noaa.gov/involved/sac/sac_welcome.html.

OFFICE OF NATIONAL MARINE SANCTUARIES (ONMS)

Olympic Coast National Marine Sanctuary is one of the marine protected areas in the National Marine Sanctuary System encompassing more than 600,000 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 Papahānaumokuākea and Rose Atoll marine national monuments. Visit the ONMS website at:

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

Get Involved!

To learn how to get involved in the sanctuary visit:

<http://olympiccoast.noaa.gov/involved/welcome.html>.

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