## NEWSLETTER®

**FALL 2020, ISSUE 7** 



Summer interns Bethany Whitten and McKenzie Barker clamming on the Oregon Coast.

### FROM THE ACADEMIC ADVISOR'S DESK

It has been a Swiss Army Knife kind of year, hasn't it? We've all needed many different tools to handle all of the changes and challenges of 2020. Although the new school year brings even more uncertainty and abnormal modus operandi, marine students continue to be resilient, hopeful and excited about the current and new ocean-related opportunities provided by OSU and its partners. Every week MSI receives requests for more information about OSU's different marine programs--from high school. transfer, post-bacc and current OSU students. As the official 2021 launch of the new Marine Studies (MAST) degree nears, more and more students are asking about it. It's an exciting time! We're getting the word out all of OSU's marine programs via "virtual visits" for prospective students, emails to high school and community college teachers and advisors, and remote conferences and fairs where prospective students can dialogue with current OSU marine students, and download brochures and watch videos about ocean and coast opportunities. In our present virtual world, we are committed to keeping our students as engaged with each other and the



**Cynthia Leonard,**Marine Studies Initiative
Academic Advisor

ocean as much as possible. MSI summer internship program was one of the few with students actually living at the coast. Our interns were rocky intertidal sampling, kayaking, filming, interviewing and exploring what Hatfield Marine Science Center and Port Orford Research Station areas offer. Creativity and flexibility was the key as we blended in-person and remote programs. There's more great experiences ahead for our students and all you ocean lovers. Come along, and keep your multi-tool ready!

## Ocean Stewards of Today & Tomorrow







The Marine Studies Initiative envisions a future where marine issues are tackled from all angles, from the natural sciences and policy, to the humanities and arts. And at OSU, we have exceptional faculty and students who have embodied this mission in their own way. We have been working together with Oregon State Productions to showcase students and faculty that embody the vision of MSI. Visit (beav.es/oM8) to view all of our Ocean Stewards of Today and Tomorrow videos.

(Photos were taken pre-COVID-19)

### 2020 Eder Family Research Fund Awardees

Through the leadership of OSU's Fisheries and Wildlife (FW) department, in partnership with MSI, Will White (FW) and Sarah Henkel and Francis Chan, both from OSU's Integrative Biology, were awarded a research grant from the Eder Family Dungeness Crab Research Fund. Dungeness crabs are an important part of the Pacific coast ecosystem and the most valuable resource harvested from Oregon's coastal waters. Being able to forecast the expected landings in a given year is important to the economics of the fishing

Will White tossing a crab pot in the ocean.



fleet. An unknown factor in those predictions is the mortality rate of male crabs in the year before they grow large enough to be harvested. This project will take repeated samples of sub-legal-sized crabs in the spring, summer, and fall, (and make use of samples of crabs in those seasons in past years) to estimate crab mortality leading up to the winter harvest season. The results will improve our ability to forecast landings based on pre-season crab surveys, improving the economic health of the fishery.

# Marine Studies Undergraduate Degree- MAST

We are very excited for the launch of the College of Liberal Arts' Marine Studies undergraduate degree, anticipated later in this academic year after it receives final approval.

This new liberal arts degree centers on the human dimensions and perspectives of coasts and oceans. Students will gain expertise in the humanities, arts, and the social sciences—and apply these approaches to the study of humans in the marine environment. Some hallmarks of the degree include:

- Nine new courses, including two required courses- Humans and the Ocean (MAST 201) and Society, Culture and the Marine Environment (MAST 300) and core electives such as Maritime Cultures and Lifeways (ANTH 320), Maritime Histories of the Pacific (HST 314), Literatures of the Coast (ENG 340), and Indigenous Ocean and Coast (ES 360).
- Liberal arts core curricula, as part of the College requirements.
- **Required coastal experience** courses at Hatfield Marine Science Center.
- Advanced coursework to specialize in areas like environmental and social justice, policy, arts and literature, global and transnational perspectives, and community development.
- Internships and capstone projects.
- Preparation for careers in public and private sectors, including in the expanding ocean economies requiring ocean literacy, interdisciplinary collaborative skills, and strengths in liberal arts fields.

## Academic Program News

We thank everyone who made summer courses at the coast a success! Students studied at the sea via internships and summer courses-- two courses offered through Ecampus and six courses offered on-site at OSU Hatfield Marine Science Center. Hatfield personnel ensured facilities supported all COVID-19 precautions and created an environment for dynamic learning experiences. Instructors and mentors were the forefront of effective teaching while practicing safety procedures in the classroom, lab, and field. Students brought their curiosities, creativity, and commitment. Visit (beav.es/oQw) for more info.

The majority of Fall 2020 courses will be offered remotely or through Ecampus. Offerings such as Introduction to Pacific Islands Studies (ES 260), Introduction to Ocean Law (FW 422), Coastal Ecology and Resource Management (FW 426), Marine Ecology (BI 351), and Oceanography (OC 201) are among Oregon State's 30+ Fall marine-related courses.

The summer Marine Invertebrate Zoology class (Z461/561) at OSU Hatfield participated in an emergency grassroots "Virtual Field" project. With support from the National Science Foundation, this project creates and distributes virtual learning resources from field stations and marine laboratories for faculty, students and others. Check out the portal at (thevirtualfield.org/).

A student takes part in a summer course rocky intertidal field activity, from BI 353 PNW Coastal Ecosystems.



## Summer Interns at the Coast



Bethany Whitten on the mudflats to research clams.

In spite of COVID-19 challenges, Hatfield Marine Science Center and Port Orford Field Station welcomed summer interns once again. Students conducted summer research projects in the Marine Studies Initiative internship program, NSF Marine Sciences Research Experiences for Undergraduates (REU) program, Oregon Sea Grant Summer Scholars, and others in partnership with public agencies like NOAA.

#### **Summer Internship Highlights**

**Bethany Whitten** (Aquatic Microbiology) is an undergraduate Ocean Sciences major with a Marine Biology and Ecology minor. She explored antibiotic resistance in Oregon coastal environments by looking at bacteria in shellfish, water and sediment, sampling from 10 locations from Tillamook to Waldport, OR. Her advice to students considering an MSI internship is "This internship helped me to grow in many more ways than I expected. Over the 10 weeks I was able to focus on my career goals and perform tasks that will set me up for success in alignment with those goals. I feel so much more prepared and confident in continuing my academic career. My vision of what my future career will be has become clearer." (Faculty mentor: Carla Schubiger, OSU Veterinary Medicine)

**Tom McCambridge** (Marine Reserve Interpretation) was based at Port Orford Research Station where he created a video and social media products for nonscientific audiences to increase awareness of the scientific research in the Red Rocks Marine Reserve. He experienced the research first-hand by assisting the grey whale, intertidal and sustainable seafood teams at POFS. Did this internship change this marine biology and chemistry student's career plans? "Absolutely. I love the idea of doing research for a living, but the day-to-day activity and impact of science communication sounds more fulfilling than research. As research becomes more and more of a collaborative undertaking, I could see myself being in a role of communicator on a research team." (Mentor: Tom Calvanese, OSU Port Orford Field Station)

## Thank you!

MSI summer internships would not be possible without our outstanding mentors!

We would like to thank all of our mentors for their commitment to guiding students through their research and work experiences, especially this summer when original projects had to be modified due to COVID-19 concerns.

Tom McCambridge lends critical support to gray whale researchers by teaming up to retrieve lost underwater camera.



Maia Insinga (Science Filmmaking) is an undergraduate studying psychology combined with marine conservation and management. With no previous videography experience, she worked with OSU Productions to plan, film, write and edit a short film "Oregon Surfing: A Vital Way of Life" which highlighted her personal feelings and passion for surfing in Oregon. It is available for viewing on our YouTube channel. Insinga is passionate about marine activism and conservation, she strove to show that ardor in this film. Her summation of the internship was "I had a great time this summer and couldn't have asked for a better internship program, especially during a pandemic. Thank you!" (Mentor: Saskia Madlener, OSU Productions)

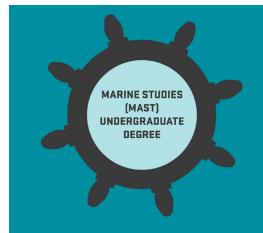
**O'Malley Martin** and **Kendal Oetken** (Coastal Tourism) worked with USDA Forest Service staff on the Siuslaw National Forest to create three short videos promoting eco-tourism in Tillamook County and coastal areas. The guiding objective was to make viewers aware of the importance of their Oregon coastal environment and forming a personal connection with them. Their "Daily Walks" video named simple walks along the Oregon coast, emphasizing that building a healthy daily habit in the outdoors does not have to be complicated. Both students commented on how the internship helped them grow personally and professionally. Kendal, a marine biology student, mentioned her improved writing skills and enlarged professional network. An aquatic biology environmental sciences major, O'Malley added, "This internship gave me an overall understanding of how job in the tourism industry work alongside government agencies. I gained several skills that I'm sure will help me in whatever field I go into." (Mentor: Traci Merritt, USDA Forest Service)

#### To view all of the intern presentations, please visit (beav.es/oA3).





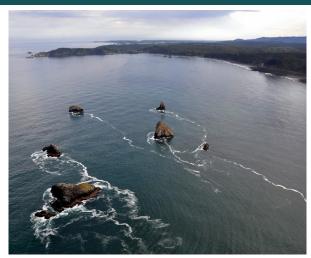
Left: Maia Insinga going to surf. Right: O'Malley Martin shooting footage for her "Daily Walks" video created with Kendal Oetken.



#### **Tipper Marine Studies (MAST) Scholarship**

Thanks to a generous donation from Captain Ronald and Maryellen Tipper, matched with OSU support, we are excited to announce our first Marine Studies Scholarship! These annual funds of \$2,000 will be for students in the College of Liberal Arts enrolled in the Marine Studies undergraduate degree program who have demonstrated financial need. Visit marinestudies.oregonstate.edu for details to come on this exciting opportunity!

## **Port Orford Field Station Updates**



Aerial photo of Redfish Rocks at Port Orford.

Like many, here at the Port Orford Field Station our resilience was tested during the summer of 2020. We're proud to report we demonstrated our capacity to persist and perform in the face of unforeseen change and disturbance, and to do it safely, and with respect. We were pleased to support a cohort of 6 students and interns in the field this summer.

We celebrated with the GEMM Lab (beav.es/odQ) gray whale research team as they conducted their 6th year of research on gray whale foraging behavior. This year, the team was again led by OSU graduate student Lisa Hildebrand, master's student Noah Dolinajec, undergraduate intern Mattea Holt Colberg, and Pacific High School student Liz Kelly of Port

Orford. Check out their blog for a taste of the team's experiences this summer (beav.es/osf). Our MSI summer intern Tom McCambridge worked with his mentor Tom Calvanese and the Redfish Rocks Community Team (beav.es/odd) to adapt a Marine Reserve Interpretation internship to these times. The immersive internship experience led to a successful science communication video project that can be found on the Port Orford Field Station's YouTube channel (beav.es/ods) You'll find a video recording of the students' end of season presentations there as well.

We hosted Connor Nolan, summer intern with Port Orford Sustainable Seafood (beav.es/ode) in the Oregon Applied Sustainability Experience Internship (beav.es/odh) program. Check out this year's State of the Coast Conference (beav.es/od8), where Connor will present his work to reduce fish waste through new product development.

We were pleased to see Station Manager Tom Calvanese featured in ODFW's Return to the Marine Reserves (beav.es/odB), outlining his journey from urchin diver and graduate student to station manager during his time in Port Orford.

We look forward to the future of our work on the south coast, as we partner with the Port of Port Orford (beav.es/od2) on the new Port Orford Seafood Hub, now in development. The Seafood Hub will provide OSU with infrastructure to support several initiatives, including the food from the sea, mariculture, and blue economy initiatives.

Students, educators, and researchers are encouraged to come to study, teach, and conduct research in Port Orford. Visit the station's grants and donations page (beav.es/od6) to support our work in the region, or to apply for a grant to support your work. We look forward to seeing you here at MSI's south coast outpost!



Ocean11 will keep sailing along this Fall with a mix of small group, outdoor and remote activities. Besides our monthly meetings we hope to have a Beach Clean-Up and other activities at the coast. Already the new school year has brought several new students joining Ocean11, bringing passion for the ocean and a lot of great ideas and energy!

For information about how to get involved, contact Cynthia Leonard at: *Cynthia.leonard@oregonstate.edu* or visit: (beav.es/ocean11)

## **Marine Studies Building**

After months of community engagement, the art team, Thurston Healy, who'd received the "Percent for Art" contract for the Marine Studies Building, installed their striking work titled "This is Water." The piece was conceptualized around a joke made by David Foster Wallace during a commencement speech he delivered to the graduating class of 2005 at Kenyon College.

There are these two young fish swimming along, and they happen to meet an older fish swimming the other way, who nods at them and says, "Morning, boys, how's the water?" And the two young fish swim on for a bit, and then eventually one of them looks over at the other and goes, "What the hell is water?"

This parable reminds us how, as individuals, we must all struggle to remain open and empathetic to what is outside of us. The vitrines, surrounded by a round mirror rim, create an 'infinity box' effect that amplifies images of the ocean and the coastal community. Over 500 hours of sounds recorded by the community were incorporated into the piece. As you view the installation, you hear the sounds of fishing, water, voices, laughter - the human dimension woven into the fabric of nature.

-Mark Farley, HMSC Strategic Initiatives Manager





Photos of the art install in the new MSB. Left: A striking piece by Micheal Boonstra outside the classrooms. Right: "This is Water", by Joe Thurston and Sean Healy of Site Specific Work.

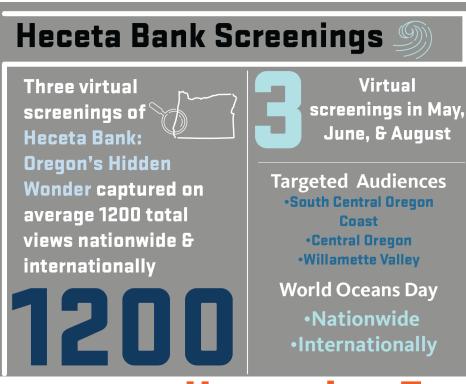
## **Hatfield News**

#### **Marine Studies Building**

The move into the new Marine Studies Building (MSB) was largely completed in early September 2020, although HMSC is still operating with low numbers on campus due to COVID-19 restrictions. Hatfield labs and offices that moved in the new building packed and sorted for weeks in preparation for the move. Specialized equipment, chemicals, tools, and large scientific freezers filled with samples collected over decades take special care and consideration to pack and move. It is so exciting to see the new building beginning to be populated with all the tools and technologies that make our incredible work happen! Stay tuned for the Marine Studies Building Grand Opening. We are hoping to announce a date in 2021.

**HMSC Research Seminars HMSC Research Seminars** take place every Thursday from 3:30-4:30 PM. Visit the OSU Events Newport Calendar at **events.oregonstate.edu/Newport** for the seminar schedule.

**The Hatfield Marine Science Center Visitor Center** remains closed until further notice to help prevent the spread of COVID-19, especially among the more vulnerable staff, volunteers and visitors. Please refer to **seagrant.oregonstate.edu/visitor-centerweb** for updates.



The Marine Studies Initiative office had many in-person events planned for 2020. Due to COVID-19, we shifted our strategy to stay connected and went virtual. Since May, MSI hosted three virtual screenings of "Heceta Bank: Oregon's Hidden Wonder," followed by a Q&A panel. The virtual screenings had over 1200 total views, from across the country and even some international viewers for our World Oceans Day event on June 8th. Huge thanks to OSU Cascades, Oregon State Productions, and our amazing panelists who helped make these virtual events happen!

## **Upcoming Events**

#### HMSC Research Summit, October 10, 2020, 1:00-5:00 pm

The Summit will provide an opportunity for our community to reconnect and learn about and engage with the diversity of research, researchers, and programs that make Hatfield Marine Science Center a unique institution. Register here: oregonstate.qualtrics.com/jfe/form/SV\_5oQ6UlkHARjs7jf

All We Can Save: Nurturing the Feminist Climate Renaissance, October 26, 2020 at 4:00 pm Ayana Johnson will be Zoom-visiting OSU on October 26 at 4 pm for an Integrative Biology (IB) seminar and panel discussion. Jane Lubchenco will be Ayana's host. Visit ib.oregonstate.edu/smnrs for Zoom details.

#### State of the Coast Virtual Conference, November 5-6, 2020

State of the Coast is a chance to have fun and learn while listening to informative talks on current marine science and policy issues, participate in hands-on activities, and network with research, industry, and community leaders. Visit seagrant.oregonstate.edu/state-coast for event updates.

#### Marine Studies Initiative Virtual Open House, Date TBD

Join us virtually this Fall for our annual open house. We will share recent MSI updates and announcements. Visit the Marine Studies Initiative website at **marinestudies.oregonstate.edu** for event updates and details.

## Follow us on social media!



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