

HIGHLIGHTS

SHEYNA'S PASSAGE OF 6 MONTH PROBATION - YAY! Sheyna passed her 6-month probationary period, so you are all stuck with me now! Molly has successfully used up her leave bank and has transitioned to hourly/on-call status.

Gulf of Alaska Ecosystem Observatory (GEO) Turnaround Success - The Long Term Ecosystem Research (LTER) cruise successfully recovered and re-deployed all of the moorings that make up the Gulf of Alaska Ecosystem Observatory or GEO. <u>Real time data from GEO3</u> is now once again available. The GEO moorings provided a full year of acoustic data, sediment trap samples, and water samples. Other instruments are still being downloaded and data recovery assessed. All in all, the GEO has had a successful year at providing critical ecosystem information for the northern Gulf of Alaska. To learn more about this project, visit the <u>AOOS GEO project page</u> on the AOOS website.

The Beaufort Lagoon Ecosystems Long Term Ecosystem Research Program (BLE LTER) 2021 Update - The BLE LTER program was able to return to the Alaska North Slope in 2021 after being absent due to Covid-19 travel restrictions in 2020. Crew successfully retrieved 100% of the moorings deployed back in 2019 in Elson, Stefansson Sound, and Kaktovik/Jago lagoons. All sensors were alive and well, though some more fouled than others. The moorings remained in place and operated successfully for over two years! Project investigators are looking forward to assessing the data for this two year period! AOOS started working with the BLE LTER in 2020 supporting instrumentation for moored OA observing in Arctic coastal lagoons. You can visit the <u>BLE LTER Homepage</u> to learn more about this project.

Lower Cook Inlet Wave Buoy Back In Operation - The CDIP (Coastal Data Information Program) Wave buoy in Lower Cook Inlet was damaged and broke free from its mooring May 26, 2021. Unfortunately, upon assessment, the buoy was damaged beyond repair and had to be replaced. Partners at CDIP, a US Army Corps of Engineers funded program based out of San Diego, shipped AOOS a replacement buoy which was deployed on August 5, 2021. Zech Bennett and crew with C&C Dive and Salvage based out of Homer, AK helped with both the buoy rescue and redeployment. Thanks to a consortium of partners, we were able to get this valuable asset back into operation for the remainder of the summer season. You can view the data from this buoy on the AOOS Lower Cook Inlet Wave Station Page.

Shark tagging - Thomas finished working remotely while helping on a Pacific sleeper shark (*Somniosus pacificus*) tagging project. Pacific sleeper sharks are deep-water sharks that inhabit the waters and fjords of Alaska, but are very understudied. They are known predators of salmon and halibut but may also prey on seals and other marine mammals given the opportunity. To learn more about them, Markus Horning at Wildlife Technology Frontiers is conducting a tagging study in Resurrection Bay and Prince William Sound. Given Thomas' experience tagging sharks in and out of Alaska, he went down to help deploy satellite and acoustic tags on Pacific sleeper sharks. The team successfully tagged 7 sleeper sharks ranging from 129cm to over 370cm total length! The tags will collect data over the coming year, pop off and send the archived depth, temperature and location information to the researchers.



Pictures from the Pacific sleeper shark tagging project. Left: Markus Horning and Thomas Farrugia position a Pacific sleeper shark alongside the tagging vessel in Resurrection Bay. Right: Markus Horning and Thomas Farrugia release a tagged Pacific sleeper shark after having taken measurements and deployed satellite and acoustic tags.

ADMINISTRATIVE

AOOS EXCOM - The AOOS Executive Committee met on August 26 for our regular bi-monthly meeting.

IOOS 2021-2026 Cooperative Agreement - AOOS has received the funding award for the FY21 cooperative agreement. We are working on the submission of the descope documents for early September 2021. Funding should be received in October or November.

AOOS Fall Board meeting - AOOS' Fall Board meeting scheduled for Tuesday, October 19, 2021 will be moved from inperson to virtual. A Zoom link has been sent out to the Board.

PROPOSALS/AWARDS

NPS Beringia and WWF projects funded - AOOS has received funding from WWF to develop the "Bering Strait Transboundary Incident Response Tool", a web-based tool using both US and Russian data, for planning, prevention, response, and restoration in the event of an incident (e.g., oil spills, disabled vessel, etc.) in the Bering Strait. This is a 3year project that will involve developing a beta-tool in the first year, incorporate stakeholder feedback in the second year, and will hopefully be used by incident responders such as USCG, NOAA, and the Russian Marine Rescue Service during a planned in-water exercise in 2023. AOOS was also notified that we will receive funding from the National Park Service's <u>Shared Beringia Heritage Program</u> to translate datasets from Russia and the U.S. from Russian into English and vice versa. This will enhance the Tool by allowing incident responders to use the tool in their native language, but also will allow for the datasets to be useful to other stakeholders in both countries.

NSF Convergence Accelerator project funded - AOOS was awarded the NSF Convergence Accelerator project entitled: "Equipping Underserved Communities with Ocean Intelligence Platforms." The proposal team is comprised of three IOOS Regional Associations (AOOS, NANOOS, and PacIOOS), a technology company (Sofar Ocean), and Indigenous partners from the Arctic, Pacific Northwest, and Pacific Islands (Alaska Eskimo Whaling Commission [AEWC], Quileute Tribe, Quinault Indian Nation, Marshall Islands Conservation Society, and National Park of American Samoa). This is an aggressive schedule with NSF required training that begins in September, development of a community questionnaire, outreach with community partners, development of a community action plan, and development of a Phase II proposal by June 2022.

<u>1005</u>

Infrastructure Bill includes ocean obs - The IOOS Association was successful in working with Senate congressional staff to include \$150 million for coastal ocean observing systems in the Senate-approved infrastructure bill. If passed by the House, this would go towards further implementation of the national plans for high frequency surface current radars, gliders, ecosystem moorings, wave buoys, water level stations, and the national Harmful Algal Bloom Observing Network. AOOS has participated in developing those plans and would benefit greatly from additional funding to help implement.

Change in IOOS fall meeting - The October fall meeting has changed from an in-person meeting to all virtual due to the increase in covid infections.

CONFERENCES/MEETINGS/PRESENTATIONS

NOAA Science Advisory Board - Molly attended the meeting on August 25 to help present a review she assisted the SAB Climate Working Group do on NOAA's proposed Implementation Approach to its Climate and Fisheries Initiative.

COLLABORATIONS/PARTNERSHIPS

Alaska Harmful Algal Bloom Network - Thomas finalized the formatting of the <u>AHAB Action Plan</u> which was then presented to the AHAB network and released on the AHAB website. The objective of the AHAB Action Plan is to establish the goals and actions needed for the AHAB Network to meet its mission. It will help members of the AHAB Network, the general public, and funding agencies better understand the role, structure and activities of the AHAB Network, and will

help the AHAB Coordinator efficiently achieve the goals and mission of the AHAB Network. Thomas also finalized the FY21 and FY22 budgets for the AHAB network. Thomas has also been working as a member of the planning committee for the Water Resources track of the Alaska Tribal Conference on Environmental Management, and will help put together conference sessions on water-related topics.

<u>State</u>

Alaska Marine Policy Forum - Alaska SeaGrant and AOOS hosted the bi-monthly Alaska Marine Policy Forum on August 18. Emily Patrolia from ESP Advisors provided an update on the infrastructure bill recently passed by the Senate and Danielle Meeker from the Alaska Center for Climate Assessment and Policy provided an overview of the recently released IPCC climate assessment report. The next forum will be held on Oct 20 at 1pm AKST.

National/International

NOAA Regional Team - Molly and Sheyna have continued to meet with the NOAA Regional Team. August has been a busy month with putting together the FY22 Priority and Project Proposal Submissions.

DATA MANAGEMENT

Axiom made progress ingesting and visualizing an initial batch of data layers made available from Russian colleagues for the Bering Strait Transboundary Incident Response Tool. This is the first of a three-year effort to make data related to sensitive biological resources and other data accessible to incident responders in the event of an oil spill in the Bering Strait region. In preparation for the US-Russia Joint Planning Group Meeting, Axiom prepared tabletop exercise visualizations to demonstrate how this tool could be used during an incident response.

ENGAGEMENT METRICS

Audience Name	Type of Presentation	# of people
Alaska Marine Policy Forum on Aug 18	Outreach	20
Alaska Harmful Algal Bloom Network	Facilitated monthly meeting and update	36

UPCOMING EVENTS		
Aug 31-Sept 2	US-Russia Joint Planning Group Meeting tabletop exercise, Anchorage, AK (Molly & Jill)	
Sep 20-23	OCEANS'21 (MTS/TOS/IEEE) Conference in San Diego, CA	
Sept 20-24	Polar Data Forum, virtual (Jill, Sheyna, Stacey)	
Oct 5-7	IOOS Association fall mtg, virtual (Sheyna, Molly & Katrina)	
Oct 6	PICES Monitor Committee Meeting, virtual (Carol)	
Oct 19	AOOS Fall Board meeting	
Oct 19-21	IOOS Community Modeling Workshop, virtual	
Oct 18-29	PICES-2021 Annual Meeting	
Nov 1-4 & 8-11	Coastal & Estuarine Research Federation Conference 2021 (virtual)	
Nov 2-4	2021 Maritime Risk Symposium, University of Houston College of Technology (virtual)	
Dec 13-17	AGU Fall Meeting 2021, New Orleans, LA (in person/virtual) (Carol, Molly, Sheyna)	
Feb 27-Mar 4, 2022	Ocean Sciences Meeting, Honolulu, HI (in person) (Abstracts due Sep 29, 2021)	
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Sheyna Wisdom, Molly McCammon, Carol Janzen, Holly Kent, Darcy Dugan, Jill Prewitt, Thomas Farrugia, and our data team at Axiom