

HIGHLIGHTS

Alaska Marine Science Symposium – The AOOS team had a major presence at the 2020 AMSS, starting with serving on the planning and implementation steering committees for workshops, keynotes, and the science program. More than 700 people attended this year’s symposium.

Keynotes – Molly helped identify an impressive array of keynote speakers this year. Maija Lukin, an



Cisco werner

Inupiaq resident of Kotzebue and current superintendent of the National Park Service’s Western Arctic National Parklands, kicked off the week-long symposium with a talk describing the unprecedented recent changes in the Bering and Chukchi Seas. She was followed by Cisco Werner, National Marine Fisheries Service Chief Science Advisor, talking about NMFS responses to such changes. Sebastien de Halleux, Chief Operating Officer for Saildrones, described the results of 5 years of pilot projects using Saildrones in the Alaska Arctic. Andrew Pietruszka, an underwater forensic archaeologist with Scripps, concluded the

first day with a talk about his efforts to locate and document WWII-era submerged archaeological sites off Kiska Island in the Aleutians. All of the keynotes were videotaped by the Alaska Teen

Media Institute and will be available soon through the Interagency Arctic Research Policy Committee (IARPC) website.



Andrew t. Pietruszka

Ocean Acidification Town Hall – Darcy Dugan hosted an evening session on

Jan 28 where nine members of the OA research community provided 5-minute updates on recent research activities, findings and plans. Among the highlights were 2 years of data from the Southeast Alaska ferry, new species response work on razor clams, crab, herring and groundfish, and community-based monitoring in Kodiak. The event was standing room only, and a recording will be on the Alaska OA Network website.

White House Ocean & Technology Summit town hall – Molly and BOEM’s Alaska region director Jim Kendall co-hosted a town hall focusing on private-public partnerships in Alaska as a follow-up to the White House Summit on Science and Technology Partnerships held in November 2019. Carol (AOOS), Ed Page (Marine Exchange of Alaska), Rada Khadjinova (Fugro), and Ginny Eckert (UAF and Alaska Mariculture Task Force) helped kick off a lively discussion on new approaches Alaskans may take to improve partnerships and collaboration. A summary of that discussion will be posted soon on the AOOS website.

Communicating Ocean Science Workshop – Dr. Brian Brettschneider, a climatologist affiliated with the University of Alaska, Fairbanks International Arctic Research Center, presented the workshop *Science Communication in a Viral World* to open the 2020 Alaska Marine Science Symposium on January 27. The 85 participants learned about how to craft messages designed for social media.

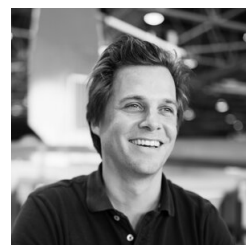
AGU Workshop - AOOS and the North Pacific Research Board hosted an all-day science communication workshop on January 26 provided by the American Geophysical Union’s Sharing Science group. The ten participants learned about how best to communicate their science to the public, the press, and policy makers.

NEPA Seminars during AMSS 2020– The U.S. IOOS Program Office and its partners engage in a wide range of activities that have the potential to impact the environment. IOOS/AOOS is responsible for ensuring these activities are carried out in compliance with all applicable federal environmental regulations and Executive Orders by conducting a National Environmental Policy Act (NEPA) analysis of these activities. Given NEPA applies to all recipients receiving federal funding to implement projects, Carol organized four short informational seminars during AMSS 2020 week to inform AOOS-funded investigators as well as others who may be required to comply with NEPA requirements. NEPA speakers included Mequela Thomas, IOOS Program Office Environmental Compliance Coordinator, and Gianinna DiMaio, who oversees environmental compliance for all of NOAA’s National Ocean Service program offices. Most of AOOS-funded field investigators attended, and material will be shared to others that were unable to make one of the seminars.

Metadata training –Axiom Data Science presented a newly-redesigned workshop to 15 scientists and technicians that included a general introduction to metadata and its importance to the scientific community, as well as hands-on



Maija Katak Lukin



Sebastien de halleux

workbook exercises designed to improve metadata-writing skills. Using an example dataset and the Research Workspace's metadata editor, workshop attendees learned about how to apply the current best practices for scientific metadata to improve the content of a metadata record.

Bering Sea Change Workshop – Molly joined NPRB's Betsy Baker, US Arctic Research Commission's Cheryl Rosa, and NOAA's Bob Foy at a session garnering input on future planning efforts for research activities in the Bering Sea region. More than 40 people attended, providing input on research needs and gaps and recommendations for community engagement and outreach.

CONFERENCES/MEETINGS/PRESENTATIONS

NFWF Coastal Resilience Assessment for Alaska Technical Working Group Meeting – Carol represented AOOS at the working group meeting held January 8 at NOAA NMFS office in Anchorage. The meeting was aimed at identifying management strategies and projects that are currently working to reduce coastal flood-related threats to communities and wildlife in Alaska, and to identify existing information that can be incorporated into the Coastal Resilience Evaluation and Siting Tool (CREST). CREST is used by community planners, conservation organizations and others to make informed decisions about the potential of restoration, conservation or other resilience-related projects to achieve dual benefits for people and wildlife. One major outcome from this meeting was the identification of fundamental data gaps, including the lack of adequate water level information and datums along the Alaska coastline.

National Ocean Acidification Planning Workshop – Molly represented the Alaska Ocean Acidification Network at NOAA's OA planning workshop held in Miami, Florida January 7-10. NOAA Pls and partners met to review a draft decadal plan for the national OA Program.

Planning for Sustainable Ocean Observations – Molly was asked by the Ocean Studies Board of the National Academy of Sciences (NAS) to serve on a planning committee for a workshop to be held later this year to develop recommendations on how to sustain ocean observations. The workshop is a follow-up to a 2017 NAS report entitled "Sustaining Ocean Observations to Understand Future Changes in Earth's Climate. The workshop was slated for April 2020 but will now likely be in September. Stay tuned for more information.

Alaska Young Fishermen's Summit – Darcy presented on ocean acidification to a group of 40 young fishermen during their three-day networking and skill-building conference.

NOAA Alaska Mariculture Workshop and the Alaska Shellfish Growers Association meeting- Axiom Data Science's Stacey Buckelew and Trevor Golden participated in two workshops focused on Alaska mariculture from January 21-24 in Ketchikan.

COLLABORATIONS

UN Decade for Ocean Science Arctic Workshop – Molly has been asked to serve on the planning committee for a workshop to be held in Copenhagen, Denmark focusing on the Arctic as part of the larger planning efforts for the upcoming UN Decade of Ocean Science (2021-2030). The Copenhagen workshop is scheduled for April 29-May 1.

Alaska Coastal Mapping – AOOS has been working in partnership with the Alaska Department of Natural Resources and NOAA to develop a statewide strategy for mapping Alaska's coastline. This effort has been underway for the past 2 years with identification of current plans, a survey of agency, community and industry priorities, and an integrated mapping strategy that was slated for publication in December last year. However, the [presidential memorandum on ocean and Alaska coastal mapping](#) that came out in November 2019 requires some adjustments and additional review of the strategic plan before publication. The presidential memorandum builds on the momentum of our efforts and adapting our strategy to be a response to the memo will encourage legislative action and budgetary considerations. Our team has been working hard to adapt our plan and has recently submitted the plan for the first round of reviews by [Alaska Mapping Executive Committee](#) (AMEC) members. The plan will be formally presented at the next AMEC meeting, which is tentatively scheduled for April 9 in Anchorage. Also, this year's **Alaska Coastal Mapping Summit** will tentatively be held in Anchorage on April 9 or 10 to take advantage of folks who may be in town for either the AMEC meeting and/or the Alaska Survey and Mapping Conference.

PROJECT HIGHLIGHTS

Regional ocean data sharing coordinator hiring – AOOS has been recruiting for a new, 2-year position to coordinate two new projects: Regional Ocean Data Sharing Partnership and Enhancing Integrated Ecosystem Assessments. We are hoping to have the new hire onboard in the next 1-2 months.

EVOSTC Gulf Watch, Herring Monitoring and Data Management PI Meeting – EVOSTC project PIS met on January 29 for a programmatic update and PI planning meeting for 2020 and an upcoming Science Synthesis Workshop (Feb 26-27). Carol, Stacey and Chris provided a data management update showing that all data submissions are on track for 2019.

Central Beaufort Sea Wave and Hydrodynamic Modeling Study – The PI Team (including Carol and Rob) and BOEM Program Manager annual meeting was held at the AOOS office on January 31 following the AMSS 2020 conference. Project Leads Jeremy Kasper (UAF) reviewed the results from the summer 2020 field campaign, and Li Erickson (USGS) provided an update on the status of the modeling portion of this project. For more details, visit the project website:

<https://aoot.org/foggy/>

Building Coupled Storm Surge and Wave Operational Forecasting Capacity for Western Alaska – Axiom hosted the PI Team meeting on January 31 following the AMSS 2020 conference. Status of the modeling progress and next steps was reviewed and demonstrations of model results were provided. For more information on this project, visit the website:

<https://aoot.org/western-alaska-storm-models/>

DATA MANAGEMENT

The NOAA Alaska Mariculture Workshop and the Alaska Shellfish Growers Association meetings brought together growers, hatcheries, regulators, researchers, funding sources, and policy makers to discuss current issues and identify needs related to research, policy/permitting, and access to capital to help develop mariculture in Alaska. Axiom presented a prototype version of the Mariculture Map, a web-based tool offering investors, regulators, and operators interactive access to pertinent environmental, oceanographic and social data to inform sustainable mariculture development. An hour was dedicated to a hands-on exercise using the tool and engaging in facilitation discussion about additional information to meet user needs. Individual meetings were also held with growers and permit regulators to gather additional feedback to further improve the tool. With a grant from the Pacific State Marine Fisheries Commission to the Alaska Fisheries Development Foundation, the Mariculture Map will be operationalized by responding to end user feedback and incorporating additional data needs (including data from the Alaska HAB network) to help inform mariculture stakeholders.



Trevor Golden, Axiom Data Science, gives a hands-on workshop on the Mariculture Map.

UPCOMING EVENTS

- Feb 10 & 12 Alaska Forum on the Environment: Bering Sea Change (Carol)
- Feb 11 Alaska Forum on the Environment – Ocean acidification and community based sampling session (Darcy)
- Feb 13 Alaska Forum on the Environment – Harmful Algal Bloom session (Darcy)
- Feb 14 Alaska Forum on the Environment – Microplastics (Molly)
- Feb 10 Ocean Data Roundtable, Washington DC (Molly)
- Feb 11-12 IOOS Federal Advisory Committee, Washington DC (Molly)
- Feb 16-21 AGU/TOS/ASLO Ocean Sciences Meeting, San Diego, CA (Molly & Carol)
- Feb 26-27 EVOSTC Science Overview Workshop, Anchorage, AK (Carol, Stacey, Chris)
- Mar 4-5 IOOS Spring Meeting, Washington DC (Molly)
- Mar 31-Apr 2 Arctic Observing Summit, Iceland (Molly)
- April 1-4 Western Alaska Science Symposium, Dillingham (Darcy)
- Apr 29-May 1 Arctic Planning Session: UN Decade of the Ocean, Copenhagen (Molly)

Molly McCammon, Carol Janzen, Holly Kent, and Darcy Dugan, and our data team at Axiom Data Science