



# ALASKA MARINE SCIENCE SYMPOSIUM

**JANUARY 27-31, 2025**

Showcasing Marine Research in the  
Arctic Ocean, Bering Sea, and Gulf of Alaska

**HOTEL CAPTAIN COOK AND EGAN CENTER, ANCHORAGE, ALASKA**

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**@AKMARINESCIENCE | #AMSS2025**

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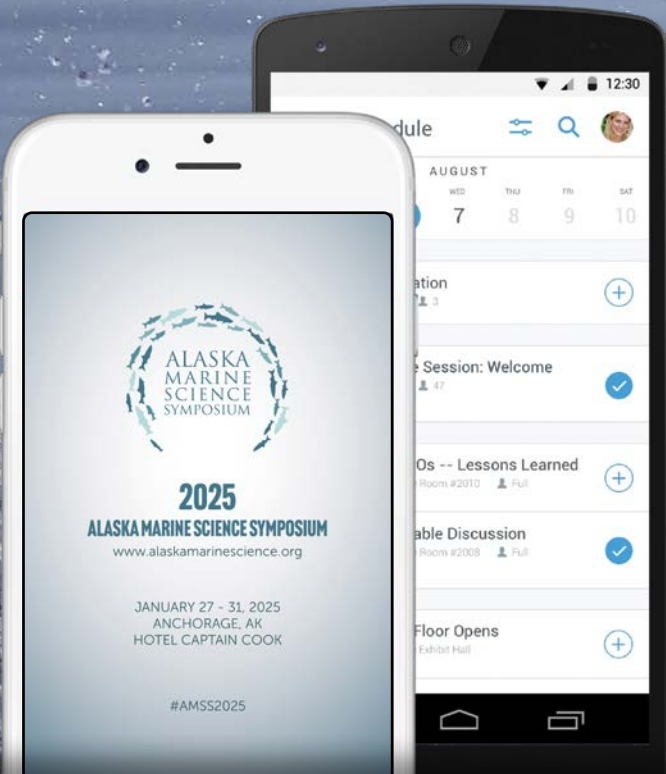
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**MONDAY, JANUARY 27, 2025**

1:00 p.m. – 1:30 p.m.

**WELCOME & OPENING REMARKS — MAIN BALLROOM**

Lynn Palensky, Executive Director, North Pacific Research Board  
Congressional Delegates Opening Remarks (Videos)

1:30 p.m. – 5:00 p.m.

**KEYNOTES — MAIN BALLROOM**

6:00 – 7:30 p.m.

**GULF OF ALASKA POSTER SESSION WAVE ONE — EGAN CENTER**

7:30 – 9:00 p.m.

**GULF OF ALASKA POSTER SESSION WAVE TWO — EGAN CENTER**



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# KEYNOTE SPEAKERS

Monday, January 27

1:30 P.M. – 2:15 P.M.

**NOELLE M. BOWLIN, PHD**

Program Lead, CalCOFI, NOAA Southwest Fisheries Science Center



## PAST, PRESENT, AND FUTURE ROLE IN THE ECOSYSTEM APPROACH TO FISHERY RESEARCH

**Dr. Noelle Bowlin** is a fisheries biology researcher at the National Marine Fisheries Service (NMFS) Southwest Fisheries Science Center (SWFSC) in La Jolla, California, and is the NOAA lead of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) Program. Noelle and her teams (Ichthyoplankton Ecology, Fisheries Oceanography, and Ship Operations) conduct the quarterly CalCOFI cruises to monitor marine species and the effects of climate variability in the California

Current Ecosystem, and conduct research with a primary focus on the early life history dynamics of coastal pelagic species such as sardine, anchovies, and mackerels. Her research focuses on larval fish dynamics, particularly with respect to habitat use, the effects of environmental variability, and anthropogenic stressors. Noelle received her M.S. in Marine Biology in 2011, and her Ph.D. in Biological Oceanography in 2016, both from Scripps Institution of Oceanography, University of California, San Diego.

### Abstract

The California Cooperative Oceanic Fisheries Investigations (CalCOFI) program has been a cornerstone of ecosystem and fisheries research for 75 years. Originally established to study the Pacific Sardine fishery collapse of the 1940s, CalCOFI pioneered the ecosystem approach to fishery research by integrating understanding of predators, prey, competitors, and underlying environmental conditions to determine the drivers of sardine survival and recruitment. This innovative design led to seminal research in fish demography, development, and essential habitat, as well as advancements in instruments and techniques, making it a model for modern fisheries science. CalCOFI researchers developed the globally adopted Daily Egg Production Method (DEPM) for biomass estimation and contributed significantly to the development of the acoustic trawl method for estimating small pelagic fish biomass. CalCOFI's evolution continues by incorporating new technologies such as eDNA monitoring and the use of uncrewed systems as we embark on the new frontier of offshore wind energy development.



Courtesy of Noelle Bowlin

**2:15 P.M. – 3:00 P.M.**

**JOHN HOPSON, JR.**

Alaska Eskimo Whaling Commission

**JENNY EVANS**

Alaska Eskimo Whaling Commission

**SHEYNA WISDOM**

Alaska Ocean Observing System



Courtesy of Backyard Buoys

## BACKYARD BUOYS: BRIDGING INDIGENOUS KNOWLEDGE AND CO-PRODUCTION

### Abstract

The Backyard Buoys Project bridges western science and Indigenous Knowledge to enable coastal communities to collect, steward, understand, and utilize wave data. It is a partnership spanning three regions (Alaska, Pacific Northwest, and Pacific Islands) and expertise with Integrated Ocean Observing System Regional Associations, a wave buoy technology company, Indigenous community partners, and education partners funded by the National Science Foundation. In Alaska, the Alaska Eskimo Whaling Commission (AEWC) and UIC Science deployed 13 wave buoys in the open water season of 2023 and 26 in 2024 in several whaling villages. These locations were picked through a series of workshops with whaling captains at the triennial AWEK meetings in 2021 and 2022. Whaling captains in each of the communities deployed/recovered the buoys. Users accessed near real-time wave data on a smartphone app they helped design. This program is a best practice model for co-development and a community led program in Alaska.

# KEYNOTE SPEAKERS

Courtesy of Backyard Buoys



## JOHN HOPSON, JR.

Alaska Eskimo Whaling Commission

**John Hopson, Jr.** is an Iñupiaq whaling captain, subsistence hunter, and provider for his family and the village of Wainwright, Alaska. John has served as the Chairman of the AEWK since 2016 and as a commissioner since 2014. In addition to his leadership role with the AEWK, he serves on the North Slope School District board and as president of the Wainwright Tribal Council. He has held many leadership roles within his village and the North Slope Borough including: Assembly Member, North Slope Borough (2009 - 2023); President, North Slope Borough Assembly (2016 - 2023); Board of Directors, Arctic Slope Regional Corporation; President

and Board Member, Voice of the Arctic Iñupiat; President and Chairman, Olgoonik Corporation; Council Member, Iñupiat Community of the Arctic Slope, and Mayor, City of Wainwright (11 years). In his leadership roles, John has testified before congress numerous times regarding the importance of subsistence whaling to Iñupiaq culture. He regularly advocates for Alaska Native subsistence hunting rights and has played a critical role in the AEWK's subsistence whaling quota renewal at the International Whaling Commission. John and his wife, Pearl Panik-Hopson have raised their family in Wainwright and are active in their village. John is a member of the Wainwright dance group and enjoys drumming and dancing the songs of his ancestors.

Courtesy of AEWK



## JENNY EVANS

Alaska Eskimo Whaling Commission

**Jenny Evans** has provided grant writing/management services and operations support to the AEWK for almost 15 years. In this role, she helps mitigate the impacts of increased Arctic vessel traffic on the subsistence whaling villages in Alaska. She is responsible for securing funding for the operations of the commission, as well as developing and implementing programs that ensure food security and preservation of Iñupiaq and Yupik culture. She provides strategy and support for AEWK's work with the federal agencies and the International Whaling Commission (IWC). She also helped form the Arctic Marine Mammal

Commission and Arctic Waterways Safety Committee to address concerns regarding increased Arctic vessel traffic. Between 2012 and 2018, Jenny filmed and produced Aġvigum Ilitqusia (Spirit of the Whale), a documentary film that tells the story of the exhaustive obligations AEWK must fulfill to continue its traditional hunt of the bowhead whale. Jenny owns and operates Rural Alaska First and has worked across Alaska to build capacity with Alaska Native organizations, tribes, village corporations, and non-profits. Prior to starting her consulting business, she worked in politics and public relations in both the public and private sectors. She earned a BS in political science and BA in English literature from Ohio University. Born in Glennallen, Alaska, Jenny was raised in Homer and is a life-long Alaskan who enjoy fishing, hunting, and all things outdoors.

Courtesy of Backyard Buoys



## SHEYNA WISDOM

Alaska Ocean Observing System

**Sheyna Wisdom** is the Executive Director of the Alaska Ocean Observing System (AOOS), the Alaska regional component of the national Integrated Ocean Observing System (IOOS) based in Anchorage. Prior to her position at AOOS, she was an environmental consultant for 20 years with an emphasis in large scale program management, marine mammal permitting and compliance, noise analysis and monitoring, field logistics, and Alaska Native community engagement. Sheyna was born and raised in New Mexico and has lived in Alaska for 18 years. She received a B.S. in Biology from Eastern New Mexico University while also playing NCAA II

women's basketball and an M.S. in Marine Science from the University of San Diego studying gray whale acoustics. She is a high school fastpitch softball coach at Dimond High School in Anchorage and enjoys trying to keep up with her daughter Kea, a high school senior.

3:00 P.M. – 3:30 P.M. – BREAK  
 3:30 P.M. – 4:30 P.M.

**ANAND VARMA**  
 National Geographic Explorer & Photographer

Courtesy of Anand Varma



## INSIDE WONDERLAB: EXPLORING NATURE’S HIDDEN WORLD

With a background in integrative biology, **Anand Varma** uses photography and video to share the science and stories behind things the naked eye cannot perceive—like the mating practices of jellyfish and the hunting habits of vampire bats in the Yucatan rainforest. After graduating from the University of California, Berkeley, Anand spent several years assisting photographer David Liittschwager before receiving a National Geographic grant to document the wetlands of Patagonia in 2010. He has photographed numerous stories for National Geographic magazine, including the 2014 cover story, “Mindsuckers”—revealing the story of the

world’s most resourceful parasites, the kind that can alter their hosts’ DNA and even control their minds. He has been a National Geographic emerging explorer, Media Innovation fellow, and Civic Science fellow, and has won the World Press Photo Award for best nature story.

### Abstract

Step into a world of wonder with biologist-turned-photographer Anand Varma as he unlocks the mysteries of nature through cutting-edge photography techniques. In his Berkeley-based WonderLab, Anand captures the invisible behaviors of the natural world, beyond our naked eye. His images and videos reveal the hidden worlds that exist just outside of our perception, from the mesmerizing life cycle of a honeybee to the lightning-fast wings of a hummingbird. With Anand’s expert guidance, we can slow down the fast, speed up the slow, and magnify the miniature, enabling us to see the true beauty and complexity of the natural world.

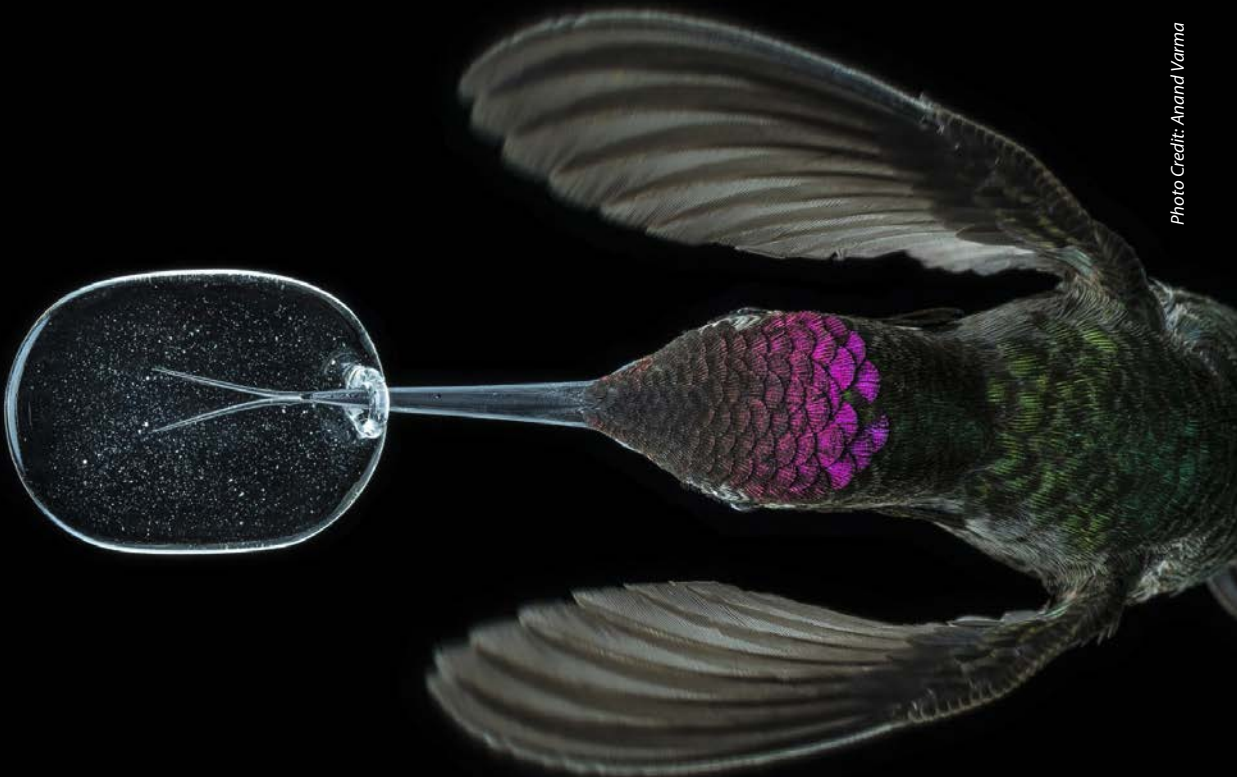
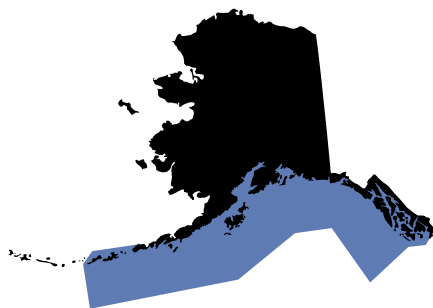


Photo Credit: Anand Varma

# GULF OF ALASKA PLENARY SESSION



TUESDAY, JANUARY 28<sup>TH</sup>

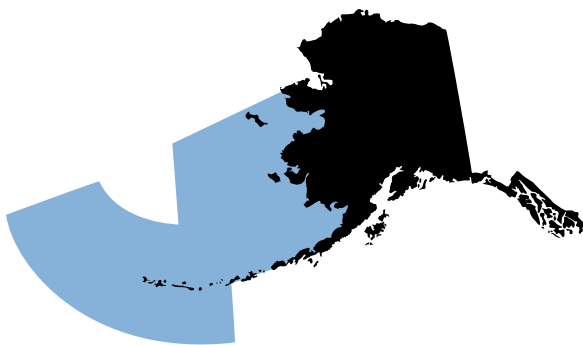
\* Bachelor's Candidate  
\*\* Master's Candidate  
\*\*\* Doctoral Candidate

TIME	TITLE	PRESENTER
CLIMATE & OCEANOGRAPHY		
8:00 - 8:15	Extending autonomous underwater glider-based ecosystem monitoring across multiple trophic levels	Hank Statscewich
8:15 - 8:30	Structure of rip currents from high-resolution hydrographic and acoustic measurements in Cook Inlet	Thilo Klenz
8:30 - 8:45	Evaluation of meso-scale eddies in MOM6-NEP simulations using satellite data	Samantha Jerry*
LOWER TROPHIC LEVELS		
8:45 - 9:00	Long-term recovery of disturbed Prince William Sound beach habitat from simulated oil spill cleanup	Gary Shigenaka
9:00 - 9:15	Distribution of <i>Alexandrium catenella</i> resting cysts in Kodiak and their role in supporting blooms	Steven R. Kibler
9:15 - 9:30	Bull kelp reproductive dynamics in Kodiak and Juneau	Angela Rose Korabik
9:30 - 10:00	Coffee Break	
FISHES & FISH HABITAT		
10:00 - 10:15	Validating Gulf of Alaska groundfish age and longevity via chemical analysis of eye lens protein	Will Patterson
10:15 - 10:30	Evaluating pelagic early life stage EFH for Gulf of Alaska groundfish using individual-based models	Mallarie Yeager
10:30 - 10:45	Signals of environmental change in spawning capelin throughout its Pacific range	Caitlin Marsteller
10:45 - 11:00	Whole genome resequencing localizes a biogeographic break in Pacific herring	Laura E. Timm
11:00 - 11:15	Understanding seasonality of fish biodiversity using eDNA metabarcoding in Kachemak Bay, Alaska	Maris Goodwin**
11:15 - 11:30	Agents of predation on late-marine Chinook salmon depend on region and fish size	Andrew Seitz
11:30 - 1:00	Lunch ( <i>Provided</i> )	
1:00 - 1:15	Coexistence of winter and spring spawning types of Pacific cod in Kodiak nurseries	Benjamin J. Laurel
1:15 - 1:30	<b>CANCELLED</b> -- Has individual variation helped "the fish that stops" Pacific cod rebound for millennia?	David Stephen Taylor

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 \*\* Master's Candidate  
 \*\*\* Doctoral Candidate

TIME	TITLE	PRESENTER
SEABIRDS & MARINE MAMMALS		
1:30 - 1:45	Seasonal fish availability and Cook Inlet beluga acoustic presence in the Kenai and Kasilof rivers	Sonia V. Kumar**
1:45 - 2:00	<b>CANCELLED</b> -- Preserving quiet winter foraging refuges: A lifeline for the endangered Cook Inlet beluga whale	Manuel Castellote
2:00 - 2:15	Seasonality of North Pacific right whales with implications for their critical habitats	Dana Wright
2:15 - 2:30	Humpback whale birth rates reflect a recovering food supply in the Gulf of Alaska	John R. Moran
2:30 - 3:00	Coffee Break	
3:00 - 3:15	Results from a collaborative pilot study to address the occurrence of gray whales in Sitka Sound	Liah McPherson
3:15 - 3:30	SeeOtter: Advances in monitoring sea otters in Alaska through AI-driven imagery analysis	Collin Power
3:30 - 3:45	Pinniped entanglement research and response: 25 years of lessons learned	Kimberly Raum-Suryan
3:45 - 4:00	Chugach Imaq Research Collaborative	Raven Alayna Cunningham
HUMANS		
4:00 - 4:15	The role of fisheries diversification in stabilizing local fishing economies: Evidence from Alaska	Kyumin Kim***
ECOSYSTEM PERSPECTIVES		
4:15 - 4:30	Should trophic interactions and climate change motivate reviewing the Gulf of Alaska Optimum Yield?	Alberto Rovellini
4:30 - 4:45	<b>CANCELLED</b> -- Trophic ecology of salmonids in the pelagic ecosystem of the Gulf of Alaska	Szymon Surma
4:45 - 5:00	Direct and cascading effects of sea star wasting on rocky intertidal communities	Mack Hughes
6:00 - 9:00	Evening Poster Presentations   Bering Sea/Aleutian Islands & Arctic Ocean	Egan Center

# BERING SEA & ALEUTIAN ISLANDS PLENARY SESSION



WEDNESDAY, JANUARY 29<sup>TH</sup>

\* Bachelor's Candidate  
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TIME	TITLE	PRESENTER
CLIMATE & OCEANOGRAPHY		
8:00 - 8:15	Collaborative research in the Bering Sea coastal domain: Toward bottom temperature predictions	Phyllis Stabeno
8:15 - 8:30	Advanced sea ice modeling for short-term forecasting for Alaska's coasts	Ayumi Fujisaki-Manome
8:30 - 8:45	CANCELLED -- Improving freezing spray guidance	Eugene Petrescu
8:45 - 9:00	Pacific-Arctic fluxes: Seasonal variability of trace metals and macronutrients in the Bering Strait	Laramie Jensen
9:00 - 9:15	Red-shifted variability in Alaskan marine ecosystems: Implications for climate tipping points	Mike Litzow
LOWER TROPHIC LEVELS		
9:15 - 9:30	Developing an Imaging FlowCytobot monitoring program to detect harmful algal blooms in Alaska	Thomas J. Farrugia
9:30 - 10:00	Coffee Break	
10:00 - 10:15	Ambient-temperature preservation of fatty acids in marine crabs for remote field collections	Reyn M. Yoshioka
10:15 - 10:30	Examining temperature-dependent starvation mortality of snow crab with practical condition metrics	Louise A. Copeman
10:30 - 10:45	Shrimp lipid and stable isotope biomarkers as metrics of groundfish prey resources in the Bering Sea	Michelle Stowell
10:45 - 11:00	Biophysical dynamics of the eastern Bering Sea Shelf from May to September 2024	Calvin W. Mordy
FISHES & FISH HABITAT		
11:00 - 11:15	Modeling migrations of gadids in the Bering and Chukchi Seas	Stephen D. Lynch
11:15 - 11:30	From boom to bust: Examining the collapse of eastern Bering Sea snow crab during a marine heatwave	Samuel Comeau**
11:30 - 1:00	Lunch ( <i>On Your Own</i> )	
1:00 - 1:15	Effects of increased temperature and ocean acidification on snow crab reproduction	Jennifer Lynn Gardner
1:15 - 1:30	Past to present: Compound-specific isotope analysis reveals dramatic shift in Pacific cod ecology	Marjolein Admiraal

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 \*\*\* Doctoral Candidate

TIME	TITLE	PRESENTER
1:30 - 1:45	Genetic population structure of Pacific herring ( <i>Clupea pallasii</i> ) in the eastern Bering Sea	Sydney Almgren**
1:45 - 2:00	Unpiloted Aerial Vehicle (UAS) stock assessment of salmon species along the Yup'ik River systems	Sean Gleason
2:00 - 2:15	Chumputer Vision - Helping chumps age chum salmon	Matt Callahan
SEABIRDS & MARINE MAMMALS		
2:15 - 2:30	Interdecadal shifts in seabird distributions relative to the velocity of climate change in the North	William J. Sydeman
2:30 - 3:00	Coffee Break	
3:00 - 3:15	Seabird mercury concentrations in context of large-scale mortality events during the breeding season	Veronica Padula
3:15 - 3:30	Long-term changes in archaeological seabirds' diet in the eastern and western Aleutian Islands, AK	Miranda LaZar***
3:30 - 3:45	Microplastics in NFS tissues from different foraging complexes around St. Paul Island, Alaska	Chelsea Kovalcsik***
HUMANS		
3:45 - 4:00	Reducing killer whale bycatch in the Amendment 80 trawl fishery: Lessons learned and the path ahead	Hannah Myers
4:00 - 4:15	Partnership building and community-led solutions efforts to address marine debris in Alaska	Brooke Carney
4:15 - 4:30	BRAIDED food security: Indigenous, community-led mercury monitoring in traditional foods	Veronica M. Padula
ECOSYSTEM PERSPECTIVES		
4:30 - 4:45	Transdisciplinary examination of ancestral Unangam refuse over millennia reveals mercury dynamics	Lorrie Rea
STUDENT AWARDS — POSTER PRESENTATIONS		
4:45 - 5:00	Best Student Poster Presentation Winners Announced	

# ARCTIC PLENARY SESSION



## THURSDAY, JANUARY 30<sup>TH</sup>

\* Bachelor's Candidate  
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\*\*\* Doctoral Candidate

TIME	TITLE	PRESENTER
CLIMATE & OCEANOGRAPHY		
8:00 - 8:15	Trails to the whale: A ~20-year record of Utqiagvik's spring whaling trails and Iñupiaq observations	Billy Adams & Donna Hauser
8:15 - 8:30	Coastal wave exposure in the Alaska Arctic	Jim Thomson
8:30 - 8:45	Variability in open-water sediment transport on the Beaufort Sea Shelf: A numerical modeling study	Julia Moriarty
8:45 - 9:00	Circulation and residence time in Beaufort Sea lagoons	Tina Geller***
9:00 - 9:15	Temporal variability driving biogeochemical provinces in the Pacific Arctic	Thomas Kelly
9:15 - 9:30	Enabling discovery: A new Registry of Polar Observing Networks (RoPON)	William F. Manley
9:30 - 10:00	Coffee Break	
LOWER TROPHIC LEVELS		
10:00 - 10:15	The microalgae community structure of Arctic coastal lagoons	Ellie F. Gellerson**
FISHES & FISH HABITAT		
10:15 - 10:30	Mission Implausible? Do current river temperatures allow for successful incubation of Pacific salmon in Arctic Alaska?	Elizabeth D Lindley***
10:30 - 10:45	The effects of prolonged exposure to ocean acidification in Arctic cod reproduction	Emily Slesinger
10:45 - 11:00	The effectiveness of species-specific automatic detectors for Arctic cod grunts	Shaye Ogurek*
SEABIRDS & MARINE MAMMALS		
11:00 - 11:15	Boom times in the Beaufort for humpback whales: Rapid Arctic colonization by a subarctic species	Kate Stafford
11:15 - 11:30	Diversity and temporal dynamics of Bering-Chukchi-Beaufort bowhead whale songs	Taylor A. Hersh
11:30 - 1:00	Lunch ( <i>Provided</i> )	
1:00 - 1:15	Baleen pathways: Climate-driven impacts on bowhead whale diet and movement through time	Clarissa Ribeiro Teixeira
1:15 - 1:30	Enhancing polar bear habitat selection models with prey data: A case study in the Chukchi Sea	Irina S. Trukhanova
1:30 - 1:45	Estimating polar bear ( <i>Ursus maritimus</i> ) age based on an epigenetic DNA methylation clock	Susannah Woodruff

\* Bachelor’s Candidate  
 \*\* Master’s Candidate  
 \*\*\* Doctoral Candidate

TIME	TITLE	PRESENTER
1:45 - 2:00	Walruses may be exposed to hazardous paralytic shellfish toxin levels during <i>Alexandrium</i> blooms	Patrick Charapata
2:00 - 2:15	Maternal transfer of microplastics across the placenta in subsistence harvested spotted seals	Lara Horstmann
2:15 - 2:30	Ringed seal exposure to vessel traffic in the Pacific Arctic, 2013-2022	Donna Hauser
2:30 - 3:00	Coffee Break	
HUMANS		
3:00 - 3:15	Changing winds in Utqiagvik: Perspectives from the Alaska Arctic Observatory and Knowledge Hub	Roberta Glenn-Borade
3:15 - 3:30	Navigating challenges: Collaborative mapping solutions and discoveries in Arctic waters	Caroline Wilkinson
ECOSYSTEM PERSPECTIVES		
3:30 - 3:45	Increasing HAB toxin presence in Arctic food webs: A synthesis of 5 yrs (2019-2023) of sampling	Kathi Ann Lefebvre
3:45 - 4:00	Bio-physical drivers of bowhead whale distribution near Pt. Barrow during rapid environmental change	Carin Ashjian
4:00 - 4:15	Trends in epibenthic biomass and community structure in the Chukchi Sea	Katrin Iken
4:15 - 4:30	Seasonal and spatial patterns in aquatic carbon along Alaska’s Beaufort Sea coast	James W. McClelland
4:30 - 4:45	NASA’s EVS-4 Mission FORTE: Arctic coastlines – frontlines of rapidly transforming ecosystems	Maria Tzortziou
STUDENT AWARDS — ORAL PRESENTATIONS		
4:45 - 5:00	Best Student Oral Presentations Winners Announced & Closing Remarks	

# PUBLIC WORKSHOPS AND MEETINGS held at Hotel Captain Cook

## COMMUNICATING OCEAN SCIENCES WORKSHOP, FEATURING AWARD-WINNING AUTHOR, DR. FAITH KEARNS

**January 27th | 9am - 12pm | Discovery Ballroom**

Dr. Faith Kearns, award-winning author of *Getting to the Heart of Science Communication*, will lead this workshop discussing important findings from her book and research with the goal to get participants thinking about and acting on how to re-center personal connections in science communication. Dr. Kearns is currently the Director of Research Communication for the Arizona Water Innovation Initiative at Arizona State University. Her previous work has included developing science communication projects for the Ecological Society of America, serving as an AAAS Science and Policy Fellow at the U.S. Department of State, and bridging science and policy advocacy efforts at the Pew Charitable Trusts.

## ALASKA ACOUSTIC TELEMETRY RESEARCH FORUM

**Tuesday, January 28th | 12:00-1:00pm | Voyager Room**

This workshop will be an opportunity for researchers who are studying (or are interested in studying) fish or crab movement with acoustic telemetry to meet and learn about other current or proposed research projects in Alaska. The goals are to map current or proposed efforts in Alaskan waters (e.g., locations of receivers and tagged animals), share logistical experiences, and brainstorm strategic receiver locations that would benefit research for multiple species. In addition, a description and update on the new Northeast Pacific Acoustic Telemetry (N-PACT) node will be provided.

## PAST, PRESENT, AND FUTURE MANAGEMENT OF COASTAL RESOURCES IN ALASKA

**Tuesday, January 28th | 12:00-1:00pm | Resolution Room**

The Coastal Zone Management Program is a voluntary partnership between the federal government and coastal/Great Lakes states and territories. Despite having more shoreline than the rest of the United States combined, Alaska is the only eligible state in the country to opt out of having a Coastal Zone Management Program. The objective of this workshop is to learn about Alaska's Coastal Management Program (which ended in 2011), hear from experts about coastal management more broadly, and discuss challenges, gaps, or opportunities that have arisen since the program's end in 2011. This workshop is great for resource managers, scientists, experts, people who live in coastal communities, community leaders, and anyone who has an interest in Alaska's coasts.

## SHARING STORIES ABOUT DISABILITIES, HEALTH CONDITIONS, AND CHRONIC ILLNESS AS SCIENTISTS

**Tuesday, January 28th | 12:00-1:00pm | Whitby Room**

This workshop will consist of a lecture by Skylar Bayer on the published book, *"Uncharted: How Scientists Navigate Their Own Health, Research, and Experiences of Bias"* and a discussion afterward about disabilities, medical conditions, and chronic illness in science. This presentation will focus on the importance of storytelling to communicate important cultural issues in science, how disability is an important aspect of diversity in the field, and messages of inclusion communicated through the stories of *Uncharted*. The book is a collection of first-person stories by scientists who come with a broad diversity of demographics, disciplines, career stages, medical conditions, disabilities, and experiences of accessibility and bias in science. As marine scientists, they arranged the book with a nautical journey in mind, making parallels between the uncharted journey on a ship, as they both experienced in graduate school, with the uncharted journey of science and medical diagnosis.

Media Room available all week in the Endeavor Room  
Lactation Room available in the Whitby Room



## ALASKA STUDENT CHAPTER OF THE SOCIETY FOR MARINE MAMMALOGY

**Wednesday, January 29th | 12:00-1:00pm | Quadrant Room**

Are you a student who studies marine mammals in Alaska? Do you want to be? This is the workshop for you! During this workshop, join the rest of the members of the Alaska Student Chapter of the Society for Marine Mammalogy, a newly formed nonprofit organization, to learn more about who we are, what we do, and how we can help you achieve your marine mammalogy goals. Our mission is focused on providing academic and professional networking, as well as financial assistance to our members through research, travel, and tuition funds/grants. If you love marine mammals, come check us out!

## ALASKA MARINE RESEARCH PLANNING NIGHT

**Wednesday, January 29th | 6:00-9:00pm | Quarterdeck**

Alaska Ocean Observing System (AOOS) will again be hosting the Alaska Marine Research Planning Night. This event is held in the Quarter Deck to encourage the networking aspect of this event. AOOS encourages marine researchers throughout Alaska to provide 1-5 slides that highlight cruise/field timing, location, duration, disciplines, vessel/platform, and opportunities for bunk space or data collection. AOOS will provide appetizers and a cash bar. Send slides to Sheyna Wisdom at [wisdom@aoos.org](mailto:wisdom@aoos.org).

## COMMUNITY EDUCATION NIGHT

**Wednesday, January 29th | 6:00-8:00pm | Adventure Room**

Community Education Nights make science accessible by using simple language and interactive activities. Come for short scientist presentations, a relaxed setting, and an opportunity to mingle and enjoy easy guided engagement with the science presented. Great for teachers, students, experts, community members, and anyone who has interest in Alaska's marine environments.

## EXPLORING OCEAN IRON SOLUTIONS FOR MARINE CARBON DIOXIDE REMOVAL: AN INFORMATION EXCHANGE EVENT

**Wednesday, January 29th | 6:00-8:00pm | Easter Island Room**

The Exploring Ocean Iron Solutions (ExOIS) consortium ([oceaniron.org](http://oceaniron.org)) strives to transparently and ethically advance research on whether ocean iron fertilization can be an effective and acceptable method of marine carbon dioxide removal (CDR). The ExOIS program office invites you to an informal information exchange event to hear from ExOIS members about the program's mission and objectives, to become familiar with our planning activities, and to contribute your perspectives. This session is a primer for an ongoing process of communication, and there will be more opportunities to engage and collaborate as the ExOIS program evolves.

## EXPLORING RESEARCH AND COLLABORATION OPPORTUNITIES WITH MARICULTURE OPERATIONS

**Thursday, January 30th | 5:00-7:00pm | Quarterdeck**

The Kelp Values Project, funded by the Exxon Valdez Oil Spill Trustee Council in 2022, explores the cultural, social, and economic feasibility of the kelp farming industry in southcentral Alaska, the area primarily impacted by the oil spill. This workshop brings together marine scientists, resource managers, and mariculture operators to discuss collaborative research at mariculture sites, which offer unique opportunities for environmental monitoring. This workshop will gather input on desired data collection and compensation models to support these partnerships. The findings will guide a companion session at the Mariculture Conference of Alaska in Sitka in February 2025, where mariculturists' interest and compensation needs for potential research collaborations will be further explored.

# WORKSHOPS

## MARINE DEBRIS - ROADMAP FOR RESEARCH

**Thursday, January 30th | 12:00-1:00pm | Quadrant Room**

Marine debris is a multi-faceted issue, with many different sources, pathways, impacts, and solutions that pose unique research questions. This workshop is an opportunity to gather researchers interested in marine debris and start to build a roadmap to prioritize and order research actions to address these questions to better understand and address debris impacts.

## ANNUAL MARINE MAMMAL STRANDING AND ENTANGLEMENT MEETING

**Friday, January 31st | 9:00-4:00pm | Quarterdeck**

Alaska marine mammal stranding and entanglement network members will provide presentations on recent stranding and entanglement events, research, and other highlights for around Alaska. This workshop is open to the public and will have a virtual option.

## BERING SEA CRAB RESEARCH MEETING

**Friday, January 31st | 9:00-12:00pm | Whitby Room**

New research efforts are underway to help us understand why Bristol Bay red king crab and eastern Bering Sea snow crab stocks are in decline. The purpose of this meeting is to bring together scientists and AMSS collaborators to introduce new and ongoing projects, provide planning and cruise updates, and discuss synergistic activities related to data collection, analysis, and outreach efforts.

## CMI ANNUAL REVIEW

**Friday, January 31st | 8:00-12:00pm | Endeavor Room**

This workshop presents updates on eight current environmental research projects funded through the Coastal Marine Institute Program (CMI). The CMI, a collaboration between the University of Alaska (CFOS), the Bureau of Ocean Energy Management, and the State of Alaska, works to inform management of energy resources in Alaska's Outer Continental Shelf regions. The public is encouraged to attend and participate in learning about ongoing research programming.

## DISCUSSION ON HARMFUL ALGAL BLOOMS (HABS) IN ALASKA

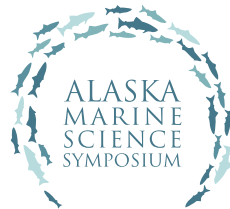
**Friday, January 31st | 9:00-12:00pm | Easter Island Room**

The Alaska Harmful Algal Bloom (AHAB) network is gathering to discuss current and upcoming activities related to HABs in Alaska. Topics will include: 2025 HAB field work, future deployments of Imaging FlowCytobots (IFCBs), development of communication materials, status of HAB-related funding proposals, following up on HAB presentations at AMSS, and HAB data working group development. The Alaska Ocean Observing System (AOOS) is hosting this discussion and will provide snacks and coffee/tea.

## REVIEWING AND REFRESHING SCIENCE MISSION REQUIREMENTS FOR FUTURE ICEBREAKERS IN THE ARCTIC

**Friday, January 31st | 9:00-11:30am | Adventure Room**

The UNOLS Arctic Marine Research Capabilities Committee is charged with reviewing and refreshing science missions and affiliated science mission requirements for future Federal Icebreakers operating in the Arctic Ocean and other northern regions. The activities of the Committee will be reviewed, and input will be sought to define future science mission scenarios from which to develop requirements for capabilities for a future vessel.



# GATHERING FOR INDIGENOUS-LED SCIENCE, MANAGEMENT, AND PRACTICE: SHARED OPPORTUNITIES AND CREATIVE SOLUTIONS IN ALASKA

**Friday, January 31st | 9:00-5:00pm | Aft Deck Room | Private Meeting - Invite Only**

This workshop brings together a diverse group working within the Indigenous-led science and ecosystem management space across and within Alaska. In a series of guided discussions, we will explore both the transformative potential and the ongoing challenges of equitably bridging Indigenous Knowledge and western science in research and management. Participants will share specific barriers they face and collectively brainstorm ways to build sustainable, mutually-supportive pathways. The session will consider responsibilities and guiding ethical principles of researchers, the fundamentals of relational research and knowledge co-production, barriers to Indigenous-led approaches, creative evaluation processes for co-led projects, and future session creation based on participant feedback. The ultimate purpose of this workshop is to continue to strengthen relationships and collaborations across geographies, institutions, and researchers in Alaska. Conference is Invite-Only. Please contact [Leckert@oceans.ubc.ca](mailto:Leckert@oceans.ubc.ca) if you are interested in attending.

## METADATA 411 WITH AXIOM DATA SCIENCE

**Friday, January 31st | 9:00-12:00pm | Voyager Room | Public Workshop**

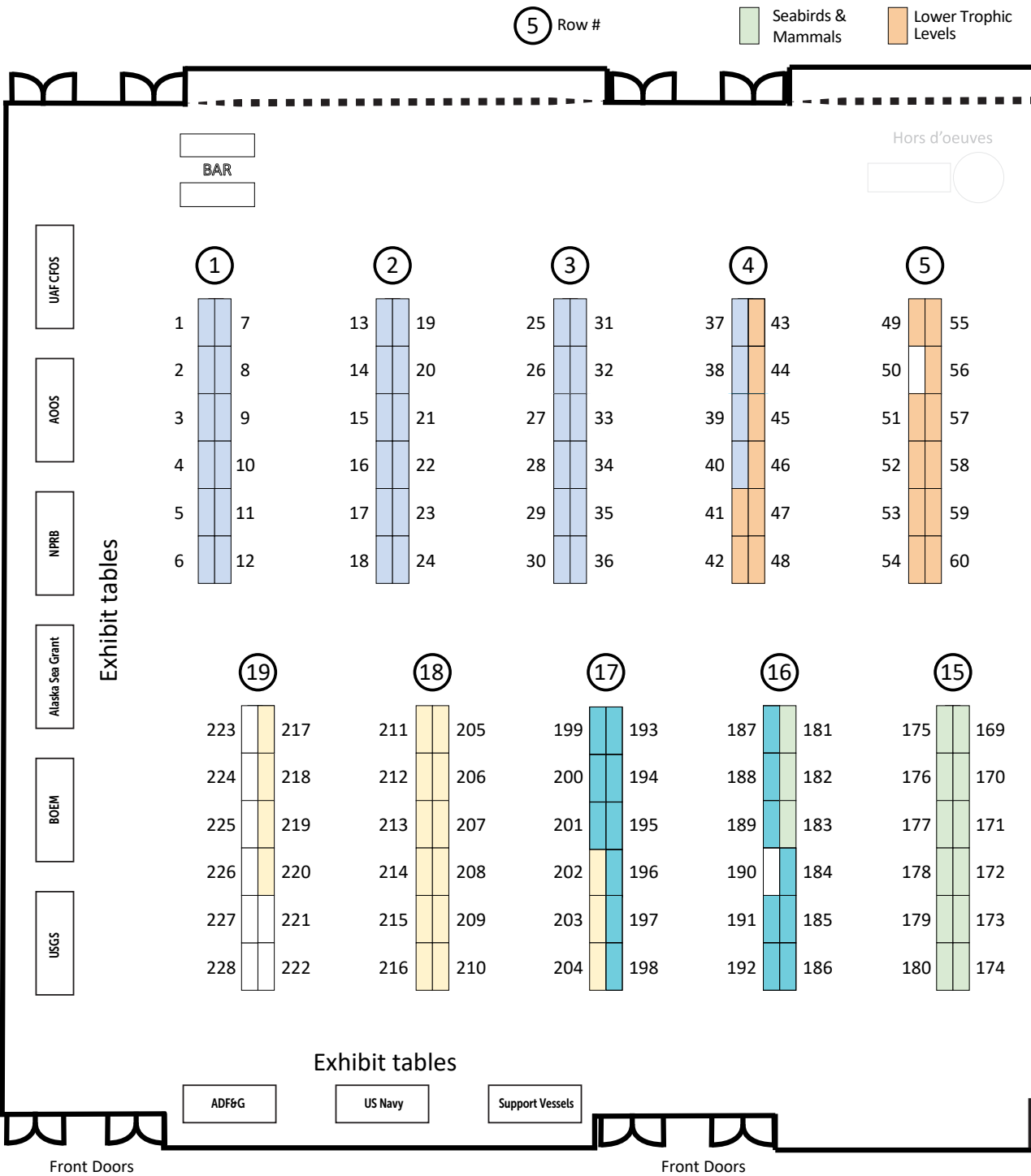
This long-form workshop is designed to provide hands on experience authoring scientific metadata for ocean and earth science data collections. Data librarians from Axiom Data Science will provide a brief introduction to data management, metadata, and the open data landscape, then provide step by step instructions on using the Axiom provided Research Workspace platform ([researchworkspace.com](https://researchworkspace.com)) for submitting data and metadata according to funder requirements. Participants will be authoring metadata live, in a practice project or for their own work, with help available from the Axiom team. As such, please bring an internet enabled device (preferably a laptop, over a tablet) in order to practice alongside us. There will be ample time for Q & A and consulting over project specifics.

## 2025 AMSS Exhibitors

- North Pacific Research Board
- Alaska Ocean Observing System
- Alaska Department of Fish and Game
- Alaska Federation of Natives
- Alaska Sea Grant
- Alaska Student Chapter of the Society for Marine Mammology
- ASL Environmental Sciences, Inc.
- Bureau of Ocean Energy Management
- Community Organized Restoration and Learning CORal Network
- Marine Mammal Commission
- MITRE
- RBR, Inc.
- Southern Cross Oceanography
- Support Vessels of Alaska
- UAF College of Fisheries and Ocean Sciences
- U.S. Geological Survey
- U.S. Navy

# VENUE MAPS

Egan Civic & Convention Center, 555 W. 5th Ave.  
Explorers Hall

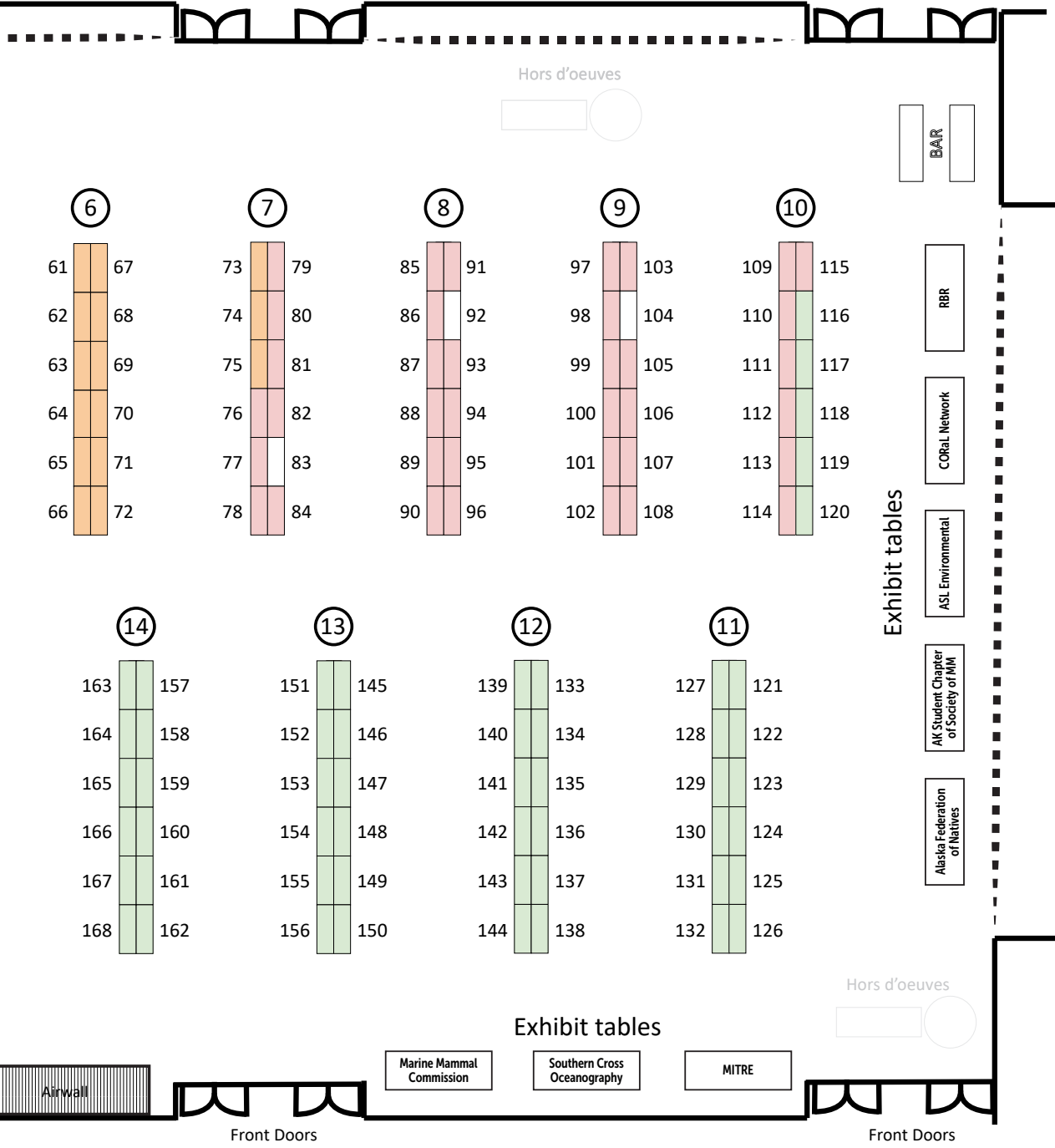


Humans

Ecosystem Perspectives

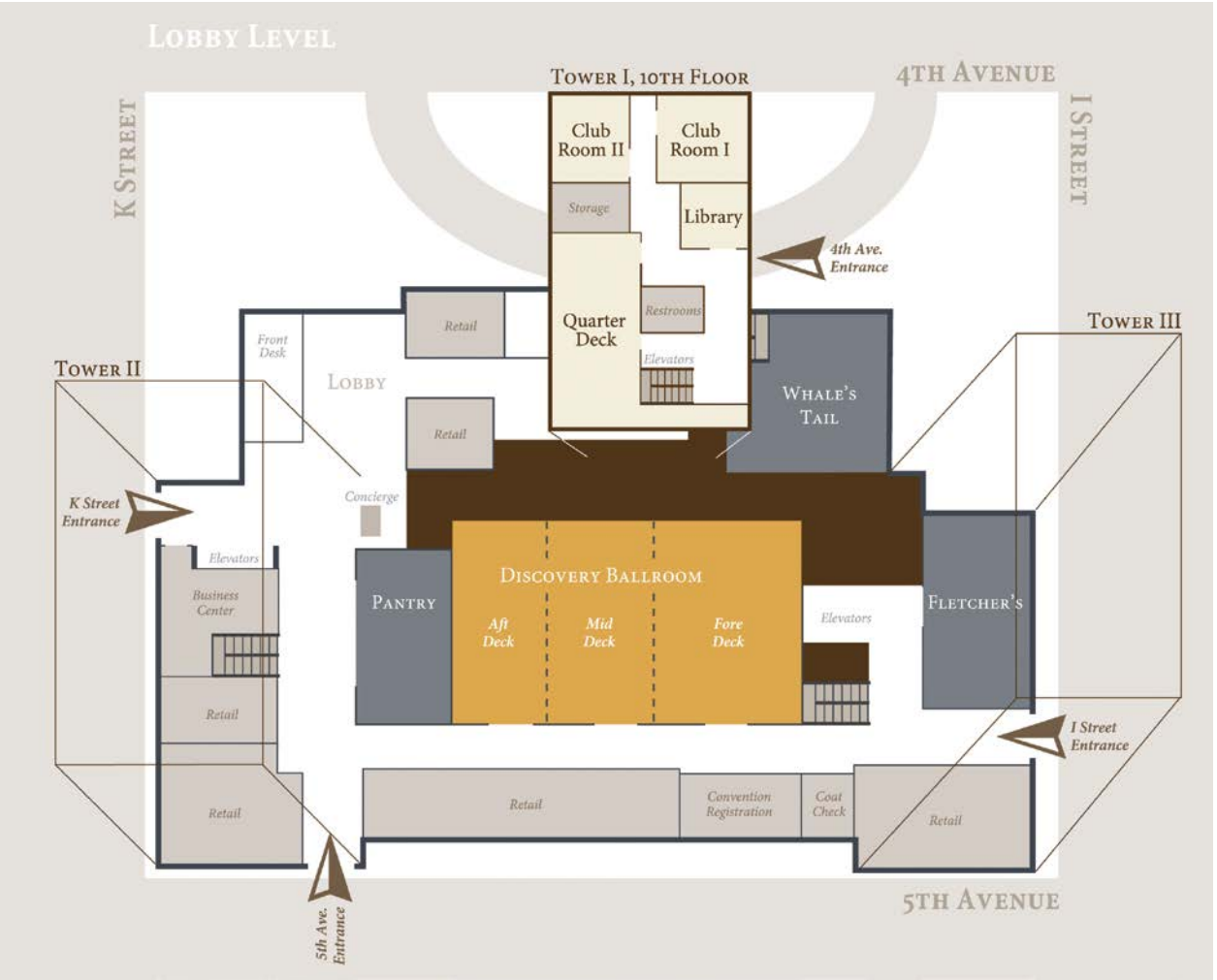
Fish and Fish Habitats

Climate and Oceanography



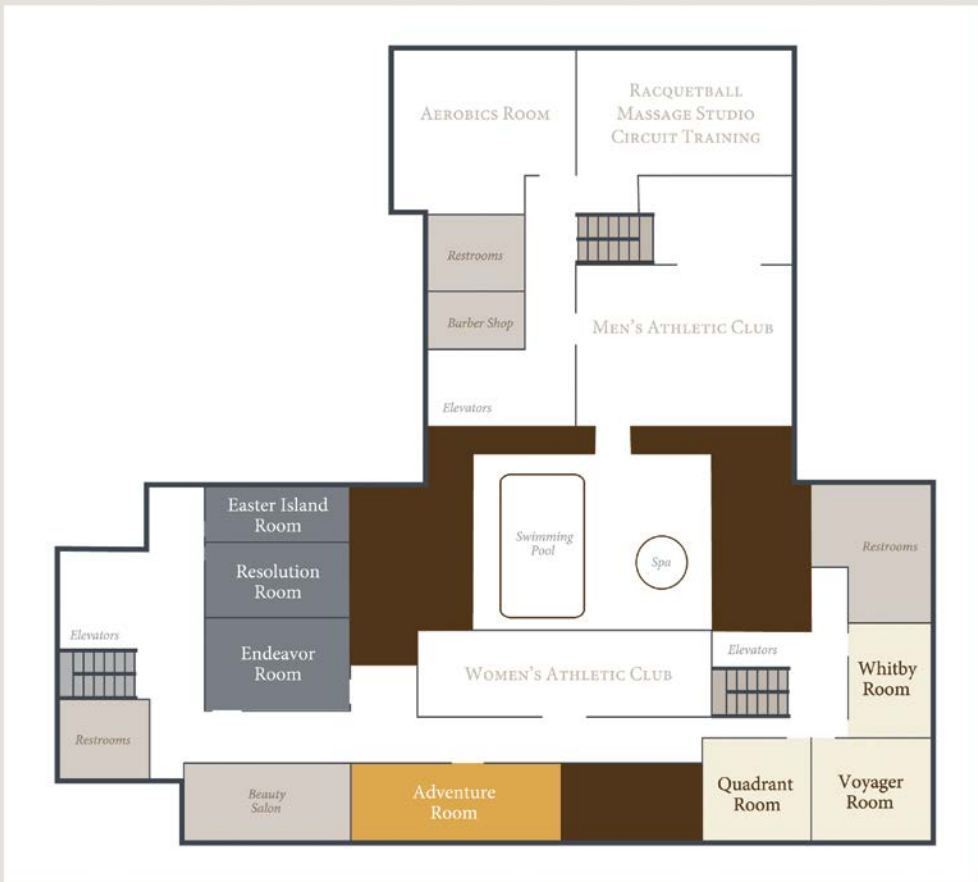
# VENUE MAPS

## Hotel Captain Cook, 939 W. 5th Ave. Lobby Level and Tower



## Hotel Captain Cook, Lower Lobby Level

### LOWER LOBBY LEVEL



# THANK YOU!

AMSS 2025 would not be possible  
without the help of many volunteers!

Thank you to the AMSS Founders (NOAA, BOEM, NPRB, AOOS and EVOSTC), and a special thanks to the following individuals for coordinating key aspects of the Symposium:

## **Event Organizer**

Crystal Moore, Crystal Clear Enterprises

## **Poster Session Coordinator**

Brooke Carney, Alaska Sea Grant

Brendan Smith, NPRB

Lily Frey, NPRB

## **Abstract Review Committee Chair**

Danielle Dickson, NPRB

## **Abstract Book Production**

Eric Cline, Terragraphica

Brendan Smith, NPRB

Lily Frey, NPRB

## **Exhibits Coordinator**

Crystal Moore, Crystal Clear Enterprises

## **Keynote Speakers Chair**

Matthew Baker, NPRB

## **Media Coordinator, Website, & Cvent Mobile App**

Brendan Smith, NPRB

## **Workshops Coordinator**

Holly Kent, AOOS

## **Student Awards Coordinator**

Thomas Farrugia, AOOS

## **Registration, Time Keeping, Student Judging, and Poster Volunteers**

We cannot thank you enough for donating your time!

# THANK YOU, CONTRIBUTORS!



**Alaska Department of Fish and Game**



**Alaska Ocean Observing System**



**United States Bureau of Ocean Energy Management**



**Cook Inlet Regional Citizens Advisory Council**



**Exxon Valdez Oil Spill Trustee Council**



**Marine Mammal Commission**



**National Oceanic and Atmospheric Administration  
Alaska Fisheries Science Center  
Alaska Regional Office**



**North Pacific Fishery Management Council**



**North Pacific Marine Science Organization**



**North Pacific Research Board**



**Oil Spill Recovery Institute**



**Pacific Seafood Processors Association**



**United States Arctic Research Commission**



**United States Geological Survey**



**World Wildlife Fund**



[alaskamarinescience.org](http://alaskamarinescience.org)

