JANUARY 29–FEBRUARY 2, 2024

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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CONTENTS

Keynote Speakers .................................................. 4
Gulf of Alaska Plenary Session ............................. 8
Arctic Plenary Session ....................................... 10
Bering Sea & Aleutian Islands Plenary Session .... 12
Workshops ............................................................ 14
Venue Maps ......................................................... 18
Contributors ......................................................... 23

TO DOWNLOAD OUR SYMPOSIUM APP, SCAN THE QR CODES BELOW.
MONDAY, JANUARY 29, 2024

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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Monday, January 29

1:30 p.m. – 2:15 p.m.

DR. KATHY KULETZ, USFWS RETIRED
Migratory Bird Management (retired / affiliate), U.S. Fish and Wildlife Service, Alaska Region

A SEABIRD’S VIEW OF THE PAST, PRESENT, AND FUTURE OF ALASKA’S OCEANS

Dr. Kathy Kuletz has been engaged in research and management of seabirds in Alaska for over 40 years. Her graduate degrees (derived from Alaska studies) include a Master’s from the University of California, Irvine and a Ph.D. from the University of Victoria, British Columbia. Kathy is retired from the U.S. Fish and Wildlife Service but remains involved in national and international projects relevant to seabird ecology and conservation. As principal investigator on multiple studies, Kathy has conducted and overseen offshore surveys to examine factors driving seabird distribution and abundance and the impacts of climate change. Kathy has served on the Science & Statistical Committee of the North Pacific Fisheries Management Council, the Executive Council of the Pacific Seabird Group, the Short-tailed Albatross Recovery Team, the Circumpolar Seabird Expert Network, and various Arctic Council and PICES working groups. She has advised damage assessment and spill response teams, as well as international conservation committees.

Abstract
Alaska’s marine ecosystems are connected physically and biologically, and seabirds move within, among, and beyond these oceans. Seabirds are highly mobile and theoretically capable of rapid responses to environmental cues over large areas. The diversity and abundance of Alaska’s seabirds are matched by rich historical context, including the deep local knowledge of Native Alaskans, casual observations of explorers, evolving efforts to standardized counts, recent applications of satellite technology, and innovative physiological and analytical techniques. Through these methods, people have sought to understand what seabirds are doing and why, how they navigate their world, and what those signals mean. In their seasonal migrations, their successes and failures at breeding colonies, what they eat or where they forage, seabirds teach us about ecosystem stability, transformation, and adaptation. I’ll consider seabird trends in Alaska, and the approaches used to better understand seabirds, and thereby the oceans on which they (and we) depend.
A DEEP-DIVE INTO THE ZOOPLANKTON OF THE GULF OF ALASKA

Dr. Russ Hopcroft is a Professor of Oceanography at the University of Alaska Fairbanks. He received his Master’s degree in 1988, and his Ph.D. in 1997 from the University of Guelph, Canada, working on tropical plankton. Before joining UAF in 2000, he did a Post-doctoral Fellowship at the Monterey Bay Aquarium Research Institute (MBARI), where he was heavily involved in the use of ROVs, in situ technologies, and traditional oceanographic surveys to study the oceans. He has broad interest in all zooplankton groups from the ubiquitous copepods to the most fragile gelatinous taxa that are rendered unrecognizable when sampled by standard collecting techniques. In addition to a rich publication record, he is broadly recognized for his images of live zooplankton that are widely distributed in the media and online.

Abstract
Zooplankton come in all shapes and sizes. While the “surface” waters of the Gulf of Alaska have been studied for decades, the communities in deeper water are virtually undescribed except for a few keystone species. In 2016, we undertook an expedition that extended the Seward Line to the Giacomini and Quinn Seamounts 200 miles offshore, sampling from the ocean’s surface the abyssal plains at 4 kilometers of depth to describe their patterns of biodiversity. We will outline the tools used from plankton nets to Remotely Operated Vehicles (ROVs), with analyses that encompass classical morphology, video recordings, and molecular identification. In particular, we will emphasize the exquisite beauty of the deep-water macro fauna (e.g., jellyfish, ctenophores, squids) that are prominent and charismatic components of the midwater communities. Many of these are known species unrecorded from the Gulf of Alaska, along with species that appear to be new to science. We will conclude by discussing plans for a follow-up cruise in May 2024.
Keynote Speakers

3:00 p.m. – 3:30 p.m. – BREAK
3:30 p.m. – 4:15 p.m.

SERENA ‘CUUCITCUAR’ ALSTROM FITKA
Executive Director, Yukon River Drainage Fisheries Association (YR DFA)

SELANGEQ ‘TO BECOME AWARE’ ON THE IMPORTANCE OF INCORPORATING TRADITIONAL KNOWLEDGE INTO WESTERN SCIENCE

Serena ‘Cuucitcuar’ Alstrom Fitka grew up in St. Mary’s on the Lower Yukon River. Her grandparents are Fred and Domitilla (Afcan) Alstrom of St. Mary’s and Tommy and Martina (Sipary) Heckman of Pilot Station. Her parents are William and Hilda Alstrom of St. Mary’s. Serena is married to Chris Fitka of Marshall. Together, they achieved their higher education goals by supporting one another as they cared for their three children while living in Fairbanks. Serena worked for her Tribe as a Summer Youth Worker in her adolescent years and grew into positions such as Secretary, Tribal Administration, and Environmental Program Director. The many successes through working for her Tribe and the Yukon River communities pushed her to go back to college to further her opportunities to serve in leadership roles. Serena has a degree in Business Administration from the University of Alaska Fairbanks with Leadership Distinction. Serena has served on the St. Mary’s City Council, United Way of Valdez, Statewide Mentor for Alaska Youth for Environmental Action, and the North Pacific Fishery Management Council Salmon Bycatch Committee. She currently serves on the Yukon River Panel Traditional Knowledge Committee and Communication Committee, Arctic River’s Indigenous Advisory Council, and Alaska Salmon Research Task Force AYK Working Group. Since joining YR DFA in 2020, Serena has brought experience she has learned into the organization’s long-standing achievements with Traditional Knowledge at the forefront of their projects.

Abstract
The stewardship of the land and animals have been looked after for thousands of years by observations by the indigenous peoples. As concern grows over declining Yukon River chinook and chum salmon, fishers are looking for ways to share their knowledge and participate in research. Yukon River fishers can provide vast and long-range knowledge about Yukon River salmon stocks gained from generations of Local and Traditional Knowledge (L TK), harvest experiences, and keen observations. Serena will elaborate on the teachings she has learned through her years growing up in her Yup’ik culture and how the organization (Yukon River Drainage Fisheries Association) she works for has successfully incorporated traditional knowledge into the programs they operate.
Haulout is a 2022 Russian-British co-production short documentary film written, directed, and produced by Maxim Arbugaev and Evgenia Arbugaeva. This film follows Russian marine biologist Maxim Chakilev to his remote hut in Chukotka, in Russian Arctic coast. Each autumn at Cape Heart-Stone in the Chukchi Sea, Chakilev observes, enumerates, and documents Pacific walrus populations that rest and mate in that timeframe. Recent loss of sea ice in the region has led to the walrus concentrating in greater numbers on beaches and shorelines. In 2020, there were record-high temperatures. Cinematographers and photographers Maxim Abrugaev and Evgenia Abrugaeva spent several months with Chakilev in the 2020 field season, documenting the massive concentrations of more than a hundred thousand Pacific walrus. Produced by Albireo Films, the film had its world premiere in February 2022 at 72nd Berlin International Film Festival. The film was selected for Academy Award for Best Documentary Short Film and shortlisted and nominated for the 95th Academy Awards.

EVGENIA ARBUGAEVA
Photographer & Producer, Tiksi, Sakha Republic, Russia

ANTHONY FISCHBACH
Research Wildlife Biologist, U.S. Geological Survey (USGS), Alaska Science Center

Evgenia Arbugaeva is a photographer of the Russian Arctic. She was born in Tiksi, a small port town of the Sakha Republic on the Arctic Sea near the mouth of the Lena River. She studied management in Moscow and photography at the International Center of Photography in New York City. She subsequently returned to Yakutsk and has developed a career photographing and documenting people in the far north of Russia, particularly hunters, scientists, and response to economic change on Russia’s northern coast.

Anthony Fischbach is a research wildlife biologist with the U.S. Geological Survey at the Alaska Science Center. His research focuses on population monitoring and modeling, applying population biology to problems of conservation and subsistence, and managing records of population biology field work. He has an extended history studying Pacific walrus, both through satellite and field observations in collaboration with scientists on both sides of the Bering Strait.
# Gulf of Alaska Plenary Session

**Tuesday, January 30th**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter</th>
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<tbody>
<tr>
<td><strong>Climate &amp; Oceanography</strong></td>
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<tr>
<td>8:00 - 8:15</td>
<td>Consequences of the North Pacific marine heatwave on phytoplankton abundance in the Gulf of Alaska</td>
<td>Loick Kléparski</td>
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<tr>
<td>8:15 - 8:30</td>
<td>Investigating the Alaska Coastal Current under various forcing scenarios in a high-resolution model</td>
<td>Thilo Klenz</td>
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<tr>
<td>8:30 - 8:45</td>
<td>Genomic tracking of the invasive green crab expansion into Alaska</td>
<td>Carolyn Tepolt</td>
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<tr>
<td><strong>Lower Trophic Levels</strong></td>
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<tr>
<td>8:45 - 9:00</td>
<td>Indoor cultivation protocols for the rhodophytes, <em>Devaleraea mollis</em> and <em>Palmaria hecatensis</em> from Alaska</td>
<td>Muriel Dittrich*</td>
</tr>
<tr>
<td>9:00 - 9:15</td>
<td>Phytoplankton response to volcanic ash and dust in the high-nutrient, low-chlorophyll Northeast Pacific</td>
<td>Karen Stamieszkin</td>
</tr>
<tr>
<td>9:15 - 9:30</td>
<td>Unexpected high importance of the smallest phytoplankton in the northern Gulf of Alaska</td>
<td>Suzanne Strom</td>
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<tr>
<td>9:30 - 10:00</td>
<td>Coffee Break</td>
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<tr>
<td>10:00 - 10:15</td>
<td>Resource use of the Pacific oyster and the Pacific blue mussel in a macroalgae-dominated system</td>
<td>Josianne Haag**</td>
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<tr>
<td><strong>Fishes &amp; Fish Habitat</strong></td>
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<tr>
<td>10:15 - 10:30</td>
<td>Winter marine ecology of chum salmon in the Gulf of Alaska</td>
<td>Lukas DeFilippo</td>
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<tr>
<td>10:30 - 10:45</td>
<td>Habitats occupied by chinook salmon in the Gulf of Alaska and in the U.S. Navy’s Temporary Maritime Activities Area</td>
<td>Andrew Seitz</td>
</tr>
<tr>
<td>10:45 - 11:00</td>
<td>Combining predator diets and survey data for spatio-temporal analysis of forage fish in Alaska</td>
<td>Lindsay Turner*</td>
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<tr>
<td>11:00 - 11:15</td>
<td>Seascape heterogeneity influences Alaskan eelgrass fish communities</td>
<td>Lia Domke</td>
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<tr>
<td>11:15 - 11:30</td>
<td>Cryptic genetic forms of Pacific Ocean perch mix in the Gulf of Alaska</td>
<td>Diana Baetscher</td>
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<tr>
<td>11:30 - 1:00</td>
<td>Lunch (Provided)</td>
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<tr>
<td><strong>Seabirds</strong></td>
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<tr>
<td>1:00 - 1:15</td>
<td>Optimizing egg harvest strategies for people and gulls through co-stewardship in Glacier Bay</td>
<td>Tania Lewis</td>
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<tr>
<td>1:15 - 1:30</td>
<td>Cultural and ecological relationships between the Unangax and seabirds on Sanak Island, Alaska</td>
<td>Miranda LaZar**</td>
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<tr>
<td>1:30 - 1:45</td>
<td>Response of harbor seal pups to cruise ships: A conservation concern in Alaska's glacial fjords</td>
<td>John Jansen</td>
</tr>
<tr>
<td>1:45 - 2:00</td>
<td>Inferred mass mortality of humpback whales in Southeast Alaska since the Northeast Pacific marine heatwave</td>
<td>Janet Neilson</td>
</tr>
<tr>
<td>2:00 - 2:15</td>
<td>Inter- and intra-annual variation in humpback whale body condition on their foraging grounds</td>
<td>Martin van Aswegen**</td>
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<tr>
<td>2:15 - 2:30</td>
<td>Drivers of seasonal sea otter distribution in Cook Inlet, Alaska</td>
<td>Nicole LaRoche</td>
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<tr>
<td>2:30 - 3:00</td>
<td>Coffee Break</td>
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<tr>
<td>3:00 - 3:15</td>
<td>Sea otter interactions with mariculture oyster farms</td>
<td>Emily Reynolds*</td>
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<tr>
<td>3:15 - 3:30</td>
<td>Ways of knowing abalone and sea otters in Sitka Sound, Alaska</td>
<td>Taylor White**</td>
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<tr>
<td>3:30 - 3:45</td>
<td>Conflict transformation in Alaskan fisheries: New ways forward in herring social-ecological systems</td>
<td>Lauren Eckert</td>
</tr>
<tr>
<td>3:45 - 4:00</td>
<td>PhytoCLAS: Learning about phytoplankton in the Gulf of Alaska through culture, language, art, and science</td>
<td>Katie Gavenus and Dehrich Schmidt-Chya</td>
</tr>
<tr>
<td>4:00 - 4:15</td>
<td>Where ice meets ocean: Monitoring fjord and coastal marine ecosystems in the eastern Gulf of Alaska</td>
<td>Jamie Womble</td>
</tr>
<tr>
<td>4:15 - 4:30</td>
<td>The Knik Tribe and ADEC’s Paralytic Shellfish Poisoning Risk Management Project – Year 1 Results</td>
<td>Solomia Bushell</td>
</tr>
<tr>
<td>4:30 - 4:45</td>
<td>Salmon trophic interactions in the pelagic ecosystem of the Gulf of Alaska</td>
<td>Szymon Surma</td>
</tr>
<tr>
<td>4:45 - 5:00</td>
<td>Outcomes of the 2023 NOAA Ocean Exploration Seascape Alaska Expedition Series</td>
<td>Sam Candio</td>
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<tr>
<td>6:00 - 7:30</td>
<td>Evening Poster Presentations</td>
<td>Wave 1</td>
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<tr>
<td>7:30 - 9:00</td>
<td>Evening Poster Presentations</td>
<td>Wave 2</td>
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* Master's Candidate  
** Doctoral Candidate
## WEDNESDAY, JANUARY 31ST

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<th>TIME</th>
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<tbody>
<tr>
<td></td>
<td><strong>CLIMATE &amp; OCEANOGRAPHY</strong></td>
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<tr>
<td>8:00 - 8:15</td>
<td>Weaving oceanography with Indigenous observations to understand the seasonality of Kotzebue Sound</td>
<td>Alexandra Ravelo</td>
</tr>
<tr>
<td>8:15 - 8:30</td>
<td>Ikaaqvik Sikukun - Inupiaq for Ice Bridges</td>
<td>Andy Mahoney and Ajit Subramaniam</td>
</tr>
<tr>
<td>8:30 - 8:45</td>
<td>Winter refugia for subarctic species in the Pacific Arctic: A newly emerging seafloor habitat?</td>
<td>Seth Danielson</td>
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<td><strong>LOWER TROPHIC LEVELS</strong></td>
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<tr>
<td>8:45 - 9:00</td>
<td>Monitoring for toxic algal blooms in the Bering Sea and Alaskan Arctic through shipboard deployments</td>
<td>Mrunmayee Pathare</td>
</tr>
<tr>
<td>9:00 - 9:15</td>
<td>Vertical carbon export by frontal dynamics during an underice phytoplankton bloom in the Chukchi Sea</td>
<td>Robert Pickart</td>
</tr>
<tr>
<td>9:15 - 9:30</td>
<td>Seasonal patterns of benthic metabolism and nutrient fluxes in Beaufort Sea coastal lagoons</td>
<td>Brian Kim**</td>
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<tr>
<td>9:30 - 10:00</td>
<td>Coffee Break</td>
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<td></td>
<td><strong>FISHES &amp; FISH HABITAT</strong></td>
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<tr>
<td>10:00 - 10:15</td>
<td>What fuels fish? Determining trophic resource use by Arctic fishes across Beaufort Sea lagoons</td>
<td>Sydney Wilkinson**</td>
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<tr>
<td>10:15 - 10:30</td>
<td>They're here! Pacific salmon are spawning in Arctic Rivers</td>
<td>Peter Westley</td>
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<td>10:30 - 10:45</td>
<td>eDNA detection of gadids: Metabarcoding assay validation and application to range shifts</td>
<td>Kimberly Ledger</td>
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<tr>
<td>10:45 - 11:00</td>
<td>What forage-size fish should a predator consume in the nearshore Beaufort Sea?</td>
<td>Ashley Stanek</td>
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<td><strong>SEABIRDS</strong></td>
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<tr>
<td>11:00 - 11:15</td>
<td>Body condition of Pacific common eiders along the Arctic Coastal Plain of Alaska</td>
<td>Elyssa Watford*</td>
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<td><strong>MARINE MAMMALS</strong></td>
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<tr>
<td>11:15 - 11:30</td>
<td>Seasonal and population level variation in the skin transcriptome of the beluga whale</td>
<td>Ebru Unal</td>
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<tr>
<td>11:30 - 1:15</td>
<td>Lunch (On Your Own)</td>
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<tr>
<td>1:00 - 1:15</td>
<td>Assessing the population consequences of disturbance and climate change for the Pacific walrus</td>
<td>Devin Johnson</td>
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<tr>
<td>1:15 - 1:30</td>
<td>Predictive trophic transfer models help assess exposure risks of saxitoxins to Pacific walruses</td>
<td>Patrick Charapata</td>
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<tr>
<td>1:30 - 1:45</td>
<td>Gliders detect the northward movements of subarctic marine mammals in the Pacific Arctic</td>
<td>Kate Stafford</td>
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<tr>
<td>1:45 - 2:00</td>
<td>Microplastics in marine mammal blubber, melon, &amp; other tissues: Evidence of translocation</td>
<td>Greg Merrill**</td>
</tr>
<tr>
<td>2:00 - 2:15</td>
<td>Trends in vessel traffic in the Bering Strait and implications for changing bowhead whale migration</td>
<td>Angela Szesciorka</td>
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<tr>
<td>2:15 - 2:30</td>
<td>Community collaborations around a coastal Alaska Arctic observatory &amp; knowledge hub</td>
<td>Donna Hauser and Roberta Tuurraq Glenn-Borade</td>
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<tr>
<td>2:30 - 3:00</td>
<td>Coffee Break</td>
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<tr>
<td>3:00 - 3:15</td>
<td>Tamamta (All of Us): Transforming western and Indigenous fisheries and marine sciences together</td>
<td>Courtney Carothers and Charlene Stern</td>
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<tr>
<td>3:15 - 3:30</td>
<td>Using bathymetric data analysis tools to map Alaska</td>
<td>Caroline Wilkinson</td>
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<td>3:30 - 3:45</td>
<td>High temporal resolution measurements of water quality in Hotham Inlet</td>
<td>Ajit Subramaniam</td>
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<td>3:45 - 4:00</td>
<td>A nutrient flux synthesis for the Bering Strait inflow using Distributed Biological Observatory Data</td>
<td>Lee Cooper</td>
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<tr>
<td>4:00 - 4:15</td>
<td>Ocean acidification in the Pacific-Arctic Region: Bridging carbonate system observational gaps</td>
<td>Thomas Caero*</td>
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<tr>
<td>4:15 - 4:30</td>
<td>Trophic roles of spotted seals in Alaskan Arctic marine ecosystems</td>
<td>Peter Boveng</td>
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<tr>
<td>4:30 - 4:45</td>
<td>Toxic blooms of <em>Alexandrium catenella</em> in the U.S. waters of western and northern Alaska: A synthesis</td>
<td>Donald Anderson</td>
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** HUMANS

** ECOSYSTEM PERSPECTIVES

** STUDENT AWARDS — POSTER PRESENTATIONS

4:45 - 5:00 | Best Student Student Presentation Winners Announced |
## THURSDAY, FEBRUARY 1ST

<table>
<thead>
<tr>
<th>TIME</th>
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<tbody>
<tr>
<td>8:00 - 8:15</td>
<td>Western Alaska storm surge amplified by basin shape</td>
<td>Steven Dykstra</td>
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<tr>
<td>8:15 - 8:30</td>
<td>Climate change adaptation in the Yukon-Kuskokwim Delta through a community-based vulnerability assessment</td>
<td>Joseph Molina</td>
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<tr>
<td>8:30 - 8:45</td>
<td>Capturing mesoscale processes in the Bering Sea with higher resolution modeling</td>
<td>Scott Durski</td>
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<tr>
<td>8:45 - 9:00</td>
<td>Coastal processes enhance bottom water acidification rates on the Bering Sea shelf</td>
<td>Darren Pilcher</td>
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<tr>
<td>9:00 - 9:15</td>
<td>Satellite detection of harmful dinoflagellate blooms in the Bering and Chukchi Seas</td>
<td>Priscila Kienteca Lange</td>
</tr>
<tr>
<td>9:15 - 9:30</td>
<td>Changes in copepod size in response to warm and cold conditions during spring in the eastern Bering Sea</td>
<td>Deana Crouser</td>
</tr>
<tr>
<td>9:30 - 10:00</td>
<td>Coffee Break</td>
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<tr>
<td>10:00 - 10:15</td>
<td>Poor energetic condition of Bering Sea snow crab during a population collapse</td>
<td>Erin Fedewa</td>
</tr>
<tr>
<td>10:15 - 10:30</td>
<td>Peering into the data-poor season: Distribution models to aid Bristol Bay red king crab management</td>
<td>Emily Ryznar</td>
</tr>
<tr>
<td>10:30 - 10:45</td>
<td>Movement modeling of Tanner crabs (Chionoecetes bairdi) via multi-platform acoustic telemetry</td>
<td>Elizabeth Hasan</td>
</tr>
<tr>
<td>10:45 - 11:00</td>
<td>Differential sensitivities to ocean acidification and warming in early life stages of Alaskan fishes</td>
<td>Emily Slesinger</td>
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<tr>
<td>11:00 - 11:15</td>
<td>Capelin condition and abundance through multiple heatwaves in Alaska</td>
<td>Rob Suryan</td>
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<tr>
<td>11:15 - 11:30</td>
<td>Building confidence in predictions of Pacific cod spawning habitat with new temperature observations</td>
<td>Lauren Rogers</td>
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<tr>
<td>11:30 - 1:00</td>
<td>Lunch (Provided)</td>
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<tr>
<td>1:00 - 1:15</td>
<td>Characterizing Pacific halibut movement dynamics with respect to current management practice in the Bering Sea</td>
<td>Austin Flanigan**</td>
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<tr>
<td>1:15 - 1:30</td>
<td>From Arctic Hotspot to Bering Sea Cold Pool: The nonbreeding distribution of a cryopelagic seabird</td>
<td>George Divoky</td>
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<tr>
<td>1:30 - 1:45</td>
<td>Changing forage conditions for molting Steller’s eiders in Izembek Lagoon, Alaska</td>
<td>Anastasia Maliguine*</td>
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<td><strong>SEABIRDS</strong></td>
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<tr>
<td>1:45 - 2:00</td>
<td>SPLASH twenty years later: What do we know about the humpback whales of the eastern Aleutian Islands</td>
<td>Heather Riley</td>
</tr>
<tr>
<td>2:00 - 2:15</td>
<td>Foraging niche, resource partitioning, and mercury concentrations of male Steller sea lions</td>
<td>Amy Bishop</td>
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<td>2:15 - 2:30</td>
<td>Saxitoxin and domoic acid exposure risks to northern fur seals on St. Paul Island, Alaska</td>
<td>Chelsea Kovalcsik*</td>
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<td>2:30 - 3:00</td>
<td>Coffee Break</td>
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<td><strong>MARINE MAMMALS</strong></td>
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<td>3:00 - 3:15</td>
<td>Aulukluki neqkat: Centering care of salmon and relational research in Indigenous fisheries in the Kuskokwim River, Alaska</td>
<td>Janessa Esquible and Jacqueline Cleveland**</td>
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<td>3:15 - 3:30</td>
<td>Immeasurable sovereignty: Accounting for Indigenous well-being in fishery science and sustainability</td>
<td>Rachel Donkersloot</td>
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<td>3:30 - 3:45</td>
<td>Arctic governance: Local voices in multi-level decision-making - A Gambell, Alaska perspective</td>
<td>Shauna Burnsilver</td>
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<td><strong>HUMANS</strong></td>
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<td>3:45 - 4:00</td>
<td>Inflated concerns over the graying of Alaska’s Bristol Bay commercial salmon fleet</td>
<td>Marcus Gho**</td>
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<td>4:00 - 4:15</td>
<td>Food sovereignty as well-being in Igiugig Village</td>
<td>Harmony Jade Sugaq Wayner*</td>
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<td>4:15 - 4:30</td>
<td>Proposing coproducing knowledge to develop a sustainable model of use in the Bering Strait</td>
<td>Heather Sauyaq Jean Gordon and Ashok Pandey</td>
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<td>4:30 - 4:45</td>
<td>Killer whale behavior around non-pelagic trawl vessels and gear modifications to reduce bycatch risk</td>
<td>Hannah Myers and John Gauvin</td>
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<td><strong>STUDENT AWARDS — ORAL PRESENTATIONS</strong></td>
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<td>4:45 - 5:00</td>
<td>Best Student Oral Presentations Winners Announced &amp; Closing Remarks</td>
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COMMUNICATING OCEAN SCIENCES WORKSHOP (COSW)
COSW STEERING COMMITTEE | JANUARY 29TH | 9AM - 12PM | DISCOVERY BALLROOM
Returning once again, the Communicating Ocean Sciences workshop provides symposium attendees an opportunity to learn new science communication tools and methods. This year the workshop will focus on, “Using Virtual Reality as a Science Communication Tool.” Led by Dr. Thomas Kelly, University of Alaska Fairbanks, and Amy Lauren, award-winning interactive filmmaker, this workshop will introduce virtual reality applications and offer hands-on demonstrations.

PYCNOPODIA MONITORING AND RESEARCH IN ALASKA
ALASKA DEPARTMENT OF FISH & GAME | JANUARY 29TH | 5PM - 7PM | ENDEAVOR ROOM
The focus of this meeting is to discuss Pycnopodia monitoring and research in Alaska. A sea star wasting disease (SSWD) event beginning in 2013 reduced the global population of sunflower sea stars by an estimated 94%. The species was recently proposed for listing as Threatened under the Endangered Species Act (ESA). The species status review report provides that Alaska is the largest portion of the species range, that impacts of SSWD appear to have been less on the species in Alaska, but that there is very sparse monitoring data for Alaska. The TNC Roadmap to Recovery highlights the importance of filling spatial/temporal monitoring gaps and conducting other research on the status of the species in Alaska. Potential goals of this meeting include: 1) sharing information on current/past monitoring and research, 2) sharing plans for future work, and 3) identifying and prioritizing monitoring and research gaps.

NOAA GRANT RECIPIENT SUPPORT FOR NEW ERA SYSTEMS
NOAA GRANTS OFFICE | JANUARY 30TH | 12PM - 1PM | RESOLUTION ROOM
To provide support for NOAA Fisheries grant recipients use of the new required grant management system.

ALASKA STUDENT CHAPTER OF THE SOCIETY FOR MARINE MAMMALOGY (AKSMM) ANNUAL STUDENT MEETING
AKSMM | JANUARY 30TH | 12PM - 1PM | ADVENTURE ROOM
The Alaska Student Chapter of the Society for Marine Mammalogy is requesting a room during AMSS so that we can host our larger annual meeting. This meeting will include updates from members around the state, discussing upcoming events, conferences, and other society-related matters.

RBR INSTRUMENTATION TRAINING FOR SCIENCE, FISHERIES, AND COMMUNITY GROUPS
RBR-GLOBAL | JANUARY 30TH | 12PM - 1PM | ENDEAVOR ROOM
This workshop will cover the sensor technology that RBR brings to the market to help academic researchers, community science groups, and resource managers obtain best-in-class oceanographic measurements with a modern user experience. The workshop will include a hands-on demonstration, case studies, and attendee participation.
CLIMATE READY WORKFORCE
ALASKA DEPARTMENT OF FISH & GAME | JANUARY 30TH | 5PM - 7PM | QUARTER DECK
Two key gaps exist in workforce development: community resilience coordinators and coastal/ocean opportunities for undergraduates. University of Alaska Fairbanks is submitting a proposal to NOAA's Climate Ready Workforce grant that would increase training and skill opportunities to support Alaska through our changing climate. This workshop would work to coordinate efforts around workforce development in our communities and receive input from the scientific community on what is needed to create Alaska’s climate ready workforce. Pizza will be provided!

SO, YOU WANT TO SHARE YOUR DATA?
AXIOM DATA SCIENCE | JANUARY 30TH | 5PM - 6PM | EASTER ISLAND ROOM
A workshop for a crash course in FAIR data sharing principles and making reproducible science artifacts per the needs of the growing Open Data movement. We’re going to cover questions like: * What is metadata and why do I need it? * What do I do when I outgrow my spreadsheets? * What do I need to do with my big data on the cloud? * What do I really have to archive? * What do I do with my model? * How do I use Research Workspace and can Axiom get me a DOI? And host any questions the attendees bring!

RETHINKING YOUR SCIENCE COMMUNICATION WITH THE CORAL NETWORK
CORAL NETWORK | JANUARY 31ST | 5PM - 7PM | ENDEAVOR ROOM
This workshop, hosted by the Community Organized Restoration and Learning Network (CORaL Network), is designed to help researchers navigate the diverse world of science communication and demonstrate how working with community partners can make scientific outreach more impactful. Participants will have the opportunity to ask questions, engage in open discussion, and learn some important things to consider when engaging with Alaskan communities. Participants will be given tools to help formulate outreach and education opportunities beyond print media and presentations. When you leave this workshop, you’ll have a better understanding of how to share your research with students, Alaska Native communities and organizations, and the general public. In addition, you will learn more about the CORaL Network and how we can help you with your future outreach and education efforts.

ALASKA MARINE RESEARCH PLANNING NIGHT
ALASKA OCEAN OBSERVING SYSTEM | JANUARY 31ST | 6PM - 9PM | QUARTER DECK
In past years, Fairweather Science hosted an Arctic Research Planning Night to provide an opportunity for marine researchers working in the Arctic to share information on their program for networking and collaboration. Alaska Ocean Observing System (AOOS) has reinstituted this fun and collaborative event and expanded the area of discussion to all Alaskan waters. It will be held in the Quarter Deck to encourage the networking aspect of this event, instead of just more presentations. AOOS encourages marine researchers throughout Alaska to provide 1-5 slides that highlights cruise timing, location, duration, disciplines, vessel, and opportunities for bunk space or data collection. AOOS will provide appetizers and a cash bar (we are Federally funded, so sadly we can’t provide the same free drinks). Please send slides to Sheyna Wisdom at wisdom@aoos.org.
CELEBRATION OF LIFE FOR CRAIG GEORGE AND STEVE OKKONEN
FEBRUARY 1ST | 6PM - 9PM | QUARTER DECK

BRISTOL BAY RED KING CRAB RESEARCH MEETING
ALASKA DEPARTMENT OF FISH & GAME | FEBRUARY 2ND | 9AM - 11AM | VOYAGER ROOM

A plethora of new scientific research is underway to help understand the potential mechanisms behind the decline of the Bristol Bay red king crab stock. Several new projects have been designed to help expand our current knowledge to address unknowns such as winter spatial distribution (CPS #1/2), adult movement (NPRB #23-09), and early life recruitment (NPRB #23-08). The purpose of this meeting is to bring together program scientists and interested AMSS collaborators to introduce new projects, provide planning and cruise updates, and discuss synergistic activities related to data collection, analysis, and outreach efforts.

HARMFUL ALGAL BLOOM PROJECTS IN ALASKA
ALASKA OCEAN OBSERVING SYSTEM | FEBRUARY 2ND | 8:30AM - 12PM | ADVENTURE ROOM

This workshop will bring together harmful algal bloom (HAB) researchers, managers, and monitors working in Alaska to discuss the current status of HAB work in the state and help coordinate and inform about upcoming projects. Specific topics that will be discussed include: the future of the AHB network; developing the capacity of Imaging Flow Cytobots (IFCB) in Alaska; the HAB expert panel of the Arctic ROADS project, and; upcoming proposals being submitted for HAB work in Alaska.

2024 AMSS Exhibitors

- Marine Mammal Commission (MMC)
- Alaska Federation of Natives
- U.S. Geological Survey
- University of Alaska Fairbanks College of Fisheries and Ocean Sciences
- Alaska Ocean Observing System (AOOS)
- North Pacific Research Board (NPRB)
- Prince William Sound Science Center (PWSSC) & Oil Spill Recovery Institute (OSRI)
- MITRE
- U.S. Navy
- RBR
- Cook Inlet Regional Citizens Advisory Council (CIRAC)
- Alaska NSF EPSCoR
- CORaL Network
- Support Vessels of Alaska, Inc.
- Alaska Student Chapter of the Society for Marine Mammalogy

Sean Neilson
Hotel Captain Cook, 939 W. 5th Ave.
Lobby Level and Tower
Hotel Captain Cook, Lower Lobby Level
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**
Kayla Wagenfehr, NPRB

**Poster Session Coordinator**
Kayla Wagenfehr, NPRB
Jill Prewitt, AOOS

**Abstract Review Committee Chair**
Danielle Dickson, NPRB

**Abstract Book Production**
Eric Cline, Terragraphica
Brendan Smith, NPRB

**Exhibits Coordinator**
Kayla Wagenfehr, NPRB

**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!

North Pacific Research Board
Alaska Ocean Observing System
Marine Mammal Commission

United States Geological Survey
Sea Grant Alaska
Oil Spill Recovery Institute

National Oceanic and Atmospheric Administration
North Pacific Fishery Management Council
Alaska Department of Fish and Game

United States Arctic Research Commission
Exxon Valdez Oil Spill Trustee Council
World Wildlife Fund

MITRE

Cook Inlet Regional Citizens Advisory Council
U.S. Bureau of Ocean Energy Management
North Pacific Marine Science Organization
Pacific Seafood Processors Association