



Community Observers in Arctic Research

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Bernice Oyagak, Outreach & Engagement Manager

Lloyd Pikok Jr., Videographer/Science Liaison



Defining a *Community Observer*

The overall objective is to scan the horizon and maintain high-level communication between the vessel, subsistence hunters, and land-based stations to ensure, to the best of their ability, that potential conflicts between animals, subsistence hunters, and the vessel are avoided to prevent negative impacts.

A C/O **is not** a person who represents all coastal Alaskan communities.

A C/O **is not** a person who will communicate sensitive scientific data that impacts a community.



Shipboard support in 2023



- Eidam 2303606 – Building Arctic seagoing research capacity: Arctic Chief Scientist Training Cruise
 - June 3 2023 – June 13 2023
 - Observer
- Arrigo 2135316 – The Tale of Three Systems: Fate of Primary Production in the Chukchi Sea
 - June 13 2023 – July 30 2023
 - Observer



Shipboard support in 2024

- Pickart 2135537 – Monitoring the Western Arctic Boundary Current in a Warming Climate: Atmospheric Forcing and Oceanographic Response
 - Tentative Summer 2024
 - Observer



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Arctic Research Operations



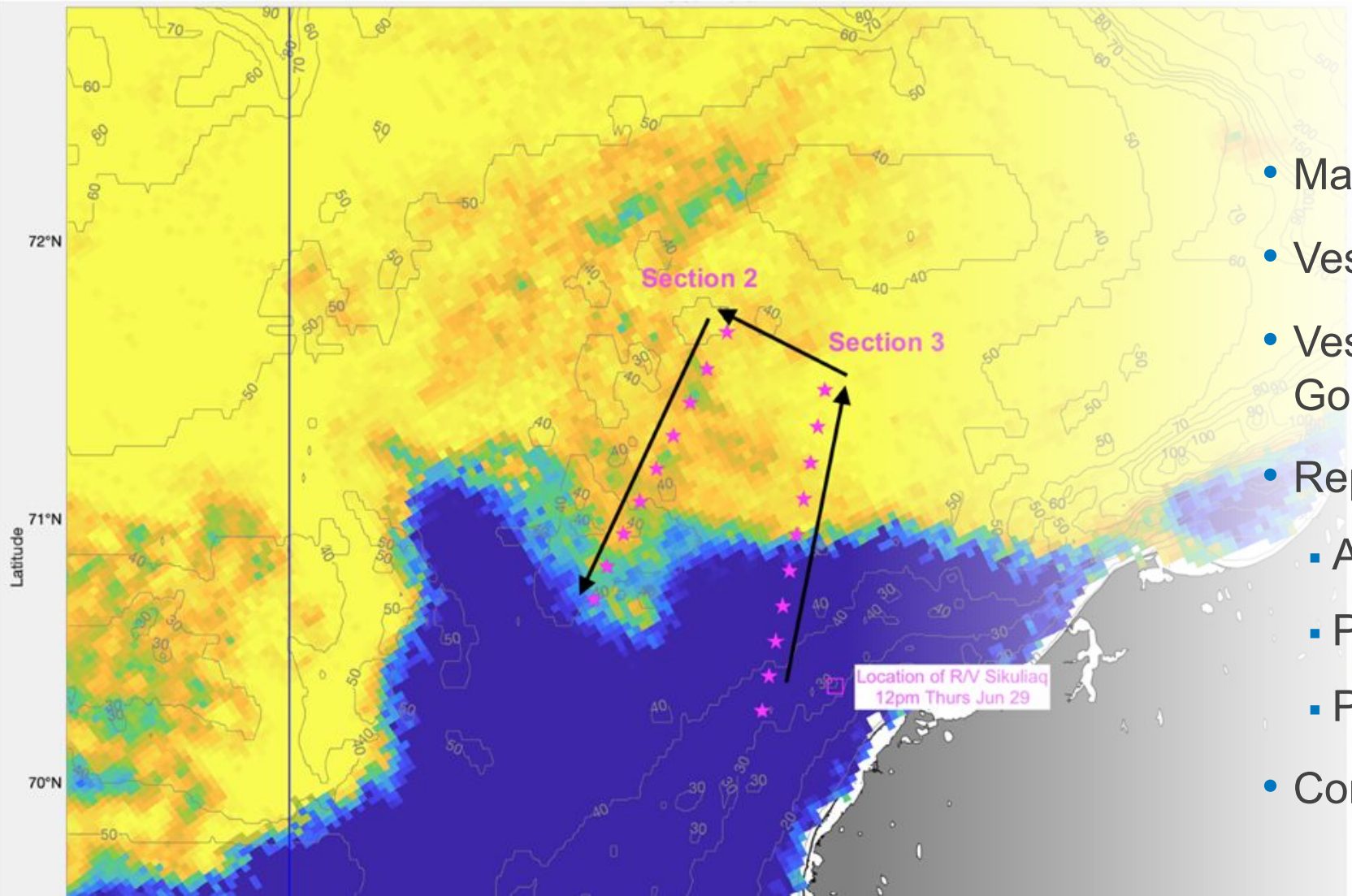
Greetings from the research vessel *Sikuliaq*. We are carrying out a multi-disciplinary study of the Chukchi Sea from June 16 to July 30, 2023. The primary goal of the mission is to better understand the fate of the algae that live within the sea ice and how they affect the ice. We will measure the sinking speeds of different species of algae under different conditions and take sediment samples to determine how much algae sinks to the sea floor. Finally, we will collect measurements of harmful algal blooms (HABs) during the summer.

We have begun occupying Section 3 for the second time, working from south to north. As we do the line, we will make a couple of excursions to the east to retrieve two of the drifting sediment traps. Going forward, we anticipate that the ice conditions change. The color on the map shows yesterday's sea-ice concentration (in percent) from satellite.

Present conditions

Location: 70.4 °N, 162.8 °W
Wind: 12 knots out of the north
Sea surface temperature: 39.7°F
Sea surface salinity: 31.7 PSU

Daily Cruise Report



- Mass E-mail – still growing!
- Vessel Mission
- Vessel Location/Direction Going
- Reporting/Findings
 - Animals Sightings
 - Present Conditions
 - Photos
- Contact Information





Pickart 1733564 Project Community Observer Report
10/31/2022 – 12/3/2022

Lloyd Pikok Jr
12-8-22

Role

The Community Observer (CO) scanned for, and identified, polar bears from the both the port and starboard sides of the vessel. The CO was present on the bridge during daylight hours while in and out of the ice, and he used a pair of Vortex Diamondback 10x56 binoculars and a Vortex Diamondback 20x60 spotting scope to scan the horizon. Reporting was required for all polar bear encounters regardless of time of day. If a polar bear was observed, the CO sent a report to the Chief of Science which included: time, location, weather, distance from vessel, total bears, bear activity, bear behavior, possible attractants, and mitigation actions taken.

The CO also sent daily updates via email to a predetermined list of community and organizational contacts while science operations were being conducted. The daily update included: location of the vessel, the vessel's travel route, science operations that took place, water surface temperature, water salinity, a map of the vessel's travel route, and a photo taken by the photographer on board. The CO sent a total of 25 daily updates to an email list of 98 recipients. The recipients were a mix of whaling captains, marine authorities (like the Alaska Eskimo Whaling Commission), community members, teachers, the National Science Foundation, and Battelle ARO.

Report

There were 15 Polar Bears reported by the CO to the Chief of Science. Of the 15 reported, three were reported as male while the remaining 12 were reported as unknown. One polar bear was reported as "brownish or dirty in color" which seemed unusual considering the time of year. All polar bears were reported in the Beaufort Sea on first year ice. No polar bear dens were observed. There were also several ringed seals (10+), one bearded seal, and three arctic foxes observed, but did not require official reporting. The CO also received two scientific inquiries during the daily updates that were forwarded to the Chief of Science. The inquiries were made by a scientist based in Utqiagvik. He was interested in the water surface temperature and salinity. This scientist and the Chief of Science had a delightful email conversation about ocean currents during a storm. No other questions or concerns regarding science were received.



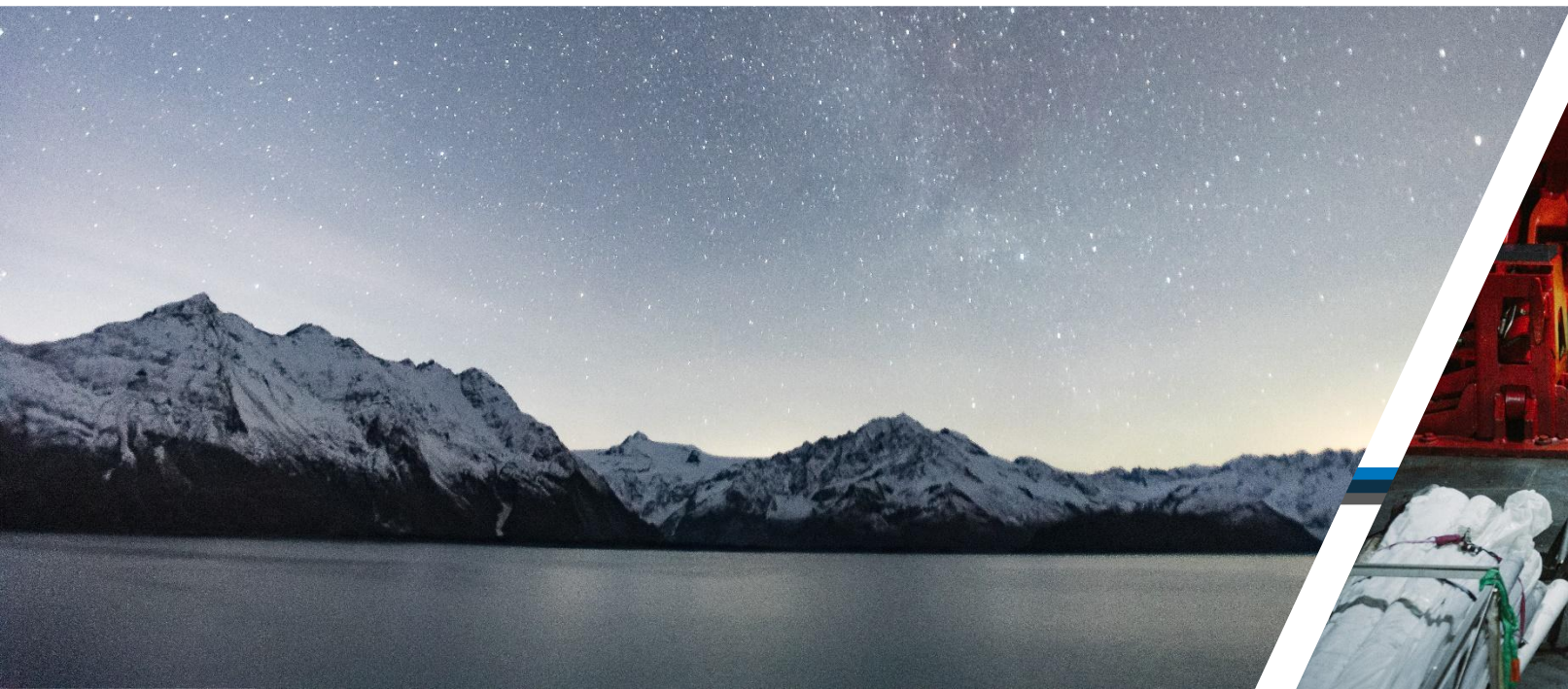
1. polar bear tracks on the sea ice. photo credit Lloyd Pikok Jr.

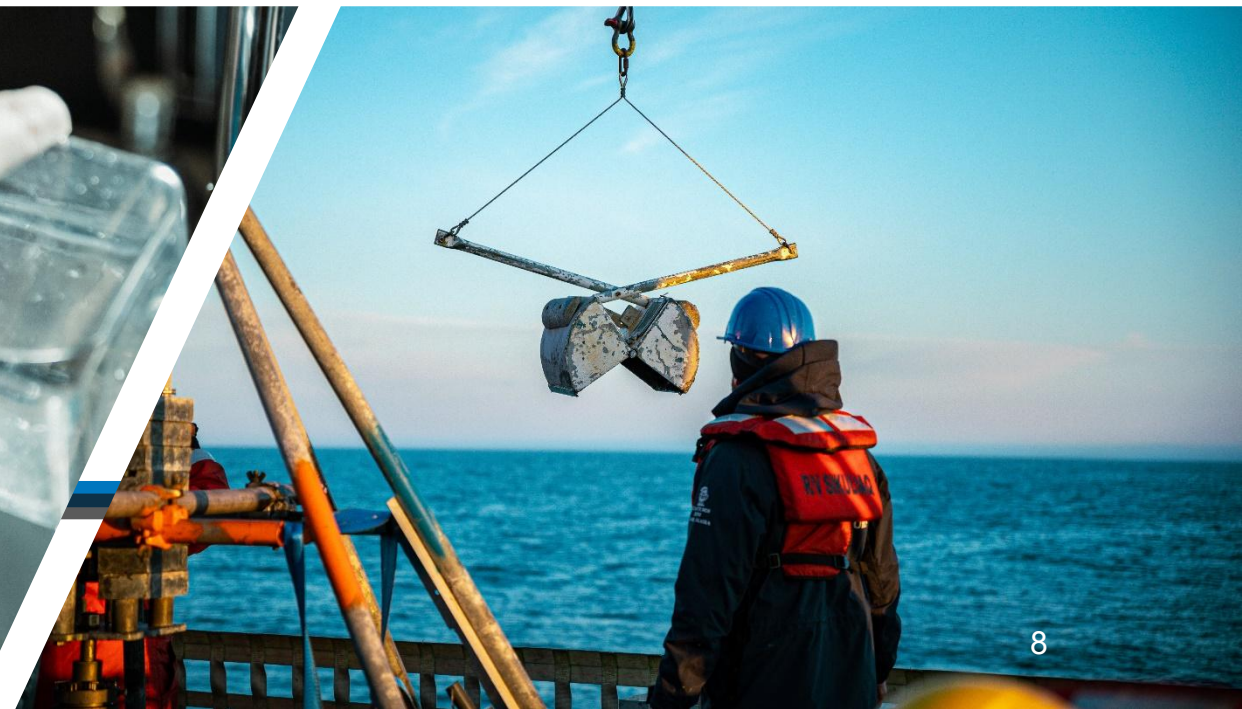


Post-Cruise Report

- Role of C/O
- Reporting/Findings
 - Community Concerns
 - Animals Sightings
 - Polar Bears & Dens
 - Seals
 - Foxes
 - Birds
- Feedback/Summary







Lloyd Pikok, Jr. (6-Minute Interview)

- To better understand the role of the C/O, watch Lloyd's video!
 - https://battlearcticgateway.org/sites/default/files/2023-05/AEWC_Video_with_disclaimers_99.mp4





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800.201.2011 | solutions@battelle.org | www.battelle.org