COMMUNITY-BASED OBSERVATIONS OF ARCTIC CHANGE Donna Hauser, Josh Jones, Olivia Lee, Billy Adams, Steven Patkotak, Joe Leavitt, Bobby Schaeffer, Hajo Eicken

The Alaska Arctic Observatory and Knowledge Hub (AAOKH) is a community-based observing network that works to empower northern Alaska communities with tools, resources, and support to share their knowledge of local environmental change. Observations are added to an ongoing Exchange for Local Observations and Knowledge of the Arctic (ELOKA) database containing over 7,000 local observations since 2006.

Close ice edge, wide open lead Steven Patkotak Measuring ocean properties Industry partners Prudhoe Bay

Wainwright

May 5-7, 2019- "Close in ice edge subsistence camp, just out front [of town]. Also spring migration of waterfowl. Big ocean shows itself with so much ice gone. Huge lead and waves."

Warm weather, increased storminess, thin ice **Bobby Schaeffer Kotzebue** March 16, 2019- "We had a total of 20 storms in February. Unheard of. The high temperature today was 35 degrees. A friend...drilled a hole. He said [the ice] was less than a foot thick. Too much snow, warm temperatures, and over flow under the fresh snow will cause the strong currents to eat away at

Changing wildlife patterns & health Billy Adams Utqiaġvik June 9, 2019- "Walruses were seen on large floes



of ice [earliest date of memory]. So we decided to take our small boats over the ice with snowmachines and 4 wheelers."

June 18, 2019- "A large bearded seal with hair loss, discolored blubber, did not smell right, and hard bumps throughout the seal."



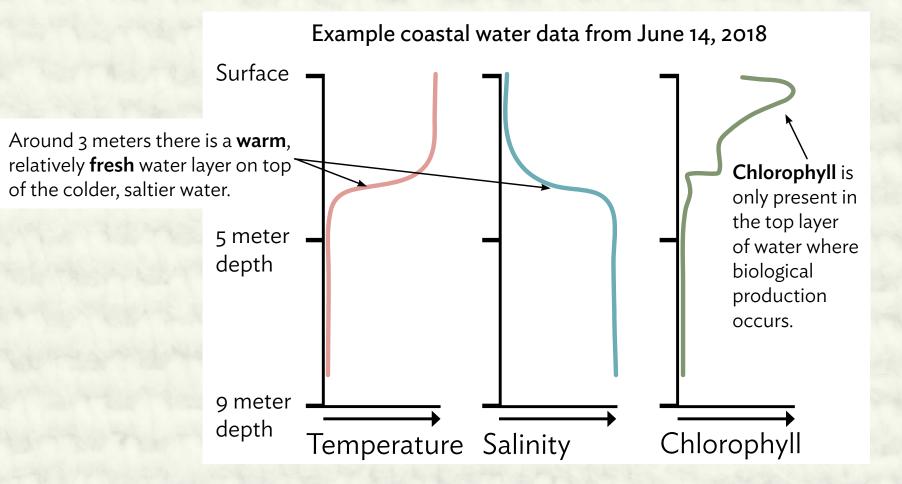
Coastal erosion Lee Kayotuk Kaktovik

"There is lots of erosion happening in my area. Permafrost is melting and the ocean is just wiping the north



Kaktovik

Several observers as well as industry partners measure water properties to help explain ocean heat drivers and biological productivity.



the already thin ice.



Kotzebue

L dette

Utqiaġvik

Wainwright

Point Lay

Point Hope

Early break-up Robert Tokeinna Jr. Wales

April 11, 2019- "The last of the shorefast ice left the land and [also] pretty much all flow ice. Temperature has been in the upper 20's" Indigenous and Scientific knowledge exchange

The AAOKH Knowledge Hub provides tools and relevant data to communities in the context of a changing seasonal cycle, with three primary goals:

Create a forum for collaboration to exchange knowledge regarding aspects of environmental change, traditional

of the island out. The storms are so bad."

Prudhoe Bay

industry partners





resources, and how this matters to each community

- Link to remote sensing data and information from collaborators studying subsistence species and oceanography
- Provide resources for education and outreach

AAOKH is guided by a Steering Group composed of community representatives & UAF academics.

Learn more at arctic-aok.org or follow us on Facebook @ArcticAOK.

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