

## AHAB Monthly Meeting July 11th, 2019

**Attendees (by phone):** Kayla Schommer and Darcy Dugan (AOOS), Kari Lanphier (Sitka Tribe), Dominic Hondelero and Kris Holderied (NOAA NCCOS), Sarah Schoen, Matt Smith and Caroline Van Hemert (USGS), Andie Wall (Kodiak Area Native Association), John Harley (UAS), Don Anderson (Woods Hole Oceanographic Institute), Gay Sheffield (Alaska Sea Grant), Patryce McKinney (ADEC Lab), Rosie Robinson (KBNERR), Courtney Hart (UAF), Julie Matweyou (Alaska Sea Grant), Joe Mclaughlin (Alaska Department of Health), Carol Brady (DEC), Aaron Poe (Aleutians Bering Sea Initiative), Kimberlee Beckman (ADF&G), Anne Garland.

### Updates by Region

#### **Kachemak Bay/Cook inlet**

Rosie Robinson from the Kachemak Bay Research Reserve provided an update on the Cook inlet and Kachemak Bay region. She expressed that it has been a weird summer for them. Their phytoplankton samples throughout the summer have been coming in with *Pseudo-nitzschia* but have not been positive for toxins. For the most part, no shellfish collected have shown high levels of toxin or PSP. Usually when they see a lot of *Pseudo-nitzschia* or *Alexandrium* on a slide, it's a red flag but this summer they haven't had toxic shellfish. They are continuing with their phytoplankton sampling but will start to be rearing back shellfish sampling as we get further into September.

Dominic Hondelero and Kris Holderied provided an update for the Kasitsna Bay Laboratory. They echoed Rosie's statement, saying it has been a strange summer as well. Similarly, they are seeing *Pseudo-nitzschia* and *Alexandrium* but no PSP or DA. They are continuing work on their Food Web sampling research. They are sending samples to Steve Kibler at the Beaufort Lab and will continue collecting food web samples. They are also going out to do the quarterly gulf watch sampling this week. The region is getting its first rain in a long time this week. Kris also mentioned that they are working with AOOS and Axiom to put together a data view. This data view will be integrating satellite data with temperature thresholds for *Alexandrium* growth using continuous data from water quality stations. She will be asking for input from this group on what it looks like.

#### **Aleutian and Pribilof Islands**

No regional representative was available on the call.

#### **Southeast**

Kari Lanphier (Sitka Tribe of Alaska/ Southeast Alaska Tribal Ocean Research) provided an update on the Southeast region. She also mentioned that the Southeast was getting their first rain in a long time. She reiterated that it was a very hot summer in the SE. They received a handful of samples over 800 micrograms of toxin per 100 grams of tissue. This is twice the amount they have seen in past years. It is dying down now in the region with only 4 blue mussels coming in over the regulatory limit since the beginning of August. Other sites whose toxin levels went down in July and August have started to rise again. In 2018, they saw a large

fall bloom in the Southeast. They are keeping an eye out for that again, however by this time last year they had already seen the levels rise much higher.

### **Kodiak**

Andie Wall (KANA) provided an update on the Kodiak region. She stated that it was a pretty quiet summer for them. They have had increased levels of pseudo-nitzschia and dinophysis but nothing extreme. Samples are coming back above the regulatory limit but nothing as bad as the Southeast. She was also happy to announce that they have received funding to continue toxin testing through March 2021.

### **Bering Strait/Arctic Region**

Don Anderson provided an update on his recent research cruise in the region. It was a DBO cruise about a month ago. The cruise went from Nome through the Bering Strait and into the Beaufort canyon. He reported high numbers of *Alexandrium* cells north of the strait as you get near the Chukchi Sea (4,000-8,000 cell counts). He also saw high numbers in Barrow Canyon area in the entrance to the Beaufort. He emphasized that these are all provisional numbers since they did it onboard of the ship and have not been confirmed in the lab using a DNA probe. They witnessed a widespread bloom of *Alexandrium*. He mentioned that they saw the same thing a year ago but last year it was centered in Rudyard Bay. This year is a much wider distribution. He said it was interesting to see the *Alexandrium* near the strait, thinking maybe they were transported there from the south. The other possibility is that it got there via localized germination of cysts or transport from elsewhere. He will be looking to resolve these different mechanisms and hopefully learn more definitively how the cells got there. Don also mentioned that the bottom waters were much warmer than in years passed and were certainly warm enough to germinate the cysts.

Gay also provided a short update on the Bering Strait region. She said they are still having warm weather and that the sea surface temperatures have taken a jump. They still have not had their first frost and Barrow has not had one since June. The ice is also pulled way off shore.

### **Updates from other Network members**

#### **KBNERR**

KBNERR is gauging interest within the Network on working with NOAA'S OCM to coordinate a HABs risk communication training in Anchorage this winter. This training could help develop HABs communication skills to take back to the regions. It could also be an opportunity to develop statewide tools for the network. NOAA's OCM is willing to update content with regards to Alaskan HABs. A possible date for this training is Monday January 27<sup>th</sup> (Monday before AMSS). KBNERR is hosting a similar training in Homer in October on HABs risk communication for the Southcentral region. This will help prepare for a statewide training. Below is a further information on the statewide training opportunity:

#### **Proposed 1-Day Workshop**

#### **Building HAB Risk Communication Skills**

<https://coast.noaa.gov/digitalcoast/training/building-risk-communication-skills.html>

January 27, 2019 Anchorage, AK

### NOAA Office for Coastal Management

Course Goal: AHAB members have a better understanding of how people respond to HAB related risks and will develop new communication skills and strategies for discussing hazards in their communities.

#### Course Objectives

- Recognize differing values, and identify how and why people perceive and respond to HAB risks the way they do.
- Apply social science and risk communication principles when responding to difficult questions.
- Respond to difficult scenarios with more confidence.
- Develop a HAB risk communication strategy that incorporates social science and risk communication principles.
- Networking, and sharing risk communication challenges and strategies with other AHAB members

### Kathi Lefebvre

Kayla provided an update sent from Kathi Lefebvre:

“We were able to establish HAB and food web sampling on 8 cruises this summer. We will be collecting seawater, phytoplankton, zooplankton, sediments, bivalves, and fish samples to test for algal toxins. We will also continue our marine mammal sample collections continuously (all marine mammal species all regions both subsistence and stranded animals).”

The cruises and sampling locations are summarized here:

- 1) **Healy Cruise** Aug 4th to 23rd, Beaufort Sea & North Bering Sea (the cruise Don Anderson reported on)
- 2) **Arctic IERP Leg 1** Aug 1-23, Beaufort Sea & North Bering Sea
- 3) **Arctic IERP Leg 2** Aug 25- Sept. 14th, North Chukchi Sea
- 4) **Arctic IERP Leg 3** Aug 25- Sept. 14th, Chukchi Sea, Bering Strait
- 5) **North Bering Sea (NBS) Cruise Leg 1** Aug 27- Sept. 8th, North Bering Sea
- 6) **North Bering Sea (NBS) Cruise Leg 2** Sept. 8th - 20th, North Bering Sea
- 7) **Southeast Coastal Monitoring (SECM) Cruise** Aug 20-26, Southeast Alaska inland waters, Gulf of Juneau
- 8) **Western Gulf of Alaska (WGOA) cruise** Western coastal waters of the Gulf of Alaska.

- 9) I'll am working on another opportunity to get HAB samples in November from the **Ice edge** in the Chukchi/Beaufort Seas with the University of Alaska Fairbanks college of Fisheries and Ocean Sciences.

#### **Discussion on communication of results from Don Anderson's cruise**

A discussion concerning how to inform the public about the result from Don's cruise occurred. Gay questioned whether something should be drafted for local people with a heads up about the *Alexandrium* in the Chukchi. He agreed that something should be drafted but that we need to be careful about what we say since little is known about the levels of toxins in the food web with birds and marine mammals. They agreed that right now, a precautionary notice would be useful and that Gay would draft something up and send it around. It was also mentioned that there is funding for shellfish washed onshore from storms or walrus stomach to be tested for toxins from the Bering Strait region.

#### **Kimberly Beckman**

Dr. Beckman who is a wildlife health veterinarian with ADF&G provided an update on marine toxins in bears. In August, a call was made to ADF&G reporting 4 bears north of Ketchikan in Neets Bay showing neurological signs such as stiff hind limbs, drunken behavior, clumsiness, seizures, and loss of consciousness. There was also a video of this event sent in. An ADF&G biologist was dispatched a few days after the call and watched the bear for 30 minutes and it appeared to have recovered and was acting normally. The salmon run was late in that region and it appeared that the bears had been eating blue mussels that they had been shucking off buoys near the beach. Levels of PSP in Ketchikan during this time were over 3,000 micrograms of toxin per 100 grams of tissues. Dr. Beckman is concerned about DA poisoning in the bears. This was due to their behavior being very similar to sea lions in California who have been proven to have DA poisoning. This is the first time ADF&G has had a report like this, especially with multiple animals involved.

Kari from SEATOR mentioned that they have received funding for DA testing. They will most be focusing on samples they have already collected for PSP but will have some wiggle room to test other samples if an event like this occurs again. They are planning to implement DA testing next summer.

#### **Update from the AHAB Network Coordinator**

Kayla Schommer (AOOS) ended the call by announcing it was her last day as the AHAB coordinator and that Darcy Dugan will be taking over the role temporarily. She thanked everyone for the amazing last year during her fellowship.

Our next monthly update call will be held **October 10th at 10 am AKST.**