



Greetings,

This issue marks the end of monitoring year 6 for the anticipated 20-year program - also known as the first year of the second five-year increment successfully implemented by the EVOSTC. We have made a great deal of progress since the program's inception in 2012 and we look forward to future achievements. Here is a brief fourth quarter summary of our program activities and accomplishments.

# Science Update:

Since this is a winter quarter we don't have a lot of observations from the field as PIs are busy processing samples, summarizing data, writing reports, and attending conferences. However, a few hearty PIs did complete a December survey in PWS. Observations are preliminary and should not be interpreted as results:

- The PWS mooring was retrieved on November 2nd.
- Marine bird surveys were conducted December 1-6 in collaboration with NOAA pollock surveys in PWS.
- PWS humpback whale surveys in early December had lower numbers of whales and marine birds along with low numbers of other forage fish and krill relative to previous years. On December 6th, 8 to 12 whales were encountered feeding on a shoal of adult herring [estimated herring biomass at 7,435 (95% CI: 5845-9025) metric tonnes], within a 2.5 nmi<sup>2</sup> area off the north end of Montague Island. We have not previously observed large shoals of overwintering herring and whales in this area during limited winter surveys. This exemplifies the importance of winter surveys.
- The Pelagic Component took possession of a highly valuable collection of frozen forage fish obtained from seabirds on Middleton Island representing over a decade of sample collection. These samples had been archived by Dr. Scott Hatch and are scientifically "valuable" because they will allow retrospective age, growth, condition, and chemical analyses of forage fishes. A fish ecologist's dream!

#### Meetings:

- Week of November 14<sup>th</sup> GWA's Program Lead briefed the EVOSTC Trustees in Anchorage; Nov. 15-17 we held our annual GWA PI meeting in Cordova.
- Week of January 22<sup>nd</sup> This marked a busy week in Anchorage as GWA PIs attended the 2018 Alaska Marine Science Symposium (AMSS). However, some federal PI travel was delayed or cancelled due to the government shut-down. GWA contributed 5 oral presentations and 17 posters and supplied materials at the EVOSTC booth. A full list of these presentations and posters can be found on our <u>website</u>.
- January 23<sup>rd</sup> Aligned with AMSS when a concentration of GWA PIs are in Anchorage, we convened a GWA PI meeting during a long lunch hour at the Alaska Ocean Observing System (AOOS) conference room.

# Program Management Team:

 The GWA program management team spent much of their time planning and facilitating meetings in the fourth quarter. Our Administrative Lead and Program Coordinator were key to successful meetings in Cordova and Anchorage. The Science Coordinator helped structure the annual PI meeting to focus on GWA science synthesis planning. Additional planning went into a collaboration with a NOAA Fisheries scientist and NPRB senior program manager to structure a workshop and special session for the February Ocean Sciences Meeting in Portland, Oregon focusing on the Gulf of Alaska ecosystem.

• The Program Management team has been in the process of reviewing and finalizing annual reports and budgets for year 6. Additional efforts are targeting close-out of FY12-16 deliverables to the EVOSTC that were accomplished during a no-cost extension.

# Data Management:

- The Data Management Program (AOOS/Axiom) provided opportunities for GWA PIs to get oneon-one help with metadata updates in the Research Workspace while they were in Anchorage attending the Alaska Marine Science Symposium.
- Additionally, the AOOS/Axiom data management team hosted a half-day workshop focused on authoring metadata using the Research Workspace.
- Axiom is continuing to work on National Center for Ecological Analysis and Synthesis (NCEAS) historical data for accessibility in the Research Workspace and preserving rigorous metadata in DataONE. This is key for current projects and legacy datasets that extend for decades.

### Outreach:

- Planning continues for GWA participation in the Kachemak Bay Science Conference and community listening sessions with Port Graham and Nanwalek.
- A community listening session will be held with members from Chugachmiut at the Kachemak Bay Science Conference on Wednesday March 7 from 10 am - 12 pm in preparation for the twoway exchange of ecological knowledge that the Trustee Council requested we conduct. We will conduct similar engagements in one or more villages in Prince William Sound in 2020.
- Additional community outreach and engagement is being planned in coordination with these communities during the April 2018 Sea Week.
- See updates on our website, <u>GulfWatchAlaska.org</u>

#### **Relevant Media:**

• A GWA scientist was interviewed for a news article on . KBBI news radio: <u>Now that the blob is</u> <u>over, scientists are eager to assess its impact.</u> -

# 4<sup>th</sup> Quarter Products:

 Deep-Sea Research II Special Issue update – We are excited to see the journal editors have completed the 19-paper compilation that is now published as a special issue volume of Deep-Sea Research II with a January 2018 publication date! See citation and cover below. See highlight on our <u>website</u>.

NOAA Fisheries Alaska Fisheries Science Center has highlighted some of the papers in this issue of *Deep-Sea Research II* as feature stories on their public website.

- o A Wealth of Scientific Information, Decades in the Making
- o Dall's Porpoise Expands Territory in a Changing Prince William Sound
- o Lingering Oil from Exxon Valdez Spill

 Aderhold, D. R., D. Esler, R. A. Heintz, R. R. Hopcroft, M. R. Lindeberg, W. W. Pegau. Editors. Spatial and Temporal Ecological Variability in the Northern Gulf of Alaska: What have we learned since the *Exxon Valdez* Oil Spill? Deep Sea Research Part II: Topical Studies in Oceanography, Volume 147, Pages 1-202, ISSN 0967-0645. January 2017.
<u>https://www.sciencedirect.com/journal/deep-sea-research-part-ii-topical-studies-inoceanography/vol/147/suppl/C.</u>



cover by M. Lindeberg

### Important Upcoming Dates (2018):

- March 1 Annual Reports due to EVOSTC
- March 7-10 Kachemak Bay Science Conference
- March fieldwork Humpback whales/seabirds, HRM herring spawning, Katmai coast birds
- April 3<sup>rd</sup> GWA quarterly PI teleconference
- April 16<sup>th</sup> Seward Line survey begins
- PWS Spring tides April 16-20<sup>th</sup>, May 14-20<sup>th</sup>, June 12-18<sup>th</sup>

# GWA quarterly photo:

Are you a killer whale diet expert? What was on the menu? Salmon pâté? Craig Matkin wants to know and is becoming pretty good at catching scat that will help us identify foraging habits! (*photo by Craig Matkin*).

