



4th Quarter: November 1, 2020 - January 31, 2021

Greetings!

The Gulf Watch Alaska (GWA) Principal Investigators (PIs) continue their research and monitoring to the best of their capabilities as COVID-19 persists. The most significant achievements this quarter include presenting results from their projects at the Alaska Marine Science Symposium, publishing peer reviewed papers, and drafting reports and proposals. Nothing like a cold dark winter under a pandemic to inspire some serious computer time and productivity. Be well everyone!

Here is a brief summary of our program's third quarter activities and accomplishments:

Science Update:

- Fresh out of the field! Currently the UAF glider named "Shackleton" is in PWS outfitted with a receiver to listen for tagged herring. This GWA and Herring Research & Monitoring program collaboration is looking at the feasibility of using gliders to detect tagged herring. Admittedly a potential long-shot for those skeptics out there, the PIs have tentatively reported that several tagged herring have been pinged by Shackleton. Well done! You can follow the location of the glider in real-time on the AOOS data portal at this link (Fig 1).
- Many GWA principal investigators contributed to panels, presentations, and posters at the virtual Alaska Marine Science Symposium held January 26-28 2021. Note that registered participants will have access to all content throughout 2021 so if you missed something, check it out online: <u>https://alaskamarinescience.org/2021program</u>.

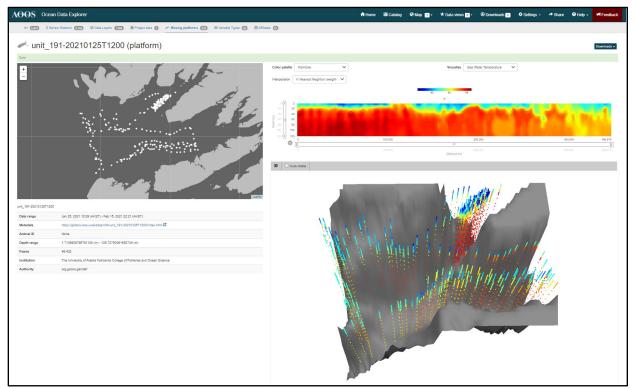


Figure 1. Screengrab of underwater glider ("Shackleton") real-time data feed to the AOOS data portal.

Program Management Team (PMT):

- The PMT coordinated a joint GWA and Herring Research & Monitoring quarterly teleconference in January to discuss and plan for the EVOSTC Invitation and next 10-year funding cycle.
- GWA PIs and the PMT are currently in the throes of preparing their annual reports for the EVOSTC.

Honoring Those Who Have Passed:

- At the Alaska Marine Science Symposium, the Gulf of Alaska keynote highlighted Pete Peterson and Pete Hagen who we lost in 2020. Molly McCammon, Bob Spies, Phil Mundy, Jim Bodkin, and Jeep Rice all gave moving reflections on the "Petes" careers and their key roles with the EVOSTC.
 - The video recording can be watched at <u>https://www.youtube.com/watch?v=wv-MCyoFEKU</u>.
 - The EVOSTC also posted an "In Memoriam" on their website <u>https://evostc.state.ak.us/about-us/in-memoriam/</u>.
 - Student scholarships have been established in their names for "Excellence in improving our understanding of ecosystems, oil spill recovery, and connecting research to societal benefits" - \$1000 Graduate Student and \$500 Undergraduate or High School. Student applications are due March 26, 2021.
 - If you are interested in donating to these scholarships please contact Scott Pegau at the PWS Science Center. <u>wspegau@pwssc.org</u>, 907-424-5800 ext 222.
- Sadly, we also lost Cherri Womac, one of the first EVOSTC employees hired in 1993. Cherri was
 the go to person for all things EVOSTC. Her knowledge, professionalism, and gracious demeanor
 will be greatly missed. See the EVOSTC "In Memoriam" on their website
 https://evostc.state.ak.us/about-us/in-memoriam/cherri-womac-1952-2020/.

Recently Accepted Publications:

- Arimitsu. M., J. Piatt, S. Hatch, R.M. Suryan, S. Batten, M.A. Bishop, R.W. Campbell, H. Coletti, D. Cushing, K. Gorman, S. Haught, R.R. Hopcroft, K.J. Kuletz, C. Marsteller, C. McKinstry, D. McGowan, J.R. Moran, S. Pegau, A. Schaefer, S. Schoen, J. Straley, V. von Biela. Accepted.
 Heatwave-induced synchrony within forage fish portfolio disrupts energy flow to top pelagic predators. Global Change Biology. <u>https://onlinelibrary.wiley.com/doi/abs/10.1111/gcb.15556</u>
- Suryan, R.M., M.L. Arimitsu, H.A. Coletti, R.R. Hopcroft, M.R. Lindeberg, S.J. Barbeaux, S.D. Batten, W.J. Burt, M.A. Bishop, J.L. Bodkin, R.E. Brenner, R.W. Campbell, D.A. Cushing, S.L. Danielson, M.W. Dorn, B. Drummond, D. Esler, T Gelatt, D.H. Hanselman, S.A. Hatch, S. Haught, K. Holderied, K. Iken, D.B. Iron, A.B. Kettle, D.G. Kimmel, B. Konar, K.J. Kuletz, B.J. Laurel, J.M. Maniscalco, C. Matkin, C.A.E. McKinstry, D.H. Monson, J.R. Moran, D. Olsen, W.A. Palsson, W.S. Pegau, J.F. Piatt, L.A. Rogers, N.A. Rojek, A. Schaefer, I.B. Spies, J.M. Straley, S.L. Strom, K.L. Sweeney, M. Szymkowiak, B.P. Weitzman, E.M. Yasumiishi, and S.G. Zador. *Accepted*. Ecosystem response persists after a prolonged marine heatwave. Scientific Reports.
- Weitzman, B.P., B. Konar, K. Iken, H. Coletti, D. Monson, R.M. Suryan, T. Dean, D. Hondolero and M.R. Lindeberg. *Accepted*. Changes in Rocky Intertidal Community Structure During a Marine Heatwave in the Northern Gulf Of Alaska. Frontiers in Marine Science. https://doi.org/10.3389/fmars.2021.556820

Important Upcoming Dates:

- March 1, 2021 GWA Annual Reports Due
- March 31, 2031 Response to EVOSTC FY22-31 Invitations

Gulf Watch Alaska Quarterly Photo:



Every year the GWA program holds a photo contest at their annual PI meeting. This year, Russ Hopcroft (Environmental Drivers Component) submitted this photo titled "Essential Scientific Equipment". Pretty much sums it up, although it does invite debate over including ziploc bags among other things.