

November 2013 through January 2014 Update

The Kodiak Seafood and Marine Science Center (KSMSC) faculty and staff provide this update on the teaching, research and public service activities at the Center. Please contact us with questions.

News:

Icicle Seafoods contributed \$40,000 towards the development of a 10-module **Seafood Quality Control Training Program** for seafood processors. Kodiak Seafood and Marine Science Center faculty members Alex Oliveira, Brennan Smith, and Brian Himelbloom will build the curriculum in 2014. The project addresses a top training need identified by the seafood processing industry as part of the Fisheries Seafood and Marine Initiative (FSMI).

The Pollock Conservation Cooperative Research Center (PCCRC) awarded KSMSC faculty members Brennan Smith and Alex Oliveira two research grants. Projects include: “Freshness and nutritional value of Alaska pollock products and byproducts” and “Developing pet treats from pollock skins.” Alex Oliveira and Brennan Smith are the principal investigators on these projects.

Kate Wynne received unofficial notification **from NOAA’s Office of Protected Resources of additional funding for the Gulf Apex Predator Prey Program (GAPP)** based at the Kodiak Seafood and Marine Science Center. This is the 15th year of funding for this research program, which has brought in close to \$10 million in research funds and established one of the longest standing marine mammal/ecosystem research programs in the Gulf of Alaska.

Coming Up:

- Feb 28-Mar 2 [Alaska Tsunami Ocean Sciences Bowl](#), Seward (Kodiak HS team participating)
- March 10-18 [Alaska Seafood Processing Leadership Institute](#), Anchorage, Boston
- Mar. 10-14 [Ammonia Refrigeration Training Class](#), (for seafood processors, UAA, Palmer)
- April 1-2 [Community-Based Monitoring](#) workshop, Anchorage
- April 3-4 University of Alaska Board of Regents meet in Kodiak
- April 22-25 [Kodiak Area Marine Science Symposium](#), Kodiak
- May 13-16 [Fisheries Bycatch: Global Issues and Creative Solutions](#), 29th Wakefield Fisheries Symposium, Anchorage

Teaching

Brennan Smith, KSMSC faculty member taught **Better Process Control School** in Anchorage to 10 participants from 5 seafood companies, DEC and three commercial fishermen. This class focuses on thermal processing of seafood (canning, retort).



Brennan and Alex Oliveira travelled to King Salmon and taught a 3-day **Hazard Analysis Critical Control Point (HACCP) class** to 11 participants. The class was organized in partnership with SAVEC the regional training center for the Bristol Bay region. Brennan and Chris Sannito, taught HACCP in Kodiak to five Alaska seafood company employees. A few weeks later, Brennan and Alex Oliveira taught HACCP in Anchorage to 28 participants.

Brian Himelbloom, Alex Oliveira, Brennan Smith, and Quentin Fong are team **teaching FISH 261, Introduction to Fisheries Utilization, this semester via videoconference** to five SFOS undergrads in Fairbanks and one in Unalaska.

Kodiak Marine Advisory agent Julie Matweyou taught **seven Ouzinkie middle-school students** how to graph and interpret paralytic shellfish poisoning (PSP) lab results, via videoconference, for the Kodiak School District Recreational Shellfish Beach Monitoring Pilot Program. She also **visited Old Harbor on Kodiak Island and taught 13 middle and high school students** and teachers about PSP principles, sample processing and testing. She was busy in January with seven science classes at Kodiak Middle School and one at St. Mary's (175 students) teaching about **paralytic shellfish poisoning awareness in Kodiak**. Matweyou led lectures on PSP causes, risks of eating shellfish and symptoms, testing for toxins, and led lab activities on testing PSP-contaminated butter clams. The 2-day lessons were well received by teachers and students.

At the [5th Alaska Young Fishermen's Summit](#) in Anchorage, 60 Alaska fishermen upgraded their skills in managing a modern fishing operation. Kodiak Marine Advisory agents Julie Matweyou and Quentin Fong were instructors at the summit which featured sessions on direct marketing, insurance risks, and fisheries management training, taught by Alaska fishing industry leaders. Since 2007, more than 320 fishermen have honed their business and public participation skills at the summits. Governor Sean Parnell and ADFG Commissioner Cora Campbell addressed a crowd of 100

at the AYFS reception. See a video on this year's Summit created by Charlie Ess at *National Fisherman*, <http://youtu.be/yvxt6HK5cQ>. Nathaniel Rose, Christopher Johnson and Jake Hartley participated from Kodiak.



Marine Advisory agent Julie Matweyou co-taught a **2-day AMSEA Drill Conductor course to commercial fishermen** in advance of the January crab season. The fleet identified December as a critical time for safety training, and Julie and her team along with Kodiak USCG personnel are providing this training annually. Nineteen participants completed the course.

Research

A book coauthored by Kate Wynne, *Guide to Marine Mammals and Turtles of the U.S. Atlantic and Gulf of Mexico*, has served as a basis for two free mobile apps recently produced by NOAA. The apps are designed to help identify local marine mammals and aid in real-time reporting of stranded mammal locations in the southeastern US. The 911 app includes a mammal id chart, linked photo sharing, and geo-location information critical for mammal stranding reporting: *See & ID Dolphins and Whales* and *Dolphin & Whale 911* <https://itunes.apple.com/us/app/see-id-dolphins-whales/id699127250?mt=8>
<https://itunes.apple.com/us/app/dolphin-whale-911/id698859376?mt=8>



Dana Wright, a student of KSMSC marine mammal specialist Bree Witteveen, won second place for her MS student poster presentation, “The importance of basal food web delta 15N values in trophic ecology studies: Kodiak humpback whale case study.” The North Pacific Research Board sponsored Dana’s award. (See photo of Dana with NPRB director Denby Lloyd)

Bree **traveled to New Zealand this month to participate in the 20th Biennial Conference on Marine Mammalogy** in Dunedin. Over 1,000 marine mammal researchers from 30 countries attended, with 200 persons participating in a session on feeding ecology chaired by Bree. She was also one of 150 abstract reviewers for the over 1,000 abstracts submitted for the event.

During an interview with KMXT radio, Bree discussed a newly released NOAA document summarizing known data on **noise levels affecting marine mammal species**. “Basically, the document identifies what noise levels are considered harassment to different animals,” said Bree. Witteveen noted these summaries often serve as the basis for determining which marine activities might require eventual permitting. The public comment period has been extended to March. See http://www.kmxt.org/index.php?option=com_content&task=view&id=5418&Itemid=2.

Alex Oliveira worked with visiting UAF graduate students, Tanja Schoolmeyer and Thomas Farrugia on lipid and fatty acid analysis for their thesis research.

Ongoing research projects in seafood science, PSP and marine mammal work are summarized on the KSMSC website; see <http://www.sfos.uaf.edu/ksmsc/research/>

Service

NFL playoff excitement pales by comparison to anticipation building throughout Alaska’s high schools for the **National Ocean Science Tsunami Bowl** coming up in Seward. Brian Himelbloom, Alex Oliveira and Julie Matweyou assisted the Kodiak team, the Elusive Jellyfish, as they practiced for the upcoming February competition.



KSMSC faculty member Alex Oliveira **hosted 95 eager 8th graders** at the Kodiak Center for an introduction to the Center's many research projects and activities. She led a hands-on lab exercise on acidifying water with dry ice to model ocean acidification due to dissolved CO₂.

UAF Kodiak faculty Brennan Smith, Brian Himelbloom, Bree Witteveen, Julie Matweyou, and Kodiak Center co-director Keith Criddle gave presentations on their work at the Kodiak Center to **23 visiting Alaska Airlines executives and managers**, as part of a company tour of the Kodiak region. Visitors sampled seafood treats (see photo) that showcased product support supplied to Alaska's seafood industry by Kodiak faculty. Quentin Fong and Alex Oliveira arranged the Center's activities included in the tour.



Brian Himelbloom participated in the quarterly teleconference as a member of the **Alaska Food Safety Advisory Council** for the Alaska Department of

Environmental Conservation. Brian also conducted water activity measurements for a smoked jerky product requested by a Kenai Peninsula commercial smokehouse.

Alex Oliveira **provided technical assistance to Adventure Appetites LLC** (<http://www.adventureappetites.com/>) about sanitation plans, HACCP requirements and regulations revolving around shelf stable food products. She brought eight products they produce back to lab in Kodiak for determination of water activity.