Kodiak Seafood and Marine Science Center
School of Fisheries and Ocean Sciences, University of Alaska Fairbanks
www.sfos.uaf.edu/ksmsc

December 2012 and January 2013 Update

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

News:
The New Year brought in the grounding of the oil drill rig Kulluk on Sitkalidak Island. Fortunately, the rig was successfully re-floated and towed to Kiliuda Bay for assessment. The communities of Kodiak and Old Harbor worked closely with the Unified Command to support logistics and recovery operations. Bree Witteveen, marine mammal specialist at the Kodiak Seafood and Marine Science Center [KSMSC], fielded many inquiries about threats to marine mammals. Besides answering general questions, she also compiled all winter aerial sightings from 1997 to the present of marine mammals near the grounding area at the request of NOAA National Marine Fisheries Service.

Coming Up:
Jan-Apr Kodiak Refuge Brown Bag Lunch Series (see schedule for KSMSC speakers)
Apr 11-3 Kodiak ComFish
Apr 19-29 Kodiak WhaleFest
Sept 26-28 Arctic AAS Science Conference (location Kodiak)

Teaching
One student finishes as another comes onboard!

Lale Gurer graduated in December with a MA in Seafood Business and Marketing. She was an international student working here the KSMSC under the direction of Quentin Fong. Her research focused on the market potential of value-added seafood products made from Alaska pink and chum salmon fillets (salmon loins). Lale defended her study last October and formally graduated from the School of Fisheries and Ocean Sciences in December 2012.
Last semester Dana Wright joined the Gulf Apex Predator-Prey Project with Bree Witteveen as her major advisor. She will be working with humpback whales around Kodiak. In January Dana visited Kodiak for a few days to spend time with Bree and acquaint herself with KSMSC. Dana will be back down soon for her field studies after taking classes in Fairbanks.

Graduate and Undergraduate classes are being successfully delivered via videoconference to UAF campuses around the state from KSMSC. The end of the semester brought a close to the 2-credit graduate-level seminar class on marine lipids (FISH 692) taught by Alex Oliveira. “Introduction to Fisheries Utilization” [Fish 261] started up with the new year. KSMSC faculty, Brian Himelbloom, Alex Oliveira, Brennan Smith. Chuck Crapo, Quentin Fong and Lei Guo, are working together to deliver this undergraduate course.

In advance of the January Pacific cod season, Julie Matweyou co-taught two AMSEA fishing vessel Drill Conductor safety classes this month; 26 fishermen and crew attended the 10-hour classes. Topics included general safety instruction, practice conducting mandatory monthly onboard safety drills, a tour of the USCG Kodiak Base flight rescue hangar, and pool training sessions. Before the class Julie gathered several pieces of training equipment donated by the Kodiak community; Julie received her USCG trainer certification earlier in the year, and this was her first class instruction.

In collaboration with Bruce Odegaard, Seafood Products Association, Alex Oliveira taught a three-day workshop in Seattle for 16 seafood processing professionals to hone odor detection skills of fresh-to-spoil fillets and whole fish samples of Pacific cod, pollock, catfish, tilapia, and pink salmon. Participants hailed from Korea, Thailand, Vietnam, Alaska, and the Lower 48. Julie Matweyou continued collaboration with Dr. Cindy Trussell at the Kodiak College. One of Trussell’s undergraduate students worked in Julie’s lab at KSMSC to test for PSP using the Abraxis ELISA.

Chuck Crapo taught HACCP courses in Fairbanks and Anchorage in response to requests by three seafood companies.

**Research**

Several KSMSC faculty participated in the eleventh Alaska Marine Science Symposium (AMSS) in January. This premier Alaska marine research conference is held annually in Anchorage, drawing over 900 researchers, students and educators from across the country. Day-long sessions feature current marine science work underway in the Arctic, Bering Sea and Gulf of Alaska regions; keynote speakers, several concurring workshops and sessions, and student presentations highlight the five-day gathering.

Bree Witteveen gave a plenary session talk on her research entitled, Using Acoustic Assessment of Pelagic Backscatter to Assess Prey Use and Niche Separation of Fin and
Humpback Whales near Kodiak Island, Alaska to about 200 attendees. Brian Himelbloom co-authored a poster with Julie Matweyou on testing methods of PSP. Bree and Brian served as judges of AMSS student posters.

**Marine Mammals**

In December, Bree Witteveen, marine mammal specialist, conducted a marine mammal scat collection trip to Kodiak’s Sea Otter Island and Cape Ubat. In January, Bree completed a bimonthly aerial survey of marine mammals in northern Kodiak waters, and conducted a scat collection on Long Island with Lei Guo and Brennan Smith.

Kate Wynne remains on sabbatical in Washington state. We expect her back in March!

**Seafood**

KSMSC graduate and former laboratory technician, Katie Brennar, published her graduate research in the December issue of Journal of Shellfish Research. Katie worked with Alex Oliveira on quality characterization of scallops.

Alex serves as committee member to two graduate students (PhD; MS) from SFOS Institute of Marine Science. Both students were in Kodiak in December working in the KSMSC laboratory under Alex’s guidance to conduct chemical and lipid analysis of marine samples.

**Harmful algal blooms**

Brian Himelbloom and Julie Matweyou continue to work towards evaluation of the Abraxis Saxitoxin (PSP) ELISA test. The NPRB-funded project will compare the developing Abraxis assay to approved toxin testing methods at the Alaska Department of Environmental Conservation.

Julie Matweyou continues to work with the Kodiak school district to develop a Kodiak-based PSP beach-monitoring project funded by Alaska Department of Environmental Conservation. Sampling has begun in the Village of Ouzinkie and test results will soon be posted online. Julie is working with the school to develop strong reporting strategies. The sampling, originally proposed at Port Lions, will be moved to Old Harbor.

**Service**

Julie supported a Kodiak Middle School science group on their science project, which focused on PSP. Julie worked with the students to conduct hands-on PSP testing in the classroom; samples were also analyzed by the experimental Abraxis ELISA test method that is being evaluated at KSMSC. Julie worked with students to interpret the test results and provide reference resources.

Brian Himelbloom tested water activity for an Alaska salmon processor developing salmon bacon bits product. Chuck Crapo and Quentin Fong provided information to Hawaiian-based company on quality testing of farm raised pongee fish. Quentin Fong provided marketing
consultation on salmon product powder, China potato markets, and potential seafood export to Philippines. Brennan Smith assisted a Kodiak seafood processor with product analysis as part of nutrition and ingredients label development.

Julie Matweyou co-hosted a meeting with the Alaska Marine Conservation Council and local jig fishermen for continued work to direct market custom caught/packed Kodiak cod.

Julie Matweyou organized and hosted a National Ocean Science Bowl quiz practice session for the self-named Kodiak High School team of five, “Marvelous Megalops”. Bree Witteveen, Lei Guo, and other community volunteers, including SFOS alumni Laura Stichert, participated on the scrimmage team. Julie and Bree provided lectures to the team in general preparation for the event. Julie had taught on harmful algal blooms and general oceanography, and Bree presented information on a marine mammal biology. Julie also attended the team’s practice oral presentation and provided feedback to the group.

photo Brian Himelbloom