The Future of the Past: Capturing a 5000 year record of Human-Environmental variability on the North Coast of Alaska
by Ben Fitzhugh

We are grateful for the QRC funding provided to get us to Utqiagvik (Barrow), Alaska in July 2016 to help excavate a 1500 year old frozen archaeological site that was actively eroding into the Arctic Ocean. This trip brought archaeology graduate students Erin Gamble and Dave Hunt, physical anthropologist Glennys Ong and Wendy Hunt (independently funded) to the Arctic for the first time. We were pleased to be able to help a salvage excavation run out of the Ukpeaġvik Iñupiat Corporation's science support organization, UIC, on a project led by UIC archaeologist Dr. Anne Jensen. We were able to spend almost four weeks in Northern Alaska, helping the dig at the eroding Walakpa site about 10 miles southwest of Utqiagvik.

Motivation for the salvage excavation was storm erosion following a catastrophic storm two years previously. Abundant, well preserved organic artifacts, animal bones, baleen, fur, and architectural features were exposed in the slump. With an archaeological record extending from the 20th century back to 500 AD or earlier, we wanted to recover as much information from the unique site as we could. In addition to ongoing questions about the history of Inupiaq ancestry and Inuit migrations from Alaska eastward, we wanted to sample the well preserved fauna and botanical record to recover and preserve paleoenvironmental evidence of changing marine and terrestrial climate and ecology in the region.

During the project, in addition to participating in the main excavation activities, Dave, Erin and Ben were able to conduct stratigraphic sampling on the erosion face for optically stimulated luminescence dating (OSL) at the UW's Luminescence laboratory. The samples were later analyzed by as class projects in Jim Feather's Archaeological Dating class. Among many interesting finds from the 2016 season were a preserved arrow shaft with feather fletching, braided baleen twine, and miniature whale effigy chipped from red chert. A historic cache of frozen seals was exposed, having been dug into the older archaeological matrix in the early 1940s. The topmost seal was removed and taken back to the lab for necropsy and sampling, e.g., to determine the radiocarbon reservoir offset for seals in this region. In 2017, Ben returned to Walakpa to help Anne continue the excavation, and by the end of the season (well after Ben had to leave), the crew finished excavating the structure of a Birnirk House with entrance tunnel that had been partially exposed in the erosion face.

Figure 1: Dave Hunt excavates intact archaeological layers near a crevice created by the slumping of the outer bank. Portions of a buried house structure are seen protruding from the lower left of the image. In 2017 that house was exposed from the top and found to be a Birnirk House from ca. 1500 years ago.
Figure 2: Erin Gamble shows off a Birnirk harpoon point she found while excavating near the erosion face.

Figure 3: Dave and Erin collecting samples from the Walakpa erosion face for OSL dating.

Figure 4: The 2016 Walakpa camp with sea ice in the background and the archaeological site forming the hill on the right.