

NOTES FROM THE DIRECTOR

By William Fitzhugh

Greetings from the Smithsonian's Arctic Studies Center. Now 26 years old, well beyond adolescence and 'grad school' and fully engaged in a chosen profession—research and education! If careers and learning seem to be preoccupying my thoughts, it's probably a result of my second winter teaching at Dartmouth College's Anthropology Department. My Arctic Crossroads course surveys Arctic geography, ethnography, history, archaeology, and climate studies, and explores northern policy issues. The class has grown from 12 last year to 25, so I must be doing something right and/or Dartmouth undergrads are once again awakening to the lure of the North. Long known for its northern research, Winter Carnival holiday, and cold snowy winters (except for this year) Dartmouth continues to train Arctic scholars, including Native Americans. Established in 1797 with a mandate "to teach Indians," Dartmouth provided faculty members for the young University of Alaska after its establishment in 1917. In the 1950s **Vilhjalmur Stefansson** and his wife **Evelyn Baird** (later **Evelyn Nef**) were in residence, and in the 1960s **Elmer Harp** and **Robert McKennan** started the Anthropology Department and began training undergrads who went on to northern PhDs, including me.

Today Dartmouth's Institute of Arctic Studies (IAS), initiated by **Oran Young** and directed now by **Ross Virginia**, offers undergraduate and PhD instruction in polar environmental science and policy. In January the

IAS hosted a conference on arctic health and wellness attended by international and aboriginal leaders [<http://now.dartmouth.edu/2016/01/examining-health-and-wellness-ends-earth>]. The IAS is leading Dartmouth's growing relationship with Greenland and Iceland-involving research and student exchange, and my association contributes to rebuilding Dartmouth's northern anthropology profile. A burgeoning Smithsonian-Dartmouth connection brought my

Smithsonian colleague **Bruno Frohlich** (and guest speakers **David Hunt** and **Sabrina Sholts**) to Dartmouth to teach a course in forensic anthropology.

Meanwhile, back on the Mall, it has been an eventful year for the ASC. The U.S. began its second term as Chair of the Arctic Council, the intergovernmental forum with representatives from countries and indigenous

communities bordering the Arctic regions. To inaugurate the event the ASC and NMNH hosted Arctic Spring Festival, a weekend educational cornucopia on 8-10 April featuring exhibits, music and dance performances, films, lectures, and panel discussion on the broad theme of "Arctic Change." Government agencies, NGOs, embassies, and others contributed time, funds, and talent. Concurrently, the Fulbright Commission announced the appointment of sixteen (mostly young) Arctic research fellows. Among those chosen was **Noor Johnson**, a cultural anthropologist in the Smithsonian's International Affairs Office who is researching community impacts of industrial development in the Canadian Arctic.

Arctic Spring was followed by other important Arctic Council developments, beginning with the creation



Ivory carving of a diving seal by Clifford Apatiki made during the Sculpting Ivory residency in Anchorage, Alaska in 2015. Photo by Ash Adams.

of the White House's Arctic Executive Steering Committee, chaired by Ambassador **Mark Brzezinski**, to provide policy leadership for the U.S. 'One Arctic' theme. Then, on 30-31 August, the Department of State hosted a conference on climate change titled Global Leadership in the Arctic: Cooperation, Innovation, Engagement, and Resilience or GLACIER (<http://www.state.gov/e/oes/glacier/index.htm>) in Anchorage, Alaska, presided over by **President Obama** and **Secretary of State Kerry**. GLACIER addressed the Arctic's special role in global climate change and identified ways Arctic residents are responding to these and other challenges. **Aron Crowell** led tours of the ASC's Living Our Cultures exhibit as part of the Anchorage Museum's contribution to the program. The final installment of the U.S. Chair inaugural events was a Polar Research Board conference called Arctic Matters: the Global Connection to Changes in the Arctic (<http://nas-sites.org/arctic/>) held in Washington, D.C. on January 14, 2016. The following day the ASC hosted an Arctic Crashes research symposium dealing with the fluctuation of animal populations in Arctic and Subarctic ecosystems.

Linked to, but not part of Arctic Council activities, **Bill Fitzhugh** and **Igor Krupnik** worked with the U.S. Interagency Arctic Research Policy Committee or IARPC (with a strong assist from **Sarah Bowden**) and State's Arctic Policy Group (APG), encouraging government and community collaborations under the U.S. Arctic Research Plan. Climate change and the activities of the Arctic Council have greatly energized interagency and international work.

2014 saw a transition in Smithsonian leadership from **Wayne Clough** to **David J. Skorton**, a cardiologist whose previous position was President of Cornell



Sam Schimmel at his Grandmother's house in Gambell, ca. 2008, with a pair of large seal-skin floats (purported to be the last in town) used for hunting walrus and whales. Photograph by Jeremy Schimmel. See full story on p.41



Samuel Schimmel inspecting Old Bering Sea snow goggles at MSC. Photograph: Stephen Loring. See full story on p.41

University. Clough successfully brought the Institution out of the shadowy **Larry Small** era and re-established respect for scholarship. Tea leaves portend vigorous progress under Secretary Skorton; he recently appointed **Richard Kurin** second-in-command with the title of 'Acting Provost' and affirmed curatorial guidance of all academic affairs.

Within the halls of the Natural History Building the ASC enjoyed another productive year. **Igor Krupnik** received a Secretary's research prize for his book, *Yupik Transitions*, co-authored with Mikhail Chlenov. Igor's newest editorial effort, emerging from the 2012 Inuit Studies Conference is *Early Inuit Studies*. Igor and **Aron Crowell** organized and presented at an Arctic Crashes symposium at the Alaska Anthropological Association meetings in Anchorage in March, along with **Stephen Loring** and others. Igor also began editorial planning for a summary volume of the *Handbook of North American Indians*.

Fieldwork brought **Aron Crowell** and a geological team from the University of Alaska Fairbanks to McCarty Fiord on the outer coast of the Kenai Peninsula, where they studied the association of Sugpiaq seal hunting camps with a Little Ice Age glacial moraine.

Stephen Loring braved the early fall storms in northern Quebec in order to find and document the archaeological correlates of 19th-century Innu caribou hunters and their families; **Igor Krupnik** continued his ethnological research with Bering Strait communities; and **William Fitzhugh** conducted a second season of surveys in Groswater Bay, with the Labrador Inuit Nunatsiavut Archaeology Office, and

excavated an Inuit winter site on the Quebec Lower North Shore. On the exhibition front, **Bill** collaborated with **Martin Nweeia** and NMNH Exhibits on *Narwhal: Revealing an Arctic Legend*, opening in 2017, and

Stephen began preparing a Smithsonian Library exhibit commemorating the purchase of Alaska in 1867.

In closing I want to thank the many friends, colleagues, and sponsors who helped make this another wonderful year (see our sponsor page!). We are especially grateful for staff work by **Meghan Mulkerin, Chelsi Slotten,** and **Kora Stapelfeldt**, who produced newsletters, field reports, and organized conferences. In the process Meghan became a proud mother and in addition landed a media post at the Smithsonian Zoo. We will miss her hard work and enthusiasm. At the same time we welcome a new arrival, our old friend **Nancy Shorey** from the Anthropology front office. Best wishes to all for the coming year.

We hope you enjoy more detailed stories in our review of the past year’s ASC activities. You can follow our current work online, using Twitter *@ArcticStudies* and on our blog, *Magnetic North*.

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SCULPTING WALRUS IVORY AT THE
ARCTIC STUDIES CENTER

By: Aron L. Crowell



Mary John using a Dremel tool to shape her carving during the Anchorage residency. Photo: Ash Adams.

For millennia walrus tusk ivory has been sculpted into forms essential to Arctic life, from harpoon heads and needles to hunting charms and figurines that evoke spiritual connections and ancestry. Three Iñupiaq and St. Lawrence Island Yupik carvers who proudly carry on this tradition – **Jerome Saclamana** of Nome, **Levi Tetpon** of Shaktoolik, and **Clifford Apatiki** of Gambell – visited the Arctic Studies Center in Anchorage for a week-long public arts residency at the beginning of April, 2015. The carvers used hand saws, files, and power tools to shape sections of tusk into graceful swans, seals, shaman figures, and whales, talking as they worked to rapt museum visitors, young learners from Anchorage schools, and Native Arts Program students **Mary John** and **James Lane** from the University of Alaska Anchorage. Jerome Saclamana said the communal, sharing atmosphere reminded him of the workshop in Nome where he first learned to carve from his father and uncles. Levi Tetpon remembered how he was initiated into ivory carving by his parents when he



A human-seal figure by Levi Tetpon; a carving in progress. Photo: Ash Adams.

was just nine years old. He explained that the transformation piece that he created during the residency – half man, half seal — represented his people's connection to the land.

The *Sculpting Ivory* residency continued the ASC's highly popular Material Traditions series, which is dedicated to supporting indigenous arts and knowledge around the state of Alaska. Material Traditions events (see also *Voices from Cedar*, this newsletter) are co-organized by the Arctic Studies Center and the Anchorage Museum, with sponsorships from the Surdna Foundation, CIRI Foundation, Smithsonian Council for Arctic Studies, Anchorage Museum, and Alaska State Council on the Arts. During the residency the artists studied ancestral walrus ivory carvings in the Smithsonian's *Living Our Cultures, Sharing Our Heritage* exhibition as well as examples from the Anchorage Museum's collection.

Walrus tusks are a primary subsistence resource for Bering Sea communities, and first-person knowledge of their behavior and natural history informs the work of Alaska Native artists. Jerome Saclamana and Clifford Apatiki described how the lives of the animals may be read from markings on their tusks. The tips and outer sides are smoothed and polished from digging for clams on beaches and on the ocean floor and from scraping breathing holes through sea ice. Walrus tusks also use their tusks to hook onto ice floes so they can rest in the water after diving. Males have larger tusks than females and use them to fight each other for dominance in the herd; consequently, they are often cracked or broken and may be unsuitable for carving. The tusks of rare seal-eating walrus are



Residency participants Mary John, Clifford Apatiki, and Jerome Saclamana examine an Iñupiaq feast bowl (*kayukaq*) which is mounted with whale figures carved from walrus ivory. The bowl, collected for the National Museum of the American Indian at Wales in 1935, is in the Arctic Studies Center's *Living Our Cultures, Sharing Our Heritage* exhibition in Anchorage. Sculpting Ivory residency in Anchorage. Photo: Ash Adams.



Clifford Apatiki of Gambell, St. Lawrence Island, makes cuts to a seal carving with a coping saw. Sculpting Ivory residency in Anchorage. Photo: Ash Adams.



Jerome Saclamana from King Island/Nome saws sections of walrus tusk, with University of Alaska Anchorage arts student Mary John. Sitting on the floor for carving and cutting on a home-mounted vise is customary. Sculpting Ivory residency in Anchorage. Photo: Ash Adams.

yellow and saturated with oil.

To prepare a tusk for carving, it must first be loosened and extracted from the animal's skull. It is then soaked in water for a day so the soft dentine at its base can be removed. The next step is boiling the upper end of the tusk in salt water to remove residual blood that could leave a stain in the solid, cream-colored ivory. Tusks are aged for several months to a year before carving, so that any new cracks that form in the material will not ruin a finished carving.

Michael Mandregan, Iñupiaq ivory carver and Native arts buyer for the Anchorage Museum, reached out to the Gambell village store on St. Lawrence Island to purchase two male and two female tusks for use during the residency. The tusks were from walrus harvested during the previous winter's subsistence hunt. Under the Marine Mammal Protection Act, only Alaska Natives may hunt walrus, buy or possess walrus tusks, or carve walrus ivory, provisions that were carefully observed during the *Sculpting Ivory* project.

The three artists-in-residence demonstrated how they select sections of tusk that are crack-free and suitable for specific types of carvings. For example, solid portions of the tusk are needed for animal or human figures (varying in size according to the tapering diameter of the tusk), while the hollow base is used for ring-based forms. Even the smallest scraps of the precious material are used for tiny carvings and decorative



Anchorage school students carving ivory (soap!) at the Anchorage Museum after visiting with the artists. Sculpting Ivory residency in Anchorage. Photo: Ash Adams.

pieces. The carvers sketch designs on the outside of the tusks in pencil and block them out using both power and hand saws. When cutting the rough shape of one of his signature diving seals with a coping saw, Clifford Apatiki noted that the tusk had a slight growth twist that he could incorporate into the carving to suggest the motion of its body. “The seal is not a stiff animal!” he said. The artists use electric Dremel tools with a variety of carving bits, and acknowledge their respect for ancestral carvers who used only stone or iron-tipped gravers, bow drills, and other hand tools. Patient filing, sanding, smoothing, and polishing are required to bring a smooth finish to carvings, which the artists then accent with ink, paint, red ocher, and plugs of whiskers and whale baleen.

On August 22 – 23, Jerome Saclamana taught a follow-up carving workshop at the Nome-Beltz Junior/Senior High School in Nome, in collaboration with Kawerak, Inc. The workshop was attended by Iñupiaq students **MaryJane Anuqsraaq Litchard**, **Moriah Sallaffie**, **Sierra Tucker**, and **Ivory Okleasik**. The Material Traditions program model pairs an Anchorage residency with a rural community workshop, in order to promote learning and revitalization of traditional arts in communities around the state.



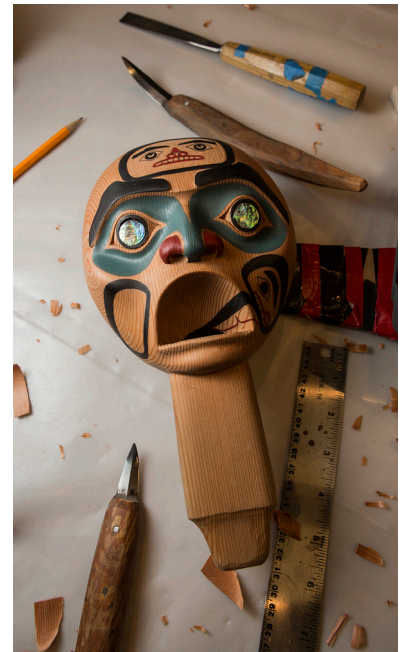
Levi Tetpon of Shaktoolik examines a walrus tusk to plan the figures he will carve. Sculpting Ivory residency in Anchorage. Photo: Ash Adams.

An important goal of the program is to capture the cultural knowledge and teachings of master artists in detailed instructional videos, which are made available online at the *Sharing Knowledge Alaska* site (<http://naturalhistory.si.edu/arctic/html/sharing-knowledge-alaska/Index.html>) and on chaptered DVDs that are distributed in Alaska to support arts learning. Alaska Native artist and arts non-profit leader **Anna Hoover** filmed the Anchorage residency and Nome workshop, supplemented by **Ash Adam's** excellent photography. The Arctic Studies Center's own **Dawn Biddison** managed the Anchorage and Nome programs and will edit the instructional film. Ethnographic conservators **Monica Shah** and **Sarah Owens** (Anchorage Museum) and **Mary Jane Lenz** (National Museum of the American Indian) participated in the residency to document artists' techniques and their knowledge about the properties of walrus ivory, to inform the future care of museum collections.

VOICES FROM CEDAR: CARVED WHISTLES AND RATTLES OF SOUTHEAST ALASKA

By Aron L. Crowell

Three wonderfully mutable organic materials – the intestines of Bering Sea mammals, walrus ivory from the Arctic ice edge, and cedar from the coastal rainforests of Southeast Alaska – have served for millennia as media for Alaska Native artistic expression and functional design. Each has been the focus of recent arts residencies and workshops conducted by the Arctic Studies Center in Alaska through its *Material Traditions* series (see articles in this and previous newsletters since 2013).



A cedar whistle carved by Tsimshian artist John Hudson. The eyes are inlaid with abalone shell. Photo credit: Wayde Carroll.

Material Traditions programs, sponsored by The CIRI Foundation, Surdna Foundation,

Smithsonian Council for Arctic Studies, Anchorage Museum, and Alaska State Council on the Arts, support a critical process of indigenous cultural renaissance. Alaska Native artists seek to recover ancestral techniques, nearly lost in the turmoil of Western contact; to draw on this artistic endowment to create new and original forms, always with respect

toward what came before; and to teach younger generations the ethic and practice of creative heritage. Technical and aesthetic experimentation, consultation with elders, and studies of museum collections are strategically blended in artistic practice.

John Hudson (Tsimshian), **Norman Jackson** (Tlingit), and **Donald Varnell** (Haida) became the latest master artists to contribute to this statewide effort when they led the Arctic Studies Center's *Voices from Cedar* residency in Anchorage (October 5 – 9, 2015). They demonstrated the carving and assembly of rattles, clappers, and large whistles that were traditionally used to summon spirits and echo their voices during ceremonies. Shaped from red or yellow cedar, these instruments blend distinctive musical sounds with rich cultural meaning and beauty of form. The artists brought other projects to the residency, from jointed puppet figures to masks, headdresses, and free-form sculpture, to show the variety of wood artistry from Southeast Alaska. **Brian Walker** and **Bryce Ehmann**, undergraduate students in the Native Arts program at the University of Alaska Anchorage, observed and carved with the lead artists throughout the week. Each day, cedar shavings piled up in windrows on the studio floor and the air filled with their peppery fragrance.

Following the residency, **John Hudson** taught a two-day whistle carving workshop to students **Tim Flanery**, **Gianna Willard Flanery**, **Sandy Luther**, **Tara Roberts**, and **David R. Boxley** in Ketchikan at the Totem Heritage Center (November 7 – 8). The residency and workshop were covered in Alaska print media, television, and radio, generating widespread public interest. Hundreds of visitors included school students, fellow artists, and museum-goers. Although



Artist John Hudson (Tsimshian) demonstrates the sound of his whistle to a museum visitor. Photo credit: Wayde Carroll.



Gianna Willard Flanery and Tim Flanery carve cedar whistles at the *Voices from Cedar* workshop in Ketchikan. Photo credit: Dawn Biddison



John Hudson lets a girl from Denali Montessori Elementary try on his mosquito headdress. Photo credit: Wayde Carroll.

museums, including the Smithsonian, hold hundreds of examples of Southeast Alaska and Northwest Coast whistles and rattles, relatively few people are aware of these instruments today, and visitors were thrilled to see them come back to life (and voice) in the artists' skilled hands.

A whistle starts as a block of red cedar which is externally shaped to the desired human, animal, or geometric form, then split or sawn lengthwise. The artist hollows out the inside using carving gouges or bent ("crooked") knives, then reassembles the two halves. Good sound production requires that there be an opening for the air to enter, an interior air channel that leads to a resonating chamber, a splitter where the moving air divides, and an exit hole where it emerges (hopefully) as a low, eerie whistle. At first try the sound of a newly made whistle may be absent, weak, or of the wrong pitch, meaning that the interior chambers must be reshaped. Air leaks mean that the whistle's halves must be more firmly clamped, glued, and lashed together.

Rattles are made by a similar process, but with only one interior chamber that is scooped out until the walls of the instrument are very thin. Small pebbles serve as rattlers inside. The decorative external carving of rattles and whistles is often intricate, and embellished with paint and abalone shell inlays.

Arctic Studies Center staff **Aron Crowell** and **Dawn Biddison** organized and conducted the *Voices from Cedar* project, joined by museum conservators **Marian Kaminitz** (National Museum of the American Indian), **Ellen Carrlee** (Alaska State Museum), and **Sarah Owens** (Anchorage Museum); videographer **Anna Hoover**; and photographer **Wayde Carroll**. A video



Norman Jackson shows his bear mask to Denali Montessori Elementary students during the Voices from Cedar residency. Photo credit: Wayde Carroll.

record of the project including step-by-step instrument making instructions by the artists, will be posted later in 2016 on the *Sharing Knowledge Alaska* page of the Arctic Studies Center web site (<http://naturalhistory.si.edu/arctic/html/sharing-knowledge-alaska/Index.html>).



Using a bent knife, Tlingit Norman Jackson cuts details of the face design on a rattle. Photo credit: Wayde Carroll.

ARCHAEOLOGY AND GEOLOGY ON THE OUTER COAST OF THE KENAI PENINSULA, ALASKA

By Aron Crowell (Arctic Studies Center, Smithsonian Institution) and Christopher Maio (Department of Geosciences, University of Alaska Fairbanks)

Introduction

Step-walled fjords and massive glaciers flowing down to the sea from Harding Icefield characterize the rugged Gulf of Alaska coast of Kenai Fjords National Park. The geological history of these shores includes glacial surges, volcanic eruptions, and great earthquakes accompanied by tidal waves. Yet human residence in this challenging environment extends many centuries, if not millennia, into the past. Scores of archaeological sites once occupied by Sugpiaq (Alutiiq) ancestors dot the coast, attesting to an abundance of subsistence resources that attracted indigenous settlement. As a consequence of marine upwelling around the mouth of Cook Inlet, marine life including fish, sea birds, seals, sea lions, and whales thrive in the Nuka Bay / McCarty Fjord region at the western end of the park, and

archaeological sites are concentrated there as well.

Unfortunately for our understanding of human history, the same geological forces that have shaped the coastline of the park have also destroyed a large part of its archaeological record. Advancing glaciers chew up everything in their paths, and great earthquakes cause the land to abruptly sink, leading to rapid erosion and the loss of shoreline sites. In July 2015, a National Park Foundation Coastal Settlement Fund partnership project for cultural resource discovery and protection was undertaken in McCarty Fjord, Kenai Fjords National Park (KEFJ) by the National Park Service, the Smithsonian Institution's Arctic Studies Center, and the University of Alaska Fairbanks. The English Bay Corporation of Nanwalek and the Port Graham Corporation of Port Graham, Sugpiaq villages in the Kenai Peninsula that are affiliated with KEFJ, provided permission for the research to be carried out.

Archaeologists **Aron Crowell** (Smithsonian Institution) and **Jonathan Hardes** (KEFJ) surveyed, mapped, and tested archaeological sites with the assistance of Alaska Native student interns **Ivana Ash** and **Norma Johnson**, both undergraduates at the University of Alaska Anchorage. Geologists **Chris Maio** (University of Alaska Fairbanks) and **Richard Sullivan** (Woods Hole Oceanographic Institution) simultaneously conducted glacial history, earthquake, and sea level studies.

Glacial and Seismic History

The advance of fjord glaciers can have important impacts on human residents in coastal zones, including the destruction of villages in their paths and the sinking of shorelines due to the weight of glacial ice. On the other hand, tidewater glaciers can attract human settlement because harbor seals, an important food resource, inhabit floes along the glacial front for spring breeding and birthing. McCarty Glacier today supports a thriving seal rookery and is likely to have done so for centuries. Studies of historical and contemporary Tlingit hunting at the ice floe seal rookery in Yakutat Bay, southeast Alaska, were conducted in 2013 – 2014 for the Smithsonian's Arctic Crashes research program (see ASC Newsletter 22, 2015).

Glaciers have played a dominant role in the evolution of coastal landscapes in Kenai Fjords National Park for at least 10,000 years. During the Little Ice Age (or LIA, 1350 – 1900 A. D.), glaciers advanced seaward, driven by snow accumulation in the Harding Ice Field. McCarty Glacier's most recent advance began prior to the LIA in around 680 A. D., reaching its furthest seaward position near the mouth of James Lagoon at approximately 1890 A. D. Once the glacier stopped moving forward the boulders and gravel it had been carrying were deposited, building a terminal moraine. The LIA moraine now forms a shallow sill that divides the outer and inner deep basins of the fjord and is exposed at low tide. When geologists mapped McCarty Glacier in 1909 it was sitting on its moraine

but by 1927 it had already retreated approximately 1 km to the north. Over the course of the 20th century McCarty Glacier continued to retreat and is today located more than 20 km up the fjord.

It has been proposed that the glacier's sudden halt in the late 1800's was due not only to climatic warming but also because it had reached the confluences of

James Lagoon on its west side and McCarty Lagoon to the east, which allowed the ice to spread out to either side rather than pushing forward. One objective of our 2015 research was to test this lateral spreading hypothesis, for if the glacier did spill into the two lagoons it would have blocked them off from human access or occupation. In addition, archaeological sites or living settlements in the lagoons might have been destroyed. If ice did not fill the lagoons then remains



Archaeologists on survey in Kenai Fjords National Park, 2015: L to R, Jonathan Harges, Norma Johnson, Aron Crowell, Ivana Ash. In the background is a "ghost forest" of dead spruce trees, killed by saltwater flooding after sinking of the Kenai coast during the great earthquake of 1964.

the ground surface accompanies these very large seismic events on the Kenai Fjords coast, with drops in land level measuring about 2 meters (6.4 feet) during the most recent in 1964 and approximately the same amount during a previous great earthquake in about 1170 A.D. A third great earthquake struck the adjacent Kodiak-Katmai segment in 1788 A.D. and could potentially have caused subsidence

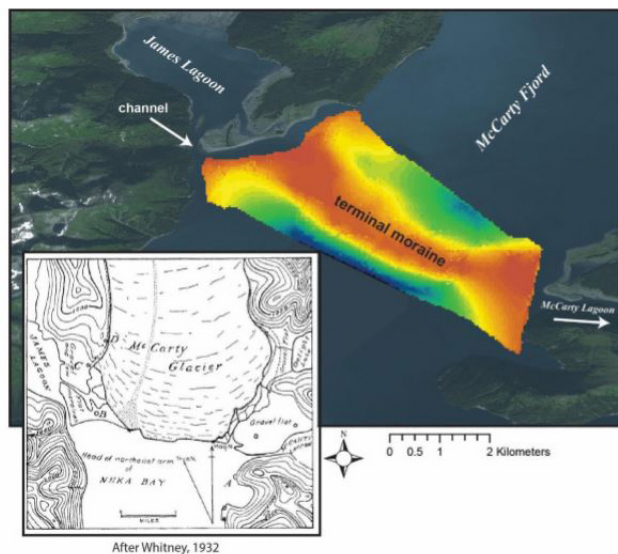
on the Kenai segment as well. "Ghost forests" of dead spruce and hemlock trees, their roots killed by saltwater immersion after the land surface dropped in 1964, are seen everywhere along the shores of the park.

Violent shaking and sinking of the coast accompanied by destructive tsunami waves (as occurred in 1964) would have had catastrophic effects on indigenous coastal residents. Archaeological evidence from around the Gulf of Alaska suggests that human populations typically abandoned earthquake-devastated regions for up to several centuries. In addition, sinking of the coast destroys shoreline archaeological sites by dropping them into the intertidal zone where they are eroded by waves or entirely submerged. In KEFJ, very few sites predating the earthquake of 1170 A.D. have survived intact, and many that were occupied after that date have eroded in the aftermath of the 1964 event.

Geological Studies

To assess the horizontal extent of McCarty Glacier at its LIA maximum and specifically to determine whether it ever extended into James Lagoon, we surveyed both the terminal moraine and lagoon areas with an acoustic sub-bottom profiler. The device was towed by Zodiac inside the lagoon and by the Serac research vessel offshore. Bathymetry of the moraine revealed a steep-sided submarine ridge that extends across the fjord but shallows and spreads out near the entrances to James and McCarty lagoons.

The acoustic survey of James Lagoon showed that its nearly closed basin has maximum water depths of about 30 meters, underlain by about 30 meters of well-stratified, subfloor sediments that may have taken 3,000 years or more to accumulate. Dark horizontal bands seen in the subfloor profile



Bathymetry of terminal moraine shoal extending across McCarty Lagoon.

of LIA settlements or hunting camps would likely have been established in those locations because of easy access to the glacier and its seals.

Because Kenai Fjords National Park sits on the Kenai segment of the Aleutian subduction zone it has experienced "great" earthquakes (exceeding magnitude 8.0 on the Richter scale) about every 700 to 800 years for at least the last four millennia. Abrupt subsidence of

are probably reflections from layers of relatively heavy, large-grained particles of sediment that were washed into the lagoon during high energy events such as storms, tsunamis, or stream floods, although some could also be volcanic ash deposited during eruptions. The thicker, less dense beds between and below the dark layers most likely represent normal estuarine deposition of fine sediments. The regularity of stratification in the subfloor profile, without major truncations or disturbances, strongly suggests that McCarty Glacier did not extend into James Lagoon at its LIA maximum, or block its entrance channel.

We also collected short sediment cores from the lagoon bottom using a gravity corer. We were able to penetrate up to 1.6 m into the sediments, and collected seven cores in total. Radiometric dating and grain size analysis of these cores will enable better interpretation of the sedimentary record that is shown by the acoustic profile. Additional cores were collected in a freshwater marsh on the southwestern shore of James Lagoon. These tests showed that waves have periodically carried coarse sands from the lagoon beach into the marsh, suggesting storms that may correlate with bedding observed in the acoustic profile and lagoon bottom cores.

Clues to coastal subsidence during earthquakes were provided by three old but well-preserved tree stumps were found along the southwestern shore of James Lagoon, all in growth position in the intertidal zone at elevations below the level of the 1964 ghost forest. Radiocarbon dating showed that two of the stumps died sometime between 1670 and 1800 A. D., possibly correlating with the 1788 great earthquake in the Kodiak – Katmai area. The third, which was rooted in a soil horizon about 1 m below the modern beach surface and 2 m below the 1964 trees, dated to between 1040 and 1210 A. D., and most likely died as the result of subsidence during the 1170 A.D. great earthquake.

Archaeological Results

Previous surveys of the Nuka Bay / McCarty Fjord area have demonstrated that it contains more indigenous archaeological sites – a total of 29 reported prior to 2015 – than any other comparable portion of the

Kenai Fjords coast, probably due to the diversity and abundance of subsistence resources that are available to coastal hunters. Known sites include winter villages, spring and summer hunting and fishing camps, and spring bark-stripping locales, ranging in age from A. D. 60 to the mid-19th century. Although it can be assumed from regional prehistory that ancestral cultures were using this coast as early as 10,000 years ago, traces of these earliest occupants have been removed by coastal sinking and glacial action.

James Lagoon, which archaeologists have not previously examined, was identified as an area

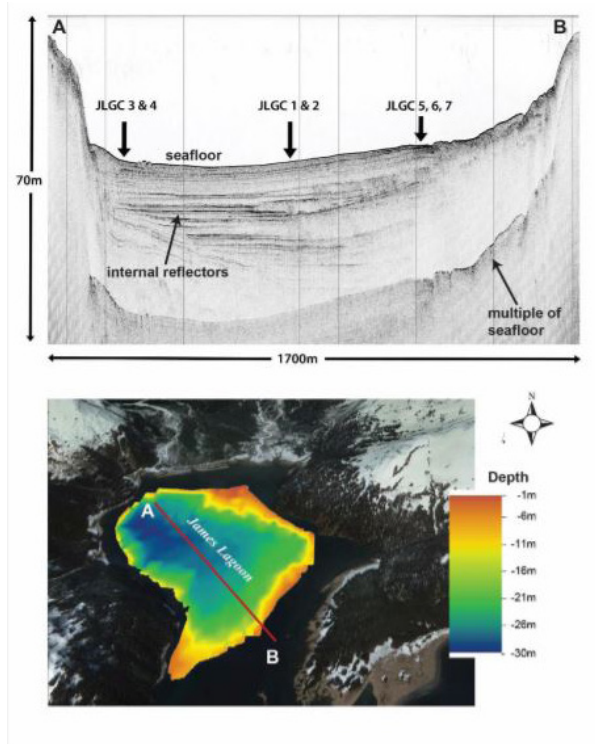
with high potential for archaeological sites because of its proximity to the presumed LIA seal rookery at McCarty Glacier. We believed that older camps or villages might also be preserved if the glacier did not advance into the lagoon and erase all evidence of human occupation.

During our visit in 2015 we walked the shores of James Lagoon to examine all areas where archaeological remains might be found, including intertidal zones where sites might have been lowered due to tectonic subsidence and backshore areas where they could have been uplifted by isostatic rebound. Methods included surface inspection for pits and other cultural features as well as shovel and trowel testing in selected areas.

As a result of this survey,

two sites were discovered along the lagoon shore. The James Lagoon 1 site, located on the inner bank of a tidal slough filled with dead trees from 1964 subsidence, consisted of two shallow depressions that may be the remains of summer dwellings, associated with cache pits and bark-stripped trees. James Lagoon 2, located in living spruce-hemlock forest nearby, provided more definitive cultural information. Situated on a terrace just above the modern beach, it consisted of two food storage pits and a 1.0 meter-deep, circular house depression with an entrance tunnel that extended to the north. This type of traditional Suppiaz house was excavated deeply into the ground and covered with a bark-covered roof on a wooden frame; the tunnel was a kind of Arctic entry that trapped cold air and helped to keep the interior warm.

A 1 x 1 m test pit excavated inside the house revealed a charcoal-covered occupation floor and a clay-lined hearth. No artifacts, animal bones, or other traces of



Seismic profile of James Lagoon sediments.



1x1 meter test excavation inside winter pit house (Feature 1) at the James Lagoon 2 site. Left to right: Norma Johnson and Aron Crowell.

activities in the house were found in the small test area. Two calibrated AMS radiocarbon dates – one from floor charcoal and one from the bottom of the hearth – were nearly identical with probability ranges spanning 1470 – 1640 A.D. These dates indicate that James Lagoon 2 was occupied after the 1170 A. D. earthquake but before McCarty Glacier advanced to its terminal moraine in the late 19th century. However, the glacier may have been relatively close when people were living at the site, providing access for sealing.

Conclusions

These preliminary results of coordinated geological and archaeological fieldwork in 2015 indicate that McCarty Glacier did not undergo lateral spreading at its LIA terminal moraine that was extensive enough to fill or block off James Lagoon. The lagoon basin has been accumulating sediments undisturbed by glacial ice for perhaps 3000 years, and its bottom sediments preserve an extended record of natural events on the outer Kenai coast including major storms, floods, tsunamis, and volcanic eruptions. The survival of pre-contact archaeological sites on the shores of both James and McCarty lagoons, one radiocarbon dated to the 16th century A. D., offers further proof that LIA glacial ice did not override or disturb the terrain in either basin. We found evidence of earth movements linked to at least two major earthquakes prior to 1964, data that may contribute to regional models of tectonic plate motion in the greater Aleutian Trench region. The

project's archaeological discoveries add to the already extensive site inventory in the Nuka Bay / McCarty area and underline the importance of this highly productive environment to the cultural history of the Sugpiaq people.

URBAN INTERVENTIONS: SKATE ART

By Dawn Biddison

The Urban Interventions series motivates and empowers youth through creative, healthy expression. Developed and managed by **Dawn Biddison** in partnership with **Monica Shah**, Director of Collections at the Anchorage Museum, the first program in this series, Skate Art, was held in August 2015. The program was led by New York-based skateboarder **Jim Murphy**, a member of the Lenni Lenape tribe, who is co-founder of Wounded Knee Skateboards and director of the Wounded Knee Four Directions Skateparks program of the Stronghold Society, a non-profit organization working with Native and non-Native youth through skateboarding and the arts.

The program consisted of three events. The first was a free public talk and skate videos presentation about the positive impact of skateboarding by Jim with audience Q&A at the Anchorage Museum. The next day, Jim, assisted by local Iñupiaq artist **Holly Nordlum**, led a free class with local youth invited by community partners from the Aleutian Pribilof Islands Association, Big Brothers Big Sisters, Cook Inlet Tribal Council and Covenant House. Students got a close-up look at objects from the Smithsonian and Anchorage Museum collections – a source of design

inspiration for the art project that followed. Students used a decoupage technique to personalize their skate board decks with print materials adapted from museum objects, archival photos and Wounded Knee Skateboards artwork. They also learned how to assemble their skateboard kit and about skateboard safety. The



River Posey at the skate jam with her museum collections inspired board. Photo: Dawn Biddison.

third event was a free skate jam at a local recreation center where students and other boarders showed their moves and learned new ones, with trick demos by Jim.

Shyanne Beatty (Hän Athabascan) of KNBA Native Voice One was the MC and DJ for the jam, and prizes were given for the best trick and worst wipe-out of the day.

POLAR LAB: COLLECTIVE

By Dawn Biddison

Polar Lab: Collective is a program that provides emerging Alaska Native artists with an introduction to museum collections research through up-close, focused study of NMNH and NMAI objects in the Living Our Cultures exhibition and of the Anchorage Museum collections. This experience advances their development as an artist, and it strengthens the relationship between Alaska Native artists and museums through increased accessibility to staff and collections. Developed and managed by **Dawn Biddison** in partnership with **Monica Shah**, Director of Collections at the Anchorage Museum, the program hosted three artists in 2015: Unangax painter **Julia Orloff-Duffy**, Yup'ik painter and skin-sewer **Peter Williams**, and Tlingit weaver **Ricky Tagaban**. With ongoing funding from the Anchorage Museum's Polar Lab initiative, three artists will also be hosted in 2016.

Prior to their visit, the artists spoke with Dawn and Monica to discuss their interests and to select objects for study. Over two days, they studied pieces taken off exhibit and from collections. Dawn provided them with a resources notebook containing object photos and documentation, and also information about artist opportunities at other museums. She reviewed online resources for Alaska Native collections and archival photographs, and introduced them to staff and resources at the Anchorage Museum archives. You can view a short video about the program's first participant, Iñupiaq performance artist **Allison Warden**, on the NMNH YouTube page *Living Our Cultures* at <https://www.youtube.com/playlist?list=PL33278BF298794573>.

ALASKA NATIVE FILM SCREENINGS

By Dawn Biddison

In May, **Dawn Biddison** organized a screening of *Iqliqtisiuǵvigruaq* (Swift Water Place), a documentary film examining the relationship between an Alaska Native village and a team of archeologists working on a village excavation site: "Up along the banks of the



Collective artist Ricky Tagaban. Photo: Dawn Biddison.



Dr. Douglas Anderson explains his team's work to the Kiana Traditional Council. Photo by Robin Kornfield, Piksik.

Kobuk River from Kotzebue Sound, beyond the Alaska arctic village of Kiana, a team of archaeologists led by Dr. **Douglas Anderson** from Brown University is building a bridge from the present to the distant past. A discovery of human remains brings the excavation to a sudden halt. But time and nature do not rest as the eroding power of the Kobuk River threatens to reclaim the site." The event was hosted by **Aron Crowell**, and a Q&A with **Brice Habeger** and **Tanya Telemaque** of the Piksik production team followed. View the trailer at <https://vimeo.com/111589211>.

For the fourth year, **Dawn Biddison** organized a film program for the Sunday prior to the Alaska Federation of Natives annual convention in Anchorage. Four documentary shorts about Alaska Natives were screened. *A Way of Making Life Beautiful: Yup'ik Art Between Two Worlds* is a film by **Katrin Simon-Sakurai** and was provided by **Len Kammerling** of the Alaska Center for Documentary Film at the University of Alaska Museum of the North.

Katrin describes the film as "explor[ing] the world of traditional Alaska Native artists and their complicated relationship to the art marketplace. Observing both rural and urban artists, the film reveals the tension between individual artists' own creative development and the art buying public's demand for quote traditional art." **Brice Habeger**, Video Production Manager for Piksik Productions, introduced their two films about winter life and sports – *Alaska: Trapping at 15 Below* and *The Story of NANANordic*. The final film screened was the premiere of *Harvest: Quyruciq*, featuring **Peter Paul Kawagaalg Williams**, a Yup'ik artist and hunter originally from the village of Akiak and now based in Sitka. Peter spent years developing the modern

Alaska Native sea otter fur trade as a means of empowering and healing Alaska Natives physically, emotionally, spiritually and economically. An audience Q&A with Peter followed the film. *Harvest: Quyurciq* was made by **Andre J. Lewis**, a documentary filmmaker, videographer and environmentalist, and by **Michael Dempster**, a filmmaker and activist. According to the filmmakers, *Harvest* tells the story of how: "In a twist that might be described as poetically just, Peter harvests and crafts the fur of the same mammal that motivated Russia's colonization of Alaska over 250 years ago: the sea otter. Colonial desire for otter furs brought disease, slavery and near cultural genocide to Alaska's indigenous peoples, but engaging in the respectful and sustainable harvest of these creatures today keeps Peter healthy and empowered."



Peter Williams from *Harvest: Quyurciq*. Photo by Fabio Domenig.

SHARING KNOWLEDGE ALASKA: MICROSITE UPDATE

By Dawn Biddison



Archival photo from *Material Traditions: Sewing Gut*. Kwigillingok, 1931, Courtesy of the Anchorage Museum.

The Smithsonian Arctic Studies Center's *Sharing Knowledge Alaska* website offers educational and instructional videos -- some with teacher's guides and lessons -- from its Anchorage Museum exhibition programs. With assistance from NMNH website administrator **James Kochert**, the site has been updated by **Dawn Biddison** to include *Material Traditions: Sewing Gut* -- a set of eleven educational videos from an artists' residency at the Anchorage Museum and community workshop at the Yupiit Piciryarait Cultural Center in Bethel (see article in this issue). The videos feature teaching artists **Mary Tunuchuk** (Yup'ik) and **Elaine Kingeekuk** (St. Lawrence Island Yupik), and contributing artist **Sonya Kelliher-Combs** (Iñupiaq/

Athabaskan). The videos include interviews, how to process seal intestine, preparing thread and grass, sewing gut strips and more. Go to <http://www.mnh.si.edu/arctic/html/sharing-knowledge-alaska/Index.html> or search for "ASC Sharing Knowledge Alaska" with Google Chrome (for best viewing) to find the link. A limited number of DVD copies are available by request, as well as full resolution HD files.

SMITHSONIAN SPOTLIGHT

By Dawn Biddison

Since August of 2010, a monthly public lecture series called the Smithsonian Spotlight has been held at the ASC exhibition *Living Our Cultures, Sharing Our Heritage: The First Peoples of Alaska*. The presentations are given by Alaska Native artists and scholars, and the program is organized by **Dawn Biddison**. In 2015, the Spotlight series was again sponsored by the Recovering Voices Program, an initiative led by the Smithsonian's National Museum of Natural History.

In February, Iñupiaq artist **Ed Mighell** discussed his process for making art tiles, from harvesting clay out of the Cook Inlet mudflats and drafting plate designs from drawings, to inspirations from his Iñupiaq heritage. **Karlin Nageak Itchoak**



Art tile by Ed Mighell

(Iñupiaq), Chief Administrator and Legal Affairs Director for the Ukpeaġvik Iñupiat Corporation, spoke in March on Alaska Native issues leading up to the Alaska Native Claims Settlement Act and Alaska National Interest Lands Conservation Act. The April presentation was by Unangax/Norwegian multi-media artist and documentary filmmaker **Anna Hoover**, who is also the *Material Tradition* series videographer. She presented an overview of the state of contemporary indigenous arts.

In May, author **Sue Unger**, Environmental Health Research Coordinator at the Aleutian Pribilof Islands Association, and contributing Unangam Tunuu linguist **Moses Dirks** discussed the 2015 publication *Qaqamiigux: Traditional Foods of the Aleutian and Pribilof Islands*, a rich resource of cultural, historical and nutritional information, with many recipes and descriptive photos. Emerging artist **Brian Walker**



Meda DeWitt-Schleifman

Native traditional health practices are relevant and accessible, and how they can provide the basis for living well today. You can watch her short video "Traditional Healing for the 21st Century" on the NMNH YouTube page in the Living Our Cultures playlist.

According to Iñupiaq linguist and educator **Edna MacLean**, "courses of change to the Iñupiaq people of the North Slope will require strong programs for the retention of our identity as Iñupiat." In September, she discussed how her 2014 publication *Iñupiatun Uqaluit Taniktun Sivuninit/Iñupiaq to English Dictionary* plays a part in the process. **D. Roy Mitchell**, Research Analyst for the Alaska Native Language Preservation & Advisory Council, gave a presentation in November on the causes of language loss, including involuntary boarding school programs in the past to ongoing economic and political domination, and the work by Alaska Native communities to revitalize their languages. In December, **Vera Starbard** (Tlingit/Dena'ina Athabascan), **Joe Bedard** (Iñupiaq/Cree) and **Richard Perry** (Athabascan/Yup'ik) of Alaska Native theatre company Dark Winter Productions spoke about storytelling as a powerful tool used by all Alaska Native cultures and discussed its role in reaching today's multi-cultural audiences.

(King Island Iñupiaq/Deg Hit'an Athabascan) gave a talk in June about his work as a carver and his experiences of cultural continuity and revitalization. In August, Tlingit Traditional Healer **Meda DeWitt-Schleifman** (Alaska Native Tribal Health Consortium) discussed how Alaska

ASC ANCHORAGE INTERNS

By Dawn Biddison

During the summer of 2015, **Hugo Viala** traveled from Palaiseau, France, to volunteer as a documentary film intern. A Master's degree student at the École polytechnique, Hugo is studying computer science and applied mathematics but is also studying and practicing film making. He is the president of the university's movie production club where he manages team video production and scripts and edits short videos. He joined ASC-AK in order to pursue more diverse film experience and his interests in anthropology and Alaska. Hugo's time in Anchorage began with an intensive study of Alaska Native cultures and ethnographic films. Working with supervisor **Dawn Biddison** and

Anchorage Museum's **Monica Shah**, Hugo's first project was to film and edit short video interviews with Alaska Native artists **Holly Nordlum** (Iñupiaq), **Ricky Tagaban** (Tlingit) and **Rebecca Lyon** (Athabascan/Unangax). He also edited videos of **Jack Abraham** (Yup'ik) and **Susie Silook** (St. Lawrence Island Yupik). His work is featured in the Anchorage Museum exhibition *Our Story* curated by Alaska Native artist **Drew Michael** (Yup'ik). For his second project, Hugo filmed and edited a short video with Tlingit traditional healer **Meda DeWitt-Schleifman** of the Alaska Native Tribal Health Consortium. Footage included her August Smithsonian Spotlight talk on Alaska Native traditional health practices and harvesting traditional plants in the Anchorage hills. You can see "Traditional Healing for the 21st Century" on the NMNH YouTube page in the Living Our Cultures play list. Hugo also completed a third project. He filmed and edited a short video on a



Iñupiaq actress Irene Bedard, Dark Winter Productions



Intern Hugo Viala filming (right)

joint Arctic Studies Center/Anchorage Museum program *Urban Interventions: Skate Art* at the Museum (for more information, see the preceding article). This film can also be viewed on the ASC playlist *Living Our Cultures*, on the NMNH YouTube page.

NEWS

INTERAGENCY POLICY ACTIVITIES

By William Fitzhugh

Since the early 1990s the Arctic Studies Center has been an active participant in the US Government's science policy formation for U.S. Arctic regions. **Igor Krupnik** and I serve on two committees that develop and monitor these plans. Igor works largely with the State Department's Arctic Policy Group (APG) which concerns international research and policy, and I serve on the Interagency Arctic Research Policy Committee (IARPC) that deals with federal agencies and their activities within the U.S.

These committees have been increasingly active in recent years due to arctic warming and the growing importance of Arctic regions generally. Issues like shipping, pollution, industrial development, border disputes, and the rights and health of the indigenous populations require new research, new policies, and greater consultation between nations, government agencies, and local populations. The Smithsonian's role has been focused on issues relating to native peoples and local residents, with topics spanning fields like language preservation, cultural heritage, education, health, indigenous environmental monitoring, and food security. We also serve as a convener and publicist for the Arctic by hosting large scholarly meetings like the Inuit Studies Conference (2012) and mounting exhibitions like "The Arctic: A Friend Acting Strangely" (2006), "Arctic Journeys / Ancient Memories: the Sculpture of Abraham Angik Ruben" (2012), and the forthcoming "Narwhal: Revealing an Arctic Legend" (2017). We have also mounted educational public festivals such as those featuring Greenland (2005), Alaska (2005), and to inaugurate the US Chairmanship of the Arctic Council, "Arctic Spring" in May, 2015.

Every five years the IARPC is charged with publishing a U.S. Arctic Research Plan and then coordinating and monitoring its conduct. The last Arctic Plan was issued in 2013 and will be replaced by a new version in 2017. During the current plan the ASC worked closely with its executive secretary, Sara Bowden, and her staff on the Arctic Communities Coordinating Team (ACCT) chaired by Fitzhugh and assisted by Krupnik. The IARPC's many coordination teams are supported

by an informative, interactive website that serves as an organizational tool as well as a source of information for the feds and general public (www.iarpccollaborations.org). ACCT activities, including regular meetings, periodic webinars, and other events relating to the plan's milestones can be accessed by anyone signing on to this site.

ACCT tasks include (1) assessing the strengths and vulnerabilities of Arctic communities faced with climate and environmental change; (2) contributing to the development of adaptation strategies and tools to maximize community sustainability; and (3) strengthening well-being through maintenance of cultural and linguistic heritage. 2015 saw accomplishments on most milestones, while several were deactivated due to completion or lack of viable prospects. Our report for progress in 2015 has been reported as follows:

Our goal of encouraging research on the impact of warming climate on communities and ecosystem services advanced along many fronts. Toward these goals, the ACCT held five meetings during the past year, with participation ranging from 12 to 20 individuals, and conducted a webinar on indigenous Arctic languages. The team includes representatives of federal agencies, universities, Alaska Native organizations, and independent scholars. Our main focus continues to be communicating and sharing information and conducting outreach rather than initiating or coordinating specific research projects or programs. Alaska dominates, but we also consider pan-Arctic issues. We found webinars the most useful tool for reaching

a broad audience, while teleconferences were used to identify topics and plan future events. Postings on the [iarpccollaborations](http://www.iarpccollaborations.org) website provided another valuable communication tool. ACCT members presented our work at several Arctic conferences.

Supporting milestones in establishing observing networks: USDOJ BOEM initiated a social indicators project in coastal Alaska to take place in 2016 (3.2.5a), and NSF Polar Programs funded "Arctic-FROST, an international, interdisciplinary research network aimed at improving health, human development and well-being while conserving ecosystem structures, functions and resources. A milestone assessing local priorities for addressing change (3.4.2, EPA) and progress has been made identifying projects and indigenous local observers for environmental observation and for data records preservation projects (3.4.9a, NSF). The TECT

Revealing the New Arctic

A CLIMATE CHANGE COMMUNICATION WORKSHOP WITH ANDY REVKIN OF THE NEW YORK TIMES

Wednesday, 16 December 2015, 3:00-4:30pm
San Francisco Marriott Marquis, Nob Hill C&D Rooms
Preregister here: <http://bit.ly/1MwBPuk>

Renowned environmental journalist Andy Revkin will lead workshop participants in an exploration of the process and importance of finding creative outlets for Arctic science, stories, and images.

PRESENTATIONS BY:

- Brendan Kelly, Study of Environmental Arctic Change "Inverted pyramids and extroverted science"
- Lawrence Hamilton, University of New Hampshire "Polar facts and polarization"
- Walt Meier, NASA Goddard "Communicating Arctic sea ice observations and predictions, guided by science and society"
- Jennifer Francis, Rutgers University "Sticky winter weather: Does it take two to tango?"
- Mia Bennett, University of California Los Angeles "Perspectives on Arctic blogging"
- Marco Tedesco, Columbia University "The POLAR Seeds project: Communicating melting in Greenland through sonification"
- Till Wagner, Scripps Institution of Oceanography "Frozen Relic: Arctic Works"

ORGANIZED BY THE STUDY OF ENVIRONMENTAL ARCTIC CHANGE

<https://www.arcsos.org/search-program>

Revealing the New Arctic climate workshop announcement. Courtesy of ARCUS.

milestone (3.2.3a) will continue to address incorporating indigenous knowledge and observing into monitoring environmental parameters.

Vulnerability research (3.6.2a) moved forward with projects on social indicators for rural Alaska (SIRAC) and studies of the role of social science in informed decision-making. NASA's on-going Terrestrial Ecology Program is conducting the Arctic-Boreal Vulnerability Experiment (ABoVE), in Alaska and western Canada seeking better understanding of the vulnerability and resilience of ecosystems and society to this rapidly changing environment (3.6.2b). Several ArcSEES programs have been on-going as well by BOEM, EPA, NSF, and USGS. The Arctic Social Indicators Report II of 2013 established important benchmarks. ACCT's milestone 3.6.3a) dealing with adaptation in the face of future climate scenarios has been benched as being unrealistic at this time. However, food security (3.6.3c) has been a driving force since our 2014 webinar presenting Alaska and ICC Inuit perspectives. Recent progress includes a North Slope Borough subsistence mapping project and an ICC-Alaska report on food security, in collaboration with TECT (3.2.3a). Also relevant here is Smithsonian research on the history, timing, and causes of animal 'crashes' among major subsistence species (seals, caribou, whales, walrus across) across the Arctic.

Our milestones on indigenous language and heritage advanced on several fronts, beginning with a webinar on indigenous Arctic languages ("From Assessment to Vitality to Active Support") focusing on language status and practical steps to encourage use and continuity. The inauguration of the US Arctic Council chairmanship provided an opportunity for IARPC demonstration of 'arctic vitality' at the Smithsonian's Arctic Spring Festival in May 2015 in which native language programs were featured together with cultural and natural history programs, exhibits, performances, and films. Efforts through the Alaska State Indigenous Language (HB 216) bill began its work in monitoring status and recommending policy (3.6.4b). The Smithsonian's Recovering Voices programs featured Alaskan topics and new research on links between oral history, language, archaeology, and climate change were the subject of an NSF-funded Smithsonian research program in Yakutat Bay. The Smithsonian also published Igor Krupnik's 20th century history of Chukotka ("Siberian Survival"), William Fitzhugh's and Wilfred Richard's synoptic history and geography, *Maine to Greenland: Exploring the Maritime Far Northeast*, and in early 2016, Krupnik's edited volume *Early Inuit Studies* document-

ing the history of research on the Inuit from 1850s to 1980s. The Arctic Council has also initiated its own Arctic Languages Vitality Project.

As noted last year, the NPS, NSF, SI, and other agencies have issued publications and new heritage and language programs. However, the bulk of this work is being carried out by or in collaboration with Native organizations, universities, NGOs, and others. Future ACCT activities will expand our collaborations with the Arctic Observing and Health teams, and pursue initiatives linked to US AC chair priorities.



Photo by: Christina Solia (POLAR Trek 2012), courtesy of ARCUS.

NARWHAL: REVEALING AN ARCTIC LEGEND

By Narwhal Core Development Team (Kim Moeller, Laura Donnelly-Smith, Trish Mace, Caitlin Grillis, Nicole Webster, Christyna Solhan, Martin Nweeia, and Bill Fitzhugh)

NMNH is preparing an exhibition on that most elusive of High Arctic animals—the narwhal. The exhibition will open in July, 2017, and will be on view for a year or more. Following is an excerpt from the exhibition's statement of purpose.

Narwhals are fascinating, elusive animals that for centuries have inspired legends, folklore, and art in both Arctic indigenous and European cultures. Until

recently, the body of scientific knowledge about this species was quite small. The narwhal's frigid, sometimes impenetrable Arctic habitat has hindered research. Recent studies have expanded knowledge of the animal's history and behavior and suggest the tooth has sensory abilities that may help it survive in its icy habitat.

Narwhals and ice are inextricably connected—this species lives its entire life cycle among Arctic ice. But planetary warming is happening twice as fast in the Earth's polar region, and sea ice is a very sensitive indicator of rapid change. Climate specialists estimate that the Arctic Ocean now has 55 percent less ice cover than during the summer months 30 years ago.

If such a trend persists, the Arctic may have little or no ice in the summertime by the year 2030. As the ice disappears and industrial activities in the Arctic increase, narwhals and other Arctic mammals are changing their behavior and movement patterns. As a result, relationships between narwhals and the Inuit hunters are also changing.

Our changing climate presents an ever-more-urgent necessity to understand the narwhal, how it has adapted

so far, and how it may continue to adapt. The narwhal is a compelling, fresh “messenger” to help engage and educate the public about human-driven climate change and how melting Arctic ice is affecting communities and ecosystems. The need for this education is crucial.

A deeper understanding of narwhals and other Arctic animals may help us understand our changing world on a broader scale and inform public policy in the Arctic. Addressing the needs of marine mammals and the communities of people who have depended on them for millennia is critical as Arctic human development activities escalate.

In the past 15 years, the NMNH has collaborated with the National Science Foundation; Harvard University; representatives from Inuit and Inughuit communities; and Fisheries and Oceans Canada on interdisciplinary research into the narwhal’s anatomy, physiology and ecosystem. The Global Genome Initiative is currently in the process of decoding and preserving the narwhal genome for future study. The Museum’s Marine Mammals Program, Arctic Studies Center, research associate Dr. **Martin Nweeia**, other experts inside and outside NMNH, Inuit hunters, and ethnographers will provide content.

The exhibition will feature several messages. One of the most important will be to convey what is known about this unusual Arctic sea mammal—its biology, adaptations, behavior, and its little known evolutionary history. We will explore its early representations in art and folklore from both Inuit and European cultures. We will present results of new scientific research into its tusk, coupled with traditional Inuit knowledge and observation. And we will explore the narwhal’s important relationship to historical and modern Inuit. Narwhals are closely tied to their Arctic habitat via specific adaptations; as the climate warms and ice melts, these

and other Arctic species are changing behaviors and survival strategies in ways that affect the entire food web, including indigenous communities.

Narwhal highlights will include tusks and tusk reproductions; Inuit traditional objects, a human-shaped stone inugsuk sculpture made by an Inuit artist; hunting tools and garments; depictions of the famous unicorn-themed tapestries from the Middle Ages; and a life-sized hollow cast of an adult male narwhal.

An exhibition focused on a large, charismatic mammal like the narwhal raises a variety of ethical issues. Inuit people in northern Canada and Greenland have hunted narwhals for generations. The exhibition will address how this hunting is tied closely to both subsistence and to cultural practices that place respect for the animal at their core. The exhibit will address issues of marine conservation, ethnics of collecting specimens, and issues of industrial development and tourism in Arctic regions. Narwhal will ensure that climate change content reflects the most up-to-date scientific information to help visitors understand the important connections between their own lives and human-driven climate change in the Arctic.



Director Kirk Johnson (center) spoke with Charlie and Enookie Inuarak (left) during the Arctic Crashes Symposium in January 2016 at which they presented on narwhals, while Martin Nweeia (far right) looks on.



Narwhal in Olaus Magnus, *De Gentibus*, 1555.

“YUPIK TRANSITIONS” (2013) RECEIVES SECRETARY’S RESEARCH PRIZE FOR 2014

Another recently published book by the ASC staff, *Yupik Transitions: Change and Survival at Bering Strait, 1900–1960* (2013) by **Igor Krupnik** and **Michael Chlenov** (see ASC Newsletter 21) received the Smithsonian Secretary’s Research Prize for 2014. The selection and nomination of awardees was administered by the Smithsonian Congress of Scholars that also hosted the ceremony at the Rasmuson Theater of the National Museum of the American Indian on February 8, 2016. There were 10 awards this year

across the entire Smithsonian Institution, of which three were for books; two went to the NMNH anthropologists – to Igor and to **Dennis Stanford** (for his co-authored book, *Across Atlantic Ice: The Origin of America's Clovis Culture*, with co-author, **Bruce Bradley**).

The Secretary's Research Prizes recognize excellence in recent scholarly research across the Smithsonian and reflect the diversity of science at the Institution, as well as the staff outstanding contribution towards the Smithsonian's main mission, "the increase and diffusion of knowledge." The 2014 awards were personally presented by Secretary **David Skorton**, his first such service as the head of the Institution. In his opening remarks (soon to be archived at <http://www.ustream.tv/channel/sistaff>), Secretary Skorton praised the breadth and intellectual vigor of the Smithsonian scholarship and vowed to support the diversity of science and the driving power of researchers' curiosity as the best means to preserve the Institution's status as the prime hub of knowledge for the Nation.

An excellent illustration of this point was the Second Annual **Will Morrison** Memorial Lecture that concluded the prize ceremony. This year, it was given by **Eleanor Harvey**, curator at the Smithsonian American Art Museum, on the topic *American Cosmos*, or *Dusting for Humboldt's Fingerprints across the Smithsonian*. In her fascinating talk, Dr. Harvey revealed huge personal and intellectual impact that the German 'knowledge giant,' naturalist **Alexander von Humboldt** (1769–1869) had on all things and characters related to the establishment of the Smithsonian – from James Smithson himself to



19th C. West Greenland kayak hunter's parka, SI 74126.



Igor Krupnik receives 2014 Secretary's Research Prize from Secretary David Skorton.



2014 Secretary's Prize Honorees from the Natural History Museum, with the NMNH Director, Kirk Johnson (center). Left to right: Igor Krupnik, Dennis Stanford, Carole Baldwin, Nicholas Pyenson, and Holly Little.

the science elite of the young American nation, including the two first Secretaries of the Smithsonian, **Joseph Henry** and **Spencer F. Baird**.

ANN FIENUP RIORDAN RECEIVES NAASA LIFETIME ACHIEVEMENT AWARD

By *Bernadette Driscoll Engelstad*

Recently Dr. Fienup-Riordan received a Lifetime Achievement Award from the Native American Art Studies Association. The award was accompanied by the following statement by Bernadette Driscoll Engelstad.

I am honored to be here this evening to pay tribute to one of the most talented and accomplished anthropologists of our time, Ann Fienup-Riordan. My initial encounter with Ann's research was through her first major publication, *The Nelson Island Eskimo: Social Structure and Ritual Distribution*, based on her doctoral fieldwork in the small Yup'ik community of Nelson Island, off the coast of southwest Alaska. At the time I was a newly appointed curator of contemporary Inuit art, and I remember being especially moved by Ann's rich description of the community ritual marking a young boy's success in taking his first seal. Ann's detailed account of family and community practice deepened my understanding of the strong social and cultural foundations that provide meaning and vitality to the creative work of indigenous artists across the Arctic—and indeed, across all of North America.

As a doctoral student at the University of Chicago, Ann worked closely with **Marshall Sahlins** and **David Schneider**, and at the Field Museum with the Arctic anthropologist, **Jim Van Stone** (whom Ann refers to as 'an elder among elders'), and throughout her publica-

tions, she acknowledges the generous mentorship of Yup'ik elder, **Paul John**. Her career spans over four decades, a period of critical change for Yup'ik communities. Ann's work is keenly marked by an awareness of the passage of time—not only of historic changes in the Arctic, but also of the pending loss of individual and community knowledge. Her writing has contributed in a significant way to stem that loss: recording, documenting, and thereby preserving Yup'ik knowledge and language for future generations. As well, her publications have brought attention and insight to the challenges faced by Arctic peoples—hunters and harvesters—across national borders and within the global community.

I should mention here that Ann is among the most modest of anthropologists. In this group picture with elders at the Berlin Museum, she is the one in the background—a visual reflection of her way of working. Not one to claim the limelight, Ann is one to build a strong structural framework that allows the voices of others to be heard. Working closely with a network of elders and community scholars, **Marie Meade** and **Alice Rearden**, Ann's focus on respectful collaboration has ensured a meaningful and indelible legacy of Yup'ik cultural knowledge.

In the interest of sharing a sample of Ann's research with you, let me simply highlight a selection of her many publications. As the titles indicate, Ann's work includes historical ethnography, missionary encounters, oral tradition, the spoken words of elders, the creative work of artists, and the study of cultural artifacts in museum collections. Working closely with the Calista Elders Council and Yup'ik colleagues, Marie Meade and Alice Rearden, much of this research is published in the Yup'ik language. The comprehensive scope of these publications would make an impressive resume for an entire faculty, let alone a single individual.

Grouping these publications thematically, let's begin with *FREEZE FRAME* and the portrayal of Eskimo peoples through the medium of Hollywood, for this is a central core of Ann's work—to take on the manner in which Western culture has imagined and imaged Arctic peoples, and turn that on its head through the description and analysis of Yup'ik social and cultural practice and its foundation in Yup'ik cosmology and worldview.

Eskimo Essays, along with *Hunting Tradition in a*

Changing World form a primer of Ann's areas of interest and developing research; while *Boundaries and Passages*, perhaps her most widely known work—and certainly highly respected—examines rule and ritual through Yup'ik oral tradition.



Ann with fellow UChicago grads, Ira Jacknis (Hearst Museum, University of California, Berkeley) and Susan McKinnon (Anthropology, University of Virginia) at NAASA conference, Santa Fe, New Mexico.

Ann has resurrected ethnographic history from the 1930s in *Where the Echo Began and Other Oral Traditions from Southwestern Alaska*; and through the travel journals of John and Edith Kilbuck, a Moravian missionary couple stationed in Bethel and Point Barrow. Her research in the Moravian Archives in Bethlehem, PA led to the publication, *The Real People and the Children of Thunder* and provides something of a foundation for Mission of Change in Southwest Alaska. This is one of the most commendable aspects of Ann's work—how one area of

research evolves into another, even more comprehensive project.

Ann's interest in ethnographic artifacts in museum collections began with the study of Yup'ik dance masks acquired by 19th century collectors which had made their way into international museum collections. The exhibit catalogue, *Living Tradition of Yup'ik Masks* is subtitled *Our Way of Making Prayer*, and is published with a companion bilingual volume documenting the thoughts and memories of elders as they studied these masks within their own community.

As an outgrowth of this project, Ann organized a three week visit with Yup'ik elders to the Ethnological Museum of Berlin; certainly the most thorough and comprehensive field-study by elders of a museum collection. The record of their visit is beautifully illustrated and accompanied by a bilingual volume entitled *Ciuliamta Akluit/Things of Our Ancestors: Yup'ik Elders Explore the Jacobsen Collection*. A masterpiece in terms of an exhibit concept is *Yuungnaqpiallerput/The Way We Genuinely Live: Masterworks of Yup'ik Science and Survival*. As Ann notes, "although there may be no word for science in the traditional Yup'ik language, it forms the very essence of Yup'ik life". From this statement, Ann goes on to show the knowledge and pragmatic use of fundamental principles of chemistry, biology, and botany that underlie Yup'ik cultural practice.

The participation of Yup'ik elders is key to Ann's research and she has worked tirelessly to bring their

voices to the fore. These publications include: *Wise Words of the Yup'ik People: We Talk to You Because We Love You*; *Our Nelson Island Stories: Meanings of Place on the Bering Sea Coast*; [Ellavut] *Our Yup'ik World and Weather*; *Words of the Real People: Alaska Native Literature in Translation* (co-edited with **Lawrence D. Kaplan**); as well as the voices of individual elders: *Stories for Future Generations/ The Oratory of Yup'ik Elder Paul John*; and *My Legacy to You* (the words of **Frank Andrew Sr.**)

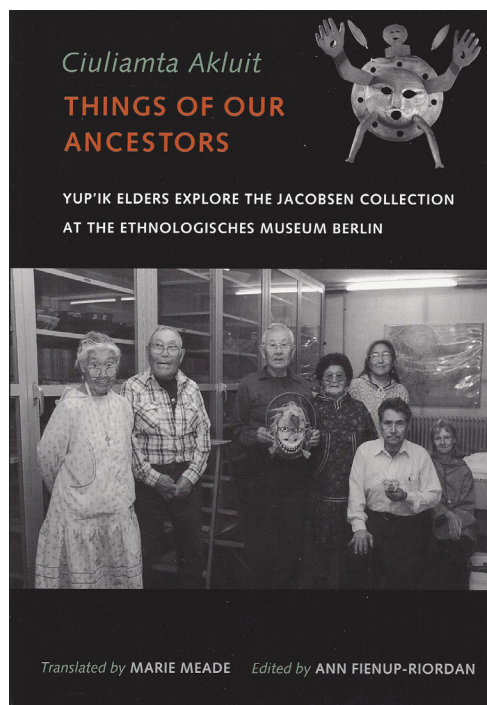
As a Research Associate with the Smithsonian's Arctic Studies Center, Ann has worked closely with the Center's directors, **Bill Fitzhugh** (in Washington) and **Aron Crowell** (in Anchorage), and both wish to add their congratulations...

As Bill Fitzhugh writes:

Ann Fienup-Riordan has been an inspiration to the young field of Yup'ik ethnography and cultural studies. Building on the work of pioneering ethnographers, Edward Nelson and Margaret Lantis, Fienup-Riordan has brought the finest scholarship on Yup'ik culture, art, and world-view to both scholarly and popular audiences in a series of highly illustrated and influential exhibitions and publications, all of which have been done in collaboration with the Yup'ik community. Her seminal publications based on museum collections from North America and Europe have been as influential in establishing broad understanding of Yup'ik culture and its spiritual dimensions as Yup'ik artifacts were in the avant-garde art movements of Europe a century ago. Her insightful and sensitive documentation has also immeasurably enriched the living tradition of Yup'ik people and has established this previously little-known culture as one of the great native traditions of the New World.

And from Aron Crowell in Anchorage:

Through many years of highly productive scholarship and collaborative engagement with the Yup'ik communities of western Alaska, Ann Fienup-Riordan has brought the complex cultural heritage and contemporary lifeway of a singular indigenous people to the world's attention. Her extensive body of published



Cover of Ann's book: *Ciuliamta Akluit/Things of Our Ancestors: Yup'ik Elders Explore the Jacobsen Collection*

*work is unmatched in Arctic anthropology; and she has dedicated herself to supporting Yup'ik culture and language both within Yup'ik communities and on the national stage through groundbreaking museum exhibitions including *The Living Tradition of Yup'ik Masks* and *The Way We Genuinely Live: Masterworks of Yup'ik Science and Survival*. By her inspired work she has inspired us all to rethink anthropology and its path toward committed, productive partnerships with Native communities. My warmest congratulations to Ann for this high honor and fitting recognition from the Native American Art Studies Association.*

In conclusion, Ann's work has been widely recognized and long appreciated in Alaska, as well as in the international community of Arctic scholars. NAASA's Lifetime Achievement Award brings Ann's research – and the work of her Yup'ik colleagues -- to an even broader audience. And we all join in offering Ann our deep respect and most sincere congratulations.

RESEARCH

A GROSWATER SURVEY

By William Fitzhugh

In late July and early August, the ASC teamed up with the Nunatsiavut Archaeology Office to extend surveys begun in 2014 in the Rigolet Narrows and the southern shore of Groswater Bay. The field team consisted of **Jamie Brake** and **Michelle Davies** (Nunatsiavut Archaeology Office), **Patrick Jolicoeur** (University of Glasgow), **Katie Portman** and **Molly Iott** (Notre Dame University), **Jacob Marchman** (Dartmouth College), and **Eric White** (Rigolet, Labrador), with **Perry Colbourne** as skipper of the M/V Pitsiulak. The survey was shorter than planned due to weather and mechanical issues that delayed our arrival in Rigolet until 15 July. Adverse weather continued throughout the survey, making landings on mainland shore impossible and restricting work to off-lying islands.

While awaiting our arrival, Jamie and Michelle expanded last year's surveys in the Backway and Narrows, assisted by Nunatsiavut Conservation Officer **David Wolfrey** and summer student **Josh Adams**. The Smithsonian-NAO survey began with investigations at several locations along the north shore of the Narrows where we recorded Inuit camps between Ticoralak Head and Palliser Point. Ticoralak Head has a long history of fishing and hunting camps, and Richard Jordan reported an Inuit winter site here in the early 1970s. That site eluded us this year, but several other settler camps and Inuit tent rings were recorded and

tested, one of which produced part of a brass telescope.

Surveys of the south shore of Groswater Bay took place over a four-day period and produced excellent results from Indian Island (sometimes called Spracklin Island), an island off Snook Cove, and Mason's Island. Day after day, strong wind and heavy seas made it impossible to set foot on the mainland shore. During this same period **Ozzie Allen** reported some of the worst seas he had ever seen around Rattlers Bight on the north side of Groswater Bay. The mainland coast along southern Groswater Bay consists of low rocky headlands and long stretches of sandy beaches formed from rivers drain-

ing the low, forested country between Groswater Bay and the Backway. These lands are excellent hunting and fishing territories and have been used by Rigolet people for salmon and trout fishing, fall caribou hunting, and winter trapping. The lack of protected harbors has restricted the development of the larger settlement groups such as seen along the north shore of Groswater Bay. Most recent settlement here is composed of widely dispersed family homes occupied during the winter by people whose summers were spent in outer coast locations of West Bay and Pottles Cove. More recently, summer activities

have been confined to several small islands where salmon and trout fishing is productive; these islands are also visited in the fall by harp seals, in the spring by caribou and in the summer by black bear. Hare, fox, and other animals are also present. Over time the most important resource has been the harp seal hunt, conducted in the fall, and large boulder caches associated with preserving the harp seal catch account for most of the archaeological evidence. These islands probably host several hundred meat caches, and some may have been re-used by different cultural groups. Caches are built in exposed boulder beaches ranging from those close to the modern shore to higher, up-lifted beach lines that are now far removed from the shore and date to early times. We excavated two of these high boulder pit sites, one on Indian Island, and a second at Indian Island West. The first was a 3-meter wide pit that was large enough to be a dwelling whose elevation suggested a possible Maritime Archaic affiliation. But upon excavation we found it to be a cache with an internal slab floor, but no organics, stone tools, or other remains. We had better fortune with a small oval pit on a high beach at Indian Island West. Excavation in the interior of this feature, which was large enough to serve as a

temporary shelter for one or two persons, produced a hearth with charcoal that gave a radiocarbon age of almost 7000 years, but no tools or bones. Two small cache pits were found just a few meters from this small dwelling. Most of the many caches we found had been opened in antiquity, but one that was intact produced a set of bones from a single caribou, many of which had been broken for marrow extraction before placement in the cache.

Another distinctive archeological feature that appeared on Indian Island and Mason's Island were small, circular 1-1.5 m diameter cobble pavements. Two of these features were observed on the low boulder-strewn

flatlands along the eastern side of Indian Island harbor. The one we excavated was heavily lichen-encrusted and had a carefully-formed circular border with a tightly-fitted pavement. Under some of these rocks we found oil-encrusted sand that also seemed to contain bits of charcoal. No tools or bones were found and there were no signs of habitation structures nearby. These pavements were only about one meter above the current shoreline and cannot be of great age. We found several similar features at the Mason Island-1 site, but the one we excavated produced no finds or charcoal. If these features are associated with a stemmed point and possible burial we found at

this site, a ca. 2000 year old date could be suggested based on the point's similarity to artifacts found at the Sid Blake site in Northwest River. Several more of these small hearth pavements were found when we were storm-bound at Punchbowl, south of Black Tickle and Spotted Island. Such features have never been found associated with Inuit sites in Labrador and probably are related to ancestral Innu.

Our survey of the northern part of West Indian Island produced two likely Inuit tent ring sites. On a low point on the west side of the Indian Island harbor we recorded a D-shaped tent ring similar to 18-19th C Inuit summer tents from northern Labrador, with a well-constructed U-shaped hearth outside the tent and a food cache in the ledges nearby. A second 20th century Inuit tent ring was found at the northern tip of the island.

The final site investigated was a blown-out gravelly beach terrace at the harbor on the south side of Mason Island. Levi and Ruth Wolfrey have a cabin here, and the location has also been the site of a bird-nesting wildlife experiment. The windblown terrace is 3-4 meters above sea level. Here we found scattered flakes of mottled grey flint or quartzite and the base



7,000 year old boulder house (left) and cache at Indian Island West.

of a stemmed biface, noted above, resembling pieces from the ca. 2000 BP Sid Blake site in Northwest River. Several of the small hearth pavements found at Indian Island harbor were also present. In addition we noted a large circular gravel mound encircled by large flat stones, several of which were oriented radially toward the center of the feature, which was depressed, as if from a collapsed sub-mound center or caused by recent excavation. There is a good likelihood this is an Indian culture burial associated with the stemmed point. If so, the site could be an important addition to knowledge of prehistoric Labrador Innu mortuary customs of ca. 2000 years ago, about which nothing is known.



Oil-stained hearth with oil encrustation on Indian Island. Several more 1-meter diameter features were found here and on the South Labrador coast.

Although our survey was brief and was restricted to island locations, the results add significant data and regional coverage to the archaeology and culture history of Hamilton Inlet and the Central Labrador coast generally. The abundance of boulder pit caches and dwelling structures indicates a long history of exploitation of seal—especially harp seal—resources. Our data also suggest that spring caribou hunting on near-coastal islands is an under-appreciated resource activity. We found caribou spoor and bones (antlers and skeletal materials from recent kills) on all the islands we visited, and caribou bones were present in the only cache pile we opened. Additionally the prevalence of small, carefully-constructed hearth pavements found in rocky non-habitation locations, as well as at some beach terrace sites like Mason Island-1, provide a new avenue for interpreting settlement patterns and Intermediate Period Indian prehistory. A few similar features have been reported from the Central Coast (Loring 1985) and much larger ones have been found as the dominant domestic hearths of the Intermediate Period Saunders-Brinex Complexes; but the smaller features described here have a different function, one not associated with habitation debris, food remains, or stone tool use and production.

The ethnographic record is of particular interest in this regard. Rigolet Inuit living in the Backway in the early 20th century at places like Haniuk were often visited by Innu groups that camped nearby and

interacted in various ways, including the playing of children. Such interaction has been overshadowed, at least in literature accounts, by stories of ‘battles’ or ‘massacres’ (e.g. Eskimo Island-Carawalla). In fact, the Backway may have been an important route for Innu movement from western Lake Melville to the southern regions of the outer coast through a heavily forested corridor laced with lakes and slow rivers. The scarcity of Inuit tent rings along the southern shore of Groswater Bay suggests these islands were not much-visited by Inuit, whose traces are common in northern Groswater Bay. The occurrence of circular hearth features, seemingly associated with

post-Maritime Archaic Indian cultures and perhaps the Innu, here and along the southeastern coast of Labrador—which was also lightly occupied by historic Inuit—adds to his pattern of Indian occupancy in these forested, low-lying regions. These areas are rich in fur and land game and are well-suited for canoe-

based cultures with more restricted use of maritime resources. Further study of this still archaeologically unknown region may reveal a much richer and more extensive Indian/Innu coastal history and adaptation than has been suggested by previous archaeological work.



Stemmed point of quartzite from Mason Island.

land with a group of elders. Despite horrible weather we had a wonderful day recalling stories about ‘them days’. Later I gave a presentation in Rigolet on my early research in Hamilton Inlet from 1968 to 1975 illustrated with excerpts from field notes, diaries, photographs of sites and local people, and archaeological reports. I plan to make these materials available to local heritage institutions for use in educational settings, local tourism development, and general community interest. There was strong encouragement for collaboration with the Rigolet Heritage committee, the Northwest River Museum, the Memorial University of Newfoundland Labrador Institute in Goose Bay, Them Days, and other groups. At the close of the visit Jamie Brake and Michele Davies reported our findings and thanked the community for their interest and support

for continuing archaeological and historical work.

In closing this brief account I want to thank our many friends in Rigolet who made this year's visit so memorable and productive. It was a real treat to re-connect with the **Allens, Tooktoshinas, Olivers, Shiwaks, Michelins, Wolfreys**, and many others. We hope to continue our Groswater Bay surveys in collaboration with NAO and Rigolet in 2016. Even without much luck at all we should expect better weather! This summer was the "pits" in more ways than one!

CARIBOU HOUSE PEREGRINATIONS

By Stephen Loring

Sam Paquet, Norpaq's chief pilot, carefully nudged his Turbo-Otter ashore at the western-end of Lac Brisson in northern Quebec. "Here you go boys, looks like a nice day, see-you in about a month." With the plane's departure back to Schefferville my colleague **Tony Jenkinson** (Tshikapisk Foundation) and I surveyed the pile of food and equipment that, theoretically at least, was to fit into the canoe and sustain the journey ahead. The silence that descends and the stillness of the lake are in stark contrast to the hustle and hassle of preceding weeks that characterize departures to the North. Following-up on last autumn's fieldwork at Mistanipi, the joint Smithsonian-Tshikapisk Caribou House Project is a loose confederation of researchers (Akaneshaut and Innu) interested in exploring the history of Innu occupancy in the extreme Northeast—in Ntessinan, or the Quebec-Labrador peninsula, call it what you will. For almost twenty years our collaboration has been instrumental in revealing the extent and duration of ancestral Innu land-use and occupancy. Under the aegis of the ASC's Arctic Crashes initiative our attention this year (and last) was to build upon the Kamestastin research (as well as the pioneering investigations of our archaeological and ethno-historian predecessors **Gilles Samson** and **Alan Cooke**) by extending our investigations into the George River country which has figured so prominently in the dynamic history of both Innu and caribou.

The broad valley in which the George River (Mushuau-shipu) flows to the north, is a long forested oasis backed by barren ground plateaus. Providing shelter and resources and facilitating access and communications to groups throughout the region the valley provides the center



Day 1. Full canoe with tent-poles and tent stove.

stage for examining the mingled relationships of human beings and caribou over time. A relationship that, for the most part, existed beyond the purview of Western observation and relies significantly on the photographs and journal entries of **William Brooks Cabot** (1858-1949), on Innu oral history and testimony, and increasingly, on archaeology. It was William Cabot's description of the 1906 Innu fall caribou hunting camp on Mistanipi where a small band group of Innu families had intercepted and killed hundreds of caribou as they crossed the lake at its narrows that fueled our interest

in the potential of the site and the region to help refine our awareness of what the Innu caribou-specialized adaptation might look like on the ground (see last year's account in the ASC Newsletter 22). One of our primary research agendas is to learn how an understanding and appreciation of the character and constraints of the 19th-century Innu adaptation might correlate with earlier archaeologically-derived cultural manifestations. Specifically, can we deduce anything about the nature and duration of caribou populations and fluctuations over time from archaeological-derived insights? What correlates of the archaeological record—the location and density of sites from different time periods, the evidence of intra- and inter-regional patterning, tool use and acquisition, ritual and ceremonialism—might serve as proxy indicators of caribou demography?

There are an intriguing series of oddly-shaped irregular lakes (Brisson, Napeu Kainiut, Canané), connected by short stretches of rivers and rapids that flow to the south, to Mistanipi, which discharges into the George at Indian House Lake (Mushuaunipi). This lake and river system is approximately 30-35km east and parallel to the



Tony Jenkinson mapping in a portion of the 19th-century Innu caribou-bone feature at Mistanipi Eshatshiut. Over twenty centimeters deep the feature contains the remains from hundreds of caribou.

George River valley. The route is sometimes traversed today by Innu hunters from Natuashish who travel over the lake ice to hunt geese who are attracted to the open water of the rapids in the early spring. Mobility is a key factor in barrenland survival for both humans and caribou and we suspected that such natural north-south corridors as offered by the lakes draining into Mistanipi would likely have served as a prominent travel route in the past. In traversing this region we hoped to facilitate a broader regional appreciation of past land-usage expanding upon and connecting the “islands” of research represented by Samson’s work at Indian House Lake and our work at Kamestastin and Mistanipi. Furthermore this whole portion of the northern Quebec-Labrador boundary region is the territory traversed each year by the migrating George River caribou herd. We were keen to observe and document the physical traces of caribou paths in an effort to determine their direction, their lay on the land, their use and abandonment, and their relationship to cultural features.

A canoe-based survey affords an opportunity to experience the nuances of a place with an intimacy and appreciation not readily observed when traveling by mechanical conveyances, be they motor-boats or helicopters. The immediate concerns of wind and weather, shelter and wood, and an awareness of the creatures in the countryside –birds, fish and animals-- , the obstacles to travel, and certain advantages afforded by both travel-routes and choices for sites (access to resources, viewsapes, etc.) afford researchers a perception and appreciation of past lifeways than might not otherwise be obtained. This practice of experiential archaeology has always been a component of the Smithsonian-Tshikapisk archaeology work with Innu. Unfortunately, a proposed rendezvous with a group of Innu colleagues who were interested in documenting former Innu burial places in the country

did not transpire so that the autumn 2015 fieldwork was limited to the one canoe.

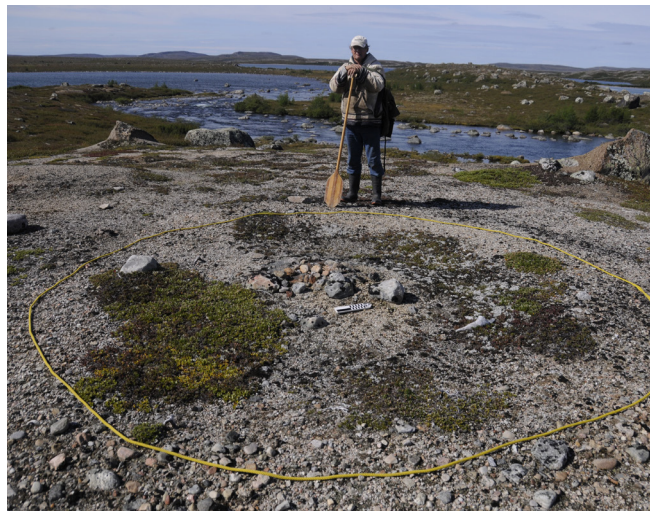
In the course of four weeks we surveyed the country about the western end of Lac Brisson whose drainage we subsequently followed through the lakes down to Mistanipi according to the dictates of weather, wind and waves, and the constraints imposed in documenting the sites discovered. We were successful in identifying several small Tshiash Innu (a.k.a. Maritime Archaic) and ancestral Innu hunting camps and boulder cache features in addition to the numerous remains of raised earthen-wall tent-rings that are a hallmark of 19th (and early-20th) century Innu occupations. Perhaps the most interesting of these historic Innu sites were a cluster of tent-rings that occurred on an island at the debouchement of Lac Canané into Mistanipi. This site, Mistanipi Eshatshiut, contained the remains of at least four prominent tent-ring structures that overlooked the rapids that separated the two lakes. Off to one side of the habitation area, in a secluded spot surrounded by large boulders, was a caribou bone bed, approximately 2x3 meters in breadth, consisting of a layer of shattered long-bone fragments overlaying a 10cm thick deposit of caribou bone mash. The bone mash results from the crushing and pounding of the epiphyseal ends of long bones that are rich in

fat that is rendered out when the bone mash is boiled. The fat and marrow extracted from the bones is the central feature of the mukushan a ceremonial thanksgiving feast that figures prominently in Innu social and spiritual practices.

Having mapped and photographed the features at Mistanipi Eshatshiut we portaged our canoe and equipment through a series of small ponds to emerge on the northshore of Mistanipi Lake proper. Mistanipi –literally “big lake” in Innu-aimun-- (but some Innu say it has



Norpaq stencil at abandoned caribou hunting camp on Lac Brisson. We are extremely grateful to the entire Paquet clan at Norpaq, outfitters and air-service out of Schefferville, whose knowledge and skill contributed greatly to the success of our fieldwork and whose kindness and consideration were the definition (and then some!) of northern hospitality.



Tony Jenkinson standing behind a typical Innu tent-ring (with a central stone hearth) at the rapids draining Lac Brisson.



A lonely child's grave situated on a knoll overlooking the southern reaches of Napeu Kainiut. We were reminded of a passage from Mrs. Hubbard's book –A Woman's Way Through Unknown Labrador- who encountered a similar burial place at Michikamats near the headwaters of the George River, "Who could doubt that romance and poetry dwell in the heart of the Indian who chose this for the resting-place of his dead." (1908: 159)

been rendered incorrectly in modern usage and should be Matshanipi -meaning bad or ugly lake.) proved a formidable adversary. With the prevailing autumnal winds, a twenty-five km. fetch, rockbound shores and a thunderous surf it took all our skill, patience and luck to cover the last portion of the survey arriving, gratefully, at our old camp-site from last year where tent-poles and firewood awaited us. Two days later, as promised, **Sam** and **Pierre Paquet** braved snow squalls and gales to pluck us from our beach and carry us back to town.

HART CHALET ARCHAEOLOGY

By William W. Fitzhugh

The few days available for work at the Hart Chalet site added importantly to our knowledge of this 17/18th C. Inuit winter village and to the evidence for Inuit occupations of the Quebec Lower North Shore in general. Previous investigations included partial excavation of HC House 1 and testing of House 2. House 3, this summer's target, had been neglected previously because it was overgrown by thick spruce forest and could not be mapped or photographed. This summer we cleared the vegetation, extended the HC site grid to cover House 3, produced a topographic map of its shape, depth, and features, and sampled a transect from its entryway to its rear wall. This dwelling, which had been excavated into sandy beach deposits, was of special interest because Houses 1 and 2 had been disturbed by land-clearing and construction of the Hart Chalet cottage. House 3 offered a chance to explore an undisturbed dwelling and midden that we hoped would include organic preservation.

By the time we arrived at Brador we had a well-seasoned dig team, accustomed to lousy weather, heavy seas, pesky flies, and spaghetti. The group for this part of the project included our skipper, **Perry Colbourne**,

Jacob Marchman from Dartmouth, **Molly Iott** and **Katie Portman** from Notre Dame, and **Patrick Jolicoeur** from University of Glasgow. This year we reached Brador in an unconventional manner—in Perry's pick-up truck from Lushes Bight rather than by boat. As land-lubbers, we were freed from worries about harbors and storms, and we had the luxurious food and lodging provided by **Florence Hart** at her home in Brador, only a few kilometers from the site at her 'chalet' cottage near the mouth of the Brador River.

As work began at House 3 the situation turned out to be less clear than we had hoped. We did not locate an external midden (midden seems to have been dumped on the house walls), and we found the house structure more complicated than its external appearance suggested. The upper levels of the interior produced numerous caribou skulls and bones, and many nails of medium and small size were found in the buried cultural level that contained vestigial remains of a plank floor. We did not excavate into the rear or side portions of the dwelling where sleeping benches may be buried



Hart Chalet House 3 cleared and prepared for grid installation. View to south showing entrance passage.

under wall collapse deposits. A large mound of consolidated soil containing charcoal, caribou bones, and burned tile east of the house's inner doorway proved to be a hearth mound and/or roof support rather than stone lintel support. Further, the inner doorway did not include the cold trap so diagnostic of most Inuit winter houses, but only a flat boulder-top on which we found remnants of planking and wood sticks. The short entry passage (1.5-2.0 m long) and house floor were also anomalous in not having been paved with stone slabs but by wood planks, and both areas contained few artifacts.

An important structural feature of the site (and one we did not have time to excavate) was an elevated 3x3m area south of the southeast corner of the house, east of the entryway. Here we found evidence of a large open hearth indicated by caribou bones, charcoal, and charcoal-stained roof tile and rocks. This feature seems

to have been part of an anteroom attached to the main room of the house, possibly separated by a wall, creating a kitchen area under a secondary roof adjacent to the entry passage. A similar kitchen annex was suggested in House 2 at the Little Canso Island-1 site in Jacques Cartier Bay. Inuit dwellings with similar hearths were described by **Louis Jolliet** from the LNS and southern Labrador in 1694:



Jake, Molly, and Katie beginning a buggy-day excavation of House 3 interior, View North.

“They had no fire inside, but had a special place for it in the open... It had a [main] room and an anteroom built of logs eight, twelve, and fifteen feet in length, fastened to a beam supported by posts. These logs were set alongside one another, with turf on top and a foot of mud covering them. There was one door to the anteroom on the south end, and two large windows for the room, slanting skyward which served as chimneys in fine weather and apparently as doors too, besides the small door three feet high which was the entrance from the anteroom.”

Another novel feature of this house distinguishing it from contemporary Labrador Inuit dwellings on the central Labrador coast was a plank-lined drainage ditch extending down-slope in line with the entry passage. In this ditch we observed a score of thin layers of charcoal-stained sand alternating with clean sand that may record annual deposits, like tree-rings, providing a clue about the duration of occupancy, dark layers representing the period of winter use and the clean layers the period of summer abandonment. A layer of pure charcoal on top of the plank floors suggests a fire terminated the occupation. Historical records document numerous instances of Europeans and Innu attacks on Inuit settlements on the Lower North Shore in the 1720-30s.

The material finds from House 3 are interesting—not

because of their frequency (non-nail finds were rare) but because of their uniqueness vis-à-vis other LNS Inuit collections and general similarity with finds from Houses 1 and 2. Grey Normandy stoneware was present in one or two vessel forms, and a new type of SW with a pink paste and surface was recovered as well as pieces of light green glazed earthenware. Medium-small blue glass beads were found in scattered locations in floor deposits, but other types found at Hare Harbor were rare. As in other LNS Inuit sites we found soapstone lamp and pot fragments. Iron knife blades, an awl, iron pyrites nodules, and a trunk latch piece were among the non-nail finds. Most interesting was the complete absence of clay pipes and marmite earthenware so common at Hare Harbor. No bone or wood tools were found, nor whalebone sled runners or other similar items of whalebone, antler, or bone. Almost all of the food remains were caribou. Numerous flakes and artifacts of fine quality chert and quartzite attest Indian occupations prior to the Inuit arrival. These similarities and differences provide clues to the chronology, regional patterns, and social arrangement of LNS Inuit villages and whether they represent a single homogeneous occupation, occupations by different pioneering Inuit groups with different trade and social relations with various European groups, or occupations at different times during the 17th and early 18th centuries.

The 2015 Brador project was made possible by funds from the Arctic Studies Center, the Smithsonian Grand Challenges Consortium, Notre Dame University, and the **Claire Garber Goodman** Fund of Dartmouth College. **Patrick Jolicoeur** of the University of Glasgow volunteered his time and resources and helped bridge the yawning age gap that has plagued recent expeditions. As usual the project could not have been conducted without the expertise of Captain **Perry Colbourne** of Lushes Bight, Newfoundland, and his wife **Louise**.

In Brador, **Florence Hart**, opened her home, showers, food, and transport to our motley, bug-infested team and provided access to the Hart Chalet site. **Garland Nadeau** provided inspiration for Lower North Shore heritage.

‘ARCTIC CRASHES’ WRAP-UP

By Igor Krupnik

The Ernest S. (“Tiger”) Burch, Jr. Endowment for the Arctic Studies Center (ASC) was established in December 2012 and was named after Ernest S. (“Tiger”)



Some of the many caribou bones from House 3.

Burch, Jr., the long-term ASC Research Associate and the leading figure in Arctic/Alaska anthropology for several decades. The mission of the Endowment is to support, promote, and interpret the multidisciplinary study of Arctic peoples and their cultures, including via coordinated circumpolar studies, museum collection and archive research; international, interdisciplinary, and indigenous cooperation; publication; public and professional education; and other programs. The Endowment supported some of the activities related to the ASC two-year research project, "Arctic Crashes. Peoples and Animal Relations in the Changing Arctic: Human, Climate and Habitat Agency in the Anthropocene," including two full-day 'Arctic Crashes' sessions in 2015 and 2016 (see below), and two annual 'Tiger Burch' memorial lectures delivered in February 2015 and January 2016, respectively.

2015 was the second and the final year for the ASC 'Arctic Crashes' project under the Smithsonian 'Grand Challenges' Consortia award. It was a busy year to the project team that included all of the ASC research staff, as well as their partners, both within and outside the Smithsonian Natural History Museum. The highlights of the year comprise two 'Arctic Crashes' symposia that we organized and hosted in Anchorage and Washington, DC (see below), as well as the slew of individual activities in research, data analysis, and synthesis that may be summarized as follows.

Aron Crowell continued the analysis and publication of his research data on the archaeology and historical ecology of indigenous harbor seal hunting in Yakutat Bay and southeast Alaska, both before and after Western contact. His collaborator, zooarchaeologist **Michael Etnier** (Portland State University) identified almost 6500 faunal specimens excavated at the Yakutat Old Town site during the 2014 field season, including 850 from harbor seals. The large number of newborn seals in the assemblage confirmed that the site's residents in AD 1500 - 1700 were harvesting seals from the ice floe seal rookery at the head of Yakutat Bay. DNA and stable isotope studies of the seal bones are underway and will be completed in 2016. In March 2015, Aron organized and co-chaired (with **Igor Krupnik**) a full-day session covering 'Arctic Crashes' and associated studies at the 42nd Annual Meeting of the Alaska Anthropological Association in Anchorage (see below).

William Fitzhugh conducted another field survey in summer 2015 in Labrador and on the Quebec Lower North Shore, both of which contributed to his study of harp seal exploitation for the Gateways-Crashes archaeological project and produced new data on culture and climate history in Labrador and the Gulf of St. Lawrence (see Fitzhugh, this issue). The Labrador work, conducted in partnership with the Nunatsiavut Inuit archaeological office, documented a 6,000 year old pit-house camp used for caribou and seal hunting in southern Groswater Bay. Continued excavation at the 17-18th C. Hart Chalet Inuit winter settlement in

Brador, Northern Quebec, at the west end of the Strait of Belle Isle, produced a large collection of caribou and seal bones that will provide information about subsistence patterns, water temperature, and ice conditions during the most recent Inuit southern migration during the Little Ice Age.

Stephen Loring, in partnership with the Tshikapisk Foundation (Sheshatshit, Labrador) conducted another archaeological and ethnohistorical fieldwork in the interior of northern Quebec-Labrador. The canoe-based survey traversed a traditional Innu travel route through a series of large barren-ground lakes immediately east, and parallel to, the George River in Nunavik. Research was directed at identifying architectural and archaeological features associated with caribou hunting subsistence strategies during times of caribou abundance. Late 19th and early 20th century Mushuainnu sites were ubiquitous attesting to a peak abundance of caribou at that time. As well, a small number of Archaic period sites (ca. 4000 years old) at caribou crossing places were documented. The results of his two field seasons in 2014 and 2015 for the 'Crashes' project will be summarized in a chapter for the future project volume.

Igor Krupnik supervised the overall logistics of the 'Arctic Crashes' project and disseminated its research and outcomes at various national and international meetings. He collected historical data on the Pacific walrus historical distribution and catches since the 1800s, for a major paper for the future 'Arctic Crashes' volume. He organized and chaired a full-day 'Arctic Crashes' session at the Alaska Anthropological Association's annual meeting in Anchorage in March 2015 (together with **Aron Crowell**) and another 'Crashes' symposium in Washington DC in January 2016 (see below). Igor also made a brief field trip to Alaska in December 2015 (Nome, Gambell, Wales) to collect first-hand reports on a dramatic decline in subsistence walrus catch in several Native Alaskan communities over the past three years. Though not yet an 'Arctic crash,' the situation was grave enough for the affected communities to appeal in 2013 for an 'economic disaster' declaration by the State of Alaska. This most recent story may be viewed as a model of climate-sea ice-induced crises that periodically affect human life in the Arctic (see paper by Krupnik and Benter). Igor also presented overviews of the 'Arctic Crashes' project in papers given in Anchorage, Nome, Washington, Aarhus (Denmark), and Moscow.

Walter Adey (NMNH, Botany) specializes in the biology and ecology of coralline algae, long-lived builders of calcium carbonate from tropics to the Arctic. In cruises to the Eastern Arctic and Labrador shores since 2010, he has been able to demonstrate the conditions under which *Clathromorphum compactum* off the coast of Labrador lives up to 1500 years, and perhaps longer, potentially providing a detailed climate record for the Holocene in Arctic waters. In 2014, he helped organize a cruise to Baffin Island,

partly supported by “Arctic Crashes” (see ASC Newsletter 22), to extend that capability. **Merinda Nash**, an Australian post-doctoral fellow in physics, has recently arrived in Adey’s lab, and is currently working with Adey on the calcification in these organisms to gain a better understanding of the process and the variables that control its cycles, including the 2014 cruise records.

Moira McCaffrey (Independent Researcher, Ottawa, ON) is an archaeologist and museologist with her research focus in the eastern Canadian Subarctic and on the Îles de la Madeleine in the Gulf of St. Lawrence. Her previous surveys on the Islands revealed a deep and rich archaeological record, with sites dating back 8000 years and spanning all time periods. In the historic period, the Islands are notable as a key location for walrus hunting by Basques, French, English and ultimately American entrepreneurs. By the late 1700s, Maritimes walrus had been extirpated. With the funding from the ASC ‘Crashes’ project, Moira traveled to the Îles de la Madeleine in fall 2015 to revisit the sites she studied in the 1990s and to reconnect to local residents. It was a very successful study that involved examining sites linked to the past walrus exploitation; identifying local walrus specimen collections; carrying out historical research to track the movement of walrus products from the Islands to global markets; and evaluating the use of walrus by Indigenous groups on the Islands and in the wider Gulf of St. Lawrence region. Moira presented the outcomes of her recent survey at the second ‘Arctic Crashes’ symposium (see below) and is currently working on a paper for the project summary volume.

Alaina Harmon (formerly with NMNH – see ASC Newsletter 2015) completed her survey of National Museum of Natural History osteological specimens for the ‘Crashes’ project. Her study covered five key Arctic species: bowhead whale (*Balaena mysticetus*), harbor seal (*Phoca vitulina*), harp seal (*Pagophilus groenlandicus*), walrus (*Odobenus rosmarus*), and caribou (*Rangifer tarandus*). The final NMNH collection database, complete with the five identified key species and two northern right whale species, contains approximately 1,100 specimens. Its final template features locality data, collection data, nomenclature, accession data, weight, length, sex, stage, geological age (for paleo specimens only), associated culture, stock

designation, geo-referencing data, collector biographical data, and associated documents for each specimen. The database promises to provide information rich for interdisciplinary research.

Dissemination and Public Outreach. Besides several presentations given by the project participants at various science meetings, team members put substantial effort in knowledge dissemination, student training, and public outreach. **Meghan Mulkerin** has updated the project webpage at http://naturalhistory.si.edu/arctic/html/Arctic_crashes_home.html that was created by **Josh Fiacco** in spring 2014.



Female and young caribou moving north towards the tundra grounds. Kamestastin, interior Labrador, May 2012. Photograph by Stephen Loring.

Although the main Smithsonian funding for the ‘Arctic Crashes’ project expired in 2015, the team is poised to continue its activities in 2016. Our major effort will be to compile and edit the project’s summary volume now in preparation under the collective editorship of Krupnik, Crowell, and Loring. It will be made of papers presented at two sessions, in Anchor-

age in March 2015 and in Washington, DC in January 2016, as well as of a number of invited contributions. We believe we have assembled a strong and diverse team and have collected valuable new data for an in-depth treatment of several historical cases of human-animal-climate relations across almost a half of the circumpolar region – from the Bering Strait to East Greenland and the European Arctic. The project also laid the foundation for a much larger collaborative network that now links Smithsonian scholars with their colleagues and indigenous partners in the U.S., Canada, Denmark, Greenland, Netherlands, Russia, and other countries. The ‘Crashes’ project was another milestone in the ASC history and the 2014 Consortia award, augmented by funds from the ASC Burch Endowment, various small grants, and other sources has been applied to a noble cause.

TWO ‘ARCTIC CRASHES’ SYMPOSIA INTRODUCE AND SUMMARIZE PROJECT RESEARCH

By Igor Krupnik

As the ‘Arctic Crashes’ project advanced into its final phase in 2015 (see Krupnik, this issue), the ASC team broadened the scope of the study by engaging other scientists to share their research and vision on human-climate-animal relations in the Earth’s northern regions. The Arctic has a long-established tradition of

scholarly and applied studies of animal fluctuations, both past and present. Today's strong signal of Arctic environmental change draws even more attention to human-animal-climate interactions from the science community, resource managers, decision-makers, and polar residents. The 'Crashes' project stemmed from, and capitalized on this rising interest, particularly during the years of the U.S. Arctic Council chairmanship.

From the onset of the 'Arctic Crashes' project we knew that we would need external partners and more information than our small team could generate on its own in two years. So, the idea of hosting a cross-disciplinary 'Arctic Crashes' symposium (or two?) was embedded in our original proposal and was integral to the Smithsonian 'Grand Challenges' Consortia's mission. We actually ended the project with two full-day symposia – one focused on the Western Arctic-North Pacific region and another addressing the same agenda in the Eastern Arctic and North Atlantic.

The first symposium was put together by **Aron Crowell** and **Igor Krupnik**, as an invited

session at the 42nd annual meeting of the Alaska Anthropological Association in Anchorage, Alaska on March 5, 2015. With its intriguing title, *Who's Driving? People and Climate as Causes of Northern Animal "Crashes,"* it engaged some 60–70 participants and featured 17 presentations.

In his opening presentation, Krupnik told the story of the 'Arctic Crashes' and summarized the project's major activities in both the western and eastern regions of northern North America. The following talks featured a great variety of perspectives – from archaeologists, indigenous users, ethnohistorians, population biologists, and game managers. Two papers dealt specifically with indigenous visions of human-animal climate relations. **Merlin Koonooka** (Gambell, St. Lawrence Island) spoke about the changing sea ice conditions and the growing instability of subsistence hunting for walrus and bowhead whales (see Krupnik, this issue). **Ann Fienup-Riordan** (Calista Elders Council, Anchorage) shared Alaskan Yup'ik beliefs and teachings that place people strongly responsible for animal health via traditional hunting and ethical rules, and, thus, culpable for their demise, if these rules are not followed properly. A broad cross-Pacific approach offered by **Ben Fitzhugh** and **Will Brown** (University of Washington) illustrated that local/re-

gional differences in resource distribution and abundance may put cultures in rapid decline and trigger long-term 'crashes,' as indeed happened in the Kurile Islands and along the Aleutian-Kodiak chain.

Several papers were dedicated to people's relations with particular marine mammal species, both in the past and in the present days. Igor Krupnik, in another paper, spoke about historical fluctuations of the Pacific walrus viewed through the dynamics of its three individual local stocks (sub-populations), from 1825 to the present. **Barbara Mahoney** (NOAA, Anchorage) reviewed the history of a small local stock of the Cook Inlet beluga whale and the challenges for its management, sustainable growth, and subsistence use by local residents. A matching pair of papers dealt with the historical and contemporary Tlingit hunting of harbor seals in the Yakutat Bay, Alaska – as seen through the lenses of historical and archaeological sources (Aron Crowell) and by local subsistence users (**Judy Ramos**, University of Alaska Fairbanks). Another pair of papers addressed commercial exploi-

tation of Alaskan fur seals on the Pribilof Islands introduced by the Russians in the late 1700s and now practiced by local Aleut/Unangax residents (papers by **Douglas Veltre**, University of Alaska Anchorage and **Michael Etnier**, Portland State University).

A smaller cluster of five papers was dedicated to northern terrestrial species. **Margaret Williams** (WWF) shared how her organization, World Wildlife Fund, assesses the status of local populations of

polar bears across the Arctic and perceives their future in the rapidly changing Arctic environment. **David Yesner** (University of Alaska Anchorage) invoked the case of Pleistocene extinction of many large land mammals across Beringia, as a combination of human pressure and rapid climate change. Three papers dealt with the historical fluctuations of Arctic caribou. **Kenneth Pratt** (BIA, Anchorage), **Matt Ganley** (Bering Straits Native Corporation), and **Dale Slaughter** (BLM, Anchorage) addressed the role of firearms in the overkill of caribou in Western Alaska in the late 1800s. **Karen Mager** (Earlham College, IN) shared the results of her study of Alaskan caribou population genetics and what it might tell us about the past caribou crashes and genetic bottlenecks. **Stephen Loring** (NMNH) spoke about his field surveys of the traces of historical caribou-hunting camps in the interior of Northern Labrador.



Enookie (left) and Charlie Inaurak from Pont Inlet speak at the 'Arctic Crashes' session. Photo: Will Richard.

The symposium concluded with a paper by **Amy Phillips Chan** (Nome Museum) on the reflection of animal ‘crashes’ in historical carved ivories from the Bering Strait region. **Brendan Kelly** (Monterey Aquarium) offered a biologist’s perspective to the many presented stories of human-animal relations across Alaska and the North Pacific region.

The second ‘Crashes’ symposium, *Human, Climate, and Habitat Agency in the Eastern Arctic and North Atlantic* was hosted at the Smithsonian Natural History Museum on January 15, 2016. It featured 12 papers and two short opening and concluding remarks. This meeting was structured in *three* thematic, rather than habitat/species-focused, sessions. It followed the second ASC ‘Burch Lecture’ delivered by **Morten Meldgaard** (University of Greenland— see *Meldgaard*, this issue); and was an international venue, with several speakers from Canada, Denmark, and the Netherlands, in addition to the U.S. contributors. It brought a diverse audience of 50-60 people throughout the day of talks; the logistics was skillfully managed by the ASC team of **Chelsi Slotten, Meghan Mulkerin, and Nancy Shorey**.

In his short opening remarks, Igor Krupnik introduced the goals and basic elements of the ‘Arctic Crashes’ study and the purpose of the second symposium to provide comparative stories and data from the Eastern Arctic. The first session, *Climate Change, Animal Crashes, and Aboriginal People* was chaired by **Susan Kaplan** (Bowdoin College) and dealt with indigenous people’s responses to Arctic animal fluctuations. Its four papers explored: historical Inuit-harp seal-sea ice relations off the Labrador and Strait of Belle Isle shores (**William Fitzhugh** and **Walter Adey**, NMNH); the instability of human occupancy of High Arctic Greenland, due to game animal and sea ice fluctuations (**Bjarne Grønnow**, National Museum of Denmark); symbolism of human-



ASC ‘Arctic Crashes’ logistics team welcomes visitors at the NMNH. From left: Meghan Mulkerin and Chelsi Slotten. Photo: Hunter Snyder.



William Fitzhugh



Bernadette Driscoll Engelstad



Moir McCaffrey



Susan Kaplan



Bjarne Grønnow

animal relations as reflected in traditional Inuit clothing (**Bernadette Driscoll Engelstad**, ASC Associate); and the impact of resource change on historical Inuit settlement pattern along the central Labrador coast (**James Woollett**, Université Laval, Quebec).

The second session chaired by Bill Fitzhugh, *Historical Commercial Hunting and Animal Crashes*, brought in several stories of rapid decline of northern wildlife species triggered by unregulated commercial hunting, as well as a few cases where

local users tried to avoid animal collapses. **Moir McCaffrey** (independent researcher, Ottawa) reported on her return visit to the Îles De La Madeleine in the Gulf of St. Lawrence, to explore the remains of walrus killing sites used by generations of commercial Euro-American hunters, who finally extirpated local walrus by the early 1800s. **Brenna McLeod** (Nova Scotia Museum of Natural History) introduced her DNA data from historical baleen samples and argued that commercial Basque whalers in the Western North Atlantic in the 1500s and 1600s were in pursuit primarily of the bowhead whale, rather than the Greenland Right Whale, and cannot be blamed for the Greenland whale decline, which probably preceded the 16th century. **George Hambrecht** (University of Maryland) revealed dramatically different impacts of the Norse colonists’ exploitation of local resources in medieval Iceland and Faroe Islands, one triggering vegetation and stock collapse (Iceland), the other supporting sustainable local economy (in the Faroes). **Frigga Kruse** (University of Groningen) pictured a similarly different outcome of commercial exploitation of marine (whales, walrus) versus terrestrial (Arctic fox, reindeer, polar bear) animal resources over some 400 years on the Svalbard archipelago.

The third session, *Changing Visions of Human-Animal-Habitat Relations in the Arctic* (chaired by

Krupnik), also of four papers, offered four distinct perspectives on how people

view and explain Arctic animal ‘crashes.’ Of particular importance was its opening paper delivered by **Charlie and Enookie Inuarak**, two hunters who came to DC from the Canadian Arctic community of Pond Inlet (Mittimatalik) to attend the conference and consult with the NMNH’s narwhal exhibit team for the 2017 Narwhal exhibit project. An elder (Charlie) and a younger hunter (Enookie) spoke eloquently about Inuit relations to the animals and their vision of the system of interaction between narwhal and people which is still mostly intact, despite increasing climate-related ice entrapments and new threats from shipping, mining, and seismic surveys. Biologist **Carleton Ray** (University of Virginia) presented a complex network of factors that push animal populations in a downward spiral, whereas historian **Mark Madison** (Fish and Wildlife Service) spoke of intellectual ‘cycles’ in justifying animal and habitat preservation. Archaeologist **Tom McGovern** (Hunter College, CUNY) argued passionately about the closing window of opportunities to study past ‘crashes’ due to accelerating loss of archaeological resources. **Torben Rick** (NMNH Anthropology) concluded the symposium with a short story of multiple ‘crashes’ in other habitats they follow closely the patterns typical for Arctic human-animal crises.

The second symposium, thus, added another cluster of 12 papers to the ‘Arctic Crashes’ portfolio. With 10-12 earlier papers from the Anchorage 2015 symposium and two ‘Burch Memorial Lectures’ of 2015 and 2016 (see *ASC Newsletter* 2015; *Meldgaard*, this issue), also covering the ‘crashes’ story in Arctic Canada and Greenland, respectively, we have an excellent stock of contributions to the future ‘Arctic Crashes’ volume. Krupnik, Crowell, and Loring have agreed to collect and edit papers for future publication, and the Smithsonian Institution Scholarly Press (SISP) expressed its interest in publishing it in 2017. The work

All speakers portraits courtesy of Will Richard



Brenna McLeod



George Hambrecht



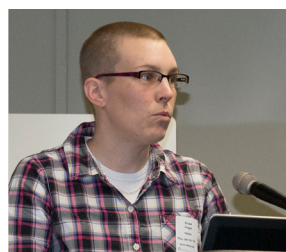
Mark Madison



Carleton Ray



James Woollett



Frigga Kruse



Tom McGovern



Torben Rick

with the authors on their papers and data will help expand the lifetime of the ‘Crashes’ project for two more years. Stay tuned for more ‘Crashes’ updates to come in the next Newsletter.

MORTEN MELDGAARD GIVES 2016 ERNEST S. BURCH JR. MEMORIAL LECTURE: CARIBOU, COD, CLIMATE, AND MAN: A STORY OF LIFE AND DEATH IN THE ARCTIC

By Dr. Morten Meldgaard, professor, Natural History Museum of Denmark and University of Greenland.

As a student I had the good fortune to be allowed to excavate one of the most interesting arctic sites – the West Greenlandic caribou hunting camp Aasivissuit. Together with two fellow students **Bjarne Grønnow** and **Jørn Berglund Nielsen**, I spent the summer of 1978 in the interior of West Greenland digging through more than 2000 years of culture history and mapping wonderfully elaborate caribou drive hunting systems, heavily worn caribou trails and beautifully situated hunting camps. We became acutely aware of the intricate and delicate relationship between man and game and the following winter I enrolled in a caribou biol-

ogy project studying the causes of a recent crash in the largest West Greenland caribou herd.

The following years we spent countless hours analyzing thousands of bones and artefacts from the Aasivissuit site and plowing through hunting statistics, ethno-historical sources, and scientific papers. It was during these studies that we came across the most inspiring piece of work, namely **Tiger Burch**’s paper, *The caribou/wild reindeer as a human resource* (1972). He brought it all together, caribou, man, prehistory and history based on his ground breaking studies in Alaska. We followed in his tracks the best we could and published two monographs (Grønnow et al 1983, Meldgaard 1986) which in many ways serve as a point of departure for the Ernest “Tiger” Burch Memorial Lecture that I was invited and honored to give on January 15th, 2016.

It is often said that history repeats itself. The same can be said about nature in the Arctic. Glacial periods are followed by interglacials, cold climate is followed by warm, winter is followed by summer. Plants and animals adapt, their distribution and abundance change and their availability to people living of the land constantly undergo changes on a seasonal, annual, decadal and long termed basis. There is a certain regularity in the natural cycles and by studying them we can gain insight that can help us predict future development. Also, by studying the dynamic interrelationship between man and living resources we can begin to understand what sustainability really means in Arctic past and present.

Mammoth Crashes and Extinction

Dramatic environmental changes occurred in the arctic area by the end of the last glaciation. Climate warming was the major driver, resulting in the melting away of huge ice caps and in the northward shift of arctic plant communities. For arctic animals this had a profound influence on their distribution and abundance and in many cases extinction was the end result. Prominent examples are the woolly mammoth that went extinct in North America 10.000 BP and in Eurasia 3.700 BP and the woolly rhinoceros that died out 14.000 years ago. Other species like the musk ox, wild horse and bison went extinct on one continent to survive locally in restricted habitats on the other and yet other arctic species like the caribou/reindeer adapted well to change and thrive to this day.

When analyzing the possible causes of these extinctions it appears that even though climate is an underlying driver the animals respond to climate change is a species-specific manner and it also appears that other factors such as hunting are in play. Thus genetic studies show that Man put hunting pressure on the wild horse, the bison and the mammoth during the last glaciation and caused population reductions and probably even population crashes followed by local extinctions. Musk ox and woolly rhinoceros however seem to owe their range reduction and extinction solely to climate warming.

Caribou Crashes and Survival

Even though caribou/reindeer as a species survived the

great transition to our interglacial its populations are living in a constant state of change. If we look at the West Greenland case archaeological, historical, ethnohistorical, and biological information tell a story of regional population crashes reducing the caribou populations by more than 90 % and even leading to local extinctions. The drastic population fluctuations occur several times every century and they are synchronized over large areas by climate change. However, other factors such as hunting and overgrazing also influence population size and especially the smaller and more marginal populations are vulnerable to strong hunting pressure as can be seen in southern most Greenland where the population went extinct 200 years ago and in Southeast Greenland 800 years ago.

The fact that every generation of hunters is likely to face a caribou crash has profound impact on human

subsistence. This is reflected in the archeological and ethnohistorical record and becomes very clear cut at the caribou hunting site Aasivissuit which is situated in the heart of the largest caribou territory in West Greenland. Cutting through the midden layers of this site it is revealed that periods of heavy use with remains of thousands of killed caribou are replaced by periods with no or very little hunting activity. The heydays coincide with communal hunting

practices and with the establishment of large camps where people from distant coastal villages meet for hunting, bartering and social exchange. During periods of scarcity the hunting camp is only visited on rare occasions and then only by solitary hunters roaming the lands for the odd caribou.

To the West Greenlanders caribou scarcity meant long periods of time with hardly any caribou skins, sinew, antler, fat and meat. It was missed, but it was not detrimental. Other living resources were at hand, especially marine mammals and fish and most products could be substituted by local alternatives or through long distance trade. Livelihood in West Greenland thus depended on maintaining a broad based subsistence strategy with both terrestrial and marine components that could absorb population crashes in individual game species like the caribou.

Harp Seals, Ringed Seals and Sea-ice

There is a close relationship between sea-ice and seals.



Bill Fitzhugh welcomes Dr. Morten Meldgaard, the 'Burch Memorial Lecturer, at the beginning of the 'Arctic Crashes' day. Photo: Will Richard.

Some species like the harp seals depend on sea ice for spring pupping but avoid it at other seasons. Species like the ringed seal also depend on the sea ice for pupping, but due to their ability to maintain breathing holes even in thick ice they prefer to spend the rest of the year either under or in close association to sea-ice. Changes in sea-ice cover due to climate change thus have profound effects on distribution and abundance of the Arctic seal species and additionally, sea-ice variability strongly affects the hunter's access to the desired prey.

Many settlements in West Greenland are located where seal hunting is good and if there is access both to open water species like the harp and hooded seal and to ice-dependent species like the ringed and bearded seal, fresh seal meat is available almost throughout the year.

The local availability of seals and other sea mammals may vary strongly from year to year due to the current ice situation. Even though these variations locally can be experienced as resource crashes they are not necessarily linked to population fluctuations among the prey species, but they are important as they determine hunting strategy, population movement and camp location. However, the annual more unpredictable changes are superimposed on short and long termed climatic changes that do influence the well-being of the seal populations including population size. Thus decades of warming in West Greenland may make life easier for the harp seals and promote population growth while the ringed seal will be forced to retreat northwards and the population will decline. A well-known example is the general warming of the North Atlantic area during the 1920s and the concurrent shift towards a more Atlantic biological regime off West Greenland. This shift had enormous consequences for the Greenlandic society and made the development of industrialized fisheries possible.

Such regime shifts have occurred regularly and the cultures of West Greenland have adapted to the often quite dramatic changes in resource composition. However, there seem to be limits to subsistence flexibility and from archaeological, historical, and ethnohistorical sources we know that people have been forced to abandon camp sites, region or even the whole of West Greenland and that resource fluctuations due to climate change is an underlying driver.

Fish Population Crashes, Past and Present

Arctic fish populations are also subject to dramatic population changes. Alaskan sockeye salmon are a case in point. Cores taken from lake-bottom sediments on Kodiak Island show that the salmon populations have fluctuated over centuries and that these fluctuations occurred prior to commercial fishing and were to a large extent correlated with climate change. The same goes for the West Greenlandic cod populations that have been fished for more than 4000 years.

Traditionally, fish have been an important part of subsistence in the arctic and natural fish population dynamics have affected livelihood and survival in many areas. But traditional arctic fishing technology has only given limited access to the fish resources and only in special

situations e.g. with sensitive local char populations have people made a substantial impact on fish populations. With the industrialization of the fisheries and the development of highly efficient fishing technologies this picture has changed radically. North Atlantic commercial fishing has overexploited the North Atlantic fish populations and the total biomass of fish caught for consumption has been steadily decreasing over the past century.

Standing on the rocky shore with a view to the immense expanse of the sea it is impossible to imagine that Man can deplete the marine fish resources of the North

Atlantic and if it really was the case one would tend to console oneself with the notion that nature is resilient and that the fish populations if left unfished will recuperate. However, there are indications that this may not be the case. Cod populations in the eastern part of the North Atlantic that have been heavily exploited for centuries have crashed and do not seem to increase in population size again. Instead other less commercially interesting species take over and permanently alter the structure of the ecosystem. These seemingly irreversible changes are very worrisome.

The Lesson of the Great Auk

On the 5th of June 1844 two Icelandic fisherman spotted a couple of great auks at their nest on the small skerry of Elday. They rounded the flightless birds up and killed them with clubs and in the rumple they by accident smashed the bird's single egg. They were on a mission sent by the Natural History Museum of Denmark to collect great auks for scientific study and for



Dr. Morten Meldgaard. Photo: Will Richard.

sale to other museums around the world. Little did they know that the two birds now dead at their feet were the last great auks ever to be seen alive.

At the time it was believed that the great auks were widespread and numerous in the North Atlantic and important breeding sites were known off the coasts of Newfoundland and Iceland. Stories of how whalers and fishermen rounded thousands of these fat goose-sized alcids up at their nesting sites and drove them on board their ships as live provision were wide-spread, and a simple industry developed where the auks were stuffed into huge pots and their fat melted for oil. The fires were kept going by using the carcasses of auks already defatted.



Great Auk in the collections of the National Museum of Natural History, collected in June of 1834 by C. E. Gotz on the Isle of Eldey, Iceland, North Atlantic Ocean. Catalog number 57338.

The breeding sites were actually few and far between and the heavy exploitation quickly decimated the population until it was beyond recuperation. Slowly the scientific community realized that the bird had gone extinct and thus it became the first North Atlantic species where Man played that decisive role. The Great Auk was in many ways special. Flightless, with restricted and easily accessible breeding grounds and a low reproductive rate it was very vulnerable to overexploitation and it has become a symbol of the sensitivity of the North Atlantic and the Arctic environment underlining how important it is to secure a sustainable future for the arctic species and ecosystems - and for ourselves.

A 'DISASTER OF LOCAL PROPORTION': WALRUS CATCH FALLS FOR THREE STRAIGHT YEARS IN THE BERING STRAIT REGION

By Igor Krupnik and Brad Benter

The two authors have been working with indigenous hunters and the Pacific walrus (*Odobenus rosmarus divergens*), the keystone species in the Bering Strait region ecosystems and local economies for several decades. Over the years of our field observations, literature surveys, and many conversations with local users, we have become quite familiar with the dramatic annual fluctuations in walrus catch – by communities, region, and/or historical period. So, when the first reports about an extremely low walrus kill in spring of 2013 in two communities on St. Lawrence Island, Alaska started trickling in, it was treated as a regular,

albeit unpleasant annual 'anomaly.'

The true scope of the spring 2013 calamity became more obvious in the following months. During the peak of walrus migration and spring subsistence hunt, between April 18, and June 10, 2013 Gambell hunters landed only 126 walrus, slightly more than a fifth of their usual spring catch. Savoonga 2013 spring harvest of 227 walrus was but marginally better, about a half of the 1960–2002 average. People's confidence dropped, as the news about empty storage racks, meat cellars and freezers spread among the nearby communities and kindred families across Alaska. In August 2013, both St. Lawrence Island tribal councils asked for emergency government assistance in the form of an 'economic disaster' declaration. It was duly issued by the Governor of Alaska on August 29, 2013. Local media reports and the Governor's declaration spoke of a 'historically low walrus harvest' and the impending 'food crisis of an unprecedented scale.' Food donations were sought and even options of food-drops to the affected communities have been openly considered.

Yet, local Yupik hunters were keen to report that while the conditions in spring 2013 were unusual, they were neither 'unprecedented' nor 'catastrophic.' They offered a rational explanation of the factors that contributed to the failed walrus hunting in spring 2013:

"February and March [of 2013] were just typical months, with windy conditions prevailing throughout. We had inclement weather most of April; ...we were more focused on the walrus hunt near the end of April and with the more favorable weather (coming) in the beginning of May. ...However, light winds prevailed from the southwest pushing the ice pack on shore and the shore-fast ice blocked our path to the north. This in itself wasn't unusual since media made it sound like an effect of weather change. We simply could not go out the first two weeks [of May]. By this time, major groups of walrus were being reported north and north-east of Savoonga. When favorable wind directions developed, about the third and fourth week [of May], we were able to venture out to the outer ice edge, but it was mostly closely packed large ice floes making it almost impossible to penetrate. Very few walrus were found, with many of them perhaps further out. By the time the large floes finally gave way to scattered ice, much of the game had gone past already.

Many [hunters] weren't able to go out during the few windows of opportunity that were presented due to the cost of gas. There were maklak [bearded seals] in abundance but with few walrus during the tail end of the spring migration. Overall, the weather was not much different from previous trends and patterns, windy conditions with a few periods of favorable weather." (Paul Apangalook to Igor Krupnik, October 30, 2013).

It is clear from this report that the low catch in spring 2013 was due to a combination of factors. Some were well familiar to hunters; others were quite recent and

primarily of a social nature, like the exorbitant gasoline prices that kept many hunters on edge. Nor was the walrus catch in Gambell in spring 2013 a ‘historical low.’ Hunting records since 1960 identify at least three other years when the harvest was much worse (1963, 1968, and 1971) and a handful of years when it was only slightly better. There were more years with a lower kill in Savoonga – eleven altogether, between 1960 and 2002. It looked like spring 2013, as in some other unfavorable years, St. Lawrence Island hunters had missed their best window during a peak of walrus migration.

What was indeed ‘highly unusual’ in spring 2013 was that the hunting was poor in *both* Gambell and Savoonga, since the two towns have different wind and ice regimes, so that ‘good’ years in one of them often correspond to ‘bad’ years in another. Left unnoticed was the low walrus kill in many other hunting communities in the area, like Little Diomedede (0), Wales (4), Nome (14), King Island (5), and others. Altogether, Native Alaskan walrus catch in 2013 dropped by half, compared to previous years. The inability of local residents to use their traditional coping strategies, such as meat sharing among communities or more active hunting at the tail end of the walrus migration, contributed to the gravity of the situation.

Scientists quickly came with an explanation of what happened to St. Lawrence Island hunters in spring 2013. In a paper written in 2014 (though published in early 2016), a team led by walrus biologist **G. Carleton Ray** summarized available data on the recent ‘decadal’ change of sea ice regime and walrus distribution in the Bering Sea during the winter season (Ray, Hufford, Overland, Krupnik, McCormick-Ray, Frey, and Labunski 2016). According to the authors, a dramatic shift has been in play in the northern Bering Sea over the past decade, due to climate warming. It has transformed the former stable distribution of certain sea ‘ice-scapes’ into a ‘mixing bowl’ of different types of young and unstable ice, a maze of less structured, fragmented, relatively independent, free-moving floes, to which walruses have to adapt. This transition has produced structural changes in walrus winter habitat in many ways. Simply speaking, there is not enough suitable ice in the northern Bering Sea in the wintertime

to support established patterns of walrus networking, feeding, reproduction, and migration. According to the authors, the changes in sea ice are likely to become more evident as climate change and ice diminishment continue, increasing stress on the Pacific walrus population.

The next two years tested the scientists’ model and proved to be, again, harsh for subsistence hunters in the northern Bering Sea-Bering Strait. Catch level in both Gambell and Savoonga in spring of 2014 and 2015 remained low and did not recover to the previous level. On Little Diomedede, the reported walrus kill plummeted from an average of 100–150 per year in the 1990s (82 in the decade of 1993–2002) to zero; and in several

other villages, walrus hunting in the past years all but ceased (14 in Nome; 8 in Wales; 13 by King Islanders living in Nome; 0 in Kivalina, etc.). The overall Alaskan annual reported subsistence walrus harvest dropped well over half: from an average of 1299 from 2003–2007 to 529 in 2015.

With the three-year poor hunting in a row, both indigenous hunters and biologists/game managers wonder whether they may be facing a systemic shift in the distribution and behavior of the

Pacific walrus population, if not in their overall health. If so, the Bering-Chukchi Sea subsistence hunting communities are on the path to a painful adjustment of their seasonal calendar, food habits, and local cash economy. Preferable food products from walrus hunt may become scarce; and food storage and sharing, as it has been known for generations have been affected. Low or no walrus harvest has also ‘cascaded’ through many other facets of Native life, besides traditional food. In the past times, walrus hides were used for boat covers and walrus meat was the main source of dog food. Those two items are of low importance these days, since hardly any skin boats remain in the area and other products may be used to feed a few active dog teams.

What is harder to sustain is the drop in the supply of walrus ivory that serves as a major commercial resource for Native carving and handicraft production. A low supply of raw ivory transforms into lower cash return from sales of ivory carvings; it also puts additional pressure on ‘archaeological ivory’ obtained from unregulated excavation of ancient sites that the locals call ‘subsistence digging.’ Until other stable sources



Walrus meat racks in Gambell, Alaska were nearly empty following the poor walrus catch in spring 2013. Photo: Martin Robards, Wildlife Conservation Society <http://earthzine.org/2015/04/24/pacific-walrus-and-coastal-alaska-native-subsistence-hunting-considering-vulnerabilities-from-ocean-acidification/>

of income become available (like commercial fishing, tourism, oil revenues), families and local economies will suffer. It would actually maintain a circle of cascading events: lower walrus catch contributes less meat and less cash, which, in turn, decreases hunters' ability to kill walrus (less money to buy equipment and gasoline), which, in turn, lowers incentives for hunters to keep hunting.

Of course, like in any major ecosystem shift, no single factor explains everything and not everyone is a loser.

Larger places, like Gambell and Savoonga, with some 700 residents each are more resilient, because they have more alternatives to generate food and income, and more species to hunt, like the bowhead whale. Many families rely on subsistence seal hunting, summer fishing, and reindeer meat from a re-established island reindeer herd. Because of that, people have already rejected food assistance offered by the State government in the form of air shipments of frozen halibut. Smaller communities are more vulnerable. Wales (population 160) has accepted food donations in 2015. On Little Diomed Island, residents prefer moving to other places, as prospects for walrus hunting become increasingly bleak. The island population has shrunk from 178 in 1990 to 110 in 2010 to reportedly less than 90 in 2015, with just 19 students enrolled in local school.

Another factor is progressing change in walrus habitats. As subsistence walrus kills in areas south of Bering Strait dwindles, in some other communities, primarily along the Chukchi Sea shore, it remains stable, even increasing, like in Wainwright, Barrow, and Shishmaref. Hunters from Savoonga were reportedly seen in Shishmaref joining local crews going out after walrus. On the Russian side, walrus now haul out in the thousands at many coastal sites along the arctic shores of the Chukchi Peninsula. That offers an unprecedented abundance of meat, food for dogs (and for roaming polar bears!), and precious ivory. Russian hunters and biologists—much like their counterparts near Point Lay, Alaska—are in awe about the unprecedented number of animals going onshore and converting miles of the coastline into unbroken masses of roaring walrus bodies. Nobody can predict how long it may last; whether local benthic resources can sustain such high number of animals; and what would happen when the walrus food base is exhausted.



Chukchi Sea remains almost free of ice off Shishmaref on December 17, 2015, almost two months late compared to the previous decades. Photo: Igor Krupnik.

Nor are scientists' predictions always right. Yet the speed of contemporary transition is indeed breathtaking; but there are many critical gaps in our knowledge, and both the animals and people who depend on them have defied gloomy scenarios many a time, since the late 1800s when the first documented 'crash' in the Pacific walrus population took place in the northern Bering Sea, due to commercial overhunting by Yankee whalers. In this moment of uncertainty about the trajectory of change, it is imperative to continue observations and to work hand in hand with hunters in rural communities, the best local observers and subsistence experts. They watch for walrus 24/7 and track keenly any signals in the status of animal health, abundance, and migration cycle. They are now anxiously preparing for the new spring hunting season of 2016, which, as they hope, may break the unfavorable pattern of the past three years. But it may not; and then things may turn from bad to worse, for the fourth year in a row. The verdict on whether we face a 'disaster of local proportion,' a temporary blip in the ice regime or a systemic ecosystem change will not be easy nor will it come from a single authority. It is the combination of different types of knowledge, data, and analysis that may fill yet another page in the 'Arctic Crashes' narrative.

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ARCTIC CRASHES' AND THE RESURRECTION OF OLD DATA

By Frigga Kruse, Arctic Centre, University of Groningen, Netherlands

When Professor **Peter Jordan**, director of the Arctic Centre in Groningen in the Netherlands, asked me to participate in the second 'Arctic Crashes' project symposium in his stead, I was delighted (and that is an understatement!). I had been following the progress of 'Arctic Crashes' since its inception because I, too, study the role of humans in the historical collapse ('crashes') of Arctic wildlife species. I very much looked forward to this opportunity of exchanging ideas and learning of other approaches. The pressing question was what to present and for what purpose.

My post-doc research concerns the consequences of 400 years of natural resource exploitation in Svalbard in the European High Arctic. This remote archipelago has never known indigenous people, while the arrival of **Willem Barentsz** in 1596 paved the way for com-

mercial whaling, sealing, fur hunting, and fishing. This makes Svalbard a well-defined and fascinating case study of the lasting impacts of four centuries of commercial hunting on an Arctic ecosystem. I have chosen five species of former game animals: the bowhead whale (*Balaena mysticetus*), the Atlantic walrus (*Odobenus rosmarus rosmarus*), the polar bear (*Ursus maritimus*), the Arctic fox (*Vulpes lagopus*), and the endemic Svalbard reindeer (*Rangifer tarandus platyrinchus*). This choice is ambitious but holistic. I want to make sure to include both the terrestrial and the marine ecosystem as well as hunters from the different nations and the various industries. My presentation at the 'Arctic Crashes' symposium focused on the bowhead whale only.

The history of whaling (and whales!) in Svalbard and the surrounding seas is very well known. The well-preserved archaeological record of the whaling stations is complemented by a wealth of historical documents, most importantly log books and customs records. The main players were Dutch, German, and British whalers. The Dutch and German industries have been detailed by De Jong (1972-9), the British by Jackson (1978). More recently, the economists Allen and Keay (2001, 2004, 2006) for all intents and purposes 'completed' the picture by reconstructing the original size of the bowhead whale population in the Greenland Fishery, establishing the chronology of its demise by 1828, and determining the role played by subsidy policies, climate change, and international competition – of which the latter had the most dramatic effects on both industry and animals. They conclude that under historically relevant assumptions, "regulation could not have simultaneously increased profits and preserved the stock of whales" (Allen and Keay 2004: 400). Whaling (and whales!) are seemingly 'done for', so what next?

This call to arms gave purpose to my talk: we must move away from the traditionally narrow research agenda of nation-based economic history, e.g. Dutch whaling, to comprehensive historical ecology, e.g. whales as well as other key species in the Svalbard ecosystem. My current research, however, is revealing that we do not have a complete record of all ships or people who have travelled to Svalbard in the past 400 years, let alone a record of all animals they caught. There are serious research biases and wide knowledge gaps!



Massive walrus haulout at Cape Serdtse-Kamen in mid-October 2011. Photo: Maxim Chakilev, Chukot-TINRO (www.wwfblogs.org).

Despite the commendable work on whaling history, we actually have no idea what else the whalers caught and how much of it! The same is true of the other industries, including science, tourism, and mining. Hunting may not always have been their primary purpose, but everybody did it – at least until the threatened game animals were protected, starting with the Svalbard reindeer in 1925. Only an all-inclusive, interdisciplinary study will reveal the lasting impact.

So it is time to redirect the research agenda in accordance with the aims of historical ecology. It is also time to rephrase the research questions and to resurrect old data in order to gain new insights. I will need to read those same log books and customs records that have passed through the hands of many scholars before me. Whereas they counted the whales from the perspective of a national whaling industry, I will look at all industries from the perspective of the ecosystem. This fresh approach,

I imagine, will initially bury me under a mountain of environmental data. But to complete the analogy: the phoenix to rise from these ashes will be the comprehensive image of human-animal relationships in the European High Arctic.

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TSHIKAPISK REPORT

By Anthony Jenkinson (Tshikapisk Foundation, Sheshatshit, Labrador)

Regular readers of the ASC Newsletter can't but help be aware of the close working relationship, now approaching twenty years, that the ASC has enjoyed with Innu community members in Sheshatshit and Natuashish and with the Tshikapisk Foundation –an Innu experiential education initiative. Born of a shared commitment to celebrating country-based Innu knowledge, skills and values and to providing educational opportunities for young people, Tshikapisk has embraced a multi-faceted archaeological and heritage conservation commitment. –Stephen Loring



Chloe Benuen and Anthony Jenkinson, archaeological survey/walk with Chloe at Kamestastin, May 2015

2015 brought us a variety of different happenings. Us in this case are the group of like-minded friends of both Innu and non-Innu origins who have, under the umbrella of the Tshikapisk Foundation, sought to explore and celebrate Innu history and lifeways in the peninsula. Though over the past year there has been time in the country and fieldwork, perhaps the most important events of 2015 have been the discussions over the nature of archaeology and its role in illuminating and celebrating the epic story of the Innu/Iyu in the Quebec Labrador peninsula. The road we have travelled has been one through a changing landscape and the journey has not been a simple trajectory from a starting point to a sought after destination. It has evoked wanderings familiar from other parts of the world over whether, in the case of archaeology, a colonial-derived and sometimes alienating interpretation of the past can be transformed into something that genuinely belongs to descendant peoples and can express their historical, economic and spiritual connections to their homeland. And, if it can, what needs to be done to ensure that it does.

We were thrilled and grateful for a generous recognition of our efforts by **Donald Holly** (University of Eastern Illinois) who decided to donate to Tshikapisk the proceeds of the sale of his book on the archaeology of Labrador and adjacent Maritime Provinces, *“History in the Making: the Archaeology of the Eastern Subarctic* (Altamira, 2013).”

2015 brought us a variety of different happenings. Us in this case are the group of like-minded friends of both Innu and non-Innu origins who have, under the umbrella of the Tshikapisk Foundation, sought to explore and celebrate Innu history and lifeways in the peninsula.

Though over the past year there has been time in the country and fieldwork, perhaps

From May to June of 2015 research continued at Kamestastin, a sustained effort that has now gone on for almost 20 years. This was in spite of the early deterioration of ice conditions which impeded safe movement around the lake. Nevertheless, what appears to be a significant new site was discovered close to the Tshikapisk camp at the east end of Kamestastin, which emphasized further that, in spite of sustained meticulous survey, even in the thin soil conditions of this largely treeless tundra landscape, much can remain hidden.

Fully cremated bone samples from two Kamestastin sites (Natakamaeimupan and Tuamish) were also submitted for dating. They had previously returned dates on wood charcoal that sat uncomfortably with assemblages which looked much older. Given the shallow sandy soils on which most of the sites at Kamestastin are situated and the pervasiveness of forest fires over thousands of years we have come to favor calcined bone dates from bone fragments recovered in hearths, as much more reliable. The bone dates returned from our newly submitted samples place the sites securely in the region of 6700 to 6900 calendric years before the present. The date on bone carbonate from Tuamish, around 7000 years calibrated years BP now makes it the oldest site we have at Kamestastin. A big thank you as usual to the folks at the Arctic Studies Center (**Bill Fitzhugh** and **Stephen Loring** in particular) for the support they have provided to Tshikapisk's work over the past year, and thanks especially for paying for the new bone carbonate dates from Kamestastin.

Back in the Innu community of Sheshatshit, at the western-end of Hamilton Inlet, Tshikapisk archaeologists have played a prominent role is salvaging ancestral Innu sites being impacted by new housing construction.

The ancient beach terraces at Sheshatshit, along with those across the river at Northwest River, contain –probably– the most continuous extant record of Innu history. During the summer a small site called Antu



Hope Michel and Jean-Baptiste Michel two of the Sheshatshit team who in 2015 excavated the small site at Antu East Small Terrace in Sheshatshit

East Small Terrace was excavated in Sheshatshit at an elevation of about 11 meters above sea level. Two wood charcoal samples produced dates of around 2000 years before the present. The dates agreed with both the elevation and the assemblages in confirming that the site is a component of Bill Fitzhugh's North West River Phase. The community is experiencing an exploding population putting extra pressure on available housing. The excavation in July and August was prompted by the need to "clear" housing lots.

A sample of fully cremated bone from a fire pit on a high terrace in Sheshatshit was dated at the same time and has produced Sheshatshit's first Rattler's Bight date. Found within a few meters from the pit, though unfortunately after ground disturbance by heavy equipment, was a ground slate gouge fragment, and the proximal end of what may be another.

In September 2015 **Stephen Loring** and **Anthony Jenkinson** spent a month canoeing and surveying a route which runs roughly parallel and just to the east of George River. Stephen had driven up from Maryland in his trusty Volvo as far as Sept Iles/Uashat.

He then left the car at the railroad station and took the train to Schefferville, on the way picking up Tony who had driven from Sheshatshit to meet the train at Emeril Junction. The following day, 28th of August, both were flown in a Norpaq Turbo Otter to the west end of Kapimitshikupitats/Lac Brisson. The decision to bring a bundle of tent sticks turned out to be a good one as, to put it mildly, Kapimitshikupitats is not a well forested landscape.

An exercise such as our survey (2 men in a canoe) can only *sample* what is out there. No claims can be made that ours was an exhaustive survey. We stopped where we could in places we happened to be. The fine

toothed comb treatment applied over many years at Kamestastin is the other end of the spectrum. Even at Kamestastin new sites are recorded almost every year. Nevertheless it's clear even from our limited sampling that there are many stories waiting to be told. Three samples of fully burnt caribou bone from hearth features returned "Point Revenge" ancestral Innu

dates. Components at a caribou crossing at Kapimitshikupitats apparently belong to "Rattler's Bight" occupation or occupations. And almost everywhere we stopped were the ubiquitous earth embanked Tastueikantshuap and Shaputuan structures, most of which likely date to the 19th century or early 20th. Frequent skidoo tracks impressed on gravel and thin vegetation and scattered 12 gauge goose shells and other recent artefacts attest to the fact that Mushuauinnu (many travelling from Natuashish and Kamestastin) are, after a hiatus of many years, once again extending their hunting activities into regions familiar to their grand-parents and great-grand parents.

We owe a heavy debt of gratitude to the **Paquet** family in Schefferville who provided such warm hospitality to us,

both on the outward and return portions. Exemplary airmanship by the pilot **Sam Paquet** allowed for us to be picked up on time at Mistanipi despite choppy conditions at the last camp.

Finally following an invitation from **David Denton** we are preparing a couple of papers for publication in *Recherches Amérindiennes au Québec*. We in this case means **Stephen Loring**, **Apatet (Ben Andrew)**, **Chelsee Arbour** and **Anthony Jenkinson**. RAQ will be devoting an issue to community archaeology and is interested in both the work, experience and viewpoints of some of the people who have been involved with Tshikapisk.



En route between Kapimitshikupitats and Mistanipi. Stephen Loring at his notes shortly before setting forth down the waterway to Napeu Kainiut, September 2015.



Spring camp at the west end of Kamestastin, May 2015.

COLLECTIONS

ARCTIC ETHNOLOGY IMAGING PROJECT

By *Emily Cain and David Rosenthal*

The summer of 2015 saw the beginning of the Department of Anthropology's Collections Management Unit's Arctic Ethnology Imaging Project. The goal of this project is to photograph and make available online the entire NMNH Arctic Ethnology collection of over 20,000 objects.

Funding for the first project year (2015/2016) came from the Smithsonian Collections Care and Preservation Fund (CCPF) created in 2006 as an institution-wide pool to accomplish a wide variety of collections-related projects. The CCPF has funded 181 projects since its inception, totaling over \$19 million awarded. **Jake Homiak**, former Anthropology Collections and Archives Program Director, and **David Rosenthal**, Anthropology Collections Manager, worked on the first grant proposal in summer 2014 together with the support of **Igor Krupnik**, Arctic Ethnology Curator.

Receiving the funding has allowed us to hire **Brittany Hance** and **Emily Cain** to see this project through. Brittany is a professional photographer and former intern with NMNH Photo Services. Emily, with a Master's Degree in Museum Studies from GWU (2015) has worked as a SIMA (Summer Institute in Museum Anthropology) intern and contractor. Brittany and Emily primarily work out of the Anthropology Collection Lab's photo studio at the Museum Support Center (MSC) in Suitland, Maryland. It is equipped with an in-studio Mac Pro shooting computer, a Canon T6s camera with 24-70 EF lens, and Capture One 8.3 software, allowing for a streamlined process and high-quality product. Objects are tracked electronically, using a digital bar-code reader and color-coded system that records at exactly which step in the process each individual object is. Using these and other tools, they've modified the imaging workflow so that images are added to the online database almost as fast as they are taken while also minimizing human error.

Each object from the collection, ranging from **Edward Nelson's** 1879 ti-sikh-puk dance mask from Western Alaska to Greenlandic souvenir tupilak figures of the 1960s, are carefully and thoroughly photographed, providing a highly detailed and readily accessible visual record to go along with existing catalog records.

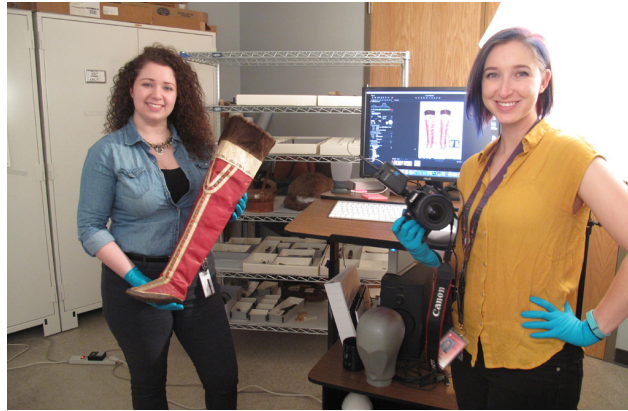
Challenges

The wide variety of materials within the Arctic collections presents certain logistical challenges; namely, the execution of an efficient system despite the breadth of shapes, sizes, and compositions of objects. In order to navigate this issue, the photo studio has been redesigned with fully modular and mobile shooting and staging areas, allowing for maximum flexibility to suit the needs of individual objects. Additionally, a series of specialized, supplemental photoshoots is planned for objects that fall outside of the capabilities of our main studio.

In collaboration with NMNH Photo Services, two weekend photo shoots have been completed to date in order to accommodate oversized objects such as large parkas and blankets. These objects' size and, often, age require a much larger staging space and many careful hands. These photo shoots, conducted with the gantry system in the street at MSC, involve experienced volunteers to help facilitate the handling of very large objects, as well as the presence of two photographers for a combination of overall and detail shots with maximum ef-

iciency. In order to manage extra-long objects such as spears and paddles, a new shooting process involving linear motion positioning is in the works for the coming summer.

To date, we have photographed more than 2,800 objects and produced over 14,000 images. The majority of objects that belong to St. Lawrence Island Yupik and Nunivak Island Yup'ik/Cupik cultural groups have been photographed and inserted into the database, as well as the collections of **Lucien M. Turner** and **Charles Francis Hall** for Labrador and Arctic Canada/Greenland, respectively. The collections database is being updated with the outcomes of the project on a regular



Emily Cain (left) and Brittany Hance (right) in the Department of Anthropology's Imaging Lab at the Museum Support Center.



Miniature walrus carving collected on St. Lawrence Island by Vaughn Rockney, 1943. E416900, Photograph by Brittany Hance



Small wooden mask collected in western Alaska by Henry Collins in 1927. E340246, Photograph by Brittany Hance.

basis, with hundreds of new images being made available to both internal users and the general public each week.

We are currently waiting for the Smithsonian to announce the 2016 recipients of the CCPF awards and have high hopes to be funded for year 2 of this project. It will include the imaging of the Kotzebue Sound, Northwest Alaska, and of our smaller Siberia collections. Overall the project is expected to take four years to complete. In that time, Brittany and Emily plan to continue improving their process and to document it for future implementation across other in-house Anthropology digitization projects.

A VISIT TO THE SMITHSONIAN

By Samuel Schimmel

*Late in December the ASC was pleased to host a visit by a family with deep roots to the community at Gambell on St. Lawrence Island. **Sam Oozevaseuk Schimmel**, a precocious young man with a deep curiosity about the tools and artifacts his Yupiget ancestors had used and left behind, was joined by his mother—**Rene Oozevaseuk Schimmel**—and father, **Jeremy**. Rene is a granddaughter of **Estelle Oozevaseuk**, a much revered Elder who had been a valued consultant to both Aron Crowell (when he conducted an archaeological survey and site assessment on the island in 1984) and Igor Krupnik. Estelle inherited the hospitality and curiosity of her father (Sam's great-great grandfather on his mother's side) **Paul Silook** whose long engagement with visiting scientists, including Smithsonian researchers Ales Hrdlicka and Henry Collins, helped shape archaeological and anthropological research among the Yupiget of St. Lawrence Island.*

Accompanied by Stephen Loring Sam and his parents spent a day examining the collections from St. Lawrence Island housed at the Museum Support Center. Sam's account of his visit follows.

-Stephen Loring.

During my recent visit to the Smithsonian I saw and held items that my Apa (Grandma Estelle Oozevaseuk), and other elders, talked about in their stories about our history and customs. For instance, with Stephen, we got to see what my Apa called a “fancy” gut parka. In one of her stories I remember her telling me about how her grandmother gave her the task of preparing the intestines of a bearded seal for the making of a fancy parka. It made me feel great that it was preserved unlike many others that I have found rotting in the ground while digging.

The one thing I did not like about it is that the access to it is cut off from the general public. The archives contained artifacts without the knowledge from the people. The only thing that differentiates these items from any other chunk of ivory is the knowledge and history that has been passed down from generation to generation that is now being lost. When I saw items that I heard talked about even without ever seeing them I knew what they were as a result of the stories and knowledge passed down to me by my elders. I heard a song that one of my uncles taught me when I picked up that carved ivory drum handle. To be able to see and hold these items allowed me to have a deeper understanding and connection with the knowledge and heritage of my people.

I think it would be very beneficial for other native people to be able to see, hold, and learn from artifacts from their culture. In addition to opening up the archives allowing access to one's own culture there should be someone telling the story that goes with them. Now as many of our elders are passing on it is more important than ever to bring their knowledge into the classroom, so that our traditional ways are not lost. I can remember my uncle telling me that when he was a kid they would go ice crabbing, and unless you were over two miles out



Sam Schimmel with his Grandma, Estelle Oozevaseuk.

on the sea ice, the ice would be too thick, ten to fifteen feet to be exact, to make your hole for crabbing whereas now the sea ice is thin if there is any at all. Stories like this are important to bring up when we talk about climate change. We also need expose the general public to

the very real side of climate change that directly affects our subsistence based culture.

The visit to the Smithsonian just showed me how much has changed in the past 300 years. It showed me that it is important to document a culture and its stories in order that future generations can learn and experience their heritage even if it is no longer present in their community. As climate change threatens the very subsistence lifestyle we have lived by for thousands of years our generation must find a way to continue our traditions, even with the threat of rising sea levels, declining walrus populations, and thinner ice.



Sam Schimmel being hugged and kissed by his Grandma, Estelle Oozevoseuk.

Postscript: We are excited to add a post-script to Sam's report. After his visit in December Sam expressed a keen interest in coming back to the Smithsonian to work with us on some aspects of St. Lawrence Island history and culture. Coincidentally, Dr. Steven Young (formerly of the Center for Northern Studies in Wolcott, Vermont and a long-standing ASC colleague) had proposed to give his slide collection from his biological and botanical research on St. Lawrence Island (beginning in 1966) to the Arctic Studies Center and the National Anthropological Archives. Igor and Sam are proposing to work together to collect the genealogical and cultural information represented in Young's slide collection. Sam will be coming back to the Smithsonian in June 2016 to help organize and catalog the slide collection prior to heading back to Gambell for the summer with copies of the images to further document them and share them with community members in Gambell and Savoonga. Hopefully next year's newsletter will carry an update on this project. We are delighted at this manifestation of the long and deeply entwined research commitments between Smithsonian researchers and people from St. Lawrence Island.

ARCTIC MEMORABILIA FINDS A HOME AT NATIONAL ANTHROPOLOGY ARCHIVES

By Stephen Loring

Last November, the Smithsonian's National Anthropological Archives received an extremely interesting small photograph album containing approximately 35 photographs including some Arctic and Inuit imagery. The album was a gift from **Benton and Elizabeth Cox**

Leach of High Point, North Carolina. It had turned up when going through the contents of Elizabeth's mother's closet. Her parents, **Robert S. and Bessie M. Cox**, had lived for many years at the Sailors Snug Harbor on Staten Island, NY, where Mr. Cox had served as the head of the Commissary Department. Sailors Snug Harbor, which opened in 1833, was the first enterprise of its kind established to care for aged, infirm, and impoverished merchant seamen. In its heyday during the late-1800s it housed over a 1000 retired seamen in a suite of imposing Greek-revival buildings. The Cox's lived at Snug Harbor until Mr. Cox's death in 1941. The Cox family retains a number of mementos, including this album, that had been gifted to them by deceased "Snugs" alumni. The existence of the album was unknown prior to its recent discovery, and unfortunately there is no associated information about to whom it had once belonged.

The Cox-Leach photograph album had crumbling black cardboard covers and about 40 black-paper pages to which the photographs had been glued. The album consisted of basically three sets of photographs: a group from an Arctic voyage showing ships, ice, and Inuit; and two smaller sets of images, one depicting a Newfoundland harp seal hunt; and the third, a cluster of images from the tropics (possibly the Panama canal) in which a pet monkey appears.

The only date appearing in the album--"July xxiv 1917"--is associated with the Arctic imagery and led to the realization that some of the photographs appear to be derived from the 1917 voyage of the *Neptune* sent by the American Museum of Natural History as a relief vessel to collect Donald MacMillan and his Crocker Land Expedition party that had spent the previous four years at and about Etah, in extreme northwest Greenland. The *Neptune* was under the command of the legendary Newfoundland skipper and ice-master, Capt. Bob Bartlett who was accompanied by Mr. Burbank from Pittsfield, Massachusetts (arctic aficionados might appreciate knowing that the Berkshire Museum in Pittsfield houses a small but important collection of memorabilia derived from both Peary and MacMillan's North Pole exploits) and the ship's surgeon G. S. Knowlton of New York. MacMillan's party was picked-up on July 31st, and by mid-August (the 14th) they reached Godhavn where they were greeted by Danish administrators and visited with the pioneer Arctic botanist Morten P. Porsild. Leaving Greenland on the 17th of August the expedition arrived at Sydney Harbor, Nova Scotia on the 24th passing, "...from the quietness and peace of the North into the turmoil and bloodshed of warring nations" (MacMillan 1918:319).

In addition to scenes of pack ice and barren rocky shores, the album includes photographs of the expedition members and a number of striking images of what appear to be Canadian Inuit as well as scenes and people from Greenland. The Canadian Inuit imagery struck me as curious as it seemed that a relief expedition would be hell-bent to reach their destination in northern



Group of Inuit photographed in Cumberland Sound, Baffin Island, 1912. Photo from the Northern Ventures Expedition in the Cox-Leach photograph album in the National Anthropological Archives

Greenland and would not have had time for visiting and trading with the Inuit on the way north. Several of the photographs bore notations that they were at “Solmon River” and “Ponds Inlet”. One photograph showed a portrait of a proud Inuit headman and was labeled “Chief Nassau, © Northern Ventures Ltd.” This proved to be an important clue. Northern Ventures Ltd was a prospecting company that formed a small expedition in 1912 to investigate the claims for gold deposits in northern Baffin Island. Members of the company, including its leader, A.W. “Lucky” Scott of Toronto and an American adventurer Frank Vassar. The group had chartered the Neptune and traveled to the purported locality of the gold-fields adjacent the Solmon River west of Pond Inlet. There they found traces of copper and coal but no gold. However they were able to trade with the Inuit and returned to New England with a profitable haul of fur, baleen, ivory, and a polar bear cub destined for the Bronx Zoo, as well as over 5000 feet of motion picture film and 1600 photographs (Boston Evening Transcript, Sept 27, 1912, p.1). It seems apparent that the Arctic photographs in the Cox-Leach album are derived from two separate expeditions, the Northern Ventures commercial enterprise of 1912 and the MacMillan Crocker Land Relief Expedition of 1917, the common denominator being the ship that carried both parties north, the Neptune, which has me wondering if the album had once belonged to a former Neptune crew-member. This hypothesis is strengthened by the presence of the second set of photographs that depict scenes on the pack-ice of the spring seal-hunt off the coast of Newfoundland. How to explain the third set of pictures, which has naval officers in dress whites entertaining ladies aboard a ship moored in a tropical setting and attended by a pet monkey, remains to be determined.

The Arctic Studies Center and the National Anthropological Archives wish to extend our thanks and appreciation to Mr. and Mrs. Leach for their generosity and foresight. And a tip-o-the-hat and thanks to NAA Archivist Gina Rappaport for making the connections and recognizing its significance!

MacMillan, Donald B. 1918. *Four Years in the White North*. New York: Harper and Brothers.

OUTREACH

A TRIP ON *THE WORLD*

By William Fitzhugh

I had the good fortune to take an amazing trip in East Greenland this year between 21 August and 8 September as a lecturer and field guide. High summer, you might say? Well, not here! East Greenland is the Northern Hemisphere’s coldest ‘refrigerator’. Sea ice swirling around the Arctic Ocean gyre exits the Arctic for southern waters here, making East Greenland the iciest coast in the Arctic. Sometimes the Greenland coast from Peary Land to Ammassalik never sees open water, even in summer. During the Little Ice Age ice blocked the east coast and wrapped around into southwest Greenland, snuffing out the Norse colonies by blocking their vital connection with Europe.

Well, those days have passed as a result of global warming and ‘Arctic Climate Amplification’. *The World* was only one of about fifteen cruise ships scheduled to visit this summer. But even in the new climate regime, most of the ships never got into the massive Scoresbysund fjord complex because pack ice continued to block the coast until late August.

The World is an unusual ship. Its passengers own the vessel, maintain permanent residences onboard, and choose the destinations as the ship makes its yearly passage around the globe. I was aboard once before for a West Greenland Viking and Labrador tour. Smithsonian anthropologists **Noel Broadbent**, **Rick Potts**, and **Bob Laughlin** have also served as guides and lecturers. The vessel has several 5-star restaurants, an international clientele, an excellent library, a fleet of kayaks, and a wine list to die for. It was an honor to be back aboard among old friends to see the part of the Arctic I never had laid my eyes upon. There was a price to pay, however, an evening dress code! No teva sandals allowed; so I had



The World explores an Ammassalik fjord.

to borrow the ship engineer's black shoes.

I met the ship in Reykjavik along with the rest of the **Tim Soper's** Eyos Expeditions crew which was contracted to run the expedition, hire its scientists and zodiac drivers, and deliver educational content. We had an amazing group of experienced Arctic/Antarctic 'hands' including naturalists and sportsmen (and women)—most of whom were also rifle-shooters who were experienced icy water kayakers schooled in polar bear deterrence. The bears cooperated, making cameo appearances at precisely the right moments (and distances!). We saw lots of humpback whales, lunched ashore with muskoxen, and even had a fleeting glimpse of a narwhal. We spent nearly a week exploring Scoresbysund's glaciers and mammoth icebergs and visting Ittoqqortoormiit, the northernmost town in East Greenland. We then traveled south to Tasiilaq (Ammassalik). We spent a day hiking in beautiful Skjoldungenfjord; then passed through Prins Kristiansund to the Greenland's southwest coast, where we visited Qaqortoq and the Norse church site of Hvalsey. We explored Narssarsuaq and Norse Brattahlid where we inspected the ruins left by Erik the Red and Leif Eriksson. Our last stop was at Unartoq, Greenland's only hot spring. While the ship's residents were bathing with champagne glasses in their hands, I communed with a huge Inuit village complex excavated in 1945-48 by Christen Veboek. From here *The World* made a stormy crossing to Newfoundland, arriving in St. John's on 8 August.

My role on the expedition was to lead shore excursions, provide lectures, and educate the residents on human doings in the Arctic. Other members of our team were experts on Arctic animals,

history, geology, and climate change. The latter proved to be a 'touchy' subject that required delicate navigation since a few of the residents were avowed 'climate skeptics'. The last thing our team or the Captain wanted was to instigate a brawl among the ship residents. As the trip progressed I wrote a few passages for *The World's* daily blog post and reproduce them in the following paragraphs.

Discovering a Thule Culture Village

This morning at Nordbugten (the northern arm of Scoresbysund) we landed on a sandy beach near a glacial outwash plain. Almost immediately, on the bank above our landing spot, I spotted fragments of bone mixed with charcoal-blackened soil—sure signs of an ancient garbage dump! And where there's garbage, there's people! I did not have far to look for dwellings: two groups of turf- and stone-walled winter huts of the 500-year old Thule culture, the ancestors of the modern Greenland Inuit!

The first group of huts was almost invisible in the rock-strewn hillside moraine. Here were four small single-family houses only 5-6 meters across whose walls and roofs of driftwood, skins, and turf had collapsed onto the floors and sleeping bench inside. A wall of layered rock formed the lower end of the house where a small doorway partially blocked by a vertical slab led to an underground tunnel lined with rocks that emerged 4 meters downslope. I immediately recognized the distinctive feature of a Thule culture winter house, a marvel of engineering designed to keep cold Arctic air out of their cozy, oil lamp-heated



Kayakers enjoying a brisk summer paddle while we had a 'glacial' barbecue.



Archaeology! AD 1500 Thule Inuit winter pithouse in Scoresbysund.



Esben Christiansen's English language class greet The World at Tasiilaq.

dwelling.

Crawling into a Thule house one left behind the frigid

temperature of a North Greenland winter and entered a warm, dimly-lit, earthen cave-like dwelling. I could imagine the sleeping bench covered with musk-ox or caribou skins; dinner cooking in a soapstone pot hanging above the lamp; and skin clothing drying on a rack. Children were playing games or with dolls while men repaired hunting weapons and women cooked or mended clothes. Outside, sled dogs were howling for dinner scraps. From the remains I saw ours was a small village of reindeer (caribou) hunters, although today musk-ox has replaced caribou as the only large land game.

One hundred meters to the south was a second cluster of pithouses and nearby a circle of stones from what would have been a skin-covered summer tent (tupik) with a sleeping area and a slab pavement where the oil lamp had rested. Burned goose bones gave a clue to one of their meals. The entry to one of the pithouses had been blocked by rocks. Perhaps someone had died here, for it was the custom of northern people to abandon a house and seal its doorway when one of the residents died, to discourage the spirit of the deceased from returning. Perhaps that was the case here, although we found so sign of a burial cairn.

Our little village had been occupied twice, each time by 25-30 people who spent several winters hunting caribou in winter and geese in summer. There were no artifacts on the surface, but an excavation no doubt would be rewarding. The absence of iron, glass, or other European materials and the architecture suggest the site was occupied by Thule people around AD 1500. Our chance discovery adds knowledge to the Inuit ancestry of Scoresbysund and has been reported to the Greenland archaeological authorities.

Students Welcome *The World*

When we arrived at the town of Tasiilaq (Ammassalik) we found nineteen students from **Esben Christiansen's** English class on the dock waiting to greet us. Esben had brought them down to give us a welcome and have a chance to speak English. "How are you? My name is Henrik [etc.]. Can I come on your ship?" was a frequent

refrain! Several of the students were quite proficient. "Others," Esben said, "are just too shy to speak." All were courteous and well-mannered and snapped to attention for the group photo, while also displaying a few neighborly 'rabbit ears'. Esben and I discovered we have a mutual friend in **Will Richard** of Georgetown, Maine, the co-author of our book, *Maine to Greenland: Exploring the Maritime Far Northeast*. Will has been a frequent visitor to the West Greenland town of Umannaq, and during one visit he and his wife, Lindsay, stayed for several days at Esben's home when he was teaching there a few years ago.

The Ammassalik Museum



The Ammassalik Museum exhibits in the old converted 1908 church.



A 2010 performance at the reconstruction of Thojhilde's church at Brattahlid, the first Christian church in the America.

While visiting Tasiilaq we found a fine small museum located in the old church perched above the harbor. The church was consecrated in 1908, only twenty-four years after Ammassalik was first explored by **Gustav Holm's** 1884 "Woman's Boat Expedition" which arrived, appropriately, in an umiak or 'woman's boat'. Outside the museum a large skin-covered umiak and kayak are on display next to a reconstructed sod-covered house. Every spring these boats are used in a ceremony marking the anniversary of Holm's 'discovery' event.

The Ammassalik Museum, now directed by **Carl-Erik Holm**, has wonderful collections and displays of Inuit technology, clothing, and history and sells

local artisan's jewelry, ivory carvings, and books. It has several fine kayaks, a dog sledge, and examples of East Greenland traditional costumes and fancy "national dress". There is a large display of historical information and old photos documenting the history of each of the Ammassalik settlements, including photos from the original Holm expedition. The wooden boxes and sun-visors embroidered with Ammassalik's miniature ivory carvings of animals, and its signature collection of 'tupilaks' (representations of evil spirits), and a collection of grotesque dance masks are prominently displayed. One of the earliest tupilaq's known to have been carved—an ugly black polar bear—is also present. And there is much more. One of the most amusing displays is a narrow board with a rounded bottom that simulates an East Greenland kayak. You can sit on the board with

your legs stretched out and try to keep upright with a paddle-like stick for balance—and you need it! Carl-Erik succeeded in ‘staying afloat’, but all our experienced kayaking shipmates who thought this would be a piece of cake ‘drowned’ immediately!

Qassiarsuq (Erik the Red’s Brattahlid)

A visit to Qassiarsuq, known to the Norse as Brattahlid, brought us to the farm of Erik the Red’s family and descendants. Situated across the fjord from the airport town of Narssarsuaq, Qassiarsuq is a small village of Inuit sheep and horse farmers who took up the old Norse economy in the early 1900s and today make a living selling sheep for meat and wool. A bronze statue of Leif Eriksson stands on a hill overlooking the settlement and nearly five centuries of archaeological ruins.

Brattahlid was the most important place in Norse Greenland. This was the site chosen by Erik the Red for his farm in 982 and became the home for his wife, Thojhilde and his sons, among them, Leif Eriksson, who discovered North America, established its Vinland colony, and inherited Erik’s leadership of Norse Greenland. Here we find not only the ruins of Erik’s house (probably below a 13th century renovation) but also the tiny church built by Erik around 2000 at the insistence of his wife, Thojhilde, who, along with Leif, introduced Christianity to Norse Greenland. The tiny U-shaped church foundation was excavated in the 1960s along with the skeletal remains of nearly one hundred Norse. Today a reconstruction of the church and a typical longhouse is found a few hundred meters away, near the ruins of a 13th century stone church and churchyard. This church, which also was excavated, has been nearly completely dismantled by the early residents of Qassiarsaq for use in building farms and roads. Near the church are several more longhouses, each with its attached workrooms, cattle stalls, and hay barns exposed and open to the air since they were excavated in the 1930s. Walking among the ruins gives a keen sense of Norse life in Medieval Greenland and the importance that just a few cows, horses, and small herds of sheep were to this tiny European outpost, situated literally at the edge of the known world, at the mercy of its climate and the few voyages

from Europe that supplied them with critical materials like iron, grains, and even bishops. Archaeological work continues sporadically at Brattahlid, and the region is in the process of applying for recognition as a World Heritage Site. One cannot help but be struck by the contrast between the rudimentary state of its ruins and public interpretation for a site of such importance in world history.

Beyond Hot Springs: Ancient Native Life at Unartok

Today, while many were enjoying a relaxing dip in the Unartok Island hot springs I investigated the old raised beaches above the spring and the shore on the other side of the island. Today Unartok is home of a few Inuit who maintain hunting camps here, but centuries—and perhaps even thousands of years ago—this island had a much larger population of hunters.

On the beach crest above the hot spring I found a series of old inugssuks and rock cairns that had been part of an old hunting trap. Inugssuks (meaning “standing in place of a person”) are made by piling rocks on top of each other, often topped with bird wings or clumps of grass that wave in the breeze. Caribou, having poor eye-sight, see these structures as people and shy away. In other places I found piles of rocks a few tens of meters apart in two parallel lines running down the length of the ridge. Some of these piles still had holes where posts had been erected, and between these hide ropes would have strung with attached feathers and flapping

things. As animals—presumably caribou—moved from the hills down onto the plain they were channeled by the fence lines to a place where the hunters lay waiting with spears or bows. Since musk-oxen are not known to have inhabited such southern locations in Greenland the hunting drive system must have been for caribou, which were once present here but have since disappeared.

Elsewhere on the beaches I found recent tent sites, and on the raised cobble beaches on the west side of the island, small stone hut foundations, meat caches, and hearths. With so much peripheral evidence I kept wondering where the permanent settlement might be—whether on Unartok or some nearby island. As it happened I did not have long to wait for an answer. Spying a grassy area I approached and was astonished



Our wonderful Qaqortok guide displaying the town’s modern rock art.



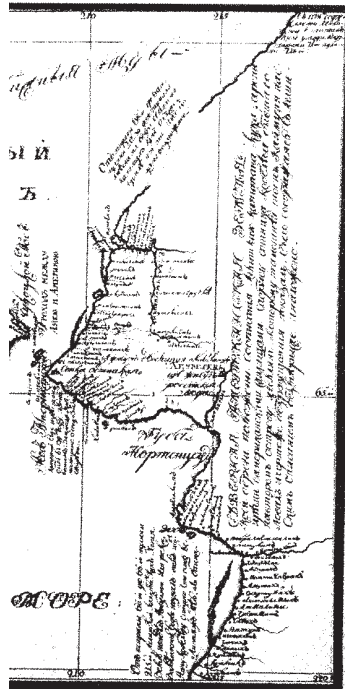
Bettina Ovgaard admires West Greenland ‘national dress’ in Qqortok.

the 1779 map from **Ivan Kobelov's** voyage (Alaskan portion shown below), as noted in Postnikov and Falk (2015: 133), 61 Eskimo settlements are indicated using the native toponyms on the west coast and along the Yukon and Kuskokwim rivers, all of which are recognizable and shown in present-day geographic sequence (Dorothy Ray, "Eskimo Place Names in Bering Strait and Vicinity," Names, 19 (1) 1974: 4-7 and 1975: 45).

Below is the right section of **Grigorii Shelikhov's** 1796 map, the first ethnolinguistic map of Alaska. According to **Michael Krauss**, ("A History of Eyak Language Documentation and Study: Frederica de Laguna in Memoriam," Arctic Anthropology, Vol. 43, No. 2 (2006), pp. 172-217), "It includes on Seward Peninsula and Norton Sound (and beyond) over 50 of the 80 Inupiaq place-names gathered by Kobelev from an elder on Diomedede in 1779..." The map distinguishes five ethno-linguistic regions along the Pacific coast, dividing that clearly into five sectors labelled vertically as follows: KO-NIAGI (Yup'ik / Alutiiq); KE-NAITSY (Dena'ina); CHU-GA-CHI (Sugpiaq); UGA-LAX-MIUTY (Eyak); and KO-LIU-ZHI (Tlingit).

In 1798, **George Vancouver** and his cartographer, **Edward Roberts**, created an Atlas of Northwestern North America From Surveys Conducted in 1792-1794. While English, Russian and a couple Spanish place names were applied to coastal and physical features, not much of any native presence was noted. Later, **Arrowsmith** in 1822 and **Faden** in 1823, published maps with English and Russian names along the Gulf coast, but included the Native place names along the west coast from the Cook expedition.

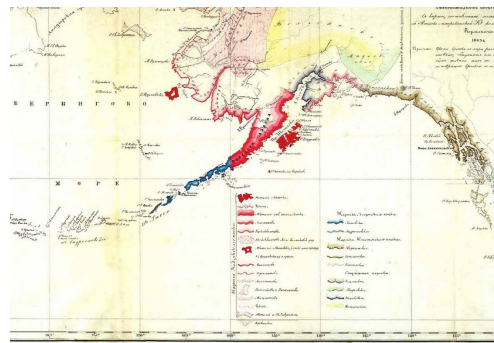
The Geography Division of the Russian Admiralty was able to map all of Alaska including the north coast in 1844. **Igor Krupnik** has verified that this



Alaskan portion of 1779 map from Ivan Kobelov's voyage.



Right section of first ethnolinguistic map of Alaska. Grigorii Shelikhov 1796



Fedor Wehrman 1863 "Map of the Native Dialects in the Aleutian Islands and the Northwest Coast of America"

map included Native toponyms along that coast (below are his translations from Cyrillic), as well as along the Aleutians, west coast and Gulf Coast.

In 1861, **Tichmenieff** created a map with more details and Native Place Names in the Alaskan Interior. And in 1863, **Fedor Wehrman** drafted a "Map of the Native Dialects in the Aleutian Islands and the Northwest Coast of America."

When the United States purchased Alaska from Russia in 1867, a map was compiled by the U.S. Coast Survey for the State Department. While some Native place names were acknowledged, mostly Russian and English place names were used and depicted a largely "empty" interior. Later, The Census Bureau steps in and records plenty of Native toponyms for its 1880 Census map of Alaska (below is a cropped portion of the Kuskokwim Bay/ Nunivak Island area). This map was compiled by **Ivan Petrov**, Special Agent, Tenth Census, from Russian, French, English, U.S. Hydrographic Office,

and Coast & Geodetic Survey charts and maps. Not surprisingly, during the gold rush of 1899, regional maps were drawn up depicting the locations of discoveries (gold), hydrology, various White towns, but only a few "Indian villages."

Today, the Alaskan Native Language Archive notes that approximately 270 Native place names are in Alaska (<https://www.uaf.edu/anla/collections/map/names/>). Given that this list was last updated in June 2013, that archive could have a lot more! Recently, some Native groups are mapping and naming places on their own including: the Yup'ik (below), Aleut/Alutiiq, Angoon, Kake, Naparyarmiut, and Tanana Cultural Atlases.

While one cannot be surprised that many Russian and English place names appear on the landscape, what is notable is the survival of Native Alaskan place names. What this paper presented is a historical summary of

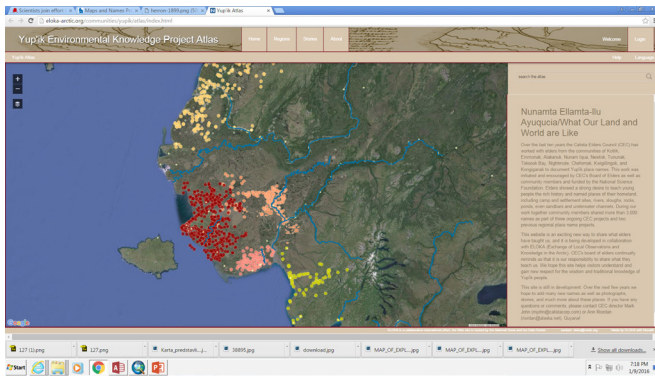
Native Alaskan toponymy and how it has flourished despite of colonial and federal interference.

This paper is a condensation of a paper presented at

the March 2016 Alaska Anthropological Association meetings in Juneau, Alaska, in a session organized by John Cloud (NOAA).



Census map of Alaska (cropped portion of Kuskokwim Bay/Nunivak Island area) - Ivan Petrov, Special Agent, Tenth Census, from Russian, French, English, U.S. Hydrographic Office, and Coast & Geodetic Survey. 1880



Alaskan Native Language Archive showing 270 Native place names (<https://www.uaf.edu/anla/collections/map/names/>).

PARTNERS, FELLOWS AND INTERNS

MARITIME WALRUS AND THEIR HUNTERS ON THE ÎLES DE LA MADELEINE, QUÉBEC

By Moira McCaffrey

The windswept Îles-de-la-Madeleine may hold the key to understanding one of the least known chapters in the history of animal collapses in the North Atlantic. Historic accounts reveal that in the late 1500s, Basque, French, and English merchants were on the Islands engaged in hunting walrus. In summer their ships could be found vying for access to deep harbours and "échoueries", or walrus haul out sites. This practice continued for close to two hundred years with cargos of ivory tusks, hides, and walrus oil making their way to North American and European markets. By the 1790s, walrus had been extirpated on the Islands and throughout the Gulf of St. Lawrence, save for occasional sightings up to the present. To date, my research on the Îles-de-la-Madeleine has focused on the long and complex record of indigenous occupation, which

likely included hunting or scavenging walrus. The "Arctic Crashes" project has provided an impetus for renewed ethnohistoric and archaeological investigation into human-walrus interaction on the Islands.

Background

The Îles-de-la-Madeleine are situated near the centre of the Gulf with the closest mainland being Cape Breton Island, Nova Scotia, at a distance of just under 100 km. The Mi'kmaq called the Islands Menago-esenog meaning "surf-lashed islands" or "place where the breakers foam", and travelled there seasonally. Prior to 1988, the Îles-de-la-Madeleine had received only cursory attention from archaeologists. In 1930, William J. Wintemberg explored the archipelago for five days as part of a far-ranging survey of the Atlantic Provinces. Although he recovered prehistoric materials, his notes failed to pinpoint specific sites. In 1977 **Charles A. Martijn**, of the Ministère des Affaires culturelles du Québec, returned to locations mentioned by Wintemberg and identified two precontact sites.

A decade later, Martijn was instrumental in initiating systematic archaeological surveys on the Islands, supported jointly by the Municipalité des Îles-de-la-Madeleine and the Ministère des Affaires culturelles du Québec. I carried out this research from 1988 to 1990. My fieldwork assistants - ethnologist **Hélène Chevrier** and local historian **Leonard Clark** - played a key role in sharing their profound knowledge of Island heritage. The Îles-de-la-Madeleine proved to be much richer in archaeological resources than anyone had thought possible considering their distance from the mainland, small size, and high rate of coastal erosion. Close to 40 prehistoric sites were identified, as well as two historic period occupations. As excavations have yet to be carried out, the observations below are based on the study of surface-collected artifacts and limited sub-surface testing.



The Îles-de-la-Madeleine are situated near the centre of the Gulf of St. Lawrence. Walrus (seen swimming below Newfoundland) make an appearance on this 1666 map of America septentrionalis by Jan Jansson, Amsterdam. McGill University (detail).

Diagnostic lithic artifacts found on a small number of sites indicate that the Îles-de-la-Madeleine were visited, maybe even occupied for extended stays, in Late Paleoindian and Early Archaic times. Distinctive concave-based projectile points found on the eroded shorelines of three sites may date to at least 9000 years ago. These points compare well with similar specimens found on Prince Edward Island, and with early assemblages from the Lower North Shore of Québec and southern Labrador. A range of large side-notched and stemmed points were also recovered, probably dating to the Archaic period from 6500 to 3000 years ago. Though water levels would have been much lower at these times, the use of watercraft to reach the Islands seems highly likely.

Finally, stemmed projectile points along with ground stone axes, bifacial knives, and scrapers, have been recovered from quite a few sites. These tools were regularly found in association with pottery fragments, which indicates occupations dating to the Ceramic period from about 2500 years ago to the early sixteenth century. These groups are the direct ancestors of the Mi'kmaq people who still reside in eastern Québec, the Maritimes, Newfoundland, and Maine. The lithic materials used through all time periods are predominantly local, with the addition of Ingonish Island rhyolite from Nova Scotia and some flakes of Ramah chert from northern Labrador.

Maritimes Walrus

The remarkable suite of marine resources available on the Îles-de-la-Madeleine no doubt explains why indigenous groups were willing to risk the journey. Four species of seals frequent the Islands - grey, harbor and harp seals, and occasionally hooded seals. Quantities of cod and mackerel could be jigged and weirs used to capture runs of smelt, herring, and eels. Tidal flats



The windswept Îles-de-la-Madeleine are characterized by distinctive hillocks or buttes, abrupt sandstone cliffs, interior lagoons called barachois, and extensive beaches and sandpits. Photo: Moira McCaffrey.



Diagnostic projectile points with concave bases have been recovered from the surface of numerous sites on the Îles-de-la-Madeleine, indicating that the Islands were already visited over 9000 years ago. Photo: Moira McCaffrey.

offered up shellfish in abundance. Birds and their nutritious eggs were plentiful, with hundreds of species known to frequent the Islands. And what of walrus? Were they present in the Gulf of St. Lawrence thousands of years ago and were they hunted by indigenous groups on the Îles-de-la-Madeleine?

Research led by biologist **Brenna A. McLeod** of Saint Mary's University, Halifax, is producing new data that

will help answer these questions. In a recent study, she compared genetic and morphological characteristics of walrus specimens from Maritimes, Atlantic, and Pacific populations to conclude that Maritimes walrus was a morphologically and genetically distinctive group. They appear to have been bigger animals, with large and robust tusks, skulls, and mandibles. Specimens from the Îles-de-la-Madeleine were not included in this initial study but are available for future research.

As McLeod points out, the duration and extent to which the Gulf of St. Lawrence was frequented by walrus is not known, nor do we know if the animals were seasonal or year-round inhabitants. Walrus remains have yet to be recovered on precontact archaeological sites on the Îles-de-la-Madeleine; however, they have been recorded elsewhere in the Gulf. On the Québec Lower North Shore **Jean-Yves**

Pintal found walrus in hearths dating to the Letemplier Complex (8500-6500 BP). In southern Labrador, a walrus tusk was included as a grave offering in the l'Anse Amour burial mound dating to about 7500 BP. Walrus ivory tools, tusks, have been found in Maritime Archaic cemeteries at Port au Choix, Newfoundland, and Hamilton Inlet, Labrador, dating to 4400 and 3300 BP. Finally, burned and calcined walrus bones were reported by **Helen Kristmanson** on a number of Ceramic period sites in Prince Edward Island.

Lending support to the observations above, an early

historic period reference specifically mentions walrus hunting by indigenous people somewhere in the Gulf of St. Lawrence. In his 1586 unpublished manuscript "Canada: Grand Insulaire", French cosmographer André Thevet writes that in the Gulf are found, "...a great number of marine horses walrus which are amphibious fish as are crocodiles and seals." He goes on to state that when indigenous people catch them, "...they do not leave one behind but kill them with arrows and large wooden clubs and then eat them avidly, for their flesh is very good and delicate."

Field Program 2015

When flights to the Îles-de-la-Madeleine are delayed or cancelled, the cause is usually high winds. In the case of my research trip in early December, dense fog was the culprit. As the pilot pulled up from a second attempt to land, I had no trouble imagining why a graveyard of ships has amassed on the rocky shoals around the Islands. Our plane re-routed to Gaspé where the unplanned layover afforded me time to review the documentary record of walrus hunting on the Islands. Based on research by local historians, supplemented by Charles A. Martijn's ethnohistoric work, we can construct a schematic history of commercial walrus exploitation.

Jacques Cartier visited the Îles-de-la-Madeleine twice, in 1534 and again in 1536. His description of walrus herds and the subsequent inclusion of the Islands on the Harleian map dating to about 1547 suggest that French fishermen were already in the area. Next there is a 1591 report of a Breton ship called the *Bonaventure*, which together with a consort vessel, killed some 1500 walrus on Ramea Island, an early toponym for the archipelago. Before they could return home with a cargo of walrus oil, hides and tusks, as well as quantities of dried cod, the ship was captured and confiscated as a prize by the English.

Then in 1597 the *Hopewell*, an English ship commanded by **Captain Charles Leigh**, arrived at the Islands with the specific intent of taking over the walrus fishery, which until then had been exploited primarily by French Basques and Bretons. Leigh entered the present-

day Baie du Havre aux Basques north of Île du Havre Aubert where he encountered four French ships. Leigh threatened the ships and they surrendered their powder and ammunition to him; however, three days later the English awoke to find "200 Frenchmen and Bretons with ordinance" set up and ready to fire on them from the beach, forcing Captain Leigh to depart in haste. Remarkably, the account states that an armed force of about 300 indigenous people was also involved. For the following century and a half, only historic references to the Îles-de-la-Madeleine exist.



A private collection of walrus skulls and tusks discovered on Island beaches after storms and high winds. Photo: Moira McCaffrey.

In 1760, with the capitulation of New France, French possessions in North America were handed over to the British. An Anglo-American from Boston - Colonel Richard Gridley - received the concession of the Îles-de-la-Madeleine and set up a fishing post for seal, walrus and lobster at Havre-Aubert, where he employed Acadian settlers. Gridley and his employees extended their operations to walrus échoueries on the northern Islands - locations that can be pinpointed today thanks to a 1765 account of the walrus fisheries and a detailed map prepared by **Peter Frederick Haldimand**, assistant to **Captain Samuel Holland**, surveyor general of the Northern District of North America.

During archaeological work in the late 1980's, we visited places identified on Haldimand's 1765 map and discovered ghost features and depressions on the western shore of Grosse Île island at a locale corresponding to the site of **Richard Gridley's** operations. According to Haldimand's report, walrus at échoueries in the Old Harry region were herded overland through Seacow Path into Old Harry Bay, where they were killed and

loaded onto ships for processing at the Grosse Île island shore station. A main objective of 2015's field program was to return to this region for further exploration of the sites involved.

Finally back on the Islands, I was joined again by ethnologist **Hélène Chevrier**. Over the next few days we divided our time between visits to archaeological sites and hours spent in the homes of Madelinot to discuss walrus research and examine collections. Three individuals in particular, who have amassed large collec-



Eighteenth century accounts describe how walrus were "herded" from échoueries, or haul out sites near Old Harry, along Seacow Path to Old Harry Bay, where they were slaughtered. Seacow Path is still clearly visible in this 1990 photo. Photo: Moira McCaffrey.

tions of walrus skulls, tusks, and skeletal parts, generously shared their deep knowledge and experience of walrus history and habitat on the Islands. Two of these collectors have been active for decades, heading out after storms, high winds, and heavy surf, when walrus remains are most likely to be tossed up or exposed on beaches. The third individual is devoted to researching Island history and to ensuring that historic objects remain on the Islands. His impressive collection of walrus skulls, tusks, and teeth has been amassed primarily through purchase. He has also assembled an exceptional library and archive pertaining to the archipelago's walrus hunting past.

Just prior to leaving for the Îles-de-la-Madeleine, I learned of a student and serious history enthusiast from the Islands who had made a remarkable discovery in the spring of 2013. While walking along the western shore of Grosse Île Island during a particularly low tide, **Jean-Simon Richard** had come across and collected hundreds of historic artifacts strewn over a 40 by 10 meter stretch of exposed shoreline. He had prepared an illustrated report on the discovery and emailed me a copy. Though we were unable to meet up as he was away at university, Jean-Simon arranged for us to view the collection while I was on the Islands.

The assemblage contains objects suggestive of both a living zone and workshops where diverse materials were being stored, used, and transformed. Many of the artifacts fit well with a mid-eighteenth century date, though at least one piece, a Louis XV half cent, dates to 1722. The collection includes fragments of glass bottles, ceramic vessels and kaolin clay pipes, a triangular lead seal from the Compagnie française des Indes orientales (1664-1795), over 600 lead musket balls, scrap lead fragments, pork bones, and split and worked walrus tusk fragments. As the discoverer points out in his report, these objects suggest a complexity of origins and dates beyond an association only with Richard Gridley's establishment. Future study of the collection will no doubt help to pin down firmer attributions.

The next day we headed out to the original Gridley site identified in 1989, especially curious to see the shoreline 400 meters to the north where the new discovery had been made. We pulled up hoods and parka zippers and headed into the cold wind that buffets the shoreline at Grosse Île Island. The Gridley site covers an area of about 45 by 18 meters on a flat protrusion of land

backed by an almost vertical cliff face. Recent warmer temperatures have encouraged a dense growth of beach grass on the site mixed with low shrubs and stunted conifers, effectively obscuring the square and rectangular features we had previously observed. Nevertheless, two deep circular depressions separated by an oblong mound were still easy to spot. Perhaps this is indeed the site of a tryworks where walrus blubber was placed in large cauldrons to be rendered into oil, packed in barrels, and loaded onto ships? Continuing south we saw no evidence of historic materials in the shallows along the rocky shore.

Future Plans

This report shares only glimpses of the important contributions the Îles-de-la-Madeleine can make in documenting the existence and demise of walrus in the Gulf of St. Lawrence. While plans for a new phase of

archaeological work are underway, fieldwork will only begin once much additional background research is complete. In the meantime, steps will be taken to develop a public information and engagement program. The combination of increased shoreline erosion and the rise of an avocational metal-detecting community has exposed sites to heightened attention that in some instances may place them at risk.

Additional archival research is planned on the history of commercial walrus hunting on the Îles-de-la-Madeleine, as well as

the movement of ivory, hides, and oil to global markets. Recent archaeological syntheses of the Basques presence in the Gulf of St. Lawrence and the establishment of European fisheries in Newfoundland will inform this work. In addition, current research by scientists documenting climatic change, walrus biogeography, and habitat studies establishes groundwork for evaluating natural versus human impacts on Maritimes walrus populations. Ultimately, the extent to which humans caused or contributed to the extirpation of walrus on the Îles-de-la-Madeleine will be assessed at the complex intersection of these different research threads.

THE STUDY OF ARCHAEOLOGICAL TEXTILES FROM THE NORSE COLONIES OF THE NORTH ATLANTIC AD 870-1800.

By Michèle Hayeur Smith, Haffenreffer Museum of Anthropology, Brown University.

My current NSF funded research project, *Weaving*



This 1989 photo shows local historian Leonard Clark standing in a rectangular depression on the western shore of Grosse Île island. This is the presumed site of Richard Gridley's walrus processing shore station, which operated in the mid-1760s. Photo: Moira McCaffrey.

Islands of Cloth: Gender, Textiles and Trade Across the North Atlantic, is in its final year. This archaeological, collections-based project has expanded on the scope of my previous NSF-funded, 3-year (2010-2013) project, *Rags to Riches: An Archaeological Study of Textiles and Gender in Iceland AD 874-1800* and earlier research on gender, dress and adornment in Viking Age and Medieval Iceland.

In *Rags to Riches*, I analyzed archaeological textile assemblage from 34 Icelandic sites that spanned 1,000 years and was able to generate new information on the roles of men and women in Icelandic society; changing approaches to textile production through time; the role of Icelandic textiles and women in international trade; Icelandic women's sustainable responses to climate changes during the Little Ice Age (Hayeur Smith, 2012, 2014b) and changes through time in Icelandic dress. Critically, I found material evidence, in the form of increasingly standardized textile production, that women were pivotal in making Iceland's cloth currency during the medieval period. Icelandic archaeological textiles, while numerous (n. 6000-8000 fragments), have escaped the scrutiny of researchers and yet are not only evidence of women's labor, but formed the basis of their economy. The Icelandic commodity-money system, as understood through medieval and post-medieval Icelandic law codes, was based on stable, legally negotiated exchange rates for the value of different goods relative to other products. Thus, values for domestic commodities such as cattle, butter, sheep, foodstuffs and manufactured goods, including cloth, as well as hack silver and coins, were initially established through exchange rates based upon standardized weights of refined silver. However, silver became so scarce in Iceland by the 11th/12th centuries that cloth replaced it as the standardized unit of exchange and was legally regulated through provisions recorded in Iceland's medieval law codes. By directly dating textile samples from sites across Iceland, I was able to identify and sequence critical changes in textile production strategies while also providing much needed dating for many of the sites I investigated.

Weaving Islands of Cloth has allowed me to take the knowledge I gained and the lessons I learned from



North Atlantic Sheep at Signabøgarður, Faroe Islands. (photo MHS)

Rags to Riches to the next logical level: a comparative, millennium-scale examination of textiles as evidence for women's labor and roles in all of the colonies that Norse settlers established across the North Atlantic in the 9th century AD and that developed, over the following centuries, into the modern nations of Scotland, Iceland, the Faroe Islands, and Greenland. This international collaborative project has integrated analyses of existing collections in six national museums with a pilot project carried out in Norway to assess the scale of the textile trade that took place between these North Atlantic islands and the mainland.

Collections from Greenland (stored in both Nuuk, Greenland, and Copenhagen, Denmark) and the Faroe Islands (in Tórshavn) were consulted in 2014 and 2015 at the National Museum of Denmark (Copenhagen), the Greenlandic National Museum and Archive (Nuuk, Greenland) and the National Museum of the Faroe Islands (Føroya Fornminnisavni).

These research trips expanded the scale and range of the collections available for my analyses immeasurably and brought the research value of these existing collections more into the minds of these institutions' curators and directors. For example, prior to my visit to the

National Museum of the Faroes, virtually no information was available in published or unpublished sources on the scale, diversity, age, or even the existence of archaeological Faroese textile collections and my concern was that few, if any, results would come from visiting the Faroes. My work at the National Museum of the Faroes encouraged the museum's curators to search deeply and pull samples from an unexpected range of sites and site types spanning nearly a millennium of occupation on the archipelago. Similarly rich and unexpected results came from working with the Greenlandic Norse collections in Denmark, and especially from the site of Herjolfsnes. Work in Scotland has also clearly just scratched the surface of a rich and deeply informative series of patterns and trajectories of change through time, regional/cultural divergence, and long-distance trading networks.

It is clear that these collections contain significant new cultural and economic information on the use and

reuse of textiles as the products of women's efforts across the North Atlantic. Patterns now still roughly seen from Greenland, the Faroes, and Scotland contrast significantly with the Icelandic patterns, where cloth served as currency throughout the medieval period. Rather than using cloth as currency, Greenlanders appear to have shifted their production over time more in response to local climatic and social hardships (Hayeur Smith, 2014b), while the Faroe Islands and Scottish Norse trajectories have just begun to emerge from the data and appear to be quite different and complex. Faroese production appears to have been nearly as ubiquitous and quasi-industrial as in Iceland, yet the products appear different and the role of imports more obvious.



Inside of a Viking period oval brooch from Ketilstaðir, North Eastern Iceland with mineralized textiles on the inside of the brooch. (Photo MHS)

Greenlandic research has led to more elaborate analyses as well as productive research collaborations with Danish colleagues. In December, 2014, **Mikkel Holger Strander Sinding** from the Center for Human GeoGenetics (Natural History Museum of Denmark and the University of Copenhagen) agreed to conduct aDNA analyses on Greenlandic samples of cloth collected during my visits to Nuuk and Copenhagen. Our goal was to determine whether an increasingly diverse range of hair and fur from mixed species (e.g. sheep, goat, arctic hare, polar bear) was integrated into locally produced cloth through the later centuries of the Norse colonies' survival in Greenland. This pattern, suggesting both adaptive farming strategies and adaptation to cooling climates, had been proposed by **Walton-Rogers** (1998) as a result of macro- and microscopic fiber analyses of textiles from the site of GUS (Gården Under Sandet) in western Greenland. Strander Sinding's work on those textiles, published in the *Journal of Archaeological Science* (Sinding et al 2015), raised questions about the accuracy of such macroscopic and low-power microscopic identifications when reported bison hair was identified as domestic horse, and specimens originally identified as polar bear, black bear, and muskox were identified by aDNA as goat. In fact, those analyses raised important questions about the role of goat hair in Greenlandic textile production and suggested that domestic goat might be a more important factor in local economies and textile production than the arctic species previously thought to have been integrated into regional textile production. While it is very difficult to distinguish between goat and sheep osteologically it was thought that aDNA analyses of possible goat hair integrated into medieval textiles might provide additional information of value not only for docu-

menting unique aspects of Greenlandic textile production but also for reconsidering zooarchaeological understandings of subsistence and adaptation in Norse Greenland. Our hypothesis (still being tested) was that parts of the Eastern Settlement had placed greater emphasis on goat for wool production, a potentially

more robust and resilient creature better adapted to the Greenlandic environment (Sinding and Hayeur Smith, forthcoming).

pXRF (portable X-Ray Fluorescence) have become relatively standard in many aspects of archaeological analyses, and I have been hoping to uncover new uses for this analytical approach that can be applied to textiles. Traditionally museums have used XRF to identify mordants, dyes, and contaminants in textiles. While these are

useful pursuits, and I have had success in identifying elemental signatures of such dyes and mordants on Greenlandic and Icelandic samples already, I am hoping that pXRF might also be used to source the origin of textiles so that it can be combined with strontium analyses or used as an alternative, non-destructive approach. Recent work on Greenlandic samples suggest that pXRF may be able to reveal information about the movement of cloth, and preliminary results from the Greenlandic context suggest that some textiles with elemental signatures from southern Greenland made their way to the Western settlement, 400-500 kilometers away. More interestingly still, a small pocket of textiles stemming from the eastern settlement—in the vicinity of Erik the Red's farm and medieval Greenland's bishopric—has revealed unusually high levels uranium within the cloth. This part of the Eastern Settlement lies above a known uranium-rich geological zone and variations in uranium and lead concentrations, among other elements, show promise for tracing the movement of some cloth both within this part of the Eastern Settlement and to other parts of it. While this component of the project is still in its infancy, and more analyses are required, it



Kevin P. Smith, Haffenreffer Museum of Anthropology using a pXRF on a 14th century gown from Herjolfsnes, Greenland at the National Museum of Denmark. (Photo MHS)



Michele Hayeur Smith, Haffenreffer Museum of Anthropology, working on textiles from the site of Gilsbakki, western Iceland at the National Museum of Iceland (Photo MHS).

is interesting to ponder the health effects of this uranium on the Greenland Norse populations, particularly those living in uranium-rich areas.

These applications of pXRF also suggest new potentials for using it to track the movement of cloth at the local and regional levels within one of the "Islands of Cloth"—Greenland. Other pXRF analyses, in Iceland, have allowed me to identify imports and/or imported dyes through anomalous concentrations of mercury, lead, bismuth, barium and other elements, both in archaeological textiles of the 12th-16th centuries and in textile swatches preserved at the National Archives of Iceland that represent known imports and locally produced cloth types sold in Iceland by merchants during the 18th/19th centuries. With samples of raw, contemporary wool from Greenland, Iceland, the Faroes, Scotland, and Norway now in hand, and a wider range of archaeological samples from Greenland, Iceland, and the Faroes, a next step will be to assess whether pXRF can be used to trace the movement of cloth from these macro-regional zones across the North Atlantic and beyond.

To compliment the pXRF analysis of textiles and to trace the movement of cloth across the North Atlantic, I am also working with Dr. **Karin Frei** (National Museum of Denmark) to use strontium isotopes to characterize local cloth from Icelandic sites, document imports, and hopefully identify where they were made. She has been able to establish—from the cloth, wool, and environmental samples collected as a part of this grant—secure strontium baselines for Iceland so that foreign imports can be identified from Sr-isotope values that contrast significantly in comparison. This

has allowed us to begin to determine the quantities, distribution, and percentages of foreign cloth imported into Iceland in the late medieval and early modern periods.

CARRIE M. MCLAIN MEMORIAL MUSEUM: JOURNEY OF AN ARCTIC COLLECTION

By Amy Phillips-Chan, Director of the Carrie M. McLain Memorial Museum

For almost 50 years the Carrie M. McLain Memorial Museum has perched a few yards from the icy coast of Norton Sound on historic Front Street in Nome, Alaska. In 1967 the Nome Museum, among other museums, including the Cordova Historical Museum, Pioneer Museum (Fairbanks), and Alaska State Museum (Juneau), sprung up across the state to celebrate the centennial purchase of Alaska from Russia. The centennial museums represented a concerted statewide effort to gather and preserve Alaska history and culture while at the same time they announced the importance of Alaska collections and researchers to the professional field.

In Nome, local historian **Carrie M. McLain** had embarked on a lifelong pursuit of collecting and sharing oral histories, photographs, and artifacts since her arrival on the fringe of the gold rush in 1905. McLain's founding collection of ivory artwork and historical photographs set a precedent for donors with personal connections to Nome and the surrounding region looking to return their treasures and memories. The museum collection greatly expanded over the past five decades and now comprises 15,000 objects, 12,000 photographic prints and negatives, and over 100 linear feet of historical records.



Tools, ivory carvings, a pair of model boots, and a baleen basket from the Lopp Collection donated by great-grandson Stuart Dick in May 2015. CMMM, Acc. 2015.4.abogardur, Faroe Islands.

The museum's greatest collection strength is Alaska Native material culture from the late 19th century, followed by items related to gold mining, the ivory curio market, ancient ivory carvings, and dog sledding. The collection also comprises a fair number of business and household articles from early 1900s Nome as well as cultural artifacts and faunal remains from the Snake River Sandspit site. The overall collection affords unique insight into the socio-cultural and economic shifts occurring within Bering Strait communities at the turn of the 20th century.

The Lopp Collection of bone and ivory implements, stone tools, models, and ivory curios represents one of the museum's distinct assemblages portraying transculturation. **William Thomas "Tom" Lopp** and **Ellen Louise Kittredge Lopp** served as missionaries, teachers, and reindeer superintendents in Wales between 1892-1902. The Lopps participated in subsistence activities, took photographs, and printed a newsletter, *The Eskimo Bulletin*, which chronicled daily life within an Iñupiaq village. The growing presence of gold miners in the area and ensuing changes to the local economy are captured in Kathleen Lopp-Smith's, *Ice Window: Letters from a Bering Strait Village, 1892-1902* (2002).

By the time of the Lopp's departure from Wales in 1902, the town of Nome had swelled to almost 20,000 people, Western goods were prevalent, and the ivory curio market was in full swing. The Shields Collection provides an example of positive cross-cultural relations with Iñupiaq families in transition and a variety of items produced for the tourist trade in Nome. From 1910-1918, **Walter C. Shields** served as Superintendent of Schools of the Northwest District of Alaska. Shields oversaw the establishment of new schools and advocated for the promulgation of reindeer herding as a means to increase Iñupiaq wealth and standing. During his treks to northern communities by reindeer sled, Shields took photographs, acquired objects, and framed his view on Iñupiaq history as a book of poems titled *The Ancient Ground* (1918).

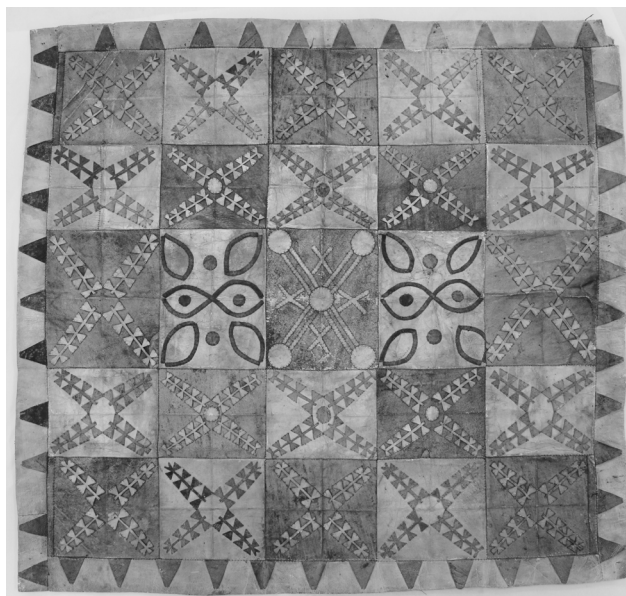
In February 2015 I came onboard as Director of the Carrie M. McLain Memorial Museum as it stood on the cusp of its own significant transformation with construction of a new building, new exhibits, and its first dedicated collections storage area. Like many small museums, lapse in staff and lack of training over the years had resulted in a disorganized and poorly documented collection. The use of multiple numbering

systems, a lack of accession records, and dearth of deed of gifts, presented an impressive challenge. Indeterminate portions of the collection were also stored in seven different locations across town adding another layer of organizational complexity.

In spring 2015 the museum undertook its first comprehensive inventory in fifty years. For those who have



Ivory artwork from the Shields Collection donated by grandson Philip Shields in April 2015. The reindeer and figure stand on top of the tusk inscribed, "To Walter C. Shields, Superintendent 1916. Nome, Alaska. From, Wales Delegates." CMMM, Acc. 2015.2.



Sealskin skin wall hanging featuring alternating light and dark squares of geometric designs. CMMM, Cat. 1979.1.52.

processed collections, one is intimately familiar with the meticulous task of searching for documentation, identifying, attributing, and cataloguing. Opening unmarked boxes and exploring collection hideaways also carries a heady sense of excitement and discovery. One remarkable object found folded in storage is a tanned and dyed sealskin wall hanging featuring alternating light and dark squares of intricate geometric appliqué typically found on 19th century Chukchi clothing from Eastern Siberia.

For our museum, the comprehensive inventory served a manifold purpose. First, the extensive processing activity helped us establish right of ownership while gaining critical insight into the scope and strengths of our collection. Knowledge about the range and dimensions of objects was also instrumental in planning the layout of cabinets and shelves in our new collections storage area. Next, after objects were catalogued and photographed they moved down the line to where they were wrapped and boxed for the move to the new museum. Finally, hands-on analyses of the collection afforded an opportunity to visualize new exhibit themes and identify key objects for storylines.

The museum collection will embark on its next journey during summer 2016 as it moves approximately one mile north to our new facility. Rehousing the collection in mobile storage will greatly increase the accessibility of the collection and expand its potential value for research, public programs, exhibits, and community projects. Following the move, the museum will be

rolling out a “Community Historian” program as an integral part of exhibit development for the main gallery. The program invites community members with localized knowledge to partner with museum staff and draft exhibit content utilizing materials within the collection.

The Carrie M. McLain Memorial Museum contains a rich assemblage of artifacts, photographs, and papers that reveal the vibrant history of Nome and the Bering Strait, from marine mammal hunting equipment and ivory artwork, to gold mining and the origins of long distance dog sled racing. Through many personal donations and accounts, the collection offer critical insight into the shared history of Western and Bering Strait Native peoples that continues to enrich the cultural fabric of Nome.

MODEL ARCTIC COUNCIL – FAIRBANKS, ALASKA

By Lauren Bishop

This spring during the Arctic Science Summit Week in Fairbanks, Alaska, I had the honor of participating



Lauren Bishop (second from right) participating in an Arctic policy discussion at the 2016 Alaska Science Conference.

in the second Model Arctic Council sponsored by the University of the Arctic in partnership with the University of Alaska Fairbanks. As a delegate from Dartmouth College I represented Sweden on the Protection of the Arctic Marine Environment Working Group as I, representatives from the other seven Arctic member states, permanent participants, and observers discussed the effects of increased cruise ship tourism in the Arctic as well as the sustainable management of Arctic shipping and resource development. While half the delegates debated maritime issues, the others deliberated better water and sewage management in northern communities and addressed the rising suicide rate among indigenous groups throughout the Arctic within the Sustainable Development Working Group. The delegates in both groups were not only extremely well informed about their particular topics, but were also very passionate about the issues.

Attending the MAC was the experience of a lifetime, for through the conference I was able to meet colleagues from around the world who share my interest in

the Arctic but also view the pressing issues of climate change, increased development, and social issues through a different lens. I was able to learn a great deal by actively lessening to what other delegates, particularly the permanent participants who were mostly represented by members within their indigenous group, had to say about the use of traditional hunting lands for tourist excursions, the environmental impact of resource development from the view of a subsistence based culture, and the potential impacts of economic stimulus in the north. While writing the declaration that detailed our recommendations for the four topics, we ran across the issue of phrasing and how the word “consent” versus “consult” could make such an impact on indigenous peoples’ right to decide what happens to them and their traditional land. Overall I created lasting friendships with dedicated students from around the Arctic while expanding my knowledge of both the Arctic Council and similar programs and their effect on Arctic policy.

FROM NOTRE DAME TO PITSIULAK

By Katie Portman

When I applied to be an intern at the Smithsonian, I was not expecting much. It was the spring of my first year at the University of Notre Dame, and I had only taken one introductory anthropology class. Yet by some stroke of fate, luck, or a bit of both, I found myself flying out to DC not even three months later, indescribably nervous and beyond excited to embark upon the biggest adventure of my life.

My first three weeks were spent in the ASC offices, compiling an archive of publications, photographs, and personal journals spanning William Fitzhugh’s 40+ years of research in the Hamilton Inlet region of Labrador. The next step was seeing Labrador for myself, alongside Bill and three other interns. Despite weather issues, engine malfunctions, and permit-related delays, over my six weeks in the field I fell in love with arctic archaeology. It is a field that combines rigorous hands-on exploration with intense intellectual stimulation, aggregating knowledge from disciplines ranging from geology to chemistry to history. And in the arctic, archaeology takes on a quality that is almost magical. I witnessed locations virtually unchanged from their descriptions in Bill’s 50-year old journals; I touched icebergs releasing oxygen captured millennia ago; I held stone flakes chipped off by thousand-year-old hands. While sitting on the stern of the MV Pitsiulak for hours on end, I saw islands that



Katie examines a find at the dig site.

appeared to float above the water, while humpbacks, fin whales, and orcas splashed out of the endless fog.

The impact of my first field experience is difficult to articulate. As an archaeology student, nothing was more exciting than discovering my ability to physically interact with time. By digging just inches below the earth's surface, I removed the tangible manifestation of history, revealing clues to how people lived centuries ago. Archaeologists have the unique opportunity to see what they saw, walk where they walked, and even touch what they touched. With this opportunity comes the responsibility to preserve what we find and share what we learn with the world. It was an amazing privilege to play even just a small role in the history of the ASC, and I am so excited to take the skills and the perspective I gained this summer and apply it to the rest of my life.

INUKSUK AND INSIDE JOKES FROM LABRADOR

By Molly Iott

This expedition was my first experience of archaeological field work and I was taught so much during the short month-long trip. We spent a good deal of time surveying islands off the coast of Labrador and finding traces of the people that lived there so long ago. I learned a lot about Inuit lifestyle and culture, both from our archaeological work and from talking to our teenage Inuit assistant, **Eric White**. Prior to this expedition, I knew very little about the Inuit. The following is an account from my expedition journal of a story Eric told me during a survey of the Indian Islands:

While on top of [a] hill, Eric told me that the inuksuk were built to direct people to villages depending on where they point. He also told me about some of his [religious] beliefs... he told me the legend of the sea goddess. She was a beautiful woman who married a man with raven black features. Once they were married, he would go off all day and only return at night. Her brothers were curious so they followed him one



Katie Portman, Jacob Marchman, Molly Iott, and Patrick Jolicoeur.



Eric White with an inuksuk on South Indian Island.

day and saw that he could turn into a raven. Ravens are bad omens so these brothers decided they had to kill their sister because she had married a raven. They took her out to sea to drown her. When they tried to fling her over the side she clung to ship so they cut off first her hair then her fingers. When the hair hit the water it became fish and the fingers turned into seals, the first seals. The raven took pity on her and granted her power over the sea so she became the sea goddess.

When excavating the tent pits of a long-abandoned Inuit village, it can be difficult to envision the culture of those who resided there as a living thing. We know from the evidence left behind that people definitely lived there in the past but it seems so distant, almost unreal. Through Eric's stories, I experienced the living and thriving Inuit culture. There is a beautiful connection

between those whose houses we studied and their descendants who still know the stories.

MARCHMAN'S ASC SUMMER INTERN REPORT

By Jacob Marchman



Jake Marchman (right), Katie Portman (center left), and Molly Iott (left) digging our first ever test pit at the Grassy Cove site. Michelle Davies (center) supervising.

This summer, I had the privilege, as a Dartmouth College anthropology student, to accompany Dr. Fitzhugh on his yearly trip to Labrador along with his skipper, Perry, and his crew of students. I came into this experience with little archaeological background: only the handful of anthropological courses I took in my first year at Dartmouth College. It was thus to my surprise that Dr. Fitzhugh warmly invited me to join the trip.

Our goal was to conduct archaeological surveys on the hitherto uninvestigated south shore of Hamilton Inlet. Although our trip north was fraught with delays, but we did eventually make it to Hamilton Inlet, where our short time yielded some fascinating results. We discovered, among other things, a possible Indian burial site, several unidentifiable stone pavements, and a six and a half thousand year old Maritime Archaic site.

I think, though, that among the most memorable aspects of this trip was the exposure to the people and culture of Newfoundland. We spent a lot of time ashore in Newfoundland, due to mechanical and weather related delays. We met old friends of Dr. Fitzhugh's, and made new ones when we were stranded in the town of Englee for a week after our vessel, the M.V. Pitsiulak, broke down. I quickly learned that Newfoundlanders love fresh bread, but hate it without butter, sip moonshine with iceberg ice, and consider the only real fish to be codfish.

One of my professors told me that the only way to know if you really want to do archeology is go into the field. Having gone on this trip, I now know that I do. So to **Dr. Fitzhugh** and the folks at the Smithsonian I have one word to say – thanks!

ENGAGING WITH THE PUBLIC: DIFFERENT PLATFORMS FOR DIVERSE AUDIENCES

By Chelsi Slotten

When I began my internship here last October, I was both excited to begin and unsure of what my role would entail. As someone who is primarily trained in research osteoarchaeology, I was looking forward to fortifying my skills in museum studies. To that end, I participated in an array of outreach projects aimed at vastly dissimilar audiences.

Initially, I began my work by participating in the Smithsonian's *Science How* web series for students. **Bill Fitzhugh** was being interviewed about life in the Arctic and the education team wanted an expert to answer some of the student questions that were sub-

mitted during the course of the program. I assumed the position of the expert, enabling me to answer questions ranging from hunting techniques to average temperatures to whether there are penguins in the Arctic.

While participating in the *Science How*, I also took responsibility over posting for the ASC's social media pages—including Facebook, Twitter and a blog. I started a series of #TBT (Throwback Thursday) posts which highlight some of our past exhibits and

feature interviews with the head curators about their memories of the aforementioned exhibits. Likewise, I promoted our public programs, such as the webcast and documentary screenings, both here and at the Alaska office. In addition, I have utilized social media to share other research and news articles relating to the Arctic.

By far the biggest project I have undertaken is the organization of this year's *Arctic Crashes* symposium.

This full day event kicked off with a public lecture and then segued into an academic conference about animal crashes in the Arctic past and present. The intended audience for this conference was primarily academic and disparate from the typically public type of outreach done via social media and webcasts.

I have learned a great deal about different means of public engagement across a variety of platforms to target diverse audiences through this experience. I am deeply grateful to Bill, Igor, and Stephen for giving me this opportunity and I am excited to continue my internship here.



Katie goofs off with a caribou skull.

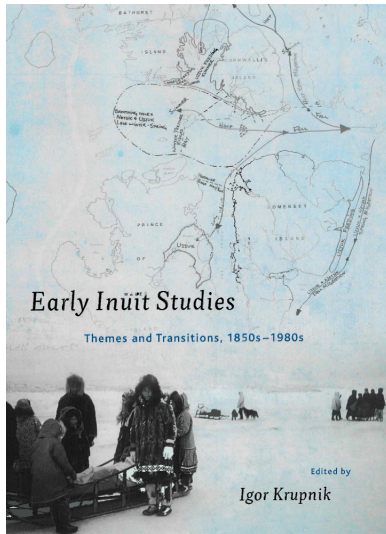


Chelsi Slotten with Bill Fitzhugh on the Smithsonian's Science-How? set.

BOOK REVIEWS

EARLY INUIT STUDIES PUBLISHED

By Igor Krupnik



Cover: *Early Inuit Studies: Themes and Transitions, 1850s–1980s*

In late December 2015, the Smithsonian Institution Scholarly Press (SISP) released a new book of great importance to the field of Northern studies and to ASC, in particular. The 450-page volume called *Early Inuit Studies: Themes and Transitions, 1850s–1980s* is a collection of 15 chronologically arranged papers and the first-ever definitive treatment of the intellectual history of Eskimology

(known today as ‘Inuit Studies’) for over 130 years – between the 1850s and 1980s. The book originated from a session on the history of Eskimology organized during the 18th Inuit Studies Conference in Washington D.C. and chaired by Igor Krupnik. Sixteen authors contributed chapters to the volume, for which Krupnik served as a compiler and editor.

The book features extensive introductory chapter by Krupnik that offers new chronology of major phases and transitions in the development of Eskimology: from the 1850s (or rather the 1870s) when it evolved into a distinct scholarly area, the study of the Eskimo people, and until the 1980s, when it was replaced by a new field currently known as ‘Inuit Studies.’ The three major structural sections of the book mostly follow this chronology. Part One, Early Science about the Inuit, covers the formative decades of the discipline, when it was first framed by its early founding figures, among them, Heinrich Rink, Samuel Kleinschmidt, Franz Boas, and Knud Rasmussen. Part Two, Concepts and Methods in Early Eskimology, assesses the ‘golden decades’ of early Eskimology, between the 1920s and the 1950s. These were marked by the next generation of scholarly giants, like Kaj Birket-Smith, Therkel Mathiassen, Henry Collins, Waldemar Bogoras, Frederica de Laguna, and William Thalbitzer. Part Three, Eskimology: Maturity and Changeover, reviews life-stories of our scholarly Elders, whom the present generation of (senior) Arctic specialists remember fondly and vividly. Chapters in this section feature the names of Margaret Lantis, Jim VanStone, Wendell Oswalt, Dorothy Jean Ray, Lydia Black, Albert Heinrich, Nelson Graburn, Lee Guemple, David

Damas, Helge Kleivan, Eric Holtved, Robert Petersen, Charles Hughes, Milton Freeman, and Tiger Burch – as well as of Helge Larsen, Froelich Rainey, and Jorgen Meldgaard covered earlier.

The string of (mostly) chronological chapters is ‘bracketed’ by two short personal essays, those by Nelson Graburn reporting on his early Arctic field years in the late 1950s and by Beatrice Collignon telling about the transitions she personally witnessed in the 1990s. Such a panoramic, multi-faced/multi-voiced treatment of the early Eskimology offers a new vision of its intellectual history; it also reveals the deep personal connections among its many practitioners, both visible and invisible academic genealogies. Of course, no historical synopsis is complete and perfect, and the book leaves certain prominent figures of the late 1800s and early 1900s covered briefly or barely mentioned. Perhaps a second volume is warranted someday to accommodate another set of historical essays about those scholars.

The book has over 100 illustrations, mostly historical photographs from the early-mid 1900s also several maps. It features an extensive 30-page Index and massive references, both of great value to future researchers. We are grateful to the SISP and to the Press editor, Stephanie Summerhays for being great partners in the production of the book.

REVIEW OF WANDERINGS OF VARVARA KUZNETSOVA

By Igor Krupnik

Elena A. Mikhailova. Wanderings of Varvara Kuznetsova (Varvara Grigor'evna Kuznetsova's Chukotka Expedition, 1948–1951) [Skitaniia Varvary Kuznetsovoi. Chukotskaya ekspeditsiia Varvary Grigor'evny Kuznetsovoi, 1948–1951 gg.]. St. Petersburg: Museum Anthropology and Ethnography RAN, 190 pp. photographs.

This is a remarkable publication about an extraordinary life story. In 1948, Russian ethnographer, Varvara Kuznetsova from MAE-Kunstkamera went to Chukotka to collect



Cover: *Wanderings of Varvara Kuznetsova*

data for her Ph.D. thesis on the social and ritual life of Reindeer Chukchi. She was supposed to be in the field for 12 months; she emerged after three full years of nomadic wandering with Chukchi reindeer camps, with a trove of first-hand data, 48 (!) field notebooks, and over 850 superb daily photographs – but as a broken person on the verge of emotional and mental collapse. No one ever preceded or repeated Kuznetsova's experience, certainly not a single woman-ethnographer could claim similar 36-month 'participant observation' in nomadic camps. On my first visit to Chukotka in 1971, twenty years after Kuznetsova's venture, I heard stories of a 'white woman,' who was reportedly 'abducted' by rogue Chukchi herders and who was rescued by Russian helicopter pilots, as she escaped from her tormentors. That woman was Varvara Kuznetsova; but her real story was more complex than any legends could tell.

We should be grateful to another Russian female ethnographer from MAE-Kunstkamera, Dr. Elena Mikhailova, who succeeded in untangling Kuznetsova's story from her diaries, field notes, and other materials she brought from her Chukotka expedition of 1948–1951. In her slim, but very informative and nicely published book, Mikhailova introduces Kuznetsova's biography, her preparation for dissertational fieldwork, travel to Chukotka; and then follows each of her three field years among the Amguema River Chukchi. In the second section of the book, Mikhailova assesses Kuznetsova's field approach, her level of training and preparation for the task, and analyzes what went wrong, and how Kuznetsova overestimated or miscalculated her ability to practice 'participant observation' for three full years. The book concludes with a brief description of Kuznetsova's manuscript and photographic collection at MAE-Kunstkamera; it is illustrated by 97 captioned black-and-white photographs selected from among 850 Kuznetsova's prints and negatives stored at MAE, all of superb ethnographic and visual quality.

The 'rediscovery' of Kuznetsova's legacy that Mikhailova started in the early 2000s and that which is now followed by her colleagues in Siberian research (Elena Davydova, Virginie Vaté) is opening a fascinating chapter in the history of Siberian ethnography. Even more so, because Kuznetsova left little of her own published account of her research. She never completed her Ph.D. and produced only one, though quite detailed, paper in Russian about the ceremonial cycle of the Amguema River Chukchi (1957). She suffered from mental illness and was eventually dismissed from MAE five years after her return to St. Petersburg. Even the date of her death remains unknown. This heroic scholar deserves the attention given to her by contemporary ethnographers, since none of us today would endure what she went through and could match the depth of her knowledge of the nomadic culture that has been deeply transformed since the days of the 'wanderings of Varvara Kuznetsova.'

BERGYBITS



ARCTIC STUDIES ONLINE

The Arctic Studies Center is on Twitter [@ArcticStudies](https://twitter.com/ArcticStudies), and is also posting the latest ASC news and events via Facebook in order to connect with the Arctic community. Check out our blog, *Magnetic North* and website <http://www.mnh.si.edu/arctic/> for more detailed information and links to additional resources. Like us on Facebook and follow us on Twitter!

ARCTIC AMBITIONS: CAPTAIN COOK AND THE NORTHWEST PASSAGE

By Aron Crowell

In the words of the organizers of *Arctic Ambitions: Captain Cook and the Northwest Passage*, "It is one of science's burning questions: Will the melting Arctic ice reveal a Northwest Passage -- the very thing Captain Cook sought but never found?" The Arctic Studies Center's Alaska Director **Aron Crowell** contributed to the Arctic Ambitions exhibition and catalog, which focus on Cook's 1778 explorations and search in Alaskan waters for a transcontinental passage leading to the Atlantic. The exhibition, curated by Canadian maritime historian **Robin Inglis** and produced by the Anchorage Museum, was shown in Anchorage from March - September, 2015 and in Tacoma at the Washington State History Museum from October 2015 to March 2016. The critically acclaimed catalog (published by the University of Washington Press in 2015), includes chapters by 20 historians and anthropologists including **Adrienne Kaeppler** (Department of Anthropology, National Museum of Natural History), **Evguenia (Jenya) Aninchchenko** (NMNH Research Fellow), and Crowell, whose chapter examines Cook's encounters with Alaska Native residents of Prince William Sound, Cook Inlet, and the Aleutians and with Russian fur traders who were establishing colonial control over the region.

A WHALE'S TALE: VISIT OF THE PRIBILOVIANS

By Stephen Loring

Even though Spencer Baird was a visionary—as the first curator of the Smithsonian Institution (later, it's second Secretary [from 1878 to his death in 1887])

and responsible for nurturing an impressive cadre of young naturalists and collectors--we doubt even he could have envisioned the growth and stature of the Smithsonian's National Museum of Natural History which now houses over 126 million specimens that document the full range and history of life on earth. So instrumental was Baird's promotion of science in the late 19th-century that he was honored with having twelve species of fish and over twenty-five species of mammals, birds, and mollusks named after him, including a little-known, mysterious, marine mammal of the North Pacific --Baird's Beaked Whale (*Berardius bairdii*). Baird's Beaked whale is a deep water pelagic creature that is relatively poorly represented in the world's cetacean collections. Thus it was both a surprise and a delight to learn that some remains from a stranded Baird's whale, that had washed ashore on a remote corner of St. George, one of the Pribilof Islands in Alaska's Bering Sea, had been sent to the Smithsonian's Marine Mammal Program earlier this year in a large box labeled: "Alaska Seafood: Keep Frozen".

The carcass of the *Berardius* whale had been stranded on some foreshore flats on St. George Island where it



Posed in front of the skull of a blue whale in the Marine Mammal collections facility at Suitland are (left-to-right, back-to-front): standing: Stephen Loring, Rebecca Lent (Executive Director of the Marine Mammal Commission), Dee Allen (Research Program Officer of the Marine Mammal Commission), Michelle Ridgway (Marine Ecologist, Alaska Deep Ocean Science Institute), Kate Wynne (Marine Mammal Specialist, University of Alaska Fairbanks) and Charley Potter; kneeling are Cara Lestenkov-Mandregan, Caitlin Bourdukofsky, Anthony Lekanof, Carmen Philemonof, and Sir William Lekanof.



Representatives of the Pribilof Domain Marine Science Team in the Marine Mammal collection building at Suitland (left-to-right): Carmen Philemonof, Sir William Lekanof, Caitlin Bourdukofsky, Anthony Lekanof, and Cara Lestenkov-Mandregan. The *Berardius* skull on the left is the one they recovered and sent to the museum.

had been observed by **Hertha Kashevarof** and **Josh Prokopiou** who in turn brought it to the attention of **Kate Wynne** (a UAF SeaGrant Marine Mammal expert) and **Michelle Ridgway** (of Alaska Deep Ocean Science Institute, Kodiak) who had been running an innovative experiential educational program for high-school students on the Pribilofs. The Pribilof Marine Science Camps held on St. Paul and St. George Islands is a hands-on field-program in Bering Sea oceanography and biology (For their work on king crab biology the Pribilof students were awarded the Alaska Ocean Leadership Award in 2013). As part of the summer 2014 program science students, including **Caitlin Bourdukofsky**, **Anthony Lekanof**, **Cara Lestenkov**, **William Lekanof**, and **Carmen Philemonof** (all members of the Pribilof Island Marine Science Team) observed and measured the whale carcass--as tides and weather permitted, collected tissue samples for DNA analysis, and eventually partially dissected the carcass to recover the skull. Once the skull had been cleaned and prepped, it was sent to the Smithsonian where **Charley Potter**, then collections manager for the Marine Mammal Program, gratefully received it.

This past March (2015) the Alaska Deep Ocean Science Institute helped to sponsor a trip for the students and their instructors involved with the *Berardius* recovery to Washington where they were hosted by Charley Potter and **Stephen Loring**. Potter arranged to show the students the Marine Mammal collection area--one of the largest collections of marine mammal bones in the world (carefully curated in a pair of buildings at the Museum Support Center complex in Suitland, Maryland)--and Stephen arranged to show them the Aleutian ethnology and archaeology collec-

tion housed in the Anthropology Department's collections.

Also, of tremendous interest to the students, were the collections of photographs and drawings from their communities, including lovely ink and water-color paintings by **Henry Wood Elliott**, housed in the National Anthropological Archives. For the students it was a wonderful opportunity to see how their participation in scientific research and collecting fits into current marine mammal ecology and systematics and to gather insight on the unique history of their Pribilof Island homes and heritage. Spencer Baird would have been proud.



Cartoon by Robert L. Humphrey, illustrating William Fitzhugh's article on the Vikings (*AnthroNotes*: Fall 2000).

ANTHRONOTES EDITORS LAUNCH DOWNLOADABLE DIGITAL DATABASE

By William Fitzhugh

AnthroNotes, a publication of the National Museum of Natural History's Department of Anthropology, received the Society for American Archaeology's Award for Excellence in Public Education for "presenting archaeological and anthropological research to the public in an engaging and accessible style and for encouraging the study of these disciplines in classrooms across the nation."

The entire collection of *AnthroNotes* (1979-2012), along with 263 individual *AnthroNotes* articles, can be downloaded from the Smithsonian Libraries official Digital Repository (**Smithsonian Libraries' Official Digital Repository**). The database is searchable by author, title, and year, as well as major subfields such as archaeology and forensic anthropology. Searches may be conducted in over 40 topics including geographic regions (Africa, Middle East); contemporary issues (refugees, genetics); and education (teaching activities, careers).

HARALD V OF NORWAY VISITS ASC ANCHORAGE

By Aron Crowell

His Majesty King Harald V of Norway paid a royal

visit to the Anchorage Museum on May 27, 2015 to open *Polar Night: Life and Light in the Dead of Night*, an exhibition organized by Tromsø University Museum about undersea life in the Norwegian archipelago of Svalbard. Environmental conservation is a strong interest of the king, who served as Norwegian head of the World Wildlife Fund before ascending the throne in 1991. During his brief visit to the museum the king toured the Arctic Studies Center and the Smithsonian's *Living Our Cultures* exhibition of Alaska Native cultures with ASC-Alaska Director Aron Crowell, Norwegian Ambassador Kåre Aas, and Anchorage Museum Director Julie Decker. King Harald seemed most intrigued by a pre-1880s stone-tipped whaling harpoon head from Point Hope, and the information that similar points are still occasionally found inside modern bowhead whales, indicating the exceptionally long life span (up to 200 years) of these animals.

LETTERS TO THE ASC

We are used to, and appreciate, the post-publication reviews of our books, monographs and catalogs that appear in the professional literature, even if we do not sometimes agree with everything that's said. Still, for many of us at the ASC we hope that some of our materials find their way back to the northern communities from which much of the content we show and discuss is ultimately derived. I love to see the rain-swollen, charcoal-stained and partially torn copies of Labrador Winter and Turner's Ethnology of the Ungava District in the Innu homes and camps I visit in northern Labrador so much more so than the pristine copies on our office and library shelves. We always welcome the opportunity to share our work with community members and I was delighted to recently respond to a request by Ms. Luci Henderson of Kennewick, Washington (formerly of Gambell) if I could send her copies of Igor Krupnik's ASC publication Our Words Put to Paper (ASC Contributions to Circumpolar Anthropology 3). Even more delightful is her thank-you note which followed, featured below in part. - Stephen Loring.



Luci Henderson's Great Grandmother Aallenga in Gambell, 1912. Photograph in *Akuzilleput Igaqullghet - Our Words Put to Paper, Contributions to Circumpolar Anthropology 3* (2002). Photograph by Riley Moore, SI-NAA.

March 8, 2016
Kennewick, Washington

Dear Dr. Loring,

Thank-you so very much on your thoughtfulness and generosity in sharing the most appreciated books on St. Lawrence Island (SLI), Alaska, filled with amazing historical information and pictures of very special relatives whose names and namesakes previously existed by word of mouth only! Speaking for myself and everyone on SLI, our gratitude is endless to everyone involved in the existence of these precious books.

As a little girl, growing up in Gambell, I managed to put part of our family trees together mentally and the precious photographs confirmed these relationships. The photos of my maternal Great Grandparents are on pages 450-451 of *Our Words Put to Paper*. My biological paternal Grandparents and Great Grandfather are also in the same book and Dr. Leuman M. Waugh's photography book [*Faces We Remember – Neqamikegkaput*, ASC Contributions to Circumpolar Anthropology 9]. Now I know where our prominent physical features came from! Most of these precious pictures are living images of their forbears today. These books and Volumes 1 and 2 of *The Lore of St. Lawrence Island* are priceless to me as family and historical information.

One of my biggest dreams is to one day visit the Smithsonian Institute. I know some or most of our artifacts are housed in these fine institutions, with some made by close family members who are long gone from us. Do you know if one of my Great Grandfather Apaata's famed pipes is housed in either the Smithsonian or the NMNH? He was often referred to as the pipe maker in the articles I've read about him...

Dr. Loring, thanks, again to your generosity in sending me and my Aunt Macias in San Antonio the special books on SLI. Because the NMNH is run by our government, I wasn't expecting a reply for my request....

Sincerely, Luci Henderson

Thank-you for your kind words Luci, and we look forward to welcoming you to the museum when you come to visit Washington!

A POEM ON RETIREMENT

By Margery Gordon

How to look back on ones' career at SI

It is hard to get a lot of it in but I'll try

New exhibits to learn about and broaden my scope

And special ones on Prague and Chile with love and hope



Margery Gordon

*I delved into exhibits on soils
and the great blue sea*

*And learned there was only
one Ocean, not two or three*

*I trained many a docent and
intern both during day and
at eve*

*And built up hours and hours
and hours of leave*

*I survived SI trips from Rus-
sia to the Carolinas,*

And even made stops in Albania and China.

*A musk ox, Uummannaq singers, and signs that were
due*

*I celebrated completing the Arctic festival with many
of you*

We successfully held it despite a race near the mall

*Watched dancers move as ice and saw salmon gutted
and all*

*I thought scouts and orchids were paramount to this
place*

*And many other subjects from Caribbean masks to
talks on race*

*I worked with Sipan, Egypt, Ebla, Caesarea, whales,
and more*

*And found time to herald potatoes, chocolate, corn,
and Chinese lore*

*I worked with Committees on Latinos and Asians and
Women's rights*

To be heard in the museum with power and no fights.

*I managed to do several paintings in the states of
Mass and Maine*

*Dragging up canvasses by car, and on train or by
plane.*

Drawing was my evening of right brain and of zen

My book club, an uplift, every now and then

So thank you all for your support and your cheer

*And look forward to a new phase in the upcoming
year.*

TRANSITIONS

MARY JANE LENZ (1930-2016)

By Kevin Gover, NMAI Director, and staff.

With great sadness, I must report that our dear friend and colleague Mary Jane Lenz passed away yesterday afternoon, having celebrated her 86th birthday on March 24. Mary Jane, or simply “MJ” as she was called by those closest to her, had a long and distinguished professional career, graduating Phi Beta Kappa from Beloit College in 1952 with a degree in Anthropology and from Bryn Mawr College in 1954 with a Master’s degree in Sociology and Anthropology. For her Master’s research, MJ did fieldwork in the Tlingit community of Yakutat under the direction of the distinguished anthropologist Frederica de Laguna. As an undergraduate, she began work at Beloit’s Logan Museum of Anthropology and remained interested in museums and museum work, joining the Museum of the American Indian staff in 1974. She was appointed director of the MAI archaeological lab in 1976 and worked on materials recently excavated from Marajo Island near the mouth of the Amazon in Brazil. From 1977 onward, she worked in the Curatorial Department, assisting researchers.

Throughout her career Mary Jane curated exhibitions and wrote about art and material culture and the history of the MAI. In 1981, she wrote the exhibition text for “Arctic Art: Eskimo Ivory,” a show of 200 ivory carvings at MAI. Later that year, Mary Jane traveled with MAI collections and exhibition staff to set up a version of the “Ancestors” exhibit in the Museum of Chinese History in Beijing, China. She served as curator of the MAI exhibition “Out of the Mists; Northwest Coast Indian Art” at the IBM Gallery in New York (1984), “The Stuff of Dreams; Native American Dolls” and published the book by the same name (1986), and served as co-curator of “A Gift From the Heart: Two Pomo Artists” (1990).

During the years following NMAI’s creation, MJ worked with others on planning for the Mall Museum and the CRC as well as “All Roads Are Good” and “Creation’s Journey” and their associated publications (1994) and other early exhibits at NMAI-NY. Mary Jane was one of the few New York staff who chose to relocate to DC and headed the Curatorial Department after 1999 and served as chair of NMAI’s Curatorial council for several years. For the Mall inaugural



Mary Jane Lenz at work

exhibits, she curated “Window on Collections” and its later development and also served a co-curator on “Listening to our Ancestors: The Art of Native Life Along the North Pacific Coast” in DC (2007) and in NY (2008).

Mary Jane’s special areas of research and expertise included the Northwest Coast and the Arctic and the cross-cultural study of dolls through her book *Small Spirits: Native American Dolls* from the National Museum of the American Indian (2004), but she was vitally interested in all aspects of Native life, world culture, and current events and politics. Mary Jane devoted much time to improving the collections documentation for NMAI’s Northwest Coast and Arctic collections. Finally, besides her MAI-HF and NMAI publications, Mary Jane wrote for *American Indian Art Magazine* and served on their editorial board and published in *Art & Antiquities*. She retired from NMAI in 2011 but remained in the area until 2013 when she moved to the Boston area to be nearer to her family.

These professional accomplishments were but one part of MJ’s life. She was the proud mother of five children—Patty, Peggy, Sue, Mike and Tim—and an equally proud and indulgent grandmother. For many of us, she filled several roles, combining the attributes of friend, colleague, mother, grandmother, role model, and enthusiastic supporter during the years we knew her. During her time in DC, she welcomed many to her home on Capitol Hill which was filled with the personal collections she had accumulated over decades and the incredible warmth, generosity, and positive outlook she brought to it and to every part of her life and, by extension, to our lives. Her spirit and generosity—personal, collegial, and intellectual—will be sorely missed.

2015 ASC STAFF PUBLICATIONS

Crowell, Aron. L.

2015 Sharing Knowledge through the Looking Both Ways Exhibition, in Kal'unek – *From Karluk, Kodiak Alutiiq History and the Archaeology of Karluk One*, edited by Amy F. Steffian, Marnie A. Leist, and Sven D. Haakanson, pp. 301-303. University of Alaska Press, Fairbanks

2015 The Glacier's Eternal Gift: Sealing, Science, and Indigenous Knowledge at Yakutat Bay, Alaska. In *Keeping Our Traditions Alive: Compendium of Best Practices in Promoting the Traditional Ways of Life of Arctic Indigenous Peoples*, pp. 48-49. The Arctic Council Secretariat, Ottawa.

Fitzhugh, William.W.

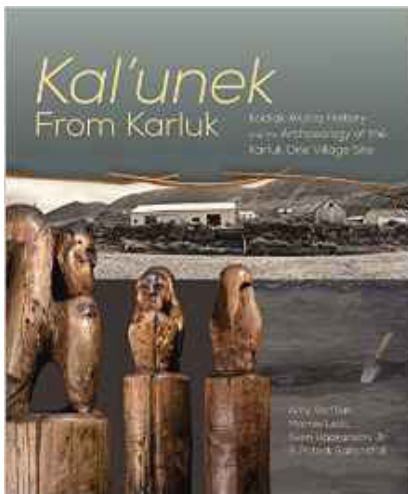
2014 After Red Bay: A Basque and Inuit Joint Venture on the Quebec Lower North Shore. *Rev. International de los Vascos* 59(2): 321-348.

2014 Assessment of portable X-ray fluorescence analysis for the evaluation of slate procurement and exchange: a Maritime Archaic case study from Newfoundland and Labrador. *Open Journal of Archaeometry* Vol. 2, No.1 (Paper #5460). (Wolff, Christopher B., Robert J. Speakman, and William W. Fitzhugh)

2015 Rigolet Surveys and Excavations at the Hart Chalet Site, Brador. *Provincial Archaeology Office 2014 Archaeology Review*, 13: 48-53, St. John's Newfoundland.

2015 The Gateways Project 2014: Land Excavations at Hart Chalet. Produced by Austin Tumas with assistance from Meghan Mulkerin and Katherine Leopold. Arctic Studies Center. Smithsonian Institution. 110 pp.

2015 Inuit Archaeology of the Quebec Lower North Shore. *Etudes Inuit Studies* 39(1): 37-62.



Cover: From Karluk, Kodiak Alutiiq History and the Archaeology of Karluk One.

Krupnik, Igor (ed.).

2016 *Early Inuit Studies. Themes and Transitions, 1850s–1980s.* Washington, DC: Smithsonian Institution Scholarly Press, 452 pp.

2016 From Boas to Burch: Eskimology Transitions. In:

Early Inuit Studies. Themes and Transitions, 1850s–1980s. Washington, DC: Smithsonian Institution Scholarly Press, pp. 1–32.

2016 Closing the (Arctic) Circle: Ernest S. Burch and 'Peoples of the Arctic Map.' In: *Early Inuit Studies. Themes and Transitions, 1850s–1980s.* Washington, DC: Smithsonian Institution Scholarly Press, pp.374–409.

2016 One Field Season and 50-year Career: Franz Boas and Early Eskimology. In *Early Inuit Studies. Themes and Transitions, 1850s–1980s.* Washington, DC: Smithsonian Institution Scholarly Press, pp.73–83.

GC Ray, GL Hufford, JE Overland, **I Krupnik**, Jerry McCormick-Ray, Karen Frey, Elizabeth Labunski.

2016 Decadal Bering Sea Seascape Change: Consequences for Pacific Walruses and Indigenous Hunters. *Ecological Applications*, 26(1), 2016, pp. 24–41.

SIGN-UP TO RECEIVE OUR NEWSLETTER ELECTRONICALLY!

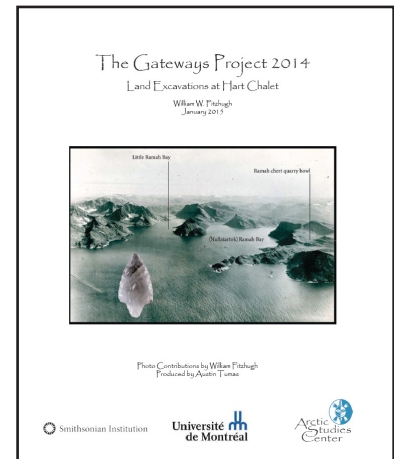
As you may have noticed, this is a big newsletter! Help us save some trees (and some green!) by signing up to receive our newsletter electronically here:

http://eepurl.com/bq9_8P

Thanks for helping and reading! See you next year. In the meantime, don't forget to keep up with us online!



For more information on greening initiatives at the Smithsonian visit: <http://facilities.si.edu/ofmr-in-action/sustainability.html>



Cover: The Gateways Project 2014: Land Excavations at Hart Chalet.

CHANGES FOR THE ASC

Meghan Mulkerin has left the Arctic Studies Center to pursue a new opportunity at the Smithsonian's National Zoological Park, as a web content writer. Meghan leaves us with great memories of a successful Arctic Spring Festival that she organized in 2015, as well as a slew of other projects, including the creation of two ASC Newsletters (Vol 22 and 23), countless photo rights obtained for various ASC publications, interns supervised, a new Quebec Field Report brought to press and improvements to our web presence and digital outreach initiatives. We will miss her and wish her the best in her future endeavors!

Nancy Shorey has joined the ASC from the Anthropology front office. We are happy to have her with us, and look forward to working together.

Congratulations to the ASC former staff and associates on the arrival of their new babies!

Meghan Mulkerin and her husband **Robert Radu** (**Violet Sue Minerva Mulkerin Radu**);

Laura Fleming Sharp and her husband **Jarrod** (**Ellison Kathleen Virginia Sharp**);

Noor Johnson and her husband (**Soraya Grace**); and

Scott Heyes and **Christine Labond** (**Henley Tay Heyes**).



Violet Sue Minerva *Ellison Kathleen Virginia* *Soraya Grace* *Henley Tay*

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SPECIAL THANKS TO OUR 2015/2016 ASC CONTRACTORS, INTERNS AND VOLUNTEERS

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This newsletter was edited by William Fitzhugh, Igor Krupnik, Aron Crowell, Stephen Loring, and Meghan Mulkerin and designed and produced by Meghan Mulkerin and Kora Stapelfeldt.



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