

question “How should the object look on exhibit?” consultants offer perspectives and information otherwise unavailable. For example, upon viewing a pair of Yup’ik dance fans, Central Yup’ik consultant **Chuna McIntyre** immediately surmised that they were missing feathers, rather than a caribou hair ruff. This was confirmed under the microscope when quill remnants and the wood pegs that once secured them were located in each of the holes made along the edges of the fans. Apparently, the objects were collected in this condition, as indicated by a 19th century ledger drawing and old photographs in the 1881 report of museum collector, **Edward Nelson**. Chuna felt strongly that the missing feathers/plumes that once encircled the pair of dance fans ought to be restored; the fans would come to life, they would “sing.” Chuna demonstrated the use of fans in Yup’ik dance, and the way in which the long feather plumes would have accentuated the arm movements. In dancing the fans, Chuna clearly illustrated how essential feathers were in understanding both the use and purpose of these objects. By restoring the feathers, the meaning of the fans would be preserved. Discussions with curators followed, about how to balance preservation of the original objects as they



Inupiaq consultant, Sylvester Ayek, explains the use, traditional care, and proper configuration of the parts of this harpoon.

were collected, with the cultural imperative to restore the feathers. In the end, an innovative exhibit mount was designed to receive the feathers while preserving the full integrity of the original objects. The feathers will be restored once the fans are in Alaska, hopefully by Chuna or another appropriate Yup’ik person. The fans are but one example of the many ways in which Native input has impacted conservation treatment decisions for this project.

Ideally, consultations become exchanges that flow both ways. In particular, older objects inspire the work of visiting artists, the telling of stories and recounting of memories. A Yup’ik artist takes a tracing of an elaborate fur parka for a future re-creation. An Inupiaq artist snaps photos of the objects that will inspire his own art. A pair of Yup’ik boots stirs memories of a grandmother’s traditional care of footwear, thus explaining the unusual pattern of wear on the soles



Tsimshian Consultant, David Boxley, discusses the carving methods and paint types used on a wood hat with potlatch rings. From left to right NMAI conservator, Kelly McHugh, NMNH conservator, Michele Austin-Dennehy, David Boxley, and NMNH conservator, Landis Smith.

observed by conservators. Objects and the materials from which they were made are discussed and named in Native languages, the preservation of museum collections inextricably tied to the preservation of language and the traditions the objects embody.

Consultations in Washington, DC are necessarily limited by distance, time and funds, but serve an invaluable and essential role in the treatment of these collections. Once in Alaska the relative proximity of AK Native people will allow more ongoing discussions with more people. There will no doubt be more issues raised and hopefully more questions resolved. Either way, Alaska Native people will be at the center of the discussion about the care and presentation of their cultural heritage.

A special thanks to the **Andrew W. Mellon Foundation** for their generous grant to the NMAI, make the consultations possible, and to the **NMNH Anthropology Department** for additional support.

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TAILS OF A YUP’IK GROUND SQUIRREL PARKA

By Molly Gleeson

This Yup’ik man’s ground squirrel parka was collected by **Edward William Nelson** from the village of Nushagak in northern Bristol Bay, Alaska and accessioned into the collection at the US National Museum in 1880. There is no record that the parka was ever exhibited or included in any publications since its acquisition, and it is likely that its existence is not known outside of a small group of people at the Smithsonian’s National Museum of Natural History (NMNH). After over a century in storage, however, its days of anonymity are numbered. The parka soon will be featured in the *Living Our Cultures, Sharing Our Heritage: The First Peoples of Alaska* exhibit, which opens in the Anchorage Museum in May 2010. As a garment that would have been worn during *Kelek*, a major winter festival, also called *Qaaritaaq*, *Itruka’ar*, *Agayuyaraq*, or the Inviting-In Feast, it will be featured in the “Ceremony, Celebration” section of the Yup’ik community case.

In the *Living Our Cultures* project, access is a key word, particularly for the conservation team. Once installed in the Anchorage Museum, the parka will be on exhibit for over ten years and made available to Alaska Native visitors for study and research. Due to some condition problems, the parka required conservation treatment in order to make it accessible for this type of use. However, work on the parka went beyond stabilization - through literature research, consultations with Native advisors, and utilization of special expertise and resources available at NMNH, important information regarding the cultural context, raw materials and construction techniques of the garment was discovered and recorded. This information not only informed the treatment decisions, but will also travel with the parka to Alaska and be

available to those viewing or studying the piece while it is on loan.

The parka is made from the summer fur of the Arctic ground squirrel. Approximately 103 ground squirrel skins, plus additional pieces of squirrel fur were prepared to construct the double-layer parka. The main part of the parka, below the shoulders, was assembled from squirrel skins that were sewn together with sinew, side-by-side in five horizontal rows. Each squirrel skin was prepared by removing the head and front legs; then the bodies were cut across the inside of the hind legs and the skins were cleaned. It appears that most were then flattened, with the squirrel backs and tails exposed on the outside of the parka, and the bellies and front legs on the inside. The squirrel tails hang like fringe in rows across the entire surface of the parka and the sleeves. The hood has a ruff of wolverine fur, and the sleeves have cuffs of white caribou fur with narrow bands of short brown trim, most likely beaver or river otter.

The parka was flagged for treatment because many of the squirrel tails were already completely or partially missing; in addition the remaining tails were extremely fragile and distorted. The conservators were concerned that the remaining tails would be susceptible to breakage and loss during preparation for the loan and throughout the duration of the exhibit. Otherwise, the parka was observed to be in good condition - the skins retained some flexibility and had well-preserved color and luster. The treatment goal was to stabilize the remaining tails and to prepare the parka for presentation in the Yup'ik community case.

Few examples of this type of parka exist in museum collections today, and published information specific to the materials, techniques and cultural context of this garment is limited. Background research began with museum records and relevant literature regarding Yup'ik material culture and parka-making, work which informed the assessment of the parka and prepared the conservator for sessions with Central Yup'ik advisors, **Vernon Chimegalrea** (linguist) and **Chuna McIntyre** (artist). They helped to provide a cultural context for the parka and identified its different types of fur and construction techniques. Additional insights were gained in consultations with NMNH mammalogists **Jeremy Jacobs** and **Suzanne Peruach**, and with NMNH taxidermist/exhibits specialist **Paul Rhymer**. Their knowledge of squirrel anatomy and animal fur preparation helped to explain some of the fabrication features and to identify potential causes for the instability of the tails. Examining the parka with all consultants provided a much deeper appreciation for the parka, its careful craftsmanship and its relatively pristine condition, especially considering its age.

After gaining a better understanding of the cultural context, materials and



NMNH mammalogists **Jeremy Jacobs** and **Suzanne Peruach** (center) discuss the parka with project conservators (from left to right) **Kelly McHugh**, **Molly Gleeson** and **Landis Smith**.

manufacturing techniques, ideas about condition problems were clarified. It was concluded that the squirrel tails were susceptible to breakage due to the initial preparation of the skins. After the squirrels were cut and skinned, the furs were likely tanned using traditional Yup'ik methods of scraping and pressing the skin, along with the application of oil (Fienup-Riordan 2007:258). While some of the tails were cut open and flattened to remove the bones and extra cartilage/fleshy material, others were not opened entirely. Because of this, many of the tails had never been completely tanned, causing them to become stiffer and inherently weaker.

Understanding why many of the tails were so fragile allowed for a treatment solution specific to this object.

This treatment would involve reshaping and repair of the squirrel tails. Standard conservation treatments for reshaping skin involve the use of water and solvents; treatments for repair include the use of a variety of adhesives and supports, either applied directly, or by using various solvents and/or heat. In order to determine which of these materials and application techniques would be suitable for the parka, various tests were conducted. The reaction of the squirrel skin to water and solvents was evaluated and both the pH and the heat shrinkage temperature of the skin were tested. In addition to helping decide on treatment, the pH and heat shrinkage tests also measured the extent of deterioration of the skin. Based on these tests, several adhesives were chosen as possible candidates. These adhesives were tested along with a range of different application techniques and supports, including Japanese tissue paper, synthetic non-woven fabrics and gold-beater's skin.

Finally, a suitable treatment protocol was determined. Each distorted tail was humidified and reshaped using a mixture of water and ethanol. After reshaping, each tail in need of stabilization was reinforced using a medium-weight Japanese tissue paper, cotton thread and Lascaux, an acrylic dispersion adhesive. In the end, forty-seven tails on the parka were treated. After carrying out further humidification and reshaping to reduce large creases in the arm and shoulder areas, the parka was deemed stable and the treatment was complete.

The treatment alone was critical to facilitate the safe travel and display of the parka. In addition, the research undertaken during the treatment provides a greater understanding of the parka and allows for further examination and study to be carried out. But perhaps one of the most important aspects of this project was bringing people together to examine the parka in Washington, DC as the first step to providing better access to this object. The next step will be taking it back to Alaska, to be seen by Native Alaskans for the first time in over 100 years.

This project was carried out under the guidance and supervision of the *Living Our Cultures* Project Conservators, **Landis Smith** and **Michele Austin-Dennehy**; and with the oversight of Head of Conservation, Anthropology Conservation Laboratory, **Greta Hansen**.

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Yup'ik men's ground squirrel parka from the collections at the NMNH.