## Smithsonian Institution

The Smithsonian has been engaged in Arctic research for more than 150 years, almost from the beginning of its operation as the main national research and museum institution. Today, most of the Smithsonian Arctic activities are conducted by the Arctic Studies Center at the Smithsonian National Museum of Natural History, with its prime focus on northern cultures, communities, and environments.

Since their first ventures in northern Alaska and Canada in the mid-1800s, Smithsonian scientists have produced an outstanding array of research publications; they also amassed unique national collections of northern natural and cultural specimens. Today, individual Smithsonian scientists maintain their strong interest in many fields of northern natural sciences. The institution's current Arctic activities are being carried primarily via the Arctic Studies Center (ASC) of the Smithsonian National Museum of Natural History (NMNH). The ASC's main focus is on cultural heritage and collection studies, exhibits, and educational and public programs that are developed in partnership with local indigenous communities across the Arctic.

Established in 1988, the ASC is the only active and long-term Federal program that has a special mission in Arctic cultural research, education, and outreach. Over 15 years of its history, ASC's scientists, fellows, and associates have conducted studies throughout the entire circumpolar zone; it is also the only national research body that has international capabilities and a solid network of scholarly partners across the Arctic region.

With its stated mission in "the increase and dissemination of knowledge," the Smithsonian, and the Arctic Studies Center in particular, promotes its signature blend of research, collections development, and public programs. Today, such a blend includes several new components driven by new technologies and growing public interest in the cultures and heritage of northern people. Traveling exhibits reaching out to the most distant northern communities; internships and fellowships for local knowledge experts, artists, and cultural activists; museum and educational training programs; heritage documentation; cultural and

	Funding	(thousands)
	FY 02	FY 03
Anthropology	400	400
Arctic Biology	50	50
Total	450	450

knowledge repatriation; website development; and cooperative community research are the trademark features of the Smithsonian approach. Under a cooperative agreement with the Anchorage Museum of History and Art, the Smithsonian also operates its Alaskan regional office in Anchorage (since 1995). The ASC Alaskan office provides research, education, and training opportunities; it advances the Smithsonian vision and its strong public focus to local researchers, residents of Anchorage, and rural Alaskan communities.

The level of the Smithsonian internal funding for its Arctic-focused research remains fairly steady over the last several years at an annual level of \$0.4–0.5 million. That covers four staff positions at the Arctic Studies Center in Washington and Anchorage and a small operational budget. Substantial additional funds are generated each year through grants and institutional and interagency partnerships in order to support various Smithsonian northern initiatives.

# Research and Collection-Based Activities

Each year Smithsonian scholars are engaged in several research, collection, and documentation projects across the Arctic region. Major initiatives by the Smithsonian staff, fellows, and associates are featured in the annual issues of the *Arctic Studies Center Newsletter* (published since 1991), with its current print run of over 1,500 copies. The



Aleutian elders work with objects from their area in the Smithsonian collection.

newsletter is a valuable source of information to northern scholars (both in the U.S. and worldwide), policy makers, northern residents, and community institutions on the wide range of Smithsonian activities. The projects described below offer a few illustrations of the breadth of the Smithsonian approach and its special focus on collaboration with other agencies and northern communities.

### Alaska Collections Project

The Alaska Collections Project (ACP), now in its fourth year, is a product of a partnership of two Smithsonian museums—the National Museum of Natural History (NMNH) and the National Museum of the American Indian (NMAI)—and local Alaskan communities. The purpose of the ACP is to bring Native elders and cultural experts from several Alaskan communities on research trips to the Smithsonian museums to explore and document ethnographic collections from their respective areas. The project allows members of the Alaskan rural communities to get their first-hand knowledge of local cultural resources held in the national collections; it also offers a basic orientation in museum policies, collection management, research, and conservation. In addition, the elders are selecting objects that will be loaned for display and studies at the ASC regional office in Anchorage and used for traveling exhibits in Alaska.

The research will eventually yield a major exhibition in Anchorage, several traveling exhibits for Alaskan communities, a Smithsonian web site, publications, and detailed information to be incorporated into the Department of Anthropology's collections records. During 2001–2003, five ACP

trips in a scheduled series of seven have brought to the Smithsonian local teams from Barrow, the Aleutian Islands, the Nome–St. Lawrence Island area, and the Yukon–Kuskokwim Delta region.

Looking Both Ways:

Heritage and Identity of the Alutiiq People

This award-winning traveling exhibit was produced in 2001 by the Smithsonian, in collaboration with the Alutiiq Museum in Kodiak and Alaskan Native communities from the Kodiak–Cook Inlet region. The exhibit is based on the collections of Smithsonian naturalist William J. Fisher, who conducted research in southern Alaska on behalf of the Smithsonian in the 1880s. The exhibit inspired great interest in local communities; it offered to many Native Alaskans their first chance to reconnect with their cultural legacy and traditions repressed for generations.

In 2002 and 2003 the exhibit traveled from its original opening venue at the Alutiiq Museum in Kodiak to Homer, Anchorage, and Juneau. In December 2003 it arrived at the Smithsonian NMNH in Washington, where it will be on display through 2004.

Watching Ice and Weather Our Way:

Environment Observation on St. Lawrence Island

There is extensive interest across the science community in the ways indigenous Arctic residents observe climate, sea ice, and weather and how this knowledge is used in their daily lives and subsistence activities. There is also growing pressure on polar researchers to incorporate data and observations from northern residents into the current models of global climate warming. To enhance such a transition, the Smithsonian, the Marine Mammal Commission, and the Yupik communities of Savoonga and Gambell on St. Lawrence Island, Alaska, undertook a joint project on ice and weather observation off St. Lawrence Island "the Yupik way" (2000–2003).

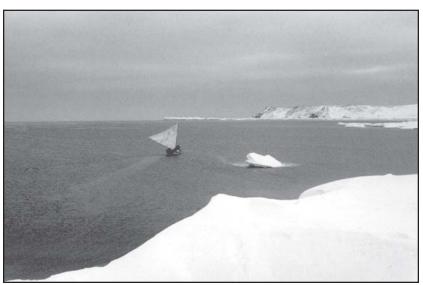
This collaborative effort to document Yupik knowledge and observation practices was named "Watching Ice and Weather Our Way." It emerged as an outcome of a special workshop, Impacts of Changes in Sea Ice and Other Environmental Parameters in the Arctic, organized by the Marine Mammal Commission in Girdwood, Alaska, in 2000. Two former workshop participants from St. Lawrence Island, Conrad Oozeva from Gambell and George Noongwook from Savoonga, agreed to organize sea ice and weather observations in their respective communities by local monitors to

be recorded in Yupik language. Several months of observations produced an unprecedented set of data, including dozens of pages of records that are full of Native terms, detailed explanations of ice patterns, references to shifts in ice and weather regimes, migrations of marine mammals, and local hunting activities. Local Yupik participants generated almost 200 pencil drawings and photographs to illustrate various local terms for ice and weather conditions. The ASC, the Savoonga Whaling Captains Association, and Marine Mammal Commission published the materials of the project as a bilingual volume, *Watching Ice and Weather Our Way/Sikumengllu Eslamengllu Esghapalleghput*, in 2004.

Labrador Community Archaeology Project

This long-term research and educational initiative has been undertaken jointly (since 1999) by the ASC; the Canadian Labrador community of Makkovik, including its local historical society, community museum, and high school; and Brown University in Providence, Rhode Island. For the past two years the project has focused on a mid-18th century Labrador Inuit village site at Adlavik Harbour. This project integrates methods of archaeological research (such as surveys and excavations), high-school curriculum development, and local heritage training in site preservation, archaeological fieldwork, and museum development. It is aimed at documenting cultural changes in early colonial Inuit communities in central Labrador, with a special emphasis on developing local knowledge, increasing potential employment opportunities in heritage preservation and tourism, and fostering pride in Labrador Inuit

Yupik skin boat sails off the whaling camp at Pugughileq, St. Lawrence Island. Alaska. This picture is one of many dozen taken by Chester Noongwook, a Yupik boat captain and a participant in the sea ice observation project.



culture and heritage. The project is supported through funding provided by the Smithsonian, the Robert S. Peabody Museum at Phillips Academy, the International Grenfell Association, the Newfoundland and Labrador School Boards Association, and Inuit Pathways. The very generous support of the Inuit Pathways is critical, as it covers local Inuit student salaries and transportation.

Jesup-2: Cultures and Nations of the Greater Bering Sea Region

In October 1992 the Smithsonian inaugurated a multi-year research and publication program focused on Native cultures of the Bering Sea-North Pacific region. The program was called Jesup-2 to commemorate the centennial anniversary of the Jesup North Pacific Expedition (JNPE) of 1897-1902 and its legacy. The Jesup-2 program, now in its second decade, has created a thriving network of partnership among research and museum institutions, and individual scholars in the U.S., Canada, Russia, Japan, and other countries. Two collections of papers have been published during 2002 and 2003, as the volumes in the newly launched Smithsonian series Contributions to Circumpolar Anthropology; many new projects have been initiated.

In October 2002, another Jesup-2 international symposium was held in Sapporo, Japan. Titled "The Raven's Arch," it was focused primarily on the Asian side of the North Pacific. Several Japanese agencies and institutions offered their support for the meeting. The proceedings of the symposium will be published in both English and Japanese, as parallel volumes. The Raven's Arch symposium was accompanied by several public events, including public lectures, an exhibit of several dozen historical photographs from the Jesup Expedition collections, and meetings with Japanese and Ainu museum curators.

A new Jesup web site was launched in 2002 produced by the American Museum of Natural History in New York. It features all recent Jesup-2 publications and several collaborative efforts, such as the ongoing study of the Jesup Expedition Siberian collections and other records stored at the American Museum of Natural History, at the Smithsonian, and in Russia.

Gateways: Quebec Lower North Shore Survey
For the past three years (2001–2003), the ASC
has been conducting archaeological studies along
the Quebec Lower North Shore (LNS) under its
survey and excavation effort titled "The St.



A camp of Tsaatan (Dukha) reindeer herders in the mountainous region of northern Mongolia.

Lawrence Gateways Project." The project is aimed at documenting various local prehistoric cultures starting from 8,000 years ago. It also explores the impact of colonial trade and culture contacts on local indigenous residents, when European sailors, primarily the Basques and the French, became established in the region around the year 1600. The surveys are authorized by the Quebéc Ministry of Culture and Communications and funded by the Smithsonian and private donors.

Surveys to date have produced evidence of nearly 50 new sites dating from circa 7,000 years ago to the present. These surveys offer insight into prehistoric maritime adaptations, seasonal and decadal fluctuations in marine ecosystems, resource scarcity, and settlement pattern variability along Quebec's LNS.

The project's second major accomplishment was the documentation of the 16<sup>th</sup>–17<sup>th</sup> century European stations operated primarily by the Basque whalers, seal hunters, and later fishermen. The new sites on the Quebéc LNS offer information on changing Basque economy, environmental conditions, and contacts with Native groups for fishing, trapping, and trade, which are likely to have become important concerns for Basque activities at this time. Such studies will help document the long history of European–Native relations in the St. Lawrence "gateway" region.

The "Deer Stone" Project:

Smithsonian Research in Northern Mongolia In 2001 the ASC launched a new interdiscipli-

nary research initiative in northern Mongolia's Muron–Darkhat region. Although located far below the Arctic Circle, at the southernmost confines of the Siberian Sayan Mountains, the region features some of the most typical Arctic complexes as well as the southernmost indigenous reindeer-herding communities in Eurasia. A virtual exten-

sion of the Arctic world, northern Mongolia may have played an important role in Ice Age ecology, the peopling of the New World, and the history of ancient Beringian ecosystems.

For over three years the Smithsonian interdisciplinary team has pursued studies in archaeology, climate history, lichen ecology, and the ethnology of the local reindeer-herding Tsaatan (Dukha) people. It seeks to understand the origins of northern Mongolian cultures and their relationships with other peoples of China, Mongolia, and Siberia. Special emphasis is placed on its connections to more distant cultures, including Scythians and Eskimos. The research is being conducted by Smithsonian scholars in partnership with the University of Pittsburgh, the National Museum of Mongolian History, and the Mongolian Academy of Sciences.

In 2002 and 2003 research in the Tsaatan mountainous camps was focused on the herders' adaptations to changing conditions in their summer and winter pastures in the forest and tundra regions. Smithsonian scientists worked with Tsaatan elders, recording their knowledge of reindeer ecology and folk taxonomies for the lichen the animals feed on. Theories abound arguing that the reindeer-herding system of the Arctic tundra residents was a mere cultural offshoot of the ancient mountainous taiga pattern still practiced by the Tsaatan. Periodic rapid climate change may have played a role in herders' migrations from the Siberian mountainous areas. This is to be investigated by an analysis of several lake sediment cores, collected from the nearby alpine lakes, that document the Holocene climate history of this border area between Siberian forest and Inner Asia steppe landscapes.

## Interagency Collaboration: Relationships and Partnerships

Since its creation in 1988 the ASC has represented the Smithsonian at various boards and in many Federal interagency programs and initiatives that deal with the polar region. Through the ASC, the Smithsonian keeps its permanent seat on the Interagency Arctic Research Policy Committee (IARPC), the Arctic Research Commission (ARC), the Arctic Policy Group (APG), and others. ASC staff members and associates represent the Smithsonian, and Arctic social sciences in general, at the Polar Research Board of the National Academies, the Science Advisory Committee of the NSF Office of Polar Programs, and other science policy

teams. Overall the center has a prominent role in formulating national policy in Arctic research; it takes seriously its advisorship to government and international bodies.

The Smithsonian has developed partnerships with many Federal agencies, such as NASA, NOAA, NSF, DOI (National Park Service), USDA, and others. For many decades, interagency partnership were pivotal in expanding resources and logistical support to Smithsonian scientists working in the polar regions; it also allowed the institution to advance high-quality research, public and educational programs, and management of the national collections. Recently these ties have been strengthened through new cooperative projects, research, and public initiatives.

## Study of Environmental Arctic Change

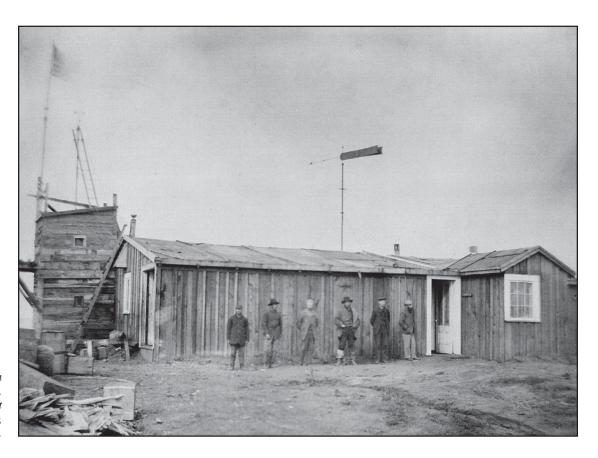
The Smithsonian, and the ASC in particular, has an established record of involvement in studies of Arctic climate and environmental change. Over the last two decades, Smithsonian teams have participated in several interdisciplinary projects across the North. Smithsonian researchers have been involved with issues of today's Arctic environment, its ongoing change, and its impact on northern people. The Smithsonian is also spearheading several outreach initiatives that are focused on the general public, indigenous communities, and northern residents.

Since 2001 the Smithsonian has participated in the Study of Environmental Arctic Change (SEARCH), an interdisciplinary and interagency initiative that addresses the origins and mechanism of today's rapid shifts in Arctic environment. The evidence of change in the current Arctic climate and biota is extensive and mounting, but social scientists have been rather late, and usually junior, partners to such research, which is driven primarily by physical and environmental science. It has been a common knowledge that northern residents should be included as critical "subjects" to any interdisciplinary survey of global climate change. However, it was not until recently that scientists also realized that Arctic people are the first and usually the most dedicated observers of change in their regions. From their side, Arctic people are also eager to cooperate with scientists and to have their observations documented and transmitted to the management agencies and policy makers. This is a critical junction, a new Arctic science frontier that will guide the course of scholarly studies, outreach and educational efforts, and public support for northern research for years to come.

During its first years the SEARCH initiative (announced in 1998) was regarded mainly as an ocean—atmosphere modeling enterprise. After 2000, SEARCH gradually evolved into a much broader venture supported by the Interagency Working Group (IWG) made up of representatives of nine participating governmental agencies, such as NSF, NOAA, DOI, EPA, NASA, and the Smithsonian.

The Smithsonian contribution to SEARCH is focused primarily on promoting the initiative's human component. From the science perspective, Smithsonian scholars contribute expertise in using paleo-environmental and archaeological records to decipher former environmental and resource fluctuations across the polar regions. Such studies provide valuable time depth to current models of Arctic climate oscillations, which are based mainly on instrumental data of the last century.

At the institutional level, Smithsonian offers to SEARCH an ideal venue to present its agenda to the policy and decision makers, the media, the general public, and Arctic residents. In 2001, ASC scientists suggested that a Smithsonian-based exhibit would be the best way to introduce the SEARCH initiative to the broader public by using the existing NMNH educational and exhibit program Forces of Change (started in 2000). The Smithsonian Forces of Change exhibit initiative features the dynamics of global change and examines the connections among the physical, biological, and cultural forces that shape our world. The core of this program is a 6,000-square-foot exhibit space at the NMNH, which will be used over several years for a series of thematically and regionally focused exhibits. Each of these exhibits will feature various "faces" of ongoing global change. The first in the series, Listening to the Prairie: Farming in Nature's Image, was successfully launched in November 2000, in partnership with the U.S. Department of Agriculture's Sustainable Agriculture and Research Education Program. The second Forces of Change exhibit, El-Niño's Powerful Reach, was launched in 2002. More ventures are in the making, including the new exhibit on Arctic environmental change, The Arctic: A Friend Acting Strangely, which will be the Smithsonian contribution to SEARCH. The preparatory and production work was started in the summer of 2003, with the support from the NOAA Arctic Research Office; the opening of the exhibit at the Smithsonian's National Museum of Natural History is due in the spring of 2005. It will be followed by several public events, lectures, and outreach activities.



U.S. Research Station in Barrow, Alaska, operated during the First International Polar Year, 1881–1883.

The Smithsonian also made two other contributions to the SEARCH initiative. In 2002 a new volume, titled *The Earth Is Faster Now: Indigenous Observations of Arctic Environmental Change*, was published by the Arctic Research Consortium of the U.S. (ARCUS) in collaboration with the ASC. The volume is a collection of ten papers featuring various recent projects involved in documenting indigenous knowledge of environmental change in Alaska and the Canadian Arctic.

Another Smithsonian contribution to SEARCH was a special panel on Arctic environmental change organized at the annual meeting of the American Association for the Advancement of Sciences (AAAS) in Seattle in February 2004. The panel, titled *Unaami: A New Model for Arctic Environmental Change*, was the first concerted effort to present the spirit and some results of the SEARCH initiative to a primarily non-science audience of media people and policy planners.

### International Polar Year 2007–2008

Planning is underway for a new large international program in polar research called the International Polar Year 2007–2008 (IPY). The IPY initiative of 2007–2008 will be the fourth similar effort undertaken by the international polar science community,

125 years after the first International Polar Year of 1882–1883. All previous IPY ventures provided major opportunities to enhance polar research. They promoted international cooperation among polar scientists and national research institutions; they also served as major vehicles to capture the public's imagination and to convey the crucial role that the polar areas play in the functioning of the earth as the planetary ecosystem.

In February 2003 the International Council for Science (ICSU) formed an International Polar Year Planning Group (IPY-PG), and in August 2003 the National Research Council of the U.S. National Academies created the U.S. Planning Committee on the IPY. Igor Krupnik, Smithsonian Arctic ethnologist, and Richard Glenn, from the Arctic Slope Regional Corporation in Barrow, Alaska, are serving on the U.S. committee to represent the interests of social scientists and northern indigenous residents, respectively. Both constituencies have great stakes in this major international effort. Unlike the previous IPY ventures, which were primarily (if not exclusively) focused on the geophysical and natural sciences, the IPY 2007-2008 is planned as a truly interdisciplinary program. The new vision is to incorporate polar residents and social scientists into all its activities, so that

many cultural, social, health, and environmental issues critical to polar communities and social/human scientists are featured prominently on the new IPY agenda.

In anticipating major planning and research activities for the new IPY initiative, Smithsonian scientists have already established their informal IPY planning team. The Smithsonian is sure to play an important role in the new IPY 2007–2008 effort. To explore the opportunities, the ASC is joining forces with the International Arctic Social Science Association (IASSA), the Barrow Arctic Science Consortium (BASC), and other interested agencies. The first IPY-focused panel, International Polar Year 2007–2008: Opportunities for Northern Communities and Social Science, was organized by the ASC scholars at the Fifth International Congress of Arctic Social Sciences in Fairbanks in May 2004.

## Smithsonian-NPS Partnership

The National Park Service (NPS), and particularly its Alaska Regional Office in Anchorage, has been a proven partner to the Smithsonian Arctic programs. Recently the NPS, through its Ocean Alaska Science and Learning Center (OASLC) program, has provided research grants to the ASC Anchorage office for its Archaeology and Oral Traditions on the Outer Kenai Coast, Alaska effort. The project, started in 2000, is investigating the archaeology and oral history of a little-known region of southern Alaska—the spectacular, glaciated Pacific coastline of the Kenai Peninsula. The study area is within Kenai Fjords National Park.

The important partners in the joint effort are the lower Cook Inlet Native villages of Nanwalek, Port Graham, and Seldovia; the Pratt Museum in Homer; and scientists from the Anchorage and Fairbanks faculties of the University of Alaska. The project has a very strong focus on education, student training, and community outreach.

Native residents of Nanwalek, Port Graham, and Seldovia are knowledgeable about the outer Kenai coast and its history. Vivid stories of traditional life and travels on the outer coast have been passed down to current generations, and interest in revisiting the area and working with scientists to study it is strong. Oral traditions, combined with traditional knowledge about subsistence resources and the outer coast environment, are invaluable for interpreting archaeological sites that range from 100 to 1,000 years old.

Another important initiative conducted jointly by the ASC and the NPS Alaskan office is the study of northern ethnographic landscapes. Under this joint project, scientists, park managers, and Native researchers from Alaska, Canada, Russia, Norway, and Iceland share results of their current research, as well as the expertise of their respective national and regional bodies in working with northern indigenous communities to protect northern landscapes and to support cultural knowledge associated with past and present use of the northern land, coastal, and sea areas. The results of the collective study are presented in the volume Northern Ethnographic Landscapes: Perspectives from Circumpolar Nations to be published jointly by the ASC and NPS in 2004.