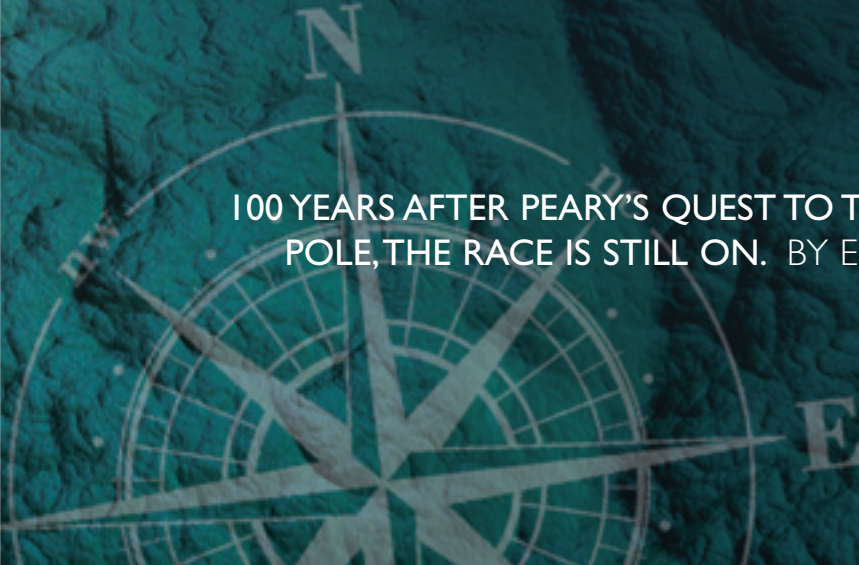




Northward OVER THE Great Ice



100 YEARS AFTER PEARY'S QUEST TO THE NORTH
POLE, THE RACE IS STILL ON. BY EDGAR ALLEN BEEM



“THERE IS NO HIGHER, PURER FIELD OF INTERNATIONAL RIVALRY THAN THE STRUGGLE FOR THE NORTH POLE.”

So declared Commander Robert E. Peary in the October 1904 issue of *National Geographic*. Five years later, Peary, Bowdoin Class of 1877, would stake his claim to being the first man to reach the Pole, an epic endeavor that was the early 20th century equivalent of a moon landing.

From 1900 to 1913, more column inches in *The New York Times* were devoted to the North Pole than to any other story, in large part due to the Great Polar Controversy that played out in the press over competing claims to its attainment.

In 1908-09, Robert Peary, with fellow Bowdoin graduate (and later explorer in his own right) Donald B. MacMillan '98 heading one of the supply support parties, raced to the North Pole amidst speculation that there would be undiscovered lands and a fortune in natural resources to be found at the top of the Earth.

On September 6, 1909, Peary cabled the Associated Press from Labrador that he and a small party of explorers had indeed reached the North Pole by dog sledge on April 6 of that year. The week before, however, Dr. Frederick A. Cook, a former Peary associate, had asserted that he had made it to the North Pole a year earlier on April 21, 1908. A century's worth of books (and now websites) have kept the controversy alive, though the general consensus has been that Robert Peary's claim was the more credible.

As Peary and Cook slipped into history, the North Pole disappeared from the public's radar screen for much of the 20th century. In 2008-09, however, the North Pole is again very much in the news, as the Arctic Ocean is the focus of debates over climate change and competing international claims to its control. With the Arctic sea ice and Greenland ice cap melting at a record pace and the

fabled Northwest Passage between the Atlantic and Pacific Oceans opening up to shipping, commercial, military, diplomatic, and scientific interest in the North Pole has never been greater.

“When Peary discovered that there was no land at the North Pole, the world turned its back on the place,” observes Susan Kaplan, director of Bowdoin's Peary-

MacMillan Arctic Museum. “There was no economic advantage to going there, so countries were no longer interested. One hundred years later, the supreme irony is that now we've got global warming and the world is again realizing the Arctic Ocean is of tremendous strategic and economic significance.”

Bowdoin College, as the alma mater of Peary (1856-1920) and MacMillan (1874-1970), is very much involved not only in preserving the history of Arctic exploration but also in contemporary scientific, cultural, and political studies of the region.

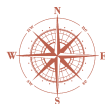
A CENTENNIAL CELEBRATION

The Peary-MacMillan Arctic Museum is celebrating the centennial of Robert Peary's historic North Pole expedition with a major exhibition, a symposium, a

lecture series, and the publication of a new edition of Donald MacMillan's long out-of-print *How Peary Reached the Pole: The Personal Story of His Assistant*, which was first published in 1934 on the occasion of the 25th anniversary of the expedition.

Northward Over the Great Ice: Robert E. Peary and the Quest for the North Pole (through September 5, 2010) fills the three Peary-MacMillan Arctic Museum galleries in Hubbard Hall with a wondrous array of some 300 artifacts and images related to Peary's polar explorations. Among the objects that bring a human immediacy to





those heroic events are garments as varied as polar bearskin pants and caribou fur parkas worn on the expedition and Peary's admiral's dress uniform, the tattered remains of the flag Peary carried to the Pole, an oak dog sledge lashed together with rawhide, and a scale model of the S.S. *Roosevelt*, the sturdy Maine-built ship that carried the Peary party into the Arctic ice. (See Sidebar: *From Bucksport to the Pole*)

The centennial exhibition also features pop cultural curiosities, such as a china mug made in Peary's likeness and one of the Peary campaign buttons worn by his supporters during the initial Peary-Cook dispute.

For the record, the Peary-MacMillan Arctic Museum staff takes the position that Robert Peary probably got within five miles of the North Pole in 1909.

"All anyone can say with certainty is that Peary was in the vicinity of the North Pole," says museum director Susan Kaplan, explaining that, on the occasion of the 80th anniversary of the expe-

FOR THE RECORD, THE PEARY-MACMILLAN ARCTIC MUSEUM STAFF TAKES THE POSITION THAT ROBERT PEARY PROBABLY GOT WITHIN FIVE MILES OF THE NORTH POLE IN 1909.

dition in 1989, the Navigation Foundation analyzed all the available evidence in an attempt to settle the dispute. Using Peary's navigational reckonings, ocean depth soundings, and shadow studies of the sun's angle in Peary's photographs at the North Pole, the foundation's report to the National Geographic Society concluded that Peary was in "the near vicinity of the North Pole on April 6, 1909."

The question of whether Robert Peary was actually the first man to set foot at the North Pole is further complicated by the assertion of Matthew Henson, Peary's African-American assistant, that he was walking ahead of Peary on the fateful day when the Pole was reached.

"I was the first man to ever set feet on the North Pole," the then-85 year old Henson states in a 1951 television interview that is part of *Northward Over the Great Ice*.

Perhaps the most compelling display in the exhibition, however, is a time-lapse animation by William Chapman, Polar Research Group, University of Illinois at Urbana

Champaign, entitled "An Ice Free Arctic?" Using satellite images taken daily between January 1 and September 23, 2007, the animation allows entranced visitors to watch the polar ice cap melt right before their eyes. It is this specter of open water that adds environmental urgency to the history commemorated in *Northward Over the Great Ice*.

A MELTING ARCTIC

While there are still some who would maintain that global warming is a natural process, the scientific consensus is that the rapidity of climate change in recent years is a function of greenhouse gases such as carbon dioxide released into the atmosphere by human enterprise.

"There is no doubt at this point that the climate is changing and that we are at least partly and possibly primarily responsible for the change," says Associate Professor of Physics Mark O. Battle.

Mark Battle studies the carbon cycle. Specifically, he studies the fractionation (a separation process) of gases in polar ice, both in Greenland and in the Antarctic.

"The work I've done enables us to better characterize the composition of the atmosphere in the distant past," he explains. "If we have a sense of that, then we can say with certainty that this is the highest CO₂ we've had."

Since the 2005 International Carbon Dioxide Conference in Boulder, Colorado, says Battle, the tenor of the scientific investigation

has shifted from how much CO₂ the atmosphere can handle to how to prevent it from getting into the atmosphere in the first place.

The Arctic is generally regarded as the "canary in the coal mine" of climate change.

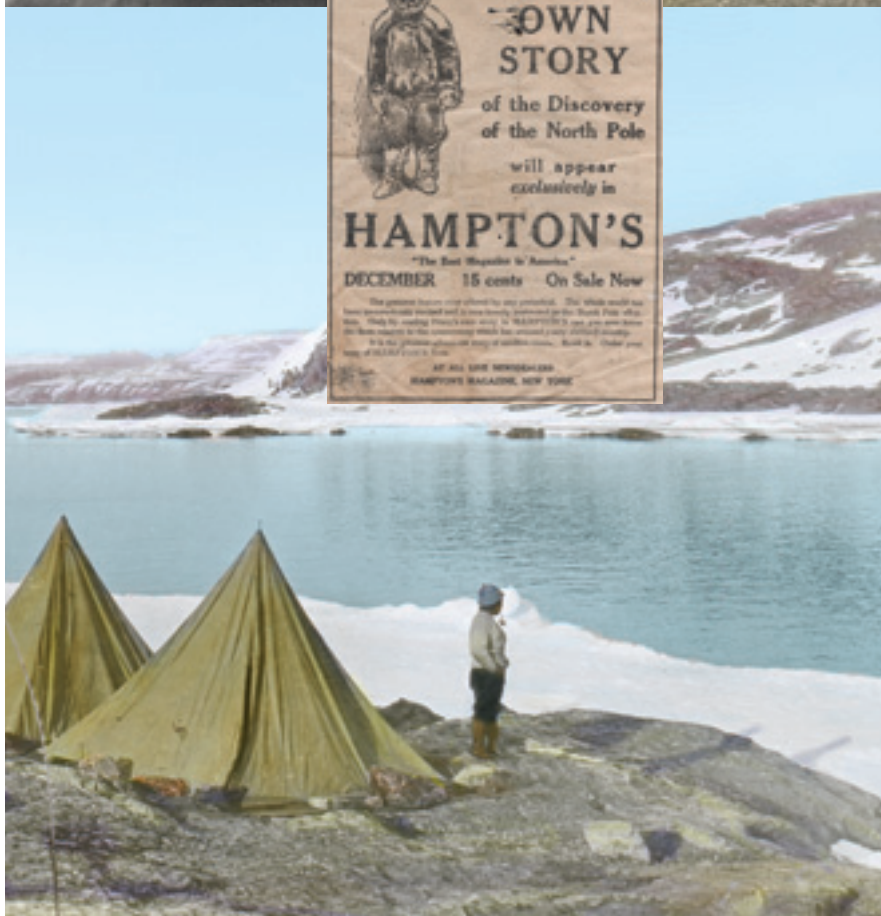
"The North Polar region is expected to show climate changes sooner and more dramatically than the average of the planet," says Battle.

That's because the Arctic is warmer than the Antarctic to begin with and because of the presence of land around the Arctic. In a process known as polar amplification, the Arctic absorbs more heat as the snow and ice, which reflect sunlight, retreat. Warming begets more warming in the Arctic.

While Mark Battle studies the dynamics of gases trapped in the polar snowpacks (or firn), he notes that, "The amount of CO₂ trapped in the polar ice sheet is utterly negligible."

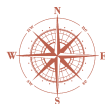


Northward OVER THE Great Ice



Clockwise from top left: Robert E. Peary, Battle Harbour, Labrador, September 1909. In June while snow cover was melting, the men helped the dogs drag sledges over the bare ground. Matthew A. Henson, Peary's assistant, accompanied him to the Pole. Dogs that worked hard eagerly awaited feeding times. Donald MacMillan with three Inuit women who worked as seamstresses on the North Pole Expedition. During the late spring and into summer, teams used tents for shelter when traveling. An advertisement for Peary's account of the North Pole Expedition serialized in Hampton's Magazine in 1910.





Not so the Arctic permafrost.

Phil Camill, Rusack Associate Professor of Environmental Studies and Biology, came to Bowdoin in 2008 to serve as program director of the Department of Environmental Studies. He studies permafrost.

While at Carleton College in Minnesota, Camill studied the degree of permafrost thaw in boreal and sub-Arctic wetlands in Manitoba. In 2007, he received a three-year, \$400,000 National Science Foundation grant to study the effects of climate change on lake ecosystems in northern Manitoba.

As the Arctic warms, not only does ice melt and sea level rise, but the permafrost thaws, releasing stored CO₂ from decayed plant life into the atmosphere. There is an estimated 750 gigatons of carbon already in the atmosphere, and it has been estimated that as much as 900 gigatons of CO₂ is sequestered in Arctic soils, also known as yedoma.

"There is half to as much as the same amount of carbon in those soils as there is in the atmosphere," says Camill.

Humans release about 10 gigatons of carbon into the atmosphere each year from burning fossil fuels and deforestation. In an April 2007 article in *Nature* about his permafrost studies, Phil Camill warned, "If just one percent of [the possible 900 Gt in the yedoma] is decomposed in a warmer world it would be as if we doubled our current rate of emissions. That's what is alarming."

Camill calls CO₂ and methane releases from thawing permafrost "a ticking time bomb."

The International Panel on Climate Change has projected that the Earth will warm by 3.5 degrees centigrade over the next century and that, due to polar amplification, the Arctic may experience at least a 5 degree C° warming.

"That's like Maine's climate changing to South Carolina's in less than a century," says Camill.

As a scientist, Camill understands that the Earth can sustain such a global warming.

"The Earth has been much warmer than it is today,"

THE ARCTIC IS GENERALLY REGARDED AS THE "CANARY IN THE COAL MINE" OF CLIMATE CHANGE.



he says. "We're in an ice age now. But how will life as we know it change? If we do nothing, we'll be pushed into a climate system not seen in millions of years. Thirty-five million years ago, there was no ice in Greenland."

As a citizen, Camill sees climate change as a moral issue, a matter of social injustice.

"We in the industrialized nations are causing the problems, but the poor in the southern hemisphere are bearing the brunt of them," he says, citing the people of flood prone Bangladesh as "climate refugees" from storm surges worsened by sea level rise.

GEOPOLITICS OF THE NORTH POLE

The International Panel on Climate Change has

projected there may be as many as 200 million environmental refugees by the year 2050. There is also speculation that the Northwest Passage could open up to year-round shipping by that same year.

"Something like 40 commercial ships have sailed between the Atlantic and the Pacific through the Arctic Ocean, something that was almost impossible before global warming," says Peary-MacMillan Arctic Museum director Susan Kaplan. "Now people are preparing for commercial shipping and debating where Arctic deepwater seaports should be located."

Ironically, while it is the modern world's dependence on fossil fuels that contributes to global warming and the opening of the Arctic, when world leaders look to the North Pole their first thought seems to be to drill for more oil and gas. The Arctic is thought to contain as much as 25 percent of the world's oil and gas reserves. But it will be decades, at least, before Arctic oil starts flowing.

"Arctic offshore production is difficult because of the drifting ice," observes Olya Gayazova, a visiting professor of international politics from DePauw University in Indiana who will teach a course in Arctic Politics at Bowdoin in the spring of 2009.

Olya Gayazova is a Russian citizen. She recalls being

The S.S. *Roosevelt*

Robert Peary's successful expedition to the North Pole was preceded by seven other journeys. He blamed the failure of his 1902 expedition in part on his underpowered steam yacht *Windward*. Thus, in 1904, Peary received permission from the Navy to commission construction of a new vessel, S.S. *Roosevelt*, which he named after his chief supporter, President Theodore Roosevelt.

The S.S. *Roosevelt* was a three-masted steamship/schooner modeled after the *Fram*, the sturdy Norwegian ship used by Fridthof Nansen and Otto

Sverdrup in the Arctic and by explorer Roald Amundsen on his 1910-1912 expedition to the South Pole.

To build his sturdy wooden ship, Peary turned to the McKay & Dix Shipyard on Verona Island in the Penobscot River at Bucksport. The keel was laid on October 15, 1904, and the *Roosevelt* was launched on March 23, 1905. Just 184 feet long and 35 1/2 feet wide, the vessel featured a sharp, raking bow for

icebreaking and an egg-shaped, rounded hull that enabled the *Roosevelt*, which drew only 16 feet of water, to pop up whenever it got squeezed by the ice.

The wooden sides of the *Roosevelt* were 30 inches thick in places and were re-enforced with steel beams. On deck there were power windlasses, winches, and capstans that enabled the vessel to haul itself free if it went aground. With a 1000 horsepower coal-fired steam engine, the *Roosevelt* could batter its way through ice floes and was ultimately frozen into the ice at Cape Sheridan on Ellesmere Island where it waited as Peary set out over the ice on dog sledges for the North Pole.

The *Fram* was ultimately restored and is now housed in its own museum on Norway, but the powerful S.S. *Roosevelt* came to a less unceremonious end, although one befitting a workhorse of a vessel. The Peary Arctic Club sold the *Roosevelt* in 1910. She then saw service as a salvage ship, fishing boat, and tugboat, and during WWI,

served as a transport ship. On January 21, 1937, the *Roosevelt* was beached and abandoned in the harbor of Balboa, Panama. Having ferried Robert Peary into history through the frozen waters of the Arctic, her bones now rest in the warm waters off the Panama Canal.



GEORGE WARDWELL, PEARY'S MAINE MAN

The captain of the S.S. *Roosevelt* was a Newfoundlander by the name of Robert A. Bartlett, but the Maine man who kept her running on both the 1905-06 and the 1908-09 expeditions was chief engineer George A. Wardwell. A Bucksport native, George Wardwell had been working for the McKay and Dix Shipyard when the *Roosevelt* was built and Peary prevailed upon him to join his crew when the ship set sail for the North Pole.

A hard-working, phlegmatic Yankee with a thick mustache to rival Commander Peary's, Wardwell proved a handy man to have on board during the vicissitudes of an Arctic voyage. He put out fires in the engine room, re-built the *Roosevelt's* boiler when it blew up, and even ground lenses by hand for a shipmate's camera. Wardwell himself was something of a photographer. Approximately 250 of the photographs he took on Peary's expeditions survive.

Following the high adventure of the polar voyages, George Wardwell returned to Maine where he worked as an engineer on a steamship that sailed between Bangor and Boston. He passed away on July 2, 1927.

During the *Northward Over the Great Ice* centennial, George Wardwell has been speaking from beyond the grave as his



George Wardwell

extensive expedition journal entries are being posted along with those of Robert Peary and Donald MacMillan on a daily blog on the Peary-MacMillan Arctic Museum website, www.bowdoin.edu/arctic-museum.

On April 27, 1909, the day Commander Peary arrived back at the *Roosevelt* from his successful trek to the Pole, George Wardwell wrote, "The Secret of the North is found and there will be no more chasing the No. pole."

Not entirely true, of course, but then George Wardwell could not have foreseen the century-long controversy over who reached the North Pole first, let alone the competing international claims to its ownership and exploitation.



Robert E. Peary pictured here with the captain of the S.S. *Roosevelt*, Robert A. Bartlett



taught that neither Peary nor Cook was the first to the North Pole. That distinction belonged to four Russian pilots who landed there in 1937.

Gayazova likens the politics of the Arctic to “many chessboards, one atop the other.”

“On every chessboard, different rules apply,” she says. “Those who own the Arctic at the seabed may not have claims over waters above.”

The 1982 United Nations Convention on the Law of the Sea stipulates that countries have exclusive economic zones up to 200 nautical miles from their shores, after which the high seas become international waters.

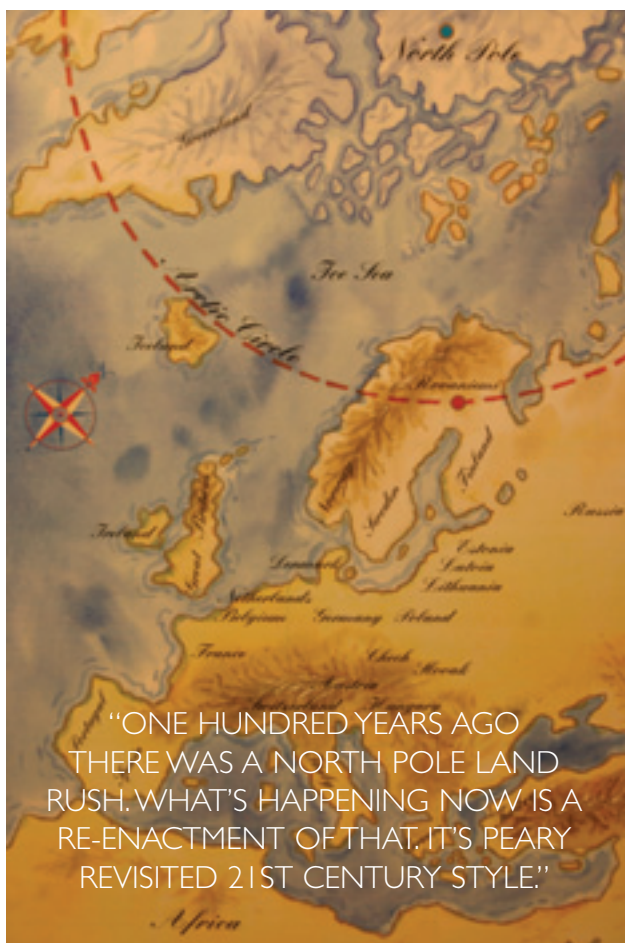
Canada maintains that the Northwest Passage runs through its internal waters, but the United States, which has not ratified the Law of the Sea Convention, regards the Northwest Passage as international waters.

The Law of the Sea does, however, include a provision that could extend dominion even farther out to sea if a country can prove that submarine ridges comprise the submerged prolongation of its land mass. As an underwater mountain range known as the Lomonosov Ridge runs 1,240 miles beneath the Arctic Ocean, Russia made a claim in 2001 that its continental shelf extends far into the ocean, possibly to the North Pole. Canada and Denmark are considering similar claims.

In August of 2007, a pair of Russian mini-sub subs planted a titanium Russian flag on the floor of the Arctic Ocean 2.5 miles beneath the North Pole. The Russians were criticized at the time for trying to stake a claim like a 15th century explorer, but they maintained that they were simply celebrating an achievement, like American astronauts planting a flag on the moon.

On the chessboard of Arctic seabed, the International Seabed Authority, established under the Law of the Sea Convention, will decide competing claims to the floor of the Arctic Ocean and, by extension, to any natural resources found there. The International Maritime Organization regulates shipping.

“The water around the North Pole is already the common heritage of mankind,” says Olya Gayazova, “but



one of the provisions is for safety zones. Conceivably, such zones can have military implications.”

For while the North Pole may have slipped from the public consciousness after World War I, it has very much been on the radar screens of U.S. and Russian missile defense systems.

“The Arctic is a major geopolitical factor in nuclear deterrence,” says Gayazova, noting that Russia maintained polar stations throughout the Cold War and that U.S. missile defense bases rimmed the Arctic. “The difference now is that there are the strategies of noise as well as the strategy of secrecy.”

Gayazova suspects that many international expressions of renewed interest in Arctic science, the environment, natural resources, and shipping mask concerns about national security.

At the inaugural Arctic Ocean Conference, held in Ilulissat, Greenland, in May of 2008, political representatives from the five Arctic nations issued a joint statement re-affirming that “the law of the sea [notably uncapitalized] provides for important rights and obligations concerning the outer limits of the continental shelf, the protection of the marine environment, including ice-covered areas, freedom of navigation, marine scientific research, and other uses of the sea. We remain committed to this legal framework and to the orderly settlement of any possible overlapping claims.”

“One hundred years ago there was a North Pole land rush. What’s happening now,” says Environmental Studies director Phil Camill, “is a re-enactment of that. It’s Peary revisited 21st century style.”

THE REAL FIRST PEOPLE AT THE POLE

In a certain sense, Robert Peary opened a Pandora’s box when he extended the reach of Western civilization to the North Pole. And just as there were Native Americans already in the New World to greet Christopher Columbus, there were also indigenous people – the Inuit – living in the Arctic before Peary reached the Pole. Indeed, Peary relied heavily on the aid, assistance, and native technologies of the Inuit people, four of whom



stood with him and Henson at the North Pole in 1909.

Both Peary-MacMillan Arctic Museum director Susan Kaplan and curator Genevieve LeMoine focus their academic studies on the anthropology and archeology of Inuit culture. Kaplan studies the Inuit of Labrador, while LeMoine studies the Inuit of Greenland.

Susan Kaplan is interested in how Western contact and climate change have impacted Inuit culture.

“The record in Labrador,” she says, “shows that not everything was rosy for the Inuit, but they displayed tremendous cultural resilience and adaptability in the face of the Little Ice Age and contact with Europeans. Now they are facing more intense and more rapid cultural change and climate change.”

Kaplan, who teaches a course entitled “Cultures Weathering Climate Change,” notes, for example, that Western environmental concerns to protect various marine mammals have come into conflict with the traditional Inuit practice of hunting seals, bowhead whales, and polar bears. But, she insists, “It’s not a choice between endangered species and endangered cultures. The solution to preservation of species and respect for cultures has to be crafted through collaboration with these Inuit communities.”

Kaplan’s archeological research has been used to bolster Inuit land claims in Labrador. And as Canada, Russia, Denmark, Norway, and the United States set their sites on claiming a share of the Arctic prize, the Inuit have also begun to assert their own sovereign rights.

In November, 2008, the Inuit Circumpolar Council, meeting in Kuujuaq, the largest Inuit village in Nunavik, Quebec, issued a statement entitled “Towards an Inuit Declaration on Arctic Sovereignty” asserting “that any claim of sovereignty that nation states may make is derived through the use and occupancy by Inuit of lands and seas in the Arctic” and calling upon Arctic governments “to include Inuit as equal partners in any future talks regarding Arctic sovereignty.”

And the Arctic chess match just keeps getting more complicated all the time.

Greenland, which has been semi-autonomous from Denmark since 1979, took a giant step closer to independence on November 25, 2008, with 75 percent of

KAPLAN’S ARCHEOLOGICAL RESEARCH HAS BEEN USED TO BOLSTER INUIT LAND CLAIMS IN LABRADOR.

voters supporting a non-binding referendum on self-rule. The Greenland-Denmark Accord on Home Rule now gives Greenland, home to 7,000 Danes and 50,000 Inuit, standing as a player in the future of the Arctic.

Genevieve LeMoine studies the transition of Inuit technologies from the prehistoric to historic period in Inglefield Land, Greenland. Currently, she is engaged in the Inglefield Land Archeological Project in collaboration with anthropologists from University of California-Davis, the Greenland National Museum, and the Thule Museum. She and her colleagues are investigating how Inuit of Northwest Greenland incorporated industrial technologies introduced into their lives by explorers.

“The community there takes a particular interest in its history, which is oddly tied to Bowdoin College,” says Genevieve LeMoine of the Inuit settlements on the

northwest coast of Greenland. “In Greenland, they are familiar with Bowdoin College because there is a Bowdoin Fjord and a Bowdoin Glacier, landmarks Peary named after the college.”

One hundred years after his crowning achievement, Robert Peary’s name is still respected among the Inuit, but it is Donald MacMillan, who

went on to facilitate scientific research in the Arctic and to bring educational materials and medical supplies to the Inuit of Labrador and Greenland, who is fondly remembered for his kindnesses among the real first people of the polar region.

The college that educated Peary and MacMillan and the museum that bears their names now play major roles not only in preserving the historic record of their achievements but also of advancing the scientific, political, and cultural understanding of the Arctic.

“Clearly, the Arctic is becoming more important,” says visiting professor Olya Gayazova. “Soon we will need a lot of specialists who know the Arctic from different angles. Bowdoin is nicely positioned as an institution that can produce people who are well-versed in Arctic studies.”

