



# THE ASHKUI PROJECT: KNOWLEDGE, CULTURE AND THE INNU LANDSCAPE

#### Geoff Howell

The Innu of Labrador see their land, which they call Nitassinan, as a collection of inseparable elements; in the Innu world view, the landscape, the processes that interact with it, and the plants and animals that live on it, form an integrated whole. Over the past four years a partnership between the Innu Nation, Environment Canada, the Gorsebrook Research Institute of Saint Mary's University, and Natural Resources Canada has been exploring new ways to connect Innu knowledge and western science.

Our approach uses the conceptual category of a Cultural Landscape Unit (CLU) as the basis for generating new knowledge about the biophysical make-up of Labrador. This takes a landscape element that has value and meaning for the Innu, and then builds a knowledge base around it from a number of perspectives – starting with the Innu perspective. Our hypothesis is that a form of ecological knowledge can be developed that combines both Innu and western knowledge systems, recognizing and understanding the qualities, limitations, and context of each.

CANADIAN POLAR COMMISSION

MMISSION CANADIENNE DES AFFAIRES POLAIRES

The work to date has focussed on a case study to examine the feasibility of the CLU approach. Innu elders identified areas of primary importance to them which they call *ashkui:* these will form the basis of this case study. *Ashkui* are areas of early or permanent open water on rivers and lakes which, because of their abundance of fish, wildlife, and plants, act as "supermarkets and pharmacies", according to some elders.



Scientists and Innu looking at satellite imagery at the Seal Lake meeting.

Canada



Jack Selma, the project Co-Researcher, collecting water samples at Wuchusk Lake.

The first step in this project involves interviewing Innu elders. Researchers collect information on various aspects of *ashkui:* biological and environmental components, conceptual boundaries, related land use characteristics, and sociological importance. The knowledge gained from these interviews is continually reshaping the overall direction of the project and the perspectives of the partners. The elders, for example, have helped select fifteen *ashkui* sites for intensive research emphasizing biology and chemistry. Questions from the Innu about the water – from its suitability for drinking and making tea to its quality as a fish and bird habitat – are influencing how the science is conducted and the way results are communicated.

This project continually challenges us to look at the ecosystem from different perspectives, to learn from these different views and to try to make our scientific work relevant to the people who depend on *ashkui*. To be effective, it is essential to recognize the need for a multi-year commitment and vision.

In May 2000, the Innu Nation hosted an in-country, camp-based meeting at an *ashkui* on Seal Lake. For three days about twelve researchers met with Innu elders, hunters, and families to discuss results and chart new directions for the project. The meeting has stimulated creation of new areas of work, including investigation of climate change impacts on *ashkui*, the start of an Innu Environmental Guardians program, the development of an interactive CD-Rom for the Innu school system, and the use of RADARSAT images to map *ashkui* patterns over time and space.

In January 2001 a one-day symposium on the Ashkui Project was held at Saint Mary's University in Halifax, in conjunction with a Polar Commission board meeting. Over 125 people attended. A diverse series of presentations represented all aspects of the project; keynote speakers included Henry Lickers, Director of the Department of the Environment for the Akwesasne Mohawk Nation, and Julie Cruikshank, a University of British Columbia anthropologist and Polar Commission board member. The day's agenda was an interwoven fabric of readings and presentations from Innu elders and hunters, the Innu Nation president, and project researchers. A talk on waterfowl abundance at ashkui, for example, was followed by a life history narrative from Mary Ann Michel, an Innu women who grew up on Seal Lake. The symposium proceedings will be published in the near future.

The Ashkui Project will continue with plans for new fieldwork in the spring and summer of 2001, expansion of the Innu Environmental Guardians Program, a concentrated focus on climate change impacts on *ashkui*, and more exploring of ways to bring Innu knowledge and western science together.

#### Contacts:

Stephan Fuller, Innu Nation Chris Fletcher, Gorsebrook Institute Geoff Howell, Environment Canada

*Geoff Howell is the Ashkui Project lead for Environment Canada.* 

## RESOURCE ROOM OPENS AT POLAR COMMISSION

Meridian's readers are familiar with the ongoing saga of Polar House, a building that would house the Polar Commission headquarters and serve as a centre for Canadian polar activities (*Meridian*, Spring/Summer 2000). While Polar House itself will probably remain an elusive dream for some time, I have good news for polar researchers visiting Ottawa: the Canadian Polar Commission has opened a polar resource room.

While it is neither large nor elaborate, the resource room does offer working space, Internet access, and some reference material. Resources include special editions of hardcover publications on arctic issues, online access to some 120 national and international newspapers, three workstations, and an evolving library of arctic and antarctic periodicals. And so it gives me great pleasure to invite arctic and antarctic scientists from around the world, as well as others researching polar issues, to drop by the Canadian Polar Commission office when visiting Ottawa. You'll find us at Constitution Square, 360 Albert Street, Suite 1710. The resource room is open weekdays from 09:00 to 17:00hrs. All are welcome.

- Steven Bigras Executive Director,
- Canadian Polar Commission

## NORTH-EAST CONNECTIONS AT SAINT MARY'S UNIVERSITY

#### Michelle Daveluy

The Arctic Research Committee at Saint Mary's University (Halifax, Nova Scotia) has been active since 1996, bringing information on major northern issues to people in Canada's southeastern region. The Committee offers research support and other assistance to professors and students interested in the north.

Student research topics have included traditional first-aid in Inukjuak, Nunavik (Sue Morrison, Anthropology), youth involvement in art production in Cape Dorset, Nunavut (James Moxon, International Development Studies), and plant species at *ashkuis*, areas of open water in winter used extensively by the Innu of Labrador (Anne Swiatoniowska, Biology/Anthropology [*see previous article*]).

The Arctic Research Committee has held numerous information sessions and other events open to the public, and many Nova Scotians have attended. We have also established strong links with the Inuit of Nunavut and the Innu of Labrador. I will discuss our Nunavut connections below; for more information on our work in Labrador visit the Gorsebrook Institute web site at www.stmarys.ca/administration/ gorsebrook/ashkuisymp.htm.

### EXCHANGES ROOTED IN HISTORY

Our northern connections have built on the historical links Nova Scotia has with the Inuit. Over the years many Nova Scotians have lived and worked in the north, especially as teachers; but ties between the two regions in fact go right back to the days when shipbuilding flourished in the Maritimes. Some of the Révillon Frères trading company vessels came from Nova Scotia shipyards, and in 1925 one of them, the *Jean Révillon*, spent the winter trapped in the ice at Baker Lake. The following spring the captain found himself short of crew for the return voyage. Four Inuit – Savikataaq, Lionel Angutegoar, Athanasie Angutitaq, and Louis Tapatai – helped bring the sailing vessel safely home to Shelburne. For details of this event and the papers presented at the 1998 symposium of the Atlantic Association of Sociology and Anthropology, visit www. stmarys.ca/academic/arts/anthropology/ mdaveluy/revillon.

#### NUNAVUT DAYS

When the Committee was created, the members were concerned that southerners knew so little about Nunavut. We therefore organized a series of "Nunavut Days", from 1996 to 1999. The first offered students, professors, and staff a chance to hear our guests speak about the coming changes. In 1997 the Nunavut Implementation Commission met in Halifax, and a broader audience learned of the challenges associated with dividing the Northwest Territories. During this visit the Chief Commissioner, John Amagoalik, received an honorary doctorate from Saint Mary's. Finally, the Nunavut Days moved to Shelburne where local people were honoured to meet Peter Irniq and David Owingayak, descendants of the Inuit crewmembers who sailed on the Jean Révillon.

One Nunavut Day event made a particularly strong impression on me. A workshop in Halifax brought together young Inuit and members of the Nunavut Implementation Commission. Sam Ootoovak, Romani Makkik, and Nymon Killiktee were excited at the opportunity to speak with their leaders in public. Their message was clear: while thrilled at the imminent creation of Nunavut, they also felt apprehensive because of the pressure on them to succeed academically and to help run the new territory. Their words can be summed up as follows: "We are told to get involved, and also to stay in school. At the same time, we get offers of high-paying jobs. We can't do it all at once. We have to choose – and we need help no matter what choice we make."

The commissioners could understand their difficulties, and responded by relating their own experiences of pitfalls encountered along the road to success. Faced with the very practical concerns of the young people, the leaders briefly turned their attention away from the world of politics to reflect on the past and on their responsibilities as role models. On the whole the discussion represented a necessary, but apparently rare, exchange of views.

## N U N A S C O T I A I 9 9 7 - 2 0 0 I

The three young Inuit were not new to Saint Mary's. During the summer they had taken part in NunaScotia, a pre-university program for Nunavut students that the University offers in partnership (since 2000) with the Nunavut Ministry of Education. Nuna-Scotia introduces Nunavut students to university and prepares them for campus life. So far, 45 have earned their certificates of participation. Judging by the substantially higher number of applicants, there is no question that the program fulfills a need.

After a preparatory workshop in Iqaluit, participants spend two weeks at Saint Mary's. They live in residence, attend classes, take



NunaScotia 2000 students with Nunavut Commissioner Peter Irniq. Standing, left to right: Lorna Ell, Cindy Kilabuk, Sharon Owlejoot, Peter Irniq, Genevieve Killulark, Benjamin Hainnu, Jeff Kolaohok. Front: Tina Muckpaloo, Rick Oyukuluk, Jimmy Aipellee, Lucie Ottokie.

part in activities, and learn to manage their time and money. They acquire a diversity of practical and academic experience, from learning how to apply to a post-secondary institution to completing a university-level lab assignment. In this way – and also by meeting others who share their aspirations – a number have increased their self-confidence, improving their chances of academic success.

For those who come to Saint Mary's set on furthering their studies, NunaScotia provides an opportunity to test the waters before diving in. Others, less sure, may return home having discovered that they are neither financially nor emotionally prepared for university. NunaScotia serves these students by motivating them to complete secondary school if they have not already done so.

Each group of students leaves its mark. The first participants thought of the name NunaScotia, which the program quickly adopted; the second group built an inuksuk that still stands proudly on campus; and thanks to the third, the flag of Nunavut flutters over Shelburne on special occasions. A Web site was created for the program last year: www.stmarys.ca/academic/arts/ anthropology/nunascotia. This July more Nunavut students will come to Saint Mary's.

**OTHER PROJECTS** Through the Arctic Research Committee, Saint Mary's University has forged links with Nunavut Arctic College, and now offers an Executive MBA in the north. Helen Kinmik Klengenberg is the first graduate, and others will follow soon. A curriculum development project on adapting traditional ways of handling difficult situations to the workplace has been added to the program.

The Committee recently established another partnership, this time with a private company. Triad Films Ltd. is making a film about Nuliajuk, the "woman beneath the sea" of Inuit legend. A series of in-depth interviews has produced a quantity of rich material which is being archived. As part of this project two Nunavut residents are doing job placements in Halifax, Loretta Kanatsiak in film production and David Poisey in archiving techniques. The experience gained in this collaboration with the private sector could lead to more media and information training opportunities in Nunavut.

I chair the Arctic Research Committee; Renee Hulan (English) is vice-chair, and Christopher Fletcher (Gorsebrook Institute) is secretary. Although there is no northern studies program as such at Saint Mary's, these three individuals offer, as often as possible, courses on relevant themes (language dynamics in the north, northern literature, circumpolar affairs). The other committee members are: William Bridgeo (Chemistry), John Chamard (Management), Patricia Fitzgerald (Management), Georgia Pe-Piper (Office of Graduate Studies and Research), Heidi Taylor (International Activities), and Liette Vasseur (Biology/Environmental Studies).

Michelle Daveluy teaches Anthropology at Saint Mary's University.



David Poisey (left) with John Brett, editing "Nuliajuk".

## UNIVERSITY OF THE ARCTIC FORMAL LAUNCH

#### Peter Johnson

The formal launch of the University of the Arctic will take place in June at the first Arctic Council Senior Arctic Officials Meeting in Finland. Over the last four years the University of the Arctic has moved from a feasibility report to a working group established through the Circumpolar Universities Association, then to an organisation endorsed by Arctic Council with its own Interim Council, and finally to an independent organisation with a full council. The Interim Council approved plans for the formal launch of the university at their last meeting, in Nuuk, Greenland.

Finland has been financially supporting the Coordination Office in Rovaniemi, and has contributed funds for a Director.

Finland will also fund a circumpolar mobility program, one of the foundations of the university's program delivery structure. Norway is contributing to the development of the curriculum for elements of the Bachelor of Circumpolar Studies (BCS); Canada is funding a number of teams developing elements of the BCS core curriculum.

An integrated plan has been published incorporating the BCS, the Arctic Learning Environment (ALE, the technical network for program delivery), and the Circumpolar Mobility Program. This and other University planning documents are available at www. urova.fi/home/uarctic.

Governance structures and committee mandates are in the final drafting stage. Applications to have programs affiliated with the university should be addressed to Outi Snellman at the coordination office at the University of Lapland.

University of the Arctic **Coordination Office** Box 122. Arctic Centre

96101 Rovaniemi

Finland

E-mail: uarctic@urova.fi

Programs now affiliated with the University of the Arctic include the Circumpolar Social Sciences PhD Network, the Circumpolar PhD Network in Arctic Environmental Studies, the Northern Research Forum, and Human Dimensions of Arctic Environments (a Web based information project).

Peter Johnson is vice-chair of the board of the Canadian Polar Commission.

#### ARCTIC DISCUSSION WITH AN THE GOVERNOR GENERAL

Peter Johnson

In January Governor General Adrienne Clarkson and her husband John Ralston Saul hosted an informal meeting and dinner at the Citadelle, Quebec City, in honour of the Arctic Council. Mme Clarkson and Mr. Saul are particularly interested in the Council, and in fact have had a keen and informed interest in the North for many years. Their guests included ambassadors or senior representatives from all the circumpolar countries, representatives from northern indigenous peoples and northern institutions, academics, and government officials. The relaxed atmosphere and diversity of viewpoints stimulated a useful series of informal talks and discussions.

Mary Simon, Canadian Ambassador to Denmark and Circumpolar Ambassador for Canada, emphasised the rapid changes in

the North, and the need to support the work of the Arctic Council. She mentioned as well that the issues of sustainable communities, health, and youth were first brought before the Arctic Council while Canada held the Chair.

Ilkka K. Ristimäki, ambassador to Finland, which will chair the Council for the next two years, outlined his country's priorities. With an emphasis on the permanent participants in the Council, Finland will concentrate on a series of issues: the Environmental Protection Strategy, the Arctic Climate Impact Assessment, health, youth, transport, arctic cultures, sustainable industries, information technologies, and finally the University of the Arctic.

Northern education emerged as the major topic of the open discussions. Sally Webber, president of Yukon College, described the progress of the University of the Arctic. Participants voiced strong support for providing university-level education in northern communities, and they also made it clear that better primary and secondary schooling is necessary if more northerners are to graduate from university. All levels of education need to improve together over the next few decades.

Guests also underscored the importance of the new models of education, which build on northern cultures rather than tacking culture and language onto southern frameworks. The way southern institutions view northern students needs to change: there are few adequate programs to help northern

M M N

students adapt successfully to university life, and existing ones do not reach the majority of students.

Participants stressed the need to expand awareness of the Arctic Council and its circumarctic and global roles, in Canada and internationally. Arctic issues have significant global implications: arctic regions will feel the effects of global warming most strongly. The result may be increased external pressures on northern communities from oil, gas, and mineral exploitation, and from the opening of the Northwest Passage.

One issue was obvious throughout the discussions: most Canadians, while cherish-

ing an image of themselves as a northern people, in fact have little understanding of the north. Southern Canadians – including governments – need improved access to accurate information about the people, environment, and economy of the north.

In her concluding remarks the Governor General expressed the desire to hold similar meetings each year. This would certainly help give Arctic Council more visibility in government circles.

The Arctic Council web site is www.arcticcouncil.org.

## NORTHERN RESEARCH FORUM: "NORTH MEETS NORTH"

Steven Bigras

During the early days of November 2000, some 100 scientists, politicians, community leaders, students, academics, bureaucrats and business people from around the globe made their way to Akureyri in northern Iceland for the first North Meets North Forum. Their first gathering took place on November 4th in an atmosphere charged with anticipation and optimism.

Though the group ranged from experienced northern researchers to the newly initiated, a common purpose brought them together: to experience a new and as yet untried way of communicating about northern issues. Certainly many of the participants had attended other events promoting dialogue between scientists and arctic stakeholders; this one held the promise of setting the groundwork for a whole new way of organizing and operating international forums.

North Meets North extended from November 4–6, and consisted of five theme sessions. First came "Relevance of History", followed by "Northern Economies in the Global Economy", "Regionalism and Governance", "Implementation of a Northern Dimension", and finally "Science and Technology Application in the North". Each session had a moderator and four or five expert panelists representing an array of views. The purpose was to examine alternatives to the southnorth orientation that dominates discussions of northern issues but rarely provides culturally, socially, and environmentally relevant solutions.

Between sessions a Square Hour – "square" in the sense of a town square, where citizens meet and talk – gave young researchers a chance to respond formally to the previous session or give prepared presentations.

What set this international Forum apart from others, in my mind, was the openness with which the panelists and audience addressed each of the themes. It allowed for a more integrated view of the north including, for example, discussions of multidisciplinary research findings. The resulting exchange of ideas and perspectives meant a more thorough examination of the issues.

The openness of the forum spilled over into official functions, allowing individuals to explore connections with northern neighbors. After the North Meets North Gala Dinner, participants regaled each other with short stories, anecdotes, and impromptu renderings of national songs – performances sometimes short on musicality but well supplied with patriotic fervour. At this gathering no barriers or borders separated people; instead, their shared interest in the Arctic united them.

It takes more than a convivial atmosphere to capture the imagination of grizzled arctic research veterans, and there were many in attendance; but they showed as much enthusiasm as the younger researchers, thanks in large part to Iceland's president, Dr. Olaf Ragnar Grimsson. Dr. Grimsson championed the North Meets North idea, and took an active part in the forum. His enthusiasm and interest added immeasurably to the overall atmosphere and the feeling of breaking important new ground.

To show his commitment he held the wrap-up session at his official residence at Bessastadir. As he wanted to hear what people had said at the theme sessions, each session presented an oral report, and a short discussion followed. Afterwards the participants were treated to dinner and an evening of informal conversation.

I believe the Forum was highly successful. There is a need to bring researchers, educators, politicians, business leaders, civil servants, community leaders, resource users, and managers together to discuss northern issues – and above all, to find northern solutions. As President Grimsson so aptly stated in his opening remarks: "By bringing forth an emphasis on the North to North relationship we are not only establishing a new global vision but also seeking

ways to enhance cooperation and mutual understanding."

Plans are already underway for the second Northern Research Forum to be held in 2002. It will draw on the results and relationships formed at Akureyri, and will seek even greater participation and support from all sectors. By continuing to provide opportunities to dialogue we can enhance and stimulate sustainable growth in communities throughout the circumpolar north; and with a champion like President Grimsson, the rest of the world will no doubt gain better understanding of the challenges facing northerners.

Steven Bigras is Executive Director of the Canadian Polar Commission.

# COMMENTS: THE I2TH INUIT STUDIES CONFERENCE

## ( A U G U S T 2 3 – 2 6 , 2 0 0 0 )

## Jean-Marie Beaulieu

The Inuit Studies Conference is one of the longest-running and most important events dedicated to improved understanding of the Inuit world. Last August the Conference took place outside a circumpolar country for the first time – in Aberdeen, where the many historical connections between Scotland and northern Canada provided the context for stories of hardships, friendships, and common experiences.

The University of Aberdeen did an excellent job of hosting the conference, thanks to the dedication and hard work of Professor Mark Nuttal and his organizing team. Owing to the generosity and kindness of our Scottish hosts, it was a success on all counts.

Ms. Sheila Watt-Cloutier, president of the Inuit Circumpolar Conference (ICC), launched the conference with the help of the ICC vice-president for national affairs, Mr. Jose Kusugak. Ms Watt-Cloutier set the tone not only of the conference, but also for the beginning of an era in which the role of scientists in northern communities is being redefined and re-examined. She extended a broad invitation to participate in building a true and meaningful partnership between the Inuit community and the scientific community.

The conference theme was the rela-

tionship between people, resources, the environment, and global processes in the North. Sub-themes dealt with Inuit history and pre-history, the Inuit world view, art and literature, culture (identity and modernity), language and globalization, self determination and self-government, and health (education and welfare).

At conferences I always find myself faced with choosing between equally interesting presentations, and of course my own choices have influenced my recollections of the Inuit Studies Conference. The session on "Inuit Communities, Indigenous Knowledge and Climate Change" was a great starter. Shari Fox, Dyanna Riedlinger and Bernard Funston, all from Canada, explored the contribution and importance of Inuit and Inuvialuit knowledge of climate change and its role in globalization and governance in Canada's arctic. Then came talks on the theme of "Knowledge, Heritage and Traditions" by Murielle Nagy and Eric Higgs of Canada, and Eivind Torp of Sweden. They presented compelling stories about the naturalized knowledge of northern peoples, and discussed how some of this information can be used alongside modern technologies like GPS.

David Scrivener of the United Kingdom characterized the Arctic Council as a minimalist international organization without much real power and few accomplishments; speakers from the Inuit Tapirisat of Canada credited the Council with establishing ongoing cooperation among Arctic indigenous peoples. In the session on "Inuit, the Arctic and Representation" Frank Tester of Canada, Gisli Palsson of Iceland, H.G. Jones of the U.S.A. and Ray Burnett of the U.K. explored the history of Inuit from archival materials, oral history, and the writings of Stefansson. Peter Usher of Canada categorized the caribou crisis as an administrative, "created" crisis, an instrument of social policy as much as wildlife policy. David Anderson of the U.K. and Patty Gray of Germany completed the picture of relationships between northern peoples and caribou or reindeer in Canada, Russia and Alaska. Finally, Natasha Thorpe and Robert Wishart of Canada discussed the extensive caribou expertise of the Gwich'in and Inuit.

The conference reflected two constants: change, and the search for sustainable adaptations to new realities. Global climate change, with its present and its potential impacts on Inuit, is one of the most important forces driving arctic research at the moment.

Also highlighted was the increased

importance of partnerships between Inuit communities and southern scientists. This kind of research has been spurred by the needs of the co-management regimes created as Inuit take control of their own destinies through modern land claim settlements.

To smooth the way for effective part-

nerships, the research community – academic, government and private – needs a way to find out what research Inuit consider necessary. Inuit in turn need to know who in the research community is best able to do the research they require. A partial solution could be a registry of southern research expertise and northern community research needs: while registries of this kind do exist, they take a variety of forms and work independently of each other. The Polar Commission could be of assistance in bringing them together. Your comments and suggestions are most welcome.

Jean-Marie Beaulieu is Manager of Polar Science for the Canadian Polar Commission.

## CHURCHILL NORTHERN STUDIES CENTRE SILVER ANNIVERSARY CELEBRATION 25 YEARS OF ARCTIC RESEARCH AND EDUCATION

Michael Goodyear



In summer 2001 the Centre will offer a university-level course on ecotourism and resource management.

Plans are now underway for the CNSC "Silver Celebration" to be held September 6–9, 2001 in Churchill, Manitoba. Activities will include guest speakers, sporting events, special commemorations, tours, a social evening and dance, memorabilia display and much more. All are welcome. Please contact the Centre at (204) 675-2307 or cnsc@cancom.net for more information. If you are a Centre alumnus or you know someone who is, contributions of pictures, video or other memorabilia would be greatly appreciated.

Michael Goodyear is Executive Director of the Churchill Northern Studies Centre.

This year marks the 25th anniversary of the Churchill Northern Studies Centre, an independent, non-profit research and education facility located 24 kilometres east of Churchill, Manitoba. Founded in 1976, the CNSC provides year-round accommodation and logistic support to researchers working on diverse topics such as polar bear behaviour and reproductive biology, microclimate, snow geese population ecology, coastal management, and migration adaptations in warblers. Recently, the CNSC has joined forces with the Earthwatch Institute to explore aspects of climate change on six selected long-term study plots, further strengthening in-house research expertise. In addition to supporting research excellence, the Centre also offers university credit courses and non-credit learning vacations to the general public.

The Churchill Northern Studies Centre is located on the sea coast at the edge of the Hudson Bay Lowland.



## A VISIT TO THE BEDFORD INSTITUTE OF OCEANOGRAPHY

#### Peter Johnson

The four annual Polar Commission Board meetings – two in the north and two in the south – give members the chance to discuss northern issues with northern research, education, and government groups, as well as other community members across the country. The recent meeting in Halifax of the Canadian Polar Commission Board provided me the welcome opportunity to visit the Bedford Institute of Oceanography.

At the Bedford Institute the Geological

CCGS Louis S. St-Laurent

Survey of Canada (Atlantic) has a number of northern research programs. Planning is underway for participation in an Ocean Drilling Program (ODP) project on the Lomonosov Ridge in the Arctic Ocean, where scientists will research climate history by examining evidence of ice cover development, circulation and ventilation of the ocean, and sediment flux history.

The Bedford Institute is also active in Baffin Bay and the Davis and Nares Straits, where they have recently completed detailed



## INDICATORS OF POLAR KNOWLEDGE IN CANADA

The Canadian Polar Commission is responsible for monitoring and reporting on the state of Canadian polar knowledge. After consulting with the research community the Commission developed a series of indicators to identify emerging trends and demonstrate how existing policies affect science.

The 1999 report on Canadian polar knowledge indicators will be published this summer. This year's work resulted in the refinement of data collection tools and methods, and improvements in reliability. Comments and suggestions received following the 1998 report contributed towards improving the project.

The Polar Commission relies on cooperation from interested partners in order to strengthen this basic tool. The first report is available online from the Polar Commission Web site. Your participation and comments are most welcome.

Jean-Marie Beaulieu



maps of physiography as well as magnetic and gravitational anomalies. Despite the importance of the region to Canada it is still difficult to fund research programs: to conduct research in Nares Strait this summer, Bedford scientists are relying on a German expedition that will use a Canadian platform.

GSC Atlantic is also doing important work on coastal environments and resources. They have been monitoring coastline changes for a number of years, and recently completed video coverage repeating surveys conducted 20 years ago. This unique record is perhaps most valuable along the northern Yukon and Mackenzie Delta coastlines, where global warming is causing significant change. GSC Atlantic research on ice gouging of shelf sediments is critical to assessing potential impact on oil and gas pipelines.

The scientists are closely involved in a number of important international collaborations including ocean drilling and seismic programs, construction of detailed bathymetric and sediment maps of the Arctic Ocean, coastal dynamics, and gas hydrate resources on the ocean shelf.

GSC Atlantic's research is vital to a

series of global, national and local issues: Canadian arctic sovereignty is under pressure from increased Russian and US activities, global warming is causing changes to environments and renewable resources; oil and gas exploitation is increasing, and indigenous communities need economic development. Despite their obvious importance the financial resources needed to research these issues are limited. Adequate and stable long-term funding is urgently required. As part of my visit I was also fortunate to have a tour of the CCGS *Louis S. St-Laurent.* This Canadian Coast Guard icebreaker is well equipped for science projects with ample laboratory space, berths for scientists, and deck space for sampling equipment. Why is the "Louis" not fully used for science as well as ice-breaking? Costs are high, and have been charged at for-profit rather than break-even rates. This has discouraged many scientists, for even at breakeven costs of about \$35,000 per day it is still difficult to obtain the funding and coordinate a science voyage. The combination of year-to-year funding policies which make long-term projects difficult to justify, and Coast Guard reticence to promote science roles, acts to the detriment of Canadian science excellence. We need to exploit the excellent research capacity of the *Louis S. St-Laurent*, and thereby make better use of our world-class arctic scientists in Halifax. This will go a long way toward regaining Canada's ability to contribute fully to circumarctic science.

## HORIZON

Arctic Science Summit Week – ASSW April 22–29, 2001 Iqaluit, Nunavut www.nac.nu.ca/nri c/o Nunavut Research Institute P.O. Box 1720 Iqaluit, Nunavut X0A 0H0 Phone: (867) 979-6734 Fax: (867) 979-4681 E-mail: stsnri@nunanet.com

## 9th North American Caribou Workshop

April 23–27, 2001 Kuujjuaq, Quebec www.cccpp-hftcc.com/nacw/en/ indexe. html

The Canadian Geophysical Union Annual Meeting and The Eastern Snow Conference May 14-17, 2001 Ottawa, Ontario www.cgu-ugc.ca Fourth International Congress of Arctic Social Sciences (ICASS IV): The Power of Traditions: Identities. **Politics and Social Sciences** May 16-20, 2001 Quebec City, Quebec www.fss.ulaval.ca/iassa E-mail: iassa.getic@fss.ulaval.ca ICASS IV Organising Committee International Arctic Social Sciences Association (IASSA) Secretariat GETIC, Université Laval Pavillon De-Koninck, Room 0450 Quebec City, Quebec G1R 7P4 Phone: (418) 656-7596 Fax: (418) 656-3023

International Conference on Port and Ocean Engineering under Arctic Conditions (POAC'01) August 12–17, 2001 Ottawa, Ontario www.nrc.ca/confserv/poac01 Contact: Dr G.W. Timco E-mail: garry.timco@nrc.ca

10

2001 International Polynya Symposium September 9–13, 2001 Université Laval, Quebec City, Quebec www.ulaval.ca Contact: Louis Fortier E-mail: louis.fortier@bio.ulaval.ca Martin Fortier Symposium Secretariat Coordinator-International North Water Polynya Study (NOW) GIROQ, Pavillon Vachon Université Laval Ste-Foy, Quebec G1K 7P4 Phone: (418) 656-3207 Fax: (418) 656-2339 E-mail: martin.fortier@giroq.ulaval.ca

We are updating our database of Canadian polar researchers. If you are an arctic researcher, kindly take a few minutes to fill in the questionnaire below, or complete it electronically on the Polar Commission web site: www.polarcom.gc.ca.

# INVENTORY OF POLAR RESEARCHERS

Name			
Affiliation			
Address			
m 1 1		n d	
Telephone	Fax	E-mail	
Web site			
Project description(s	) (2 or 3 lines)		
Field			
Keywords			
Location			
Source(s) of support	: Organization(s)		Amount
	~		

•

tesearch partner(s) in project	
Name	 
Affiliation	 
Address	 
Name	 
Affiliation	
Address	
Name	
Affiliation	
Address	
Name	
Affiliation	
Address	
<u>3</u> <u>4</u> <u>5</u>	Please return this questionnaire to: Canadian Polar Commission Suite 1710, Constitution Square
	360 Albert Street Ottawa, Ontario K1R 7X7 Fax: (613) 943-8607 E-mail: mail@polarcom.gc.ca