

# The Arctic Institute of North America

Annual Report 2003



## 2003 Board of Directors

- **Murray B. Todd**, Calgary, Alberta (Chair until October 2003)
- **Michel Scott**, Calgary, Alberta (Vice-Chair; Chair as of October 2003)
- **Marion LaVigne**, Yellowknife, Northwest Territories  
(Vice-Chair as of October 2003)
- **Louis-Jacques Dorais**, Québec, Québec
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- **Dennis Salahub**, Calgary, Alberta
- **Kathleen Scherf**, Calgary, Alberta
- **Jack Stagg**, Ottawa, Ontario
- **Harry Wilmot**, Calgary, Alberta
- **Karla Jessen Williamson**, Calgary, Alberta
- **Carl Benson**, Fairbanks, Alaska (Ex officio)

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- Executive Director: **Karla Jessen Williamson**
- Business Manager: **Sonja Hogg**
- Executive Assistant: **Beverly Williston**
- Membership Services: **Katherine Burningham**
- Editor and Adjunct Professor: **Karen McCullough**
- ASTIS Manager: **Ross Goodwin**
- ASTIS Information Analysts: **Lynda Howard**, **Lynne Howard**  
and **Pam Scowen**
- ASTIS Volunteers: **Jean McLennan** and **Robert Van Everdingen**
- University of Calgary Librarians, AINA Collection: **Eric Tull**  
and **Saundra Lipton**
- Kluane Lake Research Station Managers: **Andrew** and **Carole Williams**

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The images shown herein are of carvings made by Native peoples of Russia in the 1970s and 1980s, which are part of the AINA collection. The carvings were a gift of **A. Scovil Murray**, Calgary.

Cover: Reindeer Sled (detail), ivory, 8.5 × 23.6 cm. Page Headers: Turnip Folktale, ivory. Odd pages: 6.5 × 15.5 cm; even pages: 5.5 × 16.0 cm.

Photos and design: **Jeremy Drought**, Last Impression Publishing Service.



## Message from the Chair of the AINA Board

**A**s this year for the Arctic Institute of North America comes to a close, so does my term as Chairman. Two years have gone by quickly. One always has mixed feelings at this point—I feel a sense of loss as I leave behind friends and associates on the staff and the board, but a sense of comfort in having more time for family and other interests.

During the past year, the four traditional core business areas of AINA have done well. The journal *Arctic*, under the direction of **Karen McCullough**, continues to provide both an opportunity to publish Arctic research in a peer-reviewed, scholarly journal and an excellent source of information and research material for our members and other researchers. Karen also provides assistance and direction in the publication of other articles and books.

The ASTIS database, with over 50,000 titles, is growing every day and is proving to be a popular resource, as evidenced by the number of “hits” on our website. **Ross Goodwin**, manager of ASTIS, raises sufficient funds to cover the operation and continuous growth of the database.

More than 80 people made use of our Kluane station during the past summer, accumulating 1670 research days. A further 450 research days were supported at remote field camps. **Andy Williams** continues to provide superb management and direction at Kluane.

Our Executive Director, **Karla Jessen Williamson**, and her husband, **Dr. Robert Williamson** (AINA Senior Research Associate), initiated the DEW Line to Sea Lane project two years ago. This multidisciplinary, cross-country Arctic research initiative is building momentum while funding is gradually being obtained.

The Arctic Institute currently has 48 research associates, to whom it provides a forum for liaison with other researchers, advice and support in seeking funding for their projects, and a scholarly journal in which they may seek to publish their research results. AINA also provides working space to some of these research associates.

In a fifth strategic area—Library and Collections—we have recognized the need to extend and nurture the AINA library and the extensive collection of art, artifacts, photographs, and rare books that are the very foundations of AINA.

I intend to stay involved with the Arctic Institute in that context, while retiring as Board chair. I have a personal objective



of ensuring that the vast amount of technical research conducted by the oil industry over the last three decades is preserved and made available to new scientists and researchers. The Arctic Technology Preservation Project was initiated several years ago for that purpose. Thousands of projects undertaken by the oil industry while pursuing exploration over the last 30 years have been archived, abstracted, and entered into the ASTIS database. This is an ongoing project with many papers yet to be archived. A remaining challenge for this project is to collect and archive the social research and the vast amount of data residing in the files of federal government departments.

After many years, it seems that oil and gas development in the Arctic is really going to happen. There is alignment among governments, local residents, aboriginal groups, and industry on the Mackenzie Valley pipeline, the precursor to a long and sustained program of developing the extensive oil and gas reserves of the Arctic. Opportunities for new research are boundless.

*Murray Todd*  
*Chair, AINA Board of Directors*



Skier, ivory, 7.0 × 7.0 cm.



## Message from the Executive Director

**T**his last year has gone by very quickly, and now it is a privilege to reflect on the many rewarding moments I have experienced.

Since my arrival at the Arctic Institute, I have been preoccupied with enhancing its research profile. To that effect, I have been immersed in applying to the granting councils to fund the DEW Line to Sea Lane (DLSL) project. We applied to the Networks of Centres of Excellence, and a portion of the DLSL project will be part of ArcticNet, based at Laval University. I sincerely congratulate our partners at Laval for taking the Arctic sciences to the highest level of scholarship, and I am hugely delighted that the Arctic Institute contributed through its application. This is history in the making.

In my effort to emphasize the scholarly activities of AINA, I have convinced the Board to implement a new reporting system for AINA research associates. A list of publications by our research associates is included in this annual report, and I hope to expand it in future by including publications based on activity at AINA's Kluane Lake Research Station.

A most satisfying development for me is that AINA will continue to publish books about the Arctic in partnership with the University of Calgary Press. We are now onto our fifth publication of the *Northern Lights Series*, and I am happy to announce that the Press, under the leadership of **Walter Hildebrandt**, has an ongoing co-publication agreement with AINA. As you all know, books preserve valuable knowledge long into the future.

AINA's Arctic Lecture Series has been popular, and I am grateful to all who have volunteered to share their insights and knowledge on the Arctic and Subarctic. I welcome anyone to be a listener, or indeed a speaker, for our series.

The Kluane Lake Research Station continues to attract world-class scientists. Some of this year's talented users have applied for NSERC grants to continue their work in the coming year. On our side, we finalized the ten-year lease, and I hope that will lead to great achievements in the area of research. I am grateful to the Polar Continental Shelf Project for its active and effective participation in our efforts to hand over the Devon Island Research Station to Grise Fjord's Iviq Hunters and Trappers Organization (IHTO).

In the present era of greatly diminished support for Arctic research in Canada, it is incredibly rewarding to see the



commitment of the students whose work and enthusiasm we share tangibly through AINA scholarships. I have met a number of the recipients over the last two years, and it pleases me that AINA enables and supports the growth of Arctic research in this way. I would like to see more scholarships established, as they create much hope. If you have any ideas, please let me know.

On a more personal level, I felt honoured by the invitation to be lead author of a chapter called “Gender Issues in the Arctic” for the Arctic Human Development Report to the Arctic Council. I was also appointed to the Minister’s National Advisory Board on Earth Sciences of Natural Resources Canada. I look forward to the work that the two invitations imply.

Join me in welcoming the new Murray Fraser Professor of Community Economic Development, **John Graham** of the Faculty of Social Work, University of Calgary. He has done extensive community research among the Bedouin of the Middle East. We look forward to contact with his incredible energy and scholarship, knowing these will benefit Northerners.

In reference to the AINA Collection, we have been pleased at the way the Division of Information Services at the University of Calgary has been looking after it. This summer and fall, I have worked on obtaining permission for AINA to receive significant donations of cultural property from the Canadian Cultural Property Board, as we are hoping to extend the AINA collection of Inuit carvings.

Do explore the new AINA website, which has been very successful: our membership numbers have increased since it was launched.

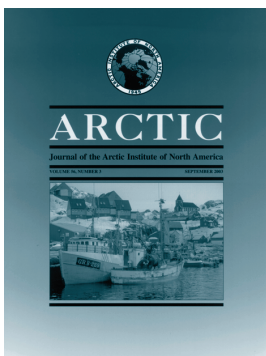
I am hoping to be able to find a poster of the moons around Saturn, which have been given Inuktitut names. **Michael Kusugak** and I selected a number of pan-Inuit names, and four of the twelve newly discovered moons have been given the names Paaliak, Ijiraq, Kivioq, and Siarnaq.

I would like to thank the United States Arctic Research Commission for holding its 68th meeting at AINA. This important milestone reasserts and recognizes the work we do here. I give my thanks to the outgoing chair of the Board, **Murray Todd**, and I welcome **Michel Scott** as the new chair. His emphasis on fundraising for AINA programs is to be anticipated with much interest.

*Karla Jessen Williamson*  
Executive Director



## ARCTIC



The year 2003 marked *Arctic's* fifty-sixth year of publishing the results of northern research. We published 36 research articles in the four issues for 2003: 11% from the physical sciences, 25% from the social sciences, and 64% from the biological sciences.

Throughout the year, we continued to work on submissions for a future issue of *Arctic* dedicated to papers from the Human Dimensions of the Arctic System (HARC) program of the U.S. National Science Foundation (NSF). This special issue will examine the relationship of humans to Arctic environmental change and the research approaches used to study that relationship. Once the issue is scheduled for publication, NSF will provide a subvention of US\$7500 toward the production costs.

In addition to the research articles, the 2003 issues contained 22 book reviews, 6 letters to the Editor, 2 obituaries, and 1 commentary. The InfoNorth section of each issue is devoted to brief, informative essays on northern topics. This year, we presented an essay on the role of the RCMP in securing Canadian sovereignty over the High Arctic islands, by AINA research associate **Peter Schledermann**; an intriguing hypothesis of a possible connection between explorer Frederick Cook and the fictional works of Jules Verne, by physicist **Randall Oszcewski**; a story about tapestries produced in a Pangnirtung weaving studio, by freelance writer **Dyan Cross**; and descriptions of their graduate research by **Ryan Danby** and **David Cameron Hardie**, winners respectively of the 2003 Jennifer Robinson and Lorraine Allison scholarships, administered by the Arctic Institute.

In an effort to obtain members' opinions on the creation of an online version of the journal, we prepared a brief survey form, which was printed on the back of the September mailer and also made available on the AINA website. The results of this survey will be available early in 2004.



## The Northern Lights Series

**T**he mandate of this joint AINA and University of Calgary Press publication series is to publish works of a nontechnical nature from all areas of northern scholarship: the natural, social, and earth sciences and the humanities. The geographical area covered by the series is the North, broadly defined as those circumpolar regions situated within the zone of continuous and discontinuous permafrost. The series editor and member of the University of Calgary Press Editorial Board for 2003 was **Peter Schledermann**.

Two new titles have been published as part of the series:

- Vol. 2) *Many Faces of Gender: Roles and Relationships through Time in Indigenous Northern Communities*, edited by Lisa Frink, Rita S. Shepard and Gregory A. Reinhardt (co-published with the University of Nebraska Press in 2002);
- Vol. 3) *New Owners in Their Own Land: Minerals and Inuit Land Claims*, by Robert L. McPherson (December 2003).

The fourth volume in the Northern Lights Series, *War North of 80: The Last German Arctic Weather Station of World War II*, by Wilhelm Dege, translated and edited by William Barr, will be published in 2004. A reprint of Father Rene Fumoleau's 1973 book, *As Long as This Land Shall Last: A History of Treaty 8 and Treaty 11, 1870–1939*, is also scheduled for publication next year.



Kayaker, fur and bone, 4.5 × 14.0 cm.





## Arctic Science and Technology Information System

The Arctic Science and Technology Information System (ASTIS) is Canada's northern abstracting and indexing service. The ASTIS database contains 53,000 records describing publications and research projects about northern Canada that cover all subjects. ASTIS has been in operation since 1978 and is funded through contract work and donations.

The ASTIS database is available for free on the Arctic Institute's website. ASTIS is searchable from a Simple Search page, from an Advanced Search page, and by clicking on hyperlinks in database records. If the full text of a publication is available on the Web, the ASTIS record will provide a link to it. The bilingual ASTIS website also provides search help, information about the scope of the database, instructions for obtaining publications, and a list of the organizations that have supported ASTIS.

ASTIS specializes in the preparation of bibliographic databases about northern Canada and can easily make these databases available from customized websites for clients. The ASTIS Subsets link on the Information menu of the Institute's website provides access to seven of these databases. New this year are the *Nunavik Bibliography* and the *NCP Publications Database*. ASTIS is also available with the world's other major polar databases in National Information Services Corporation's international *Arctic & Antarctic Regions* database. This database is available on a subscription basis as a CD-ROM and on the Web.

ASTIS projects during 2003 included work for the Nunavut Planning Commission on the *Nunavut Environmental Database*; for Indian and Northern Affairs Canada (INAC) on the *Hydrocarbon Impacts* database; for the Canadian Polar Commission to identify and index journal papers, research projects, and theses for the Commission's indicators of Canadian polar knowledge; for the Northern Contaminants Program on the *NCP Publications Database*; with Makivik Corporation, INAC, and the Canadian Circumpolar Institute on the *Nunavik Bibliography*; for the northern Canadian petroleum industry to index publications about the Northwest Territories and Beaufort Sea; and for the INAC Land and Water Management Division on the *Northern Granular Resources* database.

In March 2003, ASTIS set a new record for monthly usage, with 1360 search sessions registered on the main and subset databases.



## Photographic Archives

**D**uring the past year, research associate **Constance Martin**, assisted by research archivist **Lars Christensen**, made important progress on cataloguing AINA's collection of more than 4000 photographs. Brought to AINA from the Montreal offices at McGill University in the 1970s, these photo records of the Arctic have important historical and cultural significance, as well the potential to be a source of revenue for the Institute. One of the major strengths of photographs as archives is that they commonly contain a wealth and variety of information that goes well beyond the purposes for which they were originally taken. AINA's photo records include decades of information pertaining to the Institute's archaeological, glaciological, and geological expeditions, along with hundreds of photos of the cultural life of the Inuit. Martin and Christensen plan to create, using professional archival standards, a database of the collection from which images may be recalled by subject for scholarly or public use. Funding for this project is being sought with the help of AINA director **Karla Williamson** and the AINA Board of Directors.

Bringing the Catch Home, ivory, 4.5 × 12.4 cm.





## AINA Library

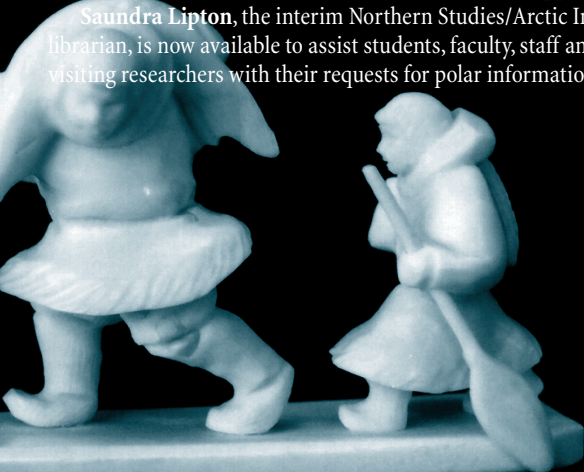
The Arctic Institute Library continues to grow through the purchase of books and serials by the University of Calgary Library, through the receipt of polar journals in exchange for the journal *Arctic* (supplied by the Arctic Institute for complimentary exchanges), and through donations. During the fiscal cycle ending March 2003, 36 new titles were ordered through the Northern Studies Fund, and the collection was further enhanced by material acquired through other Library funds (a search under the term “Arctic” limited to material published in 2002 and 2003 retrieves 75 items).

During the past summer, as part of a general reorganization of collections in the Library Tower, the AINA collection was relocated to a recently renovated space in the basement of the Library Tower.

The Arctic and Antarctic Regions (AAR) database is available to campus users, in part because it includes ASTIS. The Library is very pleased to have it available courtesy of ASTIS. The University of Calgary Library web page provides a good overview of the AINA collection, as well as links to other resources for northern studies (<http://www.ucalgary.ca/library/subjects/AINA/index.html>).

In June, **Eric Tull** retired from the University of Calgary. Eric has had a very successful career as Northern Studies/Arctic Institute Librarian and has contributed immensely to developing the collection and providing access to it. He is to be commended for his commitment to Northern Studies research support.

**Sandra Lipton**, the interim Northern Studies/Arctic Institute librarian, is now available to assist students, faculty, staff and visiting researchers with their requests for polar information.





## Scholarships

**T**he Arctic Institute administers three scholarships established by the families and friends of Jennifer Robinson, Lorraine Allison, and Jim Bourque, P.C. The *Jennifer Robinson Scholarship*, valued at \$5000, is awarded for academic excellence in field-oriented research in northern biology. The *Lorraine Allison Scholarship*, valued at \$2000, is open to Canadian graduate students who have demonstrated academic excellence and a commitment to northern research beneficial to Northerners. The *Jim Bourque Scholarship*, valued at \$1000, is open to Canadian Aboriginal students who intend to take post-secondary training in education, environmental studies, traditional knowledge, or telecommunications.

The 2003 recipient of the *Jennifer Robinson Scholarship* is **Ryan Danby**, a doctoral candidate in the Department of Biological Sciences at the University of Alberta. Using AINA's Kluane Lake Research Station, Mr. Danby is studying how the forest-tundra ecotone in the southwest Yukon may respond to climate change and how its responses will affect regional biodiversity.

The 2003 recipient of the *Lorraine Allison Scholarship* is **David Cameron Hardie**, a doctoral student in the Department of Biology at Dalhousie University, Halifax, Nova Scotia. Mr. Hardie's studies focus on the life history adaptations of non-commercial Arctic marine species and the population biology, life history, and genetics of Atlantic cod (*Gadus morhua*) in Arctic lakes at the northern limits of the species' range.

**Jeffrey Rouse** is the winner of the *Jim Bourque Scholarship* for the third year in a row. Mr. Rouse, who is connected with the Neyaashiinigmiing (Cape Croker First Nation) community, is in the fourth and final year of the Master of Environmental Studies/ Bachelor of Laws concurrent degree program at York University. He is studying self-governance of Indigenous environments and aboriginal community development.

## AINA Grant-in-Aid Program

**I**n 2003, the Grant-in-Aid Committee received 18 applications and was able to fund nine grants of US\$1000 each. The 2003 Committee consisted of **Peter Johnson**, **Matthew Sturm**, **Stephen Braund**, and **Erich Follmann**, chair.



These are the winners of the 2003 grants:

- **Laren Bill**, University of Manitoba, investigating traditional land use by a Cree community in Saskatchewan;
- **Joan Bunbury**, University of Ottawa, studying the distribution of ostracodes in northern Canada;
- **Joanna Kafarowski**, University of Northern British Columbia, investigating the views of Inuit women on environmental contaminants;
- **Ted Lewis**, University of Massachusetts, working on varve and varve-forming processes on Ellesmere Island;
- **Bradford Martin**, Northwestern University, exploring the roles of Native peoples in reshaping conservation practices in the Yukon Territory and Alaska;
- **Linh Nguyen**, Trent University, studying the distribution of shorebirds on Akimiski Island, Nunavut;
- **Andrey Petrov**, University of Northern Iowa, analyzing human population decline in the Canadian North;
- **Julie Ross**, University of Toronto, surveying the geology and archaeology of Banks and Victoria Islands;
- **David Woods**, Wilfrid Laurier University, investigating tundra hydrology and chemistry at Daring Lake, Northwest Territories.

## Northern Scientific Training Program

**T**he Northern Scientific Training Program (NSTP) grants have been adjudicated and administered by the Arctic Institute since the University of Calgary first applied for grants in 1979–80. Established in 1961 by the Department of Indian Affairs and Northern Development (now Indian and Northern Affairs Canada), the NSTP grants help defray the high cost of pursuing research in the North. The goal of the program is to encourage young Canadian scientists to undertake northern research.

For 2003, 11 students from the departments of Geography, Archaeology, and Biological Sciences were awarded NSTP grants to participate in fieldwork in locations ranging from Kluane Lake to Arviat and from Cape Bathurst to Lac La Ronge. The University's NSTP committee for 2003 included AINA Research Associate **William Barr** as Chair, former Chair **Len Hills**, **Peter Dawson** (Archaeology), **John Post** (Biological Sciences), and **John Yackel** (Geography). **Katherine Burningham** (AINA Membership Services) and **Sonja Hogg** (AINA Business Manager) provided administrative support for the Committee.



## Kluane Lake Research Station

**T**he Kluane Lake Research Station (KLRS) is located near the Alaska Highway, 220 km northwest of Whitehorse, Yukon, on the south shore of Kluane Lake (61°N, 139°W). The extreme elevation difference between Kluane Lake and the crest of the St. Elias Mountains establishes a strong gradient in environmental attributes. The result is a remarkable diversity of research opportunities within a small geographical area. Since 1961, when it was founded, KLRS has fostered research projects in the disciplines of glaciology, geomorphology, geology, biology, botany, zoology, hydrology, limnology, climatology, high-altitude physiology, anthropology, and archaeology.

More than 80 people made use of the KLRS facility during 2003. A total of 1670 research days were supported at the base camp and a further 450 days at remote field camps.

Researchers from the Geological Survey of Canada, Yukon College, and the Universities of British Columbia, Simon Fraser, Northern British Columbia, Alberta, Regina, Toronto, Waterloo, Ottawa, Trent, Western Ontario, and Maine made use of the base in 2003, in the areas of botany, mammalogy, palaeontology, geomorphology, glaciology, environmental studies, and anthropology.

During the summer of 2003, KLRS again provided a base for a botany field school, led by **Mary Vetter** (Botany, University of Regina), and a geography and glaciology field school, led by **Peter G. Johnson** (Geography, University of Ottawa).

Man and Bear, ivory, 7.0 × 7.0 cm.





## Research Associates

**R**esearch Associates are appointed by the Board of Directors. Currently the Institute has 48 research associates: 17% involved in natural science research, 10% from the physical sciences, 15% from the humanities and fine arts, and the remaining 58% involved in social science research. Much of the social science research focuses on northern issues and applied community work, some in partnership with northern communities, particularly the Dene. Brief descriptions of projects being conducted under the auspices of the Arctic Institute by some of the research associates listed below are available on the AINA website under “Research Projects.”

- **Don Albright**, Biology
- **Cindy Allen**, Dene Musicology
- **Charles Arnold**, Archaeology & Museology
- **William Barr**, Geography & History
- **Margaret Bertulli**, Archaeology
- **Ellen Bielawski**, Anthropology
- **Lloyd Binder**, Economic Development
- **Rai Brown McCutcheon**, Gender Studies
- **Leo Bushman**, Art
- **Dave Button**, Education
- **Garry K.C. Clarke**, Glaciology
- **Helen Corbett**, Film & Journalism
- **Ken de la Barre**, Human Geography
- **Mark O. Dickerson**, Political Science
- **Elmer Ghostkeeper**, Aboriginal Studies
- **Jeff Gilmour**, Law
- **Norman Hallendy**, Ethnohistory
- **Gerald Holdsworth**, Glaciology
- **Gunhild Hoogensen**, Political Science
- **Martha Johnson**, Anthropology
- **Peter G. Johnson**, Geography
- **Karim-Aly Kassam**, Arctic Social Science
- **Barbara Kingscote**, Veterinary Medicine
- **Heidi E. Klein**, Environmental Planning
- **Nic Larter**, Zoology
- **Allice Legat**, Anthropology
- **David Lertzman**, Aboriginal Studies
- **Robert MacDonald**, History
- **Sean Maher**, Anthropology
- **Constance Martin**, Art History and Curator



- **Virginia McGowan**, Health Sciences
- **Robert McPherson**, Geology & History
- **Frank Miller**, Wildlife Biology
- **Magdalena Muir**, Law, Environment & Resource Management
- **Dave Norton**, Ecology
- **Martin Raillard**, Arctic Ecology
- **Joan Ryan**, Anthropology
- **Peter Schledermann**, Archaeology
- **Ronald Silvers**, Art
- **Mary Leeds Stapleton**, History & Planning
- **Susanne Swibold**, Film & Journalism
- **Darielle Talarico**, Ecotourism
- **Jane Sproull Thomson**, Inuit Art & Culture; Heritage Planning
- **Jack Van Camp**, Environmental Science
- **Robert van Everdingen**, Hydrogeology
- **Robert G. Williamson**, Anthropology
- **Wanda Wuttunee**, Native Studies, Law, & Management
- **José Zorrilla**, Interdisciplinary

Woman and Fish, ivory, 8.0 × 6.5 cm.







## Publications of Research Associates & Staff

### Books and Articles Published in 2003

- BIELAWSKI, E.** Rogue diamonds: The rush for northern riches on Dene land. Vancouver: Douglas & McIntyre. 256 p.
- CLARKE, G.K.C., LEVERINGTON, D.W., TELLER, J.T., and DYKE, A.S.** Superlakes, megafloods, and abrupt climate change. *Science* 301: 922 – 923. (Solicited “Perspective”)
- FLEMING, S.J., and CLARKE, G.K.C.** Glacial control of water resource and related environmental responses to climate warming: Empirical analysis using historical streamflow data from northwestern Canada. *Canadian Water Resources Journal* 28(1):69 – 86.
- KOHL-LARSEN, L.** South Georgia: Gateway to the Antarctic. Translated by **WILLIAM BARR**. Cambridgeshire: Bluntisham Books. 294 p.
- KASSAM, K.-A., and TETTEY, W.** Academics as citizens: Collaborative interdisciplinary research in the service of communities. *Canadian Journal of Development Studies* 24(1):155 – 174.
- LARTER, N.C., NISHI, J.S., ELLSWORTH, T., JOHNSON, D., MORE, G., and ALLAIRE, G.** Observations of wood bison swimming across the Liard River, Northwest Territories, Canada. *Arctic* 56(4):408 – 412.
- McPHERSON, R.L.** New owners in their own land: Minerals and Inuit land claims. The Northern Lights Series, Vol. 3. Calgary: University of Calgary Press and the Arctic Institute of North America.
- MILLER, F.L., and GUNN, A.** Catastrophic die-off of Peary Caribou on the western Queen Elizabeth Islands, Canadian High Arctic. *Arctic* 56(4):381 – 390.
- MOORE, G.W.K., ALVERSON, K., and HOLDSWORTH, G.** The impact that elevation has on the ENSO signal in precipitation records from the Gulf of Alaska region. *Climatic Change* 59(1-2):101 – 121.
- SCHLEDERMANN, P.** The Muskox Patrol: High Arctic sovereignty revisited. *InfoNorth, Arctic* 56(1):101 – 106.
- SCHLEDERMANN, P., and McCULLOUGH, K.M.** Native/Norse contact in the Smith Sound Region. In: Barrett, J.H., ed. *Contact, continuity, and collapse: The Norse colonization of the North Atlantic*. Turnhout, Belgium: Brepols Publishers. 183 – 205.
- . Late Thule culture developments on the central east coast of Ellesmere Island. Copenhagen: Sila – The Greenland Research Centre at the National Museum of Denmark and the Danish Polar Center. 203 p.
- SCHMID, B., VAN EVERDINGEN, R.O., and MAATHUIS, H.** The impact of the creation of Lake Diefenbaker on water levels in underlying extensive bedrock aquifers: A 40-year history. In: *Proceedings of the 56th Canadian Geotechnical Conference/4th Joint IAH-CNC/CGS Conference/2003 NAGS Conference*, Winnipeg, Manitoba, Oct. 2003. Vol. 1: 297 – 300.



**WUTTUNEE, W.** Partnering among Aboriginal communities: Tribal Councils Investment Group (TCIG). *Journal of Aboriginal Economic Development* 3(1):9 – 17.

———. We are more than our problems. In: Anderson, M., and Shields, C., eds. *Dropped threads 2: More of what we aren't told*. Toronto: Vintage Canada. 233 – 240.

## Books and Articles In Press

**BARR, W., KRAUSE, R., and PAWLIK, P.-M.** The polar voyages of Kapitän Eduard Dallmann, 1850 – 1883. *Polar Record*.

**CLARKE, G.K.C.** Hydraulics of subglacial outburst floods: New insights from the Spring-Hutter formulation. *Journal of Glaciology*.

**CLARKE, G.K.C., LEVERINGTON, D.W., TELLER, J.T., and DYKE, A.S.** Paleohydraulics of the last outburst flood from glacial Lake Agassiz and the 8,200 BP cold event. *Quaternary Science Reviews*.

**DEGE, W.** War north of 80: The last German Arctic weather station of World War II. Translated and edited by **W. Barr**. The Northern Lights Series, No. 4. Calgary: University of Calgary Press and the Arctic Institute of North America.

**FLEMING, S.J., and CLARKE, G.K.C.** Serial dependence and the identification of long-term trends in annual river discharge records. *Canadian Water Resources Journal*.

**HILDES, D.H.D., CLARKE, G.K.C., FLOWERS, G.E., and MARSHALL, S.J.** Subglacial erosion and englacial sediment transport modelled for North American ice sheets. *Quaternary Science Reviews*.

**MANGERUD, J., JAKOBSSON, M., ALEXANDERSON, H., ASTAKHOV, V., CLARKE, G.K.C., HENRIKSEN, M., HJORT, C., KRINNER, G., LUNKKA, J.-P., MÖLLER, P., MURRAY, A., NIKOLSKAYA, O., SAARNISTO, M., and SVENDSEN, J.I.** Ice-dammed lakes and rerouting of the drainage of Northern Eurasia during the last glaciation. *Quaternary Science Reviews*.

**McCULLOUGH, K.M., and SCHLEDERMANN, P.** Thule culture kashims in the eastern High Arctic. *Anthropological Papers of the University of Alaska, New Series*.



## 2003 AINA Lecture Series

April 07: **Richard C. Davis**, Department of English, University of Calgary, "Tall Men Telling Tales: R.M. Patterson's Nahanni River."

October 22: **Peter Johnson**, Department of Geography, University of Ottawa, "Canadian Arctic Science: New Developments and International Programs."

October 27: **Lassi Heininen**, Arctic Centre, University of Lapland, "Changes in Problem Definition When Dealing with Northern Environmental Problems Related to the Military."

November 13: **Denny Gignoux**, Glacier Wilderness Guides, West Glacier, Montana, "Polar Bears and People in Churchill."

November 19: **William Barr**, AINA Research Associate, "War North of 80: The Last German Arctic Weather Station of World War II."

## Fellows

**F**ellows of the Arctic Institute of North America are elected in recognition of significant contributions to the knowledge of polar and subpolar regions. The Institute currently has 303 Fellows. Anyone wishing to nominate a Fellow can obtain a form from the AINA office in Calgary.



Farewell, ivory, 8.0 × 3.0 cm.



## Financial Report for the Fiscal Year Ended March 31 2003 (Condensed)

The Institute's financial year ends on March 31 and the figures here reflect the latest complete year and comparatives. The information presented in this document is an extract of the financial statements. The statements themselves are unaudited. This summary financial information cannot be expected to provide as comprehensive an understanding of the performance of the Institute as the full financial statements. Audited financial statements can be obtained by contacting the Institute. The Institute is a wholly owned subsidiary of the University of Calgary. The results of operations and the financial position of the Institute are included in the consolidated financial statements of the University, which are audited by the Auditor General of Alberta. To reflect the total amount of Institute activity, project grants and expenses in the amount of \$24,000 (2003) and \$22,000 (2002) were also administered. These grants were received by the University of Calgary and were administered by the Institute. Funding for general and administrative expenses is received from the Province of Alberta, Department of Learning, through the University. The University has also provided substantial in-kind support.



Net Fishing (detail), bone and fur, 7.0 × 28.0 cm.

## Statement of Financial Position March 31, 2003

	2003 <i>unaudited</i>	2002 <i>restated</i>
<b>ASSETS</b>		
Current assets		
Due from University of Calgary	\$ 785,057	\$ 754,810
Accounts receivable	100,283	60,100
Inventory	20,886	21,801
Prepaid expenses	<u>10,583</u>	<u>6,592</u>
	916,809	843,303
Investments	686,486	780,396
Capital assets and collections	<u>558,333</u>	<u>563,318</u>
	<u>\$2,161,628</u>	<u>\$2,187,017</u>
<b>LIABILITIES AND NET ASSETS</b>		
Current liabilities		
Accounts payable and accrued charges	\$ 91,108	\$ 61,135
Deferred revenue	73,415	90,254
Deferred contributions	<u>141,390</u>	<u>159,764</u>
	305,913	311,153
Unamortized deferred capital contributions	<u>30,722</u>	<u>27,425</u>
Net assets		
Unrestricted net assets	885,538	865,884
Investment in capital assets and collections	527,611	535,893
Internally restricted net assets	<u>104,253</u>	<u>97,987</u>
	1,517,402	1,499,764
Endowments	<u>307,591</u>	<u>348,675</u>
	<u>1,824,993</u>	<u>1,848,439</u>
	<u>\$2,161,628</u>	<u>\$2,187,017</u>



## Statement of Revenue and Expense for the Year Ended March 31, 2003

	2003 <i>unaudited</i>	2002 <i>restated</i>
<b>REVENUE</b>		
University of Calgary and Government grants	\$ 518,272	\$ 467,465
Sales of services and products	366,658	327,555
Donations and other grants	203,455	244,169
Investment income (loss)	(41,314)	(20,401)
Earned capital contribution	2,714	1,116
	<u>1,049,785</u>	<u>1,019,904</u>
<b>EXPENSE</b>		
Salaries	516,897	457,281
Benefits	74,870	67,180
Materials, supplies and services	337,009	336,568
Grants, scholarships and awards	67,392	41,616
Amortization	19,334	29,624
Travel and meeting	27,390	30,941
	<u>1,042,892</u>	<u>963,210</u>
Excess of revenue over expense	<u>\$ 6,893</u>	<u>\$ 56,694</u>

## Statement of Cash Flows for the Year Ended March 31, 2003

	2003 <i>unaudited</i>	2002 <i>restated</i>
<b>OPERATING ACTIVITIES</b>		
Excess of revenue over expense	\$ 6,893	\$ 56,694
Add back items not affecting cash flow		
Amortization	19,334	29,624
Earned capital contributions	(2,714)	(1,116)
Unrealized loss on investments	67,759	48,135
	<u>91,272</u>	<u>133,337</u>
Net change in non-cash working capital	(48,499)	26,498
Cash generated from operating activities	<u>42,773</u>	<u>159,835</u>
<b>INVESTING ACTIVITIES</b>		
Purchase of investments, net	(5,688)	(10,742)
Acquisition of capital assets	(14,349)	(32,626)
Loss on investments related to externally restricted endowments	31,839	19,238
Cash applied to investing activities	<u>11,802</u>	<u>(24,130)</u>
<b>FINANCING ACTIVITIES</b>		
Contributions to Endowment	1,500	500
Capital contributions	6,011	2,794
Loss on write down of externally restricted endowments	(31,839)	(19,238)
Cash generated through financing activities	<u>(24,328)</u>	<u>(15,944)</u>
Increase in cash and cash equivalents	30,247	119,761
Due from U of Calgary at beginning of year	754,810	635,049
Due from U of Calgary at end of year	<u>\$ 785,057</u>	<u>\$ 754,810</u>



## Financial Support

**F**inancial support for the programs of the Arctic Institute, Canadian Corporation, during 2003 was provided by the Government of Canada, the Government of Alberta, the University of Calgary, over 1500 members and subscribers, and the following corporate associates and sponsors:

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