



Arctic Institute of North America
ANNUAL REPORT 2006



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Message from the Chair of the AINA Board

2006 was certainly a banner year for the Arctic Institute of North America. Celebrating our 60th anniversary as an institute created by an Act of Parliament was noteworthy in and of itself; when combined with our 30th anniversary as part of the University of Calgary, it made for a very exciting year! I was pleased to Chair the Arctic Institute's Board of Directors for the third year, and am excited to report to you here about some of the exciting developments and accomplishments of the Arctic Institute in 2006.

Continuing in our endeavours to raise the profile of the Arctic Institute, 2006 presented us with many opportunities to connect with the broader community, both in Calgary and indeed, around the world. In March, the Institute was pleased to host a special film screening of John Houston's *Diet of Souls* in the Safari Lodge at the Calgary Zoo. More than 100 guests were treated to a captivating film presentation, followed by a question and answer session and cocktail reception with the filmmaker. In conjunction with the screening, John Houston also visited a Calgary elementary school and appeared on several local television news programs, providing yet more opportunities for a broader audience to learn about the Arctic Institute.

The month of June was the highlight of our year, in many ways, as the Arctic Institute was a regular fixture in local, national, and international news. Sponsoring a Mount Royal College student expedition to Baffin Island in early June raised our profile in other Calgary post-secondary institutions and provided a great opportunity for collaboration between seasoned northern scholars at the Arctic Institute and a new generation of students. Our support and coverage of the Mount Royal Expedition paved the way for an even more exciting event for the Arctic Institute – the first AINA-led scientific expedition in almost two decades. Executive Director Benoît Beauchamp and his colleague Steve Grasby took two graduate students to northern Ellesmere Island to study an unusual sulphur spring there. The media attention around the expedition was quite intense and provided us with a great opportunity to connect with a broader national and international community – all of whom saw the exciting work being undertaken by the Arctic Institute of North America.

Throughout the rest of 2006, we continued our efforts to make strong scientific, artistic, and cultural connections with other institutions and organizations. With a strong presence at the University of Calgary's Campus Fair, a sponsored talk and information booth at the Banff Mountain Festival, and the sponsorship and organization of the International Workshop on Arctic Parasitology, the Arctic Institute once again demonstrated its versatility and energy in a wide variety of research and community areas.

Of course in 2006 like every year, AINA was also driven by the strong flagship projects that have gained us respect for several decades. The multidisciplinary journal *Arctic* continues to be a great source of pride for AINA, leading the field of peer-reviewed journals on the North. In late 2006, a generous contribution from an AINA member and *Arctic* subscriber allowed us to focus on the digitization of back issues of *Arctic*, a project which will be completed in 2007. The Arctic Science and Technology Information System (ASTIS) is also growing in size and stature and is leading a prominent International Polar Year (IPY) project to archive all of the research publications derived from IPY projects in the coming years. The Kluane Lake Research Station, under the trusty supervision of Andy Williams, continues to be a premier research destination. And finally, the Photographic Archives and Research Project, under new management, entered a new phase with a new name – *The Photographic North* – demonstrating the Arctic Institute's commitment to seeing this important collection of historical photographs reach its full potential as a source of history, research, and visual culture.

Finally, I'd like to thank Ms. Liseanne Forand for her invaluable service to the Board in 2006. Ms. Forand will leave the Board in 2007 because of changing responsibilities in the Federal Government, but I thank her, on behalf of the Board, for her time, effort, and contributions. We wish her well in her new position.

As we stand on the threshold of the 4th International Polar Year (2007-08), interest in the North and in Northern issues will only continue to grow. I'm proud to say that the Arctic Institute is growing right along with it.

Michel Scott

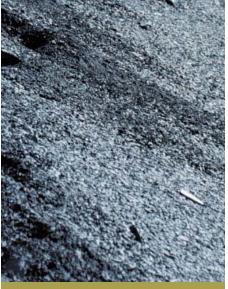
Chair, AINA Board of Directors













Message from the Executive Director

The year 2006 was very productive for the Arctic Institute of North America (AINA). Three Board of Directors' meetings were held, respectively in January, May, and November 2006, during which the Directors were presented with the five-year strategic and business plan designed to achieve the vision that had been developed the year before. The plan sets the tone as to where AINA will place its efforts and resources in years to come. It is highly ambitious as it aims to make AINA one of the world's premier university-based organizations devoted to Northern and Arctic knowledge. One step at the time, we have been making progress on all fronts and, in many cases, the accomplishments are nothing short of quantum leaps. As we moved forward, we also managed to secure additional sources of funding from new sponsors, adding to an already strong list of financial contributors the Institute can count on.

Ever since I took the helm of the Institute, one of my goals, indeed one of the cornerstones of the Vision, has been to rekindle and strengthen the bonds and linkages with our host, the University of Calgary (UofC). This has been done, and continues to be done, through continual contributions by AINA staff and research associates in the daily life of the university, whether through academic involvement, research initiatives, or well-publicized outreach events. UofC has a world-class roster of professors and students conducting Northern and Arctic research on a great many topics, ranging from climate to Arctic sovereignty. Generating goodwill all around us has enabled the Institute to tap into a remarkable intellectual pool with enormous potential for future collaborations.

Organizing AINA's research activities and initiatives into a clear and dynamic research program is also an objective of the Vision. As we do this, we will clarify AINA's relationship with its roster of research associates to the benefit of both the Institute and these very dedicated people who continue to contribute in the most positive manner to the advancement of Arctic knowledge. AINA has welcomed new research associates in 2006. We are looking forward to integrating their intellectual pursuits into the overall research program of the Institute. Among the many research activities under AINA's banner, I am particularly proud of the Institute's first expedition to Canada's High Arctic in more than two decades to study an unusual sulphur spring seeping out of a glacier on Ellesmere Island. Also noteworthy is the influx of new energy into the *Photographic North* project by AINA's Director of Communications, Dr. Dawn Johnston, whose business plan for the project was enthusiastically presented to, and received by, the Board of Directors at the November 2006 meeting. The plan is a treasure trove of fabulous ideas to launch the project along new and exciting direction under Dawn's leadership.

We have also been working very hard to increase the visibility of the Institute beyond the walls of the University of Calgary and to make sure AINA is recognized as an important source of expertise about the North and the Arctic. This effort has led to dozens of media appearances by our research associates, our university affiliates, and our staff, as the thirst for knowledgeable information about the North is growing with every passing day as we get closer to the International Polar Year. The North is hot and is under a perfect storm of converging issues, each of which receive media attention on a daily basis. Of note is the significant media coverage of our expedition to Ellesmere Island in July 2006, which was reported around the world in a variety of print and electronic news outlets.

Establishing partnerships and being an important player in the local, national and international networks of knowledge institutions devoted to, or interested by, Northern and Arctic studies has been another priority in 2006. From collaborating with local institutions such as the Calgary Zoo, Mount Royal College, and the Banff Mountain Festival, organizing and sponsoring the Third International Workshop on Arctic Parasitology (IWAP), and exploring linkages with established organizations such as the Canadian Circumpolar Institute (CCI) and the Canadian Polar Commission (CPC), just to name a few, AINA is positioning itself as a key player in the many networks devoted to the acquisition and dissemination of Arctic knowledge. In particular, much effort has been devoted to strengthen the bond between AINA's Canadian and U.S. corporations. To that end, Drs. Carl Benson and Matthew Sturm of the University of Alaska, Fairbanks, attended the January 2006 Board Meeting in Calgary and presented some interesting ideas as to how both sister corporations could work more closely. A number of models for future collaboration are being examined.

Reaching out beyond the chasse-gardé of intellectuals and participating in educational and learning initiatives both within and outside of UofC is another important goal for AINA. Dr. Robert MacDonald, one of our research associates, every year contributes to UofC's curriculum with several fascinating courses about the North and the Arctic. Among several educational outreach initiatives sponsored and organized by AINA in 2006, the crown jewel was without a doubt the remarkable presentation of John Houston's film *Diet of Souls* to a broad and enthusiastic audience last January. Likewise, AINA is now a strong presence at the ArcticNet Annual Meeting, the last installment of which was held in Victoria, British Columbia in December 2006. Renewing and augmenting our membership through the enrollment of young researchers is a priority for the Institute and meetings like the ArcticNet Annual Meeting are the perfect venues to tap into the next generation of Arctic enthusiasts.

AINA continues to be an important source of knowledge, information, and data about the North and the Arctic. This is accomplished through our flagship programs *Arctic* and ASTIS. As the world's premier multidisciplinary, peer-reviewed journal devoted to circumpolar knowledge, *Arctic* continues to be at the forefront of the latest developments in a wide variety of fields.













Through the truly excellent leadership of Dr. Karen McCullough, *Arctic* is destined to have an even larger presence in the world's intellectual sphere as a great many publications resulting from IPY initiatives will no doubt find a home in this excellent journal. IPY is also very much on the mind of Ross Goodwin, the tireless Manager of ASTIS (Arctic Science and Technology Information System), whose leading role in the IPY Publications Database is sure to place ASTIS on the world map. Ross and his dedicated team of information analysts (Pam Scowen, Lynne Howard and Lynda Howard) also play a major role in bridging AINA with many aboriginal communities in the North. Strengthening and expanding our community involvement in the North is indeed another important goal that AINA will pursue in the future.

Finally, AINA continues to be an important provider of logistic support in the North as it is the owner and custodian of the Kluane Lake Research Station (KLRS) in the Yukon Territory, which was in 2006 as busy as ever. KLRS is soundly managed by Andy Williams, whose multiple talents range from flying fixed-wing aircrafts in treacherous ice fields to maintaining and fixing diesel generators, not to mention being a hotelier extraordinaire. KLRS will be the focal point of several major IPY projects over the next few years. A major effort was put into renewing funding for the station, which was done through a still pending grant application to the Natural Sciences and Engineering Research Council of Canada (NSERC).

In closing, I would like to thank Ms. Sonja Hogg, AINA's Business Manager, who had to put in quite a few extra hours this year as she picked up some of the Membership duties while trying to make some sense out of the University of Calgary's new financial system. Sonja got help from the excellent Ms. Azin Sadr in the spring and summer of 2006. Among other accomplishments, Azin conducted a thorough inventory of AINA's art collection. It is because of dedicated staff like Sonja and Azin that our list of accomplishments for 2006 is something that we are all very proud of: hats off to all of you.

Benoît Beauchamp

Executive Director

AINA U.S. Corporation

The Arctic Institute of North America was founded jointly in Canada and the U.S. in 1945. It operated with a single board of governors until 1976 when it split into two corporations, one in each country. However, the chairman of each board is an ex-officio member of the other board, and there is only one Arctic Institute of North America (AINA).

The University of Alaska (UA), representing the three campuses: Fairbanks (UAF), Anchorage (UAA) and Juneau (UAS), has a memorandum of agreement on academic matters with the University of Calgary (UC) signed in the year 2000. AINA, working with the two universities, can enhance this. The U.S. Corporation of AINA is located in Fairbanks, at the University of Alaska Fairbanks (UAF). It receives office and secretarial support from the University.

Alaska was a Territory when the University of Alaska was founded in 1917, and residents of the Yukon Territory were given resident status for tuition at the university. Today, this resident status persists for the Yukon and has been extended to the Northwest Territories and Nunavut, as well as to British Columbia. AINA, as a binational organization, is devoted to maintaining and strengthening these ties, and hopes to include Alberta in the future.

The University of Alaska is interested in increasing communication within the Arctic community, and increasing the university's national and international visibility as a major Arctic research and teaching facility. It is also interested in developing international collaborations because so many Arctic issues cross national boundaries.

Since 1995 the U.S. and Canadian corporations have worked jointly to revive the Grant-in-Aid Program, which was one of the first AINA Programs in the 1940s. The program lapsed in the mid 1970s, but since it was reestablished it has operated as a joint Canadian-U.S. program administered by a binational committee, chaired by Dr. Erich Follmann of UAF and funded entirely from member donations.

In 2006 we sponsored the 12th and 13th Arctic Roundtables in Fairbanks in March and October respectively. A brief description of the Arctic Roundtable series was published in the September 2004 issue of *Arctic*. The subjects addressed have broad public appeal.

As part of the International Polar Year (IPY), the University of Alaska President, Mark Hamilton, established 13 IPY post-doctoral fellowships. In October, at the AINA Board of Governors meeting, the board members donated money to fund a two-year membership in AINA for each of the 13 post-doctoral fellows. AINA also joined the U.S. Arctic Research Commission and the University of Alaska Museum of the North in presenting a series of IPY lectures, which will run through 2007.

The U.S. and Canadian corporations of AINA continue to host the "Arctic Reception" at the Fall meeting of the American Geophysical Union (AGU). This reception, started by AINA, has been joined by several co-sponsors over the years. The annual reception helps the several hundred Arctic people attending the meeting find each other among the thousands present (14,000 in 2006) and is a highlight of the meeting for many.







Two members of the U.S. Board participated in the Canadian Board meeting in January 2006. AINA is both an international and a membership organization. It is also the oldest organization in North America dedicated to advancing knowledge about the Arctic. These unique assets are the foundations upon which we will continue to build.

2006 AINA News, Media, and Events Highlights

2006 was another high-profile year for the Arctic Institute of North America. The Institute and its multidisciplinary experts increasingly became the "voices of record" on northern issues, ranging from Arctic sovereignty to climate change. As International Polar Year approaches, public interest in the North has become stronger than ever, and the Arctic Institute has secured its place as one of the top "qo-to" organizations for expert comments in the media.

Two issues in 2006 were particularly newsworthy. The pros and cons of the Calgary Zoo's Arctic Shores exhibit, continued to draw public and media interest – both in favour of the proposal of the world's largest Arctic exhibit, and in opposition to it. AINA's Executive Director, Benoît Beauchamp, was called often as a commentator on the challenges and benefits of exhibiting Artic animals in a zoo environment, and as the plans for Arctic Shores develop, we expect the media attention to continue.

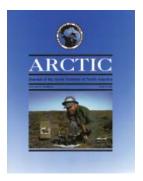
Dr. Beauchamp and his colleague, Dr. Steve Grasby of the Geological Survey of Canada, continued the media attention with the first Arctic Institute Expedition in almost two decades. Their research trip to northern Ellesmere Island to study an unusual sulphur spring drew a great deal of news interest, particularly due to its potential parallel to the environment on the surface of Jupiter's moon, Europa. With some clever media "spin," the Arctic Institute's research on "alien-like glaciers" was an attention-grabber in local, national, and international news!

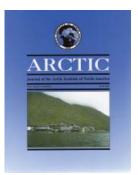
Arctic Institute-sponsored events in 2006 also increased our connections to community. Our booths at the University of Calgary's Campus Fair and the Banff Mountain Festival allowed us to meet a wider cross section of the public than ever before, and our sponsorship of scholarly events such as the Mount Royal Arctic Expedition and the International Workshop on Arctic Parasitology further grounded our academic connections with other research organizations.

All in all, it was a very productive year for the "public" face of the Arctic Institute – a role which will only increase with the launch of International Polar Year in March 2007.

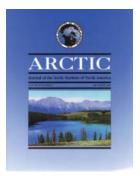
Arctic

The year 2006 marked a major milestone in *Arctic's* history, with the scanning of all 181 back issues that had been printed before production of the journal by desktop publishing. The Spring 1948 issue to the June 1994 issue comprised about 18,000 pages that were digitized by WOW Document Management Services Ltd. of Kingston, Ontario. Each digitized issue was delivered as a single Portable Document File, which now needs to be broken up into individual files for each article, note, profile, commentary and obituary. Once this work is completed, all files will be freely available in PDF format on the *Arctic* Contents page of the AINA website. We are also mounting the Research Reports and Northern News from the early issues. Once an issue is available online, a PDF icon will appear beside its name on the *Arctic* Contents page. We expect that all of the back issues will be available online by March 2007. We are deeply grateful to AINA member Joan S. Tait, whose generous private donation to the Arctic Institute provided a substantial portion of the funding for the scanning of *Arctic* back issues. Having free access to all articles published in *Arctic* since 1948 will be a tremendous resource for Northern researchers, students, and all those interested in the Arctic regions of the world. We are especially pleased to see the completion of this project in time for the start of the 4th International Polar Year 2007–08.



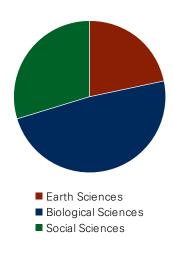






The four issues of *Arctic* published in 2006 included 35 research articles, two research notes, 27 book reviews, two obituaries, one Arctic profile, four letters to the editor and two commentaries. The pie chart shows the breakdown of articles and research notes by major disciplinary category. Articles in the social sciences and earth sciences both increased, while the percentage of biological science papers published decreased.

Six essays were published in the InfoNorth (IN) sections in 2006. The March IN presented two essays from the 2005 winners of the Jennifer Robinson and Lorraine Allison Scholarships. Shawn Morrison from the University of Alberta wrote about his research on the foraging ecology and population dynamics of collared pikas in the southwestern Yukon and Jane Kirk, also from the University of Alberta, described her work on potential sources of monomethyl mercury in Arctic seawater. In the June 2006 IN, geologist Christopher Harrison laid out the obstacles to the development of hydrocarbon resources in Canada's Arctic Islands. In September, Grete Hovelsrud and Igor Krupnik provided an update on social science research planned for the upcoming International Polar Year. Research essays by our 2006 scholarship winners Jennie McLaren and Mark Edwards were published in the December 2006 InfoNorth section.



Arctic Science and Technology Information System

The Arctic Science and Technology Information System (ASTIS) is Canada's Northern database. ASTIS contains 61,000 records describing publications and research projects about Northern Canada. ASTIS includes all subjects, has been in operation since 1978 and is funded through contract work and donations.











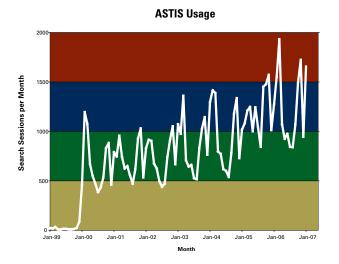


The ASTIS database is available for free on the Arctic Institute's website. ASTIS is searchable from a Simple Search page, from an Advanced Search page and by clicking on hyperlinks in database records. If the full text of a publication is available on the Web, the ASTIS record will provide a link to 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.

The ASTIS database contains 14,000 records describing research projects conducted in Canada's three Northern territories since 1974. These records are based on information provided by the organizations that license all territorial research: the Aurora Research Institute, the Central and Arctic Region of Fisheries and Oceans Canada, the Northwest Territories Department of Environment and Natural Resources, the Nunavut Department of Culture, Language, Elders and Youth, the Nunavut Department of Environment, the Nunavut Research Institute, the Prince of Wales Northern Heritage Centre and the Yukon Heritage Resources Unit.

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 page of the Institute's website provides access to 11 such databases. ASTIS is also available with the world's other major polar databases in National Information Services Corporation's international Arctic & Antarctic Regions database, which is available on a subscription basis on CD-ROM and the Web.





for the Nunavut Planning Commission on the *Nunavut Environmental Database*; work for Indian and Northern Affairs Canada (INAC) on the *Hydrocarbon Impacts database*; work with Makivik Corporation, INAC, the Canadian Circumpolar Institute and the Centre d'études nordiques on the *Nunavik Bibliography*; work with the Inuvialuit Joint Secretariat on the *Inuvialuit Settlement Region Database* funded by Shell Canada and Devon Canada; work for the INAC Land and Water Management Directorate on the *Northern Granular Resources Bibliographic Database*; work for the INAC Northern Contaminants Program on the *NCP Publications Database*; work for the Yukon Biodiversity Working Group on the *Yukon Biodiversity Database* funded by Foothills Pipe Lines and the Yukon Government; and work for the Northern Canadian petroleum industry to index publications about the Northwest Territories and Beaufort Sea.

New ASTIS projects that began in 2006 included the development of the *Circumpolar Health Bibliographic Database* for the Canadian Institutes of Health Research Team in Circumpolar Chronic Disease Prevention; and work with the American Geological Institute's Cold Regions Bibliography Project, the Scott Polar Research Institute Library, and National Information Services Corporation on the *International Polar Year Publications Database (IPYPD)*. The Canadian component of the IPYPD is funded by EnCana Corporation.

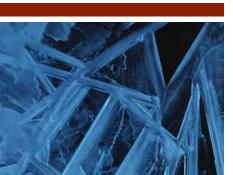
ASTIS also worked on several internal Arctic Institute projects in 2006, including the *Kluane Lake Research Station Bibliography*, the *Arctic* Contents and *Arctic* Search pages of the Institute website; and maintenance of the Institute's publications server which makes more than 3,000 publications available on the Web as PDF files.

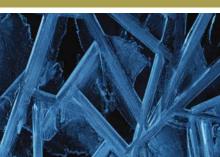
More than 7,000 ASTIS records now provide links to PDF files using URLs or DOIs. As shown in the accompanying graph on page 11, ASTIS usage continues to increase.

Kluane Lake Research Station

For more than 40 years, the Kluane Lake Research Station (KLRS) has been one of the most heavily used field research stations in Northern Canada. The significance and diversity of research opportunities combined with comparative logistic simplicity are unrivalled. KLRS provides an entry-point to the Icefield Ranges of the St. Elias Mountains, which comprise Canada's highest mountains and largest glaciers. The extreme elevation difference (> 5,000 m) between Kluane Lake and the crest of the St. Elias Mountains establishes a strong environmental gradient and creates exceptionally diverse research opportunities within a small geographical area. KLRS has grown in importance over the past decade as it remains one of the few research bases still in operation in Northern Canada, at a time when all eyes are on the Arctic through the International Polar















Year (IPY) and buoyed by a strong desire expressed by the Canadian government to increase our scientific presence in the North.

KLRS' record of supporting scientific excellence is illustrated both by the calibre of science conducted there and by the geographically diverse institutional bases of principal investigators from several Canadian universities. KLRS will be the grounding stage of both several Canada Research Chairs and a major IPY project over the next five years. KLRS is also a focal point for international collaboration. KLRS supports an ambitious multidisciplinary study of climate change in the western sub-Arctic mountains of Canada, focusing on physical and biological processes, studies of contaminants, paleo-environments and modeling. A new cohort of researchers has established research programs at KLRS, ensuring a dynamic future for the station. Funds from partners, universities and NSERC will be used for various infrastructure upgrades. There will also



be a strong emphasis on training through field courses and through collaboration with Northern communities, local, territorial and federal government agencies, and with the Kluane National Park. Close partnerships are being developed with the University of Alaska in Fairbanks and with the Yukon College of Whitehorse and much effort has been devoted to reaching out to local aboriginal communities.



Highlights for 2006 include the completion of a new laboratory building on the KLRS premises, one that was beautifully decorated by Ms. Sabine Nouvet, a local artist. A new illustrated issue of the KLRS Newsletter was produced through the hard work of Ryan Danby of the University of Alberta. The 2006 field season brought its usual large number of researchers and students conducting a wide variety of projects from the lake level to the nearby mountain peaks. Field schools involving dozens of students were staged from the base. Renewed funding for KLRS was applied for in 2006 through the Major Resources Support (MRS) Program of the Natural Sciences and Engineering Research Council of Canada (NSERC). The MRS program is an offspring of the old Major Facility Access (MFA) program that provided the bulk of KLRS funding over the past three years. A significant advantage of the MRS program is that funding can be granted for up to five years, which would provide welcome financial stability. User fees and contributions from a number of universities will make up the difference. Five Canadian universities (Calgary, Alberta, Ottawa, Toronto, and British Columbia) are committed to directly support KLRS, providing the MRS application is successful.

The Photographic North Research • Archives • Visual Culture

Formerly known as the Photographic Archives and Research Project (PARP), AINA's substantial photo collection is heading in an exciting new direction. In 2006, the project came under new management by AINA's Director of Communications, Dr. Dawn Johnston, and was relaunched to the Board of Directors as *The Photographic North*.

The new structure of the project has three main components: digitization, research, and publication. Up to and including 2006, only 1,000 of the collection's 8,000 images had been digitized. By the end of 2007, the remainder of the collection will be digitized, archived, and fully available online. In the autumn of 2007, with the help of a fully funded doctoral student, the research component of the project will begin. We anticipate that with funding success, by 2009 we will be prepared to publish both a scholarly text and a coffee-table book highlighting the images and exploring the visual culture of this very rich collection.

Northern Lights Series

The mandate of this joint AINA and University of Calgary Press 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. William Barr continued as series editor for 2006.

One new title was published in 2006 as part of the Northern Lights Series:

No. 9: Tanana and Chandalar: The Alaska Field Journals of Robert A. McKennan, edited by Craig Mishler and William E. Simeone. (Co-published with the University of Alaska Press).













Scholarships

The 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 \$5,000, is awarded for academic excellence in field-oriented research in Northern biology. The *Lorraine Allison Scholarship*, valued at \$2,000, 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 \$1,000, is open to Canadian Aboriginal students who intend to take post-secondary training in education, environmental studies, traditional knowledge, or telecommunications.

Jennie McLaren, a doctoral candidate in plant ecology at the University of British Columbia, was the 2006 winner of the Jennifer Robinson Scholarship. For her doctoral research, Ms. McLaren is investigating the effects of biodiversity loss on ecosystem function through a series of plant removal experiments at a dry grassland site near Kluane Lake in the southwestern Yukon.

The winner of the 2006 Lorraine Allison Scholarship was once again a student from the Department of Biological Sciences at the University of Alberta: **Mark Edwards**. Mr. Edwards' research focuses on the habitat and movement ecology of grizzly bears in the Mackenzie Delta region North of Inuvik to the Beaufort Sea.

The research essays by Ms. McLaren and Mr. Edwards are available on the *Arctic* Contents page at <www.arctic.ucalgary.ca/sections.php?sid=publications&cid=arctic_contents>.

David O'Soup was the 2006 recipient of the Jim Bourque Scholarship. Originally from the Key First Nation in Norquay, Saskatchewan, Mr. O'Soup is currently enrolled at the University of Saskatchewan in Saskatoon in the Indian Teacher Education Program, a four-year program designed for First Nations students interested in obtaining a Bachelor of Education degree.

Northern Scientific Training Program

Since 1979, the Arctic Institute of North America has adjudicated and administered the Northern Scientific Training Program (NSTP) grants. First established in 1961 by the Department of Indian Affairs and Northern Development (now Indian and Northern Affairs Canada), the NSTP grants are designed to encourage young scientists in Canada to undertake research in the North by offsetting the significant expenses of Northern travel.

The 2006 NSTP committee was chaired by AINA Research Associate Brian Moorman, and included John Post, Len Hills, Peter Dawson, Richard Davis, and C.C. Chinnappa, with administrative support provided by AINA Business Manager Sonja Hogg. The Arctic Institute was pleased to award NSTP grants to the following 12 students undertaking undergraduate and graduate research.

Northern Scientific Training Program Grant Recipients

Brent Else	Darcy Ippolito
Kathleen Faccia	Randall Scharien
Torsten Geldsetzer	Jennifer Talerico
Vanessa Gurr	Adrienne Tivy
Gwen Healey	Matthew Walls
Stephen Howell	Andrea Waters-Rist

AINA Library

The Arctic Institute Library collection continues to grow through the purchase of books and serials by the University of Calgary Library, through the continued receipt of polar journals in exchange for the journal *Arctic* (supplied by the Arctic Institute for complimentary exchanges), and through donations. During the 2006 fiscal cycle, 40 new titles were ordered through the Northern Studies fund including seven electronic books. Research support was further enhanced by the addition of donated materials to the collection. A concerted effort has been made to add materials previously housed in the Pipeline Room to the circulating collection. With the assistance of Bibliographic Services this year, over 1,500 copy records were added, with 716 of the items being indexed in ASTIS.



AINA Grant-in-Aid Program

Re-established in 1995, largely through the efforts of the AINA U.S. Corporation, the Grant-in-Aid program is funded by annual contributions from the membership. All contributions are distributed directly to recipients; none are used for administrative purposes. In 2006, our volunteer Grant-in-Aid Committee — **Stephen Braund, Erich Follmann, Peter Johnson**, and **Matthew Sturm** — adjudicated 35 applications submitted for Grant-in-Aid Awards and awarded grants to seven students representing universities in Canada, the United States, and England. The recipients of the 2006 awards are as follows:

- **Peter Evans**, Cambridge University, is studying the transformations of indigenous resistance and identity in Northern Labrador from 1947 to the present;
- Jennie McLaren, University of British Columbia, is researching the effects of plant functional groups on vegetation dynamics and ecosystem properties;
- Rob Lukens, Temple University, is looking at Arctic exploration and the making of modern America;
- **Jessica Wu**, University of Guelph, is examining dental enamel hypoplasia (DEH) in the 'Bluenose' herds of barren-ground caribou (*Rangifer tarandus groenlandicus*);
- **Douglas Wacker**, University of Washington, is investigating the range expansion and physiological and behavioral flexibility in the territoriality of male Northern red fox sparrows in Arctic Alaska;











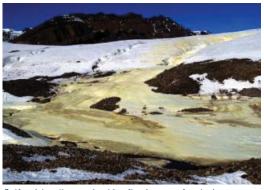


- B. Britten Harter, University of Manitoba, is studying the effects of global warming and the retreat of Arctic pack ice on the daily chick growth and breeding success of the black guillemot (Cepphus grylle);
- Lea Randall, University of Calgary, is researching the response of insectivorous mammals to insect infestation in the Northern boreal forest

Information on the Grant-in-Aid application procedures and deadlines is available on the Institute's website at www.arctic.ucalgary.ca.

AINA's 2006 Research Expedition to Ellesmere Island

For the first time in recent memory, the Arctic Institute of North America organized and conducted a field expedition to Canada's High Arctic. Dr. Benoît Beauchamp, AINA's Executive Director and Dr. Steve Grasby, Research Scientist with the Geological Survey of Canada (GSC) studied a unique glacial spring on Northern Ellesmere Island, just 9° south of Earth's North Pole. They were accompanied by graduate students Damhnait Gleeson of the University of Colorado and Jet Propulsion Laboratory, and Marie-Eve Caron of the University of Calgary. The expedition received considerable media attention for the presence of sulphur-transforming bacteria living within and beneath the ice and the analogy that can be drawn with potential life on other planets, especially Europa, a moon of Jupiter that has an



Sulfur-rich yellow-stained ice flowing out of a glacier



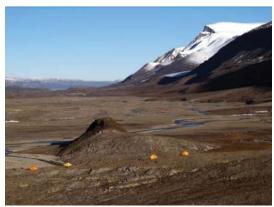
Caron walking back to camp

ocean of liquid water entirely covered with ice. The expedition took place from late June to mid-July 2006. It was funded by the Canadian Space Agency, the Polar Continental Shelf Project, the Planetary Society, and the Geological Survey of Canada.

The most startling observation was the large volume of the discharge on top of the glacier and the considerable area of sulphur-stained yellow

ice both on the glacier and on the river ice nearby, attesting to a remarkably dynamic system. The smell of rotten eggs, indicative of potentially lethal hydrogen sulphide, was, at times, almost unbearable. The research team spent considerable time sampling both the water discharge and the mineral deposits in and around the spring.





Gleeson and Caron handling samples

Camp site

The research team also assessed the geology of the surrounding area in an effort to understand the complexity of the spring's "plumbing" system and to find the cause of its unique occurrence. In addition, Gleeson performed multiple spectral measurements of the yellow-stained ice in an effort to "educate" satellites to recognize such springs from outer space. The project is now awaiting results from laboratory analyses that will tell researchers the extent and vitality of the bacterial population within the ice.

Selected 2006 Publications of AINA Research Associates

BARR, W. 2006. Belgian Antarctic (*Belgica*) Expedition (1897–1899). In: Riffenburgh, B., ed. Encyclopedia of the Antarctic. New York and London: Routledge. 136–137.

BARR, W. 2006. German South Polar *(Deutschland)* Expedition (1911-1912). In: Riffenburgh, B., ed. Encyclopedia of the Antarctic. New York and London: Routledge. 453–455.

BARR, W. 2006. International Polar Years. In: Riffenburgh, B., ed. Encyclopedia of the Antarctic. New York and London: Routledge. 537–539.













DAWSON, P. 2006. Space, place and the rise of 'urbanism' in the Canadian Arctic. In: Robertson, E., Seibert, J., Fernandez, D., and Zender, M., eds. Space and spatial analysis in archaeology. Calgary: University of Calgary Press/University of New Mexico Press.

DAWSON, P., and Levy, R.M. 2006. Constructing a 3D computer model of a Thule whalebone house using laser scanning technology. Journal of Field Archaeology 30(2005):443–455.

Levy, R.M and **DAWSON**, **P**. 2006. Reconstructing a Thule whalebone house using 3D imaging. IEEE MultiMedia 13(2):78–83.

HOLDSWORTH, G., Demuth, M.N., and Beck, T.M.H. 2006. Radar measurements of ice thickness on Peyto Glacier, Alberta – geophysical and climatic implications. In: Demuth, M.N., Munro, D.S., and Young, G.J., eds. Peyto Glacier: One century of science. Science Report 8. Saskatoon: National Hydrology Research Institute. 59–82.

HOOGENSEN, G., and Stuvøy, K. 2006. Gender, human security and resistance. Security Dialogue 37(2):207–228.

HOOGENSEN, G., and Solheim, B.O. 2006. Women in power: World leaders since 1960. Westport, Connecticut: Praeger Publishers.

HOOGENSEN, G. 2006. A human security perspective' In: Sloan, L., ed. Women and natural resource management in the rural north: Arctic Council Sustainable Development Working Group 2004–2006. Norfold, Norway: Forlaget Nora. 10–11.

GUNN, A., **MILLER, F.L.**, BARRY, S.J., and BUCHAN, A. 2006. A near-total decline in caribou on Prince of Wales, Somerset and Russell islands, Canadian Arctic. Arctic 59(1):1–13.

REIMERS, E., **MILLER, F.L.**, EFTESTØL, S., COLMAN, J.E., AND DAHLE, B. 2006. Flight by feral reindeer *Rangifer tarandus tarandus* in response to a directly approaching human on foot or on skis. Wildlife Biology 12(3):367–377.

THOMSON, C., and SPROULL THOMSON, J. 2006. Arctic cruise ship island tourism. In: Baldacchino, G., ed. Extreme tourism: Lessons from the world's cold water islands. Oxford: Elsevier. 168–178.

HOWELL, S.E.L., TIVY, A., **YACKEL, J.J.**, and SCHARIEN, R.K. 2006. Application of a SeaWinds/QuikSCAT sea ice melt algorithm for assessing melt dynamics in the Canadian Arctic Archipelago. Journal of Geophysical Research 111-C07025: doi:10.1029/2005JC003193.

Research Associates

Research associates are appointed by the Board of Directors. During 2006 the Institute had more than 50 research associates, covering various aspects of research in the natural, physical, and social sciences, as well as the humanities and fine arts. 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 and Education."

- Don Albright, Biology
- · Cindy Allen, Dene Musicology
- Charles Arnold, Archaeology and Museology
- William Barr, Geography and History
- Margaret Bertulli, Archaeology
- Ellen Bielawski, Anthropology
- Lloyd Binder, Economic Development
- Jean Blodgett, Art
- Dr. Alexander Braun, Geomatics and Engineering
- Rai Brown McCutcheon, Gender Studies
- Leo Bushman, Art
- Dave Button, Education
- Garry K.C. Clarke, Glaciology
- Helen Corbett, Film and Journalism
- Peter C. Dawson, Archaeology
- Ken de la Barre, Human Geography
- Mark O. Dickerson, Political Science
- Elmer Ghostkeeper, Aboriginal Studies
- Jeff Gilmour, Law
- John Graham, Social Work
- Norman Hallendy, Ethnohistory
- Gerald Holdsworth, Glaciology
- Gunhild Hoogensen, Political Science
- Robert Huebert, Political Science
- Martha Johnson, Anthropology
- Peter G. Johnson, Geography
- Karim-Aly Kassam, Arctic Social Science
- Barbara Kingscote, Veterinary Medicine
- Heidi E. Klein, Environmental Planning

- Dr. Susan Kutz, Veterinary Medicine
- P. Whitney Lackenbauer, History
- Nic Larter, Zoology
- Allice Legat, Anthropology
- David Lertzman, Aboriginal Studies
- Robert MacDonald, History
- · Sean Maher, Anthropology
- Constance Martin, Art History and Curator
- Dr. Arthur Mason, Anthropology
- Virginia McGowan, Health Sciences
- Robert McPherson, Geology and History
- Frank Miller, Wildlife Biology
- Magdalena Muir, Law, Environment and Resource Management
- Dave Norton, Ecology
- · Martin Raillard, Arctic Ecology
- Alan Smart, Anthropology
- Mary Leeds Stapleton, History and Planning
- Susanne Swibold, Film and Journalism
- Darielle Talarico, Ecotourism
- Callum Thomson, Archaeology and Expedition Cruise Tourism
- 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, and Management
- John James Yackel, Geography
- José Zorrilla, Interdisciplinary













Financial Support

Financial support for the programs of the Arctic Institute, Canadian Corporation, during 2006 was provided by the Government of Canada, the Government of Alberta, the University of Calgary, the University of Alaska, over 1,500 members and subscribers, and the following corporate associates and sponsors:

- ATCO Frontec
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- ConocoPhillips Canada Resources Ltd.
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- The Garvey Family
- TransCanada PipeLines Limited







Financial Report for the Fiscal Year Ended March 31, 2006 (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. 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 \$27,000 (2006) and \$32,765 (2005) 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 Advanced Education, through the University. The University has also provided substantial in-kind

Statement of Financial Position as at March 31, 2006

	2006	2005
ASSETS		
Current assets		
Due from University of Calgary	\$ 787,282	\$ 832,357
Petty cash	400	400
Accounts receivable	97,933	71,427
Inventory	14,332	15,607
Prepaid expenses	1,740	2,982
Tropana expenses	901,687	922,773
	301,007	022,110
Investments	1,188,646	1,105,235
Capital assets and collections	600,365	587,215
	\$ 2,690,698	\$2,615,223
LIABILITIES AND NET ASSETS		
Current liabilities		
Accounts payable and accrued charges	\$ 89,216	\$ 68,083
Deferred revenue	63,641	84,633
Deferred contributions	115,149	116,390
	268,006	269,106
Unamortized deferred capital contributions	79,852	55,196
Net assets		
Unrestricted net assets	1,255,802	1,193,102
Investment in capital assets and collections	520,513	532,019
Internally restricted net assets	133,249	163,942
Endowments	433,276	401,858
	2,342,840	2,290,921
	\$ 2,690,698	\$2,615,223

Statement of Revenue and Expense for the Year Ended March 31, 2006

	2006	2005
Revenue		
University of Calgary and Government grants	\$ 407,592	\$ 382,013
Sales of services and products	361,562	438,650
Donations and other grants	207,283	249,228
Investment Income	144,770	77,955
Earned capital contributions	4,621	6,094
	1,125,828	1,153,940
Expense		
Salaries	641,930	549,185
Benefits	101,566	73,499
Materials	283,870	337,750
Grants, scholarships and awards	22,135	27,600
Amortization of capital assets	20,299	22,188
Travel and meeting	24,021	29,776
	1,093,821	1,039,998
Excess of revenue over expense	\$ 32,007	\$ 113,942

Statement of Cash Flows for the Year Ended March 31, 2006

	2006	2005
Cash provided from (used in):		
Operating Activities		
Excess of revenue over expense	\$ 32,007	\$ 113,942
Items not affecting cash flow:		
Amortization of capital assets	20,299	22,188
Amortization of deferred capital contributions	(4,621)	(6,094)
(Gain) on non-endowed and internally restricted		
endowment investments	(63,500)	(24,687)
Net change in non-cash working capital	(25,089)	78,816
Cash (applied to) generated from operating activities	(40,904)	184,165
Investing Activities		
Purchase of capital assets, net	(33,449)	(52,130)
Contribution of non-amortizable assets	-	2,500
Increase in long-term investments, net	(769)	(103,663)
(Gain) on investments related to externally restricted		
endowments	(19,142)	(7,583)
Cash applied to investing activities	(53,360)	(160,876)
Financing Activities:		
Endowment contributions	770	-
Capital contributions	29,277	30,905
Gain on externally restricted endowments	19,142	-
Cash generated through financing activities	49,189	30,905
(Decrease) Increase in cash and cash equivalents	(45,075)	54,194
Due from University of Calgary at beginning of year	832,357	778,163
Due from University of Calgary at end of year	\$ 787,282	\$ 832,357
, , , , , , , , , , , , , , , , , , ,		, , , , , ,
Net change in non-cash working capital:		
Accounts receivable decrease (increase)	\$ (26,506)	\$ 18,526
Inventory decrease	1,275	3,605
Prepaid expenses decrease	1,242	6,506
Accounts payable increase	21,133	9,659
Deferred revenue increase (decrease)	(20,992)	4,423
Deferred contributions increase (decrease)	(1,241)	36,097
(400.000)	\$ (25,089)	\$ 78,816



Expiry Date ____/___

Signature _

Arctic Institute of North AmericaMEMBERSHIP APPLICATION

Thank you for your interest in becoming a member of the Arctic Institute of North America. The only criterion for membership in AINA is an interest in the North. Members receive the quarterly journal *Arctic* while supporting a vibrant organization devoted to the dissemination of Arctic research and knowledge.

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