

UNIVERSITY OF  
CALGARY

# Arctic Institute of North America

ANNUAL REPORT 2013



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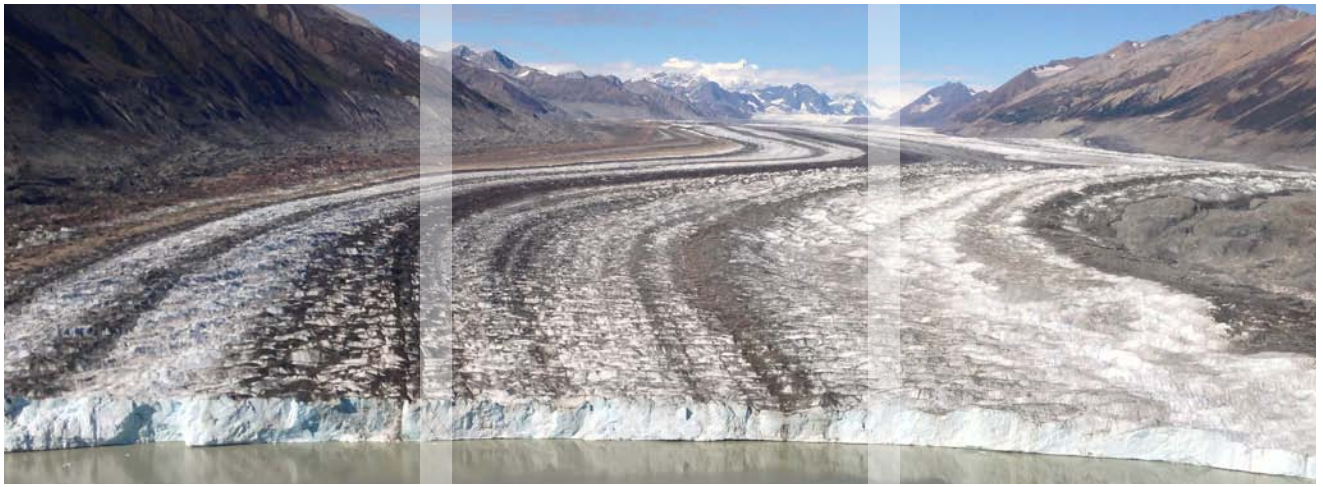
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## Message from the Executive Director



THIS HAS BEEN AN EXCITING YEAR AT THE Arctic Institute of North America and an exciting year for me personally. Since my return to Canada in July after many years in Alaska, it has been my great privilege to assume the role of Executive Director of AINA, and a real honour to follow in the footsteps of so many others who have led the Institute since 1945. Moreover, it is my very good fortune to work with such a fine staff and a Board of Directors, all of whom are willing to head boldly into the future with enthusiasm and energy as we realize AINA's vision for advancing knowledge about a changing North.

The North, as always, remains dynamic and compelling—a place where change is constant and life filled with risk and reward. Yet today, change in the North is unprecedented and accelerating across the physical, biological, and human systems. It is in this context that AINA steps forward to meet the challenge of understanding a rapidly changing North in a changing world. We are setting a course for the future that builds on our rich history of research and education and our longstanding partnerships with northern peoples and institutions across Canada and around the circumpolar world. This next phase in the life of the Arctic Institute will see a renewed emphasis on growing relationships that address the interests and needs not just of the research community, but of northern peoples and Canadians more broadly. This year we will release a new Strategic Plan and Implementation Strategy for AINA. This plan lays out our institutional goals and focal areas for building capacity and integrating research, education, and public engagement. It also identifies mechanisms for implementation and highlights programs that are already underway—all of which will help us to fulfill our broad mandate.

Our institutional pillars are strong. The Kluane Lake Research Station (KLRS) continues to enable leading scientific research and, with support from the W. Garfield Weston Foundation, we are operating at full capacity, expanding our scientific infrastructure, and improving our communication capabilities. I'd like to thank our dedicated Station Managers Sian Williams and Lance Goodwin for keeping KLRS running and in fine condition, and I'd especially like to acknowledge Sian for her willingness to travel the planet with me as we work to make KLRS a leading light among northern research facilities. I'd also like to welcome Michael Schmidt to AINA as the Science Coordinator for KLRS. Mike comes to us from the Geological Survey of Canada, and we are pleased to have him on board to assist us with the instrumentation of our station and the growth of our research partnerships.

The journal *Arctic*, as always, flourishes under the expert guidance of Karen McCullough. I am pleased to announce that in 2014 *Arctic* will publish a special issue of papers from the inaugural Arctic Observing Summit 2013 held in Vancouver. The Summit is a biennial forum for exchange and discussion of information critical to building and sustaining an integrated, multi-domain observing system of pan-Arctic scale. We hope that *Arctic* will become the permanent venue for the publication of scholarly papers emerging from future Summits, broadening both the readership of the journal and its content.

The Arctic Science and Technology Information System (ASTIS) is also growing, with established connections to other important polar data



management systems and an infusion of energy stemming from our recently funded Arctic Connect project. ASTIS Manager Shannon Vossepoel has worked tirelessly with our partners in Geomatics Engineering to build a new network for Arctic research and information sharing that incorporates ASTIS data into a geospatial platform and that connects to research at KLRS, Arctic research at the University of Calgary, and the activities of our many research associates and collaborators. Arctic Connect promises to enhance significantly the ways in which AINA communicates and makes scholarly information available to our many stakeholders, and we look forward to launching it in 2014.

We are pleased to have a strong partnership with the Office of the Vice President of Research at the University of Calgary. With VPR Ed McCauley's support, we are transitioning into a leadership role for many of the Arctic and northern-related activities on campus, and we are working to establish strong national and international collaborations both for AINA and for the University. For example, this year AINA partnered with Environment Canada to consider ways in which the Arctic Council's Conservation of Arctic Flora and Fauna (CAFF) Arctic Terrestrial Biodiversity Monitoring Plan might be implemented in Canada, and we opened our doors to host the Program Office for the International Study of Arctic Change (ISAC). We have established a strong presence at national and international Arctic venues, such as the annual meetings of the Association of Canadian Universities for Northern Studies, ArcticNet, and the American Geophysical Union, as well as the International Congress of Arctic Social Sciences and Arctic Science Summit Week. I thank Melanie Paulson, Karen McCullough, Sian Williams, and Shannon Vossepoel for filling in for me at various times when it became apparent that I couldn't be at opposite sides of the circumpolar North at the same time.

Our information analysts Lynne and Linda Howard ensure that ASTIS records remain current, and Ross Goodwin, through sacrificing his hard-earned retirement, continues to help out there and with other ASTIS-related matters. We are pleased to have Vinay Radjev join us as a research assistant and help us to develop plans for a virtual centre for the exploration of northern culture and heritage. I'm looking forward to 2014, and an even bigger year, as we add to our staff with a host of post-doctoral fellows, and if everything goes according to plan, new support for KLRS and ASTIS and for initiatives in education and outreach and basic research.

In closing, I'd like to acknowledge Peter Schledermann, Benoît Beauchamp, Peter Dawson, and Shawn Marshall—all of whom have served as AINA Executive Directors or Acting Directors. They have helped me ease into the role by providing excellent advice and critical background information that has made my job so much easier this first year. Finally, I'd like to thank three people in particular: First Mary Li, our Institute Manager, for working closely with me to overhaul our system of money management and patiently walking me through the sometimes arcane systems of operations that are often in place at large institutions; second, AINA Board Chair Henry Sykes, for insight and support above and beyond; and third, Melanie Paulson, our Administrative Assistant, who keeps the ball rolling, me on schedule and sane, and everyone else in line.

**Maribeth S. Murray, PhD**, Executive Director

## Message from the Chair



WELCOME TO THE 2013 ANNUAL REPORT OF THE Arctic Institute of North America. The past year has been quite eventful for the Institute. For at least two years, I have been promising to introduce you to our new Executive Director. I am extremely pleased that I can finally do so. Dr. Maribeth Murray is a Canadian who comes to us via the University of Alaska Fairbanks. Without meaning to sound trite, the process may have taken a long time, but the result was worth the wait. I believe we have found an executive director with the right combination of academic achievements and organizational skills needed to propel the Arctic Institute forward.

One enormous advantage of the process that we undertook was that it engaged the University of Calgary in the search in a meaningful way, with the result that the University today, I believe, is fully committed to the success of the Arctic Institute. I would like to thank the University of Calgary administration and the entire search committee both personally and on behalf of the Board. In particular, I thank Dr. Ed McCauley, Vice-President (Research), and his Associate Vice-President, Dr. Annie Katzenberg, both for their hard work in getting this appointment across the finish line and for their vision in setting Dr. Murray up for success in her new role.

I would also be remiss if I did not again extend the thanks of the Board to Shawn Marshall and Peter Dawson, both professors at the University of Calgary, who served as interim executive directors while our search was underway. Both did far more than could reasonably have been expected of persons in that position, and we are very grateful to them.

Our “continuing operations,” if I may be permitted to call them that, go on improving and impressing every year. Our quarterly research journal *Arctic* has had another excellent year under the leadership of Karen McCullough. The level of interest in Arctic-related issues is such that there is no difficulty in obtaining papers to publish in *Arctic*; on the contrary, it is difficult to limit ourselves to only four issues per year.





We continue to upgrade and improve the Kluane Lake Research Station (KLRS), where a great deal of very important work has been done for five decades. We intend to continue to improve this facility, and we are fortunate to have obtained grants for this purpose. In particular, we thank the W. Garfield Weston Foundation for its support of basic operations at KLRS. We have recently published a set of papers celebrating the 50th anniversary of the research station, which are freely available on our website at <http://arctic.journalhosting.ucalgary.ca/arctic/index.php/arctic/issue/view/275>.

Our Arctic Speaker Series continues to attract both interesting speakers and sizeable audiences. While these lectures are generally held at the University of Calgary, we also post them on our website, and I commend them to you. The last speaker in our most recent Speaker Series was our new executive director, Maribeth Murray, and if you have not yet met her, you can see her lecture on our website.

I would be remiss if I did not mention our staff, who have persevered through times of uncertainty. On behalf of the board, I would like to thank them for their hard work and commitment in the past year. We are very grateful to them.

Change at the top generally means more change is on the way, and I expect AINA is no exception. Maribeth's enthusiasm for her new position is infectious, and her plans for the Institute are impressive. With that in mind, I look to the future with a great deal of optimism, and I look forward to sharing that future with you.

**Henry W. Sykes, QC, Chair of the Board**





# AINA US Corporation Report

2013 MARKED AN IMPORTANT YEAR for the U.S. Corporation of the Arctic Institute of North America (AINA). The University of Alaska Fairbanks (UAF) provided funds for new leadership. Dr. Carl Benson, Chairman of the Board of Governors and Emeritus Professor of Geology and Geophysics at UAF, announced the appointment of Dr. Ken Tape as Executive Secretary. This appointment followed soon after Dr. Maribeth Murray became Executive Director of the Canadian Corporation. We believe that both of these changes will benefit our binational AINA as it faces new challenges comparable to those that led to its formation during World War II.

Dr. Tape is an ecologist at UAF, Institute of Northern Engineering. He has broad interests in the Arctic natural sciences, and his research describes the impacts of 20th century climate warming on various components of the Arctic tundra ecosystem, including vegetation, permafrost, hydrology, and wildlife. Dr. Tape will be working closely with Arctic Institute members and leaders in the United States and Canada.

The Grant-in-Aid program, which is supported by member donations, continues to grow rapidly. In 2013, the program received an unprecedented 58 applications from students across North America. The binational committee of reviewers selected 18 proposals for awards of \$1000 each. Thanks to members for their donations, which make the program possible, and to the reviewers, for the time they spend selecting the best among many good proposals.

**Carl S. Benson, PhD**, Chairman, Board of Governors  
**Ken Tape**, Executive Secretary







## Kluane Lake Research Station

EVERY YEAR THERE IS A SIGNATURE PROJECT OR EVENT AT KLRS that characterizes the season, and 2013 was the Year of the Lake. This was the first year of the Kluane Lake Watershed Collaboratorium (KLWC), an initiative that seeks to integrate the existing terrestrial projects with a new focus on freshwater as an integrator of scientific and community interests in the Kluane region.

The development of the KLWC is also a response to the change in funding regimes that have supported the station for many years. In 2013 a significant portion of our operating funds came from generous support by the W. Garfield Weston Foundation. This contribution was partially matched by grants from the Yukon Geological Survey (YGS) and the Kluane First Nation. Diversifying the funding base and variety of users at KLRS has been crucial to ensure the future of the station and has motivated strengthening connections in Yukon, across Canada, and internationally.

Starting locally in Yukon at the beginning of the season, Yukon College hosted its first Geology Field School at KLRS. Throughout the summer, we worked with the Kluane First Nation (KFN) to develop the scope of the KLWC. We hosted a liaison student from KFN, Kelsey Kabanak, who assisted on several projects, including a week at Glacier One with Dr. Flowers, lake work with Dr. Hik and Dr. Carmack, tree-line dynamics with Dr. Danby, and a translocation project with PhD student Jeff Warner. Ms. Kabanak also represented the research station at the KFN General Assembly and helped promote our Open House event at Kluane in August. KLRS partnered with YGS, several Canadian universities, and Carol Janzen from Seabird Electronics in the implementation of the KLWC. We organized a series of follow-up community workshops in December.

Along with the contingent of long-term researchers and students from across Canada, we hosted the NSERC CANPOLIN (Pollination Network) workshop in July. AINA also entered a grant and contribution agreement with Environment Canada to look into the feasibility of implementing Circumpolar Biodiversity Monitoring Plan protocols at Canadian Arctic research stations. Through this agreement, we have increased the value of our membership in the Canadian Network of Northern Research Operators.

On the international front, we traveled to the InterAct Station Manager's Forum in Sweden and entered an agreement to participate in the Transnational Access Program, which will bring a new group of scientists to the station. Dr. Hik led the Worldwide University Network PhD field school. NASA's ABoVE scientific design team visited the station in September. Almost 40% of base users come from outside of Canada, and many of these students are working on Canadian-led projects. It is clear that KLRS is recognized internationally as a station of considerable interest, while it continues to prioritize building support and opportunities for collaboration locally.

KLRS was happy to welcome our new Executive Director, Dr. Maribeth Murray, who made it a priority right from the start to visit the station. We are already seeing the benefits of having a full-time person in the director's chair and are grateful for the renewed interest in the research station from the University of Calgary.

**Sian Williams and Lance Goodwin**  
Station Managers, Kluane Lake Research Station

# Outreach

## Arctic Speaker Series

AINA Research Associate Kenneth Jones kicked off our Arctic Speaker Series in January 2013 with an informative talk on Foxe Basin, the last part of Canada's North to be explored and mapped. In February 2013, Robert Barclay from the Department of Biological Sciences, University of Calgary, provided a fascinating talk on the ecological and behavioural adaptations that allow bats to live in northern areas, as well as the potential effects of climate change on northern bat populations. Our final speaker for the spring talks was filmmaker and biologist Steve Smith of Meltwater Media, who presented a talk entitled "Arctic Seabirds and Climate Change Science."

The Arctic Speaker Series continued in October 2013 with a talk by Dr. Naotaka Hayashi, who had just joined the Department of Anthropology at the University of Calgary in July. Dr. Hayashi entertained us with his presentation entitled "Sheep, Seals, and Oil: The Human Dimension of Climate Change in Greenland," based on his doctoral research on the social implications of climate change in West Greenland. In early November, Chris Henderson, President of Lumos Energy, introduced his new book, *Aboriginal Power*, which discussed clean energy and the future of Canada's First Peoples. Also in November, Dr. Masaki Hayashi, Canada Research Chair in Physical Hydrology, Department of Geoscience, University of Calgary, wrapped up the Arctic Speaker Series for 2013 with a talk on permafrost hydrology in the complex mosaic of wetlands in the North known as muskeg.

## Outreach Presentations

For the third year in a row, Saddle Ridge Elementary School in Calgary requested presentations to five Grade 2 classes (~125 students) over two days as a complement to the Social Studies program that explores communities, including those of the Inuit. The class sessions featured sketching and interpretation of Inuit artifacts and natural history specimens, including many from the AINA collections.

In partnership with the First Nations Student Association and the Native Centre at the University of Calgary, AINA sponsored two screenings of the film *Vanishing Point* by Canmore filmmakers Stephen Smith and Julia Szucs. Narrated by Inughuit elder Navarana, *Vanishing Point* tells the story of two Inuit communities, one on Baffin Island and the other in Northwest Greenland, that are linked by the late 19th century migration of the Inuk shaman, Qitdlarssuaq.

## Partnership Activity

Adventure Canada, one of AINA's partners, continued to provide unique outreach opportunities for the Institute in the form of displays and presentations on Arctic expedition cruises. News on AINA activities that may be of interest to Adventure Canada's clientele is made available through the partner's newsletter and website. Honourary Outreach Coordinator Dr. Jon Dudley lectures onboard various Adventure Canada cruises in the Arctic, during which he promotes the activities and goals of the Arctic Institute.

# Arctic Journal in 2013

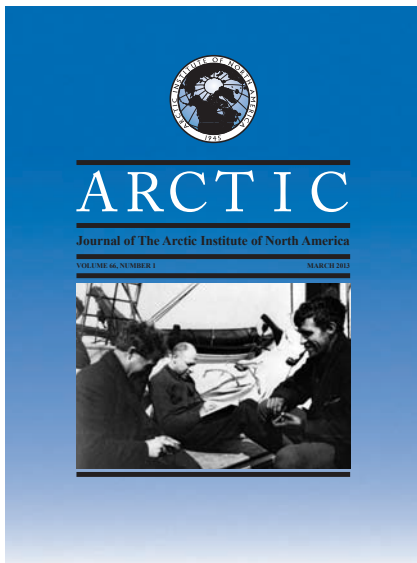
THE FOUR ISSUES OF *ARCTIC* PUBLISHED IN 2013 CONTAINED 41 research articles (including 3 notes), 18 book reviews, 4 obituaries, one Arctic profile, one Letter to the Editor, and 5 InfoNorth essays. Our page count for Volume 66 was 527 pages. Of the 41 research articles published in 2013, 14 (34%) were from the social sciences, 23 (56%) from the biological sciences, and 4 (10%) from the physical sciences. In 2013, we received 63 submissions to consider for publication; of these, seven were deemed unsuitable for the journal and were not sent out for peer review.

In 2013, *Arctic* became a member of CrossRef, an official digital object identifier (doi) registration agency for scholarly publications. Each item now published in the journal, from the research articles to book reviews, InfoNorth essays, and the AINA News section, is assigned a doi, which is a persistent link to the item. All of the back issue content that is freely available on our Open Journal Systems platform has also been assigned doi numbers. *Arctic* readers will notice that with the March 2014 issue, we are adding doi numbers to the references in each article, so that we can provide links to cited material.

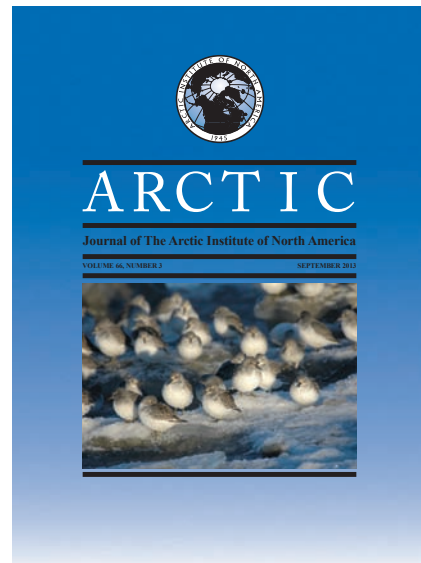
In the autumn of 2013, we began working on a set of papers written to celebrate the 50th anniversary of the Kluane Lake Research Station (KLRS) in 2011. The papers, which provide an overview and synthesis of the research results derived from five decades of research at KLRS, were initially published online. A print version will follow in 2014.

Karen McCullough, *Arctic* Editor

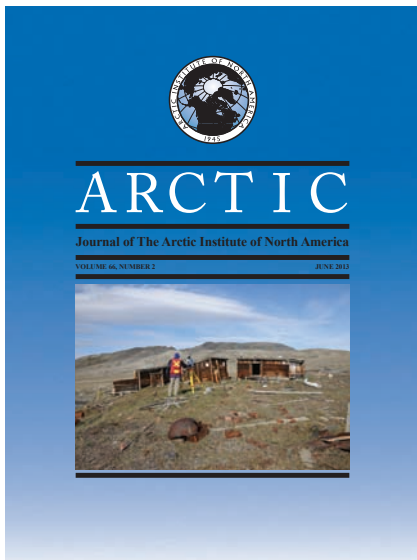
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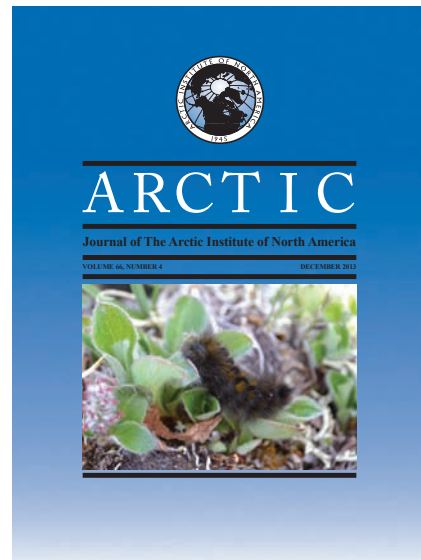
September 2013



June 2013



December 2013





## Arctic Science and Technology Information System

THE ARCTIC SCIENCE AND TECHNOLOGY INFORMATION SYSTEM (ASTIS) is Canada's national database of northern research. ASTIS contains 79,000 records describing publications and research projects about northern Canada and the circumpolar Arctic. The database covers all subjects including the earth sciences, the biological and health sciences, engineering and technology, the social sciences, traditional knowledge, history, and literature. ASTIS has been in operation since 1978 and is funded through contract work and donations.

The ASTIS database, available without charge from a bilingual website at [www.aina.ucalgary.ca/astis](http://www.aina.ucalgary.ca/astis), is searchable from Simple and Advanced Search pages or by clicking on hyperlinks in database records. ASTIS records contain abstracts and detailed subject and geographic indexing terms from the ASTIS thesauri. The publications cited in the database include both peer-reviewed and grey literature. More than 21,000 records contain links to PDF files of publications that are available online.

The ASTIS database contains 17,200 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 continued to grow in 2013 with support from its many funders. In 2013, ASTIS received general funding from BP Canada, the Canadian Association of Petroleum Producers (CAPP), Chevron Canada, ConocoPhillips Canada, MGM Energy, and TransCanada.

ASTIS specializes in the preparation of bibliographic databases about northern Canada and can easily make those databases available from customized websites for clients. The Databases page of the Institute's website provides access to 16 such databases.

In 2013, ASTIS developed a new subset database: The Sahtu Settlement Area Database. Funded by Husky Energy, the database includes 2,100 records that describe publications and research projects about the Sahtu Settlement Area. The database is available for free online at [www.aina.ucalgary.ca/sahtu](http://www.aina.ucalgary.ca/sahtu). With support from the Nunavut General Monitoring Plan (NGMP), ASTIS also redesigned and upgraded the Nunavut Database in 2013. It is now available at [www.aina.ucalgary.ca/nunavut](http://www.aina.ucalgary.ca/nunavut). Ongoing projects include the ArcticNet Publications Database, funded by the ArcticNet Network of Centres of Excellence Canada; the Hydrocarbon Impacts database, funded by the Aboriginal Affairs and Northern Development Canada (AANDC) Northern Oil and Gas Branch; the Northern Granular Resources Bibliographic Database, funded by

the AANDC Land and Water Management Directorate; and the NCP Publications Database, funded by the AANDC Northern Contaminants Program. ASTIS also worked with Makivik Corporation on the Nunavik Bibliography, funded by Hydro Quebec; with the Inuvialuit Joint Secretariat on the Inuvialuit Settlement Region Database, funded by ConocoPhillips Canada and Chevron Canada; with the Yukon Biodiversity Working Group on the Yukon Biodiversity Database, funded by Wildlife Conservation Society Canada; and for the Yukon Heritage Resources Unit, to index Yukon research projects.

ASTIS also worked on several internal Arctic Institute projects in 2013, 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 4,338 publications available on the Web as PDF files.

All of these projects are moving ASTIS closer to its goals of providing comprehensive coverage of northern Canadian publications and research projects and of connecting and collaborating with other organizations that collect information and data in the circumpolar Arctic.

**Shannon Vossepoel**, ASTIS Manager

## Northern Lights Series

**T**WO BOOKS WERE PUBLISHED IN 2013 and can be purchased as hard copies or accessed as free ebooks that can be downloaded from the University of Calgary Press website.

P.J. Capelotti wrote *Shipwreck at Cape Flora: The Expeditions of Benjamin Leigh Smith, England's Forgotten Arctic Explorer*. Capelotti has provided us with a fascinating look at the life and achievements of Leigh Smith, an accomplished Arctic explorer who shunned the limelight. In addition to an account of Leigh Smith's little-known discoveries, Capelotti provides a remarkable story of survival in the Arctic that took place after the explorer's ship, the *Eira*, sank off Cape Flora, Franz Joseph Land, in 1881.

The *Fast-Changing Arctic: Rethinking Arctic Security for a Warmer World* was edited by Barry Scott Zellen. Seventeen contributors from various nations discuss the implications of declining sea ice and increasing access to the Arctic for diverse issues such as sovereignty, national and environmental security, energy development, shipping, geopolitical disputes, and opportunities for cooperation among Arctic nations.

The manuscript *A Historical and Legal Study of Sovereignty in the Canadian North: Terrestrial Sovereignty, 1870 – 1983*, written by the late Gordon W. Smith and edited by Whitney Lackenbauer, was accepted for publication by the University of Calgary Press Editorial Committee. Smith was an authority on Arctic sovereignty, and his work provides a comprehensive treatment of some key events in the development of Canada's role in the North.

We are pleased to report that Wendy Dathan, author of *The Reindeer Botanist: Alf Erling Porsild, 1901 – 1977*, was awarded the Canadian Historical Association 2013 Clio Prize in the category "The North." *Reindeer Botanist* was also named the Scholarly and Academic Book of the Year at the 2013 Alberta Book Awards held by the Book Publishers Association of Alberta.

**Elisa Hart**, Northern Lights Series Editor



## AINA Library

**H**OUSED IN THE GALLAGHER LIBRARY at the University of Calgary, the Arctic Institute of North America collection attracts students, researchers, and an interested public from across campus and around the world.

Libraries and Cultural Resources continues to develop a research collection in support of Arctic and polar research at the University of Calgary. During the past year, the Library added about 1,100 items from the historic Arctic Institute of North America collection into our online catalogue, making this material more accessible. New titles from a variety of disciplines are added to the collection annually.

During the summer of 2014, the Gallagher Library will be renovated to create additional study spaces for learners and researchers. Approximately 75% of the Arctic Institute of North America collection (materials published prior to 2000) will be transferred to the High Density Library (HDL), an environmentally controlled storage facility that will allow us to maintain the integrity of this important collection and to preserve this valuable research resource for years to come. The Library is also creating a new programming room that will bring Arctic research and resources to a wider audience.

For information on how to access the collection, please consult our new online research guide developed to support the use of the Arctic Institute of North America collection. The guide is accessible to the public through: <http://libguides.ucalgary.ca/content.php?pid=561210&sid=4626202>.

Claudette Cloutier, the Liaison Librarian for Northern Studies, provides research assistance to students, faculty, staff, and visiting researchers looking for northern and polar-related information and can be contacted at: [ccloutie@ucalgary.ca](mailto:ccloutie@ucalgary.ca).

**Claudette Cloutier**, Liaison Librarian for Northern Studies





## 2013 Scholarship Winners

### Jennifer Robinson Scholarship – \$5,000

The winner of the 2013 Jennifer Robinson Memorial Scholarship was Anne Bjorkman, a PhD student in the Department of Geography and Biodiversity at the University of British Columbia. Anne is undertaking ecological field experiments on Ellesmere Island to evaluate how Arctic plant communities respond to warming temperatures through phenotypic plasticity, evolutionary adaptation, and migration.

### Lorraine Allison Scholarship – \$3,000

The recipient of the 2013 Lorraine Allison Scholarship is Jennifer Provencher, a doctoral candidate in the Department of Biology at Carleton University. Jennifer's research focuses on Arctic marine birds, mainly the Common Eider (*Somateria mollissima*), and how contaminants such as mercury influence host-parasite dynamics in eiders.

### Jim Bourque Scholarship – \$1,000

Amber Giles of Pointe au Baril, Ontario, is the recipient of the 2013 Jim Bourque Scholarship. Amber recently completed a Bachelor of Science degree in marine biology at the University of New Brunswick and is now pursuing a Master of Marine Management degree in the Marine Affairs Program at Dalhousie University in Halifax. Her master's research in the area of Indigenous Knowledge Systems will explore concepts of management, governance, and conservation in relation to First Nations fisheries.





## Grant-in-Aid Program

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THE GRANT-IN-AID PROGRAM IS A JOINT CANADA-UNITED STATES ENDEAVOUR that provides funds to young investigators starting their careers in northern research. A binational committee administers the program, and funding comes entirely from member donations.

Of the 58 students who applied for a Grant-in-Aid award in 2013, 18 received awards to assist with the costs of conducting northern research. The successful applicants were Andy Baltensperger, Casey Brown, Dana Fjare, Diane Huebner, and Courtney Nichols from the Department of Biology and Wildlife, University of Alaska Fairbanks; Chris Cannon, Department of Linguistics, University of Alaska Fairbanks; Katie Christie, Institute of Arctic Biology, University of Alaska Fairbanks; Lisa Strecker, Resilience and Adaptation Program, Department of Anthropology, University of Alaska Fairbanks; Cecilie Reimer Ebsen, Department of Anthropology, University of Alaska Fairbanks; Eric Hutton, Department of Geography, University of Alaska Fairbanks; Andrew Chater, Department of Political Science, Western University, London, Ontario; John Moody, Bioarchaeology and Archaeological Sciences, Department of Anthropology, Western University; Megan Lukaswich, School of Public Health, University of Alberta; Jennifer Provencher, Department of Biology, Carleton University, Ottawa, Ontario; Jaanika Vider, Department of Archaeology, Oxford University; David Watts, Ecology Intercollege Graduate Degree Program, Pennsylvania State University; Jeffrey Werner, Department of Zoology, University of British Columbia; and Chandra Young-Boyle, Department of Archaeology, Memorial University of Newfoundland, St. John's, Newfoundland.

The members of the Grant-in-Aid Selection Committee for 2013 were Mark Johnson, Matthew Sturm, Thomas Newbury, Peter Johnson, Stephen Braund, and Carl Benson. Proposals for 2014 are due on 1 February. Please refer to the AINA website for application information.







## Research Associates

**A**RTIC RESEARCH INVOLVES AREAS OF EXPERTISE NOT ENCOMPASSED BY ANY ONE discipline or department. This fact is reflected in the Institute's research associates—a diverse group of individuals whose work is advancing the study of the North and the mission of the Arctic Institute. Their interests cover a wide range of disciplines in the natural, physical, and social sciences, as well as the humanities and fine arts.

- **Don Albright**, Biology
- **Thomas D. Andrews**, Archaeology and Museology
- **Charles Arnold**, Archaeology and Museology
- **William Barr**, Geography and History
- **Margaret Bertulli**, Archaeology
- **Ellen Bielawski**, Anthropology
- **Lloyd Binder**, Economic Development
- **Jean Blodgett**, Art
- **Alexander Braun**, Geodesy
- **Dave Button**, Education
- **Garry Clarke**, Glaciology
- **Helen Corbett**, Film and Journalism
- **Peter Dawson**, Archaeology
- **Ken de la Barre**, Human Geography
- **Mark Dickerson**, Political Science
- **Jon Dudley**, Earth Science Outreach, Geology, Canadian Arctic Culture
- **Jeff Gilmour**, Law
- **Gunhild Hoogensen Gjørvi**, Political Science
- **John Graham**, Social Work
- **Norman Hallendy**, Ethnohistory





- **Alexander Hill**, History
- **Gerald Holdsworth**, Glaciology
- **Robert Huebert**, Political Science
- **Martha Johnson**, Anthropology
- **Peter Johnson**, Geography
- **Kenneth Jones**, Geology, Geography, Archaeology, History
- **Karim-Aly Kassam**, Arctic Social Science
- **Barbara Kingscote**, Veterinary Medicine
- **Heidi Klein**, Environmental Planning
- **Susan Kutz**, Veterinary Medicine
- **P. Whitney Lackenbauer**, History
- **Line Laplante**, Spirituality and the Environment
- **Nic Larter**, Zoology
- **Allice Legat**, Anthropology
- **David Lertzman**, Aboriginal Studies
- **Robert MacDonald**, History
- **Sean Maher**, Anthropology
- **Constance Martin**, Art History and Curator
- **Arthur Mason**, History, Politics and Culture
- **Robert McPherson**, Geology and History
- **Frank Miller**, Wildlife Biology
- **Magdalena Muir**, Law, Environment and Resource Management
- **Dave Norton**, Ecology
- **Marc Poulin**, Medicine and Kinesiology
- **Martin Raillard**, Arctic Ecology
- **William Semple**, Northern Housing
- **Alan Smart**, Anthropology
- **Jane Sproull Thomson**, Inuit Art and Culture, Heritage Planning
- **Mary Stapleton**, History and Planning
- **Emma J. Stewart**, Geography
- **Wayne Strong**, Forest Ecology
- **Susanne Swibold**, Film and Journalism
- **Darielle Talarico**, Ecotourism
- **Callum Thomson**, Archaeology and Expedition Cruise Tourism
- **Robert van Everdingen**, Hydroecology
- **Wanda Wuttunee**, Native Studies, Law and Management
- **John James Yackel**, Geography
- **Jose Zorrilla**, Interdisciplinary

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- Andrews, T.D.** 2013. Northwest Territories. In: Kammen, C., and Wilson, A.H., eds. Encyclopedia of local history, 2nd ed. New York: AltaMira Press. 418–421.
- . 2013. Mobile architecture, improvisation, and museum practice: Revitalizing the Tłı̄cho caribou skin lodge. In: Anderson, D.G., Wishart, R., and Vaté, V., eds. About the hearth: Perspectives on the home, hearth and household in the circumpolar North. Oxford: Berghahn Books. 29–53.
- Bertulli, M.M., Dick, L., **Dawson, P.C.**, and Cousins, P.L. 2013. Fort Conger: A site of Arctic history in the 21st century. *Arctic* 66(3):312–328.
- Dawson, P.C.**, Bertulli, M.M., Levy, R., Tucker, C., Dick, L., and Cousins, P.L. 2013. Application of 3D laser scanning to the preservation of Fort Conger, a historic polar research base on northern Ellesmere Island, Arctic Canada. *Arctic* 66(2):147–158.
- Hennessy, K., Lyons, N., Loring, S., **Arnold, C.D.**, Joe, M., Elias, A., and Pokiak, J. 2013. The Inuvialuit Living History Project: Digital return as the forging of relationships between institutions, people and data. *Museum Anthropology Review* 7(1-2):44–73.
- Huebert, R.** 2013. Cooperation or conflict in the new Arctic? Too simple of a dichotomy! In: Berkman, P.A., and Vylegzhanin, A.N., eds. Environmental security in the Arctic Ocean. NATO Science for Peace and Security Series–C: Environmental Security. Dordrecht, The Netherlands: Springer. 195–203.
- . 2013. It's time to talk about Arctic militarization. *The Dispatch* (Summer 2013):9. Calgary: Canadian Defence & Foreign Affairs Institute.
- . 2013. U.S. Arctic policy: The reluctant Arctic power. In: Zellen, B.S., ed. The fast-changing Arctic: Rethinking Arctic security for a warmer world. Calgary: University of Calgary Press. 189–226.
- MacKay, G., Burke, A.L., Gauthier, G., and **Arnold, C.D.** 2013. Mackenzie Inuit lithic raw material procurement in the Lower Mackenzie Valley: The importance of social factors. *Arctic* 66(4):483–499.
- Muir, M.A.K.** 2013. Social acceptance and the development of the North Sea offshore grid. *Renewable Energy Law and Policy Review* 2/2013:143–150.
- Strong, W.L.** 2013. Ecoclimatic zonation of Yukon (Canada) and ecoclimatic variation in vegetation. *Arctic* 66(1):52–67.
- Strong, W.L.**, and Hills, L.V. 2013. Holocene migration of lodgepole pine (*Pinus contorta* var. *latifolia*) in southern Yukon, Canada. *The Holocene* 23(9):1340–1349.
- Strong, W.L.**, and Jung, T.S. 2012. Stand-level attributes of snowshoe hare (*Lepus americanus*) habitat in a post-fire trembling aspen (*Populus tremuloides*) chronosequence in central Yukon. *Canadian Field-Naturalist* 126(4):295–305. (Issue published in June 2013.)
- Strong, W.L.**, Chambers, J.H.S., and Jung, T.S. 2013. Range constraints for introduced elk in southwest Yukon, Canada. *Arctic* 66(4):470–482.





## Financial Report for the Fiscal Year Ended March 31, 2013 (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 from 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. 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. 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 support.

The Notes and Schedules accompanying these financial statements form part of the statements. To see the Notes and Schedules, please contact the Institute Manager via e-mail at [mmli@ucalgary.ca](mailto:mmli@ucalgary.ca), or by telephone at 403-220-8373.



## Statement of Financial Position as at March 31, 2013

	2013	2012 (restated)
<b>ASSETS</b>		
Due from University of Calgary	361,722	505,601
Investments	1,241,979	1,159,191
Accounts receivable	88,522	131,413
Inventories and prepaid expenses	30,305	25,173
Tangible capital assets	2,441,252	2,521,227
	<u>4,163,780</u>	<u>4,342,606</u>
<b>LIABILITIES</b>		
Accounts payable and accrued liabilities	49,439	76,136
Deferred revenue	2,571,528	2,788,215
	<u>2,620,967</u>	<u>2,864,351</u>
<b>NET ASSETS</b>		
Endowments	477,490	456,477
Accumulated surplus	1,017,278	1,021,778
Accumulated remeasurement gains (losses)	48,045	–
	<u>1,542,813</u>	<u>1,478,255</u>
	<u>4,163,780</u>	<u>4,342,606</u>

## Statement of Operations as at March 31, 2013

	2013	2012 (restated)
<b>REVENUE</b>		
University of Calgary and government grants	567,731	450,001
Sales of services and products	288,843	305,562
Donations and other grants	204,363	157,042
Investment income	49,536	31,765
	<u>1,110,473</u>	<u>944,369</u>
<b>EXPENSE</b>		
Research	1,114,972	1,023,840
	<u>1,114,972</u>	<u>1,023,840</u>
<b>Excess/(deficiency) of revenue over expense</b>	<u>(4,499)</u>	<u>(79,471)</u>
Change in accumulated surplus	(4,499)	(79,471)
Transfer from endowment		
Accumulated surplus, beginning of year	1,021,777	1,101,248
<b>Accumulated surplus, end of year</b>	<u>1,017,278</u>	<u>1,021,777</u>

## Statement of Cash Flow as at March 31, 2013

	2013	2012 (restated)
<b>OPERATING TRANSACTIONS</b>		
Excess / (deficiency) of revenue over expense	(4,499)	(79,470)
Add (deduct) non-cash items:		
Amortization of tangible capital assets	91,677	93,328
Amortization of deferred capital contributions	90,369	106,851
Gain on non-endowed investments		3,463
Total non-cash items	182,047	202,642
Net change in non-cash working capital	(295,995)	(309,526)
<b>Cash provided by (applied to) operating transactions</b>	<b>(118,448)</b>	<b>(186,354)</b>
<b>CAPITAL TRANSACTIONS</b>		
Acquisition of tangible capital assets	11,703	(178,275)
<b>Cash provided by (applied to) capital transactions</b>	<b>11,703</b>	<b>(178,275)</b>
<b>INVESTING TRANSACTIONS</b>		
Proceeds from (purchase of) long-term investments, net	(48,272)	(780)
Endowment investment income	7,641	9,281
<b>Cash provided by (applied to) investing transactions</b>	<b>(40,631)</b>	<b>8,501</b>
<b>FINANCING TRANSACTIONS</b>		
Endowment contributions	3,498	780
<b>Cash provided by (applied to) financing transactions</b>	<b>3,498</b>	<b>780</b>
<b>Increase (decrease) in cash and cash equivalents</b>	<b>(143,879)</b>	<b>(355,348)</b>
<b>Due from University of Calgary, beginning of year</b>	<b>505,601</b>	<b>860,949</b>
<b>Due from University of Calgary, end of year</b>	<b>361,723</b>	<b>505,601</b>



## Financial Support

FINANCIAL SUPPORT FOR THE PROGRAMS OF THE ARCTIC INSTITUTE, Canadian Corporation, during 2013, was provided by the Government of Canada, the Government of Alberta, the University of Calgary, the University of Alaska, over 1000 members and subscribers, and the following corporate associates and sponsors:

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Thank you for your interest in becoming a member of the Arctic Institute of North America. The only requirement 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 northern research and knowledge.

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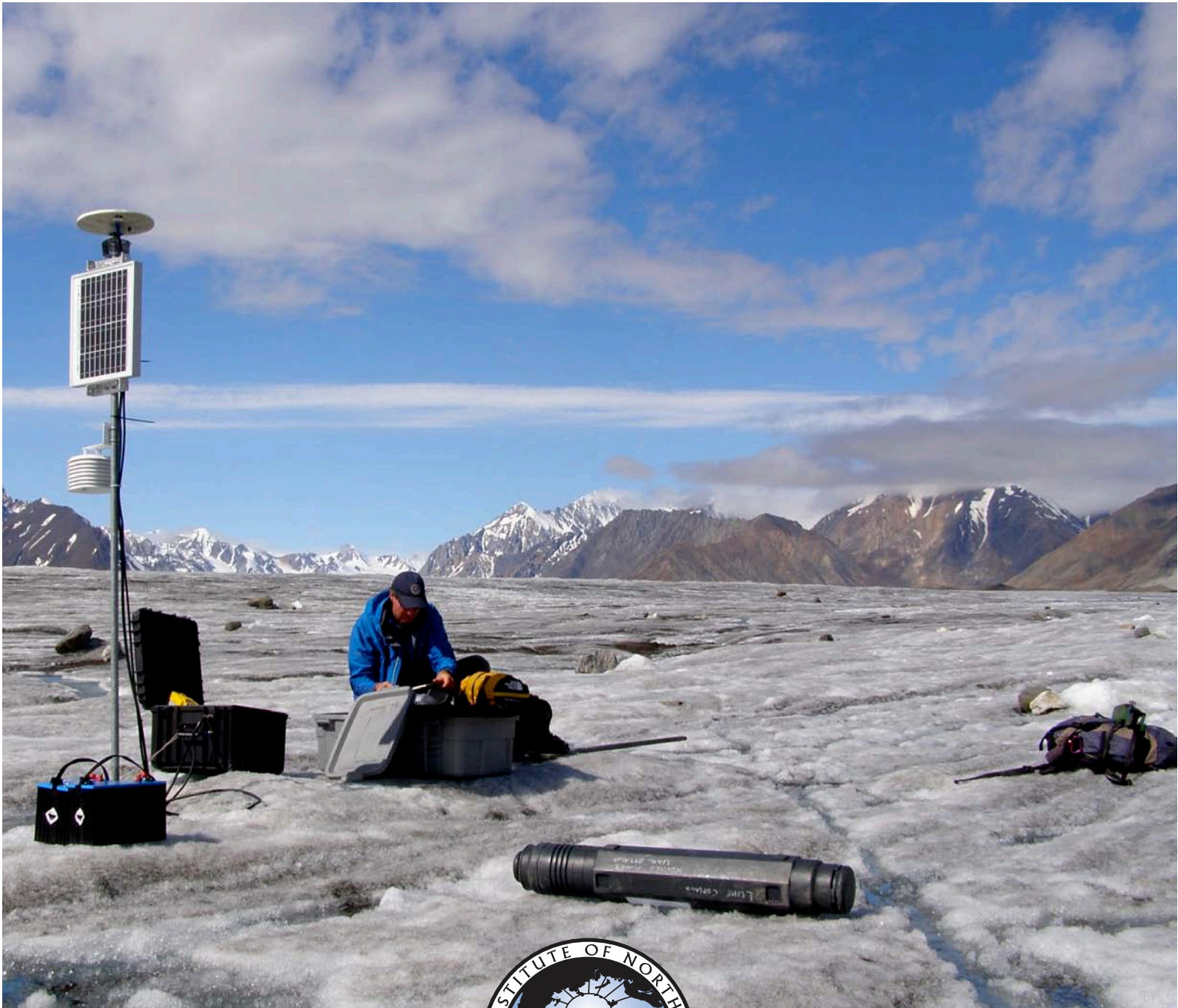
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