OMB No. 8591028364297

Arctic Research In Canada Science Metrix

How do you do research in the Arctic? (To the Point) Arctic Research (2003) The Canadian High Arctic Research Station: A Community Perspective Arctic Alive: a giant map and cool research Studying Permafrost in the Canadian Arctic (Byte-Sized Science) Science: The Battle for the Arctic - NYTimes.com/video My Arctic Research Summarized in Under 2 Minutes, Kayla Buhler Photos from the Canadian High Arctic Research Station Expedition Arctic Botany: Digitizing a National Plant Library! Everything you need to know about Arctic Research in Churchill, Manitoba (Subtitled) Arctic Marine Research Arctic Marine Life Course (Benthic Ecology) Stefansson, Dr. Anderson and the Canadian Arctic Expedition, 1913--1918 by Stuart E. Jenness Spotlight with Scientists in School: Dr. Emily Choy, Arctic Marine Biologist! [CC] Arctic Science at the Canadian Museum of Nature What's life like in an Arctic Research Camp? | Ocean Wise Expedition: Arctic // Specimens and Science Botany in the Arctic Arctic Research with Dr. Nelson O'Driscoll Arctic Marine Research

Going to Mars: Science in Canada's High Arctic
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Arctic Research In Canada Science Metrix *OMB No. 8591028364297 edited by*

ANDREA TRINITY

Going to Mars: Science in Canada's High Arctic Springer Nature

Once ice-bound, difficult to access, and largely ignored by the rest of the world, the Arctic is now front and center in the midst of many important questions facing the world today. Our daily weather, what we eat, and coastal flooding are all interconnected with the future of the Arctic. The year 2012 was an astounding year for Arctic change. The summer sea ice volume smashed previous records, losing approximately 75 percent of its value since 1980 and half of its areal coverage. Multiple records were also broken when 97 percent of Greenland's surface experienced melt conditions in 2012, the largest melt extent in the satellite era. Receding ice caps in Arctic Canada are now exposing land surfaces that have been continuously ice covered for more than 40,000 years. What happens in the Arctic has far-reaching implications around the world. Loss of snow and ice exacerbates climate change and is the largest contributor to expected global sea level rise during the next century. Ten percent of the world's fish catches comes from Arctic and sub-Arctic waters. The U.S. Geological Survey estimated that up to 13 percent of the world's remaining oil reserves are in the Arctic. The geologic history of the Arctic may hold vital clues about massive volcanic eruptions and the consequent release of massive amount of coal fly ash that is thought to have caused mass extinctions in the distant past. How will these changes affect the rest of Earth? What research should we invest in to best understand this previously hidden land, manage impacts of change on Arctic communities, and cooperate with researchers from other nations? The Arctic in the Anthropocene reviews research questions previously identified by Arctic researchers, and then highlights the new questions that have emerged in the wake of and expectation of further rapid Arctic change, as well

as new capabilities to address them. This report is meant to guide future directions in U.S. Arctic research so that research is targeted on critical scientific and societal questions and conducted as effectively as possible. The Arctic in the Anthropocene identifies both a disciplinary and a cross-cutting research strategy for the next 10 to 20 years, and evaluates infrastructure needs and collaboration opportunities. The climate, biology, and society in the Arctic are changing in rapid, complex, and interactive ways. Understanding the Arctic system has never been more critical; thus, Arctic research has never been more important. This report will be a resource for institutions, funders, policy makers, and students. Written in an engaging style, The Arctic in the Anthropocene paints a picture of one of the last unknown places on this planet, and communicates the excitement and importance of the discoveries and challenges that lie ahead.

Witness the Arctic

Routledge
This book shares graduate student experiences, lessons, and life learnings from research with Inuit communities in the Canadian Arctic. The results of graduate student research are often disseminated in a thesis or dissertation, but their personal experiences building relationships with Inuit, working together to design and conduct research, and how this shaped their research approach and outcomes, are rarely captured. As such, there are limited resources available to new researchers that share information about the practical aspects of community-based research in the Arctic. The book is intended to provide a glimpse into what it is like to do research together with Inuit, and in doing so, contribute to the development of more productive and equitable relationships between Inuit and researchers. The chapters are written as structured narratives in the first-person and include reflections, and lessons learned.
Marine Fishes of Arctic Canada Springer Science & Business Media
Library and Information Studies for Arctic Social Sciences and Humanities serves as a key interdisciplinary title that links the social sciences and humanities with current issues, trends, and projects in library, archival, and information sciences within shared Arctic frameworks and geographies. Including contributions from professionals and academics working across and on the Arctic, the book presents recent research, theoretical inquiry, and applied professional endeavours at academic and public libraries, as well as archives, museums, government institutions, and other organisations. Focusing on efforts that further Arctic knowledge and research, papers present local, regional, and institutional case studies to conceptually and empirically describe real-life research in which the authors are engaged. Topics covered include the complexities of developing and managing multilingual resources; working in geographically isolated areas; curating combinations of local, regional, national, and international content collections; and understanding historical and contemporary colonial-industrial influences in indigenous knowledge. Library and Information Studies for Arctic Social Sciences and Humanities will be essential reading for academics, researchers, and students working the fields of library, archival, and information or data science, as well as those working in the humanities and social sciences more generally. It should also be of great interest to librarians, archivists, curators, and information or data professionals around the globe.
Nordic Perspectives on the Responsible Development of the Arctic: Pathways to Action Routledge
Contains articles on Arctic sovereignty, Soviet experience, Arctic Research Centre, social science research, mid-Canada corridor, etc.
Unfreezing the Arctic Triangle Interactive, Inc.
One issue each year devoted to the annual report.
John Wiley & Sons
Each Canadian research project was required to be relevant to the needs of northern communities, involve Northerners in planning and implementing the research and include an element of capacity building for students and communities. Indeed, unlike previous IPYs, IPY 2007-2008 included people from the circumpolar world in the planning and execution of research projects, a recognition that local populations in the circumpolar world now have more control over their lives through land claim settlements and self government."--Introduction.
Arctic Research Priorities Springer Nature
This book investigates the multifaceted nature of change in today’s Nordic Arctic and the necessary research and policy development required to address the challenges and opportunities currently faced by this region. It focuses its attention on the recent efforts of the Nordic community to create specialized Centers of Excellence in Arctic Research in order to facilitate this process of scientific inquiry and policy articulation. The volume seeks to describe both the steps that lead to this decision and the manner in which this undertaking as evolved. The work highlights the research efforts of the four Centers and their investigations of a variety of issues including those related to ecosystem and wildlife management, the revitalization resource dependent communities, the emergence of new climate-born diseases and the development of adequate modeling techniques to assist northern communities in their efforts at adaptation and resilience building. Major discoveries and insights arising from these and other efforts are detailed and possible policy implications considered. The book also focuses attention on the challenges of creating and supporting multidisciplinary teams of researchers to investigate such concerns and the methods and means for facilitating their collaboration and the integration of their findings to form new and useful perspectives on the nature of change in the contemporary Arctic. It also provides helpful consideration and examples of how local and indigenous communities can be engaged in the co-production of knowledge regarding the region. The volume discusses how such research findings can be best communicated and shared between scientists, policymakers and northern residents. It considers the challenges of building common concern not just among different research disciplines but also between bureaucracies and the public. Only when this bridge-building effort is undertaken can true pathways to action be established.
Canadian Arctic Sovereignty [electronic Resource] Taylor & Francis
The Arctic is often portrayed as being isolated, but the reality is that the connectivity with the rest of the planet is huge, be it through weather patterns, global ocean circulation, and large-scale migration patterns to name but a few. There is a huge amount of public interest in the ‘changing Arctic’, especially in terms of the rapid changes taking place in ecosystems and exploitation of resources. There can be no doubt that the Arctic is at the forefront of the international environmental science agenda, both from a scientific aspect, and also from a policy/environmental

management perspective. This book aims to stimulate a wide audience to think about the Arctic by highlighting the remarkable breadth of what it means to study its ecology. Arctic Ecology seeks to systematically introduce the diverse array of ecologies within the Arctic region. As the Arctic rapidly changes, understanding the fundamental ecology underpinning the Arctic is paramount to understanding the consequences of what such change will inevitably bring about. Arctic Ecology is designed to provide graduate students of environmental science, ecology and climate change with a source where Arctic ecology is addressed specifically, with issues due to climate change clearly discussed. It will also be of use to policy-makers, researchers and international agencies who are focusing on ecological issues and effects of global climate change in the Arctic. About the Editor David N. Thomas is Professor of Arctic Ecosystem Research in the Faculty of Biological and Environmental Sciences, University of Helsinki. Previously he spent 24 years in the School of Ocean Sciences, Bangor University, Wales. He studies marine systems, with a particular emphasis on sea ice and land-coast interactions in the Arctic and Southern Oceans as well as the Baltic Sea. He also edited a related book: Sea Ice, 3rd Edition (2017), which is also published by Wiley-Blackwell.
The Arctic Routledge
Review of arctic research supported throughout the Foundation, including those of the office of Polar Programs. Includes list of NSF arctic research grants, FY 1978.
United States Arctic Research Plan University of Pittsburgh Press
Discusses the problems that must be resolved if the peoples of the Arctic countries are to develop their region away from militarism and towards civility.

Exploring the Public Value of Networked Science in the Canadian Arctic

Cambridge University Press
Canada and Polar Science
Directory for Arctic Science and Technology Research in Canada Dundurn
Report of the United States federal government body responsible for determining priorities for Arctic research by the United States, including the text of the relevant legislation and a statement of principles for the conduct of research in the Arctic.
Program Report - National Science Foundation University of Toronto Press
The Arctic: A Barometer of Global Climate Variability provides a comprehensive source of information on all aspects of the Arctic region. Through thorough research, first-hand accounts and case studies, the book details international arctic research initiatives and native environments, including flora and fauna. Sections explore the impact of climate change, the effect of the Arctic on climate change, the environmental issues facing the region and how it is adapting. It is also a must-read source of information for polar scientists, applicable PhD students, early researchers, environmental scholars, and anyone searching for information on any aspect of the Arctic region. Users will find a great resource that brings together all aspects of Arctic research into one concise book. Provides comprehensive coverage of numerous aspects of Arctic science, including polar light, Arctic resources and environment, climate change effects, the Arctic ocean, Arctic history and research initiatives, and environmental risks, among others Explores the Arctic region from a comparative global perspective, likening it to other regions and detailing the Artic environment Uses computer modeling to investigate the effect of climate change on the Artic and the Arctic's effect on global climate change
Baffin Island National Academies Press
"The Arctic is one of the world's most rapidly changing regions and is facing a series of unprecedented and complex challenges. It has been argued that science-informed innovation will be key in supporting sustainable regional development and improved policy outcomes. Despite significant and increasing public investment in Arctic research, Northern communities continue to assert that existing research governance structures have been unable to create public value, failing to deliver research that reflects public expectations, interests, and innovation needs. Given that little is known about how Arctic scientific research is embedded in broader innovation and value creation processes, this dissertation takes a systems approach to examine the complex and dynamic governance contexts that shape how networked scientific research creates public value in the Canadian Arctic. It begins with a literature review that connects the concepts of innovation ecosystems and public value with Canada's efforts to guide Northern and Arctic research to identify salient challenges and opportunities relevant to research and innovation policy. Then, the remainder of the dissertation examines public value creation processes by focusing on the instrumental case of ArcticNet, a large Canadian research network responsible for connecting public, private, government, not-for-profit and Indigenous stakeholders to study the impacts of climate change in the Arctic with the goal of informing adaptation strategies and national policies. This empirical research focused on three levels of organization: 1) networked scientific research actors; 2) a network administrative organization; and 3) institutional mechanisms for delegating authority. A Social Network Analysis was conducted to map the configuration of science-based innovation actors in ArcticNet and its evolution over a 13-year period. Results suggest that the network was centralized around non-local public-sector actors who played central boundary spanning roles that facilitated collaboration, while local Arctic actors had an increasing propensity for carrying out boundary spanning roles and closing structural holes in the network. Next, the Network Administrative Organization (NAO) was used as the unit of analysis to explore the network-level public values associated with ArcticNet to inform network-level evaluation strategies. Public Value Mapping revealed that the NAO targeted diverse publics, seeking to create a range of public values that were identified both at the outset of the network and emerging later. Results point to the need for research networks to improve clarity in value articulation across public facing documents and different scales (e.g., research versus network impacts). Turning to the larger contract between science and society, principal-agent theory and the public value Strategic Triangle were used to identify the overlapping, multi-level principal-agent contracts for delegating public value creation in Arctic science. Findings illustrate that the adoption of networked models for science governance corresponded with a trend towards contracting roles for public value management to Arctic scientific research actors; however, it remains unclear how core elements of public value management (i.e., identifying public value, political legitimacy and operational capacity) have been realized. This dissertation presents new insights into the complex, networked and multi-dimensional nature of Arctic scientific research governance in Canada, raising important questions about how publicly-funded research efforts can be designed to enhance public value, with potential implications for the

strategic design and operation of Arctic research efforts, as well as for regional research and innovation policy"--

Arctic Bulletin Extreme Latitudes

In recent years the circumpolar region has emerged as the key to understanding global climate change. The plight of the polar bear, resource extraction debates, indigenous self-determination, and competing definitions of sovereignty among Arctic nation-states have brought the northernmost part of the planet to the forefront of public consideration. Yet little is reported about the social world of environmental scientists in the Arctic. What happens at the isolated sites where experts seek to answer the most pressing questions facing the future of humanity? Portraying the social lives of scientists at Resolute in Nunavut and their interactions with logistical staff and Inuit, Richard Powell demonstrates that the scientific community is structured along power differentials in response to gender, class, and race. To explain these social dynamics the author examines the history and vision of the Government of Canada's Polar Continental Shelf Program and John Diefenbaker's "Northern Vision," combining ethnography with wider discourses on nationalism, identity, and the postwar evolution of scientific sovereignty in the high Arctic. By revealing an expanded understanding of the scientific life as it relates to politics, history, and cultures, Studying Arctic Fields articulates a new theory of field research. Advocating for a greater appreciation of science in the remote parts of the world, Studying Arctic Fields is an innovative approach to anthropology, environmental inquiry, and geography, and a landmark statement on Arctic science as a social practice.

International Agreements for Research, Logistics and Access Concerning the Arctic Springer Nature

A comprehensive, up-to-date assessment of the Arctic climate system for researchers and advanced students.

Annual Report

McGill-Queen's Press - MQUP

The McGill Arctic Research Station on Axel Heiberg Island, Nunavut has been operating continuously since 1960, and its name is more than a coincidence: this outpost at 79o26' North latitude is about as close as we can get to Mars on Earth. Getting there, living there, and doing research there are all adventures that the reader can experience from the comfort of home. The scientists who make the journey, sometimes each summer for decades, study the climate of this fascinating region, its flora and fauna, and its microfauna: the bacteria and protozoa that are the only inhabitants of much of the area. Their work tells us about the history of this planet, and about how best to search for microbial life elsewhere in the Solar System. The photos in the book show not only the scenery at the macroscale, but also visit the microscopic world to examine the lifeforms that dominate extreme environments. Glaciers, wolves, Arctic hare, willow, and Thiomicrospira: this land uninhabited by humans and dark 4 months of the year is a surprise of biodiversity. Travel to MARS, and you may begin to believe in life on Mars.

The Arctic

University of Chicago Press

Report on the feasibility and advisability of establishing a Canadian national polar institute. Identifies the present situation, the needs not satisfied by the present situation and possible options.

Arctic Science, International Law and Climate Change Canada and Polar ScienceReport on the feasibility and advisability of establishing a Canadian national polar institute. Identifies the present situation, the needs not satisfied by the present situation and possible options.Vision for the Canadian Arctic Research Initiative: Assessing the Opportunities

Listing of governmental agreements (United States bilateral and multilateral) and non-governmental activities and programs affecting eight types of activity in the Arctic; access, logistics and security, science and technology, wildlife and wilderness management, environmental pollution, fisheries, energy, health, educational and cultural exchanges.

Alone in the Arctic Elsevier

Developments in the Arctic region are increasingly part of international discussion. The book contains a comprehensive and interdisciplinary analysis of the current problems around marine scientific research in the Arctic region. It combines scientific, legal and policy aspects. The main questions addressed are: ongoing and future Arctic marine research, marine research in the Arctic Ocean in practice, the legal framework, enlarged continental shelves and the freedom of marine science and particularities and challenges of the Arctic region. The contributors are leading experts in the field of politics, law and science.