

# ARCTIC CENTRE ANNUAL REPORT 2011

UNIVERSITY OF LAPLAND, ROVANIEMI, FINLAND



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Arctic Market Days in December 2011, photo by Jussi Portaankorva

Arctic Black Gold Exhibition, photo by Marjo Laukkanen

Researcher Nuccio Mazzullo, photo by Jussi Portaankorva

Mapping the bear rituals of Khanty people on the river Ob, photo by Markku Heikkilä

Christmas party organized by Science Centre, photo by Marjo Laukkanen

Scientific Advisory Board meets the staff, photo by Arto Vitikka.

Arktikum in April, photo by Arto Vitikka

Field work on Yamal Peninsula, photo by Hanna Strengell.

## FROM THE DIRECTOR

This annual report tells what the Arctic Centre of the University of Lapland has done during the year 2011. Figures and facts paint a picture of a dynamic and active Arctic scientific impact and outreach expertise and highly professional teamwork that contain much to be proud of. All professors, researchers, students, science communication and science centre experts together with our professional office staff have achieved great results again this year.

The result statistics can be found from this annual report. They provide an overview of how the Arctic Centre plays the driving force in implementation of the Arctic profile of the University of Lapland, to which work the Arctic Centre has paid special attention during the past year.

Today, the Arctic Centre is more than just a sum of its activities. The current global "Arctic boom" has turned both national and international interests towards the expertise that the Arctic Centre has a well-established reputation for, and which demands a sustained response. The Arctic Centre is actively involved both in international and Finnish Arctic discussions.

The Arctic Centre's resources have remained pretty much at the levels of previous years. The stable situation has been an asset on top of which the superior working atmosphere among the staff has resulted in an increasing amount of results such as scientific and popular articles, books, exhibitions, information products, artwork, seminars, dialogues, reading circles, student supervision, Arctic expeditions and further new projects and incoming experts.

The Arctic Centre is the hub of European international network of Arctic institutions, which is working on the EU Arctic Information Centre initiative. Its concept is to act as "a boundary organization" for different knowledge groups and interests related to the Arctic by offering interaction and access for information, outreach and communication activities. The initiative has been supported by the Finnish Government, EU Parliament as well as High Representative Lady Ashton from the European Commission. The

positive development of the initiative, which has been closely monitored nationally and internationally, mirrors how strongly Arctic issues have become a focus of global geo-political, economical and environmental interest.

Indeed, the Arctic Centre's multidisciplinary and multifunctional combination of research, education, science centre exhibition and communication is a unique concept in the circumpolar context. This breadth of the activities of the Arctic Centre enables it to seek a holistic understanding of developments in the Arctic.

Sustainable Development in the Arctic is the core vision of the Arctic Centre which studies climate, environment, politics, social questions, natural resources, transport routes, changing land use, indigenous peoples or any other matter relevant to the current environmental and societal development and change of the Arctic. This thinking is opening many more possibilities for the Arctic Centre in the future, and the Arctic Centre has also undertaken the challenge to become The Centre of Excellence on Arctic Sustainable Development.

With these words I wish to thank all members of the Arctic Centre staff as well as all our national and international partners for such a successful year 2011.

Paula Kankaanpää  
Director, Arctic Centre



Photo: Eero Kuosmanen

## RESEARCH

During the year 2011 Arctic Centre has continued and started various national and international research projects. Research has been carried out across the Arctic as well as presented in numerous international conferences and publications. Research focuses on three main themes. Each research group is led by a research professor and includes a multidisciplinary team of researchers.

Arctic Centre's professors and researchers participated in 27 short-term international exchanges and 4 long-term exchanges. In addition 11 foreign researchers worked in the Arctic Centre in a short-term exchange and 7 in a long-term exchange.

### THE RESEARCH GROUPS AND SOME EXAMPLES OF THE TOPICS IN 2011:

#### GLOBAL CHANGE

- Adaptation to rapid land-use and climate changes on the Yamal Peninsula, Russia
- How to preserve the tundra in a warming climate
- Dynamical evolution of Scharffenbergbotnen blue ice area
- Stability and variations of Arctic land ice
- Reindeer forage and supplementary feeding in changing climate
- Effects of ultraviolet radiation on northern peatland ecosystems
- Thermal responses and safety during outdoor activities in winter
- Urban bird atlas of Rovaniemi
- Epidemiology of viruses in birds
- Effects of parasites on population dynamics of grouse



Reindeer forage and supplementary feeding. Photo: Minna Turunen.

#### SUSTAINABLE DEVELOPMENT

- Arctic climate change, economy and society
- Barents international political economy: Governance and gender in development
- Economic growth in Lapland
- Preparing for and responding to disturbance: Arctic lessons for Sweden
- Climate change adaptation by regional development related strategic planning
- Knowledge to action in strategic and environmental planning

- Sami customary law and fishing traditions
- Indigenous identity and power relations
- Oral history of empires by elders in the Arctic
- Arctic Urban development and population movement
- Reindeer herding in a changing social and natural environment
- Human-animal-environment relationships
- Social and economic significance of fishery and aquaculture in the Barents region
- Vulnerability in context: Reindeer herders of the tundra and climate change
- Encounters between Sámi and Finns in the Inari and Teno River Areas
- Afterlife of research projects in the North
- Tourism and its effects on tradition in Inari



Oral History of Empires by Elders in the Arctic (ORHELIA). Arctic anthropologists Roza Laptander and Florian Stammmer on their preliminary field trip to the Yamal Peninsula in April 2011 with the Vengo family.

## THE NORTHERN INSTITUTE FOR ENVIRONMENTAL AND MINORITY LAW, NIEM

- Indigenous property systems
- Indigenous peoples and environmental rights
- Indigenous peoples, especially Saami peoples rights within the context of ILO Convention No. 169 and the Draft Nordic Saami Convention
- Status and rights of non-state actors in international environmental governance
- EU seal ban and human rights questions
- Transit rights through the territorial waters of the Åland Islands in international law
- The reform of the Arctic Council
- How Finland's EIA procedure is functioning from the viewpoint of Finland's international environmental impact assessment obligations
- Globalization in the Arctic – political, legal and environmental perspectives

## OTHERS

- Change and variability of Arctic systems Nordaustlandet, Svalbard; Outreach & communication activities of KINNVIKA expedition
- Knowledge in environmental planning and decision making

## EDUCATION



Arctic Doctoral Programme (ARKTIS) is a nationwide multidisciplinary programme which educates doctors with special expertise on Arctic research in Finland. It is hosted by the Arctic Centre and funded by the Ministry of Education and Culture and the Academy of Finland. The joint research theme is 'Social and Environmental Impacts of Modernization and Global Change in the Arctic'.

During 2011 ARKTIS had 18 doctoral students enrolled at the Universities of Lapland, Oulu and Helsinki in the fields of law and humanities, social sciences and natural sciences. At the end of 2011, ten doctoral dissertations have been defended.



Elina Helander-Renvall and Päivi Soppela in the annual seminar. Helander-Renvall was one of the key note speakers, and Soppela is program coordinator of the ARKTIS.

### EXAMPLES OF ARKTIS ACTIVITIES IN 2011

ARKTIS organised the 9th Annual Research Seminar 'Local knowledge and participatory research in the Arctic' on April 4–5<sup>th</sup>. The number of participants was 46, including 21 PhD students and 5 international senior scholars.

ARKTIS also organised a Summer School together with the Design Connections Doctoral Program (Aalto University). It collected 18 PhD students and teachers to the Lapland University's field station, Keropirtti in the Pyhäntunturi National Park, to discuss multidisciplinarity, concepts and conceptualization from the views of different disciplines. The program included lectures, seminars, visual working and field trips.

During 2011 ARKTIS organised several public lectures, and hosted guest lectures by international scholars like Fulbright visitor Amy Lovecraft (USA), Elisabeth J. Cooper (USA/Norway) and Rene Kuppe (University of Vienna). Ainu-Sami seminar was organized by the Arctic Indigenous Peoples and Sami Research Office together with ARKTIS on November 22<sup>nd</sup>.

PhD students of ARKTIS published altogether 15 scientific publications, 5 professional publications and 2 popular publications.

More information about ARKTIS: [www.arcticcentre.org/arktis](http://www.arcticcentre.org/arktis)



ARKTIS seminar group photo, 2011. Photo: Arto Vitikka.

### ARCTIC STUDIES PROGRAM (ASP)

The Arctic Studies Program (ASP) is a multidisciplinary study program providing a possibility to specialize in the Arctic issues. It gives comprehensive understanding on the physical, environmental, social and cultural aspects of the Arctic. The program is administrated by the Faculty of Social Sciences, and the teaching is provided by the Arctic Centre's researchers. About 30–40 students participate the ASP yearly.

More information: [http://www.arcticcentre.org/InEnglish/EDUCATION/Arctic\\_Studies\\_Program.iw3](http://www.arcticcentre.org/InEnglish/EDUCATION/Arctic_Studies_Program.iw3)



Arctic Studies Program included Pyhäntunturi Excursion on September 2011. Senior scientist Minna Turunen tells to students how snags are formed. Photo: Ilona Mettiäinen

## SCIENCE CENTRE

The Science Centre popularises Arctic information and research through functional exhibitions, public events and programs for schools. The Science Centre Exhibition at the Arktikum house presents the Arctic with its beautiful nature and various indigenous cultures through an interactive and scientific based approach. Almost 73 000 persons visited the Arktikum house in Rovaniemi in 2011, about half of them from abroad.



Science communicator Ari Laakso guides pupils in 'Get lost in the forest!' happening at the Science Centre. Photo: Marjo Laukkanen

The Science Centre participates actively in the European Network of Science Centres and Museums (Ecsite) and in the Nordic Science Centre Association (NSCF). During 2011, the Science Centre participated on two international projects. Natural Europe (2010–2013) focuses on museum education and deploys innovative web-based tools to help manage, connect and to better utilize the digitalized collection found in the Natural History Museums. ACCENT project (2009–2011) coordinated European action on climate change, engaging the public inside and outside of science centres and museums across Europe.



Researcher Emilie Beaudon in Kilpisjärvi school as part of the ACCENT project. Photo: Ari Laakso.

## SCIENCE CENTRE EXHIBITIONS IN 2011:

- *Way Out*, exhibition based on the Aalto University's design students' expedition to Lapland, 22.10.2010–16.01.2011
- *Nature Photograph of the Year 2010*
- *Berry Tours*, exhibition done together with researchers and artists of University of Lapland, 26.5.–16.10.2011



Berry Tours. Photo: Marjo Laukkanen.

- *The Call of the Poles*, exhibition organised by the French Ministry for Foreign Affairs and the French Embassy in Finland in cooperation with the Arctic Centre, 1.6.–28.8.2011
- *Muukalaisvaeltaja*, photos by Maria Huhmarniemi, 1.–31.9.2011
- *Arctic Black Gold*, exhibition on Arctic oil, 9.12.2011–6.5.2012



Arctic Black Gold, photo: Marjo Laukkanen.

## SCIENCE COMMUNICATIONS

The Science Communications unit compiles, popularizes and communicates information on arctic issues to national and international experts, different target groups and general public. The goal is to increase the knowledge and understanding on arctic issues by offering net services and news, by organizing happenings and by utilizing the expertise of the staff and partners. The Science Communications unit has important role in the information management in the Barents Euro-Arctic region.

In 2011 Science Communications made 59 press releases in Finnish and 27 in English. There were 185 stories in newspapers concerning or about the Arctic Centre. In 96 of these stories the Arctic Centre was the main topic. Most of the stories were published in Lapin Kansa, Uusi Rovaniemi, Pohjolan Sanomat, YLE and Kaleva.



Exchange students visiting the Arctic Centre in September. Photo: Jussi Portaankorva.

### SCIENCE COMMUNICATIONS MILESTONES IN 2011:

- New layout and content structure for Arctic Centre website developed
- Arctic Centre handout brochure planned and published in Finnish, English and Russian
- Arctic Centre multimedia and video presentations produced together with students from the Faculty of Art and Design
- New four year Barents information contract signed with International Barents Secretariat
- Barents environmental hot spots information system developed for Barents Euro-Arctic Council
- Several Barents Cafe discussion forums organized and the concept developed together with ThinkBarents project

A screenshot of a computer screen displaying the "Information System for the Barents Environmental Hot Spots" website. The page features a header with the Barents logo and a banner image of a snowy landscape. A sidebar on the left lists links such as "Hot spots frontpage", "Background information", "Environmental hot spots", "Hot spots on map", "Documents archive", "Contacts", and "Links and more information". The main content area includes a large image of a snowy landscape, a section titled "INFORMATION SYSTEM FOR THE BARENTS ENVIRONMENTAL HOT SPOTS", and a detailed text box about the purpose of the website. At the bottom, there is a small image of a forest and some footer text.

## LIBRARY

The library of the Arctic Centre contains a comprehensive collection of literature and information sources dealing with northern regions. Library patrons include visitors of Arktikum, local residents, students and national and foreign experts, e.g. scientists and administrative authorities, who need information on arctic and northern issues.

The collections of the library include books, journals and electronic material on Arctic, Antarctic and northern issues within various disciplines. In 2011 library had about 11 000 books, almost 70 subscribed journals as well as access to over 30 000 electronic books and over 15 000 electronic journals.

The library has worked from the beginning of the year 2010 organizationally as an independent unit of the Lapland University Consortium Library but functionally according to the strategic mission and goals of the Science Communications unit. The library and information service have taken an active role by producing book exhibitions, book launches and other events in close cooperation with the research units and the Science Centre.

### BOOK EXHIBITION: BIODIVERSITY IN NORTHERN FORESTS

The book exhibition consisted of information and literature on biodiversity and sustainable use of northern forests. The exhibition was mainly based on the research and expertise of Arctic Centre scientists. The aim of the exhibition was to present long-lasting research that our scientists have done in the northern forests and also to welcome the Pilke Science Centre in the neighbourhood.



Information specialist Liisa Hallikainen tells about biodiversity and sustainable use of northern forests to a group of school students in front of the book exhibition. Photo: Jussi Portaankorva.

## EU ARCTIC INFORMATION CENTRE INITIATIVE

Arctic Centre and its partners promoted actively the EU Arctic Information Centre initiative during 2011. No actual decisions were made but the initiative got a lot of visibility and support and the network discussed the contents actively.

In January 2011 European Parliament accepted a resolution on a sustainable EU policy for the High North with following wording: "requests the Commission to explore as a key priority the establishment of an EU Arctic Information Centre as a joint, networked undertaking, taking into account suitable proposals; notes the proposal by the University of Lapland in this respect; considers that such a centre needs to be capable both of organising permanent EU outreach to the major actors relevant to the Arctic and of channelling Arctic information and services towards the EU's Institutions and stakeholders."

Following this the Parliament accepted in December a 'Preparatory Action – Strategic Impact Assessment of the Development of the Arctic' which aims to support the future establishment of the EU Arctic Information Centre. The Arctic Centre was actively involved in related discussions in Brussels.

A brochure about EU AIC network was drafted together with Arctic Portal in Iceland and it was available for distribution in May. The network had a planning meeting in Rovaniemi in May 30–31.

As a major sign of political support the new government program in Finland states that Finland aims to have EU Arctic Information Centre established to Rovaniemi. The brochure and meeting were financed by resources granted by the Parliament of Finland for the initiative.

The Regional Council of Lapland supported the initiative by financing a 50 000 euro project for 2011–2012, and Arctic Centre was able to hire planning personal to the project.



Director Paula Kankaanpää presented the EU Arctic Information Centre Initiative in different events and audiences during 2011.  
Photo: Arto Vitikka.

## ADMINISTRATION

The Arctic Centre has a staff of approximately sixty persons and over ten nationalities: Professors, researchers, students, communication experts, producers, and planners.



Development Day for the staff on June. Photo: Jussi Portaankorva.

The staff conducts internationally renowned multidisciplinary research, train specialists in Arctic affairs, and increase knowledge and understanding of northern regions and their people, with a view to promoting sustainable development in the Arctic. Many of them serve as specialists in international and national tasks. The staff has also very wide and active network of contacts around the world.

## THE ARCTIC CENTRE BOARD (20.4.2010–31.12.2011)

Chairman: Director Matti Hepola, Centre for Economic Development, Transport and the Environment, Lapland

Members: Professor Suvi Ronkainen (vice chairman), Dean Timo Jokela, Lecture Lassi Heininen, Professor Susan Meriläinen, Professor Esa Poikela, Director of international Relations Outi Snellman and Professor Lotta Viikari

Staff representative: Head of Science Communications Markku Heikkilä

External member: Director Kari Laine, Thule Institute, University of Oulu

## THE ARCTIC CENTRE SCIENTIFIC ADVISORY BOARD (1.1.2009–31.12.2011)

The scientific board meets yearly and it has an advisory and supervisory role. The international board includes Dr. Karl Erb, Dr. Elena Andreeva, Dr. Frank Burnet, Ms. Liisa Holmberg, Dr. Grete Hovelsrud, Dr. David Leary, Ms. Annika Lindblom, Dr. Peter Prokosch and Dr. Philip A. Wookey.



The Arctic Centre Scientific Advisory Board in 2011.

## FUNDING

The Arctic Centre's basic budget comprises the share from the University of Lapland and the appropriation granted by the Ministry of Education. The sources of external funding are Academy of Finland, EU framework and regional programs, ministries and companies.

### BUDGET BY THE ARCTIC CENTRE

	<u>2011</u>
Basic budget	3,757 m€
External funding	1,134 m€
TOTAL	4,891 m€

## EXTERNALLY FUNDED PROJECTS IN 2011

### SCIENCE CENTRE PROJECTS

ACCENT – Action on Climate Change through Engagement, Networks and Tools / Nicolas Gunsley / EU-FP7, partner / 1.4.2009 – 31.3.2011

Natural Europe / Nicolas Gunsley / EU-FP7, partner / 1.10.2010 – 30.9.2013



Photo: Jukka Jokimäki.

### RESEARCH PROJECTS

#### GLOBAL CHANGE RESEARCH GROUP

Adaptation to Rapid Land-Use and Climate Changes on the Yamal Peninsula, Russia: Remote Sensing and Models for Analyzing Cumulative Effects / Bruce Forbes / University of Alaska Fairbanks / 1.6.2009 – 31.5.2012

TUNDRA - How to Preserve the Tundra in a Warming Climate / Bruce Forbes / NordForsk, Nordic Centre of Excellence / 1.1.2011 – 31.12.2015



Photo: Bruce Forbes.

Rovaniemen kaupunkilintuatlas / Jukka Jokimäki / EAKR – Lapin ympäristökeskus / 1.6.2009 – 31.12.2011

Ristipalonsuon samakkoselvitys / Jukka Jokimäki / GCG Finnish Consulting Group / 1.6.-30.6.2011

Dynamical Evolution of Scharffenbergbotnen Blue Ice Area since the Late Glacial Maximum / John Moore / Suomen Akatemia / 1.1.2009-31.12.2012

Clim-ATIC Northern Periphery Programme Project / John Moore / EU-NPP/ Ympäristöministeriö / 1.3.2008-28.2.2011

Sval Glac / John Moore / Liikenne- ja viestintäministeriö / 1.1.2010 – 31.12.2012

SVALI - Stability and Variations of Arctic Land Ice / John Moore / Nord Forsk, Nordic Centre of Excellence / 1.1.2010 – 31.10.2015

Poron ravinto ja lisäruokinta muuttuvassa ilmastossa / Minna Turunen / Maa- ja Metsätalousministeriö / 1.1.2008–31.3.2011

#### SUSTAINABLE DEVELOPMENT RESEARCH GROUP

ACCESS – Arctic Climate Change, Economy and Society / Anna Stammler-Gossman / EU-FP7 / 1.3.2011 – 28.2.2015

ORHELIA – Oral History of Empires by Elders in the Arctic / Florian Stammler / Suomen Akatemia / 1.9.2011 – 31.8.2015

BIPE - Barents International Political Economy:  
Governance and Gender in Development /  
Monica Tennberg / NordForsk / 1.10.2010 –  
30.09.2012

MISTRA – Mistra Arctic Futures: “Preparing for  
and Responding to Disturbance: Arctic Lessons  
for Sweden” / Monica Tennberg / Umeå  
University

#### NORTHERN INSTITUTE FOR ENVIRONMENT AND MINORITY LAW

Indigenous property systems / Timo Koivurova /  
Nordic Council of Ministers, Nordregio /  
1.5.2009– 30.4.2012

Ihmisoikeustutkimuksen tutkijakoulu / Timo  
Koivurova / Åbo Akademi / 1.1.2010 – 31.12.2013

Selvitys YVA-lainsäädännön kansainvälistä  
kuulemista koskevien säännösten toimivuudesta  
/ Timo Koivurova / Ympäristöministeriö /  
12.11.2010 – 28.2.2011

The Reform of the Arctic Council / Timo  
Koivurova / Walter & Duncan Gordon Foundation  
/ University of Toronto / 24.11.2010 – 1.12.2012

#### ADMINISTRATION

Tieto ympäristön käytön suunnittelussa ja  
päätöksenteossa / Paula Kankaanpää / EAKR /  
1.1.2010 – 31.12.2012

ARKTIS 2007–2011, Arktinen tutkijakoulu/ Paula  
Kankaanpää ja Päivi Soppela / Opetusministeriö,  
määräraha tutkijakoulun palkkakustannuksiin /  
1.1.2007-31.12.2011

ARKTIS 2010–2013, Arktinen tutkijakoulu / Paula  
Kankaanpää ja Päivi Soppela / Suomen Akatemia,  
tutkijankoulutuskurssit / 1.1.2010 – 31.12.2013

Kinnvika Legacy / Paula Kankaanpää / Nordic  
Council of Ministers, Nordregio / 1.5.2009 –  
31.12.2011



ARKTIS. Photo Päivi Soppela.

EU-Information Centre / Paula Kankaanpää /  
Eduskunta / from 1.1.2011

#### SCIENCE COMMUNICATIONS

Barents Hot Spots / Markku Heikkilä / NEFCO  
(Nordic Environment Finance Corporation) /  
1.1.2011 – 31.3.2011

Finnish Antarctic research data / Markku Heikkilä  
/ Finnish Marine Research Institute / 1.1.2003 –  
31.12.2011

Barents Euro-Arctic Council website, Barentsinfo-  
portal, Barents Information Strategy / Markku  
Heikkilä / Barents Euro-Arctic Countries /  
1.1.2008 – 31.12.2011



Photo: Arto Vitikka.

## MAIN EVENTS IN 2011

- *Securing the Indigenous*: A workshop in co-operation with the Faculty of Social Sciences, 3.2.
- Barents Café: "Venäjän modernisaatio / Modernization of Russia", organized in co-operation with ThinkBarents and Lapland University Consortium, 7.2.
- Barents Café: "Barentsin mahdollisuudet / Possibilities of Barents cooperation", 22.2.



Professor Hiroshi Maruyama, Dr Jan-Age Riseth, Dr. Elina Helander Renvall, Dr Leena Heinämäki and Assistant Professor Takashi Matsuna in Ainu-Sami seminar on November. Photo: Francis Joy.

- Lintuilla / *Bird Evening*, public lectures in cooperation with Provincial Museum of Lapland and Lapland Ornithologic Association, 24.3. and 28.4.
- Barents Café: "Valuvatko Barentsin mahdollisuudet Lapin ohi / Is Lapland missing the possibilities of Barents cooperation", 29.3.
- Knut Espen Solberg: *Melting Arctic*, public lecture in co-operation with Norwegian Embassy, 31.3.
- ARKTIS Annual Research Seminar: *Local knowledge and participatory research in the Arctic*, 4–5.4.
- ARKTIS public lecture by Dr. Amy Lovecraft: *Arctic Politics Across Scales*, 4.5.
- International Museum Day, open doors in Arktikum, 18.5.
- Eksy metsään / *Get lost in the Forest*, happening to school children in co-operation with Arktikum palvelut, Faculty of Art and Design, Lapland Provincial Museum and PILKE, 18.–19.5.
- BIBE workshop in Apatity, 18.–19.5.
- Dr. Stephan Dudeck: *Are you a Spy or should we marry you off?* Public lecture, 23.5.
- *The Role of the EU in Arctic Research*, seminar in



European Parliament, 24.5.

- *The Arctic and the European Union*, seminar in co-operation with French Embassy, 1.6.
- ARKTIS summer school with Aalto Design School in Pyhä, 13.–17.6.
- *Arctic indigenous property systems*, final seminar of the project, 19.–21.9.
- ARKTIS public lecture by Elisabeth J. Cooper: *Winter Ecology in the High Arctic*, 21.9.
- European Bird Watch happening in the Arctic Garden, in co-operation with Lapland Ornithologic Association, Arktikum Services, Provincial Museum of Lapland and Pilke Science Centre, 1.10.
- Tieto ja osallisuus ympäristöhallinnossa / Knowledge and participation in environmental governance, workshop with the Faculty of Law and the Faculty of Social Sciences, 14.10.
- Arktista Vimmaa / *Arctic Fury*, film and media festival, in co-operation with Pohjola-Norden Lapland and Lapland Centre of Expertise for the Experience Industry (LEO), 8.–12.11.
- CLIM-BEAR workshop, 14.–16.11.
- AINU-SAMI seminar 22.11.
- Barents Café: Kaivostoimintaan liittyvät kansalaisten mielikuvat / *Peoples images of Mining Activities*, 23.11. & Barents Café: Hyvin muokattu brändi voi tehdä Lapista entistä vetovoimaisemman / *Brand of Lapland*, 13.12.
- *Arctic Market Days*, in co-operation with Arctic Label 2 –project, 16.–18.12.
- *Anthropological and legal aspects of industrial development impact assessment*, seminar, 19.12.



CLIM-BEAR workshop in Korundi. Photo: Joonas Vola.



Arctic Market Days in December 2011. Photo: Marjo Laukkanen.

## PUBLICATIONS IN 2011

### Publications of the Arctic Centre:

Members of AC staff are marked with bold

*Arktis* the author or one of the authors  
(underlined) is a Ph.D. student in the Arctic  
Doctoral Programme Arktis

*Visitor* the author is a visiting scientist in Arctic  
Centre

### PEER REVIEWED ARTICLES IN SCIENTIFIC JOURNALS, ORIGINAL RESEARCH

*Arktis* Beaudon, Emilie, Arppe, Laura, Jonsell, Ulf,  
Martma, Tõnu, Möller, Marco, Pohjola, Veijo A. &  
Moore, John C. (2011). Spatial and temporal  
variability of net accumulation from shallow  
cores from Vestfonna Ice Cap (Nordaustlandet,  
Svalbard). *Geografiska annaler. Series A. Physical  
geography* 93 (2011) : 4, s. 287-299.

Alla Bolotova (2011). Engaging with the  
environment in the industrialized Russian North.  
*Suomen Antropologi* 36 (2011) : 2, p. 18-36.

Büntgen, Ulf, Raible, Christoph C., Frank, David,  
Helama, Samuli, Cunningham, Laura, Hofer,  
Dominik, Nievergelt, Daniel, Verstege, Anne,  
Timonen, Mauri, Stenseth, Nils Chr. & Esper, Jan  
(2011). Causes and consequences of past and  
projected Scandinavian summer temperatures,  
500-2100 AD. *PLoS ONE* 6 (2011) : 9, e25133.

Callaghan, Terry V., Johansson, Margareta,  
Brown, Ross D., Groisman, Pavel Ya., Labba,  
Niklas, Radionov, Vladimir, Bradley, Raymond S.,  
Blangy, Sylvie, Bulygina, Olga N., Christensen,  
Torben R., Colman, Jonathan E., Essery, Richard L.  
H., Forbes, Bruce C., Forchhammer, Mads C.,  
Golubev, Vladimir N., Honrath, Richard E., Juday,  
Glenn P., Meshcherskaya, Anna V., Phoenix,  
Gareth K., Pomeroy, John. ; Rautio, Arja. ;  
Robinson, David A. ; Schmidt, Niels M. ; Serreze,  
Mark C. ; Shevchenko, Vladimir P., Shiklomanov,  
Alexander I., Shmakin, Andrey B., Sköld, Peter,  
Sturm, Matthew, Woo, Ming-ko & Wood, Eric F.

(2011). Multiple effects of changes in Arctic snow  
cover. *Ambio : a journal of the human  
environment* 40 (2011) : Suppl. 1, p. 32-45.

Cavalieri, Sandra, McGlynn, Emily, Stoessel,  
Susanah, Bruckner, Martin, Koivurova, Timo &  
Nilsson, Annika E. (2011). Spurensuche : der  
ökologische Fußabdruck der EU in der Arktis.  
*Osteuropa* 61: 2-3, S. 211-223.

Divine, Dmitry, Isaksson, Elisabeth, Martma,  
Tõnu, Meijer, Harro A.J., Moore, John C., Pohjola,  
Veijo, Van de Wal, Roderik S.W. & Godtliebsen,  
Fred (2011). Thousand years of winter surface air  
temperature variations in Svalbard and northern  
Norway reconstructed from ice-core data. *Polar  
research* 30 (2011), 7379.

Duyck, Sébastien (2011). Drawing lessons for  
Arctic governance from the Antarctic Treaty  
system. *The yearbook of polar law. ed. by  
Guðmundur Alfredsson and Timo Koivurova;  
special editor for vol. 3 Kamrul Hossain.* 3 (2011),  
p. 683-713.

Forbes, Bruce C., Stammer, Florian, Kumpula,  
Timo, Messhtyb, Nina, Pajunen, Anu &  
Kaarlejärvi, Elina (2011). Ямальские оленеводы,  
газодобыча и изменения окружающей среды :  
адаптивный потенциал кочевого хозяйства и  
его ограничения. *Экологическое  
планирование и управление* 12 (2011) : 1, s. 52-  
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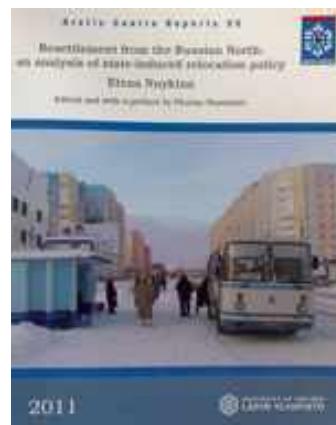
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## EXPERT MEMBERSHIPS

The staff of Arctic Centre is participating as experts in various national and international boards. This activity has wide scientific and societal impact. Here are some examples of memberships in 2011.

## PUBLICATIONS

- American Journal of Climate Change / John Moore, editor in chief
- Arctic and Antarctic Journal / Anna Stammler-Gossmann, co-editor
- The Arctic Review of Law and Politics / Timo Koivurova, editor & Kamrul Hossain, member of editorial board
- Chinese Journal of Polar Science / John Moore, member of editorial board
- Climate Change Research Letters / John Moore, editor in chief
- Cooperation and Conflict. Journal of the Nordic International Studies Association / Monica Tennberg, member of editorial advisory board
- Council for Finnish University Libraries, Research Support Network / Liisa Hallikainen, representative of the University of Lapland
- The Cryosphere / John Moore, member of editorial board
- Fennia / Bruce Forbes, member of editorial board
- Geografiska Annaler: Series A, Physical Geography / Paula Kankaanpää, co-editor
- International Journal of Wilderness / Anna-Liisa Ylisirniö, associate editor
- Journal of International Women's Studies / Kamrul Hossain, member of editorial board
- Landscape and Urban Planning / Jukka Jokimäki, member of editorial board
- Nordic Journal of International Law / Timo Koivurova, co-editorship
- Nordic Journal of Environmental Law / Timo Koivurova, co-editor
- Pastoralism Journal / Florian Stammler, member of editorial board
- Polar Geography / Bruce Forbes, member of editorial board & Paula Kankaanpää, member of editorial board
- Suomen riista / Osmo Rätti, member of editorial board
- The Yearbook of Polar law / Timo Koivurova, editor-in-chief & Kamrul Hossain, special editor (volume 3)

## BOARDS, COMMITTEES AND WORKING GROUPS

- Arctic Design / Anna Hyvönen, vice chair of steering group
- Arctic Human Development Report II (AHDR-II), Sustainable Development Working Group, Arctic Council / Bruce Forbes, member of steering group and lead author & Timo Koivurova, lead author
- Arctic Social Indicators (ASI), Sustainable Development Working Group, Arctic Council / Bruce Forbes, member
- Arktisen neuvoston taustaryhmä, Ulkoministeriö (*Background group of Arctic Council, Ministry for Foreign Affairs*) / Paula Kankaanpää, expert member
- Board of the Arctic Research Consortium of the US (ARCUS) / Timo Koivurova, member
- Different Land-Uses and Local Communities in Mining Projects (DILACOM) / Antti Aikio, member of steering group
- Etelämanner-tutkimuksen koordinaatioryhmä, Opetus- ja kulttuuriministeriö (*Antarctic Research Coordination Group, Ministry of Education and Culture*) / Paula Kankaanpää, member

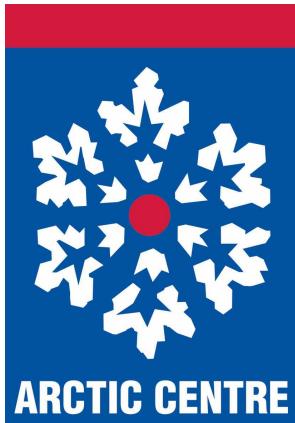
- EU Cost Action FA0906 UV-B radiation: A specific regulator of plant growth and food quality in a changing climate (UV4Growth) / Minna Turunen, Member of management committee
- Executive Board of the Arctic Research Consortium of the United States (ARCUS) / Bruce Forbes, member
- Extractive Industry Working Group of IASSA (International Arctic Social Sciences Association) / Florian Stammler, coordinator
- European Science Foundation: Expert Boards and Committees – assessment committee / Paula Kankaanpää, member
- The Finnish Publication Forum Project / Osmo Rätti, member of panel (Biological sciences I)
- Fulbright Board, Finland-United States Education Commission (FUSEC) / Bruce Forbes, member
- Hammastunturi reindeer herding co-operative / Terhi Vuojala-Magga, member
- Human Rights and Climate Change Working Group / Sebastian Duyck, member
- Human rights delegation overseeing the newly established Human Rights Centre / Timo Koivurova, member
- Ilmatieteen laitoksen neuvottelukunta (*Advisory Board of Finnish Meteorological Institute*) / Paula Kankaanpää, chair
- The International Advisory Board on Human Rights, Ministry of Foreign Affairs / Timo Koivurova, expert member
- International Arctic Science Committee (IASC) Glaciology Network / John Moore, Finnish representative
- International Arctic Social Sciences Association (IASSA), Florian Stammler, Executive Council Member
- The international environmental law interest group of the American Society of International Law (ASIL) / Timo Koivurova, co-chair
- The IUCN's Academy of Environmental Law (ICEL) / Kamrul Hossain, member
- The IUCN's International Council of Environmental Law (ICEL) / Timo Koivurova, member
- The IUCN's Commission on Environmental (CEL) / Timo Koivurova, member
- Kilpisjärven kyläympäristöhanke (*Environment of Kilpisjärvi village*, project) / Anna-Liisa Ylisirniö, member of steering committee



Standing Committee on Antarctic Data Management on Mallorca in 2011. Photo: Arto Vitikka.

- Lapin liiton ilmastostrategia (*Climate adaptation strategy of the Regional Council of Lapland*) / Monica Tennberg, chair of steering committee

- Lapin lintutieteellinen yhdistys (*Lapland Ornithologic Association*) / Jukka Jokimäki, member of board
- Lapin tutkimusseura (*Lapland Research Association*) / Osmo Rätti, deputy member of board
- Lapin liiton Lappi-brändin työryhmä (*Lapland as a brand, working group of the Regional Council of Lapland*) / Markku Heikkilä, member of expert group
- Nordic Network on sami and indigenous law (NORSIL) / Timo Koivurova, member of steering committee
- The Norwegian Research Council's Geopolitikk-Nord / Timo Koivurova, member of steering committee
- The Norwegian Research Council's NORRUSS / Timo Koivurova, member of steering committee
- Polaarialueiden tutkimuksen kansallinen komitea, Suomen tiedeakatemia (*Finnish National Committee of Arctic and Antarctic Research, Council of Finnish Academies*) / Paula Kankaanpää, member & Arto Vitikka, secretary
- Porotalous- ja luontaiselinkeinotutkimuksen neuvottelukunta, Maa- ja metsätalousministeriö (*Advisory board of Research on reindeer farming and natural source of livelihood, Ministry of Agriculture and Forestry*) / Minna Turunen, member
- Research Ethics Board of ACCESS (Arctic Climate Change, Economy and Society), Anna Stammler-Gossmann, Chair
- Research Council of Norway / Kamrul Hossain, panel member of grant evaluation committee
- Restoration of the freshwater pearl mussel populations with new methods / Minna Turunen, member of the steering group
- Scientific Council of Russian Reindeer Herders Union / Florian Stammler, expert member
- Suomen Arktinen neuvottelukunta (*Finland Arctic advisory board*) / Paula Kankaanpää, member
- The Social Science Working Group in the Committee on Polar Research of the Polish Academy of Sciences / Adam Stepien, member
- Standing Committee on Antarctic Data Management / Arto Vitikka, member
- Suomen Tietokirjailijat ry / Markku Heikkilä, member of board & regional chair of Lapland
- ThinkBarents / Markku Heikkilä, member of steering group
- UNEP Civil Society Advisory Group on International Environmental Governance / Sebastian Duyck, member
- University of the Arctic's Arctic Law Thematic Network / Timo Koivurova, chair & Tanja Joona, vice-lead
- Walter and Duncan Gordon Foundation, Canada / Paula Kankaanpää, invited Arctic Security expert
- World Library and Information Congress, 78th IFLA General Conference and Assembly, 11–17 August 2012, Helsinki, Finland / Liisa Hallikainen, member of advisory board
- Ympäristöalan pitkäaikaisaineistot Lapin tutkimusasemien verkostoitumisen kilpailutekijänä (LTSER, Long-Term Socio-Ecological Research) / Anna-Liisa Ylisirniö, member of the steering group



#### MULTIDISCIPLINARY RESEARCH INSTITUTE AND SCIENCE COMMUNICATOR

The Arctic Centre founded 1989 at the University of Lapland is a national and international hub of information and centre of excellence, which conducts multidisciplinary research in changes in the Arctic region and in their impacts. About 50 researchers, communicators and other professionals work at the Arctic Centre.

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