### **Update: Arctic-FROST Research Network in 2015**

### Introduction



Research Coordination Network "Arctic-FROST: Arctic FRontiers Of SusTainability: Resources, Societies, Environments and Development in the Changing North" (NSF PLR #1338850) is an international, interdisciplinary, and collaborative network of environmental and social scientists, local educators, and community members from all circumpolar countries. Its primary purpose is to enable and mobilize research on sustainable Arctic development. The network aims to support improved health, human development, wellbeing of Arctic communities while conserving ecosystem structures, functions and resources. The intellectual goal of the project is to contribute to conceptual, applied, and educational aspects of Arctic sustainability science by supporting the dissemination of knowledge and exchange of methodologies across the four Arctic-FROST

themes: sustainable regions, economies, cultures, and environments. Arctic-FROST is based at the UNI Arctic, Remote and Cold Territories Interdisciplinary Center (ARCTICenter).

Arctic-FROST address three overarching questions: What does sustainable development in the Arctic mean, locally, regionally, and globally? How is sustainable development attainable in a changing Arctic? What are the best ways of measuring achievements towards adaptation, thrivability and sustainable development in the Arctic?

Membership in Arctic-FROST is open to anyone with interests in sustainability and sustainable development in the Arctic. Since its inception in September 2013, the network has amassed more than 250 members from 20 countries including all Arctic jurisdictions with 55% coming from the U.S., 29% from Europe and Russia, and 15% from Canada. Alongside seasoned academics and community members more than half of the RCN members are early career scholars or graduate students. The network also involves Indigenous scholars and members of underrepresented groups.

The network has an extensive plan of activities for 2014-2018 consisting of annual meetings, early career scholar workshops, community workshops, the first Arctic Sustainability Education Forum in 2018, and multiple smaller theme-based conferences throughout each year. First-year events include the inaugural Arctic-FROST meeting-held in late 2013 at the University of Northern Iowa and the first annual meeting and early careers scholars workshop entitled "Sustainability and Sustainable Development in the Arctic: Meanings and Means" held in Anchorage, Alaska on September 18-20, 2014.

### **2015 General Events**

In 2015 Arctic-Frost held its second annual meeting and early career workshop in St. Petersburg, Russia on August 15-17, 2015. This meeting's theme was "Resources and Sustainable Development: Can, Should and Will Resource-based Development be Sustainable?". It gathered a diverse group of researchers representing multiple disciplines, demographic groups and countries. The meeting was followed by the early career scholar's workshop. In addition to St. Petersburg meetings, Arctic-FROST hosted and co-sponsored many domain and side meetings, as well as workshops. These include: five "Polar Geographies" sessions at the Association of American Geographers Meeting (Chicago, IL); ASSW 2015/International Conference on Arctic Research Planning III (Toyama, Japan), where Arctic-FROST held a special session on Arctic sustainability and ICARP III session/panel; "Sustainable development in the Arctic". Sessions were also held at the International Geographical Union Meeting (Moscow, Russia) "Arctic Sustainability Research: Agenda 2025" and an ICARP III white paper workshop (Charleston, SC). The symposium, "Canada and U.S.: Allies and Partners in the Arctic" was held in (Cedar Falls, IA), and "Resources and sustainable development" northern community workshop co-sponsored with ReSDA (Kuujjuaq, QC), as well as multiple public events in Iowa to raise awareness about environmental and social change in the Arctic have taken place.





2015 Arctic-FROST Annual Meeting (left) and Early Career Scholars Workshop (right), St. Petersburg, August 15-17, 2015

Arctic-FROST members are committed to deliver a number of key products, including two edited volumes devoted to sustainable development in the Arctic, a textbook on Arctic sustainability, other educational materials, academic publications, and a research plan for Arctic sustainability science for the next decade. The initial version of this plan was presented at the Third International Conference on Arctic Research Planning (ICARP III) on April 23-30, 2015, where Arctic-FROST co-organized two panels. The Arctic-FROST members also contributed to the "Northern Sustainabilities" volume edited by Gail Fondahl and Gary Wilson (UNBC).

In 2016 Arctic-FROST will hold its annual science meeting in Vienna, Austria The meeting will be devoted to "Arctic Sustainabiluity in a Gloibal Context." (<a href="www.uni.edu/arctic/frost">www.uni.edu/arctic/frost</a>).

### "Sustainability that Works" Community Knowledge Sharing Wworkshops

In 2015 Arctic-FROST actively collaborated with other research networks and organizations, such as Resources and Sustainable Development in the Arctic (ReSDA), Research Coordination Network in Arctic Urban Sustainability, International Arctic Science Committee (IASC), International Arctic Social Sciences Association (IASSA), Association of Polar Early Career Scientists (APECS), and others. At the ReSDA-Arctic-FROST Kuujuuaq workshop the two networks launched a collaborative initiative to hold a series of community workshops under the common theme "Sustainability that works", where researchers and community members can exchange their practical experiences with sustainable development projects. The second workshop will take place in Alaska in 2016.

In March 2016 Arctic-FROST held a community knowledge-sharing "Sustainability that Works" workshop in Nome, Alaska. The workshop was a forum where Arctic-FROST researchers and community members shared that-of-the-art knowledge and community perspectives on sustainable development in the Arctic. Participants from Canada, Alaska and Russia to discussed their experiences in respect to successes and challenges of long-term, sustainable development in their communities. The event brought together nine researchers and Indigenous community members from outside Nome, as well as local participants/speakers from Kawerak Inc, Bering Straits Native Corporation, local village corporations, local utility and UAF Northwest campus. Some themes and ideas that emerged during the workshop included: (1) community interest in development when such development is done in a way that maximizes local benefits and minimizes negative impacts; (2) importance of resource and self-governance; (3) necessity of "post-resource" planning; (4) investments in local capacities and people in the community (transferable skills); (5) need for "new money" in Alaska economy, new economies will make communities more sustainable; (6) issues of Arctic youth; (7) role of leadership and entrepreneurship in ensuring sustainable development. Arctic-FROST will continue knowledge-sharing workshop in Arctic communities in collaboration with ReSDA and other partners.

### Other 2015 highlights:

Annual meeting abstracts. Abstracts were produced for the Annual meeting and made freely available on Arctic-FROST's website. A fancier version of abstracts/proceedings is coming shortly. Abstracts and selected paper for side and domain workshops were published by respective conferences.

*Other publications*. A book "Northern Sustainabilies" (edited by Gail Fondahl and Gary Wilson) with chapters written by Arctic-FROST members (ICASS VIII and annual meeting participants) is in print by Springer. Selected members published peer-reviewed articles and book chapters.

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*Peer-reviewed volumes*. Work has begun on the first peer-reviewed volume "Arctic Sustainability: A Synthesis of Knowledge". We established writing team and developed a plan to move forward.

Arctic-FROST web portal is operational. Facebook page was launched. These are primary tools for publication, rapid circulation and dissemination of network activities. www.uni.edu/arctic/frost

Collaborative research proposals. Arctic-FROST members developed a number of successful collaborative interdisciplinary and international proposals, which directly benefited from Arctic-FROST activities in 2014-2015: Belmont Arctic call (NSF/Nordfosk/RFBR/RCN) synthesis project "Arctic Sustainability: A Synthesis of Knowledge" (PI Petrov), IASC Arctic Sustainability Workshop (PI Petrov, Fondahl and Schweitzer), Foreign Affairs Canada Arctic Symposium funding (PI Petrov and Cruz). Finally, a group of Arctic-FROST members collaborated with RCN in Russian Arctic Urban Sustainability to develop a successful NSF grant "PIRE: Promoting Urban Sustainability in the Arctic" (PIs Orttung, Heleniak, Laruelle, Streletskiy and Shiklomanov).



Arctic-FROST Researchers at a Community Workshop in Nome, AK, March 21st, 2016

# NSF Arctic-FROST ANNUAL NETWORK MEETING AND EARLY CAREER SCHOLARS WORKSHOP:

### Resources and Sustainable Development in the Arctic:

### Can, Should and Will Resource-Based Development Be Sustainable?

### ST.PETERSBURG, RUSSIA, AUGUST 15-17, 2015

European University in St. Petersburg, RUSSIA

### Preliminary agenda

### August 14th

6:00 pm Ice Breaker reception

August 15th

8:00-8:30 Registration

8:30-9:15 **Session 1.1 Opening and Introductions** 

Chair: Nikolay Vakhtin

Nikita Lomagin, Vice Rector for Governmental Relations

Andrey Petrov, Arctic-FROST PI

9:30-10:15 Townhall/Plenary Session 1.1: Arctic Sustainability Science: Past, Present and

**Future** 

Chair: Tatiana Vlasova

Andrey Petrov and Peter Schweitzer "Arctic Sustainability Research: Past, Present and

Future"

Discussion

10:15-10:30 Coffee break

# 10:30-12:30 Keynote/Plenary Session 1.2: Resources and sustainable development in the Arctic: lessons and possibilities

This session will feature four speakers who will set the tone for further presentation discussions: focus on current issues, achievements and questions related to the role of resources is sustainable development in the Arctic

Chair: Yuri Gladky, Herzen State Pedagogical University of Russia (Russia)

Alexander Pelyasov, Council for Productive Forces, Russia Resources and sustainable development in the Arctic: lessons and possibilities

Chris Southcott, Lakehead University, Canada Resources and Sustainable Development in the Arctic Project: Initial Findings

Florian Stammler, University of Lapland, Finland Confrontation, co-existence or co-ignorance? Determinants of relations between industry and local people

# Dean Carson, Umea University, Sweden/Charles Darwin University, Australia Resources and long term economic development along Australia's 'spine': some local stories Discussion

12:30-2:00 Lunch

# 2:00-4:00 Illustrated paper session 1.3 Mineral resources and sustainable communities: impacts, contestations and complementarities

Q: What is the role (if any) of non-renewable resources in sustainable development of the Arctic? (illustrated paper: each panelist gives a short (5 mins) presentation: context of the study(s)-results-main conclusion/discussion points [more of a summary/one or two main conclusions related to the theme of the meeting]; overall discussion moderated by the chair follows)

Chair/Discussion lead: Jessica Graybill, Colgate University, USA

Elena Kluchnikova, Mining projects and local communities in the Russian Arctic: join development

Rasmus Ole Rasmussen, Nordregio, Sweden

Gerald Zojer, University of Lapland Finland Arctic hydrocarbon resources: Curse or blessing for societal security in the Arctic?

Scott Stephenson, University of Connecticut, USA

Mia Bennett, University of California, Los Angeles, USA *The Last Frontier? Long-Term Perspectives on Arctic Natural Resource Extraction* 

Victoria Hermann, University of Cambridge, UK Frozen Assets: Moving Arctic Investment from Resource Extraction to Human Development

Discussion

4:00-4:15 Coffee break

### 4:15-5:30 Illustrated paper session 1.4: Resources and Indigenous communities

*Q*; Resources and indigenous communities: is there a way to achieve sustainability? Chair/Discussion lead: Florian Stammler

Peter Schweitzer, University of Vienna Lessons from the Never-Ending ANWR Debate Chris Southcott, Lakehead University Using non-renewable resources to enhance renewable resource development in Indigenous communities

Anna Varfolomeeva, Central European University, Hungary *Past Experiences Forming Present Interactions: Indigenous Peoples and Extractive Industry Development in the North-West of Russia.* 

Alexey Pristupa, Wageningen, University. Netherlands. Information as legitimacy broker in zoning efforts in the Numto nature park in the Russian Arctic: Planning for sustainability versus vested interests

Andrew Hodgkins, University of Calgary, Canada Examining Sustainable Communities through Vocational Education and Training Partnership Programs in the Canadian North Discussion

6:00 Dinner

### 6:00 ARCTIC-FROST STEERING COMMITTEE MEETING (closed)

Petrov, Heleniak, Graybill, Schweitzer, Southcott, Rasmussen, Vlasova, Crawford

### August 16th

8:30-10:30 Illustrated paper session 2.1: Resources, cities and sustainable development

Q; Can resource-based cities and towns be drivers of sustainable development?

Chair/Discussion lead: Gertrude Saxinger, University of Vienna

Gertrude Saxinger, University of Vienna, Austria We also want to mine 100 years – let's safe the deposits!" local Ideas about Sustainability

Nadezhda Zamyatina, Moscow State University, Russia Current Migration Trajectories of Young Talents to Russian Arctic cities: the Role of Universities

Doris Carson, Umea University, Sweden *Diversifying resource-based communities:* understanding the role of mobilities in path dependence

Yulia Zaika, Moscow State University, Russia Socio-economic and environmental challenges and problems of single-industry cities of Murmansk region, Russia Julia Loginova, University of Melbourne, Australia Institutional Factors of Community Resilience to Natural Resource Development in the Timan-Pechora Province Elena Kuznetsova, Norwegian University of Science and Technology, Norway Aggregate sustainability in Arctic and Sub-Arctic: challenges and possibilities Sigrid Schiesser, University of Vienna, Austria The development of railroad infrastructure in the Russian North (Sakha Republic): ecology, symbolics and sociality

Vera Kuklina, Sochava Institute/George Washington University, USA Resource extraction and infrastructural networks in the North of Irkutskaia oblast

Discussion

10:30-11:00 Coffee break

# 11-12:30 Illustrated paper session 2.2: Renewable resources and sustainability in the Arctic

Q: Can renewable and traditionally-used resources and be deployed in order to achieve sustainable development?

Chair/Discussion lead: Diane Hirshberg

Nathaniel Thrumbull, University of Connecticut, USA Marine Protected Areas and the Russian North

Catherine Chambers, Blönduós Academic Center, Iceland / University of Alaska Fairbanks, USA *The Icelandic lumpfish fishery as a case study to illustrate the multiple goals of sustainable fisheries management* 

Egor Ivanov, Sochava Institute of Geography, Russia Sociocultural potential of glacier landscapes of Near-Baikal mountains

Emily Francis, University of Northern Iowa, USA Wild Reindeer dynamics and Sustainability of Social-Ecological Systems in Taimyr

K. Eidemiller, Herzen State Pedagogical University of Russia (Russia) *The interests of environmental safety in the development of the Arctic resources as an imperative Discussion* 

12:30-2:00 Lunch

2:00-2:45 **Illustrated paper session 2.3: Sustainable development and Arctic governance** *Q*; What are the governance mechanisms for sustainable development in the Arctic?

Chair/Discussion lead: Natalia Loukacheva, University of Northern British Columbia, Canada

Illustrated paper Panelists:

Natalia Loukacheva, University of Northern British Columbia, Canada

Klaus Georg Hansen, Greenland. Large scale industrial projects and political sustainability in Greenland

Nengye Liu, University of Dundee, UK. The European Union and Sustainable Management of Fisheries in the Arctic

Genivieve Parente, University of British Columbia, Canada *Sustainable Governance in Alaska* Alla Fedorova, Galina Gnatiuk and Viktoria Filippova, M.K. Ammosov North-Eastern Federal University, Yakutsk, Russia *Problems of Legal Regulation of Traditional Land Use (Case of Bellet Evenk National Nasleg, Sakha (Yakutia)* 

Discussion

3:00-5:00 **Discussion groups/round table** 

Chair: Timothy Heleniak, Nordregio, Sweden

*5:00-5:15 Coffee break* 

5:15-6:00 Session 2.4: Synthesis session

Chair: AndreyPetrov & Jessica Graybill

Participants: day's presenters, ECS, other Arctic-FROST members

6:30 Dinner

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### Arctic-FROST Early Career Scholars Workshop August 17th, 9 am-5:00 pm

9:00 Opening: (Re)-introduction and workplan

9:30-10:30 am "Authors meet the critics": Meetings with mentors=paper reviewers

10:30-11:00 Coffee break

11-12:30 Panel 1: Visions of Arctic sustainability science and community scholarship Moderator:

Panelists: Peter Schweitzer (place of Arctic sustainability science among social sciences), Alexander Pelyasov (reaching put to policymakers, making an impact), Chris Southcott and Diane Hirshberg (Arctic sustainability sconce and northern communities)
This panel will focus on both summarizing the outcomes of the conference, discussion about the nature of sustainability science in the Arctic and its role in making Arctic communities sustainable.

12:30-2:00 Lunch

2:00-3:30 Panel 2: Arctic sustainability science as a career

Moderator: Francis

Panelists: Jessica Graybill (interdisciplinarity), Tim Heleniak (publishing), Scott Stephenson

(post-PhD career management), Andrey Petrov (getting funded)

3:30-4:15 Work in groups

Arctic-FROST's strategy to build new generation of Arctic sustainability scholars

4:15-5:00 Reports and reflections

Conference highlights (2 pager or 4-5 slides from each) – what are the most important things you learned at this meeting?

6:00-6:30 Wrap up

"Arctic FROST Young Scholars Panel – Arctic Anthropology and Sustainability" at the Alaska AnthropologicaAssociation Meeting in Sitka, Alaska - 3<sup>rd</sup> March 2016. Brief REPORT

Panel organizers: Alexander Meitz, Susanna Gartler

Speakers (in chronological order):

- Susanna Gartler (University of Vienna, AT)
- Jon Krier (Oregon State University)
- Josie Oliva (UAA) & Alexandra Taitt (UAA)
- Kate Yeske (Colorado State University)
- Alexander Meitz (University of Vienna, AT)

The cross-disciplinary panel specifically invited young graduate students to present and discuss their research. This low-threshold platform allowed six speakers to present their topics: Jon Krier – speaking about "GIS Applications for Predictive Modeling of Submerged Sites", Josie Oliva and Alexandra Taitt who presented their research on "Anchorage Sister Cities: Exploring sustainable Arctic connections.", Kate Yeske talking about "Communal hunting game drive systems in Alaska", Alexander Meitz with "The Bicycle in the Arctic – Questions about Sustainable Mobility" and Susanna Gartler presenting the opener of the session "Sustainability – and the Arctic." Unfortunately, Danielle Ringer, one of our proposed participants could not attend due to health issues. With Alexandra Taitt, who received the Thomas F. Eidel Graduate Scholarship (MA Level) of the Alaska Anthropological Association in 2016, and Josie Oliva presenting together on their topic we nevertheless reached the target of six presenters.

Following the well-attended session we held a world-café session determining intersections of our anthropological and archeological research. Several key areas were identified such as resource use, relations (human-animal, human-environment and human-human), adaptability, indigenous relations — all of which were contextualized in the framework of 'sustainability'. Thus the group was able to determine key differentiating factors of sustainability such as temporality and spatiality. The research topics presented brought in different aspects regarding these themes - i.e. the archeological case studies highlighted long-term temporal frames for sustainable resource use, contrasting with mining and the extractive industry where far shorter time-frames shape policies and actions. Urbanization, local knowledge and food security were identified as over-arching themes as well and discussed in the world-café as well as adaptability to disrupted environments. The follow-up to this panel is a planned joint publication of all authors elaborating on the above themes.

### **REPORT**

# ARCTIC-FROST COMMUNITY KNOWLEDGE SHARING WORKSHOP: YOUTH MULTI MEDIA TRAINING WORKSHOP IN YUKON TERRITORY

Submitted by Gertrude Saxiner, University of Vienna

From 14<sup>th</sup> to 18<sup>th</sup> of March 2016 a one week FROST networking project took place in the village of Mayo in the Yukon Territory.

The networking activity was a training in skills on "Video-Storytelling" for academics with the option of participation of youth from the village. The teacher Prof. Jessica Graybill is a highly experienced trainer in this field. The aim of video storytelling is that the participants learn

- \*to conceptualise a short story
- \*to write up the story
- \*reading out and recording the voice over for the clip
- \*to shoot high quality pictures and edit them
- \*use of video computer programs
- \*compile pictures, music, story into one video clip
- \*upload in social media and learn about copy rights, ethical dimensions in publishing on the internet

The aim of these skills for academics is to convey community based research activities involving participants of the village and to transfer digital and storytelling skills. The participants were Dr. Gertrude Saxinger and Ph.D cand. Susanna Gartler. In her research they work with young inhabitants of the village of Mayo within the ReSDA research project LACE- community participation in the extractive industries. Besides integrating and developing skills of youth in the YMM project the results of the students are valuable research data for understanding, in this case, the visions of development and the ideas about the individual future and that of the region.

Besides the fact that the course was announced in the local school, during a culture camp by the Susa and Gertie as well as announced in individual talks with potential participants as well as there was strong support by the youth coordinators in the Na Cho Nyak Dun Frist Nation government, no youth wanted to participate in this first course. The reasons are various. It needs even more personal interaction with potential participants, more effort by the youth coordinators to promote the activity and probably the location of the course (the school) was not attractive during spring break. However no other location was possible due to the need for computers.

Susa and Gertie's plan is to make another attempt in 2017 and to frame the course in a slightly different way. The greatest benefit of this FROST networking activity has been the training of the researchers who can now transfer this knowledge in a variety of cases throughout the numerous projects.

Furthermore, Gertie was invited by another First Nation to train next year within a local agriculture course where participants learn to document their experience growing things from seeds until distributing the fruits and vegetabels in fall.

Moreover, the team developed the idea together with Jessica Graybill to do a research project on community based activites for documenting live throughout the Arctic.

All in all the project had very valuable outcomes and the team thanks for the funding by ARCTIC FROST



### **ACTIVITY REPORT**

# KNOWLEDGE SHARING WORKSHOP

"Sustainability that Works in the Arctic: Sharing Challenges and Experiences of Arctic Communities on the Path to Sustainable Development"

> March 21-23, 2016 Nome, AK

> > Prepared by Andrey N. Petrov

Cedar Falls, 2016



### Acknowledgements

This report provides an overview of an activity supported by the following National Science Foundation grants: PLR #1338850, PLR #1532655. We also acknowledge collaboration from Resources and Sustainable Development (ReSDA) project (Canada) in organizing this and other workshops in the "Sustainability that Works in the Arctic" series.

We would like to thank all workshop speakers and participants. In particular we are thankful to the members of the program and organizing committee: Vera Metcalf, Diane Hirshberg, and Ann Crawford. We are also grateful to the University of Alaska Fairbanks Northwest Campus and to Bob Metcalf (campus director) personally. The workshop and report were prepared with the support from UNI graduate students Varvara Korkina and Emily Francis.

Andrey N. Petrov, PhD Arctic-FROST Principal Investigator Director, ARCTICenter University of Northern Iowa



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Arctic-FROST Researchers at a Community Workshop in Nome, AK, March 21st, 2016

# "Sustainability that Works" Community Knowledge Sharing Workshops KNOWLEDGE SHARING WORKSHOP

"Sustainability that Works in the Arctic: Sharing Challenges and Experiences of Arctic

Communities on the Path to Sustainable Development"

MARCH 21-23, 2016

**UAF Northwest Campus, Nome, AK** 



"Sustainability that Works in the Arctic" Community Workshop:

Vera Metcalf of Kawerak. Inc. talking about sustainable marine mammals co-management in Alaska (left); Varvara Korkina (graduate student at the ARCTICenter, UNI) explains the experiences of benefit sharing from gold mining activities in Chukotka, Russia (right).

In the recent decades Arctic communities experienced dramatic economic, social and cultural transformations, as well as a rapid environmental change. While some communities were able to partially capitalize on new economic opportunities, assert their rights and preserve ecosystems, others are facing formidable challenges and struggles. As the second UN Indigenous Peoples Decade is ending, it is an opportune time to reflect on the relevance and meanings of sustainable development in Indigenous communities, and analyze experiences from various corners of the Arctic. The purpose of this workshop is to provide a forum for such information- and story-sharing among Arctic Indigenous people and facilitate the knowledge exchange with social scientists.

In 2015 Arctic-FROST actively collaborated with other research networks and organizations, such as Resources and Sustainable Development in the Arctic (ReSDA), Research Coordination Network in Arctic Urban Sustainability, International Arctic Science Committee (IASC), International Arctic Social Sciences Association (IASSA), Association of Polar Early Career Scientists (APECS), and others. With ReSDA-Arctic-FROST Kuujuuaq workshop the two

networks launched a collaborative initiative to hold a series of community workshops under the common theme "Sustainability that works", where researchers and community members can exchange their practical experiences with sustainable development projects. The second workshop will take place in Alaska in 2016. For the purposes of the workshops "sustainable development' is broadly defined here to refer to such development that improves human well-being and health, while preserving ecosystem functions and structures.

In March 2016 Arctic-FROST held a community knowledge-sharing "Sustainability that Works" workshop in Nome, Alaska. The workshop was a forum where Arctic-FROST researchers and community members shared that-of-the-art knowledge and community perspectives on sustainable development in the Arctic. Participants from Canada, Alaska and Russia to discussed their experiences in respect to successes and challenges of long-term, sustainable development in their communities. The event brought together gathered nine researchers and Indigenous community members from outside Nome, as well as local participants/speakers from Kawerak Inc, Bering Straits Native Corporation, local village corporations, local utility company and UAF Northwest campus.

Prior to the workshop the guest researchers held a public lecture as part of the "Strait Science" Talk speaker series organized by UAF campus in Nome.



Local Audience at the Strait Science Talk at the University of Alaska Fairbanks Northwest Campus, Nome, March 21<sup>st</sup>, 2016

On the main day of the event (03/22) we held two introductory presentations about sustainable development in the Arctic, which reported on the latest findings of the two major research projects: Arctic-FROST (USA) and "Resources and Sustainable Development" ReSDA (Canada). Arctic-FROST organized and sponsored the Nome workshop. Then we held a panel of experts who reported results of particular studies in USA, Russia and Canada. We also held a panel with the Nome region speakers. We also had a open discussion of lesions learned on the last day.



### The following themes were key in these discussions:

- ❖ Governance as a central component of sustainable development in the Arctic.
- \* Changes in communities when local residents have control over their future.
- \* Role of researchers in translating information that local government can understand.
- ❖ 'Fate control' as framing for policy, local governance; implementation mechanisms for successful self-governance and resource governance.
- ❖ Funding of local decisions: how to use available funds and where find funding to support local priorities?
- ❖ Shareholders and right holders, and relationships between various forms of local governance (Regional and village corporation, tribal governments, local and state authorities)
- ❖ The issue of high local dependency on the state or federal government The need for 'new money': tourism, crabbing, cultural economy, renewable energy, to end the dependency on oil.
- ❖ Lack of education, but also lack of jobs for educated professionals
- ❖ Capacity issues with managing small communities: overcommitment, lack of internal resources, etc.
- ❖ The role of cultural values in governance: Cultural values called help good governance
- ❖ Need for strategic human capital development, especially in respect to young people



"Sustainability that Works in the Arctic" Community Workshop: Pavel Sulyandziga (front) is listening to Dr. Chris Southcott's presentation

### Main takeaways from Nome workshop discussions could be summarized as follows:

- (1) Local communities in the Arctic are interested in resource and other forms of development when such development is done in a way that maximizes local benefits and minimizes negative impacts.
- (2) Governance of resources and self-governance ("fate control") are important for ensuring sustainable economic and social development (strong institutional and governance structures are key to success)
- (3) There is a need to plan for post-resource development from the beginning of new mining/oil etc. projects
- (4) Use various mechanisms to invest in local capacities (local businesses, infrastructure that can be used for multiple purposes, education; create permanent funds, etc.)
- (5) The main resource of the Arctic is its people. Investment in people is key (education, retaining human capital, professional training combined with learning land- and sea-based activities and traditions)
- (6) There is a need for "new money" in Alaska economy: something that is not reliant on non-renewable resources or government (creative economy, cultural economy, tourism, entrepreneurial activities). Best of those will still be related to traditional cultures and activities (cultural economy, ecotourism, hunting tourism, etc.). These economies will make communities more sustainable.
- (7) Issues of Arctic youth are very urgent and important when addressing sustainable development
- (8) Case studies demonstrate that even in very difficult institutional, economic and political circumstances (e.g., in Russia) strong leadership, entrepreneurship (including local government entrepreneurship/intrapreneurship) can lead to positive results (case presented by Pavel Sulyandziga, famous Indigenous rights activist from Russia and a member of the UN Working Group on Business and Human Rights)



"Sustainability that Works in the Arctic" Community Workshop: Dr. Mara Kimmel (Anchorage) talks about urban resilience in the Alaska

### KNOWLEDGE SHARING WORKSHOP

# "Sustainability that Works in the Arctic: Sharing Challenges and Experiences of Arctic Communities on the Path to Sustainable Development" MARCH 21-23, 2016

**UAF Northwest Campus, Nome, AK** 

### SPEAKERS AND REGISTERED PARTICIPANTS:

Andrey Petrov, University of Northern Iowa
Bob Metcalf, UAF Northwest Campus
Chis Southcott, Lakehead University
Cindy Wieler, Kawerak Inc.
Diane Hirshberg, University of Alaska Anchorage
Gay Sheffield, UAF Northwest Campus
Jackie Hrabok-Leppäjärvi, UAF Northwest Campus
John Handeland, Nome Joint Utilities
Larry Pederson, Bering Straits Native Corporation
Lee Huskey, University of Alaska Anchorage
Maisie Thomas, Nome Nugget

Maisie Thomas, Nome Nugget
Mara Kimmel, City of Anchorage
Mary David, EVP, Kawerak Inc.
Matt Ganley Bering Straits Native Corporation

Patti Lillie, UAF Northwest Campus

Pavel Sulyandziga, RAIPON of Primorsk Krai and the United Nations

Richard Beneville, Mayor, City of Nome

Robert Loeffler, University of Alaska Anchorage

Rose Fordick, Kawerak Inc.

Roy Ashenfelter, Bering Straits Native Corporation
Tatiana Vlasova, Russian Academy of Sciences
Tom Gray, White Mountain Village Corporation
Varvara Korkina, University of Northern Iowa
Vera Metcalf, Kawerak Inc. and Eskimo Walrus Commission

### KNOWLEDGE SHARING WORKSHOP

### "Sustainability that Works in the Arctic: Sharing Challenges and Experiences of Arctic Communities on the Path to Sustainable Development"

### MARCH 21-23, 2016

### **UAF Northwest Campus, Nome, AK**

### **PROGRAM**

Arrival: March 21 (morning/afternoon)

Departure: March 23<sup>rd</sup> after 12 pm

### **Program:**

### March 21st

Tour of Nome and vicinities (Gay Sheffield)

5 PM Icebreaker

6:30 PM STRAIT SCIENCE TALK - UAF campus, Nome, AK

Lee Huskey, Andrey Petrov and Chris Southcott

### March 22<sup>nd</sup>

8-9 AM Opening:

Welcome: Richard Beneville, Mayor, City of Nome

Bob Metcalf, Director, UAF Northwest campus

Vera Matcalf, Knwerak Inc. and Eskimo Walrus Comission

Andrey Petrov, Arctic-FROST

9:30-10:30 AM

Session 1: Arctic sustainability: what do we know? ReSDA and Arctic-FROST Updates

Moderator: Vera Metcalf

Andrey Petrov, Arctic-FROST, USA: Sustainable Development in the Arctic: Approaches and Possibilities

Chris Southcott, ReSDA, Canada: Resources and Community Sustainability in the Arctic: ReSDA Findings

Discussion (lead: Vera Metcalf)

10:45-12:15 AM

# Session 2: Arctic sustainability: what do we know? Current research on Sustainable Communities in the Arctic

Moderator: Chris Southcott, Lakehead University

Lee Huskey, University of Alaska Anchorage: Elements of Community Sustainability

Mara Kimmel, University of Alaska Anchorage: Communities and Sustainable Development in Alasla

Robert Loeffler, University of Alaska Anchorage: Mining and Sustainable Communities: A Case Study of the Red Dog Mine

Tatiana Vlasova, Russian Academy of Sciences: *Developing Indicators for Community Socio-Ecological Resilience and Sustainability* 

Discussion (lead: Chris Southcott)

12:15-1:30 PM

LUNCH

1:30-3:00 PM

### Panel 3: Sustainable development projects in Arctic communities: Sharing Local Experiences

Moderator: Diane Hirshberg, UAA

Vera Metcalf, Kawerak Inc./EWC "Experiences in Nome and at Kawerak, Inc."

Matt Ganley, Larry W. Pederson, Bering Straits Native Corporation: "Hard Cases: The Projects in the Bering Straits Area"

Jackie Hrabok-Leppäjärvi, UAF Northwest Camopus: "Circumpolar Reindeer Curriculum"

Mara Kimmel, City of Anchorage: "Experiences in Anchorage, AK: Urban Resilience in the (near) Arctic"

John Handeland, Nome Joint Utilities "Sustainable Energy in Nome, AK"

Discussion (lead: Diane Hirshberg, UAA)

3:30-5:00 PM

Panel 4: Sustainable development projects in Arctic communes: International Experiences

Moderator: Lee Huskey, UAA

Andrey Petrov, UNI "Resources, CLCA and well-being dynamics in the Inuvialuit Settlement Region, Canada"

Pavel Sulyandzyga, RAIPON-Primorsky Krai: "Bikin Udege: a Path to Sustailability"

Varvara Korkina, University of Northern Iowa: "The Kupol Project: Corporate Social Responsibility and Community Development in Chukotka"

Discussion (lead: Lee Huskey, UAA)

### 23 March

9:00-10:30 AM

Synthesis Session and Arctic Horizons Discussion Table: What have we learned and What we need to know in the next decade?

Moderator: Diane Hirshberg, UAA

Participants: Matt Ganley, Tom Gray, Vera Metcalf, Bob Metcalf,

Andrey Petrov, Mara Kimmel, Lee Huskey, Chris Southcott, Pavel Sulyandziga, Varvara Korkina, Robert

Loeffler, Tatiana Vlasova

of the Northwest Campus, were instrumental in bringing the group to Nome.

It seems that areas rich in natural resources, such as the North Slope, are better able to adapt to the Western structure of government, said Mara Kimmel, a professor at the University of Alaska Anchorage. One hypothesis is that the governing bodies in regions rich in resources had discussions about what is best for their communities for a long time, so their governing systems are well-oiled. These regions also have more money at their disposal. "I don't think that's been systematically explored, that intersection between governance and economic development," Kimmel said. She added that the local regional corporations and tribal governments often clash in areas where there are really no resources to argue about.

Bob Metcalf said that traditional communities sometimes struggle to adapt to the Western governing system. Drawing on his experiences in Savoonga, Metcalf said that the village historically made decisions by consensus. The community had trouble selecting one person to be a decision-maker. According to another participant, board members of corporations are often not fully competent in their positions. Since communities are uncomfortable with the Western system and unsure whom to elect, they vote for relatives and friends. The leaders of the corporation boards sometimes do not realize how to best capitalize on their resources, and do not bring new money into the region. "It's not bringing in the money the way it could," Petrov said.

Along with governance issues, another important topic at the workshop was education. "The main resource of the arctic is its people," Petrov wrote in an email to the Nome Nugget, "Investment in people is key." Kawerak's Cindy Weiler said the school systems in rural Alaska are not up to par with those in the rest of the country. For local people to earn college degrees, they often need to leave their region.

According to Lakehead University professor Chris Southcott, indigenous people often have a stronger desire to stay in their regions than non-Native residents do. Arctic communities are interested in resource development when it is done in a way that maximizes local benefits, which is hard to ensure. He mentioned modern comprehensive treaties as being key in protecting indigenous Canadians. "You do see a big change in communities when these communities have some control over their future," Southcott said. The treaties establish the Native peoples law-making and self-governance powers, and help the communities and traditional lifestyles survive.

The effects of climate change were also addressed. It is hard for traditional communities to survive when climate change is altering seasonal patterns. Tatiana Vlasova with the Russian Academy of Sciences said there is a need for adaptive capacity building in the face of climate change, when subsistence opportunities are taken away. Lakehead University professor Chris Southcott said economic development is one of most important aspects of adaptive capacity. Communities need money in order to change, and "Often communities say 'we have all these social issues, but if we can get new money we can solve them ourselves. What we need is for you to tell us how to get the money."

However, the main focus remained on governance. Diane Hirshberg, a University of Alaska Anchorage professor who moderated the panel, expressed her concern about the lack of control indigenous people often have at the federal level, where the fates of communities are often decided. Hirshberg's comment was a follow-up to a presentation the day before by Varyara Korkina with UNI. Korkina spoke about corporate social responsibility in the Chukotka region. "I'm really struck by the governance concept as not being explored enough, and as being really critical in our Northern communities," Hirshberg said. She said there needs to be a way of identifying obstacles keeping local governments from succeeding, and a plan to overcome them, in order "to translate the work that Arctic-FROST and other research organizations are doing... and convey that in a way that local governments can comprehend and then put into practice," Hirshberg said.

Bering Straits Native Corporation's Matt Ganley said there needs to be a way of preserving subsistence while maintaining an economy. "The reality is that there are two things out there here. One is the very western cash based economy that you need in the villages, and also the (subsistence) lifestyle. The opportunity lies in between," Ganley said. White Mountain hunting guide Tom Gray said modern technology, such as the Internet, interferes with subsistence activities. But obligations, such as jobs, provide an even bigger challenge. Entire communities used to spend summers on the rivers setting fishnets and drying fish.

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#### HOME / NEWS / NOME HOSTS SUSTAINABLE ARCTIC DEVELOPMENT WORKSHOP



**Photo by Maisie Thomas** 

ACTIVIST-Pavel Sulyandziga, an indigenous rights activist of the Udege tribe, visited Nome last week on behalf of Arctic-FROST.

### Nome Hosts Sustainable Arctic Development Workshop

FRI, 04/01/2016 - 4:01PM admin



#### BY: MAISIE THOMAS

Members of the Arctic-FROST Steering Committee visited Nome early last week, hosting a workshop entitled "Sustainability that Works in the Arctic: Sharing Challenges and Experiences of Arctic Communities on the Path to Sustainable Development."

According to Andrey Petrov, one of the project's leaders and a professor of geography and geospatial technology at the University of Northern Iowa, sustainable development improves human well-being and health, while preserving ecosystem structures and functions. Indigenous community members from throughout the Arctic, including Canada, Russia and Alaska traveled to Nome for the workshop

In 2013, Petrov applied for a grant from the National Science Foundation to start the program, officially titled Arctic-FROST, an acronym for Arctic Frontiers of SusTainability: Resources, Societies, Environments and Development in the Changing North. "In recent decades Arctic communities [have] experienced dramatic economic, social and cultural transformations, as well as rapid environmental change," Petrov wrote in an email to The Nome Nugget. The program examines why some communities thrive in the changing environment, while others struggle to survive. Vera Metcalf, Director of the Eskimo Walrus Commission, and an Arctic-FROST steering committee member, and Bob Metcalf, Director

### Nome, AK

Weather Wind Sun

30.2°F

Mostly Sunny

N Wind 0 knots

- 27°F

SEARCH

Now, Gray said, only about five families spend summers on the river. "Money, to me, is just a tool. Subsistence, for me, that's a bigger issue, I mean, that's my life."

Greenland has developed a novel approach to combining subsistence and commercial economies. Towns have employees who are designated subsistence hunters who can sell what they catch to people who want to continue to eat traditional foods, but need to work. "We don't have regulations in this state that recognize this possibility, and this might be where that conversation can begin," Kimmel said. She stressed the need for an international discussion with Greenland to look into the possibility.

On the last day of the workshop, Petrov asked the group where it believed social scientists should be focusing their research. The ultimate goal is for regions to tell the program where they need research, not for researchers to come into communities with a specific idea in mind. To do this, the group decided to hold community-wide listening sessions.

#### Pavel Sulyandziga

Pavel Sulyandziga, a Russian indigenous rights activist, gave a key note speech during the workshop. Sulyandziga is of the Udege nationality, and leads the group's effort to regain control over their traditional territory along the Bikin River, which was the topic of his presentation.

The Udege are one of the few Russian ethnic groups to remain in their home territory. Sulyandziga said that he could see other villages disappearing. "No one of course killed them, their environment was destroyed... so they just dissolved," Sulyandziga said through a translator. The Bikin River is one of the only places with absolutely no industry, but that is not for lack of effort on the part of the Russian Government.

When, in the 1980s, the Soviet Union gave the territory to a South Korean company on a 30-year lease, the Udege people knew what to expect. They decided to fight for their land, and chose to do so through education. "Our grandfathers made the decision that, no matter what you do, you need to be educated," Sulyandziga said. In his ethnic group of about 700 people, 30 percent have bachelor's degrees, and in his village alone there are nine PhDs. "I think it's one of the reasons we were successful in the end," he said.

What the Udege people lacked in numbers they made up for in unity. In the face of pressure and bribes from the Soviet Union, they decided they would make all decisions together. "The unity was the second element in the struggle against external forces," Sulyandziga said.

The government questioned the Udege people's ability to live without any industry, so in 1993 they received a grant from the U.S. Forest Service to create a development plan. With help from the Russian Academy of Science, they took data on all of the resources in their region, including gold, coal and wood. They developed a program that showed they could sustain their community on traditional resources alone. The region has large amounts of coal and gold, but the Udege people are allowed to develop the resources on their own terms.

The Udege territory is in the Primorsky Krai province, located on Russia's southeastern border. The Primorsky region is the only one where indigenous people do not receive any government money. When the Udege people asked for funds, they were forced to choose between getting the money and getting their land. They chose the land, which was designated a Territory of Traditional Natural Resource Use, and were tasked with how they wanted to develop it. Ultimately, they decided to create a tariff for Korean pine nuts, which come from the cedar forests on their land. The Udege people also decided to allow part of their territory to be designated a federal park to protect the habitat of the Amur tiger.

In an email to the Nome Nugget, Petrov observed that the experience of the Udege people demonstrated that "even in very difficult institutional, economic and political circumstances strong leadership, entrepreneurship (including local government) can lead to positive results."

Section: NEWS

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