Report on the Human Dimensions of the Arctic System (HARC) Open Meeting
Arctic Forum 2007
Planning Core Office Activities for the International Polar Year
24 May 2007

In 1989 the National Science Foundation established the Arctic System Science Program (ARCSS) to research the relationships among the physical, biological, and social components of the Arctic in the context of global environmental change. ARCSS emphasizes understanding the Arctic as a complete system with a wide variety of interconnected components that interact in complex ways.

In 1997 the Human Dimension of the Arctic System (HARC) initiative was implemented to increase integration between social and natural science researchers within the ARCSS program. In 2003–2004 ARCSS moved into a synthesis phase in which the interactions among the major components of the arctic system are examined to advance our understanding of how the whole arctic system operates. The HARC research agenda is a key part of the larger ARCSS synthesis effort as it contributes knowledge about the human aspects of the arctic system to the ARCSS and global science communities, and to decision-makers and stakeholders. Since 2004 the HARC Core Office has been directed by Dr. Maribeth S. Murray through the Center for Global Change at the University of Alaska Fairbanks, and HARC Core Office activities have been planned in collaboration with a science steering committee and community input via a series of workshops, meetings, and teleconferences.

At the 2007 Arctic Forum in Washington, DC, the HARC Office held an Open Meeting to solicit feedback on activities since 2004 and input on future activities, especially during the International Polar Year. The meeting opened with an overview of the development and role of HARC within the ARCSS Program and an introduction to the current organizational structure of the HARC Core Office, including the members of the HARC Science Steering Committee. The Open Meeting presentation included a summary of Core Office activities and accomplishments from Fall 2004 through Fall 2006. Highlights include the publication of the HARC Human Dimensions Observing Network brochure and the inclusion of Human Dimensions Observing (HD) as a component in the Arctic Observing Network. Neil Swanberg, the ARCSS Program Director at NSF, has pointed to an increase in funded HARC-type projects over the past three years, including project awards in all three of the most recent ARCSS-related Announcements of Opportunity, namely the Study of North Alaskan Coastal Systems, the Synthesis of Arctic System Science (SASS I & II), and the broader announcement of opportunity for the development of the Arctic Observing Network for implementation of SEARCH.

Following the presentation there was a general discussion emphasizing the planning of specific activities to further human dimensions research within the context of IPY and over the longer term. Several participants noted that in the circum-arctic every year is a polar year and that human dimensions research is critical to observing, understanding, and responding to arctic and global changes. Proposal pressure on national and international agencies from the human dimensions research community is essential, as is

entrainment of young scholars to ensure that national opportunities presented during IPY and following from it are not missed. Proposed HARC activities and workshops should have strong early career scientist participation, and long-term proposal pressure should prominently feature early career scientist collaborations—both measures that could ensure long-term sustainability of a human dimension focus in ARCSS and arctic research more generally.

Suggestions for specific activities and projects during the IPY were:

1) HARC Core Office should work with ARCUS to develop a human dimensions-related theme for inclusion in the next Arctic Forum (2008), should this topic be selected by the ARCUS Board of Directors as suitable. Possible title and subject matter: "Human Dimensions and Arctic Teleconnections."

2) HARC should have a presence – informational and research synthesis – at two upcoming meetings: "The Arctic Coastal Zones at Risk" (Tromsø, Norway, 1–3 October 2007) and "Resilience, Adaptation and Transformation in Turbulent Times" (Stockholm, Sweden, 14–16 April 2008).

3) The HARC Core Office should convene a Human Dimensions Synthesis Workshop and produce a report/publication detailing the results of HD synthesis activities over the past several years. Efforts should be made to draw the HD synthesis projects together (synthesis of syntheses) to assess gaps in observing and understanding the Arctic System. Holding this synthesis workshop prior to the April 2008 Resilience meeting may provide a good opportunity to publicize the results of the HARC synthesis overview.

4) The HARC Core Office should convene a meeting of the IPY Legacy Committees to develop a long-term vision/strategic plan to ensure continued and increased proposal pressure and to facilitate community awareness of opportunities for national, international, and interdisciplinary collaborative human dimensions research and scholarly development.

5) In collaboration with international partners (Canada, Finland, etc.) the HARC Office should sponsor an Early Career Scientist Development Workshop at the 7th Open Meeting of the Human Dimensions of Global Environmental Change Research Community (New Delhi, India, 15–19 October 2008). Potential sources of workshop funding include the National Science Foundation, the Social Sciences and Humanities Research Council of Canada, and the European Union. Johanna Wandel and Leslie King both have experience with this type of workshop and attest to its potential value for entraining new researchers into the HARC/ARCSS research community.

6) Expansion of the HARC website to include:
    a. All IPY human dimensions projects – not just those funded by NSF, but also international projects

b. Critical and relevant publications (a publications database) with input solicited from ARCSS PIs, IPY PIs, and other members of the HD community

7) Another open meeting for information and planning at the Fall 2007 American Geophysical Union Annual Meeting on 10–14 December 2007 in San Francisco, California.

8) The HARC Core Office director should complete a summary white paper on Human Dimensions research themes and research questions identified in various Arctic research planning documents, beginning with *Arctic Social Sciences: An Agenda for Action* (1989), National Academy Press, Washington, DC, focusing on the upcoming Surface Transformations in the Arctic Environment (STATE) Community of Practice science planning, and ending with the forthcoming report from the ARCSS Data and Modeling Workshop. Such a document would be useful for assessing how far we have come and where we need to go in the coming years with respect to planning and research initiatives.

Activities already planned include:

1) Several HARC sponsored sessions at the 9th International Conference on Permafrost, 29 June–3 July 2008, Fairbanks. Tentative session topics include:

   a. Human Response to Permafrost Change
   b. Feedbacks to Permafrost from Economic, Industrial, Subsistence and Land Use Changes
   c. Paleoecology and archaeology in permafrost regions

2) Participation in the development of the Polar Archaeological Network which is an international body groups seeking formal recognition by the International Arctic Science Committee (IASC). The first organizing meeting was held in St. John's, Newfoundland, in May 2007. A second meeting is planned for Copenhagen in Fall 2007, with a third meeting tentatively scheduled in conjunction with the 9th International Conference on Permafrost in Fairbanks, Summer 2008.

The HARC Core Office and Science Steering Committee welcome feedback and input on these and other activities during the international polar year. Comments may be sent via e-mail to any of the following:

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