

InfoNorth

It's Not Just About Bears: A Problem-Solving Workshop on Aboriginal Peoples, Polar Bears, and Human Dignity

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INTRODUCTION

THROUGHOUT THE ARCTIC, the conservation of polar bears (*Ursus maritimus*), based on the goals and principles of the 1973 International Agreement for the Conservation of Polar Bears and Their Habitat, has long been considered a wildlife management success story (Fikkan et al., 1993; Prestrud and Stirling, 1994; Ross, 2000). Recently, however, a rapidly warming climate and accelerating social changes in the Arctic have raised increasingly difficult questions not only about conserving polar bears (e.g., Derocher et al., 2004), but also about the polar bear management system itself, particularly the roles of northern aboriginal peoples in making decisions about wildlife (Berkes et al., 2005; Tyrrell, 2006; Clark et al., 2008; Dowsley and Wenzel, 2008; Lemelin et al., 2008). Conserving polar bears has now become a complex and sometimes volatile issue with social, political, and ecological dimensions spanning a range of geographic and institutional scales. Multiple competing perspectives are expressed by different participants in a decision-making system that has become increasingly fragmented and symbolically charged by issues such as the 2008 listing of polar bears as Threatened under the U.S. Endangered Species Act.

Human dignity is important for all people involved with or affected by wildlife management decisions, and it is a policy goal to be considered alongside biological conservation. However, this objective is especially important in the polar bear situation because of northern aboriginal peoples' subsistence needs and their historical identity as wildlife users (e.g., Keith et al., 2005; Freeman and Wenzel, 2006; Foote and Wenzel, 2009). Over the past three decades, aboriginal people in northern Canada have gained in general a greater measure of authority and control over natural resources through land-claim agreements. The co-management regimes resulting from those agreements have not only changed the distribution of power in wildlife management systems, but also introduced traditional ecological knowledge, alongside science, as a basis for decision making (Treseder et al., 1999; Armitage and Clark, 2005).

In the case of polar bear management, these ongoing trends have led to successes (Brower et al., 2002; Johnson, 2002) as well as controversies (Tyrrell, 2006; Dowsley and

Wenzel, 2008; Nirlungayuk and Lee, 2009). Further, different regions have had different experiences as their co-management systems evolved, and consequently one cannot say that any specific definition of a management problem—or indeed any specific proposed solution—holds across the entire range of polar bears in Canada, let alone worldwide. Similarly, appeals to simply substitute “top-down” management with a “grassroots” approach overlook not only the complexity of situations on the ground and the considerable strengths of the existing management system (Berkes et al., 2005), but also the real and diverse roles that aboriginal people have long been playing in polar bear conservation across the Canadian North. Clearly, as the challenges of conserving polar bears become increasingly complicated, there is an urgent need to build on the acknowledged successes and move beyond the divisive controversies.

OBJECTIVE AND METHODS

The overall goal of our project was to facilitate the development of polar bear conservation policies that are adaptive, cognizant of biophysical and social realities in the North, and broadly supported by the people they affect. The approach to achieving that goal was pragmatic: to engage northern institutions in collaborative assessment of polar bear conservation policy processes and to build project participants' individual and collective capacities to create informed, reasonable, and justifiable policies that are informed and respectful of differing perspectives.

The core activity of this project was a focused problem-solving workshop. Twenty-four people from government wildlife management agencies, aboriginal resource management organizations, and academic institutions across Canada and the United States, all active in polar bear management and research at varying levels, came together at Yukon College in early 2009. The workshop broadly followed a template for integrated problem solving that has been successfully applied in situations such as conservation planning for koalas (*Phascolarctos cinereus*) in Australia (Clark, 2002) and resolving large carnivore-human conflicts in the Rocky Mountains (Mattson et al., 2006; Rutherford et al., 2009). To accommodate cross-cultural and



FIG. 1. Workshop participants relax and share stories in the Yukon College cafeteria. (Photo: D. Clark.)

cross-disciplinary topics, participants agreed to an attitude of respect, tolerance, and facilitated deliberative dialogue at the outset of the meeting.

WORKSHOP OUTCOMES

The group worked through a series of facilitated exercises and came to four conclusions. First, individual participants drew up and shared their own “mind maps” of the existing polar bear management system. The current system was seen by all as very complex, involving many interacting organizations operating at (and influenced by) various scales, from local to global. Not surprisingly, different people pictured the system and their places within it quite differently. As a metaphor for solving conservation problems, participants used weaving a three-stranded rope, with the strands representing biophysical, social, and institutional dimensions of the problem. Each strand is important, all are interwoven, and attention to all is critical to produce a durable end result. The substantial research on polar bears to date shows a strong focus on the biophysical strand, but sustained research on the other two strands is a much more recent phenomenon.

Second, although all participants cared deeply about the conservation of polar bears, the group clearly articulated that “it’s not just about bears.” During the second day, workshop participants collectively generated a list of 50 problems and their corresponding solutions. The group then categorized the problems into two classes: problems of process (the formal and informal rules in use within and among organizations) and problems of content (obvious and tangible things, like quotas or bear-human conflicts). Of the 50 problems, 41 were identified as process problems, but only nine as content problems. This is not to say that those content problems weren’t considered important, however. Participants were emphatic that they were important, and they were not trivial problems: an example was answering



FIG. 2. On the last day, some participants consider what they’ve learned from their collective experience and how to apply that learning to polar bear management. (Photo: D. Clark.)

the fundamental question of how many bears there are in any given region. Nonetheless, the overall message was clear: process matters.

Third, by examining how each person defined the problems and generated solutions for those lists, a broad consensus emerged that structural traps (Brunner et al., 2002) were operating in peoples’ habitual approaches to making decisions about polar bears and polar bear management. Participants were very aware that transforming polar bears into a politicized symbol magnifies differences of opinion into conflict (e.g., Robbins, 2007), and they easily avoided that trap. However, two more subtle traps were harder to avoid: the “black box” of uncritically applying favoured solutions to problems without actually considering their appropriateness or chances of success (Clark, 2002), and the mingling of science and politics in less-than-optimal ways, creating “politicized science” and “scientized policy” (Pielke, 2007).

Finally, the group enthusiastically shared many successes they had experienced in wildlife co-management and had a rich dialogue about how to learn from those situations and adapt that understanding to new challenges. Examples included establishing grizzly bear (*Ursus arctos*) quotas in the Inuvialuit Settlement Region, recent narwhal (*Monodon monoceros*) and bowhead whale (*Balaena mysticetus*) management in Nunavut, and even sea turtle conservation initiatives in the Caribbean. Harvesting hard-won experience makes empirical “common-sense” (Brunner et al., 2002) and appears to be a promising starting point to help people move forward together on contentious issues around polar bears.

NEXT STEPS

While many participants were initially unsure what to expect from the workshop, their feedback indicates

considerable success, particularly in two areas: strengthening the professional relationships between group members and building awareness of alternative approaches to complex conservation problems. Several examples from participants' written appraisals illustrate this:

We should start more workshops like this to build capacity among local leadership, and to also build trust among ourselves and others.

From the local level or scientific level, there is really no wrong or right way. You try to work out what is best for everyone, not what or who is better.

My fear [is that] we are going to leave this meeting and go back to our old ways of doing things, but my hope is that people will reach out to work together.

The group responded very positively to having this additional forum for discussing polar bears, and the venue seemed to provide sufficiently safe neutral ground for them to be able to interact in an atmosphere of mutual trust and respect. On the basis of those attributes of their dialogue, workshop participants felt that they had truly created some positive momentum. The group hopes to see this effort continue as a way to complement and contextualize established committees and consultation processes. The eventual need for an even more inclusive forum involving national and international-scale organizations was also recognized. Finally, opportunities for more such workshops were identified, focusing on specific regional and local polar bear issues in different parts of the North.

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AINA NEWS

Arctic Institute on Facebook and Twitter

The Arctic Institute of North America (AINA) has made it easier for members to keep informed about Institute activities by creating two Facebook pages and a Twitter account. The AINA Facebook page offers information about activities such as presentations, media releases, and scholarship deadlines. Photos of Institute activities are also posted. The Kluane Lake Research Station (KLRS) Facebook page is devoted to keeping researchers up to date on the professional and social activities of people at the camp. Researchers and staff at KLRS are encouraged to use the page to post comments and photos. Notices about events and deadlines are posted to the Twitter account.

To sign up, log into Facebook or Twitter and search for "Arctic Institute of North America" or "Kluane Lake Research Station." Links to the sites are also located on the Arctic Institute homepage.

ARCTIC Online

Members will be interested to know that we are working towards offering an online subscription to *ARCTIC*. To do so, we have become part of *Synergies*, an innovative, national project to produce, store, disseminate, and provide access to digitized knowledge produced in Canada. Some complete issues of *ARCTIC*, created using the Open Journals System (OJS), are now available through the Prairie Node of *Synergies*, led by the University of Calgary. Please visit the Arctic Contents page on the AINA website at www.arctic.ucalgary.ca/index.php?page=arctic_contents, which will continue to have all back issues available while we transition to the OJS. During the interim you will find an "ARCTIC on OJS" Link on the Arctic Contents page. The link will bring up the "Register" page, where you can register with the journal as a reader, author, or reviewer. By clicking on the "Archives" page, you can view back issues as they become available and some sections of the current issues. Articles and notes from the last four issues are locked, but we invite individual and institutional members to request a free trial subscription to the complete current issues online by emailing arctic@ucalgary.ca. Please quote the user name you registered with and we will sign you up right away!

Hydrocarbon Impacts Database

AINA's Hydrocarbon Impacts (HI) database describes 6900 publications and research projects about the environmental impacts, socio-economic effects, and regulation of hydrocarbon exploration, development, and transportation in northern Canada. The database is funded by Indian and Northern Affairs Canada's Northern Oil and Gas Branch and is available at www.aina.ucalgary.ca/hi.

New in HI during the past year are the electronic library of key publications prepared for the proposed Beaufort Regional Environmental Assessment (BREA) and coverage of publications resulting from the multi-departmental

federal government Northern Oil and Gas Science Research Initiative (NOGSRI).

As the regulatory process for the Mackenzie Gas Project nears its end, HI continues to describe and provide links to all major regulatory documents about the project. More than 1500 HI records now have links to PDF files of online publications.

New Project Strengthens Geoscience Ties to Arctic Research

A handful of early career scientists in the Department of Geoscience now have the opportunity to extend their research into the High Arctic thanks to a new initiative funded by government agencies and private sources. The Studies to Unlock Northern Basins Energy along Arctic Margins (SUNBEAM) program has received four years' funding at \$100,000 per year from the Natural Sciences and Engineering Research Council of Canada (NSERC), National Resources Canada (NRCan), and French energy giant Total. The project will allow veteran Arctic researcher and department member Benoît Beauchamp, along with Geoscience faculty members Andrew Leier, Bernard Guest, and Per Pedersen, to work in the Sverdrup Basin, which extends across the northern islands of the Canadian Arctic Archipelago.

NRCan's portion of the funding comes through the Geomapping for Energy and Minerals (GEM) Project, a five-year, \$100 million effort to identify energy and mineral resources in Canada's North. This comprehensive mapping project will provide scientific and technical knowledge about the availability of resources to northern communities.

ASTIS News

The coverage of Canada's northern database, the Arctic Science and Technology Information System (ASTIS), continues to improve on many fronts. The main ASTIS database now describes 69,300 publications and research projects about northern Canada, and provides links to PDF files of 15,000 publications. The database is available for free from the AINA website at www.arctic.ucalgary.ca.

ASTIS recently began work on a new project for Indian and Northern Affairs Canada's Inuit Relations Secretariat (IRS). The IRS is the Government of Canada's primary point of contact for collaboration with Inuit organizations and an internal government source for information, advice, and expertise on Inuit matters. The IRS Knowledge Project has gathered more than 1000 citations to publications and research projects about issues affecting Canadian Inuit. ASTIS will integrate these citations into the ASTIS database to make them freely available to Inuit, researchers, and the public.

The Yukon Biodiversity Database at www.aina.ucalgary.ca/yb now describes 6400 publications and research projects about the biology of the Yukon and the Beaufort Sea. The database is produced by ASTIS and the Yukon Biodiversity Working Group and funded by Foothills Pipe Lines.

The Northern Contaminants Program Publications Database is now very close to comprehensive. The database

describes 2180 publications and is available at www.aina.ucalgary.ca/ncp.

The Circumpolar Health Bibliographic Database at www.aina.ucalgary.ca/chbd now describes 5200 publications. ASTIS recently finished adding to the database all articles published in the *International Journal of Circumpolar Health*. The database is funded by the Canadian Institutes of Health Research Team in Circumpolar Health Research.

Two New Books Translated by William Barr

Two books, one on a Soviet scientist falsely accused of treason, the other about a French-Canadian Arctic explorer, are now available to English readers in translations by historian and Institute research associate William Barr. The riveting story of Mikhail Mikhailovich Ermolaev, a Soviet scientist falsely accused of treason and sentenced to 11

years hard labour in the Gulag, was co-published by AINA and the University of Calgary Press in the fall of 2009, as the thirteenth offering in the Northern Lights Series. The original Russian biography was written by Ermolaev's son, Sleksei Mikhailovich Ermolaev, and V.M. Diber. *Arctic Scientist, Gulag Survivor: The Biography of Mikhail Mikhailovich Ermolaev, 1905–1991* is a fascinating personal account typical of the experiences of so many Soviet citizens who were unjustly banished to the infamous Gulag.

Also in the fall of 2009, the Arctic Institute and Baraka Books published Barr's translation of a book on Arctic explorer Joseph-Elzear Bernier by Quebec scholar Marjolaine Saint-Pierre. Entitled *Joseph-Elzear Bernier, Champion of Canadian Arctic Sovereignty*, it focuses on the life of the Quebec-born mariner and explorer who played a critical role in staking Canada's claim to the Arctic.