ARCTIC
VOL. 63, NO. 1 (MARCH 2010)

InfoNorth

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

by Douglas A. Clark, Susan G. Clark, Martha Dowsley, Lee Foote, Thomas S. Jung and Raynald H. Lemelin

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.)

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.)

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 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.

ACKNOWLEDGEMENTS

The Whitehorse workshop was made possible by a grant from the Walter and Duncan Gordon Foundation. Additional support came from the Government of Yukon Department of Environment, the Northern Rockies Conservation Cooperative, and those participants who graciously split their travel costs because they were also attending another meeting in Whitehorse: the Government of Nunavut, the Inuvialuit Game Council, Nunavut Tunngavik Inc., and the Wildlife Management Advisory Council-NWT. Finally, many staff and students of Yukon College contributed to making our workshop successful and memorable; we are particularly grateful for their assistance and hospitality.

REFERENCES

Armitage, D., and Clark, D. 2005. Issues, priorities, & research directions for oceans management in Canada's North. In: Berkes, F., Huebert, R., Fast, H., Manseau, M., and Diduck, A., eds. Breaking ice: Renewable resource and ocean management in the Canadian North. Northern Lights Series, No. 7. Calgary: Arctic Institute of North America and University of Calgary Press. 337–362.

Berkes, F., Bankes, N., Marschke, M., Armitage, D., and Clark, D. 2005. Cross-scale institutions and building resilience in the Canadian North. In: Berkes, F., Huebert, R., Fast, H., Manseau, M., and Diduck, A., eds. Breaking ice: Renewable resource and ocean management in the Canadian North. Northern Lights Series, No. 7. Calgary: Arctic Institute of North America and University of Calgary Press. 225–248.

Brower, C.D., Carpenter, A., Branigan, M.L., Calvert, W., Evans, T., Fischbach, A.S., Nagy, J.A., Schliebe, S., and Stirling, I. 2002. The Polar Bear Management Agreement for the southern Beaufort Sea: An evaluation of the first ten years of a unique conservation agreement. Arctic 55(4):362–372.

Brunner, R.D., Colburn, C.H., Cromley, C.M., Klein, R.A., and Olson, E.A. 2002. Finding common ground: Governance and natural resources in the American West. New Haven, Connecticut: Yale University Press.

Clark, D., Lee, D., Freeman, M., and Clark, S.G. 2008. Polar bear conservation in Canada: Defining the policy problems. Arctic 61(4):347–360.

Clark, T.W. 2002. The policy process: A practical guide for natural resource professionals. New Haven, Connecticut: Yale University Press.

Derocher, A.E., Lunn, N.J., and Stirling, I. 2004. Polar bears in a warming climate. Integrative & Comparative Biology 44(2):163–176, doi:10.1093/icb/44.2.163.

Dowsley, M., and Wenzel, G. 2008. "The time of the most polar bears": A co-management conflict in Nunavut. Arctic 61(2):177–189.

Fikkan, A., Osherenko, G., and Arikainen, A. 1993. Polar bears: The importance of simplicity. In: Young, O.R., and Osherenko, G., eds. 1993. Polar politics: Creating international environmental regimes. Ithaca, New York: Cornell University Press. 96–151.

Foote, L., and Wenzel, G. 2009. Polar bear conservation hunting in Canada: Economics, culture and unintended consequences. In: Freeman, M., and Foote, A.L., eds. Inuit, polar bears, and sustainable use. Edmonton: Canadian Circumpolar Institute Press. 13–24.

Freeman, M.M.R., and Wenzel, G.W. 2006. The nature and significance of polar bear conservation hunting in the Canadian Arctic. Arctic 59(1):21–30.

Johnson, C. 2002. Polar bear co-management in Alaska: Cooperative management between the U.S. Fish and Wildlife Service and the native hunters of Alaska for the conservation of polar bears. In: Lunn, N.J., Schliebe, S., and Born, E., comps. Polar bears: Proceedings of the 13th Working Meeting of the IUCN/SSC Polar Bear Specialist Group, 23–28 June 2001, Nuuk, Greenland. Occasional Paper of the IUCN Species Survival Commission No. 26. Gland, Switzerland: IUCN. 139–141.

Keith, D., Arqviq, J., Kamookak, L., Ameralik, J., and the Gjoa Haven Hunters and Trappers' Organization. 2005. Inuit *qaujimaningit nanurnut*: Inuit knowledge of polar bears. Solstice Series No. 4. Edmonton: Canadian Circumpolar Institute Press.

Lemelin, R.H., Peerla, D., and Walmark, B. 2008. Voices from the margins: The Muskekowuck Athinuwick/Cree people of northern Ontario and the management of *Wabusk*/ polar bear. Arctic 61(1):113 – 115.

Mattson, D.J., Byrd, K.L., Rutherford, M.B., Brown, S.R., and Clark, T.W. 2006. Finding common ground in large carnivore conservation: Mapping contending perspectives. Environmental Science and Policy 9:392 – 405.

Nirlunayuk, G. and Lee, D. 2009. A Nunavut Inuit perspective on Western Hudson Bay polar bear management and the consequences for conservation hunting In: Freeman, M., and Foote, A.L., eds. Inuit, polar bears, and sustainable use. Edmonton: Canadian Circumpolar Institute Press. 135 – 142.

Pielke, R.A. 2007. The honest broker: Making sense of science in policy and politics. Cambridge: Cambridge University Press.

Prestrud, P., and Stirling, I. 1994. The International Polar Bear Agreement and the current status of polar bear conservation. Aquatic Mammals 20:113 – 124.

Robbins, J. 2007. Saint *Ursus maritimus*. Conservation Magazine 8(4), URL: http://www.conservationmagazine.org/articles/v8n4/saint-ursus-maritimus/.

Ross, K. 2000. Environmental conflict in Alaska. Boulder, Colorado: University Press of Colorado.

Rutherford, M.B., Gibeau, M.L., Clark, S.G.C., and Chamberlain, E.C. 2009. Interdisciplinary problem-solving workshops for grizzly bears in Banff National Park, Canada. Policy Sciences 42(2):163 – 187.

Treseder, L., Honda-McNeil, J., Berkes, M., Berkes, F., Dragon, J., Notzke C., Schramm, T., and Hudson, R.J. 1999. Northern Eden: Community-based wildlife management in Canada. Occasional Paper 46. Edmonton, Alberta: Canadian Circumpolar Institute.

Tyrrell, M. 2006. More bears, less bears: Inuit and scientific perceptions of polar bear populations on the west coast of Hudson Bay. Études Inuit Studies 30(2):191 – 208.

Douglas A. Clark (d.clark@usask.ca) holds the Centennial Chair in Human Dimensions of Environment and Sustainability at the University of Saskatchewan and is a research affiliate with the Yale School of Forestry and Environmental Studies. Susan G. Clark is the Joseph J. Cullman III Professor in Wildlife Conservation and Policy at the Yale School of Forestry and Environmental Studies. Martha Dowsley is an assistant professor in the Departments of Geography and Anthropology at Lakehead University. Lee Foote is an associate professor in the Department of Renewable Resources at the University of Alberta. Thomas S. Jung is a senior wildlife biologist with the Yukon Department of Environment. Raynald H. Lemelin is an associate professor in the School of Outdoor Recreation, Parks, and Tourism at Lakehead University, where he also co-directs the Centre for Northern Studies.