

## ARCTIC COUNCIL

### **Senior Arctic Officials Meeting Anchorage, Alaska, U.S.A. May 5-6, 1999**

Revised as of September 28th, 1999

#### **Summary of Proceedings**

##### **Agenda Item 1: Confirmation of Chairperson**

The U.S. proposed that Raymond V. Arnaudo of the U.S. Department of State serve as Chairperson of the Senior Arctic Officials Meeting. The proposal was approved. Arnaudo welcomed delegates to the meeting. He noted the particular interest of the U.S. in bringing more Alaskans into Arctic Council activities

##### **Agenda Item 2: Approval of Agenda**

The U.S. asked the meeting to approve the Agenda circulated by the United States on March 26, 1999. Iceland requested that Agenda Items 5 and 6 be switched to allow the discussion on ACAP to precede the discussion on coordination of activity among Working Groups. Norway concurred, and Iceland's suggestion was adopted. Canada requested that the meeting allow time to discuss the next Arctic Council Ministerial to allow for SAOs to identify possible deliverables. The Chair suggested that this topic be placed between agenda items #10 and #11. The Chair also suggested that the portion of agenda item 5 dealing with the IASC Climate Change draft proposal be moved to the second day of the SAO meeting. It was agreed to place this topic between agenda items #7 and #8, to allow Dr. Robert Corell of the U.S. National Science Foundation to present the proposal.

##### **Agenda Item 3: Chairman's Summary**

The Chair gave the following summary of Arctic Council events since the conclusion of the Ministerial meeting in Iqaluit:

- The United States became Chair of the Arctic Council and set up a Secretariat operating from the U.S. Department of State's Office of Oceans Affairs;
- AMAP Working Group met in Helsinki in December 1998;
- EPPR Working Group held an interim meeting in London in October 1998;
- The U.S. (NOAA) hosted meetings of AMAP's Assessment Steering Group (ASG), the AMAP/CAFF Assessment Steering Committee (ASC), and Radioactivity subgroup in March 1999;
- Norway hosted an ACAP "brainstorming meeting" in Oslo in April 1999;
- Canada hosted a meeting of PAME in February 1999, where progress was made on PAME's Regional Program of Action; and,

- The Chair of the Council had received requests for Ad Hoc Observer status from the North Atlantic Marine Mammal Commission and the Nordic Council of Ministers, both of which were accorded this status for the SAO meeting in Anchorage.

Canada inquired whether the Chair would arrange for an "interim conference call" to carry on the business of the Council in the event that two SAO meetings per year are found to be insufficient to conduct Council business. The Chair replied that the Secretariat would be glad to circulate such a request, and if there were a consensus on the need for such a teleconference, it would make the necessary arrangements.

Canada inquired about the status of outstanding applications for Observer status. The Chair replied that all applications for Observer status had been acted upon. Some had been granted status, and some had not. The Chair stated that any groups that not been accorded Observer status should reapply if they wished to be reconsidered.

Norway thanked the Chair for the report on developments since Iqaluit and noted that it had been almost one year into the U.S. chairmanship that a SAO meeting had been held and that Norway would have appreciated a more vigorous start. Norway then extended a warm welcome to the Nordic Council of Ministers and NAMMCO.

The U.S. stated that the Secretariat was eager to help any groups applying for Permanent Participant or Observer status with the process. The U.S. apologized for the problems it was having with its e-mail system and assured the other delegations that it was working to bring the system up to speed. The U.S. stated that it was aware of the desire of a number of Council members to have more frequent meetings, but that the United States would evaluate its success as Chair not by the frequency of meetings but by progress on the Council's program of work.

#### **Agenda Item 4: Working Groups Chairs' Reports**

*Arctic Monitoring and Assessment Program (AMAP)* - Hanne Petersen, the new Chair of the AMAP Working Group, reported that AMAP is currently without a Vice Chair and asked Council members for the names of possible candidates. Petersen gave an overview of the Working Group's activities since the Ministerial Meeting in Iqaluit. See Appendix A: "Progress Report from AMAP to the SAO meeting in Anchorage." Topics discussed included:

- AMAP Working Group Meetings;
- Assessment Steering Group Meetings - the trend and effects program;
- Assessment Steering Committee Meetings - the Climate and UV program;
- Arctic Climate and Impacts Assessment (ACIA) program;
- Workshops arranged;
- Translation of the "State of the Arctic Environment Report" (SOAER) into Russian;
- AMAP website and the SOAER and AAR on CD ROM;
- AMAP Strategic Plan;
- AMAP Monitoring and Effects program for contaminants;
- AMAP Monitoring programs for climate and UV-B;
- National Implementation Plans for 1998-2003;
- AMAP Thematic Data Centers (TDCs);
- Workshops and International Conferences to be arranged;
- Special projects under implementation and development;

- International Cooperation; and,
- Finances.

The following interventions were made in response to the AMAP Chair's briefing:

AMAP thanked the Indigenous Peoples Secretariat, Norway, Denmark, RAIPON, and the US (DoE, EPA, NOAA) for contributing funds towards the Russian translation of the "State of the Arctic Environmental Report" (SOAER) and the U.S. for contributing to a CD-ROM version of the SOAER. The U.S. thanked its Department of Energy, Environmental Protection Agency, and National Oceanic and Atmospheric Administration for contributing to the Russian version of the Report.

AMAP thanked Denmark for its financial support of the Thematic Data Centers.

The AMAP Secretariat gave a general overview of the work done so far regarding the joint ICC/RAIPON/Russian Government AMAP project proposal to the Global Environment Facility, as well as what AMAP intends to do at different sites in northern Russia. The objective of the project is to assess pollution impacts on the health of indigenous people of Arctic Russia, and to ascertain the level of "country" food contamination as a result of pollution from global and local sources. The ICC has already received \$25,000 US for preparation of the project proposal from the GEF (Global Environment Facility). UNEP is the implementing agency and the estimated total cost of the project will be \$3-4 million US; \$750,000 US is being requested from the GEF. As the GEF will match any funds that are raised for this project, the AMAP Secretariat requested that SAOs review ongoing bilateral projects on health/environment in Russia as these could potentially be counted as Arctic countries' contributions to the project.

Regarding the PCB project, a contract with the Russian company has been signed, and the first phase of the project has started. All arctic countries have raised financial support to the project and both the Netherlands and NEFCO have expressed interest in supporting the project. The report from phase 1 is expected to be available within one year.

At the AMAP working group meeting in December 1998 an Assessment Steering Committee (ASC) was established to oversee and coordinate the work related to climate and UV and the US has taken on the job as lead country for this task. CAFF and IASC have been invited to be members of this group, and a first meeting of ASC was held in Washington, DC in March 1999 where the assessment was discussed.

RAIPON thanked AMAP for the Russian translation of the SOAER and for its work on a new project on "Pollution, Food Security and Indigenous People of Arctic Russia." RAIPON stated that the health of indigenous people in Russia is their number one problem and that it was important for the research project to show how pollutants affect their food. RAIPON reported that the Government of Russia would support this project with in-kind contributions, and asked the SAOs for additional support.

The ICC reported that they and AMAP have identified four possible major funding sources, among them the World Bank. The ICC intends to send a formal project proposal to GEF in mid-to-late June and stated that it would be helpful to receive a letter of support/endorsement of the proposal from the Arctic Council.

Petersen said that the ICC should send a letter to the Arctic Council Secretariat requesting endorsement of the project, along with the final copy of the formal proposal. The Secretariat would then distribute copies to Council members for consideration. Petersen went on to suggest that the most effective course of action might be for individual countries to approach their own GEF representatives to request

assistance. Canada, Finland, Norway, and the U.S. voiced general support for the ICC project.

Council Members were generally pleased with AMAP's Monitoring and Effects program and voiced support for the current schedule, which would allow for the presentation of results at the Rio +10 meeting.

Council Members were pleased with AMAP's participation in an Assessment Steering Committee (ASC) that involves CAFF, IASC and IPCC in the monitoring of Climate Change and UV-B in the Arctic, as it sets a good pattern for future Working Group cooperative activity within the Council.

The United Kingdom intervened to note that the U.K. supports the work of the Council, and would like to see that work strengthened in the future. To this end, the U.K. is hosting the 4th International Conference on Environmental Radioactivity in the Arctic in Edinburgh, Scotland, September 20-23, 1999. Prince Phillip will make opening remarks at the conference.

*Conservation of Arctic Flora and Fauna (CAFF)* - Berit Lein, the newly appointed Chair of the CAFF program, reported on CAFF's activities since Iqaluit, as well as its plans for future work. See Appendix B - "CAFF Report to SAO Meeting, Anchorage."

Priority Items for CAFF in the future include:

- Production of its overview report entitled "Arctic Conservation Issues: Status and Trends of Arctic Flora, Fauna and Habitats;"
- CAFF/AMAP work on monitoring Climate Change and UV-B in the Arctic (Sweden to take the lead for CAFF);
- Circumpolar monitoring of Arctic biodiversity (Iceland to host a workshop in late fall 1999, AMAP to be invited);
- Circumpolar Protected Areas Network (CPAN) - U.S. to take the lead, CAFF, PAME and IUCN to co-sponsor a Circumpolar Marine Workshop in Montreal, November 28-December 2, 1999; and,
- Species Conservation - Canada and U.S. to host a multi-stakeholder workshop on incidental mortality of seabirds in the Arctic region. U.S. to take the lead of an ad hoc Flora group to prepare a discussion paper on Arctic flora conservation efforts.

CAFF's strategic workplan was accepted and praised by Council members for being focused and manageable. Iceland held it up as a positive example of what a good strategy can mean to the coherence of a Working Group's activities.

After the presentation on CAFF's overview report, entitled "Arctic Conservation Issues: Status and Trends of Arctic Flora, Fauna and Habitats," the CAFF chair asked for feedback from SAOs on whether it would be appropriate for the report to make recommendations for specific actions to address threats to Arctic ecosystems.

There was agreement that the CAFF report should include recommendations so that it is not merely a beautiful book about the Arctic. There was also agreement that the SAOs were the appropriate body to review the report and its recommendations, and that the SAOs were prepared to carry out this task according to the timetable for producing the report that CAFF provided in its presentation. During discussions of the timetable, some delegations emphasized that the quality of the report should not be sacrificed for time. There was agreement that CAFF should proceed as planned, and that progress can be reviewed at the

next SAO meeting.

*Emergency Prevention, Preparedness, and Response (EPPR)* - Joe Nazareth, Vice Chair of EPPR, reported on the group's activities since Iqaluit. See Appendix C, "Report from the EPPR working group to the SAO meeting in Anchorage 5-6 May 1999 by the Chair." The group held an interim meeting in London in October to work towards implementing aspects of the EPPR strategic plan adopted by Ministers. Specific items that were mentioned were:

- The "Circumpolar Map of Resources at Risk from Oil Spills in the Arctic." This resource will identify potential sources of spills, biological resources at risk, and human communities in the Arctic that are especially vulnerable. EPPR intends to work with both CAFF and PAME on this project and hopes that the product will serve as a tool for facilitating more precautionary activities to minimize the risks, where appropriate;
- EPPR is developing a web site (under U.S. leadership);
- EPPR is currently revising its internal "rules of procedure" - which will be in accordance with the Arctic Council's ROP;
- During the coming year, EPPR intends to work towards developing "Source Control Management and Prevention Strategies for High Risk Activities in the Arctic;"
- Canada has the lead within EPPR for developing "shoreline cleanup guidelines;" and
- EPPR is developing a brochure that will describe its mandate and activities.

EPPR was congratulated on the publication of its "Field Guide for Oil Spill Response in Arctic Waters." Canada gave thanks to all who contributed to the document and especially praised Sweden for its efforts to update the guide.

The U.S. expressed appreciation for EPPR's communication strategies (brochure, web site, and placement of the Field Guide on the web), and encouraged EPPR to focus on developing strategies for emergency prevention in the future.

Norway expressed the desire to see more dynamism on the part of EPPR in the future and increased cooperative efforts with other Council Working Groups.

*Protection of the Arctic Marine Environment (PAME)* - John Karau, Chair of the PAME Working Group, reported on its activities since the Ministerial in Iqaluit, and its plans for future activities. Activities since Iqaluit included the following:

PAME met in Ottawa, Canada, February 15-18, 1999. The key objective for the meeting was to prepare PAME workplans in response to the directions from the Arctic Council meeting in September 1998.

Regarding the recently adopted Regional Programme of Action for the Protection of the Arctic Marine Environment from Land-based Activities (RPA) PAME has given immediate priority to seeking the necessary support for the Russian NPA-Arctic and the Partnership Conference. There is also continuing support given to promoting actions on heavy metals and POPs under UNECE LRTAP and the global POPs negotiations. Longer term attention will be directed at coastal zone management initiatives and other sources of marine pollution. The RPA is available in English, French, Russian, and Inuktitut;

PAME continues to promote application of the Arctic Offshore Oil and Gas Guidelines and will report to the next Arctic Council Meeting on its progress in

meeting the goals and objectives of the Offshore Guidelines. PAME will also provide input to the IUCN/E&P Forum draft document, "Oil and Gas Exploration and Production in Arctic and Sub-Arctic Offshore Regions - Guidelines for Environmental Protection."

To assist in determining what if any additional shipping measures are required, PAME agreed to shift its approach from the present data collection to an evaluation of the concrete environmental problems associated with shipping activities and on the basis of the collective current knowledge. Norway continues to serve as lead country.

In 1996 the Ministers accepted PAME's recommendation that there was no immediate need to negotiate a new international legal instrument for the protection of the Arctic Marine Environment. PAME is updating its overview of the effectiveness of existing pollution prevention instruments and will expand this to include habitat protection instruments which relate to the coastal zone provisions of the RPA. 2002 is the expected completion date.

PAME will also continue its work through a collaborative approach with other working groups and new initiatives such as the Arctic Council Action Plan (ACAP) being developed by Norway. PAME regards its Regional Program of Action as a component of ACAP and noted that ACAP could respond to issues like fresh water, climate change, and acid rain that are not part of the current pollution prevention efforts.

Future plans include the following:

- PAME and CAFF will also co-sponsor an IUCN Circumpolar Marine Workshop scheduled for November 28-December 2 in Montreal that will focus on data gaps and common working tools, involvement of local indigenous people and authorities, and protection mechanisms for the Arctic marine environment;
- The next PAME Meeting is scheduled for November 1-4, 1999 in Akureyri, Iceland;
- Organization by UNEP of a global sewage conference in the year 2000.

PAME also provided a debrief on the UN Commission on Sustainable Development (CSD) meeting in New York and highlighted the four key issues for oceans:

1. Conserving, managing and achieving sustainable use of fisheries and other marine resources.
2. Preventing pollution and degradation of the marine environment from land-based activities.
3. Better scientific understanding of the oceans and seas and the interaction with the world climate system.
4. Better international coordination and cooperation.

Iceland announced that its Minister of the Environment had formally opened the PAME Secretariat on Friday, April 30th, 1999, and that an Executive Director for the Secretariat had been appointed. Iceland urged PAME to focus on the socio-economic consequences of threats to the Arctic marine environment.

Council members expressed appreciation to Iceland for hosting the Secretariat.

Canada, Norway, and the United States voiced support for the PAME and ACOPS Partnership Conference. Norway voiced some concern, however, asking, "do we know what they are actually doing, how they are doing it, and where the work stands?" The U.S. reported

that it had already secured some financial support for the conference and that it continued to seek additional resources. Canada stated that it would also make a financial contribution to support the conference.

Russia announced that the Russian Government had approved the NPA but that for it to become legally binding it had to be adopted by the Duma. Russia noted that ACOPS had done preliminary work to flesh out the workplan for its Partnership Conference in Russia, and that more than 50% of the required financial contributions had been secured.

*Sustainable Development Working Group (SDWG)* - Ray Arnaudo, Chairperson of the SDWG, reported on the first meeting of the group, which immediately preceded the SAO meeting. See Appendix D: "Arctic Council Sustainable Development Working Group, Anchorage, May 3-4, 1999, Meeting Highlights." Issues covered during this meeting included:

- The mandate of the SDWG;
- Reports on the status of ongoing SD projects;
- Discussion of new SD projects;
- Discussion of Health and Humanitarian Aid as possible priority areas for SD programming in the future;
- Presentations by Council Members and Permanent Participants on the top 3-4 socio-economic problems or priorities of each; and
- The desire by the majority of Council Members for the SDWG to have a "strategy" for SD programming.

At the conclusion of his report on the SDWG meeting, the Chair distributed a one-page summary of the meeting for comment. The Chair noted that this summary would not take the place of more detailed, formal minutes that would be circulated among Council members for revision and ultimate adoption at the next meeting of the SDWG.

During the meeting of the SDWG, Canada requested "clear support" from the SAOs on the revised circumpolar work plan for the SD project on "The Future of Children and Youth in the Arctic." Canada stated that some aspects of the plan require SAO involvement and funding support.

Sweden remarked that the project had a "very extensive work plan," and that Sweden would try to share with Canada some of the information it was receiving in other fora relevant to what Canada was attempting to accomplish in advancing the Arctic Council project.

The U.S. said that it supported this project in both its health and internship aspects, and that it would continue to participate given the interests of U.S. federal agencies, State of Alaska representatives, and private citizens. The U.S. commented that it was the U.S. understanding that Canada, as the "project manager," would be the organizing/driving force on the project, bearing primary responsibility for securing project support from Member States and others. The U.S. stated that it sensed general support for this project from Council Members and Permanent Participants, although it appeared that no state had volunteered to help Canada with funding.

RAIPON thanked Council Members for the "moral support" for its new project on linking

communities to embassies in Moscow.

UNEP intervened to note that it had made available to delegates a UNEP press release on a recent session of the UN Commission on Sustainable Development, which addressed issues of relevance to the SDWG, including sustainable tourism, oceans, and sustainable production and consumption. UNEP then expressed interest in cooperating with PAME, particularly through its UNEP/GPA Coordination Office in The Hague, which planned to invite PAME to participate in an upcoming meeting of regional seas conventions and actions plans. UNEP further said it was involved in activities such as early warning of environmental emergencies and emergency prevention/preparedness that would be of interest to EPPR (appropriate contact information to be provided to EPPR). UNEP then relayed to CAFF that UNEP, the UK Government and IUCN had recently agreed that the World Conservation Monitoring Center in Cambridge is to be reconstituted as an integral part of UNEP and the center of its biodiversity monitoring. AMAP was informed of UNEP's recent designation of GRID-Arendal as its key center for polar information, monitoring and assessment as well as the anticipated release later this year of UNEP's second Global Environmental Outlook, which reports on the state of the environment in the polar and other geographic regions.

#### **Agenda Item 5: Arctic Council Action Plan (ACAP)**

Norway, lead country and initiator of the Arctic Council Action Plan, began by thanking the participants in a recent "brainstorming meeting" in Oslo regarding the plan. Norway characterized the plan as a two-level concept for taking action to clean up and reduce pollution in the Arctic. One level would be a general strategy for addressing pollution in the Arctic. The other level would be specific projects and/or actions that would arise based on the urgency of addressing them. Norway stressed the importance of the plan being flexible enough to meet changing priorities, and that it be designed in a way that would allow states to contribute and implement as they like. Norway intends to hold two to three workshops to develop the plan and would like to have a final version of the plan ready for adoption by Ministers in the fall of 2000.

Norway described the April 99 "Brainstorming Session" in Oslo as a success and reported that the group gave full support to the concept of a two-level (strategy and specific projects) approach to the Arctic Council Action Plan. The Session was divided into three breakout groups that discussed respectively: 1) overall strategy; 2) operational and organizational concerns; and 3) implementation. Norway pointed to the importance of developing a clear set of criteria for setting priorities within the program. Among these will be severity of the pollution problem and feasibility of taking action. Pollutants that will be targeted for remediation will include POPs and heavy metals. Norway presented a draft of the plan that was developed at the Oslo meeting and requested comments before June 15, 1999. Norway will structure meetings depending on the comments they receive from Council Members, but would like to hold a "negotiating meeting" early enough to have a draft document ready for approval at the Spring 2000 SAO meeting.

SAOs commended Norway for its leadership on ACAP and made the following suggestions for Norway to consider while moving forward with the plan:

- ACAP should consider involving all of the Council's Working Groups;
- ACAP's work shouldn't be solely restricted to responding to information the Council has learned from AMAP;



- perhaps a committee of representatives from countries' environmental ministries could act as an advisory body to ACAP; and
- Iceland suggested expanding the mandates of Working Groups to implement the Action Plan.

Norway cautioned that it would be premature to make decisions regarding the structure of ACAP, and stated that it did not want to establish a new bureaucracy. However, Norway did want to find the shortest distance between problem identification and solution. Norway suggested that the lead nation principle might be a good way to implement the action plan, but stated that it looked forward to receiving the thoughts of all Council members on this issue.

The IUCH intervened regarding ACAP to urge delegations not to represent industrial interests, but to try to influence them.

### **Agenda Item 6: Coordination of Working Group Activities**

John Karau, Chair of the PAME Working Group, gave the following report regarding the May 4, 1999 meeting of Arctic Council Working Group Chairs and Secretariats on Working Group collaboration:

- Working Group Chairs met to discuss where they were collaborating, whether they could better collaborate, and opportunities for better communication and administrative harmonization;
- Chairs are currently collaborating in such areas as PAME's RPA, AMAP and CAFF on Climate Change/UV-B monitoring, PAME and CAFF on the marine workshop, and in work related to operating guidelines and monitoring;
- For more effective collaboration, the chairs proposed a standing agenda item for Working Group chairs and the Arctic Council Secretariat to meet the day before SAO meetings. This would allow Chairs to discuss collaboration on matters such as the review of work plans and promoting coordinated approaches with international agencies (e.g., UNEP) and international financial institutions (e.g., GEF). On a rotational basis, Working Group Chairs would prepare an agenda with the Arctic Council Secretariat, which would be responsible for arranging the venue. A representative from the SDWG would also participate;
- Opportunities for better communication include: better use of the Arctic Council and Working Group web sites; promote Working Group information exchange through national representatives who participate in more than one Working Group; encourage more exchanges between Working Group representatives at the national level; undertake an analysis of common or overlapping Working Group activities; and
- Opportunities for administrative harmonization: operating guidelines, legal analysis, reporting procedures, analysis of common or overlapping WORKING GROUP activities.

The U.S. thanked the Working Group Chairs for their efforts at improving collaboration and gave special thanks to Hanne Petersen, Chair of AMAP, for taking the initiative to bring the group together.

### **Agenda Item 7: Inventory of Arctic Research**

The United States introduced this item as a domestic initiative that forced the U.S. to take

stock of the breadth of its research in the Arctic. The motivation was also to let other Council members learn what the U.S. is doing with the idea of eventually constructing an international arctic research inventory, possibly using the Internet.

Dr. Maryellen Cameron of the U.S. National Science Foundation (NSF) gave a presentation entitled "U.S. Arctic Science: Examples of Programs from the Federal Agency Inventory". The presentation opened with a brief introduction to activities of the Interagency Arctic Research Policy Committee (IARPC), which is charged by law with developing a national Arctic research policy and a 5-year plan to implement that policy. In the remainder of the talk, Cameron presented examples of individual federal agency and interagency programs that address some of the activities identified in the IARPC 1998-2002 science plan. Among the programs described was a new NSF grants program on Human Dimensions of the Arctic System (HARC). It focuses on current and potential impacts on or by human activity in response to global change. Other programs described highlighted NSF's "Contaminant Behavior and Impact in Northern Polar Regions", the interagency UV monitoring program, and NSF's "Long-Term Observations in the Arctic" program.

Walter Parker of the U.S. Arctic Research Commission (ARC) gave a brief presentation on the work of the ARC in the United States, and summarized its goals for 1999 as follows: studies of the Bering Sea region and its ecosystems; environmental health of Arctic residents; studies of Arctic region and global change; Arctic Ocean research; and problems with deteriorating permafrost and its effects on infrastructure.

Patricia Cochran of the Alaska Native Science Commission advocated involving local indigenous communities in Arctic research and including "traditional knowledge" in the dialogue regarding threats to the Arctic environment and what to do about them. To underscore her point, Cochran gave a number of examples of the kinds of phenomena that were being observed by hunters and other inhabitants of indigenous communities in the U.S. Arctic. These included:

- color and taste of "Eskimo tea" is changing;
- seal skins which were opaque in the past, now are translucent, "don't hold their crimp," and take longer to dry. The color of seal oil was clear; it is now yellow;
- weather changes too quickly to predict;
- ice is forming later, melting earlier, and is generally weaker and dirtier;
- new species are being seen at higher latitudes. Beaver are coming north and ruining salmon streams. Various flora are appearing at higher elevations; and
- animals with tumors, lumps, and sores are being increasingly seen. They have also been behaving in odd ways.

To address the concerns of indigenous communities in the Arctic, Cochran made the following recommendations:

- convene annual meetings to review and compare statewide research systems to ensure that the appropriate questions are being asked and answered and that information is being shared;
- ensure adequate funding for the collection, compilation, and integration of traditional knowledge;
- convene annual meetings of an "Elders Council" to make sure the concerns of indigenous communities are being heard and that information on the environment is

- getting back to the communities in an appropriate manner;
- establish rural laboratories;
- build linkages between stakeholders; and
- establish a database of traditional knowledge.

Cochran asked that the following questions be addressed in future Arctic research:

1. What's causing the changes that residents are observing?
2. How do they adapt?
3. What is causing human health changes such as an increase in cancer and respiratory problems in youth?
4. Is it safe to eat traditional foods, or not?
5. What are the effects of UV-B on human populations, Arctic flora and fauna?
6. What is the effect of the use of trawlers on marine resources?

Canada congratulated Dr. Cameron on her presentation and remarked that Canada was aware of and appreciated the amount of resources the U.S. puts towards Arctic research. Canada reported that it was trying to put together a framework for northern and Arctic research and listed some of its priorities as: population health; northern economic sustainable development; and sustainable use of northern renewable resources.

Iceland asked if it would not be possible to use the existing information from IASC more effectively, remarking that inventories presented a "static way" of looking at science. Iceland suggested the Council may wish to consider communicating directly with IASC.

Denmark stated that for inventories to be effective, they must be up-to-date, relevant, evolving, and cheap. Denmark suggested that there be one focal point for an "international Arctic research inventory" (perhaps NSF or the Danish Polar Center), and stated that the only way to make a common inventory work would be through the Internet.

Greenland said that it is important to establish a mechanism for "feeding back to the public" the results of research being conducted and that indigenous populations should be active participants in the process and no longer simply guinea pigs. (Mosquitoes are referred to as "little scientists" in Greenland because they come in droves in the summer, draw blood, and take off.). Greenland listed its research priorities as: research in economic and social development; conditions for economic development; culture, traditions, and language; and health.

AMAP requested that the U.S. include its inventory of Arctic research in its National Implementation Plan (NIP) so that other Council members participating in AMAP would be informed. AMAP mentioned its website and the inventories of Arctic research to which it is linked (for example, GRID-Arendal) and mentioned that a problem in future efforts to establish an international Arctic research inventory will be compatibility between data bases.

Sweden announced its "Tundra Northwest" research project that will take place this summer. An icebreaker intends to make approximately 70 stops along the way. Sweden asked interested parties to contact them if there was any desire for participation or collaboration on this project.

The representative from the Standing Committee of Arctic Parliamentarians mentioned the

existing inventory on sustainable development initiatives produced by the Standing Committee. The inventory is already available at a website maintained by GRID- Arendal and contains 200+ pages of information on 250 projects. The Arctic Council was urged to build on existing work and avoid needless duplication. The Standing Committee is very interested in cooperating with the Arctic Council in building a more comprehensive inventory and willing to make its own inventory part of its contribution to the work of the Council.

Finland supported Iceland's views of perhaps fostering better interaction with IASC.

Norway stated that it had hoped at the establishment of IASC that the Committee might have evolved to play a stronger role, and noted that we still did not have a concrete proposal on how we could proceed collectively on inventory work. Norway suggested that Council members might wish to formally establish cross-links among existing databases and pledge to renew efforts among themselves to keep the information up-to-date.

ICC intervened to stress the necessity of including local observations and traditional knowledge in research and in inventories.

IASC stated that it was prepared to work with the Arctic Council on establishing data links and making the best use of existing technology.

The Aleut International Association (AIA) thanked the U.S. for its inventory of Arctic research.

The U.S. said that it was important for the Permanent Participants to be fully involved in the Council's efforts to compile Arctic research. It especially requested assistance in keeping track of the "explosion of research" taking place in Greenland.

The Chair suggested that to move forward with the development of an Arctic research inventory, the U.S. should work with the chairs of the Council's Working Groups and IASC.

### *Climate Change*

Dr. Robert Corell, representing IASC, presented a comprehensive project proposal for monitoring and assessing climate change and UV-B in the Arctic. The proposal, which reflects the initial efforts of AMAP, CAFF, IASC and the IPCC (Inter-governmental Panel on Climate Change) was generally well received by all Council members. A number of countries noted, however, that they would need a more detailed proposal, along with a budget, before they could commit to participating.

During the presentation, IASC noted the need to select a lead country for the project, enter into discussions on how best to conduct research, and grapple with the difficult subject of financing the project. IASC suggested that "common costs" should be assumed by the lead country, and that a mechanism be constructed to allow for central funding. IASC intends to return to the next SAO meeting (Washington, D.C., fall 1999) for comments on the project and discussions of actions to be taken.

AMAP suggested establishing a "joint board" to move the project forward.

Sweden, the U.S., Iceland and Norway underlined the importance of having AMAP and CAFF actively involved in this project. Norway stressed the importance of IPCC's

participation.

Norway and Iceland welcomed the project as a "major new initiative" that would allow the Council to work with outside scientific organizations. This could help the Council deliver a strong, effective presentation on climate change/UV-B in the Arctic.

The Chair stated that a project of this scope and size could only be approved at the Ministerial level, and asked that the members (AMAP/CAFF/IASC) of the Assessment Steering Committee (ASC) continue their work and present to the next SAO meeting a more detailed plan for the content, including the socio-economic part.

CAFF noted that climate change is an overwhelming threat to Arctic biodiversity and actively discussed it during their recent Working Group meeting in Yellowknife, Canada (April 1999). CAFF views climate change in the Arctic as a key topic which it should address. CAFF noted that at this point the project proponents were merely requesting a "green light" from the SAOs to develop the joint proposal further.

The U.K. stated that it, as the current president of IASC, is ready to support the project scientifically.

IASC stated that IPCC had expressed potential interest in the project. IPCC has reviewed the proposal and made two minor changes. IASC recommended that the IPCC secretariat serve as the coordinating point for the project.

Iceland observed that the IASC proposal seemed to be implementing item #21 of the Iqaluit Declaration and asked if we, therefore, really needed a new mandate to support the project.

The Chair asked delegations to be mindful of not getting ahead of the need for Ministers to endorse this project, and suggested that delegations consult with their governments back home and look for funds.

## **Agenda Item 8: Public Awareness, Education and Outreach**

### *Presentation on the Arctic Council Website*

Dr. Bruce Molnia of the United States Geological Survey (USGS), current manager of the Arctic Council's website, gave a presentation on the site. Molnia outlined the purpose of the site as follows:

1. provide accurate and current information on the Arctic Council to all those involved with or interested in Council activities;
2. serve as a mechanism for outreach and education;
3. serve as a uniform forum for all Arctic Council Working Group websites; and
4. serve as a link to other sites, inventories, and databases related to the Arctic.

Molnia stressed the need to improve outdated links and outdated descriptions on the site, and requested feedback from Member States, Permanent Participants and Observers. Specifically, Molnia requested the names of websites that should be linked to the AC website, e-mail addresses and the names of national contacts with whom he could work to update the data in the "country sections" of the site. Molnia thanked the Canadians for all of their hard work in

establishing the site.

Iceland requested that, in the future, the U.S. considers using the website for allowing SAOs access to the Council's working documents.

*GLOBE (Global Learning and Observation to Benefit the Environment)*

The Deputy Director of the U.S. GLOBE program, Ms. Peggy Finarelli, briefed Council members on its five-year-old operation, which is supported with funds from the U.S. agencies NOAA, NASA, and NSF. GLOBE links school children around the world with each other and with scientists and gives students a chance to gather data that is valuable to scientific research. The World Wide Web (WWW) facilitates the exchange of the data, which is ultimately posted on the GLOBE website (<http://www.globe.gov>). It was noted that all Council Member States have schools that participate in the GLOBE program, and that it might be fruitful to bring schools from the Arctic region of Council member countries into the program. The GLOBE program representative noted that all delegations had been given folders on GLOBE with the names and contact information on "GLOBE Country Coordinators" for each Arctic Council Member State.

The Chair of the Council reiterated that GLOBE brings youth and children into contact with science and environmental issues and suggested that the next SAO meeting might be a good venue for further discussion of concrete proposals for participation in the GLOBE program.

*University of the Arctic*

A representative of the University of the Arctic sought to provide delegates a clear understanding of where efforts to establish the institution now stand, as well as an idea of some of the goals and challenges faced by the University.

The University as it is currently envisaged:

- will emphasize education rather than research;
- will build on existing resources; there is no plan to build a new campus;
- will incorporate both scientific and traditional knowledge;
- will use both classroom and "virtual" education; and
- will offer a Bachelor of Science in "Circumpolar Studies" (BCS).

Finland is supporting the initial coordination office for the University and attempts are currently underway to get small northern and indigenous colleges involved in its establishment. Governance of the University will rely on a Council (constituted of members of represented institutions) and a Board of Trustees (Council members were asked to give the names of suitable individuals to serve on the Board).

Current priorities for the University include:

- support for Russian consultation and participation;
- support for indigenous representation and programs;
- development of a BCS curriculum;
- a circumpolar mobility program (by successfully promoting a "Citizenship of the Region" initiative, students and staff would be able to move simply back and forth from institution to institution in the region); and

- become an institution "about the North, for Northerners, in the North."

Challenges/Concerns faced by the University:

- program will probably attract many students from outside the Arctic;
- threat of ignoring the needs of Arctic students in favor of students from the South;
- more institutions from outside the Arctic may wish to participate;
- how to answer local need without supplanting existing institutions; and
- how to add programs where none exist?

Requests for support from Arctic Council on this initiative:

- How can the University of the Arctic work with the Arctic Council or its member countries to have a closer working relationship?
- Would Arctic Council members make suggestions to the University for candidates to serve on the institution's board of trustees?
- Suggestions for solving some of the stated problems? Is there support from individual governments for certain programs?
- Request for collaboration with governments on B.S. curriculum development and for progress on the mobility program.

Canada congratulated the University on its progress, thanked the individuals involved, and voiced strong support from Canada and Nunavut. Canada suggested the University put together a sub-group from the Board of Trustees to devise a fund-raising strategy.

The Chair requested that the University of the Arctic, if it required formal support from the Council, should send a letter to the Council requesting support.

The ICC suggested that the Ministers of Education from Arctic Council Member States provide intellectual and financial support to the University of the Arctic. The ICC advised that it would give the University the name of a contact.

The U.K. reported that the University of the Arctic would be highlighted at a June 24-27 conference in Aberdeen, Scotland, on circumpolar universities.

The IUCH expressed a desire to help the University of the Arctic with the "Health Component" of its program.

### **Agenda Item 10: Financing**

Denmark announced that it gave US \$110,000 to the IPS in 1999. Denmark observed that all countries should be willing to contribute, and that this will be especially important when/if new Permanent Participants join the Council.

Canada suggested that Council members may wish to pursue funding sources from the private sector.

Norway reiterated its belief that the Council needs a common budget and that the members should all share in the costs.

The U.S. repeated its position that it could not support mandatory funding for the Secretariat or make the Council a formal "international organization," but that it was currently trying to solicit funds from the private sector. The U.S. referred to its letter to the MacArthur Foundation requesting support for the IPS.

The Saami Council stated that this may be the last Council meeting it would be able to attend, and requested the Chair to formally ask member countries to answer in writing what they were doing to help Permanent Participants participate in the Council. The Chair did so.

The ICC asked the United States what it was doing to support the participation of indigenous groups. The U.S. pointed to its letter to the MacArthur Foundation, and added that \$5,000 was being made available by the U.S. Department of the Interior to assist U.S. indigenous representatives in taking part in the work of the Council. In addition, the U.S. noted that U.S. \$25,000 from the U.S. EPA and the same amount from the State of Alaska might become available for this purpose, but that nothing was yet definite. The U.S. offered to further discuss this "off line" with the ICC if it wished.

Canada expressed a willingness to work together to try and ensure that all Permanent Participants will be able to continue to participate.

The Northern Forum made a brief introduction of a proposed Circumpolar Sustainable infrastructure project. The project, under consideration by the Northern Forum, would seek to improve efficiencies in Arctic infrastructure through a broadly based plan to coordinate regional and national research, development and construction efforts.

### **Agenda Item 11: Timing and Location of Next SAO Meeting**

The United States reported that the next SAO meeting would be held in the fall of 1999 in Washington, D.C. (in order to give delegations more access to some of the other federal agencies that are involved in Council activities). The U.S. reported that it would be proposing a specific date.

The Chair took under advisement a Canadian suggestion for a possible theme for the Ministerial Meeting in the fall of 2000. In response to a Canadian question regarding possible deliverables for the Ministerial Meeting, the U.S. suggested that delegations consider the following:

- ACAP;
- Declaration on Arctic Children's Health;
- Arctic Internship Program;
- A Sustainable Development "chapeau" or framework covering progress on specific projects;
- Climate Change/UV-B;
- CAFF Report on Status and Trends of Arctic Biodiversity;
- PAME RPA/NPA for the Russian Arctic;
- Potential changes in the mandate of Council Working Groups;
- Arctic Inventory;
- Website/GLOBE/University of the Arctic; and
- Contact with the public (Pan-Arctic public forum)



Canada suggested that deliverables include something on "capacity building" for northern and indigenous people.

Denmark suggested that two or three "political" topics be put aside for discussion and decision by Ministers. Among these, Denmark included Sustainable Development.

The Netherlands suggested that something be included that dealt with socio/economic development of indigenous people in the north.

**Agenda Item 12: Approval of Press Release**

Delegates discussed a draft press release that the United States intended to make available at the conclusion of the meeting. The U.S. incorporated a number of suggested changes (see Appendix E).

**Agenda Item 13:**

Senior Arctic Officials Meeting Concludes The meeting concluded at approximately 4 p.m. on May 6, 1999.