Summary report of the

Fifth Meeting of the CAFF International Working Group

CAFF V

Rovaniemi, Finland

September 9-11, 1996

Prepared by the CAFF International Secretariat

Introduction

The fifth annual meeting of the CAFF International Working Group was held in Rovaniemi, Finland, on September 9-11, 1996. The Working Group meeting was preceded, on September 8, by a meeting of the CAFF National Representatives and Permanent Participants and followed by an excursion to Pyhatunturi National Park and Luosto, Lapland, on September 12. A special meeting devoted to the implementation of CPAN (Circumpolar Protected Areas Network) was held on September 13, also in Rovaniemi, and attended by many of the same participants.

The structure of the meeting was conventional, with country overviews, observer presentations, reports on Program activities during 1995-96, discussion on Program management, and the development of new CAFF Work Plan for 1996-97. A drafting committee, consisting of Canada (Kevin McCormic), Norway (Finn Katerås) and Inuit Circumpolar Conference (Violet Ford) was formed to draft a proposal for the 1996-97 Work Plan for discussion and review by the Working Group. The plenary sessions were chaired by the Chair of CAFF, Peter Nielsen.

The following report and attached CAFF Work Plan 1996-97 summarises the presentations, discussions and decisions made during the meeting.

SESSION 1: Opening CEREMONIES AND OVERVIEWS BY COUNTRIES AND PERMANENT PARTICIPANTS

Antti Haapanen

Antti Haapanen, CAFF National Representative for Finland, welcomed participants to the, historical city of Rovaniemi where the Arctic Environmental Protection Strategy (AEPS) was launched five years ago and declared the fifth annual CAFF meeting open.

Address by Mr. Pekka Haavisto, Minister for the Environment of Finland

Mr. Pekka Haavisto

Mr. Pekka Haavisto began by welcoming participants and pointing out that the protection of Arctic life was the central idea of the whole Arctic Environmental Protection Strategy and that promotion of that work was the task of CAFF.

He noted that the AEPS Ministers had appreciated the abundant resolves of the work of CAFF displayed in Inuvik and went on to cite the three priority areas the Ministers had singled out for CAFF, i.e. the **implementation and further development of the Circumpolar Protected Areas Network (CPAN), the implementation of the *International Murre Conservation Strategy and Action Plan*, and the completion of *the Draft Co-operative Strategy for Conservation of Biodiversity in the Arctic Region***. The Biodiversity Strategy, he observed, covers the whole idea of CAFF and the next task will be to produce a clear action plan and a timetable based on it and priority considerations.

Mr. Haavisto reviewed conservation achievements in northern Finland which are of special interest to CAFF. Among them he mentioned the recent designation of 1.5. mill. ha of land in Lapland as wilderness area under the Wilderness Act, the governmental decision this summer to protect about 300.000 ha. of Old Growth Forests (forest more than 120 years old), the globally unique project to create a continuos chain of protected areas, a "Green Belt", along the Finnish/Russian border from the Arctic ocean to the Gulf of Finland, covering approximately 2 mill. ha of land in both countries.

Of concern in northern Finland is environmental deterioration resulting from air pollution from the metal factories in the Kola Peninsula and from overgrazing by large reindeer herds. Both problems are currently under active study aimed at finding solutions.

Mr. Haavisto ended by stating that, as a result of the five years work by the AEPS, the member nations are now much better informed about the environmental conditions in the Arctic and that the knowledge already accumulated provided a base for action. Thus, the important task for CAFF in the future was to present concrete and realistic action plans for the AEPS Ministers to consider.

Address by the Chair of CAFF

In his address, ***Peter Nielsen*** pointed out that during the last five years CAFF had become quite well known in the Arctic region and gained respect and active participation of Indigenous Peoples and others committed to the principles of conservation and sustainable utilisation of Arctic flora and fauna.

Mr. Nielsen agreed with Mr Haavisto that a wealth of information on Arctic conservation issues had been gathered within CAFF and that the challenge facing the Program at this point was to act upon some of the issues identified.

He further noted that CAFF must adjust to the needs of the Arctic Council. The work of CAFF will be especially important in providing consultation and scientific information for the Council's sustainable development work. CAFF strongly advocates that sustainable development is planned within a framework of conservation and sustainable utilisation and must do its best to advocate that view within the Arctic Council. Finally, Mr. Nielsen expressed his hope that the work of CAFF will continue to be of high value to all people in the Arctic region.

Canada

Gerald McKeating

Gerald McKeating acknowledged the fine efforts of two long-standing Canadian players in CAFF, Doug Pollock, former CAFF National Representative, and Jeanne L. Pagnan, the former Executive Secretary of the Program.

Mr. McKeating then reviewed some conservation initiatives within Canada during the past year. Among them, the establishment of Tuktu Nogait National Park, protecting the calving grounds of the Bluenose herd of the Barren Ground Caribou, and the Nirjutiqavviq National Wildlife Area which protects some of the major seabird colonies of Murres, Black-legged Kittiwake and Fulmar. In terms of legislation, an Oceans Act is underway, including provisions for marine protected areas and a Canadian Federal Endangered Species Act. The Wild Animal and Plant Trade Act is in force and the

Migratory Bird Convention Act, a convention between Canada, the US and Mexico, is being amended. Initiatives have been taken with the US and Greenland, looking at some of the common bilateral problems regarding eider populations and sea ducks. The Arctic Goose Joint Venture is an international program, primarily between The US and Canada, which looks at population status, wintering grounds and migration of about 16 population of the Arctic nesting Geese.

Mr. McKeating noted that Canada's involvement in CAFF has focused strongly on integrating indigenous knowledge into the program and that these projects had made good progress. He ended by stating that Canada is very pleased with the establishment of the Arctic Council and looking forward to host it for the next two years, under the chairmanship of the Ambassador for Circumpolar Affairs, Mary Simon.

Greenland

Peter Nielsen

Peter Nielsen emphasised CAFF's beneficial role as a model for conservation and legislation work in Greenland. As an example of this he noted that provisions of the *International Murre Conservation Strategy and Action Plan* and the draft Eider Conservation Strategy had already found their way into the draft for new hunting regulations. Furthermore, ideas from CPAN will be used during a planned revision of the Nature Protection Act, in which special attention will be made to protected areas. Mr. Nielsen cited examples of solid political support for conservation and sustainable use research in Greenland, for example, the willingness to establish and fund the Greenland Institute of Natural Resources, which does most of the conservation and sustainable use research in Greenland, and the decision to establish a Department of Environment within the Home Rule Government in early 1997.

On a negative note, Mr. Nielsen, mentioned that there are still problems with management of Walrus and the Beluga whale. However, awareness is growing and needed research on these species has been identified. He ended by welcoming participants to the sixth annual meeting of CAFF in Greenland in September 1997.

Norway

Berit Lein began by thanking Finland for its efforts in arranging the meeting. She emphasised that CAFF must work on issues that can contribute to improved flora and fauna conservation in the member countries, that proposals must be presented on topics which are of interest and importance to political and management decision makers, and that information must be provided that is authoritative, timely, relevant and suited to the audience.

Ms. Lein then informed the meeting on CAFF program activities in Norway and provided an overview of other Arctic related activities; among them a gap analysis to support conservation in Svalbard, development of a protection plan for Bear Island, and an

environmental status report for Jan Mayen. An evaluation of the Polar Bear Agreement was finished during the year, recommending *inter alia* that the Arctic countries should reaffirm their commitment to protect polar bears and their habitat, and improve the overall protection of important marine and terrestrial polar bear habitats. Work is continuing on the development of a management plan of Svalbard reindeer, and national management plans for deer and for geese have been presented. Norway continues to actively participate many international conventions and agreements such as the Bonn Convention, Ramsar and the Convention on Biological Diversity.

Ms. Lein ended by pointing out that the hosting of next year's Ministerial meeting will draw heavily on Norwegian resources and staff dealing with Arctic issues and hence called upon other countries to take the lead on items that the AEPS Ministers have singled out for particular action.

Iceland

Aevar Petersen

Aevar Petersen began by highlighting some national conservation issues. New Nature Conservation Law will take force the first of January 1997. A new system of hunting licenses and hunting statistics has been adopted which will help greatly in the management of species that have been utilised. Work is progressing towards the establishment of a new national park on the Snaefellsnes peninsula in western Iceland, and implementation of the Breiðafjörður Conservation Law, passed by the parliament last year, has begun. The State Planning Commission is making a comprehensive plan for the Icelandic Highlands, something that has never been done before. Other noteworthy projects initiated recently are e.g. an extensive program on mapping species composition and distribution of invertebrates in Iceland, a "multi species program" looking at different elements of the marine ecosystem (fish, whales, seals and seabirds), and "Bio Ice", a benthic program for the whole of Iceland's economic zone.

Regarding CAFF specificly, Dr. Petersen mentioned several seabird projects related to the Murre and Eider Strategies and a renewed interest in vegetation mapping. He thanked Jeanne Pagnan for the extensive work she had undertaken for CAFF since the beginning of the Rovaniemi process. As a result of the transfer of the Secretariat, he noted that the Ministry for the Environment has increased its support for CAFF related activities in Iceland. Looking to the future, the most important thing for CAFF is to build a framework for the main conservation issues that the Program should been dealing with. He ended by thanking Finland for organising the meeting.

Sweden

Christer Borgh

Christer Borgh began by complementing Finland for the meeting arrangements. The Lapponian World Heritage Area is expected to be inscribed as a Natural Property on the World Heritage List at the end of 1996. Sweden has been concentrating much work on the implementation of the Biodiversity Convention and has produced an Action Plan which has now been published in English. A great deal of Sweden's remaining resources for conservation activities were used to fulfil commitments under EU's Habitat Directive, especially the "Nature-2000 programme".

Mr. Borgh then explained that the economic situation is negatively affecting conservation work in Sweden and that e.g. the Environmental Protection Agency will have its grants cut by 20% over the next 3 years. Because of this, and bearing in mind that Sweden's Arctic territory is relatively small, the CAFF work could not be given the highest priority.

Russia

Vladimir Pisheliev

Vladimir Pisheliev initially reconfirmed Russia's has high appreciation of the activity of CAFF and makes all possible efforts to fulfil its program activities, although the economic situation in Russia during the last year did not make this an easy task. In Russia, a special attention was given to national legislation improvement and several new laws were passed, i.e. the laws on Environmental Protection, the Protection of Fauna and the law on Nature Protected Areas. Special laws such as the Water Code of the Russian Federation and the Code on the State Regulation in the field of Genetic Activity were also passed. A recent resolution on the Red Data Book of the Russian Federation will signify enforced work on protection of rare species of animals and plants.

On CAFF related issues Dr. Pisheliev emphasised the considerable expansion in protected areas coverage with new nature reserves (zapovetniks) and sanctuaries established. Notable among them are the Koryaksky Reserve and the Sanctuary of northern Severnaya Zemlya which is a structural subdivision of the Great Arctic Reserve. He noted that the economic situation had forced some non-standard decisions regarding the creation of new protected areas and, in some cases, concessions to financial interests. The trend is towards sanctuaries rather than zapovetniks as the former are less expensive and easier to promote through the government.

Dr. Pisheliev explained that Russia, in order to realise CAFF objectives and programs, had to use all possibilities available, including mechanisms of international conventions and bilateral and multilateral agreements. He ended by thanking the Finnish hosts for organising the meeting and for providing financial support.

The United States of America

Janet Hohn opened by thanking Finland for the generous invitation to Rovaniemi and by introducing the US delegation. Ms. Hohn stated that the CAFF Program continues to attract the attention of research and management professionals in the US, as a model of international co-operation on conservation issues in the Arctic.

Because substantial areas of the US Arctic (56%) already have protected area status, current efforts are focused on developing partnerships for co-operative management of key species rather than expanding the protected area coverage. However, the US continues to work toward designation of the Beringia Heritage International Park.

Her talk then focused on providing a summary of important accomplishments on the 1995-96 CAFF Work Plan. The Ice Edge Pilot Mapping project, the Circumpolar Arctic Vegetation Mapping projects and the work on Rare Endemic Arctic Vascular Plants are reporting good progress. The *International Murre Conservation Strategy and Action Plan* and the draft Eider Conservation Strategy, Ms. Hohn stated, are good examples of issues that address common management concerns of shared populations, requiring multilateral solutions. Projects aimed at integration of Indigenous Peoples and their knowledge are close to completion. The Arctic research ethics item which first arose within CAFF at the urging of the Arctic Indigenous People's organisation has since then been referred to the SAAOs for action within the broader context of all AEPS programs. Ms. Hohn concluded by wishing the meeting good success in moving forward the important objectives of CAFF.

Finland

Antti Haapanen reiterated his welcome to the participants and thanked for the kind words provided by the National Representatives. He gave a graphical overview of Wilderness Areas in northern Finland and Lapland. In these areas construction work is strictly limited, but the rights and conventional livelihood of the Saami people are well protected. In addition to the Wilderness Areas, different ecosystems enjoy various levels of protection. The Wild River Act, which entered into force in 1987, protects many of the northern river systems. And this summer a decision was made to protect 300.000 hectares of Old Growth Forest in northern Finland, representing approximately 50% of the forested area in northern Finland. New legislation on Nature Conservation has been developed that will enter into force in January 1997. As a result of Finland's recent membership, much effort has been devoted to implement conservation initiatives of the EU, especially the "Nature 2000 Network". Finland is also active in several other international and multilateral efforts such as the Barents Co-operation and the Green Belt.

Mr. Haapanen ended by mentioning Finland's work on the Biodiversity Strategy and expressing his hope that it will become one of the most important documents guiding CAFF's work in the future.

Inuit Circumpolar Conference (ICC)

Henry Huntington

Henry Huntington stated that the work of CAFF is of great importance for the Inuits and other Indigenous Peoples of the Arctic and that it is important to find common grounds for conservation and sustainable use, because those who depend on the resources are also the first to suffer if conservation is not achieved. The work of CAFF should also ensure the protection of the activities and cultures that depend on Arctic Flora and Fauna.

He thanked Finland for the excellent meeting arrangements and congratulated Snorri Baldursson for being appointed to the CAFF Secretariat. He thanked Jeanne Pagnan for her hard and dedicated work on behalf of CAFF for the past several years and expressed his hope that the enthusiasm she has shown for CAFF and its programs will continue. Dr. Huntington brought regards from the Indigenous Peoples of the Russian Federation who regretted not being able to attend the meeting due to their concurrent hosting of an Arctic Writers Conference in Salahard.

The Saami Council

Ritva Torikka provided examples of administrative and court decisions in northern Scandinavia showing increased understanding and concerns for the culture and livelihood of the Saami People. For example, the highest administrative court in Finland had supported an appeal, made by the Saami Reindeer Herders Committee, for withdrawing permissions for mineral exploration in northern Finland, since these permissions failed to consider the impacts on Saami reindeer herding and culture. In Norway, authorities denied permission for mineral exploration in two Saami municipalities in Karasuk (?) and Kautokeino on the grounds that the Committee for Saami Rights had not finished its work. Also promising was a recently initiated joint project between the Saami Parliament and the Ministry for the Environment on sustainable development in Saami area.

In spite of these positive developments, Ms. Torikka noted that there are still problems facing the Saami indigenous culture. On the Kola Peninsula the best salmon rivers are rented by commercial sport-fishing companies, preventing traditional fishing by the local Saami. A problem also is the lack of holistic thinking on indigenous issues by the state authorities.

SESSION II: PROGRESS REPORTS ON THE 1995-96 CAFF WORK PLAN

1. Habitat Conservation

Circumpolar Protected Areas Network (CPAN) (item 1.1) - Russia and Norway

Vladimir Pisheliev

Vladimir Pisheliev expressed a pleasure in reporting, on behalf of the CPAN Steering Group, on the fruitful work of 1995-1996. He described the last year as the final stage in the CPAN preparatory process, initiated for real in 1993 by the appointment of the CPAN Steering Group. Since then the group had overseen the development of 5 summary reports leading up to the *CPAN Strategy and Action Plan* which was endorsed by the AEPS Ministers in Inuvik in March 1996. The goal of the CPAN Strategy is to "facilitate implementation of initiatives to establish, within the context of an overall Arctic conservation strategy, and adequate and well managed network of protected areas that has a high probability of maintaining the dynamic biodiversity of the Arctic region in perpetuity".

To meet this goal, the CPAN Strategy identifies a number of action items to be undertaken by the Arctic countries both at a national level and at the broader level of the AEPS. The important task of this meeting, he stated, would be to select action items from this list for the CAFF Work Plan 1996-97. Dr. Pisheliev, noted that some of these actions might demand substantial financial resources and possibly the establishment of 2-3 persons sub-groups.

Jan-Petter Huberth Hansen presented the latest CAFF Habitat Report, *Proposed Protected Areas in the Circumpolar Arctic*, published in August 1996. Initially he thanked everybody involved, especially the CPAN Ad hoc Expert Advisory Group, WCMC and UNEP GRID-Arendal. He further explained that delayed response from some countries had made it impossible to maintain the initial deadline for its publication. Since the publishing in 1994 of the first CAFF Habitat Report, five new protected areas had been established, increasing the number of existing protected areas in the Arctic region from 280 to 285 with some 14,1 % of Arctic terrestrial area currently protected. The report contains a directory of 118 proposed protected areas, but many of them quite preliminary. Maps are provided that show the location of existing and proposed areas. The report's focus is towards marine issues, since the establishment of marine protected areas is seen as one of the big challenges of CPAN in the future.

Finn Katerås focused on the main elements of the *CPAN Strategy and Action Plan*. He reiterated that the Ministers had given a very clear endorsement of the Strategy and requested its further development. As a response the CPAN Steering Group had met in Trondheim on June 10th and developed proposals on how to follow up on the actions recommended in the Strategy. These proposals were presented to the CAFF National Representatives and widely distributed throughout the CAFF community. Out of 17 actions to be taken on a national level and 9 at the AEPS level, the Steering Group had

proposed two and seven items, respectively, for the next Work Plan. On national level these were to:

- Develop an initial national CPAN Implementation Plan
- Report on progress regarding CPAN

And on AEPS level to:

- Evaluate the national CPAN Implementation Plans
- Secure the establishment of Pan-Arctic Protected Areas Registry of terrestrial, freshwater and marine candidate sites for future action
- Further work on gap analysis
- Prepare a discussion paper on the need for marine protected areas
- Establish mechanisms to co-operate with and contribute to IUCN's efforts to establish a global system of representative marine protected areas within CAFF area
- Prepare a discussion paper on the establishment of linkages with other jurisdictions for species migrating outside CAFF countries
- Identify partners and resources available for enhanced public education on CPAN and its values

Dr. Katerås emphasised the importance of the two national action items and further stated that due to the extensive nature of some of the AEPS tasks, the CPAN Steering Group had found it wise to start with a very preliminary work on some of them. He closed by briefly going through the draft agenda of the planned CPAN meeting on Friday, September 13

The Ice Edge Pilot Mapping Project (item 1.2) - USA and Arctic Network

Margie Ann Gibson

Margie Ann Gibson began by thanking the CAFF National Representatives for accepting Arctic Network's application for permanent observer status in CAFF. The three main purposes of the Ice Edge project are to:

- Identify and map areas of high biological diversity, seasonal concentrations of migratory species, cultural and susbsistence value
- Identify and prioritise concerns about the ecological health of the ice edge environment and to the future of traditional harvesting and subsistence
- Facilitate co-operative effort among Arctic countries, local communities, conservation NGOs, and scientists to design and ecologically based management regime in areas identified as needing protection.

The Pilot project area is the Bering, Chucki, and Beaufort seas. The project has emphasised indigenous involvement from the start with 25 communities currently involved; 13 on the Alaska side, 12 on the Russian side.

Regarding progress, the habitat mapping is underway on three ice-depending species, Bowhead whale, Polar bear and Pacific walrus. Human caused threats to ice-edge habitat and species have been identified which, in most cases, are the same as those generally identified at CAFF IV for Arctic biodiversity. The design of management regime is premature prior to the mapping of critical habitat but consultations have begun.

Wildlife Habitat Mapping (item 1.3) - Russia and WCMC

Igor Lysenko

Igor Lysenko from the Institute of Nature Conservation in Moscow began the joint presentation. The project was initiated by Russia two years ago for the practical purpose of developing an approach which would allow a simple graphical presentation of complex eco-geographical and species distribution data. The crucial step was the subdivision of a continuous natural ecosystems into specific habitat units and, thus, reducing geographical and ecological details while still maintaining integrated information on species distribution. The species distribution data were analysed by Dr. P.R. Danilenko from Moscow State University and the map was developed by Dr. Marina Mirutenko from the Institute of Nature Conservation.

Dr. Lysenko showed the finished product, a colour map of northern Russia showing a network of species habitats, the development of which he considered a very fine example of the type of international co-operation possible under the umbrella of CAFF; with technical and methodological input from the WCMC and Finland (Dr. Seppo Kaitala) and financial assistance provided by the UK and US. He stressed that this type of work would be very well suited to provide decision support for the CPAN process, for the monitoring of Arctic flora and fauna, and for concrete conservation activities.

Richard Luxmoore from the World Conservation Monitoring Centre (WCMC) in Cambridge continued with focus on the potential use and future development of wildlife habitat maps. Basically, he explained, such maps provide a method for the integration and simplification of complex biological and physical information on e.g. vegetation, ecological communities, species, land cover, landscape, geology and climate. Their striking appearance make them a powerful communication and presentation tool for advocating conservation issues. And lastly, they are a very effective tool for decision makers.

He explained that the preliminary gap analysis which had been conducted so far, and formed the basis for the map presented, relied on a very simple consideration of the major vegetation zone in the Arctic overlaid with information on protected areas. Dr. Luxmoore expressed a hope that in the future other mapping initiatives of CAFF, such as seabird colony maps and distribution maps of terrestrial migratory species, could be incorporated into the gap analysis.

The Chair remarked that while making habitat maps for the most common birds and mammals was workable, it would be difficult to use this approach for e.g. the tens of thousands of insects around. ***Dr. Luxmore*** agreed and stated that the habitat maps were only one element in a large set of tools which can be used for conservation planning. His hope was, however, that this approach would identify some of the richer invertebrate environments.

Circumpolar Arctic Vegetation Mapping Project (CAVM) (item 1.4) - USA

Stephen Talbot

Stephen Talbot opened by noting that a significant and substantive progress had been made on CAVM, and by introducing the scientists involved, among them Dr. Skip Walker the overall project co-ordinator. The project will produce three products at the scale of 1: 7.5 million:

- A cloud- and snow-free false-colour infrared AVHR (Advanced Very High Resolution) satellite image of the Arctic region. A first of its kind base map on which to draw vegetation boundaries with a variety of applications for Arctic science and education
- A map of relative vegetation greenness, portrayed by using Maximum Normalised Difference Vegetation Index (NDVI) - useful for examining e.g. biomass production or for modelling the effects of climatic change
- A geo-botanical database and arrived vegetation maps of the circumpolar Arctic tundra and polar desert.

The first two items are near completion and will be ready for display at the Ministerial Conference in June 1997. The legend for the vegetation map and database, and a scheme and a time table for international co-operation was developed at the Second Circumpolar Arctic Vegetation Workshop in Arendal in May 1996. The legend will be multi-factor, incorporating both vegetation and landscape information. Regional maps will be completed in 1998, continental synthesis in 1999, and a circumpolar synthesis in 2001. Experts in each region of the Arctic will do the initial mapping but sub-continental synthesis will be conducted at the GIS-Centres in Alaska and GRID-Arendal in Norway, and at the Komarov Botanical Institute in Russia. Funds of USD 50.000 have already been secured from the US towards completion of the project, covering approximately one sixth of the estimated total cost to finalise it.

Russia noted that the Russian team would be responsible for a very large proportion of the regional mapping work and that serious help was needed from CAFF to secure

financing of these activities. ***Finland*** expressed interest in connecting to the CAVM project. ***WWF*** asked how the two CAFF mapping efforts on Habitats and Vegetation related to each other and suggested integration to safe funds. Arctic Bulletin's assistance was furthermore offered for general promotion of these efforts. ***Dr. Lysenko*** stressed the amount of specific data underlying the general output of the CAVM and that this specific information must be made generally available for further work and later updating of the maps. ***Dr. Talbot*** responded by noting that he saw the vegetation map as the basic framework from which other maps could be created, but agreed that it might be valuable to have the habitat group involved. He further stated that all underlying data will be kept at GRID-Arendal in an accessible form.

2. Species Conservation

Rare Circumpolar Endemic Arctic Vascular Plants (item 2.1) - USA and Russia

Stephen Talbot

Stephen Talbot covered three action items for the USA (2.1.i-iii): the annotated list of rare circumpolar endemic vascular arctic plants, distribution maps of rare plants in relation to protected areas, and a Draft Atlas of Rare Circumpolar Endemic Arctic Vascular Plants. He explained that the development of the list of rare plants - a step by step process that was initiated by Canada at the first CAFF meeting in Ottawa - is now approaching completion and that the final list will be published in the Atlas. The mapping effort has been on hold awaiting the final version of the annotated list. A draft Atlas has been produced for review with the final version scheduled for the Ministerial meeting in June 1997. The Atlas will contain a general introduction discussing concepts of rarity, a methods section, an 11-category annotated list of now approximately 100 rare endemic Arctic species, a rare plant glossary of terms, and an English bibliography of 116 scientific works many of which are published in Russian. The Atlas will be decorated by colour photos of some of the plants.

The main tasks remaining are to complete the annotated list with data from all countries, conduct a thorough circumpolar review of the Atlas, update newly submitted species, and to promote a scientifically credible list by e.g. sending the names of problem taxa to taxonomic specialists, and by flagging unresolved taxa. By overlaying preliminary distributions maps of rare plants on maps of protected areas he showed that many rare plants do not enjoy protection at the time being. Dr. Talbot stressed the need for actualisation and implementation of a formal flora working group and full representation from all Arctic countries. He ended his presentation by showing a few slides of rare plants to remind participants that rarity, although commonly thought of in terms of restricted distribution, is also a question of beauty.

WCMC asked about the categories of rarity used in CAFF's work and how they matched the IUCN categories for threatened species, and cautioned that, if steps aren't taken to match the lists, Arctic plants might be omitted from the global list of threatened plant species to be published by the IUCN. ***Dr. Lysenko*** inquired into the exactness of the locations or distribution spots for the rare plants in relation to the protected area maps. ***Dr. Talbot*** responded by noting that the categories used were based on those of the Nature Conservancy in the US, since the IUCN categories were not available when the work was initiated, and that the issue of harmonisation would have to be investigated. The locations of the rare species are based on latitudinal and longitudinal co-ordinates provided from each country and should be compatible with maps of protected areas. He further noted that the rare plant distribution spots could be compared with other types of maps, e.g. vegetation maps and wilderness quality indexes.

Boris Yurtsev outlined ideas for listing non-endemics in a list of plant species of circumpolar conservation concern (sub-item 2.1.iv). The overall definition of such species would be: "taxa, other than endemic, with very restricted ranges within the Arctic (defined as the northern treeless region)". Criteria for selection species should include:

1. Rarity in the Arctic

1. A very limited longitudinal distribution in the Arctic, or occurrence in two or three strongly isolated localities
2. Rarity also outside the Arctic or, as a minimum, a significant disjunction between the Arctic and non-Arctic part of the range
3. Relic nature; restriction in the Arctic to specific non-zone habitats

Prof. Yurtsev noted that the inclusion of such taxa would not significantly increase the general list of circumpolar species in need of whole-Arctic protection. Out of approximately 500 rare species of the Russian Arctic, approximately 90 species of endemic and only 14 non-endemic taxa fitted the definition.

He recommended that CAFF countries presented in 1996-1997, their list of non-endemic species according to the above criteria, for inclusion into the Pan-Arctic list of plant species in need of protection at a circumpolar level, and these would then provide the core of a Red Data Book of Arctic vascular plants. He recommended also the acquisition of analogous data on bryophytes, lichens and algae of the Arctic.

The US asked if this was seen as a separate list from the annotated list in the Atlas of Rare Circumpolar Endemic Arctic Vascular Plants. ***Prof. Yurtsev*** expressed his view that there should be a single list of plant species of circumpolar concern destined for incorporation into a Red Data Book for the Arctic, but that the Atlas of endemics could very well exist as a separate product from that.

Pan-Arctic Flora Initiative (item 2.2) - Russia

Boris Yurtsev

Boris Yurtsev reviewed progress on the Pan-Arctic Flora Check-list for vascular plants. In 1996, the work was slowed down due to lack of funds. However, a draft version already exists on some of the major families including: Compositae, Cruciferae, Leguminosae and Juncaceae, a number of aquatic families of monocots and a few others. A plan exists to complete the draft version of the check-list within the next two years and to publish it after thorough review among the Arctic countries. It is also the intention to publish the Check-lists for Arctic representatives of some important families with distribution maps. Cryptologists have already published the annotated check-lists of lichens and mosses for the Russian Arctic. Prof. Yurtsev noted that the involvement of Nordic countries in the project was of paramount importance for its success and financing which remained a chronic problem. In light of the importance of the Pan-Arctic Flora initiative for all aspects of conservation and sustainable use of the Arctic flora, he called upon CAFF to help provide the support needed by addressing Arctic funding agencies.

Circumpolar Seabird Working Group (CSWG) (item 2.4) - CAFF

Kent Wohl

Kent Wohl, Chair of the CSWG, explained that according to the approved CSWG charter, the main goal of the group is to "promote, facilitate, and co-ordinate seabird conservation, management and research activities among the circumpolar countries, and to improve communications between seabird experts". The group has conducted three annual meetings since its establishment in 1993. The 1996 meeting was hosted by Greenland in Nuuk and the next meeting will hosted by Canada and held in St. Johns, Newfoundland in April 1997.

Dr. Wohl reviewed progress on the 9 tasks assigned to the group in CAFF's Annual Work Plan 1995-96 and noted with pleasure that good progress had been made on all of them. The *International Murre Conservation Strategy and Action Plan* was completed and endorsed by the AEPS Ministers in March 1996. As an initial step in the implementation process, the CSWG recommends that each country develops a five year action plan and reports progress annually to CAFF. A Draft International Eider Conservation Strategy and Action Plan, a major effort of CSWG in 1996, has been completed and distributed for review. The final strategy is scheduled for 1997. The design of the Circumpolar Seabird Colony Databases is finished and the database will be populated with Murre colony information as a first step. Most countries have submitted information on magnitude and impact of seabird harvest and incidental mortality of seabirds in commercial fisheries and responded to questionnaire addressing the impact of human disturbance at seabird colonies. Reports on these items will be published in 1997. The Circumpolar Murre Monitoring Plan and Banding projects are progressing with final

plans scheduled also for 1997. Lastly, the CSWG has published the second issue of the *Circumpolar Seabird Bulletin*.

Dr. Wohl closed by inviting additional comments from other group members present. ***Richard Elliott*** commented that Canada had arranged for translation into Russian of the *International Murre Conservation Strategy and Action Plan*.

WCMC asked if gulls were included in the CSWG's definition of seabirds and if the database would include Arctic colonies of gulls. ***WWF*** noted that although the CSWG efforts were deeply impressive, it might appear from the outside that CAFF was a bit biased dealing only with seabird issues and proposed that CAFF also worked with the terrestrial counterpart of the seabirds, i.e. tundra or wetland birds. ***Russia*** inquired into the level of accuracy of geographical co-ordinates in the Colony Database. ***Dr. Wohl*** reiterated that the database would initially only be populated with Murre colony data and that decisions regarding additional species would wait until later. He noted further that geographical information will be entered by longitude and latitude as tabular data. An Atlas with maps might be envisaged later.

3. Biodiversity Conservation

Draft Co-operative Strategy for Conservation of Biodiversity in the Arctic Region (item 3.1) - Finland

Antti Haapanen

Antti Haapanen reminded that the Ministerial Conference in Inuvik had welcomed the *Draft Co-operative Strategy for the Conservation of Biodiversity in the Arctic Region* and asked CAFF to continue its development for the next Ministerial Conference in June 1997. The continuation of the project had been discussed at National Representative's and specialist's meetings. These meetings revealed that some member countries had difficulties accepting the document as presently drafted, calling for a new round of review within the CAFF community. The common decision was that Finland would redraft the strategy as a kind of framework document for conservation of biodiversity in the Arctic region, taking into account comments from member countries. This draft would then be submitted to the consideration of the National Representatives at their meeting in early 1997.

Monitoring of Biodiversity (item 3.2) - Greenland, Russia and Iceland.

Peter Nielsen noted with regret that the "Overview of Current Monitoring Efforts Among the CAFF Member Countries" (sub-item 3.2.i), which Greenland is responsible for, was not ready but that this work would be finished during the next winter.

Boris Yurtsev referred to a tabled discussion paper on the "Creation of the Circumpolar Network of Sites for Biodiversity Monitoring" (sub-item 3.2.ii) and an earlier version presented at CAFF IV. This year the Komarov Botanical Institute has established a biodiversity monitoring network at a local flora level in the Asian sector of the Russian Arctic. Sites have been selected, according to the previously defined criteria, and the program of monitoring has been prepared. Creation of a database is also underway. Local floras have been chosen as monitoring objects in the Russian Arctic because they comprise a well studied (by the A.I. Tolmatchev method) and natural unit of biodiversity, whereas plant communities may be more diffuse entities to deal with. If already well studied floras were used in other CAFF countries, a circumpolar network could be in place within 2-3 years.

The present main question is whether the CAFF member countries are willing to extend the network to become really circumpolar. Prof. Yurtsev noted that biodiversity monitoring is a crucial element of the Biodiversity Convention and highly recommended in the CAFF Biodiversity Strategy. The short term significance of a biomonitoring network is e.g. to portray the species diversity for representative landscapes and to identify indicator species. In the long term, such a network would analyse trends in flora transformation and the impact of global changes on plant cover. Hence co-operation should be sought with AMAP and other environmental monitoring programs. Dr. Yurtsev ended by calling for support for this initiative and by offering Russia's further work on drafting the monitoring program and collecting necessary information from the member countries.

IASC commented that the International Tundra Experiment (ITEX) already has a network of sites throughout the circumpolar region, monitoring several keystone species. ***USA*** asked for clarification on the key objectives of the proposed network and raised concerns about funding. ***The Chair*** noted that creating a new network of monitoring sites all over the Arctic region was a major job and goals needed to be very specific. ***Finland*** suggested, as a first step, to find out more about ITEX and other current monitoring activities in the Arctic region. ***Canada*** supported Finland's idea and noted that a number of initiatives on environmental monitoring were underway. ***Dr. Yurtsev*** agreed that the ITEX project should be consulted, although its aims were somewhat different. The main objective of the proposed network would not only be to monitor global changes but also short term human processes that threaten biodiversity. By linking the network tightly with other CAFF initiatives, like CPAN, cost might be reduced.

Vladimir Pisheliev presented a discussion paper, prepared by Russia and Iceland, on the "Potential of Using Invertebrates as a Biomonitors of the Arctic Ecosystem" (sub-item 3.2.iii). The paper concludes that invertebrates, especially soil animals, are good bioindicators of environmental quality also in tundra regions. As an example, recent studies of soil macrofauna changes, caused by smelter impacts in tundra ecosystems, have shown that changes are evident earlier in soil macrofauna than in vegetation cover. Earthworms, diptherans and beetles are the most sensitive groups among macrofauna, and enchytraeids and oribatid mites among mesofauna in tundra regions. Thus, invertebrates can, potentially, be the main bioindicators of local and global changes in tundra biomes, but the point for discussion, Dr. Pisheliev observed, was to decide whether the present stage of knowledge of Arctic invertebrates was sufficient to use them constructively for this purpose.

Iceland noted that the paper was still very preliminary and needed to be reviewed by the other countries. Dr. Petersen further observed that monitoring is proposed as an integral part of several CAFF projects (e.g. CPAN, Murre Strategy) and that CAFF had previously developed a list of indicator species in close collaboration with AMAP. He suggested a general discussion on the objectives and co-ordination of monitoring activities within CAFF and other AEPS programs. An inventory of monitoring activities within the Arctic region might be a good first step. ***The Chair*** stated that the taxonomy of Arctic invertebrates was to a large extend unresolved and until that problem had been fixed, invertebrates were of limited use as bioindicators.

Threats to Arctic Biodiversity (item 3.3) - Finland

Antti Haapanen explained that the draft paper on this issue had not been developed further, but that Finland was prepared to advance this work if needed. He reiterated that all of Finland's biodiversity related work should be taken into account when the CAFF framework for biodiversity conservation in the Arctic region was developed.

As an explanatory note, the ***Chair*** referred to a decision made by CAFF National Representatives to establish a broad Analytical Group to re-evaluate and focus CAFF through the developing of a new conservation framework and action plan for the program. It is agreed that the biodiversity concept provides a sufficient framework for CAFF's activities. Hence the revised Biodiversity Strategy, called for by the Ministers and under development by Finland, will be integrated with the AG's work. ***Iceland*** noted that the work on threats was a special niche within the overall analytical work and suggested that Finland prepared a final paper on this issue by compiling and analysing the

information already gathered. ***Finland*** agreed and asked member countries for inputs and comments on how to continue from the present draft.

"Biodiversity 2000" - special report

The ***Chair*** introduced Stella From from the Finish Environmental Institute, co-editor of the planned Report on Biodiversity in Northern Europe - a recent initiative by the Nordic Council of Ministers.

Stella From noted initially that the Nordic Council had commissioned this work to the Working Group on Environmental Monitoring and Data, for which she and the Finnish editorial team was working. It was initiated in August 1996 with a planned publication date in the year 2000. It is a part of Nordic report series on the State of the Environment. A forthcoming issue in these series, she noted, would focus on the Arctic region in the Nordic countries. The Biodiversity Report will focus on description of biodiversity in a geographical area, covering the Nordic countries, Estonia, Latvia, Lithuania and north-western part of Russia. Its main aim is to provide to a wide audience, both basic knowledge on the northern biological diversity and up to date information on its development, threats and protection. The project will mainly rely on existing data and research results. National co-editors are responsible for collecting the data from their own countries. Stella From finished by thanking for the opportunity to present this project.

Ms. From's report evoked a considerable discussion on the various Nordic and international initiatives related to conservation of biodiversity and the potential of overlap and duplication of work among these initiatives. ***Finland*** suggested overlap with two recent Nordic initiatives, report on "Nordic Nature Conservation: Problems and Possibilities" and a Nordic working group presently working on a report on biodiversity policies in the Arctic countries. The newly published report on the *State of the European Arctic Environment* and the forthcoming report on the Arctic environment from the Nordic Council of Ministers were also mentioned. The ***Chair*** noted that many groups and official organisations appeared to be following the same line and that a higher degree of co-ordination would be beneficial. He expressed a wish that a good co-operation could be established between the "Biodiversity 2000" project and CAFF, especially since the former covered a significant part of Russia in addition to the Nordic countries. ***US*** and ***Canada*** were not aware of matching projects currently underway in Alaska or northern parts of Canada. ***Ms. From*** reiterated that the "Biodiversity 2000" project did not specifically address the Arctic environment but covered biodiversity in general in the countries identified.

4. Integration of Indigenous Peoples and Their Knowledge

Indigenous Knowledge Mapping on the Beluga Whale (item 4.1) - USA and ICC

Henry Huntington

Henry Huntington began by stating that the overall goals of the project were to:

- Demonstrate an effective methodology for documenting traditional ecological knowledge, at a reasonable cost and within a reasonable time-frame.
- Prepare recommendations concerning the documentation and use of indigenous knowledge in future work of CAFF and the AEPS.

He then presented the final report of the methodological field part, co-authored by Nicolai Myrmin in Russia. Semi-direct or open-ended interviews were conducted with hunters and elders in Inuit communities in Alaska and the Chukotka region.

In summary, the methodology used produced frequently unexpected results and information, not likely captured by conventional fixed questionnaires. Through effective partnership with communities and individuals, the researchers were able to gather the data quickly and efficiently and to the satisfaction of interviewers as evident by positive reviews. Following ethical principles is of paramount importance in this kind of research, i.e. getting community and individual consent before doing research and making sure that the information collected is reviewed in the communities.

A key question remaining is how to use the information thus collected and how to apply it in conservation and environmental protection. Since traditional knowledge can not be separated from its source, its utilisation will require the full participation of Indigenous Peoples in the research and management fora. A dialogue between the scientists and the indigenous knowledge experts is also crucial. A seminar in Inuvik in November [15-17] 1996, with wide participation from indigenous peoples and indigenous knowledge experts, will focus on this issue. Recommendations on how to use and integrate indigenous knowledge will be developed and forwarded to CAFF. Dr. Huntington suggested forwarding the results of the seminar also to the Ministerial Conference in 1997.

Canada suggested that the results of the Inuvik seminar be summarised for consideration by the National Representatives and Permanent Participants at their meeting in February. ***Finland*** inquired how this type of information could be used in conservation management work, and the ***US*** asked what safeguarding principles were in place to avoid potential misuse of indigenous knowledge, such as sensitive hunting information. ***Dr. Huntington*** vowed to aim for summary recommendations by the February meeting in Iceland. He noted that although good quality data on aspects of the environment is always useful, the main question to address was how to obtain meaningful involvement

reflecting some of the indigenous perspectives in both the goals **and** the practice of conservation and management. He explained further that through the review process communities and individuals had a chance to identify sensitive information and delete it if they so wished

Ethical Principles for Arctic Research (item 4.2) - USA and ICC

Taylor Brelsford

Taylor Brelsford explained, as a matter of background, that the CAFF undertaking to develop research ethics for the Arctic had been conceived at CAFF II in Fairbanks 1993, but referred to the Senior Arctic Affair Officials for further action after CAFF III in Reykjavik. The SAAOs in turn asked the International Arctic Science Committee (IASC) to assist. The research ethics were not ready by the Ministerial meeting in Inuvik, as initially intended. The Ministers, however, reaffirmed their interest in the development of a clear statement of ethical principles.

IASC considered draft guidelines for ethical principles for arctic research at a meeting in Bremerhaven in April 1996, but was unable to reach consensus. Instead, a statement was prepared which concluded that a "circumarctic set of ethical principles appears to be not only elusive... but perhaps undesirable and unnecessary". The statement goes on to suggest that this results from the great social and political diversity in the Arctic countries, and from the fact that other universally accepted ethical principles and national codes of ethics continue to operate. Dr. Brelsford closed by reiterating that further course of action will be determined by the SAAOs.

ICC asked how national standards among CAFF member countries compared to the proposed circumarctic codes of ethics and noted further that lack of ethical standards, especially lack of consent among scientists, was still an ongoing issue in Inuit communities and that this ought to be resolved through CAFF. ***Dr. Brelsford*** explained that the standards adopted by the Arctic countries differed substantially. Some national standards addressed virtually all of the proposed research ethics and were widely acceptable, while others were less well developed. He observed further that the best practice of science in the Arctic - collaborative science with community involvement - had been widely recognised within CAFF.

Indigenous Knowledge Data Directory (item 4.3) - Canada and ICC

Fred McFarland

Fred McFarland gave a status report on this project - a collaborative effort between Canada and ICC Canada over the last two or three years. A final report was planned by

CAFF V but preparations for the Inuvik Ministerial meeting prevented this. A new deadline has been set by the National Representatives/Permanent Participants meeting in February. The project was initiated at CAFF II with the aim to develop an annotated directory of existing data bases - a framework by which information on indigenous knowledge can be made available to the wider public via providing information on their contents, structure and cultural context. A working model will be displayed on the ICC website in early 1997. The final product will be an operational directory of databases on the ICC website and a report addressing the long term maintenance and up-keeping of this directory.

Review of Co-management System Project (item 4.4) - USA and ICC

Taylor Brelsford presented a final report on this item. It was initiated at CAFF III, with the aim to review the structure, strengths and weaknesses of current co-management systems of natural resources in the American Arctic, but modified at CAFF IV to focus on a planned international conference on co-management held in Inuvik, Canada, September 1996.

Dr. Brelsford summarised the findings of the conference which was attended by 240 participants from 5 countries. Although, no universal definition of co-management exists, common elements include: the sharing of responsibility, co-operation and balancing of power between agencies and users, communication and networking, recognising and overcoming cultural and linguistic barriers, a consensus style of decision making, and the use of both scientific and indigenous knowledge in resource conservation. Beyond these common elements there are several important differences in the way the term is being used and this is reflected in the structure and role of co-management units responsible for e.g. conservation and management plans, habitat protection, policy review, data gathering.

The conference identified many strengths of co-management most of which arise from better communication and consensus building. Among the restraints identified were lack of governmental good will, overlapping jurisdictions, ambiguous authority and cultural differences. It was stressed that co-management committees only succeed to the extend that they retain effective communication with the local hunters. In conclusion, Dr Brelsford stated that the Inuvik conference has provided rich reference source and an extensive list of recommendations for consideration by the Arctic governments.

SESSION III: OBSERVER PRESENTATIONS

The Netherlands

Gerard Boere

Gerard Boere began by ascertaining that the Netherlands continues to take great interest in the work of CAFF and by thanking for this opportunity to address the CAFF Annual Meeting. He then described several national and international conservation initiatives with a bearing on CAFF activities, among them the new Program on International Nature Conservation (PIN) emphasising *inter alia* wetlands, coastal zones and migratory birds; the signing (August 15th) of the African Eurasian Waterbird Agreement (AEWA); a major contract to Wetlands International to continue the wetland inventory of the CIS countries, including the whole of the Russian Arctic; a planned symposium on Arctic research in Russia in November 1997; and support to Russian authorities, through a contract with WWF, in establishing a number of new Arctic Reserves in line with the priorities of CPAN.

The Bonn Convention

Gerard Boere

Gerard Boere continued on behalf of the Secretariat of the Bonn Convention. He noted that the AEWA is now formally open for signature at the Dutch Ministry of Foreign Affairs. The AEWA has now been signed by the Netherlands, Germany, Ireland and Guinee-Conakry. It will come into force after seven ratification's by European and African countries, respectively. An Interim AEWA Secretariat with a full time officer has been established and activities have started on a program and project level in co-opreation with Wetlands International, which will be AEWA's scientific support organisation. Dr. Boere supported WWF's proposal for establishing a circumpolar group to prepare an overview of the breeding populations of Arctic waders and geese and offered data base and other assistance through AEWA and Wetlands International. He stressed that the conservation and sustainable management on an integrated flyway level is of crucial importance for Arctic breeding birds and noted that the Netherlands is increasing its activities in West Africa to strengthen the conservation status of the wintering areas of Arctic breeding birds, waders in particular. Dr. Boere ended by extending his thanks to the Finnish hosts for excellent facilities and hospitality.

World Conservation and Monitoring Centre (WCMC)

Richard Luxmoore

Richard Luxmoore opened by extending thanks, on behalf of the WCMC, to CAFF and the Finnish hosts. WCMC is an international non-profit organisation, managed by a board which includes UNEP, IUCN and WWF. WCMC's mission is to support conservation and sustainable development by providing comprehensive and objective information on the natural environment through three main programs of global information compilation or databases:

- On status and distribution of threatened species, currently containing information on some 25.000 species of animals and 80.000 species of plants
- On distribution and extent of national parks and protected areas, with 35.000 protected areas currently listed
- On distribution and extent of natural ecosystems.

These databases have contributed to CAFF's work in various ways. Since 1993, WCMC has been developing a specific GIS based database relating to the Arctic, the Arctic Environmental Database, a joint project with Moscow State University, the Scott Polar Institute and UNEP GRID-Arendal. This database has been used e.g. to supply GIS information for the CPAN program and for the gap analysis of circumpolar protected areas. Other recently conceived projects include: a proposed popular Conservation Atlas of the Arctic, in co-operation with WWF, capturing information generated within CAFF and outlining major conservation issues of the Arctic in a format geared for the general public; a CD ROM containing Arctic data - another joint project with GRID-Arendal; and, finally, a Circumpolar Database on Terrestrial Migratory Species, compiling especially information on the breeding distribution of Arctic geese and waders.

Dr. Luxmore encouraged a look beyond the borders of the Arctic to see how CAFF activities fit within broader conservation initiatives and offered WCMC's support for doing that. In turn, he sought the support of CAFF for new initiatives, notably the Conservation Atlas of the Arctic and the Migratory Species Database.

United Nations Environment Program - GRID-Arendal

Speaking on behalf of UNEP and the people of GRID-Arendal, ***Lars Kullerud*** expressed a pleasure with the work of CAFF and the AEPS and identified it as a model for the rest of the world on how to organise co-operation. He then reviewed GRID-Arendal's involvement in CAFF activities, including construction of maps for the CPAN reports, technical assistance and hosting of the CAFF Internet Homepage, hosting of the a Circumpolar Arctic Vegetation Mapping workshop in April 1996, and the CD ROM, previously mentioned by WCMC, which he offered to produce under the name of CAFF. GRID-Arendal has also been developing maps for e.g. AMAP and PAME. A project of great importance to Arctic environmental co-operation is the International Arctic Environmental Data Directory (ADD), providing a common Internet access to Arctic environmental meta data and data holders. A directory with maps of international and regional conventions related to the Arctic is underway; to be published through the Nordic Council of Ministers.

As tentative areas of future co-operation and challenges, Mr. Kullerud identified work on various base maps and gap analysis and the continued improvement of Arctic environmental databases in general, especially relating to the marine areas. He stressed the need for co-operation to avoid duplication of work which he considered a real problem in international fora and even within the AEPS. As an example, he showed maps

of threats to the Arctic generated by three different programs of the AEPS but signalling widely diverging and conflicting information. The best way to avoid this would be enhanced sideways communication among specialists and data gatherers.

International Arctic Science Committee (IASC)

Speaking for IASC, ***Terry Callaghan*** initially thanked for the invitation to attend the meeting and for the Finnish hospitality. IASC is an NGO to "encourage and facilitate co-operation in all aspects of Arctic research, in all countries engaged in Arctic research and in all areas of the Arctic region". At present, there are 16 countries involved as members. IASC's mission is to: (1) initiate, co-ordinate and promote basic and applied interdisciplinary research concerned with the Arctic at a circumarctic or international level, and (2) provide scientific advice on Arctic issues. Dr Callaghan then reviewed the IASC Scientific Agenda which is divided between four major program areas:

- Impacts of Global Changes on the Arctic, including the effects of increased UV-radiation on aquatic and terrestrial ecosystems
- Arctic Processes of Relevance to Global Systems, including FATE (Feedbacks and Arctic Terrestrial Ecosystems) which addresses one key question, causes and consequences of changes in biodiversity and distribution of species and ecotones
- Processes Within the Arctic
- Sustainable Development in the Arctic which, among other things, looks into sustainable use of living resources.

All of these topics, Dr Callaghan noted, are relevant and complimentary to CAFF. The main difference between CAFF and IASC is that the latter is primarily interested in mechanistic processes involved in biodiversity change, and in keystone species or functional groups rather than rare species. Dr. Callaghan noted a special advantage of linking FATE and the CAFF Circumpolar Arctic Vegetation Work.

World Wide Fund for Nature (WWF-Arctic Programme)

Peter Prokosch

Peter Prokosch expressed gratitude on behalf of WWF-Arctic Programme for the invitation and for the formal recognition of WWF in CAFF's Framework Document. Dr. Prokosch found it very appropriate that this fifth anniversary meeting was held in Rovaniemi, the birth place of the Finnish initiative, the AEPS and of CAFF, and that WWF was very much counting on Finland to keep the spirit of this initiative alive also in the Arctic Council.

Dr. Prokosch spoke of two highlights in the Russian Arctic since CAFF IV that had not been mentioned so far: (1) the October 10th 1995, decree no.1032 of Boris Jeltsín, pledging a federal target program of supporting state natural zapovnetniks and national parks for the period up to the year 2000, and (2) the recent decrees to establish a nearly 6 million ha. nature reserve covering the new Siberian Islands and parts of the Lana Delta, and another 1.5 million ha. nature reserve between the Jana and Indigirka river. This, he noted, demonstrates the speed with which Russia is implementing CPAN.

He stated that WWF will continue to promote public awareness for CAFF via, in particular, the Arctic Bulletin, and went on to review the six main objectives of WWF with emphasis on projects which are of special relevance to CAFF. These are, e.g. the WWF-Canada Endangered Spaces Campaign, efforts to restore the highly endangered Lesser White-fronted Goose in the Finnish and Scandinavian Arctic, development of ethical principles for Arctic tourism, the Arctic Conservation Atlas together with WCMC, and efforts to produce a management plan for wild reindeer herds on the Taymyr Peninsula. Dr. Prokosch closed by wishing the meeting and the future work of the new CAFF Secretariat in Iceland all success.

Arctic Network

Carl Hild

Carl Hild made the statement on behalf of Arctic Network. He opened by extending thanks to Finland for this particular meeting and for the Finnish initiative. He explained that the Arctic Network had been established officially in 1993 as a US response to the Finnish initiative. Initially, there was one office in Anchorage but in the summer of 1995, just prior to CAFF IV, another office was opened in Magadan, Russia.

To stress the importance of global change processes, Mr. Hild displayed a map produced by the University of Alaska in Fairbanks showing actual temperature trends in the Arctic for the last 30 years. The map identified areas over Greenland and eastern Canada where up to 2°C drop in temperature have been detected, and areas in Alaska and central Russia where temperatures have risen by up to 2°C during the same period. If this trend continues major changes in permafrost distribution and soil moisture content can be expected with resulting changes in wildlife habitats, affecting the work of CAFF in a very dramatic way. After briefly discussing the Ice Edge Mapping Project, Mr. Hild closed by noting that the Arctic Network sincerely appreciated CAFF efforts to investigate and understand systems, habitats and ranges which are not confined by artificial political boundaries.

Circumpolar Conservation Union (CCU)

Evelyn Hurwich

Evelyn Hurwich addressed the meeting as the Executive Director of CCU. She presented a joint project of the CCU and the Kola Saami Association, aiming at finding a mutually agreeable solution to the present conflicts between traditional Salmon net-fishing by the local Saami's and sport-fishing and other fishing industry stakeholders on the Kola Peninsula. She observed that the rights to fish in traditional areas had been sold without consulting the local Saami People. As a first step, CCU will consult with the local villagers to hear their concerns and initiate negotiations with the fishing industries. This consulting phase is financed by the Trust for Mutual Understanding, which is a private foundation in New York. Given positive results and available funds, the next step will be a workshop to bring together the various stakeholders for a dialogue on this issue. The final goal is to create a collaborative model for the local people and the fishing companies - to formulate policies that will give a good fishing experience, protect the environment and benefit the local people -a model for the sustainable use of the Kola rivers in the future. Dr. Hurwich noted that this might be a very appropriate project for CAFF, since it integrated indigenous knowledge and the protection of the Atlantic Salmon and its habitat.

SESSION IV: PROGRAM MANAGEMENT

Report from CAFF Chair

Peter Nielsen opened by explaining that he, as next in line, had agreed on a very short notice to step in as CAFF Chair in February when Esko Jaakkola, National Representative for Finland and CAFF Chair since the Moscow meeting, was offered a new job in Brussels. Soon after, at the SAAO meeting in March, a decision was taken to move the CAFF International Secretariat to Iceland. Although these major changes caused much turbulence in the daily work of CAFF, it was still possible to deliver a long series of valuable products to the Ministerial Conference in Inuvik (see below). This would not have been possible without the professionalism of CAFF's Executive Secretary, Jeanne L. Pagnan, whose work for CAFF has been highly appreciated by the working groups and participating countries. Mr. Nielsen acknowledged also with gratitude the Canadian Wildlife Service's offer to cover the transfer cost. In May, Snorri Baldursson won a national competition for the position of CAFF Executive Secretary in Iceland.

Mr. Nielsen then introduced briefly (see below) the major challenges ahead for the program: to enhance the focus of CAFF's work, to be more action oriented and to build work plans on priorities coming from a broad analysis of what is important in the Arctic region (see below). Until this analysis is finished CAFF should hesitate to start new work items. Mr. Nielsen ended by announcing Canada's decision to host the Annual Meeting

in 1998 and Gerald McKeating's acceptance to work as CAFF Vice-chair until the Nuuk meeting in Greenland 1997. Norway will consider overtaking the chairmanship in 1999. Finally, Mr. Nielsen thanked the Finnish hosts and the CAFF Secretariat for successful meeting arrangements

Report from CAFF International Secretariat

Snorri Baldursson noted that two major events had overshadowed the work of the Secretariat in 1995-96:

- The AEPS Ministerial Conference in Inuvik in March 1996
- The closing down of the CAFF Secretariat in Ottawa, Canada, and its subsequent transfer and establishment in Iceland

He explained that Jeanne L. Pagnan had kindly accepted to provide a written report on the activities of the Ottawa Secretariat, while his own report covered only the transfer and establishment phase.

The transfer, overseen by the outgoing Secretariat, was completed in late June and CAFF's new Executive Secretary took office formally on July 1. The Secretariat is located in Akureyri, northern Island, a town of approximately 15.000 inhabitants and a center of fisheries, education and culture. The annual budget for the Secretariat, to be cost shared among the Arctic countries as per decision of the Senior Arctic Affairs Officials in Inuvik, was set at USD 162.000 (including USD 15.000 *in kind* contribution from Russia). As of September 1, Vigdís Rafnsdóttir has been appointed as a part time administrative assistant to the Secretariat. It is affiliated with the Akureyri division of the Icelandic Institute of Natural History and the Wildlife Management Unit and a new national institute, the Vilhjálmur Stefánsson Institute, planned to be established in 1997. This institute will co-ordinate multi-disciplinary research activities in northern areas, with focus on sustainable development issues.

Dr. Baldursson explained that after a steep learning curve in July, aided by the visit of Jeanne L. Pagnan, the main activities of the relocated Secretariat had been preparations for the Rovaniemi meetings. Still unfinished business regarding establishment was e.g. to review and update CAFF distribution lists, to finish the distribution of Ministerial documents and to define the Executive Secretary's role in relation to CAFF subgroups

Jeanne L. Pagnan provided a detailed written report of the Ottawa Secretariat. Activities, besides normal administrative duties, included: CAFF IV follow-up, notably the preparation of the meeting transcript and *Report of the CAFF IV Plenary Session*;

work plan co-ordination; implementation of assigned tasks in the 1995-96 work plan and preparation of various requested discussion papers and overviews for the National Representatives and SAAOs. A major task, conducted in close collaboration with lead countries, was the preparation, printing and distribution of the following reports submitted to the Ministerial Conference:

- *CAFF Report to Ministers*
- *CPAN Strategy and Action Plan (HCR No.6) (printed in Norway)*
- *Analysis of Gaps in Circumpolar Protected Area Coverage (HCR No.5)*
- *CPAN Principles and Guidelines (HCR No.4)*
- *National Principles and Guidelines for Protected Areas in the Arctic Countries*

  (HCR No.3)

- *International Murre Conservation Strategy and Action Plan*
- *Draft Co-operative Strategy for the Conservation of Biodiversity in the Arctic Region*
- *CAFF Framework Document*

CAFF Structure and Future Role within the AEPS/Arctic Council

The Chair of CAFF initiated the discussion by presenting a discussion paper outlining his views on the *Structure, function and future directions for CAFF*. He stated that CAFF should attempt to create a simple structure that would efficiently meet the requirements of the AEPS Ministers and SAAOs. CAFF's role should be to make recommendations, quickly and efficiently, covering the whole spectrum of conservation issues as formulated in the CAFF mandate and based on the best available knowledge. Once decisions are made by the Ministers, CAFF will oversee their implementation in the different countries.

The Chair spoke of lack of an overall strategy directing the choice of projects and program activities which, as a result, commonly reflected more the interests of individual scientists or organisations rather than strict analysis of priorities. Permanent working groups, e.g. the Circumpolar Seabird Working Group, also had the tendency to grow out of proportion due to the scientific enthusiasm of their members. With permanent working groups dealing with other issues, CAFF would soon become financially unmanageable. Therefore, he suggested that permanent working groups, be replaced by *ad hoc* groups, established on as needed basis.

He suggested that CAFF in 1996-97 concentrated its efforts on: (1) priority tasks set by the Ministers, (2) finishing other ongoing projects, (3) the establishment of a broad based analytical group to analyse CAFF's current activities, and to identify the most pressing conservation issues in the Arctic, taking into account work done by other organisations.

A decision to form such a group, he stated, was already made by the National Representatives. In the future, additional *ad hoc* groups might be envisaged for drafting management plans and for assessing status of CAFF implementation plans in member countries.

The Chair suggested that the CAFF Work Plan be divided into three different project groups: (1) priority projects as per Ministerial decisions; (2) other CAFF projects, and (3) "associated projects", i.e. projects which are supportive of CAFF but conducted by other organisations at no cost to the Program.

The ensuing ***discussion*** focused initially on CAFF's working group structure. Several countries recognised the potential burden for the program of having too many and too permanent working groups, and shared the view that working groups should be designed around specific issues. However, it was also pointed out that expert groups were best suited to tackle specific issues and to provide firm recommendations, and some issues such as seabird conservation were ongoing and long-term. Strong support was given to the continued work of the Circumpolar Seabird Working Group and its significant contribution to the conservation of seabirds in the circumpolar area was acknowledged. The ***meeting*** cautioned the disbanding of CAFF's present working group structure until a new had been identified by the proposed analytical group. The ***Chair*** agreed and noted that his proposals were future directed. It was decided to maintain the present working group structure of CAFF, at least until the proposed analysis of the program has taken place.

The discussion then turned to the question of re-evaluation of the program and the role of the recently established ad hoc Analytical Group (AG). It was agreed that CAFF had suffered from a lack of conceptual framework for its work and that the AG's responsibility shall be to oversee the development of such a framework, based *inter alia* on the work already conducted under the CAFF Biodiversity initiative. A gap analysis of past and present CAFF projects and activities of other organisations would also be conducted to provide a basis for CAFF's future action plan. The ***US*** proposed in addition that each country provided a paper outlining main issues, concerns and ideas for the structure and future directions of CAFF to facilitate the re-evaluation process. This was backed by ***Iceland*** and ***Canada*** which reminded that the overviews submitted by the Arctic States to the CAFF inaugural meeting in Ottawa, outlining the concerns of the countries for the conservation of Arctic flora, fauna and habitats, should also be revisited.

Finland expressed a concern that the issue of conservation in the Arctic had been broken up into too many compartments under the AEPS and suggested a close collaboration with the Arctic Environmental Impact Assessment work and other initiatives of the Working Group on Sustainable Development and Utilisation (SDU). ***Norway*** observed that the different working groups seemed to have overlap in their mandate, but that this was an issue currently being looked at within the AEPS. The ***Chair*** noted that the AEPS was currently working on the development of new Terms of Reference for the SDU and had

invited CAFF to provide input. This input, when finalised, would emphasise collaboration and CAFF's role as the scientific branch of the Arctic Council, dealing with conservation of Arctic Flora and Fauna.

The ***Chair*** then invited specific comments from the Indigenous Peoples Organisations on the role of Permanent Participants within CAFF.

The ***Saami Council*** stated that they, as Permanent Participants in CAFF, would continue to contribute to CAFF in a meaningful and affective manner to the extent allowed by finite human and financial resources. They will make an effort to participate fully at the working group level in developing programs that achieve the goals of all those who depend upon the care for the Arctic flora and fauna. For this, however, they needed to be fully informed on all CAFF activities.

The ***Chair*** vowed that Permanent Participants would be kept fully informed on program activities.

ICC acknowledged the Chair's statement and current efforts to insure the participation of Indigenous Peoples Organisations in CAFF. ICC's goal is to become fully integrated in the process, not only attending meetings but being involved in the development and implementation of program activities every step of the way.

CAFF co-operation with conventions and organisations

The ***Chair*** opened by inviting the observer organisations present to comment on this issue and noted further that CAFF would be soliciting their help in the coming months regarding the proposed analytical work, especially making sure work was not duplicated

The ***Netherlands*** and the ***Bonn Convention Secretariat*** reconfirmed previous statements and offered in addition the Bonn Secretariat's assistance in the review process and analytical work ahead.

Arctic Network vowed to make every attempt to assist in the review process, especially in soliciting comments from Indigenous Peoples communities in Alaska and eastern Siberia.

WCMC confirmed its wish to assist the CAFF program, particularly through the new project initiative on Migratory Species Database and through the provision and incorporation of information in WCMC's three major thematic data basis previously described.

WWF-Arctic Programme pledged further support for the CAFF Program and its Secretariat, emphasising especially aid to Russia in implementing CPAN, and noted that after completion of the proposed Conservation Atlas of the Arctic, it would be in a good position to assist in identifying major conservation issues within the region. WWF observed that the country overviews provided diverged greatly in form and content and suggested a standardised format which could be graphically illustrated and measurably compared with one another. This would greatly enhance WWF's efforts to inform the general public of governmental activities and decisions regarding Arctic conservation. He offered to provide ideas for such a format. The ***Chair*** noted that perhaps the countries were not too keen on direct comparison. ***Canada*** agreed that the format of country overviews could be improved and urged WWF to provide written suggestions for the National Representatives meeting in February 1997.

UNEP-GRID-Arendal's general support for CAFF was also affirmed.

IASC noted that in addition to the projects previously mentioned, there is a general relatedness of the work of CAFF and that of e.g. UNESCO MAB Biosphere Reserve Network, the American Long Term Ecological Research Sites (LTER) and the International Tundra Experiment Network (ITEX). Linkage with these efforts was suggested. ***Iceland*** commented that ITEX had previously been listed in CAFF work plans as an initiative that CAFF should seek to collaborate with, but that the contact had been lost. ***Dr. Callaghan*** explained that ITEX was initiated as a "grass roots" project by scientists already working in the Arctic. Standardised measurements, on plant reproductive output and plant development have now been established throughout the Arctic and are spreading into the European Alpine and the Southern hemisphere as well.

SESSION V: WORK PLAN DEVELOPMENT

The 1996-97 draft Work Plan, produced by the Work Plan Committee was thoroughly reviewed and edited. Three new work items were adopted as "associated projects", with no extra funding requirements, although a consensus was not reached during the post-meeting review process to make the physical distinction in the 1996-97 Work Plan. These are the Migratory Species Database (item 2.5.i), the CD ROM (item 5.1.iii) and the

Conservation Atlas of the Arctic (5.3.i). Other novelties in the 1996-97 work plan include the establishment of an *ad hoc* group to analyse and focus Program activities (item 5.1.i). The final edition of the 1996-97 CAFF Work Plan is attached as Appendix 1.

Close of the Meeting

In his closing remarks, the ***Chair*** noted that this fifth anniversary meeting of CAFF had signified the end of a very productive descriptive phase of the Program and the beginning of new more proactive phase face of action, initially marked by a period of retrospective analysis and refocusing. He thanked the workers of CAFF for their dedicated contributions to program activities and participants and organising teams for a successful meeting. ***Canada,*** the ***USA*** and ***Russia*** also extended thanks to the Chair, delegates and organisers. The ***Chair*** then closed the meeting and welcomed participants to Nuuk in 1997.