The Seabird Information network

Arctic tern

*Sterna paradisaea*

Species abundance map

The map shows the abundance for the species according to the classes given in the legend below.

Legend:
- 1 to 11
- 11 to 36
- 36 to 1000
CAFF Designated Agencies:

- Directorate for Nature Management, Trondheim, Norway
- Environment Canada, Ottawa, Canada
- Faroese Museum of Natural History, Tórshavn, Faroe Islands (Kingdom of Denmark)
- Finnish Ministry of the Environment, Helsinki, Finland
- Icelandic Institute of Natural History, Reykjavik, Iceland
- Russian Federation Ministry of Natural Resources, Moscow, Russia
- Swedish Environmental Protection Agency, Stockholm, Sweden
- United States Department of the Interior, Fish and Wildlife Service, Anchorage, Alaska

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Cover Graph: This picture shows an image from the Seabird Information Network (SIN). SIN accesses, manages and depicts a diversity of Arctic biodiversity data via the internet. The web portal will be expanded to serve as a focal point for current and accurate information in Arctic biological resources and trends throughout the Arctic.

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## Table of Contents

1. **RESPONSE TO ARCTIC COUNCIL PRIORITIES.** .................................................. 1
   1.1 Arctic Climate Impact Assessment (ACIA) - follow-up .............................. 2
   1.2 The Arctic Biodiversity Assessment ......................................................... 2
   1.3 The Circumpolar Biodiversity Monitoring Programme ................................ 3

2. **FOUNDATION WORK AND ONGOING ACTIVITIES.** ........................................ 5
   2.1 CAFFs Expert Groups ..................................................................................... 5
   2.1.1 Flora Group .................................................................................................. 5
   2.1.2 Seabird Group ............................................................................................. 6
   2.1.3 Circumpolar Protected Areas Network ................................................... 7

3. **CAFF Projects** .................................................................................................... 8
   3.1 ECORA ........................................................................................................... 8
   3.2 The Bering Sea Sub Network ......................................................................... 9
   3.3 Ice Dependent Species ................................................................................... 9
   3.4 Climate Change follow-up ............................................................................ 9
   3.5 The Arctic Spatial Data Infrastructure ....................................................... 9
   3.6 ArcticData.is .................................................................................................... 9

4. **Cooperation with other working Groups.** ....................................................... 10
   4.1 The Arctic Monitoring and Assessment Programme .................................... 10
   4.2 Emergency Prevention, Preparedness and Response .................................. 10
   4.3 Protection of the Arctic Marine Environment .............................................. 10
   4.4 Sustainable Development Working Group ............................................... 11

5. **Cooperation with International Organizations and Conventions.** .................... 11
   5.1 UNEP-WCMC and UNEP/GRID-Arendal. .................................................... 11
   5.2 The International Union for the Conservation of Nature ............................ 12
   5.3 The European Union ...................................................................................... 12
   5.4 The International Petroleum Environmental Conservation Association .... 12
   5.5 The Convention on Biological Diversity .................................................... 12
   5.6 The Sustaining Arctic Observing Network .................................................. 13
   5.7 The International Polar Year .......................................................................... 13

6. **MANAGEMENT AND ADMINISTRATION** ....................................................... 13
Response to Arctic Council Priorities

The Conservation of Arctic Flora & Fauna Working Group (CAFF) is the Biodiversity Working group of the Arctic Council. It is guided by the CAFF Strategic Plan for the Conservation of Arctic Biological Diversity and biennial Work Plans. CAFFs mandate is to address the conservation of Arctic biodiversity, and to communicate the findings to the governments and residents of the Arctic, helping to promote practices which ensure the sustainability of the Arctic’s living resources. This document summarizes the current status of CAFF projects and activities since the last SAO meeting held in Copenhagen in February 2009.

In order to successfully conserve the natural environment and allow for economic development requires baseline data and status and trend analysis of Arctic biodiversity, habitats and ecosystem health. CAFF’s projects provide data for informed decision making in resolving conflicts which are now arising in trying to both conserve the natural environment and permit regional growth.

The common priorities agreed upon for the Norwegian, Danish and Swedish Chairmanship period of the Arctic Council are concerned with climate change, integrated resource management, the International Polar Year, Indigenous peoples, local living conditions and management issues. The Danish/Greenlandic Chairmanship has added biodiversity to this list.

CAFFs work reflects the emphasis placed on these priorities e.g. with a focus on outreach/communication, Arctic Council efficiency, data integration, spatial information, circumpolar datasets and analysis and Working group co-operation.

CAFFs Arctic Biodiversity Assessment and the Circumpolar Biodiversity Monitoring Program, the Bering Sea Sub Network, ECORA and the work of its expert groups on Seabirds and Flora are important contributions towards understanding the impacts of climate change on:

- Nature and biodiversity (management issues)
- The adaptability and sustainable use of living resources in the Arctic.

CAFF has also placed a strong focus on the International Polar Year (IPY) both through benefiting from IPY generated research and contributing to IPY legacy. As requested by the Senior Arctic
Officials CAFF is actively cooperating with other Working Groups to help to improve the efficiency and effectiveness of the Arctic Council.

1. Arctic Climate and Impact Assessment (ACIA) - follow-up

CAFFs 2009 – 2011 Work Plan places a strong focus on climate change and building upon the recommendations contained in the Arctic Climate and Impact Assessment (ACIA). The ACIA and CAFF’s Flora & Fauna: Status and Conservation reports both indicated that it was necessary to consider the status and trends of biodiversity in the Arctic. ACIA called for improved capacity to monitor and understand changes in the Arctic and to improve and enhance long-term Arctic biodiversity monitoring. The Arctic Biodiversity Assessment (www.caff.is/aba) and the Circumpolar Biodiversity Monitoring Program (www.cbmp.is) are two of the primary vehicles via which CAFF is responding to these calls.

CAFF remains prepared to contribute to the Arctic Monitoring and Assessment Programmes (AMAP) monitoring strategy and to the Sustainable Development Working Group (SDWG) on adaptation efforts in the Arctic. CAFF will work on additional aspects of ACIA follow-up through IPY endorsed projects, and projects by CAFF’s expert groups, the Seabird Group (CBird) and the Flora Group (CFG). CAFF is also actively participating in the Steering Committee for the Sustaining Arctic Observing Networks (SAON) process.

1.1 The Arctic Biodiversity Assessment (ABA)

The ABA was endorsed by Arctic Council Ministers in Salekhard 2006. Its purpose is to:

*Synthesize and assess the status and trends of biological diversity in the Arctic.*

It will provide a much needed description of the current state of the Arctic’s ecosystems and biodiversity, create a baseline for use in global and regional assessments of Arctic biodiversity and a basis to inform and guide future Arctic Council work. It will provide up to date scientific and traditional ecological knowledge, identify gaps in the data record, identify key mechanisms driving change and produce recommendations.

**Administration**

The ABA is led by Finland, Greenland/Denmark and the United Sates. The USA is the Vice Chair of the ABA Steering Committee. The Chair of the Steering Committee will rotate and next in line to take the Chair will be the Greenland in 2010. Other members include Greenland/Denmark, Canada, UNEP GRID Arendal and UNEP WCMC, the Gwich´in Council International, the Arctic Athabaskan Council and the CAFF Secretariat. Its Chief Scientist is provided by Greenland/Denmark.

The CAFF Secretariat functions as the secretariat for the ABA. Eleven Steering Committee meetings have been held. The ABA has received direct funding from Greenland/Denmark, Finland, Canada, the USA and UNEP GRID Arendal. In-kind support is being received from other CAFF Countries, Permanent Participants and Observers.

**Activities**

The ABA Work plan and Financial Strategy was endorsed by the Senior Arctic Officials in Narvik in November 2007. The report is being produced in two phases.

Phase 1 is **Arctic biodiversity trends – 2010: selected indicators of change** report. It was felt that the old name (Arctic 2010 Biodiversity Highlights Report) was not reflective enough of the content or aim of the report. The new name agreed upon was **Arctic biodiversity trends – 2010: selected indicators of change**. The report currently undergoing review will present twenty-three indicators of trends in Arctic biodiversity based on the suite of indicators developed by CAFF’s Circumpolar Biodiversity Monitoring Programme (www.cbmp.is). The report will be aimed at a broad audience including governments and residents of the Arctic. UNEP GRID Arendal are the editors of the Report.

This report will be the Arctic Council’s contribution to:
• The United Nations 2010 Biodiversity Target
• The International Biodiversity Year in 2010.
• Towards measuring the Convention on Biological Diversity (CBD) target to reduce the rate of biodiversity loss by 2010.
• The CBDs upcoming third Global Biodiversity report.

In February 2009 the Nordic Council of Ministers provided funding of 500,000 DKK to support the development of the Arctic biodiversity trends – 2010: selected indicators of change report.

Phase 2 is a full scientific Arctic Biodiversity Assessment scheduled to be completed in 2013. Greenland/Denmark has provided the Chief Scientist for the assessment. Its team of lead and co-lead authors are drawn from the Arctic Council countries. Two meetings for lead and co-lead authors have been held in the past year - one in Alaska in February 2009 and another in Canada in September 2009. The next authors meeting is scheduled for March 2 - 4th 2010 in Copenhagen.

Publications

• The Arctic Biodiversity Assessment: Work Plan and Financial Strategy (2007)

1.2 The Circumpolar Biodiversity Monitoring Programme (CBMP)

The CBMP is an international network of scientists and local resource users working together to enhance Arctic biodiversity monitoring to improve detection, understanding and reporting of important trends in biodiversity and to inform management decisions. The CBMP has over 60 global partners, 33 of which are Arctic biodiversity monitoring networks operating and linked to the CBMP. Many of these networks have received substantial support from the International Polar Year.

The program takes an ecosystem-based management approach, operating as a network of networks, coordinating existing species, habitat and site-based networks. The CBMP is in the process of convening five Expert Monitoring Groups tasked with developing long-term integrated monitoring plans for all the Arctic’s major systems (Marine, Coastal, Freshwater, Terrestrial Vegetation and Terrestrial Fauna). It is also developing coordinated reporting and outreach tools including a suite of arctic biodiversity indicators and indices as well as a web-based data management and depiction tool for biodiversity data.

Administration

Canada has reaffirmed its commitment to lead the CBMP and fund the programme office located in Whitehorse, Canada - until 2011 at the end of the next Ministerial, at which point Canada’s commitment will be reviewed. The program has received funding from multiple sources in Canada, the United States, Sweden, Norway, Finland, the European Commission and UNEP GRID Arendal. In-kind support is currently received from all CAFF Countries, Permanent Participants and Observers (e.g. UNEP WCMC).

Activities

The period since the last SAO meeting in Copenhagen in February 2009 has been an active and productive time for the CBMP. It has accomplished many important tasks and embarked upon a number of exciting projects which will be of critical importance in enhancing our understanding of the status and trends of Arctic Biodiversity (e.g. the Seabird Information Network and the Arctic Species Trend Index).

The following are the recent accomplishments of the CBMP:

• The CBMP has joined the 2010 Biodiversity Indicators Partnership and will be responsible for the Arctic analyses of the Convention on Biodiversity (CBD) relevant biodiversity indicators.
• The CBMP has continued strategic partnership engagement to expand program capacity in key areas, as identified in the Five Year Implementation Plan. This has involved targeting key organizations in Europe, Russia and North America with the aim of trying to establish a broad-based consortium for improved Arctic biodiversity monitoring and conservation.
• The CBMPs Marine Expert Monitoring Group has been activated. Norway and the US co-chair the Group and Russia, Greenland/Denmark, Canada, the Aleut International Association, PAME and AMAP are members. Norway funded a successful
start-up workshop held in Tromso, January 2009 and a second workshop is scheduled for November 2009 in the US.

- The CBMP’s Freshwater Expert Monitoring Group has been activated with Canada assuming the lead and seeking a co-lead country. A draft background paper has been developed and a Canadian planning workshop is scheduled for early December 2009.

- The CBMP published the Arctic Marine Mammal Monitoring Framework. This initiative to develop a framework for monitoring Arctic marine mammals was co-led by the U.S. Marine Mammal Commission and the U.S. Fish and Wildlife Service.

- The CBMP has drafted a Community-based Monitoring Handbook to facilitate the development and promotion of community-based monitoring techniques for arctic biodiversity monitoring programs. It is currently undergoing an in-country review.

- The CBMP has developed a prototype web-based data portal (The Seabird Information Network) for managing and depicting a diversity of arctic biodiversity data using a user-friendly interface. The web portal serves as a focal point for current and accurate information on arctic biological resources and trends throughout the Arctic.

- The CBMP has developed an Arctic Species Trend Index containing 965 arctic vertebrate population trend datasets involving 306 species (35% of all known arctic vertebrate species). The index tracks broad trends in the arctic’s wildlife. It is currently undergoing an in-country review.

- The CBMP has translated its Five-Year Implementation Plan, Indicators Strategy, Community-based Monitoring Strategy and brochure into Russian to assist in increasing outreach activities in the Russian Federation.

- The CBMP, as the biodiversity component of SAON, is serving on the SAON Steering Group.

**Current Projects:**

- The Seabird Information Network (pilot CBMP web-portal)
- The Arctic Species Trend Index
- The Arctic Report Cards. This is a collaboration between CAFF, AMAP and The US National Oceanic and Atmospheric Administration (NOAA). They are a means of presenting clear, reliable and concise information on recent observations of environmental conditions in the Arctic, relative to historical time series records.
- Integrated Arctic Marine Biodiversity Monitoring Planning
- Integrated Arctic Freshwater Biodiversity Monitoring Planning
- Community-based Monitoring Program Development Manual
- Pan-Arctic Protected Areas Monitoring Scheme

**Upcoming Workshops and meetings**

- In order to finalize the integrated, pan-Arctic marine monitoring plan a workshop is being hosted by the United States in November 3 - 6th 2009 in the US.
- A Freshwater Expert Monitoring Group Workshop is being held in Canada on December 7 - 8th.
- A workshop to consider a Pan-Arctic Protected Areas Monitoring Scheme Workshop is scheduled to be held in March 2010 in the US.
The CBMP will continue to focus upon strategic partnership engagement, further biodiversity indicator development in support of the Arctic Biodiversity Assessment, further development of its web-based data portal and activate new Expert Monitoring Groups. The Marine Expert Monitoring Group and Freshwater Expert Monitoring Groups have been activated and the remaining Expert Monitoring Groups will be activated. The technical framework for the CBMP will be further enhanced through the creation of platforms for web-based data portals, CBMP website and the Seabird Information Network.

Recent and upcoming Publications

- Community Monitoring strategy CBMP Report No. 13 (in Russian)
- CBMP Implementation plan, CAFF CBMP Report No. 14 (in Russian)
- Arctic Species Trend Index postcards
- Background Paper: Circumpolar Marine Biodiversity Monitoring Program (due for publication in November 2009)
- CBMP brochure (in Russian) - (due for publication in November 2009)
- Community Monitoring handbook (due for publication in November 2009)

The activities of the CBMP have resulted in a wide range of publications a full list of which can be accessed on the CAFF website - www.caff.is.

Foundation Work and Ongoing Activities

The following sections outline the progress made in CAFFs various expert groups and projects. Each of which contributes to the foundation upon which cornerstone projects such as the Arctic Biodiversity Assessment and the Circumpolar Biodiversity Programme are built.

2. CAFF Expert Groups

CAFF currently has two expert groups: which ensure that scientists, conservationists, and managers interested in arctic flora and fauna have a forum to promote, facilitate, and coordinate conservation, management, and research activities of mutual concern. These groups have been invaluable in synthesising, coordinating and publishing research.

2.1 CAFF Flora Group (CFG)

With botanical expertise drawn from Arctic Council countries the CFG promotes, encourages and coordinates internationally the conservation of biodiversity of arctic flora and vegetation, habitats and research activities in these fields. It also works to enhance the exchange of information relating to arctic flora and vegetation and factors affecting status and trends in arctic flora.

Activities

The period since the last SAO meeting has been an active and productive time for the CFG and it has embarked upon many of the important tasks outlined in CAFFs 2009 – 2011 Work Plan. It has embarked upon a number of exciting projects which will be of critical importance in enhancing our understanding of status and trends of both arctic flora and fauna. One of its most important challenges will be in working towards the development of the Circumpolar Boreal Vegetation Map (www.cbvm.org), the creation of which will mark a significant contribution towards monitoring, research and policy making on the Arctic environment.

The following are the recent accomplishments of the CFG:

- A workshop is planned for early 2010 to further
develop the Circumpolar Boreal vegetation map. IASC have granted 7,500 Euros to CAFF towards this.

• Members of the North American section meet in December 2009 and there are also plans to hold a workshop of selected key people to discuss the map legend.

• The CBVM was endorsed as an official Working Group of the International Association for Vegetation Science (IAVS - www.iavs.org) at its 2009 annual meeting.

• A successful workshop was held on November 2008 to develop a strategy for the development of a Circumpolar Boreal Vegetation Map. The workshop was funded by the Nordic Council of Ministers and Canada. Its proceedings are due to be published as a CAFF report in 2009.

• The CAFF Flora Group serves as the official Arctic Plants Specialist Group within the Species Survival Commission of the International Union for the Conservation of Nature.

The CFG website has been updated and revised - www.caff.is/cfg. All CFG publications are now available online and all presentations/PowerPoint's from the CFGs annual meeting held in Sweden in April 2009 are also available online.

Recent and upcoming publications

• A checklist of Arctic lichens. CAFF Technical Report No. 20 (in press)

• Proceedings of the 5th International CAFF Flora Group Workshop, 2008 (Due for publication in December 2009).

• Proceedings of the Workshop to develop a Strategy to Create the Circumpolar Vegetation Map. October 2008 (in press).

The activities of CFG have resulted in a wide range of publications a full list of which can be accessed on the CAFF website - www.caff.is/cfg. All presentations and papers from the recent CFG meeting in Sweden are also now available on the CFG website.

2.2 CAFF Seabird Group (CBird)

CBird facilitates seabird conservation, management and research activities between circumpolar countries, and works to improve communication between seabird scientists and managers both within and outside the Arctic. Conservation issues include alien predators, habitat alteration, oil pollution and contaminants, seabird bycatch, subsistence harvesting, unregulated harvesting and climate change. CBird also promotes the conservation of migratory seabirds outside of the arctic, coordinates the circumpolar seabird monitoring network in addition to developing various seabird initiatives.

The period since the last SAO meeting in February 2009 has been an active and productive time for CBird and it has accomplished many important tasks. It has also embarked upon a number of exciting projects which will be of critical importance in enhancing our understanding of the status and trends of both arctic seabirds and the changing arctic environment.

CBird is currently focusing its attention on the following issues:

• CBird conducts analyses for papers on the status and trends of Black-legged Kittiwakes and on the decline of Glaucous Gulls in the Arctic.

• Work has begun on the creation of a circumpolar seabird colony database

• Work is ongoing on a web-based Seabird Information Network, the pilot version of which is now operational. Funding for the Seabird Information Network was recently obtained and promises to speed the completion of this project.

• A Circumpolar Seabird Monitoring Plan

• CBird is in the process of completing a Murre population model for the Atlantic.

• Geolocator studies have been undertaken on several Arctic seabird species. These are
contributing towards a better understanding of seabird movements. Including towards southern wintering grounds where mortality factors operate. And this is important when considering the conservation of Arctic species.

Meetings:
CBird held a very successful meeting in Iceland in September 2009. The record attendance at this meeting reflects the growing interest and concern with Arctic Seabirds. The report from this meeting will be made available on the CBird website (www.caff.is/cbird). A further meeting has been scheduled for 2010 to coincide with the first World Seabird Conference.

Recent Publications:
- Arctic Report Card on the decline of Ivory Gulls (October 2009).

The CBird website has been updated and revised - www.caff.is/cbird. All CBird publications are now available online. A new CBird logo has been created and will now be used on all CBird documentation.

2.3 Circumpolar Protected Areas Network (CPAN)
CPAN has been an expert working group within CAFF since 1996. It had a very active and productive start however it has faced many challenges in the intervening years and it has proved difficult to find solutions on how CPAN should move forward. During its recent board meetings it was recognized that CAFF has a heavy workload and must prioritize its activities.

However, in recognizing the importance of the issues CPAN addresses for achieving CAFFs mission it was realized that some of the issues CPAN deals with are reflected in other CAFF projects and activities. For example this can be seen in the Arctic Biodiversity Assessments Arctic Biodiversity Trends 2010 report which includes a protected areas indicator as developed by CAFFs cornerstone programme the CBMP. Canada will also lead a project in CAFFs new 2009 – 2011 Work Plan to update the circumpolar map of protected areas. A workshop on monitoring in protected areas led by Canada and the USA is scheduled to be held early in 2010.

It was thus decided at the CAFF Biennial meeting in Greenland in 2008 that CPAN would not be placed on the 2009 – 2011 CAFF Work Plan. The activities of CPAN have resulted in a wide range of publications a full list of which can be accessed on the CAFF website - www.caff.is/cpan.
3. CAFF Projects

3.1 ECORA

ECORA is a Global Environment Facility (GEF) sponsored project initiated by CAFF, UNEP/GRID-Arendal and the Russian Federation. It uses an integrated ecosystem management approach to conserve biodiversity and minimize habitat fragmentation in three selected model areas in the Russian Arctic. The aim of ECORA is to develop integrated ecosystem management (IEM) strategies and action plans in three model areas representing different ecosystems and anthropogenic pressures in the Russian Arctic: Kolguev Island (Nenets), the Kolyma River Basin (Yakutia/Sakha Republic), and the Beringovsky District (Chukotka). The ECORA website can be found at - http://www.grida.no/ecora.

Russia and Norway are members of the Steering Committee, representatives from the USA and Sweden serve as Western Advisers in the Model Areas, and indigenous peoples have been directly engaged in the project implementation. In addition, six of the CAFF countries have provided financial support. ECORA is nearing completion and its expected major outcomes are:

• Strengthening the enabling environment for IEM.
• Strengthening knowledge base for IEM.
• Development of IEM plans and strategies in model areas.
• Pilot projects to test IEM implementation strategies.

The project has been officially extended to December 31st, 2009 (additional time to complete activities). A comprehensive overview of project results to date is included in the CAFF ECORA Technical report. Since then work has focused on finalizing those activities. Some activities developed by ECORA, in particular training activities, are being taken up by other communities and regions outside of the Model Areas. There are still some challenges getting integrated ecosystem management plans signed off by regional governments as a result of either changes in administration or the on-going financial crisis. The pilot projects are continuing.

A wrap-up conference is being held on November 9 - 11th in Moscow. Tentative title: Approaches to ecosystem management in the Russian Arctic: results and perspectives. Purpose of meeting is to present project results to a broader audience (e.g., project partners, other projects in Russia, Russian ministries, indigenous, etc.) and demonstrate how integrated ecosystem management is being applied and taken up in Russia. May also include side meeting looking at opportunities for developing follow-up project based on results of ECORA.

Publications

• A book documenting the experiences of ECORA is to be published in 2010 under the title: Towards integrated ecosystem management in the arctic: lessons learned and the way forward.
• ECORA CAFF Technical Report No. 19 has been published in Russian.

3.2 The Bering Sea Sub Network (BSSN)

A Distributed Human Sensor Array to Detect Arctic Environmental Change

The BSSN International Community-Based Environmental Observation Alliance for the Arctic Observing Network is an IPY project implemented under CAFF by the Aleut International Association in collaboration with the University of Alaska, UNEP-GRID Arendal and the Alaska Native Science Commission. BSSN is funded by the US States National Science Foundation (NSF). The goal of BSSN is to increase our understanding and knowledge of pan-Arctic processes, enhancing the ability of scientists, Arctic communities, and governments to predict, plan, and respond to environmental changes and their socio-economic effects. The project’s pilot stage began in June 2007 and finished in May 2009. BSSN provides the means for the systematic collection of information about the environment by six indigenous coastal communities: three in the Russian Federation and three in the United Stated. Semi-structured interviews are used to gather
bservations on primary subsistence and commercial species of the Bering Sea. The network provides for the efficient management of the data gathered from community-based environmental observations. Thus far, emerging trends of interest include the difference in observations and perceptions of change in ice-dependent and non ice-dependent communities, as well as in health of species caught in Alaskan versus Russian communities.

The first phase of the BSSN was a pilot to see if such a network was feasible. The second phase has now began and has received funding from the National Science Foundation. It has been funded for five years and will run from September 1st, 2009 - August 31st, 2014.

This second phase focuses on understanding variations in environmental and socio-economic conditions that have a meaningful impact on everyday life in indigenous communities; the evolution of consequences of change; potential strategies to enhance communities capacity to adapt and interactions and feedbacks between biophysical and social systems, so as to assess how changes in each impact one another.

Publications:


3.3 Ice dependent Species

It was decided at the CAFF board meeting in Akureyri in October 2009 to explore this emerging issue through the development of an issue paper. This paper will address the whole suite of species and not just the top mega fauna. This is an emerging issue and would be intended to be submitted to the SAOs in preparation for COP10 in October 18 – 29th 2010. The US has agreed to lead this initiative.

3.4 Climate Change ACIA follow-up

An analysis will be conducted of all CAFF publications since 2004 and assess how CAFF has responded to biodiversity relevant recommendations from ACIA. It will focus on the issue in the light of ecosystem health. Iceland has agreed to lead this project.

3.5 Arctic Spatial Data infrastructure (ASDI)

At the CAFF board meeting in Akureyri in October 2009 it was noted that this project now had the backing of all the mapping agencies from each Arctic Council and that it was scheduled be on the agenda for the upcoming SAO meeting. The links with the SIN and ArcticData projects were stressed.

3.6 ArcticData.is

CAFF and PAME are cooperating in the development and management of a web portal /data management system whereby data collected through CAFF and PAME activities is being made available for download and access to the general public and scientific communities. The portal can be accessed through www.arcticdata.is

This is a project which touches upon many of the key themes of the Arctic Council at this time. It focuses on furthering cooperation between the working groups, and relates to the effectiveness and efficiency of the arctic council - by grappling with the issues of access to AC information and making it more available to the public and scientific communities. It relates to the Arctic Spatial data infrastructure e.g. by providing access to arctic wide spatial datasets which have
been developed by the AC. It provides an active and accessible outreach and communication tool for Arctic Council data both spatial and otherwise.

Through the ArcticData portal CAFF is cooperating with PAME in fulfilling the AMSA recommendation to provide for the necessary AMSA database accessibility.

4. Cooperation with other Working Groups

In Salekhard 2006, Ministers requested Senior Arctic Officials to continue to examine the organization of the Arctic Council and their work to improve the effectiveness and efficiency of the Arctic Council. Bearing this in mind CAFF has been developing cooperation’s with other Working Groups which would contribute towards increased efficiency. Activities have included the following:

4.1 The Arctic Monitoring and Assessment Programme (AMAP)

CAFF and AMAP continue to cooperate and look for opportunities to coordinate their monitoring programs to further strengthen our understanding of the processes driving change across the Arctic and the effects of these changes on Arctic ecosystems, and to identify possible actions to compensate for, or reverse the effects of these changes, with sustainability and sustainable use of Arctic ecosystems as the ultimate goals.

CAFF has cooperated and participated closely with AMAP in the development of the Sustaining Arctic Observing Networks Process (SAON) – see item 5.6. CAFF sits on the SAON Steering Committee and on two sub-groups focusing on community based monitoring and data infrastructure for SAON. It has also cooperated with AMAP on the issue of the use and management of spatial data within the Arctic Council – see item 3.5.

4.2 Emergency Prevention, Preparedness and Response (EPPR)

The CAFF, EPPR and AMAP Secretariats have been cooperating to consider how spatial information can best be managed and used within the Arctic Council. CAFF created an information paper on spatial data and the Arctic Council and this was used as a basis for discussion. Two workshops to further discuss the use, availability and management of spatial information in the Arctic were held in Tromso January 2008 and in Oslo, February 2008.

CAFF in cooperation with EPPR and AMAP has used the discussions generated by the workshops and the above mentioned CAFF information paper to create an information paper which has been submitted to the SAOs at the Svolvaer in April 2008. The purpose of this document was to inform the Senior Arctic Officials of progress to date with regards to discussions on how spatial information could be managed within the Arctic Council and how this could be conducted in cooperation with external parties.

The information paper introduced plans to present a more complete proposal to the Arctic Council, outlined the current vision for collaborative activities among the Arctic Council Working Groups. It also considered how the Arctic Council and its Working Groups could co-operate with external parties with regards to spatial information. Based upon the results of discussions between the Working Groups, the plan is to further develop this document and to submit a proposal for consideration by the Senior Arctic Officials.

Subsequently the National mapping agencies of Iceland, Denmark/Greenland, Norway, Finland and Sweden have used the above outlined workshops and publications to start preparations for the development of an Arctic Spatial Data Infrastructure. A proposal for which is being presented to the SAOs at the SAO meeting in November in Copenhagen.

Relevant Publications:

• Spatial Data – Information paper to the SAOs, CAFF, EPPR and AMAP (2008).

4.3 Protection of the Arctic Marine Environment (PAME)

CAFF remains committed to contributing to further cooperation with PAME. However a common understanding needs to be reached between CAFF and PAME which will outline how this cooperation could take place. CAFF is actively exploring how to further develop cooperation which has thus far focused on contributions to PAMEs Regional Programme of Action and exploring how CAFF and PAME can cooperate in relation to large marine ecosystems and
marine sensitive areas. PAME also participates in the CBMPs Marine Expert Group.

CAFF and PAME are also cooperating on the development of the ArcticData.is project - see Agenda Item 3.5

4.4 Sustainable Development Working Group (SDWG)

CAFF is exploring how to further develop cooperation with the SDWG. CAFF will attend the upcoming SDWG meeting in Copenhagen on November 2009, to determine concrete actions and areas for cooperation. CAFF also along with SDWG cooperates on the further development of the SAON process.

4.5 The Arctic Contaminants Action Program (ACAP)

No cooperation at present

5. Cooperation with International conventions and organizations

CAFF cooperates and communicates with a wide variety of International organisations and conventions. These include:

International Organisations

- African-Eurasian Waterbird Agreement (AEWA)
- The Convention on Wetlands of International Importance (RAMSAR)
- Convention for the Protection of the Marine Environment of the North East Atlantic (OSPAR)
- Convention on Biological Diversity (CBD)
- The Arctic Parliamentarians
- Birdlife International
- The Global Earth Observation System of Systems (GEOSS)
- The International Arctic Science Committee (IASC)
- The International Union for the Conservation of Nature (IUCN)
- The United Nations Educational, Scientific and Cultural Organization (UNESCO)
- The United Nations Environment Programme Global Resource Information Database (UNEP GRID – Arendal)
- The United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC)
- Wetlands International
- Working Group of the International Petroleum Environmental Conservation Association (IPICEA)
- The World Wildlife Fund (WWF)

Agreements

- The Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)
- The International Polar Year (IPY)
- The Polar Bear Agreement

Conventions

- The Convention on Biological Diversity (CBD)
- The Convention on Wetlands (RAMSAR)

Find below a summary of some recent actions taken with regards to cooperation with international organisations, agreements and conventions.

5.1 UNEP-WCMC and UNEP/GRID-Arendal

CAFF cooperates with UNEP-WCMC and UNEP/GRID-Arendal on the development and data management of the CBMP and a web-based portal. Both organisations are represented on the Steering Committees for the Arctic Biodiversity Assessment and the Circumpolar Biodiversity Monitoring Programme.
UNEP Grid Arendal also act as the editor for the *Arctic biodiversity trends – 2010: selected indicators of change* report.

5.2 The International Union for the Conservation of Nature (IUCN)

The CAFF Flora Group also now serves as the official Arctic Plants Specialist Group within the Species Survival Commission of the IUCN. CAFF is in the process of formulating a joint project with the Polar Bear Specialist Group of the IUCN in connection with the CBMP. IUCN-US also hosted and contributed to organising the CBMP stakeholders’ workshop in Washington in March 2008. CAFF/CBMP in cooperation with IUCN held a workshop at the recent IUCN World Conservation Congress held in Barcelona in October 2008. The workshop was very successful, generated a lot of interest and was effective in highlighting Arctic biodiversity issues as well as promoting CAFF - the CBMP and ABA. At the Congress the IUCN adopted a resolution on an Arctic legal regime for environmental protection.

5.3 The European Union (EU)

The European Environment Agency (EEA) has expressed a desire to cooperate with CAFF on biodiversity issues in the Arctic. A series of meetings have been held with the Biodiversity unit of the EEA.

At a recent Arctic Council meeting held in Kautokeino in November 2008 the European Commission (EC) announced its intention to apply at the Arctic Council Ministerial scheduled for April 2009 to be a full Observer to the Arctic Council. The EC also announced their adoption of a *Communication on The European Union and the Arctic Region* which highlights the effects of climate change and human activities in the Arctic. Apart from setting out EU interests and policy objectives, the text also proposes a systematic and coordinated response to rapidly emerging challenges. The Communication is the first step towards an EU Arctic Policy and an important contribution to implementing the Integrated Maritime Policy for the EU.

5.4 Working Group of the International Petroleum Environmental Conservation Association (IPIECA)

CAFF is continuing dialog with the biodiversity working group of the International Petroleum Industry Environmental Conservation Association to develop possible joint projects.

5.5 The Convention on Biological Diversity (CBD)

CAFF is in discussions with the Secretariat of the CBD on the potential for cooperation and signing of a Memorandum of Cooperation between CAFF and the CBD.
5.6 The Sustaining Arctic Observing Network (SAON)

CAFF has been active in the SAON Process and has participated in each of the SAON workshops. In support of the coordinated action requested by the SAOs regarding an Arctic observing network as referred to in the 2006 Salekhard Declaration the CBMP is recognized as the biodiversity component of SAON. CAFF through the Circumpolar Biodiversity Monitoring Programme helped to develop the 2nd SAON workshop held in Edmonton in April, 2008. The CBMP Chair co-chaired the Terrestrial Observation Networks session at the 2nd SAON workshop. CAFF also played an active role in the final SAON workshop which was tasked with developing the SAON report and recommendations to the Arctic Council. CAFF remains prepared to actively participate in the next phase of the SAON process.

CAFF sits on the Steering Committee for the SAON process and also coordinates the community monitoring component of the SAON process.

5.7 The International Polar Year (IPY)

CAFF has in the previous years placed a strong focus on the International Polar Year (IPY). CAFF involvement in IPY included: endorsement of IPY projects; benefiting from Research generated by IPY projects and contributing to IPY legacy. The following list outlines those IPY proposals which have received CAFF support:

- Arctic Biodiversity of Arctic Char – Network for Monitoring and Research.
- Arctic Freshwater Biodiversity Monitoring and Research Network.
- Arctic Portal - a comprehensive gateway to the Arctic on the internet.
- Back to the Future (BTF) - changes in high latitude terrestrial ecosystem structures and functions.
- Bering Sea Sub-Network of Community-Based Environmental Monitoring, Observation and Information Stations.
- BIRDHEALTH (Health of Arctic and Antarctic Bird Populations).
- CARMA (CircumArctic Rangifer Monitoring and Assessment Network).
- CAVIAR (Community Adaptation and Vulnerability In Arctic Regions).
- Conservation Status Assessments of Canadian Arctic Flora.
- EALAT (the Reindeer Herders’ Vulnerability Study).
- Flora of the Canadian Arctic: diversity and change.
- Greening of the Arctic (GOA) - Circumpolar biomass.
- Predictive Modeling of the Circumpolar Pelagic Seabird Distribution.
- Pan-Arctic Vegetation Change.
- MERSAM – Mercury Seabird Artic Monitoring.

An example of how CAFF is benefiting from IPY will be through the role IPY generated research will play in the Arctic Biodiversity Assessment. The Arctic Biodiversity Assessment also will provide a vehicle for IPY researchers to insure that their research will reach a wider audience. CAFFs cornerstone project the Circumpolar Biodiversity Monitoring Programme is itself an IPY endorsed project and it will play a significant role in contributing to IPY legacies. This can be seen in how it is recognised as the Biodiversity component of SAON. CAFF is also a member of the contact Group which has been established as part of the Arctic Council project being led by Norway to maximise the legacy of the IPY.

6. Management and administration

The CAFF International Secretariat is located in Akureyri, Iceland. The Secretariat has a staff of two. The CAFF web system has been updated. Iceland stepped forward to take the Chair from Greenland at the 2009 Ministerial. Russia has also now taken the position of Vice-Chair of CAFF.

CAFF has held its first management board meeting under the Icelandic Chairmanship under the Chairmanship period of Iceland in Akureyri in September 2008. The meeting was very successful with participation from a broad cross section of organizations and countries active in Arctic issues.