

REPORT FROM CAFF BIENNIAL

1. Introduction

This report constitutes an overview of CAFF work since the previous SAO meeting and a summary of the key issues facing Arctic Biodiversity as discussed at the CAFF Biennial. The CAFF Biennial was held at the Hof Cultural Centre, Akureyri, Iceland on 1– 3rd February 2011. It was chaired by Aevar Petersen from Iceland with Natalia Vavilova from Russia as the vice-chair. The meeting was opened by the Icelandic Minister of the Environment who gave a speech stressing the importance of CAFF's work and Iceland's commitment to hosting the CAFF Secretariat.

The meeting agenda was divided into seven thematic sections i.e. (1) Monitoring; (2) Assessment; (3) Conservation strategies; (4) Methods and Tools; (5) Next two years; (6) International cooperation and; (7) Communication/outreach. A number of themes emerged which were common to each of the talks and different approaches presented throughout the biennial. This report summarises these for each of the biennials thematic sections.

2. Monitoring

This section was chaired by Risa Smith (Canada) and addressed the various monitoring activities carried out under CAFF.

Circumpolar Biodiversity Monitoring Programme

The current status of the CBMP was reviewed and the tasks for the year ahead were outlined. This was followed by a series of presentations on the CBMPs Expert Monitoring Groups (EMG) i.e. Coastal, Marine, Freshwater and Terrestrial. The coastal EMG is inactive, the marine EMG has completed its monitoring plan and the freshwater and terrestrial groups are operational and developing their monitoring plans. The issue of Community Based Monitoring (CBM) and its role in CAFF and the CBMP was also reviewed.

Monitoring networks and plans

Presentations were made on monitoring networks (Bering Sea Sub Network (BSSN), Seabird Information Network (SIN), Arctic Breeding Birds Conditions Survey (ABBCs), Seabird Monitoring activities, CircumArctic Rangifer Monitoring & Assessment Network (CARMA), GLORIA (The Global Observation Research Initiative in Alpine Environments)). Presentations were also made on monitoring plans under development (Protected areas, Polar bears). Further networks discussed included the Goose network and (shorebird monitoring).

Monitoring projects

Presentations were made on monitoring projects (Circumpolar Boreal Vegetation Map (CBVM), Biodiversity, traditional nature use and climate change in the Russian Arctic: assessment and adaptation strategy development and the Arctic Vegetation Database).

Summary of discussions

A number of themes emerged which were common to each of the talks and different approaches presented during this section. Many of the talks addressed the issue of why we monitor and the responses focused on the need to: (1) monitor climate change impacts; (2) monitor the conservation status of red listed species; (3) influence policy and/or management of the Arctic's natural resources.

Development challenges:

- Arctic monitoring is difficult due to the geographic scope and remoteness of the Arctic;
- The complexity of land and resource management approaches and regimes and the rapid nature of the changes taking place all present challenges in the development of effective monitoring programmes;
- Different approaches need to be incorporated within monitoring programmes e.g. community knowledge and science;

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- The need to adopt an inclusive process is in itself a challenge given the range of institutes, associations, countries and observers active and wishing to become active in Arctic monitoring;
- It can take time to get networks developed and they it be difficult to maintain momentum, interest of researchers and commitment from funders.

Technical challenges:

- What should be monitored and how should it be monitored?
- Is it possible to insure standardization while also building on existing networks?
- It can be difficult to reach agreement on boundaries e.g. on defining monitoring units which adequately capture variability across differing systems and population boundaries. Species tend not to respect boundaries, either ecological or political;
- Scale is critical when defining the scope and content of a monitoring programme;
- There remain huge gaps in knowledge (ecosystem, species) and few long term trends are known;
- Abiotic and biotic monitoring are included in all expert group plans but is there more that could be done?
- The great variability of change happening means that not all communities are undergoing similar experiences and the rate of change is different;
- Ownership of data and allowing access to that data is important to address early in the process of developing a monitoring programme;
- Working with and accommodating both species based and ecosystem based monitoring is challenging.

Content:

- The human dimension needs to be included within monitoring plans. BSSN highlighted the results that can be obtained by working with people, but also highlighted the difficulties in facilitating community based monitoring. In this context the quality of data and appropriate scale is critical in order to make it useful for policy making and this is particularly difficult when people are the involved.
- Flora population data is required in order to allow the development of baseline data and to allow for monitoring. The Arctic is probably the last nearly natural area where plants are untouched by man and thus it is essential to collect data now and not wait until problems are encountered as is happening elsewhere in the world.

Communication

The manner and nature of how the results and activities of Arctic monitoring are conveyed to the public, scientific and policy making worlds should not be underestimated:

- The development of communication tools to convey results is critical e.g. the Seabird Information Network and was singled out as an example of successful communication tools.
- Finding creative ways to integrate data makes it more useful by providing regional and circumpolar coverage's, but it is difficult and requires patience. A good example is Seabird Information Network where you can see seabird colonies and what will happen to those colonies as sea level rises. When you start to make the data live and interactive it allows the policy maker to ponder interesting 'what if' questions and engage them in the usefulness of monitoring;

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- It is crucial to insure feedback as communication is not one way i.e. researchers to communities; data analyzers to data collectors; funders to understandable results to policy;
- Regular status and trends reporting is an essential aspect of insuring the results and messages from monitoring are conveyed successfully. CBird has perhaps had the most extensive experience influencing management. With the results of monitoring they have been able to identify when a species is in trouble and have then been able to develop conservation strategies to address the results of monitoring. Countries then implement these conservation strategies.

Funding

- The development and maintenance of long term datasets is hard to fund, however such data is required in order to answer the big questions;
- It is important to keep in mind that quality and effective monitoring relies on the people on the ground without which we could not keep the monitoring going;
- It is crucial to be constantly aware of the problems with regards to the sustainability of networks and continuity of funding.

Future direction

- It was noted that champions were needed at the policy level to push the development and support for monitoring;
- It was noted that CAFFs overall plan should be aimed to facilitate people getting together and speaking about their datasets and CAFF should aim providing the support that is required;
- It was noted that Gloria is a program that serves the purposes of CAFF and that CAFF should look for such programmes and support them where possible;
- It is important to have a focus on continuity.
- It is important to integrate monitoring and research

3. Assessments

This section was chaired by Inge Thaulow (Greenland) and addressed the various assessments being carried out under CAFF.

Arctic Biodiversity Assessment

The current status of the development of the ABA was reviewed. It was noted that over 200 scientists are involved in the process and just under half the manuscripts have now been delivered. It was also noted that a project was starting which will develop a strategy to respond to the key findings contained in the *Arctic biodiversity trends 2010: selected indicators of change* report. It was noted that the ABA will be one of the main deliverables under the Swedish chairmanship of the Arctic Council and that the *Arctic biodiversity trends 2010* report has placed the issue of Arctic biodiversity firmly in the global arena.

Arctic marine ecosystems

Presentations were made on a series of assessment activities being conducted by CAFF (Arctic Marine Ecosystem, Arctic Species Trend Index (ASTI): marine analysis, Arctic Marine protected areas, Arctic sea ice associated biodiversity, Arctic marine sensitive areas (AMSA IIC) and circumpolar seabird analyses). Presentations were also made by WWF on the RACER project (A Rapid Place-based Assessment to Stay Ahead of climate change) and by IUCN on their work on Arctic marine areas.

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Sacred sites

A review was presented of work which has been carried out in this area and a suggestion made that this could be a potential area for follow-up action.

Climate change

Presentations were made on a project which aims to conduct a review of CAFF recommendations relating Climate Change. The proposal to conduct an Arctic Change Integrated Assessment (ACIA) as proposed by AMAP was presented and noted that the SAOs had decided to postpone any consideration of this issue until the 2011 ministerial was completed.

Summary of discussions

A number of themes emerged which were common to each of the talks and different approaches presented during this section.

Boundaries

- As in the monitoring section the issue of boundaries was raised and it was stressed that it was crucial that all the various ongoing projects and activities within the Arctic Council should work with compatible and comparable boundaries. In this respect it was noted that there is an ongoing process of considering the adjustment of the boundaries for the Large Marine Ecosystems (LMEs);
- It was suggested that regions could be defined in terms of climate change.

Review

- As with monitoring the engagement and involvement of Permanent Participants in the development and review processes for assessments is crucial.

Content

- It was noted that projects such as RACER and IUCN marine sensitive studies would be useful contribution to the various assessments discussed. WWF noted that they would contact CAFF when RACER is at an advanced enough stage to offer results and to consider how CAFF activities could use this project as a platform;
- It was noted that it is not the general ASTI dataset that is important but rather the regional analysis that can be anticipated, with the marine analysis now underway;
- It was noted that the ABA process had taken good steps in including Traditional Ecological Knowledge (TEK). That the ABA had adopted an approach where there was a TEK coordinator for Eurasia and North America.

Policy recommendations:

- It was agreed that the development of policy recommendations is a challenging and slow process. And that the ABA steering committee should already start to work on this issue if they wish to see a logical flow from science to recommendations. This would insure that they are strategic and produced as early as possible and should be as bold and forward looking as possible;
- The ABA steering committee has made a commitment to incorporating traditional knowledge within the ABA and has learned from mistakes of other assessments. The most successful products from the Arctic Council have been the contaminants assessments and ACIA report. The contaminants assessment is the only regional agreement that singles out Arctic People. ACIA has also had a significant impact globally. An important contribution to their success was PP involvement and their resultant advocacy for these process – this would also be crucial for the ABA and it is essential to insure their full engagement in the

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process;

- The involvement of policy makers in the development of the recommendations is important and the SAOs need to be fully engaged in the process.

Scale and approach

- The choice of scale and approach taken were regarded as being crucial i.e. that it was important to be as forward looking as possible;
- It is critical to recognise that climate change is happening and to follow up on it. WWF noted that they would be happy to cooperate in finding funding to hold a workshop on this issue;
- The drawbacks of traditional assessments were considered i.e. namely that they are static and not dynamic. There are often very large time gaps between when information is collected, analysed and made available to the Arctic Council. This means that often the data they contain may be out of date and consequently the analysis built on this information may be flawed. Regular one off assessments have been the norm and once complete all the work and effort gone into building these circumpolar cooperation's stops and the process begins anew on some other aspect and often from the ground up again;
- A primary challenge is to shorten the gap between when data is collected to when it has been processed and presented to decision makers. The aim must be to allow for a quicker response time for policy makers. It was noted that CAFF has recognised this challenge and in recent years worked towards developing a solution. This approach has focused on not just developing traditional assessments but also addressing the creation of a framework to allow for the collection, processing and analysis of data on a continuous basis. The aim being through the ABA not to produce a traditional one off static assessment but rather to create a baseline of current knowledge and at the same time developing the engine i.e. the CBMP which will feed data into this baseline allowing it to become a dynamic living tool. One which is sustainable and can produce regular and more flexible assessments and analyses.

Human dimension

- It was noted that focus should also be concerned incorporating human into these assessments i.e. how do we capture this strong link between people and biodiversity?
- It was noted that this issue had not been totally neglected within the ABAs scientific assessment which has a chapter dealing with Ecosystem services. The Arctic Biodiversity Trends 2010 report also had a series of indicators focusing on ecosystem services e.g. languages, reindeer herding etc This issue can be more fully addressed in the recommendations component of the scientific assessment;
- However it was felt that the link between people and biodiversity is so strong that a follow-up is required and that this need not await the completion of the scientific assessment. It was noted that this issue may be addressed in the follow-up to the trends report. It was also suggested that it would be worthwhile if the ABA had a map which showed the land that is owned by indigenous peoples and an analysis of this information.

Communications

- How do we communicate it effectively? --- *please see discussion on this item under the monitoring section which addresses the same issues*

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4. Conservation Strategies

This section was chaired by Bridget Larocque (GCI) and addressed the conservation strategies being developed by CAFF. Presentations were made on the development of a strategy to respond to key findings from the Arctic Biodiversity Trends 2010 report, Seabird conservation strategies and Arctic Flora conservation issues.

Summary of discussions

- Status and trends reporting is an essential aspect of insuring the results and messages from monitoring are conveyed successfully.
- How do we communicate effectively? --- *Please see discussion on this item under the monitoring section which addresses with the same issues.*

5. Methods and tools

This section was chaired by Janet Hohn (Alaska) and addressed tools and methods being developed to assist in the various activities of CAFF and other groups active in Arctic issues. Presentations were made on the Arctic Spatial Data Infrastructure (Arctic SDI) and on the relevance of remote sensing for monitoring and assessment activities.

Summary of discussions

- Projects such as the Arctic SDI were noted as constituting important contributions which help insure that data collected throughout the Arctic can be comparable, easily integrated and accessible. A key theme which emerged throughout the biennial was the urgent need to make data available and in such formats that allowed it to be easily integrated and assessed on a circumpolar scale;
- It was noted that it was important for the future development of effective conservation efforts that use be made of technologies such as remote sensing which are now developing the capacity to play an important role in circumpolar scale monitoring and assessments.

International cooperation

This section was chaired by Berit Lein (Norway) and considered the cooperation's between CAFF and various regional and international organisations and conventions. Several observer organisations and countries made statements focusing on their Arctic activities and involvement with CAFF (WWF, EEA, Wetlands International and The Netherlands)

Summary of discussions

Observers

The key theme raised in this section focused on the engagement and role of observer countries and organisations in Arctic Council activities

- A pressing issue to be resolved is the role of observers within Arctic Council and to incorporate NGOs and other countries as observers;
- It was noted that observers play an important role in developing funding sources for Arctic projects. And that the undefined role of observers can perhaps be connected to a lack of finance and challenges in getting funding;
- It was noted European countries wish to reduce their footprint in the Arctic and an EU Arctic policy has recently been developed;
- A number of suggestions were made by observers who offered to use their capacities to assist in bringing the results of CAFFs work to further clients and considering how best to use results from CAFF, to insure they are easily available and understandable.

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6. Communication and outreach

This section was chaired by Berit Lein (Norway) and addressed a number of communication and outreach activities being carried out by CAFF. Presentations were made on ArcticData.is, Arctic report cards and the Arctic biodiversity portal.

Summary of discussions

The key theme considered during this section was the need to insure effective means of conveying information developed through monitoring and assessment. And in a format that makes information accessible and usable both for the public, scientific and policy making audiences --- *please see discussion on this item under the monitoring and assessment sections of this report.*

7. Next two years

This section was chaired by Aevor Petersen (Iceland) and addressed the documents CAFF is preparing for the upcoming ministerial meeting in May 2011. The draft documents for the CAFF 2011-2013 workplan, CAFF text for SAO progress report to the ministers and the CAFF suggestions for the ministerial declaration texts were reviewed.

In order to consider ways of facilitating the better integration of wetlands within CAFFs work Wetlands International proposed the four projects for inclusion on the project CAFF Work Plan for 2011-2013:

1. To review the status of Arctic wetlands, their ecosystem values and services;
2. To study the opportunities for developing an Arctic wetlands adaptation strategy to climate change, formulated as a background technical document and draft resolution for the COP RAMSAR COP10;
3. Strengthening the reporting the Circumpolar Biodiversity Monitoring Programme (CBMP) process by drawing on the experience and capacity of RAMSAR procedures;
4. To liaise with key International NGOs (WWF, IUCN, RAIPON, TNC, First People etc.) for further promotion of Arctic wetlands as objects of land use, land-use change and forestry policy in terms of potential greenhouse emissions resulting from climate change and irresponsible land management.

These project proposals were well received and generated much discussion and interest. In order to better inform CAFFs discussions further details on the proposed methodologies and cost estimates for these projects were requested.

8. Key themes

A number of themes emerged throughout the various presentations and discussion at the biennial:

- Communication and outreach: It was critical to focus on developing effective means of conveying information to the relevant audience;
- Accessibility of information and its availability in formats and standards which allowed for ease of data integration to form circumpolar datasets will form a key role in how effective conservation efforts will develop;
- Defining the role and engagement of observers in CAFF and Arctic Council activities is important to insure a comprehensive representation of all interests and sources of knowledge and capacities in the future conservation activities;
- Attention must be paid to insuring continuity of efforts and sustainability of monitoring efforts in order to allow for the development of circumpolar and long-term datasets which are required in order to allow for adaptation and response to the changes taking place;

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- Conservation activities must be dynamic and forward looking and not stuck in the static approach which has dominated until now;
- Continuity of funding to insure continuity of monitoring is critical;
- Importance of facilitating the participation of Permanent Participants;
- To facilitate the integration of biodiversity issues into arctic wide initiatives.

