CBMP Partnership Workshop Summary Report March 6-7, 2008 Washington, DC

Supporting Publication to the Circumpolar Biodiversity Monitoring Program Framework Document









## **CAFF Designated Agencies:**

Environment Canada, Ottawa, Canada Finnish Ministry of the Environment, Helsinki, Finland Ministry of the Environment and Nature, Greenland Homerule, Greenland (Kingdom of Denmark) Faroese Museum of Natural History, Tórshavn, Faroe Islands (Kingdom of Denmark) Icelandic Institute of Natural History, Reykjavik, Iceland Directorate for Nature Management, Trondheim, Norway 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

# <section-header>Photography by:<br/>Carsten Egevang/ARC-PIC.COMFor more information please contact:<br/>CAFF International Secretariat<br/>Borgir<br/>Nordurslod<br/>600 Akureyri<br/>Iceland<br/>Phone: +354 462-3350<br/>Email: caff@caff.is<br/>Internet: http://www.caff.is

## CAFF Designated Area

## Supported by:

Sponsored by the US Fish and Wildlife Service and hosted by the World Wildlife Fund, with logistical support from the World Conservation Union

# **Table of Contents**

INTRODUCTION	1
GUEST SPEAKER PRESENTATIONS	1
WORKING GROUP SESSIONS	4
PANEL DISCUSSION	5
CONCLUSIONS & NEXT STEPS	6
APPENDIX 1. LIST OF WORKSHOP PARTICIPANTS	8





## 1. INTRODUCTION

The workshop, "Towards Enhanced Understanding and Conservation of Arctic Biodiversity: The Circumpolar Biodiversity Monitoring Program (CBMP)" was held on March 6-7, 2008 in Washington, DC at the headquarters of the US World Wildlife Fund (WWFUS). The goal of the workshop was "to develop a multi-stakeholder consortium with the common objective of advancing our understanding and conservation of the Arctic's biodiversity."

The workshop gathered over 50 participants from a broad spectrum of scientific research, natural resource management, and environmental advocacy for a lively dialogue about the CBMP. The following is a summary of the presentations and discussions that took place during the two days, as well as the key findings and priorities for action that emerged.

# 2. GUEST SPEAKER PRESENTATIONS

Guest speakers provided workshop participants with an overview of the CBMP and insight into how CBMP partnerships are adding value to monitoring programs currently underway. Bill Eichbaum of WWFUS provided Welcoming Remarks at the start of Day One.

# *Mike Gill, Chair, CBMP, "Overview of the Circumpolar Biodiversity Monitoring Program"*

Mike highlighted the serious challenges facing the Arctic and its globally significant biodiversity, including climate change, habitat alteration, and development pressures. Despite the \$300+ million dollars expended annually on biodiversity monitoring in Arctic regions, the absence of ongoing coordination and long-term commitment results in incomplete coverage, the failure to detect and comprehend changes, and weak ties to both the public and political process.

The CBMP is an international network working to improve detection, understanding and reporting of Arctic biodiversity trends. The program's goal is to add value to existing monitoring through the identification of significant biodiversity trends, underlying causes, and emerging pressures from a broad circumpolar perspective. Stemming from the Arctic Climate Impact Assessment's (ACIA) recommendation to "expand and enhance long-term Arctic biodiversity monitoring", CBMP is the cornerstone program for the Arctic Council's Conservation on Arctic Flora and Fauna (CAFF) Working Group. The program was established in 2005 and is producing results, but additional partnerships and funding will be required to realize the full scope of its vision.

## Christoph Zöckler, United Nations Environment Programme (UNEP) - World Conservation Monitoring Centre (WCMC), "CBMP: A Barometer for the Arctic Environment"

Citing numerous examples of Arctic bird species where problematic monitoring data resulted in an incomplete "picture" of changes underway, Christoph spoke to the need for integrated monitoring and data collection in order to detect and understand population trends and fluctuations. Complete and consistent data sets and monitoring are the necessary precursor to informed management decisions.

The Circumpolar Seabird Group's (CBird) Seabird Information Network (SIN) is a CBMP pilot project working to create an integrated data management system model. Individual monitoring programs will continue to house their own web data servers but will link to a central server housed at UNEP-WCMC. The central server will integrate data and information to generate circumpolar status and trends assessments and allow for correlation of the data with other abiotic data. Ideally, the web portal will allow the user to 'drill down' from an indice to a specific indicator to specific information for a given region or specific wildlife population.

#### Don Russell, CircumArctic Rangifer Monitoring & Assessment (CARMA) Network

CARMA is building local capacity and integrating and standardizing monitoring approaches with the objective of sharing data about wild caribou populations throughout the circumpolar world. CARMA's key interests relate to the role of winter areas and seasonal ranges, differences between herds, underlying causes of herd growth and decline, the role of predators and human harvest, and mechanisms for adaptation.

CARMA focuses on 14 reference herds located across the Arctic. The program has developed manuals to facilitate standardization of data collection and monitoring protocols among existing programs. CARMA is engaging local communities through data collection and interpretation, as well as documenting change through multimedia. CARMA's pilot project with CBMP involves reconciling its internal data sets and determining the best mechanisms to link to CBMP indicators.

# David Carlson, Director, International Polar Year (IPY) Programme Office, "IPY: An Opportunity and Urgency for CBMP"

The International Polar Year (IPY) presents a unique two year window in which Arctic researchers can establish long-term initiatives and systems. Circumpolar scientists need the ability to integrate geophysical data with biological data. They also need to hone their predictive abilities versus "monitoring for monitoring's sake". The key legacy of IPY will be partnerships: CBMP has a valuable role to play in ensuring that short-term research initiatives are brought "into the fold" of scientific and policy discourse.

# Mike Gill, Chair, CBMP, "The Way Forward: CBMP Five Year Vision/Plan, Current Status and Outstanding Needs"

Mike distilled the long-term vision of the CBMP into four primary goals:

- coordinated and integrated research and monitoring;
- community-based monitoring (CBM) utilized and promoted;
- involvement of Arctic peoples in monitoring and results interpretation; and,
- current, timely, and accurate information on Arctic biodiversity accessible to all.

The CBMP's Five Year Implementation Plan sets out the specific activities and products required to realize this vision:

<b>PROGRAM ELEMENT</b>	KEY ACTIVITIES/PRODUCTS (BY 2012)		
Expert Monitoring	Convene 5 EMGs and complete Integrated Monitoring Plans for each		
Groups			
Arctic Biodiversity	Complete pan-Arctic monitoring inventory, capacity assessment and		
Monitoring Strategy	final strategy to address gaps		
Data Management	Create fully operational Web-based data portal and underlying data		
	management structures		
Capacity Building	Convene CBM Guidance Group and produce CBM Program		
	Development and Best Methods manuals		
Communications	Establish communications links between scientists and communities		
	involved in monitoring		
Reporting	Complete Phase I and II of CBMP indicators and indices and produce		
	ongoing "State of the Arctic" report cards		

The CBMP's implementation milestones will support and inform the activities of other strategically linked Arctic biodiversity initiatives and programs where possible. For example, the development of the CBMP's Biodiversity Indicators and Indices will be a key contribution to CAFF's Arctic Biodiversity Assessment (ABA), forming the foundation of the ABA's summary report in 2010.

# D.A. (Skip) Walker, University of Alaska Fairbanks (UAF), "Monitoring Spatial and Temporal Changes in Arctic Vegetation"

Skip provided a compelling case for monitoring arctic vegetation and plant species diversity, citing the profound impacts climate-related vegetation changes could have for every key aspect of the Arctic system. Normalized Difference Vegetation Index (NDVI) – a satellite derived measure of plant biomass - has generally increased across the Arctic, but there is insufficient ground data for scientists to establish a strong causal relationship. Poor biomass data, cover data, inconsistent sampling methods and

incomplete plant inventories common to Arctic monitoring efforts limit the usefulness of research efforts at the decision making level.

There is a serious need for standardized protocols for baseline time-series observations of biomass and species diversity at a network of sites. Observations should be made along the complete climate gradient and at several relevant scales (from plot to planet). Vegetation monitoring should be closely coordinated with other terrestrial monitoring programs. Programs such as the Global Observation Research Initiative in Alpine Environments (GLORIA) and the CBMP are excellent examples of how monitoring efforts can be designed and/or streamlined to better meet these objectives.

## 3. WORKING GROUP SESSIONS

During the afternoon of Day One, participants broke into working groups modelled after the CBMP's proposed EMGs: Coastal, Marine, Terrestrial Vegetation, Terrestrial Fauna, and Freshwater. The working groups discussed and brainstormed around the following themes:

User Needs: What are the key priority actions/needs to be addressed by CBMP? Partnerships: Who needs to be involved in these priority actions/needs? Action Plans: What steps are required to link these needs with potential partners? Other Products/Activities: What products/activities might CBMP be missing? Sustainability: How do we sustain the CBMP and the programs underpinning it?

The major points that emerged from the working group presentations on the morning of Day Two are summarized below.

## USER NEEDS

- Develop overarching conceptual frameworks that identify what is to be monitored
- Improve scientific community's predictive capacity
- Create harmonized monitoring standards and protocols
- Tackle challenges posed by proprietary data and existing data portals i.e. avoid redundancy and capture connectivity of systems in Web portal
- Establish the links between scientific monitoring results and human systems to better inform adaptation and mitigation strategies

### PARTNERSHIPS

- Industry sectors and Northern communities
- Key conventions
- Appropriate age7ncies, NGOs and responsible countries

- Observatory networks i.e. Global Earth Observation System of Systems, CircumArctic Environmental Observatories Network, Global Observation Research Initiative in Alpine Environments, etc.
- Agencies with mapping capabilities
- Communications and media "specialists" i.e. National Geographic

#### **ACTION PLANS**

 Develop accessible information around what CBMP partnerships entail and benefits and incentives on a sector-specific basis

### **OTHER PRODUCTS/ACTIVITIES**

 Accessible, end user-focused communications products that tell a compelling story i.e. videos, web cams, "state of" publications, etc.



#### **S**USTAINABILITY

- Develop clear strategy to link CBMP with individual country priorities and mandates
- Choose indicators with circumpolar relevance and resonance
- Expand concern about the Arctic beyond the Arctic itself
- Lack of binding country-level commitments is a limiting factor
- Enlist "champions" of the program
- Differences in conceptual approaches to monitoring biodiversity will pose a challenge i.e. population approaches versus Valued Ecosystem Components (VECs)

## 4. PANEL DISCUSSION

A panel consisting of David Carlson (IPY), Fae Korsmo (National Science Foundation), Craig Fleener (Gwich'in Council International), and Skip Walker (UAF) elaborated on how best to expand CBMP targeted partnerships and sustain the CBMP and its related monitoring networks.

**David Carlson** – Think "accelerate". The pace of change in the Arctic necessitates action on these long-standing issues. IPY should be utilized as much as possible. Effective communications are key: putting out useful products will enable the program to expand

and do its work. CBMP needs to think in predictive mode, even if problems are decadal in nature. CBMP needs to think in terms of trophic levels, from "biomes to genomes".

**Craig Fleener** – Human biodiversity is as important as flora and fauna. The CBMP should think beyond individual stakeholders to large groups being impacted. Northern



communities need the tools to adapt and the ability to access resources. The CBMP needs a vision that others can see, imagine, and sign on to. Sell the message, get people excited, take manageable steps and create useful, scientific, and "popular" products.

**Skip Walker** – The CBMP needs to encourage young scientists to be champions,

encourage more dialogue between disciplines through its EMGs, and address the important issues outside and beyond the framework of biodiversity for maximum resonance with the public and decision makers.

**Fae Korsmo** – There are three primary needs that the CBMP must address: the integration of projects, people, and process; the standardization of methodology to create easy, useful tools for people; and the dissemination of compelling stories aided by effective branding and communications.

The major points raised by the workshop participants during the ensuing discussion included:

- Communications are key: make issues relevant, keep the science accessible, piggyback on existing initiatives, create a space for storytelling
- Arctic residents should understand the "pros" of change as well as "cons"
- CBMP can be a catalyst for sharing between and within disciplines
- CBMP needs to adapt in response to where the funding/research emphasis is

# 5. CONCLUSIONS & NEXT STEPS

The CBMP Partnership Workshop assembled over 50 participants for a multi-disciplinary and lively dialogue about the program's opportunities and challenges as it transitions

towards implementation. During two days of structured discussions, the group's focus shifted from the urgency of the "internal" programming functions that the CBMP is proposing (i.e., EMGs and data portal) to the importance of "external" activities that will ultimately enable the CBMP to deliver on these goals: strategic partnerships, targeted and compelling communications, and long-term funding commitments from countries and key organizations.

The short and mid-term direction of the CBMP, as envisioned by workshop participants, could be described by the flow chart below:



Participants repeatedly stressed the importance of demonstrating value and programming relevance to CBMP's existing and potential partners in the short-term. In the coming months, CBMP staff will endeavour to integrate this direction into its activities and expand the dialogue through new partnerships as it begins to deliver on its vision of harmonized, enhanced Arctic biodiversity monitoring.

# **Appendix 1. List of Workshop Participants**

#### Workshop Steering Committee Chair

Janet Hohn US Fish and Wildlife Service

Workshop Facilitator		Workshop Organizer	
Elizabeth De Santo	IUCN	Megan Hansen	IUCN
Rapporteurs			
Michael Svoboda	Environment Canada	Danielle Rappaport	IUCN
Jane Koepke	Jane of all Trades Consulting	Nirmal Bhagabati	IUCN
Blake Audsley	IUCN	Sheila Van Der Maas	IUCN
		Kira Goetschlus	IUCN
Participants			
Ann Gordon	US Department of State	Joseph Culp, Dr.	Environment Canada
Anne Bolen	SeaWeb	Lisa A. Monzon	National Geographic
Christoph Zockler	UNEP – WCMC	Marie Karlberg	David and Lucile Packard Foundation
Craig Fleener	Gwich'in Council International	Michael Baffrey	Exxon Valdez Oil Spill Trustee Council
Dag Von Graven	Norwegian Polar Institute	Mikaila Milton	National Science Foundation
Dave Carlson	IPO	Mike Gill	Environment Canada
Don Russell	CARMA	Mike Simpkins	US Marine Mammal Commission
Donald McLennan	Parks Canada	Paul Geissler	US Geological Survey
Earl Saxon	IUCN	Peter Ward	US Fish and Wildlife Service
Falk Huettman	University of Alaska Fairbanks	Randy Hagenstein	The Nature Conservancy
Fae Korsmo	National Science Foundation	Reidar Hindrum	Norwegian Directorate for Nature
			Management
Flemming Merkel, Dr.	Greenland Institute of Natural Resources	Risa Smith	Environment Canada
Fred Munson	444S Foundation	Robin Tuttle	NOAA National Marine Fisheries
Fred Wrona	University of Victoria	Skip Walker	Institute of Arctic Biology. UAF
Gary Allport	IUCN/Bird Life	Stanislay Egorovich	All-Russian Research Institute for
,	International/Audobon	Belikov	Nature Protection
Greg Butcher	Audobon Society	Tatiana Minaeva	Wetlands International Russia Programme
Greg Susanke	EPA	Thomas Barry	CAFF
Hans Meltofte	Department of Arctic	Timothy Johnson	UNEP – WCMC
	Environment (DE)		
Harlan Cohen	IUCN Global Marine	Toral Patel-Weynand,	US Geological Survey
	Programme	Dr.	
Jen Palmer	IUCN	Torre Stockard	National Geographic
Jim Reist, Dr.	Fisheries and Oceans Canada	Vida Amor de paz	Tropical Rainforest Foundation, Planeta Verde Television
John Calder	NOAA Climate Program Office	William Eichbaum	World Wildlife Fund
John Kermond, Dr.	NOAA		-

Special thanks to Workshop Steering Committee members Robert Winfree (National Park Service), Maeve Taylor (US Fish and Wildlife Service), and Nick Kulibaba (IUCN-US).