Conservation of Arctic Flora and Fauna

CIRCUMPOLAR SEABIRD EXPERT GROUP

Eighth Meeting
Progress Report

April 2002

CAFF, Circumpolar Seabird Expert Group - Progress Report VIII

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II. Executive Summary

Like much of the work of CAFF, the Circumpolar Seabird Expert Group (CBIRD) was created in recognition that Arctic countries have many seabird species in common and often share the same populations, and therefore share a joint and equal responsibility for their conservation. Arctic countries also share common population and habitat threats in marine and coastal ecosystems that seabirds depend on for their survival. The creation of CBIRD was also in recognition that conservation, management, and research activities for seabirds could most effectively be achieved by a multilateral approach of all circumpolar range states. It was in this simple context that CBIRD was approved in 1993, and has since acted as a forum to promote and facilitate the communication, coordination and collaboration of seabird activities in the Arctic. Since 1994, CBIRD has conducted eight meetings and has been instrumental in addressing and raising the visibility of priority seabird conservation issues. It has published two Conservation Action Plans (Murres and Eiders), four CAFF Technical Reports, two editions of the popular Circumpolar Seabird Bulletin, three posters, seven Progress Reports, and participated in numerous meetings and workshops.

CBIRD conducted its eighth meeting in Anchorage, Alaska on January 14-18, 2002. The meeting was attended by 30 seabird specialists and managers representing seven of the eight Arctic countries. CBIRD primarily focused its attention on the following issues: Circumpolar Murre and Eider Conservation Strategies, Conservation of Migratory Birds Outside the Arctic, Seabird Bycatch in Commercial Fisheries, Harvest of Seabirds in the Arctic, and Circumpolar Seabird Monitoring Network. The next meeting of CBIRD will be in Norway in October 2002.

III. Status of Circumpolar Seabird Research, Management, and Conservation

Iceland

Seabird initiatives in 2001

Aevar Petersen gave a short overview of seabird initiatives in Iceland. New seabird surveys were conducted in areas previously un-surveyed (NE and E-Iceland). Analyses of banding returns have been underway for Shag and Cormorant. Pilot satellite tracking study of Parasitic Jaeger was executed. The Breidafjordur conservation area was established in 1995. A conservation plan for this marine conservation area of about 3000 km² was endorsed by the Minister of the Environment, the first of its kind for a protected area in Iceland. The development of the Nature Conservation Plan is underway. This framework document for future nature conservation activities includes, among others, listing of seabird colonies, which are included on the Important Bird Areas list for Iceland. The Snaefellsnes National Park was established in W-Iceland and this includes important several seabird cliffs.

Status of CAFF activities

Aevar Petersen gave an overview of most recent CAFF and Arctic Council activities. The 10th anniversary of the Arctic Environment Protection Strategy (AEPS), forerunner of the Arctic Council (AC) as celebrated in Rovaniemi, Finland, in June 2001. CAFF represented its overview book *Arctic Flora and Fauna: Status and Conservation*, the first of its kind of circumpolar biodiversity. It has been generally well received. Based on the findings of the overview CAFF is working on recommendations to guide its future activities. Several CAFF projects are underway, and especially those with bearing on CBIRD are mentioned here. CAFF is cooperating with the Arctic Monitoring and Assessment program (AMAP) in developing a Circumpolar Biodiversity Monitoring Network. Nine networks have been identified, including seabirds, which is CBIRD is responsible for and David Irons as coordinator. A coordination meeting is planned in Iceland April 2002 to examine the findings of the networks, analyse major problems, harmonize the forward thrust, and finalize an EU funding application.

The Circumpolar Protected Area Network (CPAN) working group will meet in Alaska in February 2002 for consultation. The two major thrusts forward are producing a compendium of ecologically important marine areas and evaluation of the full value of protected areas, besides re-visiting the CPAN strategy for further development and recommendations.

The pilot phase of the ECORA project, "An Integrated Ecosystem Approach to Conserve Biodiversity and Minimise Habitat Fragmentation in the Russian Arctic", is underway, funded by GEF.

Also underway is the Arctic Climate Impact Assessment (ACIA) program. It assesses the present knowledge and the report will include 14 chapters on various aspects of climate change. CBIRD is expected to deliver relevant seabird information into the process. This is a cooperative project between CAFF, AMAP, and IASC, the International Arctic Science Council.

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The CAFF Secretariat is housed in Akureyri, Iceland, and has two and half posts besides an international secondment, which at present is Tiina Kurvits from Canada. The secretariat has about a $250K budget, 55% of which is funded by Iceland and the rest as voluntary contributions from the other CAFF countries. Snorri Baldursson is leaving as the Executive Secretary in 2002 and the post will be open for applications.

The structure of the Arctic Council continues to be debated. Reports have been made on the major problem areas and suggestions for structure changes. CAFF has not been suggested for change except that monitoring activities were to be incorporated into AMAP, which would mean reshuffling of that group to incorporate the biological knowledge, as opposed to members with knowledge of contaminants. One option is that CAFF and AMAP cooperate on monitoring in the way they have initiated on biodiversity monitoring. Other structural negotiations relate to the niche of the Sustainable Development Working Group (SDWG) and how mandates of the Protection of the Arctic Marine Environment (PAME) working group and the ACAP (Arctic Council Action Plan to Eliminate Pollution in the Arctic) initiative should be integrated. Iceland will take the Chair of the Arctic Council in fall 2002, and the general agenda and areas of emphasis are being developed. It is hoped that monitoring will be an important issue.

The 3rd AC Ministerial will be held in Iniri, Finland, in fall 2002. Various CAFF products will be delivered to the ministers, including the CAFF future recommendations, the ECORA full project, the Sacred Site project, the Circumpolar Arctic Vegetation Map, a proposal for an integrated Biodiversity Monitoring Plan, and various progress reports. CBIRD has to consider the main messages, which it would like to see reflected in the CAFF report to ministers.

Greenland

Seabird initiatives in 2001

New hunting regulations

New hunting regulations came into force January 1. Regulations are detailed under Action Item 3, Seabird Harvest in the Arctic.

Review of the 11 Greenland Ramsar Sites designated in 1987

The designation of Ramsar sites is potentially an important tool for conservation of marine birds in Greenland. A new review of the Greenland Ramsar sites concludes that monitoring and management plans are needed. New Ramsar sites have been suggested including Murre colonies and King Eider moulting areas.

New Nature Conservation Act planned for 2003

The new act will give improved possibilities for regulation and mitigation of various activities e.g. establishing hunting free areas and periods.

Public debate of the Greenland harvest levels

The book "A farewell to Greenland's wildlife" challenges the management of living resources in Greenland, especially seabirds and marine mammals, and has spurred a heated debate. The book, which calls for reduced harvest levels, will be available in English and Greenlandic in 2002.

Canada

Seabird initiatives in 2001

In Canada, a variety of conservation initiatives and supporting documents are being launched as the North American Bird Conservation Initiative (NABCI) evolves. The direct document that will outline seabird conservation in North America, the North American Waterbird Conservation Plan in is final drafts (www.nawcp.org). The Canadian implementation of that plan, *Wings over Water*, is currently in intermediate draft stages. The various Canadian regional plans are in various states of drafting.

The Canadian Technical Committee to deliver these waterbird plans are based on the old CWS Seabird Technical Ctee and has been split into two groups, seabirds (T. Gaston, chair) and waterbirds (C. Weseloh, chair).

Specific to CAFF and CBIRD activities the Canadian Murre conservation plan is complete (Chardine and Elliot). Additionally, a document describing the status of Razorbills in North America *Status of Razorbills in eastern North America* (Chapdelaine, Diamond, Elliot and Robertson) has been completed and has been published as a CWS Occasional Paper.

There has been a variety of activities related to the Newfoundland and Labrador murre hunt. Following legalization of murre hunting in Newfoundland and Labrador with Parksville Protocol, CWS implemented legal requirement for all murre hunters to purchase a Migratory Game Bird Hunting Permit in 2001/2002 hunting season. Compliance with this new regulation to purchase a permit has been quite good. CWS needs to developing techniques to implement long-term operational survey of murre harvest, as part of existing National Harvest Survey and Species Composition Survey. We hope to have a survey in place in the 2002-2003 season. Still need technique development in area of parts identification (for murre species, sex and age). Memorial University of Newfoundland will likely be involved in this project.
Population modelling suggests that harvest, combined with oil mortality is marginally sustainable in short-term. In other words, there is not much of a mortality buffer for TBMU wintering in Newfoundland and Labrador. We're planning to investigate impact of hunt on Common Murres, as they have been largely ignored in past. As the murre harvest and oiling issues are largely handled by the Atlantic region of CWS, while colony monitoring falls to Prairie-Northern region and Headquarters, CWS is hoping to assemble an internal murre working group, to provide national coordination on murre related issues.

US - Alaska

Seabird initiatives in 2001

During 2001 the U.S. has been actively pursuing several significant seabird or migratory bird initiatives. In January 2001, the President signed a landmark Executive Order concerning the Responsibilities of Federal Agencies to Protect Migratory Birds. Basically, the Order directs Federal Agencies taking actions having or likely to have a negative impact on migratory birds to work with the U.S. Fish and Wildlife Service (USFWS) to take actions to avoid or reduce the impacts of other activities and to conserve migratory birds. The Order is designed to assist Federal agencies to comply with the Migratory Bird Treaty Act and to assist the U.S. in implementing its four bilateral bird treaties (Canada, Japan, Mexico, and Russia).

In February 2001 the U.S. through its Interagency Seabird Working Group (ISWG) completed its National Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries, and is now beginning to implement priority action items. The ISWG has been expanded to include the participation of regional fisheries management councils throughout the U.S. The U.S. is presently engaged in assessing seabird bycatch nationwide. In 2002, regulations that were implemented in 1997 and 1998 concerning seabird bycatch in Alaska revised in 2002 to implement more effective mitigation measures to reduce seabird bycatch. This process followed the recently completed 2-year Alaska study of seabird bycatch mitigation devices and measures. In addition, the USFWS in Alaska has received a substantial amount of funding in 2001 and 2001 to initiate seabird bycatch studies; increase education and community outreach efforts concerning this issue, and provide streamer lines, and effective mitigation measure to reduce seabird bycatch, to commercial fisheries. The funds are specifically directed at helping fishers reduce seabird bycatch and in assessing the impacts to seabird populations like the endangered Short-tailed Albatross.

As a result of CAFF's initiative concerning the conservation of Arctic breeding Migratory birds outside the Arctic the USFWS developed a proposal in 2001 concerning the international conservation of shorebirds in the Central Pacific (Oceania) Flyway. Consistent with CAFF's concern the protection of Arctic breeding birds when they leave the Arctic to winter the U.S. proposal addresses among others, several species of shorebirds that primarily breed in the Arctic Alaska and migrate through the little-known Central Pacific Flyway that extends south to the South Pacific Island nations in the Southern Hemisphere. Currently there are no mechanisms to coordinate concerns for the shored bird populations. In the same context, the USFWS is continuing its reinvigoration of the U.S.-Japan Migratory Bird Treaty in 2002, will be participating in a Japanese Seabird Symposium in 2002, and became a member of the Asia-Pacific Migratory Waterbird Conservation Committee in 2001 including its Working Groups on shorebirds and anatidae.

The USFWS and the National Audubon Society in Alaska will be hosting a workshop in 2002 focusing on developing Important Bird Areas (IBA) in the Bering Sea. The workshop will also address conservation issues and developing bird monitoring programs for the IBA's. The U.S. is continuing to develop a North American Waterbird Conservation Plan and the Alaska region will

be completing its companion plan priority seabirds, habitats, conservation issues, and action items will be documented in the Alaska plan.

The Alaska Seabird Working Group which was established several years ago and meets annually continues to be an effective tool to coordinate the diverse seabird agenda in Alaska, and it helps implement CAFF's seabird work plan items as well. Lastly, the Short-tailed Albatross was declared "endangered" in 2001 and the U.S. has since formed an international (U.S.-Japan) Recovery Team to promote that bird's conservation.

Russia

Seabird initiatives in the Russian Far East in 2001

This summary contains those seabird projects that have occurred in the Russian Far East in 1999-2001 (since A. Kondratyev departure). Seabird studies in the RFE are mainly carried out by two institutes of the Russian Academy of Science - Kamchatka Institute of Ecology and Nature Management, Petropavlovsk-Kamchatsky (KIENM) and Institute of Biological Problems of the North, Magadan (IBPN).

Monitoring seabird populations

The study is continued on field station on Talan Island, Northern Sea of Okhotsk established by A. Kondratyev in 1987. In 1999-2000 specialists from IBPN recensused seabirds on the Commander Islands and Shelikan Island.

Cadastre of seabird colonies of the Kurile Islands

KIENM surveyed seabirds at the more than 200 colonies on the Kurile Islands in 2000-2001. At least 2.6 million seabirds of 21 species bred on the Kurile Islands in 2000. The data were included in the Beringian Seabird Catalog Database.

Important Birds Areas

KIENM and IBPN completed a list of the Important Birds Areas on the northern Russian Far East under the projects IBA-Asia and IBA's of the Bering Sea.

Migration of seabirds

KIENM carried out observation of spring migration of waterfowl and seabirds on Khalaktyrskiy Beach, southeast Kamchatka in 2000.

Flora and vegetation at the seabird colonies of the Commander Islands

The detailed investigations of vegetation cover at the seabird colonies were made by IBPN on the Commander Islands in 1999-2000.

Publishing programme
Most of the results were published in the KIENM annual scientific report "The Biology and Conservation of the Birds of Kamchatka" (Issues 1-3, 1999-2001). "Seabirds of the Russian Far East" was published in 2000 under support of the Canadian Wildlife Service.

Finland

Seabird initiatives in 2001
Finland is the only country in the European Union that still has a spring hunt for drake seaducks. No novelties occurred in the national legislation apart from the Åland Islands where quotas were set lower this year. Spring hunt is an increasingly big issue, but is claimed disproportional in relation to its effects as a population regulating factor. An experimental study on the effects of male removal on Eider female fecundity was completed and the results were submitted for the parties involved.

Sweden No report.

Norway

Seabird initiatives in 2001
A new Environmental Act for Svalbard is presently at public hearing. If implemented, it will integrate all existing legislation on nature conservation and protection into one act. A revision of the hunting regulation for Svalbard is currently undertaken. Hunting will be prohibited for Northern fulmar, Glaucous gull and Black guillemot. Hunting will still be allowed for the Thick-billed murre, but the current numbers of birds shot annually are very low (1-100 birds). The new regulations will be put into force in 2002.

No new licenses for exploratory oil drilling outside Nordland County were awarded in the 17th license round, partly due to pressure from NGOs based on the vulnerability of threatened populations of common murres. An assessment of the need to protect marine areas in the Svalbard area (incl. the north-western part of the Barents Sea) is currently undertaken. The assessment will be published in spring 2002.

As a result of new oil and gas fields being developed in the southern Barents Sea there is a great need for extending the monitoring of seabirds in the Barents Sea region, especially with respect to other population parameters than breeding numbers (e.g. adult survival rates, reproductive success and diets across a selection of species with different feeding ecology). An initiative has been taken to establish a joint government/oil industry research and monitoring program called Seabird Population Management and Petroleum Operations (SEAPOP), but the program has not yet been put into force due to lack of funding. A 3-year research project on climate effects on Atlantic puffins was started in 2001 and collaborates with British researchers.

Status of Murre Recovery Databases (North Atlantic).
Both databases (Common Murre and Thick-billed Murre) are completed. The number of Thick-

billed Murre and Common Murre recoveries are 4968 and 12749, respectively. The databases contain recovery information only and are updated until 1999. Some of the data from Viddar Bakken's doctor thesis will be used, but not all information will be presented in these publications.

To show the value of the databases CBIRD agreed on to explore the possibility to prepare a North Atlantic Murre Recovery Atlas. A small working group was established (Grant Gilchrist, Aevar Petersen, Hallvard Strøm and Vidar Bakken). The group will discuss the progress of the project and the content of the atlas.

Additional data that must be included are banding data from all the countries. The working group will decide upon the data resolution needed of the banding data.

IV. Circumpolar Seabird Work Plan

In accordance with the CAFF Work Plan, 2000-2002 and additional assignments developed during CAFF National Representatives' meetings the CBIRD primarily focused on six priority action items. Progress on those and other activities of CBIRD are reviewed below. Future recommended action items are highlighted in Chapter four.

A. Action Item 1: Conservation of Migratory Birds Outside the Arctic

CAFF Annual Work Plan 2000-2002, Action Item 2.9

In 1998, CAFF Technical Report No. 4 was published. That report, "Global Overview of the Conservation of Migratory Arctic Breeding Birds Outside the Arctic", contained 15 major recommendations. The CAFF National Representatives had requested that CBIRD review and prioritize the 15 recommendations contained in Technical Report No. 4 and develop mechanisms and processes to improve the protection of migratory birds both within and outside the Arctic. At CBIRD VII (2000), the group did not have time to develop priorities for the complex set of recommendations, and recommended that a specific workshop be conducted to develop priorities.

The workshop on "Conservation of Migratory Arctic Birds" Technical Report No. 8 was conducted in Sognli, Norway on 10-11 September 2000. It was organized by the CAFF Secretariat and Netherlands Ministry of Agriculture, Nature Management and Fisheries. The participants reviewed the original 15 recommendations and discussed gaps in the protection of Arctic birds outside the Arctic and identified opportunities to improve the implementation of existing international mechanisms agreements and need for new regional agreements. The participants developed six major recommendations as listed below.

- CAFF should prepare a report that identifies those migratory birds which nest primarily in the Arctic and rely on habitats elsewhere in the world at other times of the year, assesses their current population status and trends, identifies those populations that are of special conservation concern, identifies important migration, staging and wintering areas beyond the

Circumpolar region, particularly those that lack adequate protection and identifies instruments to improve the effectiveness of conservation action in regard to these priority areas and species.

- CAFF should prepare a report that assesses the full range of socioeconomic values of migratory Arctic birds throughout their breeding, staging and wintering areas.
- CAFF countries should make national and international funding and development agencies aware of the important opportunity to support the conservation of these priority Arctic migratory birds and their habitats, through the design of their development programs that influence land-use.
- CAFF countries should make full use of international instruments and national legislation to effectively protect and conserve Arctic migratory birds that use marine habitats.
- With respect to the urgent situation for globally threatened migratory Arctic nesting bird species, CAFF should promote and, when possible, coordinate research and recovery plans among range states.
- CAFF countries should increase efforts to define and assess the impact of harvest pressures on migratory Arctic birds and in particular in relation to threatened species, to contribute to future sustainable management of the populations.

The matrix of the 21 recommendations/action items and the status of their implementation reveal that of the total 147 possible implementing actions, 23 actions were not applicable to one or more of the countries leaving 124 possible actions to be implemented. Of the possible 124 recommendations/actions, countries were implementing 72 actions, about 50 percent. Four recommendations represented about 50 percent of the 72 implemented actions and were the following: promoting the Ramsar Convention (7 countries), improving conservation of birds at the population level (7 countries), improving the assessment of bird harvests and sustainable management of populations (7 countries), improving the use of existing international instruments (6 countries) and improving the coordination of research recovery plans of threatened species among range states (6 countries). Only one recommendation was universally not being implemented and that dealt with promoting the socioeconomic values of migratory birds throughout their range.

The six major recommendations from the Sognli workshop were intensively reviewed during CBIRD VIII. Although the group believed all six recommendations were noteworthy, the first recommendation was the highest priority as it formed the basis to move on to the other five activities. Therefore, it was suggested that each country develop a report containing a prioritized list of birds that primarily nest in the Arctic and primarily winter outside the Arctic, and this list will be called “Birds of Arctic Conservation Concern” (BACC). The status and trends, migration corridor (flyway) and wintering areas will be documented. Improvements to, or gaps in, international mechanisms will also be documented. The country reports will form the basis for a CAFF Technical Report to be published in 2003. Draft country reports are due October 2002 (CBIRD IX).

Table 1. CAFF recommendations and status of countries implementation regarding conservation of migratory Arctic breeding birds outside the Arctic.

CAFF TECHNICAL REPORT NO. 4 RECOMMENDATIONS	Arctic Country							
	Iceland	Greenland	Canada	US Alaska	Russia	Finland	Sweden	Norway
Improve involvement of Arctic Countries in existing agreements and promote better collaboration between instruments	1	2	2	4	4	4		2
Improve participation of Arctic countries in Bonn Convention activities	1	NA	NA	1	4	2		2
Improve participation in the Convention on Biological Diversity	2	2	2	4	4	4		2
Improve support of the Asia-Pacific Migratory Waterbird Conservation Strategy (2001-2005)	NA	NA	4	2	2	4		NA
Promote Ramsar Convention and designation of additional sites	2	2	2	2	2	2		2
Improve participation in the Bern Convention in Eastern Europe	NA	NA	NA	NA	4	4		2
Improve participation in agreements of the former USSR by the Commonwealth of Independent States	1	NA	2	2	2	2		NA
Improve collaboration of bilateral agreements for migratory birds in the Asia-Pacific region and possible amalgamation into multilateral agreements for the East Asia Australasia Flyway.	NA	NA	1	1	2	4		NA
Develop multilateral agreements for migratory raptors in the Americas and Eurasia/Africa	1	1	2	1	4	2		4
Improve conservation of MBs at the population level.	2	2	2	2	2	2		2
Improve research on MBs that are inadequately protected in their non-breeding ranges, especially in tropical forests.	1	2	2	2	2	1		2
Improve research on seabirds wintering along the pack ice edge.	1	2	1	1	4	NA		2
Assess impacts of climate change on Arctic breeding birds.	1	1	2	2	4	2		2
Assess impacts of Arctic breeding MBS outside the Arctic.	2	2	2	2	4	4		2
Establish a MB expert group within CAFF	NA	NA	NA	NA	NA	NA	NA	NA

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CAFF TECHNICAL REPORT NO. 8 RECOMMENDATIONS	Iceland	Greenland	Canada	US Alaska	Russia	Finland	Sweden	Norway
Complete a report identifying those MB which nest primarily in the Arctic and migrate primarily outside the Arctic, assessing status a trends of populations of special concern, identifying migration, staging, a wintering habitats of Arctic breeding MB, and identifying instruments to improve MB conservation in and outside the Arctic.	1	1	1	2	1	4		1
Complete a report assessing the socio-economic values of MB throughout their range.	1	1	1	1	1	4		1
Improve awareness of international funding agencies of the opportunities and need to support the conservation of Arctic MB and their habitats.	1	1	2	4	2	2		4
Improve the use of existing international instruments and domestic legislation to conserve and protect MB which use marine habitats.	2	2	2	2	1	2		2
Improve the coordination and support of research and recovery plans of threatened species among all range states.	1	2	2	2	2	2		2
Improve the assessment of harvests of Arctic MB and the sustainable management of populations.	2	2	2	2	2	2		2
NA - not applicable, 1 - No Action, 2 - Ongoing/In Progress, 3 – Completed, 4 - Unknown								

B. Action Item 2: Seabird Bycatch in Commercial Fisheries in the Arctic

CAFF Annual Work Plan 2000-2002, Action Item 2.7

Iceland

At present Iceland is not planning to do a status report. The longline fishery catches mostly northern fulmars. The nearshore lumpsucker gillnet fishery catches some common eiders, black-legged kittiwakes, and black guillemots. The offshore cod gillnet fishery catches common murres. The numbers of birds caught has not been studied and there is no observer program.

Greenland

There is a very small longline fishery in Greenland and they catch few seabirds. There is a gillnet fishery on lumpsuckers which catches some common and king eiders. There is no observer program.

Canada

Canada did not submit a NPOA to COFI-FAO in response to The International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries, but rather submitted an 'approach to plan' document. Canadian Wildlife Service is still finding it difficult to engage Department of Fisheries and Oceans (DFO) on seabird bycatch issues. The situation is better on west coast with little movement nationally and on east coast**.**

Workshops to train DFO fisheries observers have been organized in Newfoundland, Scotian Shelf and the west coast. Canada needs to develop better training material and needs more time to reach observers. Data extraction from DFO is also difficult because it is treated as a low priority.

Incidental evidence is mounting that a substantial mortality of common murres occurs in Sentinel Cod gillnet fishery on northeast coast of Newfoundland (thousands of murres). Timing and location of this bycatch is highly specific, to capelin spawning off the northeast coast of Newfoundland.

United States

In 1997 the US implemented seabird bycatch regulations for Alaskan longline fisheries and in 1998 the same regulations were implemented for Alaskan halibut fisheries. For the last two years researchers have conducted a study on bycatch mitigation devices in the Gulf of Alaska and Bering Sea regions. The results indicated that paired streamer lines are highly effective at reducing bycatch. In the last two years there has been a million dollar appropriation for bycatch mitigation. This funded work to create a North Pacific Pelagic Seabird Database, a seabird mitigation outreach video to educate fishers about seabird bycatch mitigation devices, a short-tailed albatross and a fulmar telemetry project, and several other projects.

Russia

There is new study that has been started titled, “Incidental mortality of seabirds in the driftnet salmon fishery by Japanese vessels in the Russian Exclusive Economic Zone”. The project was initiated by the KIENM with cooperation of Kamchatrybvod (Kamchatka Department for Protection of Fish). The estimate of total seabird mortality from the beginning of the driftnet fishery in Russian waters at the end of 1980 is about two million individuals. The fishery may have a greater influence on population of Thick-billed Murres in the western Bering Sea. On the basis of the study the question of fishery regulation is being raised to reduce the seabird mortality.

Finland

Bycatch of marine birds is not considered a conservation issue in Finland. Yet, an observer program is underway to collect data on possible bycatches of various fisheries.

Finnish marine fishing fleet comprises 210 trawlers and 76 passive gear vessels. Most are small; less than 12- meters long vessels. Vessels over 28-metres long number only 10. Vessels for small-scale coastal fishery number a further 3500; they are mainly small outboard-engine boats. Total fleet comprised 3762 vessels in 2000.

Main part of the Finnish professional marine fishery occurs within the Finnish sea territory, with only half a dozen vessels taking cod and salmon in southern Baltic, notably around Bornholm. The total catch of Finnish marine fishery was 110 million kilograms in 2000, of which 90% was Herring and Sprat, taken predominantly (97%) with bottom trawl and midwater trawl. Trawling fishery is not considered a threat to seabirds.

Of the remaining fishery forms, salmon fishery with longline could pose a threat, but demersal longlining has been declining all through the 90s and is now ceased apart from a few vessels fishing outside the Finnish territory. Their salmon catch in 2000 (south of Gotland) was 28000 kg, a net catch 230 kg/l00 nets/day, and number of fishing days 79. They might, for their part, be contributing factor in the Guillemot bycatches established in southern Baltic; albeit given the low fishing effort their share may be comparatively small.

The number of salmon trapnets in Finland was 488 in 2000, and they took 122 000 kg salmon. Salmon drift- netting is probably the main bycatching factor, although no massive die-offs have ever been reported in Finland, which might be an outcome of the scattered occurrence of bird colonies in Finnish coasts and the comparatively restricted period that birds spend within the Finnish sea territories. Dense wintering concentrations occur in southern Baltic, where the Bay of Gdansk is known to be a problem area for alcids. Finnish salmon drift-net fishery is interrupted for most of the winter as waters get ice-covered.

An observer-based survey is underway aiming to collect statistics on all catches on fishing vessels. The results of this 4-year venture will be prepared in due course.

Professional marine fishery statistics in Finland are based on catch notifications submitted by fishermen at set intervals. The fishing data of vessels at least l0-metres long are entered in the EU fishing logbook. The fishing data of vessels under 10-metres long are entered in a monthly coastal fishery report or in a salmon fishery form for coastal fishermen. The data entered include the dates of fishing by fishing trip, the fishing area, the size of the catch by species, the type and number of gears used in fishing, and the number of fishing days. All logbooks and most of the other catch notification forms are checked at the Finnish Game and Fisheries Research Institute before the data are processed.

Sweden

No report.

Norway

Norway produced a report titled "International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries" which follows. Norway has used bird scaring (streamer) lines that have worked very well to reduce seabird bycatch. The most common bird caught without the streamer lines was the northern fulmar. There have been no studies on the lumpfish or cod gillnet fisheries. Norway has no observer program and no national plan of action.

Report from Norway:

FAO -International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries

Svein LtJkkeborg, Institute of Marine Research, Norway and Morten Ekker, Directorate for Nature Management, Norway

15 February 2001

Introduction

The international work aimed at reducing incidental catch of seabirds in longline fisheries worldwide was initiated by FAG through the organization of a Technical Working Group that met in Tokyo 25-27 March 1998. Norway has participated in this work by attending the working group meeting and the successive consultations and meetings. National activities related to this topic comprise a two-year project to test different mitigation measure and a questionnaire distributed among longline fishermen to seek more information on the seabird bycatch problem in the Norwegian fishery. This report gives a summary of the results of these activities and an overview of the status of the northern fulmar *(Fulmarus glacialis)*

population in the northeast Atlantic.

The Norwegian longline fishery

Longlining has long tradition in Norway and large proportions (15 -90%) of several of the most important groundfish resources in Norwegian waters are taken by longlines (Bjordal and Lekkeborg 1996). The longline vessels used in this fishery vary greatly in size (8 -50 m) and operate both coastal and high-sea fishing grounds. About 800 vessels make up -the Norwegian longline fleet. In 1996, there were 79 longline vessels above 25 m, of which 61 were equipped with auto line systems (Brothers et al. 1999). These larger vessels landed 60% of the total catch of 144000 tons. The longline vessels, depending on size and number of crew members, set from a few hundreds up to 35 000 hooks each day at sea. The auto liners were estimated to set a total of 476 million hooks in 1996.

Testing the effectiveness of various mitigation measures

A comprehensive work has been carried out by the Institute of Marine Research (IMR) to study the potential of reducing incidental catches of seabirds in the Norwegian longline fishery. Fishing experiments have been conducted on board comi1lerciallongline vessels to investigate the effectiveness of various mitigation measures. These were a bird-scaring line to deter birds from the area where the baited hooks emerge in the water, an underwater setting funnel to guide the lines down to a certain depth and a line shooter to set lines slack to - increase the sink speed. In the course of these experiments a total of 650.000 hooks have been set while recording seabird catches and catch rates of target fish species.

These fishing experiments showed that the great majority of seabirds caught were northern fulmars. Incidental catches of seabirds were reduced by all three mitigation measures tested, most pronounced by the bird-scaring line that had an efficiency of 98 -100%. In the course of the fishing experiments, 185 000 hooks were set using the bird-scaring line and only two birds were caught compared with 205 birds caught by a similar number of hooks set when no mitigation measure was used. These experiments also indicated that higher catch rates of target fish species may be obtained when using mitigation measures. The work conducted by IMR has demonstrated that bird-scaring line, underwater setting and line shooter are all capable of reducing incidental catch of seabirds in the northeast Atlantic longline fishery. On the basis of present knowledge, it can be concluded that the bird-scaring line, which proved to almost eliminate seabird catches, is the most feasible and effective mitigation measure in this fishery.

The solution of the seabird bycatch problem would make longline fishing in this region a wholly environment friendly fishing method, and an important part of this work is *to* inform fishermen about the results that have been achieved. A pamphlet that summarizes the work of Ir\1R has been distributed among all Norwegian longline vessels, and it should be in the interest of the fishermen to use mitigation measures as this work indicated the potential of obtaining increased catches of target fish species.

Inquiry among longline fishermen.

A questionnaire has been sent to all Norwegian fishing vessels that use longlines as their main fishing method (i.e. 303 vessels) to seek more information about the interaction between longline fishing and seabirds in the northeast Atlantic. The owners of these vessels were asked to provide information about when and where seabird interaction causes problems (i.e. areas and seasons), the extent of the problem in terms of bait loss and numbers of bird caught, species most vulnerable, and whether mitigation measures are commonly employed.

This investigation showed that interaction between seabirds and longlining occurs in all areas where the Norwegian fleet is operating, i.e. from the North Sea to the Barents Sea. It confirmed that northern fulmar is the dominant species caught whereas kittiwake and seagulls may occasionally be taken. Other species are seldom caught. Of the 28 vessels that replied to the inquiry, 25 are using bird-scaring lines, one has the setting funnel, one restricts setting to night time and only one is not using any mitigation measure.

Present status of the fulmar populations in the northeast Atlantic.

The northern fulmar is linked to northern and cold seas. The breeding range includes the islands of northern Canada, Greenland, Iceland, Svalbard and Novaya Zemlya, and the coast of Norway, Britain and Britanny. The fulmar typically breeds in colonies, in or close to bird cliffs and seabird colonies. The fulmar has shown a noticeable spreading and population increase. In Norway (mainland) the first breeding record is from Runde in 1920. The present population estimate is approximately 7000 breeding pairs (24 colonies at Norwegian - mainland), probably a result of a massive emigration from other colonies in the low-Arctic and boreal parts of the Atlantic. In the Barents Sea region, most of the fulmars breed in Svalbard were about 125 colonies have been registered and the total population is estimated at 100 000 -1 000 000 pairs. The estimate for Bj0m0ya is 50 000 -60 000 breeding pairs.

The Norwegian seabird monitoring includes only a few fulmar-breeding colonies, and the data should be interpreted carefully. However, the data document a substantial increase since 1920 and that the colonies in southern parts of Norway

most probably are still increasing. In northern colonies at the mainland and at Svalbard, the numbers have been variable and there are no obvious trends (e.g. Lorentsen 2000).

The seabird monitoring in Britain and Ireland is quite comprehensive and reveal that the overall numbers of fulmars breeding at monitored colonies decreased across most regions between 1998 and 1999. In Shetland, southeast Scotland and Wales, this decline was in contrast to the upward population trends recorded between 1986 and 1997 (Thompson et al. 1999; Upton et al. 2000).

A new report on the status of marine birds breeding in the Barents Sea region discusses the threats to the fulmar in this region {Bakken and Gavrilo 2000). Organochlorines, plastics (marine litter), long1ine bycatch and oil spills are listed as relevant threats. However, the northern fulmar in the northeast Atlantic is not thought to be status-threatened given that the total breeding population is about 2 -4 million pairs.

Conclusions

Northern fulmars comprise the great majority of seabirds caught in the Norwegian longline fishery. This species has undergone massive increases in range and number in the northeast Atlantic over the past centuries. The inquiry among longline fishermen indicated that the majority of the Norwegian longline vessels use bird-scaring lines, and the comprehensive fishing experiments carried out demonstrated that this mitigation measure is effective. Thus it is reasonable to conclude that longline fishing activity has insignificant negative effects on seabird populations in the northeast Atlantic, and further measures to reduce seabird bycatches in this region are therefore not regarded to be necessary. Few fishermen (about 10%), however, responded to the questionnaire, and a new inquiry focusing on whether mitigation measures are employed might be considered.

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Table 2. Circumpolar Seabird Expert Group Seabird Bycatch Programs.

Programs/Issues	**Country**							
	Iceland	Green-land	Canada	U.S. Alaska	Russia	Finland	Sweden	Norway
Longline Seabird Bycatch Issue	No	No	Yes	Yes	Yes	No	?	No
Gillnet Seabird Bycatch Issue	Yes	Yes	Yes	Yes	Yes	?	?	Yes
Completed NPOA	No	No	No	Yes	No	No	?	No
Longline Fishery Observer Program	No	No	Yes	Yes	No	Yes	?	No
Gillnet Fishery Observer Program	No	No	No	No	No	No	?	No
Seabird Bycatch Regulations	No	No	No	Yes	No	No	?	No
Seabird Bycatch Mitigation Studies	No	Yes[2]	No	Yes[4]	No	Yes[2]	?	Yes[3]
Incidental Take Illegal	No	Yes[5]	Yes[5]	Yes[56]	Yes	No	?	No

[1] Observer Program collects Seabirds bycatch information
[2] Gillnet fisheries
[3] Longline fisheries
[4] Gillnet and Longline fisheries
[5] Illegal Seabird take not enforced
[6] Incidental take legal beyond 3 nautical miles

Table 3. Implementation of Recommendations to Reduce Bycatch in Fisheries. Management Issue: CAFF Technical Report No. 1 and No. 7

Education and Outreach

Recommendations	Arctic Country Implementation							
	Iceland	Greenland	Canada	US Alaska	Russia	Finland	Sweden	Norway
Improve cooperation between fishing industry and fishery and waterbird trust agencies to reduce seabird bycatch	1	1	1	2	2	1		2
! Improve education of seabird and fishery managers and researcher in fishery gear and techniques, fisheries, seabird conservation and socioeconomic values of fish and seabirds to society.	1	1	1	2	1	NA		1
! Develop and distribute seabird identification guides, fact sheets, posters and seabird bycatch deterrent device videos to fishers	1	1	2	2	3	NA		1
! Train observers in the political, socioeconomic and biological aspects of seabird bycatch “to improve their” ambassador role with vessel captains and crew.	1	1	2	1	2	2		NA
! Improve communications among bycatch experts in the Arctic.	2	2	1	2	2	2		2
! Improve the availability of seabird bycatch information.	2	2	1	2	3	2		1
! Create a seabird bycatch “focus group” to improve communication and coordination of the by-catch issue with fishers, agencies and NGOs.	1	1	2	2	1	NA		1
! Develop a website and a list server to distribute bycatch information and encourage discussion of the issue.	1	1	1	1	2	1		1
! Improve participation of Arctic countries in FAOs IPOA to Reduce Seabird Bycatch in Longline Fisheries and adopt mitigation measures as necessary.	1	1	1	2	1	NA		1

Monitoring and Assessment								
! Improve assessment of the geographic extent, timing, and magnitude of seabird bycatch.	2	2	1	2	3	2		2
! Assess impacts to secure populations of seabirds involved as bycatch.	2	2	1	2	1	3		2
! Establish new or improve existing conservation programs to assess the geographic extent and magnitude of seabird bycatch in longline and next fisheries.	1	2	1	2	1	2		1
! Improve information on seabird distribution and abundance in fishery areas to avoid concentrations and determine impacts to source populations.	1	2	1	2	1	1		1
! Salvage bycatch birds to determine sex, age, fat condition/ diets.	1	2	1	2	3	4		1
! Collect seabird bycatch information by observers, logbooks, videos, dockside interviews, questionnaires and random boarding of boats.	2	2	2	2	3	2		2
! Evaluate and standardize bycatch observer data collection and reporting protocols.	1	1	2	2	3	2		1
Mitigation Measures, Methods and Devices								
! Complete a worldwide review of a net seabird bycatch and mitigation in net fisheries	1	NA	1	1	1	1		1
! Include bycatch mortality in overall allocation of waterbird harvests.	1	2	1	1	1	1		1
! Improve research and development of fishing gear and deterrent devices to reduce bycatch.	1	1	1	2	1	1		2
! Define limits of seabird bycatch and intervene if limits are exceeded.	1	1	1	1	1	1		1
! Develop strategies to reduce seabird bycatch in net fisheries.	1	1	1	1	1	1		1
! Avoid areas of seabird concentrations using time and area closures.	1	3	1	1	1	NA		2

! Use modified upper gillnet panels, audio alarms, alternative mesh colors, modified corklines, and fishing deeper in the water column to reduce waterbird bycatch.	1	1	1	1	1	1		2
! Determine the underwater behavior of selected seabirds in relation to fishing operations and gear types.	1	1	1	1	1	1		1
! Routinely review the effectiveness bycatch of mitigation devices and measures and distribute the information widely.	1	1	1	2	1	1		1
! Use a combination of mitigation methods to reduce bycatch.	1	1	1	2	1	1		2
Implementation Process								
! Use regulations, tax incentives, extra fishing days, access to additional fishing areas, license for reductions, and preferred access to selected fisheries and "green ship" program for vessels using approved mitigation measures.	1	1	1	1	1	1		1
! Create a fishing grounds advisory service to alert fishers to seabird concentrations.	1	1	1	1	1	NA		1
! Improve the distribution of information on funding opportunities for seabird studies, by-catch mitigation studies and outreach activities.	1	1	1	1	1	1		1
! Arctic Countries should participate in FAOs Seabird Bycatch Plan of Action	1	1	1	2	1	4		2
! Increased emphasis should be directed to reducing seabird bycatch in net fisheries	1	2	1	2	1	2		2

NA - Not Applicable
1 - No Action in 2002
2 - Initiated in 2002
3 - Ongoing/In Progress
4 - Completed/Being Implemented

C. Action Item 3: Seabird Harvest in the Arctic

CAFF Annual Work Plan 2000-2002, Action Item 2.8

Iceland

About 250,000 tufted puffins and 70,000 common murres are harvested annually during the breeding and non-breeding seasons. There is no information on the amount of eggs taken, but may be 100,000 to 200,000 annually. Great-blackbacked gulls impact other seabirds through predation, about 40,000 are killed annually, but they are now redlisted.

Greenland

New hunting regulations came into force January 1. They are a significant improvement of seabird conservation in Greenland. Main improvements include: Murre hunting stops 15 February (1 to 3.5 month earlier), Eider hunting stops 15 February (3.5 month earlier) which means no spring hunting, and Eider hunting starts 16 October (2 month later) which means no hunting during wing moult. A bag limit of 5 Murres, 5 Eiders and 5 King Eiders per day has been introduced for leisure hunters. No egging is allowed for Arctic Tern, and there is no hunting season for 5 more species: Red-breasted Merganser, Red-throated Loon and Jaegers. From January 2003 lead shots will be forbidden.

Canada

Canadian Status Report of Harvest issues (murres only)

Following legalization of murre hunting in Newfoundland and Labrador with Parksville Protocol, CWS implemented legal requirement for all murre hunters to purchase a Migratory Game Bird Hunting Permit in 2001/2002 hunting season

Developing techniques to implement long-term operational survey of murre harvest, as part of existing National Harvest Survey and Species Composition Survey. Hope to have survey in place in 2002-2003 season. Still need technique development in area of parts identification (for murre species, sex and age). Memorial University of Newfoundland will be a partner in this technique development.

T. Gaston noted that more adults than usual taken in 2000-2001 hunt, might suggest that bumper years for TBMU in late 1990s may be ending. Overall, however, Thick-billed Murre breeding populations in Canada appear to be either stable, or modestly increasing.

Population modelling suggests that harvest, combined with oil mortality is marginally sustainable in the short-term.

Planning to investigate impact of hunt on Common Murres, as they have been largely ignored in past.

US - Alaska

Seabirds are harvested for subsistence use in Alaska. In 1996, ~36,000 seabirds (other than eiders) were reported harvested for subsistence; the two most prevalent species were crested auklet (~12,000) and common murre (~10,000). The ten year average of eiders harvested in Alaska is: common eider ~2,000, king eider ~5,500, spectacled eider ~200, and Steller's eider ~ 50.

The Alaska Migratory Bird Co-management Council has recently been established. The Council is made up of state, federal and native people and is designed to develop recommendations related to spring/summer subsistence harvest of migratory birds in Alaska. Recommendations include, among other things, seasons and bag limits, methods and means of take, law enforcement policies, population monitoring, education programs, research and use of traditional knowledge, and habitat protection. Recommendations for regulations governing harvest of game birds and non-game birds in 2003 have been adopted by the Co-management Council and will be forwarded to the U.S. Fish and Wildlife Service for action.

Russia

In 1999 about 2,000 glaucous-winged gull eggs were taken on Toporkov Island, the largest colony of the species on the Commander Islands. Due declining number of the colony the harvest was stopped in the next season. However 2,000 gull eggs were collected in 2001. Illegal seabird egg collecting is a common activity by inhabitants of nearby villages and especially by crews of visiting vessels in the northern Sea of Okhotsk. Human influence on some easily accessible colonies of common eiders has increased during recent years on the northern coast of the Koryak Highlands, Chukotka. However there is no detailed information on the harvest level. The ECORA project may provide funds to investigate harvest.

Sweden

No report.

Finland

Finland still has a spring hunting season for male seaducks and EU wants Finland to stop the spring hunt. There is no subsistence hunt of seabirds in Finland. Hunting is recreational shooting only, although spring shoot still retains considerable cultural importance for the residents on the Åland Islands (the current state of the spring shoot issue is given in the Eider Strategy report 2001).

Norway

In Norway there is little harvest of seabirds. Thick-billed murres are harvested at Svalbard.

D. Action Item 4: International Eider Conservation Strategy

CAFF Annual Work Plan 2000-2002, Action Item 2.6

1. Country Implementation of the International Eider Conservation Strategy

Implementation of the International Eider Conservation Strategy, Iceland

Aevar Petersen, Icelandic Institute of Natural History

Table 4. Implementation of the International Eider Conservation Strategy, Iceland 2001.

Action Items	Highest in history	Current	Initiatives
4.1. Consumptive Use			
4.1.1. Develop international harvest plans	0	0	
4.1.2. Establish appropriate harvest rules	0	0	
4.1.3. Obtain reliable harvest estimates	0	0	
4.1.4. Evaluate the opportunity for guided hunts	0	0	
4.1.5. Support egg and down collection programs	3	3	F
4.2. Non-consumptive Use			
4.2.6. Evaluate risks of human activities	1	1	
4.2.7. Encourage non-consumptive uses of eiders	3	3	
4.3. Commercial Activities			
4.3.8. Identify eider populations and habitats at risk from oil pollution	1	2	B
4.3.9. Reduce eider mortality caused by commercial fisheries activities	1	1	
4.4. Habitat Protection and Enhancement			
4.4.10. Prepare a summary of protected eider habitats	1	1	
4.4.11. Evaluate existing mechanisms for protecting eider habitat	1	1	
4.4.12. Protect additional eider habitat as needed	3	3	
4.4.13. Implement other needed protective measures	3	3	
4.5. Communication and Consultation			
4.5.14. Support other eider conservation initiatives	1	1	A, F
4.5.15. Ensure coordination with other bird cons. plans	1	1	
4.5.16. Enlist support of local residents and others interested in eiders	3	3	A, C
4.5.17. Solicit periodic evaluation of the Strategy by eider specialists	1	1	
4.5.18. Prepare periodic reports summarizing accomplishments in eider conservation	2	2	A
4.5.19. Ensure that eider conservation projects include an educational component	1	1	A
4.6. Research and Monitoring			
4.6.20. Develop comprehensive research agendas for each species	2	3	G
4.6.21. Estimate population size, productivity, survivorship, and movements	1	2	B, C, D, E
4.6.22. Study effects of contaminants in eiders	2	2	
4.6.23. Develop monitoring plans for eiders	1	3	B, C, G

1 = No current action but action required; 2 = In progress; 3 = Completed; 0 = No action required.

A general overview of the Icelandic Common Eider population, its status, protection, utilization, and future needs, was compiled in 1997 (Petersen 1997). At CBIRD 6 in Ottawa a matrix was formed, against which the Eider Conservation Strategy action items were

weighted. The matrix includes the relevance of the 23 action items for Iceland, whether actions have been completed or not, and if items are in progress. The matrix also included priority rankings for each of the items. The matrix is revised above as towards end of 2001.

Various research and other activities have been carried out relevant to the Eider Conservation Strategy since CBIRD 7. The major ones are summarized below, giving the action item number for which these are most relevant

Initiatives

A. ***Eider book***: A comprehensive book of Common Eider biology and Eider husbandry as an old tradition and an economic activity, was published in 2001 (Jonsson (ed.) 2001). It includes, among others, chapters which summarize the present knowledge of Eider biology and the research carried out in Iceland, especially during the last two decades. Subjects include population biology, food, diseases and parasites, contaminants (e.g. Petersen and Skirnisson 2001). One paper deals with the historical aspect of Common Eider legislative protection and research and management challenges (Petersen 2001). Much of the book is devoted to the traditional practice of Eiderdown collecting and general Eider husbandry questions. The text of the book is in Icelandic.

B. ***Eider colony Registry***: In year 2001, a database of Common Eider colonies in Iceland was completed. Altogether about 650 were registered, present and old ones (some of which have vanished). Although information on size of some of these colonies exists, for many the present situation is not registered. This information if mostly known locally but has not yet been compiled.

C. ***Monitoring eider colonies***: The colony registry provided a basis for selecting representative colonies, using different parameters for stratification, for future monitoring. About 60 were selected, covering the total breeding area, all colony sizes and local situations, i.e. mainland colonies and island ones.

D. ***Banding:*** Banding activities were continued in especially three colonies, aimed mainly at future survival analyses but also distribution of recoveries. In 2001, the first two recoveries from outside Iceland for Iceland-banded Common Eiders were reported from Greenland despite thousands of previously banded birds. Previously, one hand-raised duckling had been recovered from the Faeroes, but this may not have been a representative event for the wild population.

E. ***Mating system:*** Ralph Tiedemann and colleagues from Germany continued their studies on the Common Eider mating system in Iceland. The study is based on sampling blood from incubating females, their resulting brood, and as many males as possible. From this, paternity and maternity indices are developed.

F. ***Eider-down export:*** Eider-down, now about 3000 kilos per year, is mostly exported to Denmark, Germany, and Japan, and re-exported elsewhere. Icelandic and American authorities have been cooperating so that down could be exported to the United States. The present Endangered Species Act does not allow for the import of listed species or their products, although down was not looked upon as such a product.

G. ***National implementation Plan:*** A national plan for future work on Eider research and management questions, was completed in 2000-2001, and is being published. This identifies the actions needed and priority items for Eiders in Iceland. The plan

has still to be accepted by the Ministry for the Environment, although some action items have been worked upon, including a monitoring program.

Recent Publications

Jonsson, J. (ed.) 2001. [Eider and Eider husbandry in Iceland] Eider-Farmers Association, Mal og Mynd, Reykjavik. 528 pp. (in Icelandic).

Ketilsson, M. 2001. [On the Eider, a paper on Eiders and Eider husbandry since about 1790, with appendices by Bogi Benediktsson and Jon Ketilsson.] Pp. 359-369. In: Jonsson, J. (ed.) 2001. [Eider and Eider husbandry in Iceland] Eider-Farmers Association, Mal og Mynd, Reykjavik. 528 pp. First publication of this 200-year old manuscript, with introduction and comments by A. Petersen. (in Icelandic).

Petersen, A. 1997. Status and Conservation of Eiders: Iceland. Report to CAFF. 9 p.

Petersen, A. 2001. [Protection of the Eider population in Iceland and future visions.] Pp. 47-53 in Jonsson, J. (ed.) 2001. [Eider and Eider husbandry in Iceland] Eider-Farmers Association, Mal og Mynd, Reykjavik. 528 pp. (in Icelandic).

Petersen, A. and K. Skirnisson. 2001. [The life history of Eiders in Iceland] Pp. 13-17, 19-45 In

Implementation of the International Eider Conservation Strategy, Greenland

Flemming Ravn Merkel, Greenland Institute of Natural Resources
Thor Hjarsen, Department of Environment and Nature
Anders Mosbech, National Environmental Research Institute.

Table 5. Implementation of the International Eider Conservation Strategy, Greenland 2001.

Action Items	Highest in history	Current	Initiatives
4.1. Consumptive Use			
4.1.1. Develop international harvest plans	1	2	A
4.1.2. Establish appropriate harvest rules	2	3	B
4.1.3. Obtain reliable harvest estimates	2	2	C
4.1.4. Evaluate the opportunity for guided hunts	1	2	D
4.1.5. Support egg and down collection programs	1	1	
4.2. Non-consumptive Use			
4.2.6. Evaluate risks of human activities	2	2	E
4.2.7. Encourage non-consumptive uses of eiders	1	1	F
4.3. Commercial Activities			
4.3.8. Identify eider populations and habitats at risk from oil pollution	2	2	G,H,I,V,T
4.3.9. Reduce eider mortality caused by commercial fisheries activities	2	2	J
4.4. Habitat Protection and Enhancement			
4.4.10. Prepare a summary of protected eider habitats	2	2	K
4.4.11. Evaluate existing mechanisms for protecting eider habitat	2	2	K
4.4.12. Protect additional eider habitat as needed	2	2	
4.4.13. Implement other needed protective measures	2	2	
4.5. Communication and Consultation			
4.5.14. Support other eider conservation initiatives	1	1	
4.5.15. Ensure coordination with other bird cons. plans	0	0	
4.5.16. Enlist support of local residents and others interested in eiders	2	2	L, M, N
4.5.17. Solicit periodic evaluation of the Strategy by eider specialists	1	1	
4.5.18. Prepare periodic reports summarizing accomplishments in eider conservation	2	2	G, O, P
4.5.19. Ensure that eider conservation projects include an educational component	2	2	M, N, Q, R, W
4.6. Research and Monitoring			
4.6.20. Develop comprehensive research agendas for each species	1	2	G, N, O, P, S, T
4.6.21. Estimate population size, productivity, survivorship, and movements	2	2	E, U,
4.6.22. Study effects of contaminants in eiders	2	2	
4.6.23. Develop monitoring plans for eiders	1	2	N

1 = No current action but action required; 2 = In progress; 3 = Completed; 0 = No action required.

CAFF, Circumpolar Seabird Expert Group - Progress Report VIII

At the sixth meeting of the CAFF Circumpolar Seabird Expert Group in December 1999, in Ottawa, Canada, Greenland presented a status report concerning the implementation of the CAFF Circumpolar Eider Conservation Strategy and Action Plan. The report summarise actions already implemented and highlighted future priorities. This document presents the progress of implementation made from 2000 to 2001. Each of the 23 action items within the Circumpolar Eider Conservation Strategy and Action Plan is listed below. The right column (Initiatives) refers to new initiatives or previous activities continued this year. Characters within the right column refer to a short description of each initiative - listed below the table. For previous progress (1999 – 2000) see Merkel and Hjarsen.

Initiatives

A. Population dynamics of the Northern Common Eider in Canada and Greenland have been studied using computer simulations

B. A new national bird protection order has been completed. The new regulation will enforce major restrictions on hunting of eiders in west Greenland. The legislation is in force from January 2002.

C. Surveys of the Nuuk eider harvest were resumed (previously studied in 1995/96) in 1999/2000 and were continued in the past winter (2000/2001).

D. According to a new Home Rule order (2001), guided hunts are now allowed on open season bird species.

E. Frequency and effects of embedded shots in common and king eider ducks wintering in southwestern Greenland have been studied during the last two winters. Due to the fact that eider ducks are very popular game birds in Greenland, each year there is a take of app. 75,000 birds, this issue is of immediate importance. Preliminary information on the frequency of embedded shots on the Greenlandic side indicates that 30 % of adult common eider have embedded shots (Falk and Merkel in prep.). Preliminary studies from the Canadian Arctic show that 16-53% of the eider ducks have embedded shots. Frequency of embedded shots will be compared to hunting intensity and body condition at various collection sites around Nuuk. Impact from human activities will depend on whether eiders are philopatric to wintering sites at a local scale. This is being studied by satellite telemetry (S).

F. In Nuuk city arrangements from the local nature-guide and by the society of bird watchers continues.

G. Results from a 1999 aerial winter survey are now being published.

H. An “Environmental Oil Spill Sensitivity Atlas for the West Greenland Coastal Zone” has been completed. This atlas covers the shoreline and the offshore areas of West Greenland between 62º N and 68º N in the scale 1: 250 000. The maps show index values for coastal sensitivity and symbols for the elements of the classification: hunting and fishing areas, fish, birds, marine mammals and archaeological sites. The maps also show a number of

smaller sites especially selected as they are of particular significance and they are particularly vulnerable to oil spills. Each map has a description of biological resources and human use of the area. The Atlas has been demonstrated and distributed to oil management authorities in Greenland/Denmark.

I. Analysis in progress regarding the project "Seabird Distribution at Sea in West Greenland". The purpose of the project is to improve knowledge on offshore distribution, abundance, and distributing factors of seabirds in Greenland. Data on numbers and distribution of seabirds was obtained (summer 2000) on ship-based surveys conducted in co-ordination with oceanographic.

J. A pilot study with random sampling of eiders from the local market in Nuuk (the winter 1999/2000) showed that approximately 35% of the eider harvest originated from incidental gillnets catch (mainly lump sucker fishery). The study was continued during the winter of 2000/2001, and showed a similar result.

K. A status report on the Greenlandic Ramsar areas has been published

L. Analysis in progress regarding the project "Local knowledge of Common Eider distribution and abundance in western Greenland: a quantitative analysis" Local knowledge of Common Eider distribution and abundance has been collected and is being compared with results from simultaneously conducted ground surveys to determine the quantitative value of local knowledge information. In addition, the project aims to quantify how hunter characteristics influence the possession of local knowledge.

M. An information tour with focus on exploitation and declining bird populations was carried out in the Disko Bay area in June 2000.

N. A common eider monitoring programme for mid-west Greenland has been initiated. Selected reference colonies were surveyed this summer by the Greenland Institute of Natural Resources in co-operation with local residents. By next summer the locals will conduct annual ground surveys.

O. Results from common eider ground surveys in northwestern Greenland (1997) have been published.

P. Common eider ground surveys conducted in mid-west Greenland (1998-2000) is being reported (F. Merkel)

Q. With implementation in January 2002 of the new national bird protection legislation a broad information campaign including television spots is taking place.

R. A new national ornithological field guide is in preparation. The field guide will contain informative chapters in plain language. The field guide will be available in Greenlandic and Danish and will be distributed for free to schools throughout the country.

S. Continuation of the project "Satellite tracking of Common Eider Ducks between Greenland and Canada". By implanting satellite transmitters in Common Eiders in both Greenland (winter) and Canada (summer) this project aims to provide detailed information on

migration routes, timing, and affinities between breeding areas, moult and wintering areas. The Canadian component was initiated this summer (2001).

T. Results from king eider satellite telemetry in west Greenland (1999-2000) is being reported (A. Mosbech et al. 2001).

U. Analysis in progress regarding the project "Lead Contamination of Greenland Seabirds from the Use of Lead Shot". In this project human exposure to lead from the use of lead shot is being assessed by analysing breast meat from thick-billed murre and common eider. For the common eider, the species suspected to be most exposed to lead toxicity in Greenland, the frequency of embedded shots and the number of pellets accumulated in the gizzard is studied. Furthermore, wing bones is analysed for lead as an indicator of long-term exposure to lead.

V. Results from aerial surveys (1999) of important summer concentrations of seaducks in west Greenland have been published.

W. The recent issue of PITU (No.5) - a semi-annual GINR newsletter distributed to all households in Greenland – deals with reproduction and migration issues of murres and eiders, and inform about related monitoring- and research activities at the GINR.

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Implementation of the International Eider Conservation Strategy, Canada

Grant Gilchrist and Greg Robertson, Canadian Wildlife Service

Table 6. Implementation of the International Eider Conservation Strategy, Canada 2001.

Action Items	Highest in history	Current	Initiatives
4.1. Consumptive Use			
4.1.1. Develop international harvest plans	2	2	A, G, E
4.1.2. Establish appropriate harvest rules	2	2	G
4.1.3. Obtain reliable harvest estimates	2	2	
4.1.4. Evaluate the opportunity for guided hunts	1	1	
4.1.5. Support egg and down collection programs	1	2	B
4.2. Non-consumptive Use			
4.2.6. Evaluate risks of human activities	2	2	
4.2.7. Encourage non-consumptive uses of eiders	1	1	B
4.3. Commercial Activities			
4.3.8. Identify eider populations and habitats at risk from oil pollution	2	2	
4.3.9. Reduce eider mortality caused by commercial fisheries activities	2	2	
4.4. Habitat Protection and Enhancement			
4.4.10. Prepare a summary of protected eider habitats	3	0	H
4.4.11. Evaluate existing mechanisms for protecting eider habitat	2	3	H
4.4.12. Protect additional eider habitat as needed	2	2	
4.4.13. Implement other needed protective measures	2	2	
4.5. Communication and Consultation			
4.5.14. Support other eider conservation initiatives	2	2	B
4.5.15. Ensure coordination with other bird cons. plans	2	2	
4.5.16. Enlist support of local residents and others interested in eiders	1	2	C, I, G
4.5.17. Solicit periodic evaluation of the Strategy by eider specialists	1	1	
4.5.18. Prepare periodic reports summarizing accomplishments in eider conservation	2	2	
4.5.19. Ensure that eider conservation projects include an educational component	1	1	
4.6. Research and Monitoring			
4.6.20. Develop comprehensive research agendas for each species	2	3	
4.6.21. Estimate population size, productivity, survivorship, and movements	2	2	F, I, J
4.6.22. Study effects of contaminants in eiders	2	2	
4.6.23. Develop monitoring plans for eiders	2	2	

1 = No current action but action required; 2 = In progress; 3 = Completed; 0 = No action required.

CAFF, Circumpolar Seabird Expert Group – Eighth Meeting Progress Report

Initiatives

A. Harvest and population dynamics of the Northern Common Eider in Canada and west Greenland have been studied using computer simulation models.

B. Permits have been issued by the Canadian Wildlife Service and the Government of the Nunavut Territory to allow a regulated commercial harvest of eider down in the Belcher Islands, Nunavut.

C. Surveys of eider colonies in Frobisher Bay, Baffin Island, are ongoing and will be expanded. Impacts of changing human and polar bear distribution in the region are also being examined in relation to eider duck distribution.

D. Studies of heavy metal and PCB contaminant levels in Hudson Bay and Northern Common eider ducks is ongoing and is being expanded to include breeding populations along the eastern coasts of Baffin Island.

E. Frequency and effects of imbedded shot in common and king eiders in the eastern Canadian Arctic and west Greenland is ongoing (lead: Greenland)

F. Aerial surveys of Hudson Bay Common Eider ducks were repeated in March 2002. Approximately 100000 eiders were found 20 km offshore in pack ice, in waters of 30-15m in depth.

G. Detailed studies of the wintering ecology of Hudson Bay eider ducks are ongoing. Research includes foraging energetics, diet, body condition, habitat use, intra-specific competition, rates of predation, and identifying foraging constraints imposed by strong tidal currents and heavy sea ice. The sustainability of Inuit harvest is also being assessed.

H. A document identifying "Key Marine Habitat Sites in the Arctic" has recently been completed by the Canadian Wildlife Service of Environment Canada. This document lists several marine sites important to Common and King Eider Ducks.

I. The survival and demography of Common and King Eider ducks on Southampton Island, Nunavut is ongoing. Research examines adult survival rates, annual variation in rates of reproduction, impacts of herring gull and polar bear predation, and how energy reserves of female eiders determines probability of hatch success. Banding of adults and ducklings is also contributing to identification of wintering grounds. This latter information is also supplemented by data generated by a new satellite telemetry study of Northern Common Eider ducks in collaboration with Danish and Greenlandic researchers.

J. Initiated a new study on the survival and demography of the western race Common Eiders in the western Canadian Arctic (*S. m. v-nigra*). Research examines adult survival rates, annual variation in rates of reproduction, and how energy reserves of female eiders determines probability of hatch success. Banding of adults and ducklings is also contributing to identification of wintering grounds. This latter information is also supplemented by data generated by an ongoing satellite telemetry study of western Common Eider ducks in collaboration with American researchers.

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Implementation of the International Eider Conservation Strategy, US-Alaska

Russ Oates, Migratory Bird Management, U.S. Fish and Wildlife Service
Tim Bowmen, Migratory Bird Management, U.S. Fish and Wildlife Service

Table 7. Implementation of the International Eider Conservation Strategy, U.S. - Alaska 2001.

Action Items	Highest in history	Current	Initiatives
4.1. Consumptive Use			
4.1.1. Develop international harvest plans	0	0	
4.1.2. Establish appropriate harvest rules	2	2	
4.1.3. Obtain reliable harvest estimates	2	2	A
4.1.4. Evaluate the opportunity for guided hunts	0	0	
4.1.5. Support egg and down collection programs	2	2	
4.2. Non-consumptive Use			
4.2.6. Evaluate risks of human activities	2	2	H
4.2.7. Encourage non-consumptive uses of eiders	1	1	
4.3. Commercial Activities			
4.3.8. Identify eider populations and habitats at risk from oil pollution	1	2	B, C, D, E, F, G, H
4.3.9. Reduce eider mortality caused by commercial fisheries activities	1	1	
4.4. Habitat Protection and Enhancement			
4.4.10. Prepare a summary of protected eider habitats	2	2	
4.4.11. Evaluate existing mechanisms for protecting eider habitat	2	3	
4.4.12. Protect additional eider habitat as needed	2	2	
4.4.13. Implement other needed protective measures	1	2	
4.5. Communication and Consultation			
4.5.14. Support other eider conservation initiatives	1	2	
4.5.15. Ensure coordination with other bird cons. plans	1	2	
4.5.16. Enlist support of local residents and others interested in eiders	2	2	
4.5.17. Solicit periodic evaluation of the Strategy by eider specialists	2	2	
4.5.18. Prepare periodic reports summarizing accomplishments in eider conservation	2	2	
4.5.19. Ensure that eider conservation projects include an educational component	2	2	
4.6. Research and Monitoring			
4.6.20. Develop comprehensive research agendas for each species	2	3	
4.6.21. Estimate population size, productivity, survivorship, and movements	1	2	
4.6.22. Study effects of contaminants in eiders	2	2	B, C, D, E, F, G, I, J, K, L, M, N , O
4.6.23. Develop monitoring plans for eiders	2	2	P, Q, R,

1 = No current action but action required; 2 = In progress; 3 = Completed; 0 = No action required.

CAFF, Circumpolar Seabird Expert Group – Eighth Meeting Progress Report

Initiatives

A. Continued subsistence harvest surveys in Alaska.

B. Initiated Beaufort Sea Offshore Survey to assess use of offshore areas by molting eiders and other seaducks during late summer

C. Continued Common Eider Breeding Bird Survey. Spring aerial survey of breeding Common Eiders on Beaufort and Chukchi coastal barrier islands.

D. Continued Arctic Coastal Plain Breeding Bird Survey. Geographically extensive multi-species aerial survey that detects Steller's Eiders.

E. Continued North Slope Eider Survey. Geographically extensive aerial survey timed for breeding Spectacled and King Eiders.

F. Initiated North Slope Coastal Lagoon Survey. Aerial survey of all Alaskan, Beaufort, and Chukchi coastal lagoons to document important seaduck molting areas.

G. Completed Spectacled and Steller's Eider Brood survey. Intensive aerial survey of Barrow Triangle area to document Spectacled and Steller's eider broods.

H. Completed Oil Spill Impact Assessment. Analysis and report using oil spill trajectory models to predict numbers of seaducks killed by marine oil spill of various sizes and trajectories.

I. Barrow area Stellar's Eider studies.

J. Study of Common Eider migration using satellite telemetry.

K. Study of Common Eider nest success and effects of disturbance levels.

L. Study of Spectacled Eider in Prudhoe Bay area.

M. Continued Yukon Delta Coastal Zone Survey. Aerial survey of western Alaska Spectacled Eider nesting area.

N. Continued Yukon Delta Nest Plot Survey. Intensive ground survey of primary eastern Alaska spectacled eider nesting area.

O. Aerial survey of Steller's eider wintering areas in the Kodiak Archipelago

P. Continued aerial survey of Steller's eider staging area during spring migration in south west Alaska

Q. Studies are ongoing of Spectacled and Common Eiders in the Yukon Delta and Kigigak Island.

R. Common and King Eiders breeding in western arctic Canada are being followed into Alaska using satellite telemetry studies.

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RUSSIA FAR EAST

No Report

Implementation of the International Eider Conservation Strategy, Finland

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Table 8. Implementation of the International Eider Conservation Strategy, Finland 2001.

Action Items	Highest in history	Current	Initiatives
4.1. Consumptive Use			
4.1.1. Develop international harvest plans	2	2	A
4.1.2. Establish appropriate harvest rules	2	2	A
4.1.3. Obtain reliable harvest estimates	2	2	A
4.1.4. Evaluate the opportunity for guided hunts	1	0	
4.1.5. Support egg and down collection programs	1	0	
4.2. Non-consumptive Use			
4.2.6. Evaluate risks of human activities	2	2	
4.2.7. Encourage non-consumptive uses of eiders	1	1	
4.3. Commercial Activities			
4.3.8. Identify eider populations and habitats at risk from oil pollution	2	2	
4.3.9. Reduce eider mortality caused by commercial fisheries activities	2	2	B
4.4. Habitat Protection and Enhancement			
4.4.10. Prepare a summary of protected eider habitats	3	0	
4.4.11. Evaluate existing mechanisms for protecting eider habitat	2	2	
4.4.12. Protect additional eider habitat as needed	2	2	
4.4.13. Implement other needed protective measures	2	2	
4.5. Communication and Consultation			
4.5.14. Support other eider conservation initiatives	2	2	
4.5.15. Ensure coordination with other bird cons. plans	2	2	
4.5.16. Enlist support of local residents and others interested in eiders	1	1	
4.5.17. Solicit periodic evaluation of the Strategy by eider specialists	1	1	
4.5.18. Prepare periodic reports summarizing accomplishments in eider conservation	2	2	
4.5.19. Ensure that eider conservation projects include an educational component	1	1	
4.6. Research and Monitoring			
4.6.20. Develop comprehensive research agendas for each species	2	2	
4.6.21. Estimate population size, productivity, survivorship, and movements	2	2	C
4.6.22. Study effects of contaminants in eiders	2	2	D
4.6.23. Develop monitoring plans for eiders	2	2	

1 = No current action but action required; 2 = In progress; 3 = Completed; 0 = No action required.

CAFF, Circumpolar Seabird Expert Group – Eighth Meeting Progress Report

The CAFF Circumpolar Eider Conservation Strategy and Action Plan (CECS) lists 23 Action Items which all are relevant for Finland. A general overview of the Finnish implementation plan was done in 1998. The final plan is already drafted and will be completed by 2003. This progress report compiles actions already implemented and highlights current priorities. The right-hand column (Initiatives) refers to new initiatives or previous activities continued this year. Characters in the column refer to a short description of each initiative, listed below the table.

Initiatives

A. The European Commission was not satisfied with the explanation given by Finland on the question whether or not there exists no other satisfactory solution for resident hunters in the archipelago to bag seaducks than shooting males in spring. This so called spring shoot is a dodgy matter in the commission's strive for equal hunting practices over the entire Union. In its explanation Finland gave the results of a comparative survey (made by Finnish Game and Fisheries Research Institute) on the spring vs. autumn occurrence of spring-huntable seaduck species along the coasts. Based on these results, quotas were decreased and hunting was allowed only in areas where autumn occurrence was nil or smaller than occurrence during the spring shoot period in April-May. In accordance with quotas, 1898 eider drakes were shot on the Finnish side of the coast and 9673 in the Åland Islands in spring 2001. However, the bags of the remaining spring-shoot species were still rather high in the Åland Islands, totaling 21 645 birds, of which 3782 were Velvet Scoter males. European Commission considers this bag too high, not representing "small number" as is required by the Commission. If Finland will continue the spring shoot the commission will bring a suit against Finland next year.

B. An exploratory observer-based survey is underway to reveal all bycatches on commercial fishing vessels.

C. A pan-Baltic count was conducted on the size of the wintering population of Steller's Eiders in the Baltic Sea in February-March. The coastal areas were ice-covered in Finland and the birds had dispersed; only around 60 birds were located. The main wintering resorts in Lithuania and Estonia had 700 and 2000 Steller's Eiders, respectively. These figures are well below of those in the mid-90s, indicating a decline of 65% since then (7800-8000 ind. in 1995). The reasons for the decline (recorded also during the intermittent years) are not known. Rate of recruitment seems to have been declining as judged from the changing ratio of adult and young birds in the wintering flocks. There used to be a 3-year cycle in the abundance of female-colored birds, reflecting the cyclically varying amount of young birds in the stock. This cycle paralleled with the occurrence of lemming years in Siberia, indicating a better survivorship from predators in years of high lemming density and thus a better fledging result than in poor lemming years.

D. The Finnish breeding population of Common Eider declined in 2000 all around the coasts. This was against expectations as the fledging result in 1997 had been

comparatively good in most areas monitored. A co-operative study is underway to reveal the causes of duckling losses that have the most profound effect on the rate of recruitment, which alone explains roughly 30% of the annual variation in the size of the breeding stocks. Two basic reports were completed on the health status of incubating females based on hematological and serum chemistry parameters.

E. Systematic sampling has been continued to determine concentrations of selected trace elements in tissues of Eiders. The first incidents of females dying in lead poisoning in Finland were established.

Recent literature:

Franson, J. C., Hollmén, T., Poppenga, R. H., Hario, M., Kilpi, M. 2000: Metals and trace elements in tissues of Common Eiders (Somateria mollissima) from the Finnish archipelago. – Ornis Fennica 77: 57-63.

Franson, J. C., Hollmén, T., Poppenga, R. H., Hario, M., Kilpi, M., Smith, M. R. 2000: Selected trace elements and organochlorines: some findings in blood and eggs of nesting common eiders (Somateria mollissima) from Finland. – Environmental Toxicology and Chemistry 19: 1340-1347.

Hario, M. 2000: The Archipelago Bird Census in 1999: recent trends of Common Eider, alcids and sea terns in Finland. – Linnut Yearbook 1999, pp. 40-50 (in Finnish with English summary).

Hollmén, T., Franson, J. C., Docherty, D. E., Kilpi, M., Hario, M., Creekmore, L. H., Petersen, M. R. 2000: Infectious bursal disease virus antibodies in Eider Ducks and Herring Gulls. – Condor 102: 688-691.

Hollmén, T., Franson, J. C., Hario, M., Sankari, S., Kilpi, M. & Lindström, K. 2001: Use of serum biochemistry to evaluate nutritional status and health of incubating common eiders (Somateria mollissima) in Finland. -- Physiological and Biochemical Zoology 74 (3): 333--342.

Tiainen, J., Hario, M. & Rintala, J. 2001: Monitoring sea ducks in Finnish Baltic archipelagoes: comparison of two census methods and recent trends. – Linnut Yearbook 2000, pp. 149-158 (in Finnish with English summary).

SWEDEN

No report

Implementation of the International Eider Conservation Strategy, Norway

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Morten Ekker, Directorate for Nature Management, Trondheim

Table 9. Implementation of the International Eider Conservation Strategy, Norway 2001.

Action Items	Highest in history	Current	Initiatives
4.1. Consumptive Use			
4.1.1. Develop international harvest plans	0	0	
4.1.2. Establish appropriate harvest rules	3	3	
4.1.3. Obtain reliable harvest estimates	0	0	
4.1.4. Evaluate the opportunity for guided hunts	0	0	
4.1.5. Support egg and down collection programs	2	2	A
4.2. Non-consumptive Use			
4.2.6. Evaluate risks of human activities	1	1	
4.2.7. Encourage non-consumptive uses of eiders	1	1	
4.3. Commercial Activities			
4.3.8. Identify eider populations and habitats at risk from oil pollution	2	2	
4.3.9. Reduce eider mortality caused by commercial fisheries activities	1	1	
4.4. Habitat Protection and Enhancement			
4.4.10. Prepare a summary of protected eider habitats	2	1	
4.4.11. Evaluate existing mechanisms for protecting eider habitat	2	2	
4.4.12. Protect additional eider habitat as needed	1	2	B
4.4.13. Implement other needed protective measures	1	1	
4.5. Communication and Consultation			
4.5.14. Support other eider conservation initiatives	2	2	B
4.5.15. Ensure coordination with other bird cons. plans	2	2	B
4.5.16. Enlist support of local residents and others interested in eiders	1	1	
4.5.17. Solicit periodic evaluation of the Strategy by eider specialists	1	1	
4.5.18. Prepare periodic reports summarizing accomplishments in eider conservation	2	2	
4.5.19. Ensure that eider conservation projects include an educational component	1	1	
4.6. Research and Monitoring			
4.6.20. Develop comprehensive research agendas for each species	1	1	
4.6.21. Estimate population size, productivity, survivorship, and movements	2	2	C
4.6.22. Study effects of contaminants in eiders	1	1	
4.6.23. Develop monitoring plans for eiders	2	2	D

1 = No current action but action required; 2 = In progress; 3 = Completed; 0 = No action required.

CAFF, Circumpolar Seabird Expert Group - Progress Report VIII

This document presents the progress of implementation of the CAFF "International Eider Conservation Strategy and Action Plan" in Norway for the period 2000-2001. The previous update was given at CBIRD VII, Helsinki, Finland, October 2000.

General:
The purpose of the International Eider Conservation Strategy and Action Plan, which was published in 1997, is to facilitate the implementation of initiatives to conserve, protect and restore eider populations in the Arctic. The Eider Strategy identifies six major management issues and 23 implementing action items.

Norway will complete a national implementation plan, but priority has been given to complete the national murre plan first. A joint implementation with Russia regarding the Barents Sea region is also planned for the Eider Strategy.

There are 20 of the 23 action items applicable to Norway with 9 action items presently being implemented. One of the items is regarded as completed. Each of the 23 action items within Action Plan is listed in the table on page 2. The right column ("Initiatives) refers to new initiatives or previous activities continued this year. Characters within the right column refer to a short description of each initiative listed on page 3.

Initiatives

A. A workshop is to be held at the Island of Vega in spring 2002 focusing on the old tradition related to down collection.

B. A coastal area conservation plan for Nordland County is soon to be implemented. When put into force, this plan will increase the area of protected eider habitat in northern Norway.

C. A joint Alaskan/Norwegian (Margaret Petersen/Jan Ove Bustnes) project has, by use of satellite telemetry, revealed details of the migration routes and breeding areas of the western population of the Steller's eider.

D. The common eider was included in the Norwegian Monitoring Program for Seabirds in 2000 with annual counts of pre-breeding numbers conducted in selected areas along the mainland coast.

E. Action Item 5: International Murre Conservation Strategy

CAFF Annual Work Plan 2000-2002, Action Item 2.5

1. Country Implementation of the International Murre Conservation Strategy

Implementation of the International Murre Conservation Strategy, Iceland

A general overview of the murre populations, their status, protection, utilization, and future needs, was compiled in 1997 (Gudmundsson, Petersen & Garðarsson 1997). At CAFF 6 (1997) a matrix was developed, against which the Murre Conservation Strategy action items were weighted. The matrix includes the relevance of the 31 action items for Iceland, whether actions have been completed or not, and if items are in progress. The matrix also included priority rankings for each of the items. The matrix has been revised annually to track the implementation of the Murre Conservation Strategy. Iceland can report the following changes in the implementation of the Murre Conservation Strategy since CBIRD 7 (Helsinki 2000):

Table 10. Implementation of the International Murre Conservation Strategy, Iceland 2000 and 2001.

Management Issue	Action Item	Status 2000	Status 2001	Initiatives
I. Consumptive Use	1. Ensure that consumptive uses of murres are sustainable.	3	3	B
	2. Monitor harvest levels and assess their impacts on populations.	4	4	BC
	3. Harmonize management and harvest regimes for shared populations.	2	2	
	4. Involve local and indigenous people in the management of consumptive uses.	0	0	
II. Non-Consumptive Use	5. Ensure that non-consumptive uses of murres are sustainable.	2	2	
	6. Implement management plans for areas of eco-tourism activity.	2	2	
	7. Implement standard guidelines to minimize the impact of disturbance at murre colonies.	2	2	
III. Commercial Activities & Industries	8. Identify, publicize and minimize impacts of commercial activities on murre breeding and foraging areas.	2	2	E
	9. Implement programs to reduce oil pollution in areas used by murres.	3	3	D
	10. Assess and reduce mortality of murres in commercial fishing gear.	2	2	
	11. Ensure that management of commercial harvests of small fish species provide for their role in murre diets.	3	3	
I.Habitat Protection & Enhancement	12. Identify important murre colonies and designate them under national and international systems of protected areas.	3	3	F
	13. Identify important pelagic habitats for murres, and promote the establishment of marine protected areas in important pelagic habitats for murres.	2	2	
	14. Contribute to the "Important Bird Areas" system to highlight important areas of murres.	4	4	
	15. Explore the establishment of an international network to identify and protect key areas for murres.	3	3	
	16. Ensure that conservation action will benefit populations, by assessing causes of population declines from an ecosystem perspective.	0	0	
	17. Undertake specific restoration activities to assist depressed populations to recover.	0	0	
V. Communications & Consultation	18. Determine appropriate communication approaches and produce materials to deliver specific messages.	2	2	
	19. Emphasize communication to operators of ships at sea, the fishing industry and tour boat operators and pilots.	2	2	
	20. Produce educational materials aimed specifically at children.	3	3	
	21. Issue joint scientific reports of activities relating to murre conservation.	3	3	
VI. Research & Monitoring	22. Coordinate circumpolar murre population monitoring and store data in standardized databases.	3	3	G
	23. Conduct research on population demography at circumpolar monitoring sites.	2	2	
	24. Develop a coordinated circumpolar murre banding program.	3	3	H
	25. Monitor murre feeding ecology and food availability.	3	3	I
	26. Monitor murre mortality due to oil pollution, commercial fisheries, and hunting.	2	2	
	27. Conduct research to develop techniques to reduce entrapment in fishing nets.	2	2	
	28. Develop management techniques to restore habitats and populations.	0	0	
	29. Consider the effects of global warming and local eutrophication on murre populations.	2	2	
	30. Assess the need to conduct research into the genetics of murre populations.	3	3	
	31. Research for sea dist. abundance of murres.	3	3	J

0 = not applicable
1 = no action considered required
2 = no action to date but required
3 = in progress and continuing
4 = completed in this year or past years

CAFF, Circumpolar Seabird Expert Group – Eighth Meeting Progress Report

Various research and other activity has been carried out relevant to the Murre Conservation Strategy since CBIRD 7. The major ones are summarized below, giving the action item number for which these are most relevant.

Initiatives

A. In 2001 a draft national implementation plan was completed. This gives an overview of the status of action items, recommended actions to be taken, and priorities for research and management. The plan still awaits acceptance by authorities.

B. Hunting statistics continue to be collected from hunters giving indications if the consumptive use in sustainable and monitors the harvest levels (action items 1, 2).

C. Paper has been submitted to the Circumpolar Seabird Bulletin on the hunting statistics and a preliminary analysis done on possible effects of hunting on murre populations (Petersen, in press) (action item 2).

D. Work continues on a map for use in oil pollution emergencies and other such contamination cases by the Committee on Response to Pollution Incidences. This includes inter-alia the whereabouts of murre colonies and major feeding areas as known (action item 9).

E. The illegal sale of seabird bycatch at fish-markets, the great majority of which is murres, has been taken to court and is pending trial.

F. Work is proceeding on a nature conservation strategy for Iceland, and will include among others an overview of murre colonies, which have been designated as “Important Bird Areas” (action item 12).

G. A paper on the monitoring of seabirds, including murres, was published in 2001 (Petersen 2001). New monitoring plots were established at a murre colony in E-Iceland (Skrúður) in 2000 and counts repeated in 2001 (action item 22).

H. Small scale banding of murres continues (action item 24).

I. Research continues into the feeding ecology of the two murre species, with the aim of identifying their role in the marine ecosystem and possible effects on fish stocks (Lilliendahl & Ásgeirsson 2001) (action item 25).

J. Research has been carried out during the past few years on the distribution of seabirds, including murres, in sea-areas around Iceland, especially off the SW, W and NE coasts (action item 31).

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Lilliendahl, K. & Þ.H. Ásgeirsson 2001. [Seabirds and fish fry south and west of Iceland.] Bliki 22: 13-20. (Icelandic, Engl. summary).
Petersen, A. 2000. [Monitoring of seabird populations.] Náttúrufr. 69(3-4): 189-200. (Icelandic, Engl. summary).
Petersen, A. 2002. Seabirds in Iceland: legislation and hunting statistics. Circumpolar Seab. Bull. 3, in press.

Implementation of the International Murre Conservation Strategy, Greenland

Implementation progress: 2000 – 2001

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Thor Hjarsen, Department of Environment and Nature

At the sixth meeting of the CAFF Circumpolar Seabird Expert Group in December 1999, in Ottawa, Canada, Greenland presented a status report concerning the implementation of the CAFF International Murre Conservation Strategy and Action Plan (Merkel and Christensen 1999). The report summarized actions already implemented and highlighted future priorities. This document presents the progress of implementation made from 2000 to 2001. Each of the 31 action items within the International Murre Conservation Strategy and Action Plan is listed below. The right column (Initiatives) refers to new initiatives or previous activities continued this year. Characters within the right column refer to a short description of each initiative - listed below the table. For previous progress (1999 – 2000) see Merkel and Hjarsen (2000).

Table 11. Implementation of the International Murre Conservation Strategy, Greenland 2000 and 2001.

Management Issue	Action Item	Status 2000	Status 2001	Initiatives
I. Consumptive Use	1. Ensure that consumptive uses of murres are sustainable.	3	3	A
	2. Monitor harvest levels and assess their impacts on populations.	3	3	
	3. Harmonize management and harvest regimes for shared populations.	2	2	
	4. Involve local and indigenous people in the management of consumptive uses.	3	3	
II. Non-Consumptive Use	5. Ensure that non-consumptive uses of murres are sustainable.	3	3	
	6. Implement management plans for areas of eco-tourism activity.	2	2	
	7. Implement standard guidelines to minimize the impact of disturbance at murre colonies.	3	3	
III. Commercial Activities & Industries	8. Identify, publicize and minimize impacts of commercial activities on murre breeding and foraging areas.	3	3	
	9. Implement programs to reduce oil pollution in areas used by murres.	3	3	B
	10. Assess and reduce mortality of murres in commercial fishing gear.	4	4	
	11. Ensure that management of commercial harvests of small fish species provide for their role in murre diets.	1	1	
II.Habitat Protection & Enhancement	12. Identify important murre colonies and designate them under national and international systems of protected areas.	3	3	A
	13. Identify important pelagic habitats for murres, and promote the establishment of marine protected areas in important pelagic habitats for murres.	3	3	C, D
	14. Contribute to the "Important Bird Areas" system to highlight important areas of murres.	3	3	
	15. Explore the establishment of an international network to identify and protect key areas for murres.	2	2	
	16. Ensure that conservation action will benefit populations, by assessing causes of population declines from an ecosystem perspective.	3	3	
	17. Undertake specific restoration activities to assist depressed populations to recover.	3	3	
V. Communications & Consultation	18. Determine appropriate communication approaches and produce materials to deliver specific messages.	3	3	E, J, K
	19. Emphasize communication to operators of ships at sea, the fishing industry and tour boat operators and pilots.	2	2	
	20. Produce educational materials aimed specifically at children.	3	3	E
	21. Issue joint scientific reports of activities relating to murre conservation.	3	3	F, G
VI. Research & Monitoring	22. Coordinate circumpolar murre population monitoring and store data in standardized databases.	3	3	
	23. Conduct research on population demography at circumpolar monitoring sites.	3	3	H, I
	24. Develop a coordinated circumpolar murre banding program.	2	2	
	25. Monitor murre feeding ecology and food availability.	3	3	
	26. Monitor murre mortality due to oil pollution, commercial fisheries, and hunting.	3	3	
	27. Conduct research to develop techniques to reduce entrapment in fishing nets.	1	1	
	28. Develop management techniques to restore habitats and populations.	2	2	
	29. Consider the effects of global warming and local eutrophication on murre populations.	2	2	
	30. Assess the need to conduct research into the genetics of murre populations.	2	2	
	31. Research for sea dist. abundance of murres.	3	3	C, D

0 = not applicable
1 = no action considered required
2 = no action to date but required
3 = in progress and continuing
4 = completed in this year or past years

Initiatives

A. A new national bird protection order has been passed in the Greenland Home Rule Government 6 December 2001 – and will come into force 1 January 2002. The new regulation will enforce major restrictions on hunting of murres in Greenland.

B. An "Environmental Oil Spill Sensitivity Atlas for the West Greenland Coastal Zone" has been completed. This atlas covers the shoreline and the offshore areas of West Greenland between 62º N and 68º N in the scale 1: 250 000. The maps show index values for coastal sensitivity and symbols for the elements of the classification: hunting and fishing areas, fish, birds, marine mammals and archaeological sites. The maps also show a number of smaller sites especially selected as they are of particular significance and they are particularly vulnerable to oil spills. Each map has a description of biological resources and human use of the area (Mosbech et al. 2000). The Atlas has been demonstrated and distributed to oil management authorities in Greenland/Denmark.

C. Results from a 1999 aerial winter survey are now being published (Merkel et al. in prep).

D. Analysis in progress regarding the project "Seabird Distribution at Sea in West Greenland". The purpose of the project is to improve knowledge on offshore distribution, abundance, and distributing factors of seabirds in Greenland. Data on numbers and distribution of seabirds was obtained (summer 2000) on ship-based surveys conducted in co-ordination with oceanographic surveys.

E. A new national ornithological field guide is in preparation. The field guide will contain informative chapters in plain language. The field guide will be available in Greenlandic and Danish and will be distributed for free to schools throughout the country.

F. A report on the status of murre colonies in south Greenland has been published (Falk et al. 2000).

G. A report that summarises available information on murre colonies in Greenland, and evaluates existing murre protection mechanisms has been published (Falk and Kampp 2001).

H. According to a national monitoring plan (Falk and Kampp 1998) the murre colony next to Nuuk was monitored this summer (2001).

I. Automatic monitoring at one of the reduced murre colonies in Upernavik is presently conducted annually, using a programmed camera, to assess seasonal and annual variation – and to provide documentation applicable in information campaigns and debate.

J. The recent issue of PITU (No.5) – a semiannual GINR newsletter distributed to all households in Greenland – deals with reproduction and migration issues of murres and eiders, and inform about related monitoring- and research activities at the GINR. For instance, the methods applied in population monitoring have been explained to counter the widespread rumours of invalid surveys by "desktop-biologists".

K. With expected implementation in January 2002 of the new national bird protection legislation a broad information campaign will take place.

Literature

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Implementation of the International Murre Conservation Strategy, Canada

Table 12. Implementation of the International Murre Conservation Strategy, Canada 2000 and 2001.

Management Issue	Action Item	Status 2000	Status 2001	Initiatives
I. Consumptive Use	1. Ensure that consumptive uses of murres are sustainable.	3	3	A,B
	2. Monitor harvest levels and assess their impacts on populations.	3	3	C
	3. Harmonize management and harvest regimes for shared populations.	2	3	B
	4. Involve local and indigenous people in the management of consumptive uses.	3	3	
II. Non-Consumptive Use	5. Ensure that non-consumptive uses of murres are sustainable.	3	3	
	6. Implement management plans for areas of eco-tourism activity.	3	3	D
	7. Implement standard guidelines to minimize the impact of disturbance at murre colonies.	3	3	D
III. Commercial Activities & Industries	8. Identify, publicize and minimize impacts of commercial activities on murre breeding and foraging areas.	3	3	D
	9. Implement programs to reduce oil pollution in areas used by murres.	3	3	
	10. Assess and reduce mortality of murres in commercial fishing gear.	3	3	E
	11. Ensure that management of commercial harvests of small fish species provide for their role in murre diets.	2	3	
III.Habitat Protection & Enhancement	12. Identify important murre colonies and designate them under national and international systems of protected areas.	3	3	F,G
	13. Identify important pelagic habitats for murres, and promote the establishment of marine protected areas in important pelagic habitats for murres.	2	3	F, H
	14. Contribute to the "Important Bird Areas" system to highlight important areas of murres.	4	4	
	15. Explore the establishment of an international network to identify and protect key areas for murres.	2	2	
	16. Ensure that conservation action will benefit populations, by assessing causes of population declines from an ecosystem perspective.	3	3	
	17. Undertake specific restoration activities to assist depressed populations to recover.	2	1	
V. Communications & Consultation	18. Determine appropriate communication approaches and produce materials to deliver specific messages.	3	3	
	19. Emphasize communication to operators of ships at sea, the fishing industry and tour boat operators and pilots.	3	3	E
	20. Produce educational materials aimed specifically at children.	2	2	
	21. Issue joint scientific reports of activities relating to murre conservation.	3	3	
VI. Research & Monitoring	22. Coordinate circumpolar murre population monitoring and store data in standardized databases.	3	3	
	23. Conduct research on population demography at circumpolar monitoring sites.	3	3	I
	24. Develop a coordinated circumpolar murre banding program.	3	3	
	25. Monitor murre feeding ecology and food availability.	3	3	I
	26. Monitor murre mortality due to oil pollution, commercial fisheries, and hunting.	3	3	J,K
	27. Conduct research to develop techniques to reduce entrapment in fishing nets.	2	2	
	28. Develop management techniques to restore habitats and populations.	2	1	
	29. Consider the effects of global warming and local eutrophication on murre populations.	3	3	
	30. Assess the need to conduct research into the genetics of murre populations.	3	3	L
	31. Research for sea dist. abundance of murres.	3	3	M

0 = not applicable
1 = no action considered required
2 = no action to date but required
3 = in progress and continuing
4 = completed in this year or past years

Initiatives

A. Thick-billed murre population model built by Wiese and Robertson, to assess impacts of hunting and chronic oil pollution on Canadian breeding population. Wiese's Ph.D. thesis and papers stemming from this work should be complete in mid-2002. Model will be extended to include other north Atlantic jurisdictions in workshop to be held Feb 2003.

B. The Nunavut Wildlife Harvest Study completed 5 years of data collection in May 2001. Final data entry, verification and initial analyses should be completed over 2002-2003, which will allow an examination of murre consumption by native communities.

C. As a result of Greenland's proposed hunting regulation changes, murre hunting will be restricted to the non-breeding season in both jurisdictions. Not a direct Canadian initiative.

D. CWS (NCD) has completed a review of cruise ship activities in the Arctic and its potential relation to seabird colonies. A workshop among federal and territorial agencies and stakeholders and to discuss issues regarding the arctic cruise ship industry should be held in 2002/2003.

E. Seabird identification training to DFO fisheries observers has begun on Atlantic coast. Need to assess the quality of data collected.

F. In 1998, the community of Qikiqtarjuaq (Broughton Island) approached the CWS about getting protection for the Northern Fulmar colony at Cape Searle, and the Thick-billed Murre colony at Reid Bay (~130,000 pairs). Field work has gone on since 2000, and several public meetings have been held. Currently a National Wildlife Area Boundaries Committee has been established and candidate boundaries are being considered. A protected marine zone of a minimum of 5 km around the colony, and a maximum of 19 km radius around the colony, are being considered. The site will be co-managed by the CWS and the community.

G. The community of Coral Harbour has expressed interest in discussing possible protection for Coats Island. The CWS interest here lies in the Thick-billed Murre colony at Cape Pembroke, while the community is also concerned about walrus haul-out sites. The main, perceived threat here is the increasing number of cruise ships stopping by Coats Island. This project is at a very early stage, with a CWS-community meeting planned for April 2002.

H. CWS has completed a draft document on "Key Marine Sites for Migratory Birds in Nunavut and Northwest Territories (draft March 2002)", with a final version planned for publication in 2002/2003 as a Canadian Wildlife Service Occasional Paper. Many of the sites in the document identify waters around colonies, polynyas or staging areas critical

for marine birds in the Arctic. This information will be used to guide regional land use plans, and should lead to co-ordinated activities among departments for future Arctic marine protected areas.

I. With academic partners, demographic studies and diet studies of Common Murres underway on Gannet Islands and Great Island, Witless Bay. Working with academic partners to standardize and prioritize data collection. Continued monitoring of Thick-billed Murre demographics and diet underway on Coats Island and Prince Leopold Island.

J. Estimates for number of seabirds killed by chronic oil pollution calculated by Wiese for 1998-2000. Will be included on Ph.D. thesis.

K. CWS - Atlantic Region and Headquarters, actively working to implement an operational murre harvest survey for Newfoundland and Labrador. Questionnaires, sampling intensity and other issues are currently being considered. Techniques to differentiate murre species, sexes and ages from wings (or other body parts if necessary) are being assessed.

L. We have decided that some genetic work for murres is necessary, be it to sex/speciate body parts, or to determine the source colonies for murre taken in murre hunt or oiled. With academic partners, attempting to find funding source for this work.

M. Gail Davoren completed Ph.D. thesis (MUN) examining relationship of murre distribution and capelin distribution off northeast coast of Newfoundland.

Implementation of the International Murre Conservation Strategy, US-Alaska

Table 13. Implementation of the International Murre Conservation Strategy, U.S. - Alaska 2000 and 2001.

Management Issue	Action Item	Status 2000	Status 2001	Initiatives
I. Consumptive Use	1. Ensure that consumptive uses of murres are sustainable.	3	3	
	2. Monitor harvest levels and assess their impacts on populations.	3	3	A
	3. Harmonize management and harvest regimes for shared populations.	2	2	
	4. Involve local and indigenous people in the management of consumptive uses.	3	3	
II. Non-Consumptive Use	5. Ensure that non-consumptive uses of murres are sustainable.	2	2	
	6. Implement management plans for areas of eco-tourism activity.	3	3	
	7. Implement standard guidelines to minimize the impact of disturbance at murre colonies.	3	3	
III. Commercial Activities & Industries	8. Identify, publicize and minimize impacts of commercial activities on murre breeding and foraging areas.	3	3	B
	9. Implement programs to reduce oil pollution in areas used by murres.	3	3	
	10. Assess and reduce mortality of murres in commercial fishing gear.	3	3	C, D
	11. Ensure that management of commercial harvests of small fish species provide for their role in murre diets.	3	3	
IV.Habitat Protection & Enhancement	12. Identify important murre colonies and designate them under national and international systems of protected areas.	3	3	
	13. Identify important pelagic habitats for murres, and promote the establishment of marine protected areas in important pelagic habitats for murres.	3	3	
	14. Contribute to the "Important Bird Areas" system to highlight important areas of murres.	3	3	E
	15. Explore the establishment of an international network to identify and protect key areas for murres.	3	3	F
	16. Ensure that conservation action will benefit populations, by assessing causes of population declines from an ecosystem perspective.	3	3	
	17. Undertake specific restoration activities to assist depressed populations to recover.	3	3	G
V. Communications & Consultation	18. Determine appropriate communication approaches and produce materials to deliver specific messages.	3	3	
	19. Emphasize communication to operators of ships at sea, the fishing industry and tour boat operators and pilots.	3	3	
	20. Produce educational materials aimed specifically at children.	4	4	
	21. Issue joint scientific reports of activities relating to murre conservation.	2	2	
VI. Research & Monitoring	22. Coordinate circumpolar murre population monitoring and store data in standardized databases.	3	3	H
	23. Conduct research on population demography at circumpolar monitoring sites.	3	3	I
	24. Develop a coordinated circumpolar murre banding program.	2	2	
	25. Monitor murre feeding ecology and food availability.	3	3	
	26. Monitor murre mortality due to oil pollution, commercial fisheries, and hunting.	3	3	
	27. Conduct research to develop techniques to reduce entrapment in fishing nets.	3	3	
	28. Develop management techniques to restore habitats and populations.	3	3	
	29. Consider the effects of global warming and local eutrophication on murre populations.	3	3	J
	30. Assess the need to conduct research into the genetics of murre populations.	3	3	
	31. Research for sea dist. abundance of murres.	3	3	

0 = not applicable
1 = no action considered required
2 = no action to date but required
3 = in progress and continuing
4 = completed in this year or past years

CAFF, Circumpolar Seabird Expert Group - Progress Report VIII

Initiatives

A. Completed the Alaska Harvest Report, which documents the number of murres taken for subsistence.

B. A CBIRD brochure on seabird disturbance has been completed and will be distributed to tour boat operators, pilots and fisherman.

C. Continue to cooperate with National Marine Fisheries Service's Observer Program to collect and analyze seabird bycatch data. Received funding to buy seabird deterrent equipment for longline boats.

D. Completed a study to test the efficiency of seabird bycatch deterrent methods and devices through Ed Melvin with the U. of Washington.

E. Working with Audubon to identify important bird areas for murres and other seabirds in Alaska.

F. Participated in the Marine Conservation Workshop in Montreal and provided seabird expertise regarding the need for marine protected areas.

G. Removed foxes from Attu Island, which is a large (60 km long) island in the Aleutians. Continuing rat prevention program on the Pribilof Islands.

H. Working with CBIRD to produce a Circumpolar Murre Monitoring Plan.

I. Monitored one or more of parameters (i.e., populations, productivity, or diets) at 15 colonies in Alaska in 2001.

J. Working with CBIRD to write a paper on climate change and murre population changes.

Table 14. Implementation of the International Murre Conservation Strategy, Russian Far East 2000 and 2001.

Management Issue	Action Item	Status 2000	Status 2001	Initiatives
I. Consumptive Use	1. Ensure that consumptive uses of murres are sustainable.	2	2	
	2. Monitor harvest levels and assess their impacts on populations.	2	2	
	3. Harmonize management and harvest regimes for shared populations.	2	2	
	4. Involve local and indigenous people in the management of consumptive uses.	2	2	
II. Non-Consumptive Use	5. Ensure that non-consumptive uses of murres are sustainable.	2	2	
	6. Implement management plans for areas of eco-tourism activity.	2	2	
	7. Implement standard guidelines to minimize the impact of disturbance at murre colonies.	3	3	
III. Commercial Activities & Industries	8. Identify, publicize and minimize impacts of commercial activities on murre breeding and foraging areas.	2	2	
	9. Implement programs to reduce oil pollution in areas used by murres.	2	2	
	10. Assess and reduce mortality of murres in commercial fishing gear.	3	3	
	11. Ensure that management of commercial harvests of small fish species provide for their role in murre diets.	2	2	
V.Habitat Protection & Enhancement	12. Identify important murre colonies and designate them under national and international systems of protected areas.	3	3	A
	13. Identify important pelagic habitats for murres, and promote the establishment of marine protected areas in important pelagic habitats for murres.	3	3	
	14. Contribute to the "Important Bird Areas" system to highlight important areas of murres.	3	4	B
	15. Explore the establishment of an international network to identify and protect key areas for murres.	2	2	
	16. Ensure that conservation action will benefit populations, by assessing causes of population declines from an ecosystem perspective.	3	3	
	17. Undertake specific restoration activities to assist depressed populations to recover.	2	2	
V. Communications & Consultation	18. Determine appropriate communication approaches and produce materials to deliver specific messages.	3	3	
	19. Emphasize communication to operators of ships at sea, the fishing industry and tour boat operators and pilots.	2	2	
	20. Produce educational materials aimed specifically at children.	2	2	
	21. Issue joint scientific reports of activities relating to murre conservation.	3	3	
VI. Research & Monitoring	22. Coordinate circumpolar murre population monitoring and store data in standardized databases.	3	3	C
	23. Conduct research on population demography at circumpolar monitoring sites.			
	24. Develop a coordinated circumpolar murre banding program.	3	3	
	25. Monitor murre feeding ecology and food availability.	2	2	
	26. Monitor murre mortality due to oil pollution, commercial fisheries, and hunting.	3	3	
	27. Conduct research to develop techniques to reduce entrapment in fishing nets.	3	3	
	28. Develop management techniques to restore habitats and populations.	2	2	
	29. Consider the effects of global warming and local eutrophication on murre populations.	2	2	
	30. Assess the need to conduct research into the genetics of murre populations.	2	2	
	31. Research for sea dist. abundance of murres.	2	2	
		3	3	D, E

0 = not applicable
1 = no action considered required
2 = no action to date but required
3 = in progress and continuing
4 = completed in this year or past years

Initiatives

A. KIENM surveyed seabirds, including murres, on the Kurile Islands in 2000-2001 and as a result "Cadastre of seabird colonies of the Kurile Islands" was published (Artukhin et al., 2001).

B. KIENM and IBPN completed a list of the Important Birds Areas in the Bering Sea region under the project that was began by the Alaska State Office of the National Audubon Society, Russian Bird Conservation Union and BirdLife International-Asia in November 2000.

C. KIENM contributed detailed census data on seabirds, including murres, on the Commander Islands in 1986-1994 and on the Kurile Islands in 2000 to the Alaska-Russia Far East Seabird Colony Catalog Database.

D. KIENM conducted research on the distribution of seabirds in sea-areas along south Kamchatka and Kurile Islands in 2000-2001 (Artukhin, in prep.).

E. KIENM carried out observation of spring migration of waterfowl and seabirds on Khalaktyrskiy Beach, southeast Kamchatka in 2000 (Gerasimov, 2001).

References

Artukhin Yu.B., Trukhin A.M., Kornev S.I., Purtov S.Yu. 2001. Cadastre of seabird colonies of the Kurile Islands // The biology and conservation of the birds of Kamchatka. M., 3: 3-59. (In Russian with English summary).

Gerasimov Yu.N. 2001. Materials on waterfowl migration along southeast Kamchatka // The biology and conservation of the birds of Kamchatka. M., 3: 86-95. (In Russian with English summary).

Implementation of the International Murre Conservation Strategy, Finland

Martti Hario
Finnish Game and Fisheries Research Institute

The International Murre Conservation Strategy (IMCS) lists 31 action items to implement six objectives for Murres. Finland needs to address four of the objectives, the issues of consumptive use and non-consumptive use being out-of-date. Alcid populations are not directly exploited by man in any parts of the Baltic.

Table 15. Implementation of the International Murre Conservation Strategy, Finland 2000 and 2001.

Management Issue	Action Item	Status 2000	Status 2001	Initiatives
I. Consumptive Use	1. Ensure that consumptive uses of murres are sustainable.	0	0	
	2. Monitor harvest levels and assess their impacts on populations.	0	0	
	3. Harmonize management and harvest regimes for shared populations.	0	0	
	4. Involve local and indigenous people in the management of consumptive uses.	0	0	
II. Non-Consumptive Use	5. Ensure that non-consumptive uses of murres are sustainable.	0	0	
	6. Implement management plans for areas of eco-tourism activity.	1	4	A
	7. Implement standard guidelines to minimize the impact of disturbance at murre colonies.	0	0	
III. Commercial Activities & Industries	8. Identify, publicize and minimize impacts of commercial activities on murre breeding and foraging areas.	2	2	
	9. Implement programs to reduce oil pollution in areas used by murres.	3	3	
	10. Assess and reduce mortality of murres in commercial fishing gear.	2	3	
	11. Ensure that management of commercial harvests of small fish species provide for their role in murre diets.	2	2	
VI.Habitat Protection & Enhancement	12. Identify important murre colonies and designate them under national and international systems of protected areas.	3	3	B
	13. Identify important pelagic habitats for murres, and promote the establishment of marine protected areas in important pelagic habitats for murres.	2	2	
	14. Contribute to the "Important Bird Areas" system to highlight important areas of murres.	3	4	B
	15. Explore the establishment of an international network to identify and protect key areas for murres.	3	4	C
	16. Ensure that conservation action will benefit populations, by assessing causes of population declines from an ecosystem perspective.	3	3	
	17. Undertake specific restoration activities to assist depressed populations to recover.	2	2	
V. Communications & Consultation	18. Determine appropriate communication approaches and produce materials to deliver specific messages.	1	1	
	19. Emphasize communication to operators of ships at sea, the fishing industry and tour boat operators and pilots.	0	2	A
	20. Produce educational materials aimed specifically at children.	0	0	
	21. Issue joint scientific reports of activities relating to murre conservation.	3	3	C
VI. Research & Monitoring	22. Coordinate circumpolar murre population monitoring and store data in standardized databases.	3	3	
	23. Conduct research on population demography at circumpolar monitoring sites.	3	3	
	24. Develop a coordinated circumpolar murre banding program.	3	3	
	25. Monitor murre feeding ecology and food availability.	3	3	
	26. Monitor murre mortality due to oil pollution, commercial fisheries, and hunting.	3	3	
	27. Conduct research to develop techniques to reduce entrapment in fishing nets.	0	2	
	28. Develop management techniques to restore habitats and populations.	1	2	
	29. Consider the effects of global warming and local eutrophication on murre populations.	3	4	
	30. Assess the need to conduct research into the genetics of murre populations.	2	4	
	31. Research for sea dist. abundance of murres.	1	3	

0 = not applicable
1 = no action considered required
2 = no action to date but required
3 = in progress and continuing
4 = completed in this year or past years

Initiatives

A. The regulations for the bird-watching tourism were slightly tightened at the Aspskär colony, the most important permanent breeding site of the species in Finland. The twitching-tours to the island are not allowed, although spotting from boat at a distance is still possible.

B. Identification of important murre breeding sites was continued. No new sites were located. Both permanent breeding sites belong to IBA's, but one of them is not officially protected nor belongs to any of the national conservation programmes. Of the 96 internationally important IBA's, 18% is sited in the seaside. Main part of the Finnish alcid populations are within IBA's.

C. A pan-Baltic inventory of all alcid populations was done in 1999 in Finland, Sweden and Denmark. In Finland, this was based on the Finnish Archipelago Bird Monitoring Scheme, using census data from 44 permanent monitoring sites, consisting of a just over 2000 islands. In addition, large areas and known old breeding sites were checked in the SW archipelago and the Åland Islands, in order to improve the coverage. Compared to the results of the previous inventory made 10 years ago, a median increase of 25% (in Finland) was noted for the Black Guillemot (now totalling 17,000-18,000 pairs) and a median increase of 30% for the Razorbill (8,500 pairs). In contrast, the tiny population of Common Murres had declined from 80 pairs to 30 pairs (Hario 2000). Sweden had 11,300 pairs of Common Murres, and Denmark had 2,500-3,000 pairs, so the total Baltic murre population is estimated at 14,000 pairs in 1999, which is a little more than in the mid-80s (13,000 pairs), when the previous estimate was made (Lyngs 1993). However, the present population stage is not known, whether a result of a continuous slight increase, or is it declining after a peak during unknown year(s) in between. Another incident of the presumed Paralytic Shellfish Poisoning occurred in 2000. Deviating from the 1992 incident (Hario et al.1983), most mortality occurred in the easternmost parts of the Gulf of Finland and hit mainly Razorbills. Only 2 individuals of Common Murre were found dead. Roughly half of the Gulf of Finland Razorbill population was affected. Numbers of active nests decreased by 60% in the 7 largest Razorbill colonies. In the extreme east, at the Russian border, the reproduction was practically nil and thus worse than during the 1992 incident. The whole event was an unhappy drawback in the population development of Razorbills. The population had slowly recovered from 1992, reaching its former level finally in 1999. Now, we are back again at the 1993 level. The recovery of Common Murres has been even slower, but the 2000 incident did not affect the number of breeding pairs. In 2001, 21 active nests were located in the Guf of Finland colony. The follow-up of the incident was not equally good as in 1992. Corpses were found at a lower rate, and, once again, the toxin could not be traced. The mortality factor of highest priority in the Baltic Sea is the gradual eutrophication of the sea, causing blooms of toxic algae. As the breeding success of our small satellite colonies is often fairly modest, the health of such populations depends much on adult survival.

References

Hario, M. 2000: The Archipelago Birds Census in 1999: recent trends of Common Eider, alcids and sea terns in Finland. – Linnut Yearbook 1999: 40-50 (in Finnish with English summary).

Hario, M., Hokkanen, T. & Malkio, H. 1993: First incident of mass seabird deaths from presumed paralytic shellfish poisoning in Finland. – Suomen Riista 39: 7-20 (in Finnish with English summary).

Lyngs, P. 1993: Colony interchange in Baltic Guillemots Uria aalge. – Dansk Orn. Foren. Tidsskr. 87: 247-250.

Sweden

No report.

Implementation of the International Murre Conservation Strategy, Norway

Implementation progress 2000-2001

Hallvard Strom, Norwegian Polar Institute, Tromso
Morten Ekker, Directorate for Nature Management, Trondheim
Tycho Anker-Nilssen, Norwegian Institute for Nature Research
Vidar Bakken, Zoological Museum, University of Oslo

This document presents the progress of implementation of the CAFF "international Murre Conservation Strategy and Action Plan" in Norway for the period 2000-2001. The previous update was given at CBIRD VII, Helsinki, Finland, October 2000.

General

The purpose of the international Murre Conservation Strategy and Action Plan, which I was published in 1996, is to facilitate the implementation of initiatives to conserve, protect and restore murre populations in the Arctic. The Plan identifies six major management issues and 31 action items.

Norway will complete a national implementation plan, and a draft in Norwegian has been produced. The draft will be finished during spring 2002, and translated to English. Due to the decision by the State Committee of Natural Resources in Russia not to complete a national implementation plan for Russia, a Russian-Norwegian initiative has been taken to try to jointly implement the strategy in the Barents Sea Region (Northern Norway/North-west Russia) This process started in 2000, but due to the death of Alexander Golovkin in August 2001, who was the Russian coordinator, there has been no further progress.

Thirty of the 31 action items are applicable to Norway with 16 action items presently being implemented, and four items regarded as completed. Each of the 31 action items within Action Plan are listed in the table on the next page. The right column ("Initiatives") refers to new initiatives or previous activities continued in 2001. Characters within the right column refer to a short description of each initiative listed on the following page.

Table 16. Implementation of the International Murre Conservation Strategy, Norway 2000 and 2001.

Management Issue	Action Item	Status 2000	Status 2001	Initiatives
I. Consumptive Use	1. Ensure that consumptive uses of murres are sustainable.	2	3	A,B
	2. Monitor harvest levels and assess their impacts on populations.	3	3	
	3. Harmonize management and harvest regimes for shared populations.	2	2	
	4. Involve local and indigenous people in the management of consumptive uses.	0	0	
II. Non-Consumptive Use	5. Ensure that non-consumptive uses of murres are sustainable.	2	3	B
	6. Implement management plans for areas of eco-tourism activity.	3	3	
	7. Implement standard guidelines to minimize the impact of disturbance at murre colonies.	3	3	
III. Commercial Activities & Industries	8. Identify, publicize and minimize impacts of commercial activities on murre breeding and foraging areas.	3	3	
	9. Implement programs to reduce oil pollution in areas used by murres.	3	3	C
	10. Assess and reduce mortality of murres in commercial fishing gear.	2	2	
	11. Ensure that management of commercial harvests of small fish species provide for their role in murre diets.	2	2	
VII.Habitat Protection & Enhancement	12. Identify important murre colonies and designate them under national and international systems of protected areas.	4	3	D
	13. Identify important pelagic habitats for murres, and promote the establishment of marine protected areas in important pelagic habitats for murres.	2	3	E
	14. Contribute to the "Important Bird Areas" system to highlight important areas of murres.	4	4	
	15. Explore the establishment of an international network to identify and protect key areas for murres.	2	2	
	16. Ensure that conservation action will benefit populations, by assessing causes of population declines from an ecosystem perspective.	3	3	
	17. Undertake specific restoration activities to assist depressed populations to recover.	2	2	
V. Communications & Consultation	18. Determine appropriate communication approaches and produce materials to deliver specific messages.	2	3	F
	19. Emphasize communication to operators of ships at sea, the fishing industry and tour boat operators and pilots.	3	3	
	20. Produce educational materials aimed specifically at children.	2	2	
	21. Issue joint scientific reports of activities relating to murre conservation.	4	4	
VI. Research & Monitoring	22. Coordinate circumpolar murre population monitoring and store data in standardized databases.	4	3	
	23. Conduct research on population demography at circumpolar monitoring sites.	3	3	
	24. Develop a coordinated circumpolar murre banding program.	3	3	
	25. Monitor murre feeding ecology and food availability.	3	3	
	26. Monitor murre mortality due to oil pollution, commercial fisheries, and hunting.	3	3	
	27. Conduct research to develop techniques to reduce entrapment in fishing nets.	2	2	
	28. Develop management techniques to restore habitats and populations.	2	2	
	29. Consider the effects of global warming and local eutrophication on murre populations.	2	3	G
	30. Assess the need to conduct research into the genetics of murre populations.	3	3	
	31. Research for sea dist. abundance of murres.	3	3	

0 = not applicable
1 = no action considered required
2 = no action to date but required
3 = in progress and continuing
4 = completed in this year or past years

A revision of the hunting regulation for Svalbard is currently undertaken. Hunting will be prohibited for Northern fulmar, Glaucous gull and Black guillemot. Hunting will still be allowed for the Thick-billed murre, but the current numbers of birds shot annually are very low (1-100 birds). The new regulations will be put into force in 2002.

Initiatives

A. A new Environmental Act for Svalbard is presently at public hearing. If implemented, it will integrate all existing legislation on nature conservation and protection into one act.

B. No new licenses for exploratory oil drilling outside Nordland County were awarded in the 17th license round, partly due to pressure from NGOs based on the vulnerability of threatened populations of common murres.

C. This action item was given 3 in the report from 2000. This category is wrong, and due to this adjusted to 2.

D. An assessment of the need to protect marine areas in the Svalbard area (incl. the north-western part of the Barents Sea) is currently undertaken. The assessment will be published in spring 2002.

E. A murre poster is produced by CBIRD. A Norwegian version of the poster will also be produced.

F. A climate paper will be produced by CBIRD.

2. Murre Banding Plan

Aevar Petersen described the status of the Murre Banding Plan. No comments have been received since CBIRD 7 and the meeting decided to finish the plan by March 1 2002 and have it published as a CAFF Technical Report before the CAFF National Representatives meeting in April 2002. The following tasks are still outstanding: AP and Vidar Bakken will cooperate to include the gaps in banding as shown by the Murre Recovery Database analyses. All countries will send the most recent estimates for their murre populations and reference before February 1. AP will ask John Chardine for map of murre colonies to be included in the report. AP and VB will cooperate to include recovery totals for different countries and approach banding offices for data on ringing totals.

3. Circumpolar Murre Monitoring Plan

The Circumpolar Murre Monitoring Plan is not yet finished, but it will be by the 2002 meeting in October. We discussed what should be in the plan, a summary is listed below. A Circumpolar Murre Monitoring Framework is done and needs to be published by CAFF. Irons will discuss this with Snorri Baldursson.

Summary of discussion of contents of the Circumpolar Murre Monitoring Plan:

1. Purpose of circumpolar murre monitoring is to detect change in murre colonies, which may be caused by:
   a. climate change
   b. fisheries interactions
   c. hunting
   d. chronic and acute oil pollution

2. Parameters that should be monitored:
   a. population trends
   b. productivity
   c. diets
   d. adult survival

3. Colony selection: each country will recommend which colonies in their country should be monitored.

4. The plan will recommend methods that should be used and cite a source of the methodologies rather than repeat all the methods in the plan.

5. The plan should relate the parameters to the potential threats for that area.

6. The plan should state the current effort in each country and suggest what should be done in each country.

4. Murre Ringing Database

We discussed producing a North Atlantic Murre Migration Atlas. We created a working group composed of Vidar Bakken, Aevar Petersen, Grant Gilchrist and Hallvard Strom to work on this issue.

5. Circumpolar Murre Colony Database

The Circumpolar Murre Colony Database is done. We discussed how to put it on the Web and decided that it should go on the CAFF website. We decided to have the data and a series of maps on the Web. Hallvard Strom volunteered to produce a draft website that we can review at the next meeting in October 2002.

6. Circumpolar Murre Poster

The circumpolar murre poster is done and is ready to print. Vidar Bakken also produced a North Atlantic murre poster. The suggestion was made to do a Pacific Ocean murre poster similar to the North Atlantic one.

7. Murre/Climate Change Paper

The Murre/Climate Change paper was discussed extensively at the meeting. David Irons presented his preliminary analysis of the issue and asked for suggestions and direction from the CBIRD group. Irons analyzed the change in sea-surface temperature (SST) among different climatic regimes and compared the changes in murre colonies during the regimes to the change in SST. The preliminary results suggested that when SST increases from one regime to the next the murre colonies (both thick-billed murre and common murre) decrease in size and when the SST decreases the murre colonies remain stable or increase.

Comments on the paper:

1. Analyze the murre species separately. – Aevar Petersen.

2. Look at the anomalies in an area and we may be able to use only two years of data. – Tycho Anker-Nilsson.

3. A 20% increase is not equivalent to a 20% decrease in murre population change. – Knud Falk.

4. If colonies are too close then it may be pseudoreplication because you would use the same SST data. - Jim Reid / Vern Byrd.

5. Do not assume that breeding production is driving the population change rather than changes in adult mortality; we can predict that it is production that is driving the population changes. – Greg Robertson.

6. Use winter SST data and use large areas. – Greg Robertson.

7. Should data from farther south along the Pacific Ocean be used? No. – Everyone.

F. Action Item 6: Circumpolar Seabird Monitoring Network

CAFF Annual Work Plan 2000-2002, Action Item 1.1

The circumpolar seabird monitoring network was discussed extensively and several recommendations were made.

1. Keep the CBIRD as the main members of the network and add others as needed.
2. Adopt the Circumpolar Murre Monitoring Plan as first step, but add phenology as a parameter.
3. Propose to monitor black-legged kittiwakes also.
4. Develop a circumpolar seabird colony catalog plan and update every 10 years
5. Develop an at-sea monitoring framework.
    a. start at 10 to 15 sites
    b. monitor every 1 to 3 years

   c. monitor coast and open ocean
   d. use local ferries, research vessels, and vessels of opportunity
   e. consider putting bird observers on vessels with continuous plankton recorders
   f. try to get funding for a charter for at-sea monitoring
   g. at-sea monitoring would allow trends to be determined for many species
   h. at-sea monitoring would demonstrate changes in distribution of many species
6. Proposed using harvest data as a monitoring tool.
7. Proposed monitoring rare species through colony catalog, Christmas Bird Counts, and at-sea surveys.
8. Report species extinctions and new species in countries.
9. Develop a Circumpolar Seabird Monitoring Framework by October 2002.
10. Finalize Charter by April.
11. We need to discuss how to put criteria together.
12. Species chosen to monitor should be based the importance to the ecology, economy and culture.
13. Check to see how CAMLR decided which species to monitor.
14. Perceived threats should be considered when deciding which species to monitor.
15. All objectives of a Global Seabird Monitoring Program needs to be well justified.
16. A Global Seabird Monitoring Plan should be based on current monitoring and should identify gaps that need to be filled.
17. Currently at-sea monitoring is a huge gap.
18. Biodiversity can be defined at different levels: genetic, species, and ecosystem.

G. Action Item 7: Circumpolar Seabird Bulletin

CAFF Annual Work Plan 2000-2002

A third Circumpolar Seabird Bulletin is planned for 2002. The purpose of the Circumpolar Seabird Bulletin is to enhance information flow among the Arctic nations.

H. Action Item 8: Circumpolar Seabird Expert Group, Charter

CAFF Annual Work Plan 2000-2002

The Circumpolar Seabird Expert Group charter was revised at the meeting and is attached as an appendix. The CAFF National Representatives approved a name change from the Circumpolar Seabird Working Group (CSWG) to the Circumpolar Seabird Expert Group (CBIRD).

I. Action Item 9: Circumpolar Seabird Monitoring Network, Charter

CAFF Annual Work Plan 2000-2002, Action Item 1.1

A Circumpolar Seabird Network Monitoring Charter was written and is attached as an appendix.

K. Action Item 10: Next Circumpolar Seabird Expert Group Meeting

It was proposed that the next Circumpolar Seabird Expert Group Meeting be in Tromso, Norway in October 2002. It has since been approved by CAFF.

V. Summary of Circumpolar Seabird Expert Group Work Plan Recommendations: 2002-04

A. Action Item 1: Conservation of Migratory Birds Outside the Arctic.

$New Using CAFF Technical Reports No. 4 and No. 8 on the subject, each country will develop a report containing a prioritized list of birds that primarily nest in the Arctic and primarily winter outside the Arctic. This list will be called the Birds of Arctic Conservation Concern (BACC). Each country's report will also contain an assessment of the status and trends, description of migration corridors staging areas, and wintering location, needed improvements to, and gaps in, international mechanisms to enhance the conservation status of BACCs.

$New CBIRD will complete a CAFF Technical Report summarizing the results of each country's BACC status report and prioritized recommendations. Lead: US – Wohl, Schedule: Draft reports will be completed in October 2002 (CBIRD IX)

B. Action Item 2: Seabird Bycatch in Commercial Fisheries in the Arctic

$Ongoing All countries will continue to report on seabird bycatch initiatives including implementation of the Food and Agriculture Organization/Committee on Fisheries International Plan of Action to Reduce Seabird Bycatch in Longline Fisheries of the World and related national implementation plans.

$New Each country with a seabird gillnet bycatch issue will complete an assessment of that issue by October 2002 (CBIRD IX). The report will document gillnet fisheries, seabird species and numbers taken in each gillnet fishery, spatial and temporal extent of bycatch, impacts on seabird populations, information gaps, legal issues, mitigation methods, regulations, studies, and action items. Lead: All Countries, Schedule: October 2002

C. Action Item 3: Seabird Harvest in the Arctic

$New CAFF Technical Report No. 5, Seabird Harvest Regimes in Circumpolar Nations, will be revised by February 2003. Revision of seabird harvest data is due October 2002.

$Ongoing Countries will continue to report on seabird harvest and implementation of applicable recommendations in CAFF Technical Report No. 5.

$New Russia will improve seabird harvest monitoring and information specifically in the Chukotka region. Lead: Russia – Artukhin, Schedule: October 2002.

D. Action Item 4: Circumpolar Eider Conservation Strategy

$Ongoing Countries will continue implementing applicable action items in the CAFF report "Circumpolar Eider Conservation Strategy and Action Plan Countries" and related national action plans, and report progress at CBIRD meetings. Lead: All Countries, Schedule: Ongoing.

$New Complete a proposal to create a Common Eider Colony map of the circumpolar region by October 2002 (CBIRD IX). Lead: Canada – Gilchrist/Robertson, Schedule: October 2002

E. Action Item 5: Circumpolar Murre Conservation Strategy

$Ongoing Countries will continue implementing applicable action items in the CAFF report "International Murre Conservation Strategy and Action Plan" and related national implementation plans, and report progress at CBIRD meetings. Lead: All Countries, Schedule: Ongoing.

$New Develop a Thick-billed Murre population model for the Atlantic Region by February 2003. Lead: Canada – Robertson, Schedule: February 2003.

$Ongoing Complete a peer-reviewed publication "Effects of Climate change on Murre Populations in the Arctic" in 2002. Lead: US – Irons, Schedule: October 2002.

$Ongoing Publish and distribute the Circumpolar Murre Colony poster by March 2002, and put the poster on the CAFF Website in 2002. Lead: Canada – Chardine, Schedule: March 2002.

$Ongoing Put the Murre Colony Catalog Database country colony maps, circumpolar colony map, data tables, and country contracts on the CAFF Website in 2002. Lead: Norway - Strom and CAFF Secretariat, Schedule: October 2002.

$New Publish and distribute a murre poster for the Atlantic region in 2002. Lead: Norway – Bakken, Schedule: October 2002.

$New Complete a murre poster for the Pacific region in 2003. Lead: US - Irons and Norway – Bakken, Schedule: October 2003.

$Ongoing Publish a CAFF Technical Report "North Atlantic Murre Banding Plan", and implement the plan in 2002. Lead: Iceland – Petersen, Schedule: October 2002.

$Ongoing North Atlantic Murre Ringing/Banding Plan and Database will be completed in 2002 and recommended to implement in 2003. Lead: Iceland –Petersen, Schedule: October 2003.

F. Action Item 6: Circumpolar Seabird Monitoring Network Charter

$Ongoing Participate in the CAFF Biodiversity Monitoring Network project as the Coordinator of the CSMN and attend the BMN workshop in April. Lead: US – Irons, Schedule: April 2002.

$Ongoing Complete a circumpolar murre monitoring plan in 2002. US – Irons, Schedule: October 2002.

$New Complete a CSMN Terms of Reference by March 2002. Lead: US – Wohl, Schedule: March 2002.

G. Action Item 7: Circumpolar Seabird Bulletin (CSB)

$Ongoing Publish the third CSB by April 2002. Lead: US – Wohl, Schedule: April 2002.

H. Action Item 8: Circumpolar Seabird Expert Group, Charter

$Ongoing Revise the CBIRD Charter by February 2002. Lead: US – Wohl, Schedule: February 2002.

I. Action Item 9. Circumpolar Seabird Monitoring Network, Charter

$New Circumpolar Seabird Network Monitoring Charter was written and is attached as an appendix. Lead: US – Wohl, Schedule: February 2002.

J. Action Item 10. Next Circumpolar Seabird Expert Group Meeting

$Ongoing It was proposed that the next Circumpolar Seabird Expert Group Meeting be in Tromso, Norway in October 2002. It has since been approved by CAFF. Lead: US – Wohl, Schedule: February 2002.

VI. APPENDICES

A. Meeting Agenda

Conservation of Arctic Flora and Fauna
CIRCUMPOLAR SEABIRD EXPERT GROUP
Anchorage, Alaska
January 14 - 18, 2002
CBIRD VIII

Tentative Agenda

January 13:	Arrival in Anchorage RON Hotel Captain Cook	
January 14: Monday		Facilitator
0830 - 0840	Welcome	Wohl
0840 - 0900	Introductions/Adoption of Agenda	Wohl
0900 - 0930	Status of CAFF Activities	Petersen

0930 - 1000	Status of CBIRD Activities	Wohl
1000 - 1200	Country Status Reports of New Seabird Conservation Initiatives/ Activities (10 minutes/country)	All
1200 - 1330	Lunch	
1330 - 1335	Introduction to Murre Conservation	Irons
1335 - 1345	- Murre Poster	Robertson
1345 - 1400	- Status of Murre Colony Catalog Database	Strom
1400 - 1415	- Status of Atlantic Murre Banding Plan	Petersen
1415 - 1430	- Status of Ringing Database	Bakken
1430 - 1630	- Murre Climate - change Paper	Irons
1630 - 1715	- Review Murre Recommendations	Irons
1830	Reception at the Wohl's	All

January 15: Tuesday

0830 - 1200	Circumpolar Murre Monitoring Plan /AVEC/ Database	Irons/Anker-Nilssen
1200 - 1330	Lunch	
1330 - 1630	Conservation of Arctic Breeding Birds Outside the Arctic: A Review of Recommendations in CAFF Tech. Report 4 and CAFF Sognli Workshop Report	Wohl
1630 - 1700	Review Recommendations	Wohl
1830	Reception at the Irons'	All

January 16: Wednesday

0830 - 1100	Seabird Harvest Issues	Greenland
• Country Status Reports (10 minutes/country) and Review of Recommendations of CAFF Harvest Report		All
1100 - 1200	Circumpolar Seabird Monitoring Network	Petersen/Irons
1200 - 1330	Lunch	All
1330 - 1700	Seabird Bycatch Issues	Wohl
• Country Status Reports (10 minutes/country) and Review of Recommendations in CAFF Tech. Report 1 and CAFF (Bycatch Workshop) Tech Report 7		All
1700 - 1730	Review of Recommendations	Wohl

January 17: Thursday

0830 - 0835	Introduction to Eider Conservation	Gilchrist

0835 - 1130	Country Status Reports (15 minutes/country) and Recommendations for New or Continuing Activities	All
1130 - 1200	Review Recommendations	Gilchrist
1200 - 1330	Lunch	All
1330 - 1800	Selected Topics	

- Fulmar Telemetry — Hatch
- AK Migratory Bird Co-Management Council — Stevens
- JNCC — Reid
- Murre Population Model — Robertson
- Albatross Telemetry — Irons
- Others ? — All

January 18: Friday

0830 - 1130	Selected Topics and New Initiatives	
1130 - 1200	CBIRD Work Plan Recommendations	Wohl
1200 - 1330	Lunch	All
1330 - 1700	Selected Work Sessions (if needed)	All

B. CAFF/Circumpolar Seabird Expert Group Work Plan, 2000-2002

Conservation of Arctic Flora and Fauna
Work Plan 2000 - 2002
September 8, 2000

Fauna

a. Co-ordinate national and circumpolar implementation of the International Murre Conservation Strategy and Action Plan and report on progress to CAFF IX. (USA/Circumpolar Seabird Expert Group)
b. Co-ordinate national and circumpolar implementation of the Circumpolar Eider Conservation Strategy and Action Plan and report on progress to CAFF IX. (USA/Circumpolar Seabird Expert Group)

c. Review recommendations of the CAFF Seabird Bycatch Workshop and CAFF Technical Report No. 1, "Incidental Take of Seabirds in Arctic Countries," and report to the April 2001 CAFF management meeting on priority activities for implementation. (USA/Circumpolar Seabird Expert Group)

d. Review recommendations of CAFF Technical Report No. 5 "Seabird Harvest Regimes in the Circumpolar Nations," and report to the April 2001 CAFF management meeting on priority activities for implementation. (USA/Circumpolar Seabird Expert Group)

e. Review recommendations of the CAFF workshop on "The Conservation of Migratory Birds Outside the Arctic," and report to the April 2001 CAFF management meeting on priority activities for implementation. (Russia/Circumpolar Seabird Expert Group)

CAFF National Representatives Meeting
September 2001

1. The CBIRD should develop an Arctic Strategy to reduce gillnet bycatch in gillnet fisheries, encourage fisheries, and seabird experts to collaborate on the fisheries-seabird bycatch issue, and report annually on how countries are implementing CAFF Bycatch recommendations.
2. The CBIRD should address recommendations of the CAFF Seabird Harvest Technical Report.
3. The CBIRD should continue to develop priority activities for implementing the recommendations of the Conservation of Migratory Birds Outside the Arctic report.

C. Revised Circumpolar Seabird Expert Group Charter

CONSERVATION OF ARCTIC FLORA AND FAUNA

CIRCUMPOLAR SEABIRD EXPERT GROUP

CHARTER

(Edition 2: 2002)

I. INTRODUCTION

Marine and coastal ecosystems are socioeconomically and biologically important features in circumpolar regions. Populations of seabirds in the circumpolar region are large and diverse. About 16 species of seabirds have circumpolar distributions while several other species are shared between two or more countries. Arctic countries often share the same seabird populations. Consequently, there is a joint and equal responsibility for the conservation of seabirds in and outside the Arctic. Arctic countries also share common population and habitat threats in marine and coastal ecosystems that seabirds depend on for their survival. Traditionally, conservation, management, and research activities for seabirds in the Arctic have been poorly coordinated in terms of common direction, concerns, field methods, reporting and information exchange. Existing governmental and non-governmental regional seabird groups are organized in a north-south or latitudinal manner and not in an east-west or longitudinal manner. Therefore, seabird activities have been poorly coordinated in a circumpolar context. Circumpolar Seabird Expert Group (CBIRD) was a recognition that seabird conservation, management, and research activities could most effectively be achieved and harmonized by a multilateral approach of all Arctic countries. It was in this simple context that CBIRD was approved in 1993 within the organizational structure of the Conservation of Arctic Flora and Fauna program, a component of the Arctic Council. CBIRD will ensure that scientists and managers interested in northern seabirds will have a common forum to promote, facilitate and coordinate conservation, management, and research activities of mutual concern.

II. GOALS AND OBJECTIVES

A. GOAL

To promote, facilitate, coordinate, and harmonize seabird conservation, management and research activities among circumpolar countries, and to improve communication between seabird scientists and managers in and outside the Arctic.

B. OBJECTIVES

- To identify current and emerging seabird conservation, management, research, monitoring, and public outreach problems and opportunities in the Arctic and corresponding information and coordination needs.
- To facilitate exchanging and publishing seabird information of mutual interest to scientists and managers in the circumpolar countries.
- To facilitate harmonizing objectives, field methods and data analyses for similar studies of seabirds in the Arctic.
- To facilitate development and coordination of cooperative research and management projects and conservation plans for circumpolar seabirds of mutual concern in the Arctic.
- To promote and facilitate coordinating conservation initiatives for those Arctic seabirds that primarily winter outside the Arctic.
- To coordinate CBIRD initiatives with activities of other seabird groups as appropriate.
- To develop an integrated package of cooperative seabird activities or initiatives for the Conservation of Arctic Flora and Fauna annual work plan.
- Coordinate the CAFF Circumpolar Seabird Monitoring Network project.

III. ADMINISTRATION

A. Membership

The CBIRD complements other international seabird working groups of governmental and nongovernmental organizations.

The CBIRD is comprised of up to 16 National Representatives; i.e., up to two representatives from each of the eight member countries of the Arctic Council, and representatives from the Council's Permanent Participants and Official Observers. CBIRD National Representatives are appointed by their respective CAFF National Representatives. The representatives represent the range of organizations and geographic areas important to seabird research, management and conservation in the Arctic. Participation in CBIRD meetings, however, is open to seabird experts of all governmental and nongovernmental organizations interested in Arctic seabirds. Decision-making within the CBIRD is by consensus of the designated official representatives.

B. Leadership

The CBIRD is administered by a Chair or Co-chairs. The Chair or Co-chairs selected from the group of official Representatives. The Chair or Co-chairs are selected by the CBIRD and approved by CAFF National Representatives. They serve for two-year terms which can be renewed at the discretion of CBIRD representatives. The Chair or Co-chairs are responsible for scheduling and facilitating meetings, preparing and distributing materials prior to meetings, and completing appropriate records of meetings. Materials and records are provided to CAFF National Representatives, the Secretariat, and all attendees within 60 days of completed meetings. Meeting agendas are developed by the Chair or Co-chairs in consultation with other CBIRD representatives. The Chair or Co-chairs also coordinate the work of CBIRD between meetings.

C. Meetings

The CBIRD will conduct meetings as necessary and possible to fulfil its objectives and approved action items. The Chair or Co-chairs, in consultation with other CBIRD representatives will determine the timing and location of meetings. Generally, meetings will rotate among the eight member countries. The CBIRD representatives from the host country are responsible for meeting logistical arrangements.

D. Expenses

Unless there is prior agreement, CBIRD representatives and other meeting attendees are responsible for their travel and per diem expenses.

D. Circumpolar Seabird Monitoring Network Draft Charter

Conservation of Arctic Flora and Fauna

CIRCUMPOLAR SEABIRD MONITORING NETWORK

Circumpolar Seabird Expert Group

Charter
(Edition 1: February 2002)

I. BACKGROUND

All eight Arctic countries have identified monitoring of biodiversity as a primary initiative. This priority is reflected in the Conservation of Arctic Flora and Fauna's (CAFF) Strategic Plan for the Conservation of Arctic Biological Diversity. One of the Plan's objectives is to "Enhance efforts to monitor Arctic biodiversity, paying particular attention to species, populations, habitats, and ecosystems which are of greatest ecological, cultural, social, economic or scientific value." The primary goals of the Circumpolar Biodiversity Monitoring Program (CBMP) is to improve the understanding of trends in biodiversity through harmonization and enhancement of current monitoring programs and the timely, cost-effective sharing of such information. The monitoring program should also function as a catalyst for more specific research and conservation measures. The Arctic Council has supported this monitoring initiative since1998.

In 1999, CAFF prepared a "Conceptual Framework for a Circumpolar Biodiversity Monitoring Network" to document the scope of the program. In 2000, CAFF and the Arctic Monitoring and Assessment Program (AMAP) conducted a workshop to further address the initiative. The group agreed that nine monitoring networks (coordinating expert groups) should be established for key species. Seabirds were one of the nine species groups or habitats selected for the establishment of a monitoring network. CAFF approved the monitoring network concept in 2000. The Circumpolar Seabird Expert Group will coordinate the implementation of the Seabird Monitoring Network.

II. GOALS AND OBJECTIVES

A. Goals

- To promote, coordinate and facilitate seabird monitoring and reporting in the circumpolar Arctic.

- Detect trends in seabird populations and diversity in the Circumpolar Arctic.

B. Objectives

- To establish priority seabird species and monitoring parameters, locations, field protocols and reporting mechanisms.

- To integrate the goals and objectives of the Global Biodiversity Monitoring Network with other seabird monitoring programs in the circumpolar Arctic.

- To complete the Circumpolar Murre Colony Monitoring Plan.

- To complete an at-sea seabird population monitoring plan, create a Circumpolar Seabird Colony Catalog Database and periodically revise the Circumpolar Murre Colony Catalog, and periodically revise the Atlantic Murre banding database.

- To promote seabird monitoring programs and conservation policies in the circumpolar Arctic.

- To promote the exchange and publication of seabird monitoring information of the circumpolar Arctic.

- To complete a seabird monitoring plan and website for the circumpolar Arctic.

III. ADMINISTRATION

A. Membership

The Conservation of Arctic Flora and Fauna's Circumpolar Seabird Expert Group (CBIRD) will coordinate the implementation of the CAFF Circumpolar Seabird Monitoring Network (CSMN).

Other seabird experts interested in seabird monitoring in the Arctic will be encouraged to participate in the Network and its meetings.

B. Leadership

The CSMN is administered by the CBIRD Chair or Co-chairs. They are selected for a 2-year term which can be renewed at the discretion of the CAFF representatives. The Chair or Co-chairs are responsible for scheduling and facilitating meetings, preparing and distributing materials for meetings, and completing appropriate records of meetings. The Chair or Co-chairs facilitate and coordinates work of the Network between and during meetings.

C. Meetings

CSMN meetings will usually be conducted in conjunction with the CBIRD meetings. CSMN meetings may rotate among the CAFF countries. The host country is responsible for all logistical arrangements for CSMN meetings.

D. Expenses

Unless there is prior agreement, CSMN attendees are responsible for their travel and per diem expense.

E. List of Participants, CBIRD VIII, February 2002

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