

# Proposed Protected Areas in the Circumpolar Arctic 1996





### CAFF

Conservation of Arctic Flora and Fauna

Habitat Conservation Report No. 2



### ABOUT CAFF

The Program for the Conservation of Arctic Flora and Fauna (CAFF) was established to address the special needs of Arctic species and their habitats in the rapidly developing Arctic region. It forms one of four programs of The Arctic Environmental Protection Strategy (AEPS) which was adopted by Canada, Denmark/Greenland, Finland, Iceland, Norway, Russia, Sweden and the United States through a Ministerial Declaration at Rovaniemi, Finland in 1991. The other programs of the AEPS include the Arctic Monitoring and Assessment Program (AMAP) and the programs for Emergency Prevention, Preparedness and Response (EPPR) and Protection of the Arctic Marine Environment (PAME).

Since its inaugural meeting in Ottawa, Canada in 1992, the CAFF Program has provided scientists, conservation managers and groups, and indigenous peoples of the north with a distinct forum in which to tackle a wide range of Arctic conservation issues at the circumpolar level.

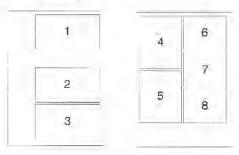
CAFF's main goals, which are achieved in keeping with the concepts of sustainable development and utilization, are;

- to conserve Arctic flora and fauna, their diversity and their habitats;
- to protect the Arctic ecosystem from threats;
- to improve conservation management, laws, regulations and practices for the Arctic;
- to integrate Arctic interests into global conservation fora.

CAFF operates through a system of Designated Agencies and National Representatives responsible for CAFF in their respective countries. CAFF also has an International Working Group which meets at least annually to assess progress and to develop CAFF Work Plans. It is headed up by a chair and vice-chair which rotate among the Arctic countries, and is supported by an International Secretariat. When needed, CAFF also sets up Specialist and Experts Groups to handle program areas.

The majority of CAFF's Work Plan activities are directed at species and habitat conservation and at integrating indigenous peoples and their knowledge into CAFF. Some examples are: work on rare, vulnerable and endangered plants and animals of the Arctic. developing circumpolar conservation strategies for certain species; work on Arctic vegetation; analyzing and making recommendations on threats to Arctic species and habitat; an indigenous peoples mapping project and development of an implementation strategy for the Convention on Biological Diversity in the Circumpolar Arctic. Most of CAFF's work is carried out through a system of Lead Countries as a means of sharing the workload. Some projects are also assigned to the CAFF Secretariat. Whenever possible, CAFF works in co-operation with other international organizations and associations to achieve common conservation goals in the Arctic.

Cover Photos:



- Novaya Zemlja, Russia. Photo: Ingar Jostein Øien.
- Polar Bear (Ursus maritimus). Photo: Reidar Hindrum/Biofoto.
- Taimyr, Russia. Photo: Georg Bangjord.
- Iceland, Photo: Peter Prokosch.
- Greenland. Photo: Peter Prokosch.
- Wolverine (Gulo gulo).
   Photo: Kjell-Erik Moseid.
- Bear Island, Norway. Photo: Hallvard Strøm.
- Moose (Alces alces). Photo: Kjell-Erik Moseid.

### Conservation of Arctic Flora and Fauna (CAFF)

### Proposed Protected Areas in the Circumpolar Arctic 1996

CAFF Habitat Conservation Report No. 2

### Compiled by









#### Responsible Institution and Publisher:

Directorate for Nature Management N-7005 Trondheim, Norway Telephone +47 73 58 05 00 Telefax +47 73 91 54 33

#### Cooperating Institutions:

Directorate for Nature Management, Norway (DN) UNEP/GRID-Arendal (UNEP/GRID) World Conservation Monitoring Centre (WCMC) Norwegian Polar Institute (NP) CAFF International Secretariat CAFF Designated Agencies

### Project team:

Jan-P. Huberth Hansen, Head of Project, DN
Finn Katerås, DN
Vladimir Pisheliev, MINPRIRODI
Igor Lysenko, MINPRIRODI
Frode Abrahamsen, UNEP/GRID
Lars Kullerud, UNEP/GRID
Stefan Norris, NP
Advisers/consultants:
Michael Green, WCMC
Olav Nord-Varhaug, DN
Peter Prokosch, WWF International
Melanie Heath, BirdLife International
Jeanne Pagnan, CAFF International Secretariat

#### CPAN Ad Hoc Experts Advisory Group:

Vladimir Pisheliev, Chair, Russia Gerry Lee and Manfred Hoefs, Canada Pertti Veijola, Finland Arnthor Gardarsson, Iceland Berit Lein, Norway Boris A. Yurtsev, Russia Leslie Kerr and Debra Clausen, USA Secretariat: Jan-P. Huberth Hansen, Norway

#### **CAFF National Contacts and Designated Agencies:**

Gerald McKeating, Environment Canada, Edmonton Antti Haapanen, Finnish Ministry of Environment, Helsinki

Peter Nielsen, Chair, Greenland/Denmark, Greenland Institute of Natural Resources, Nuuk Aevar Petersen, Icelandic Museum of Natural History, Reykjavik

Berit Lein, Directorate for Nature Management, Trondheim

Christer Borgh, Swedish Environmental Agency, Stockholm

Amirkhan Amirkhanov, Ministry of Protection of the Environment and Natural Resources, Moscow Janet Hohn, United States Fish and Wildlife Service, Anchorage, Alaska

#### Citation:

Conservation of Arctic Flora and Fauna (CAFF), 1996.

Proposed Protected Areas in the Circumpolar Arctic 1996. CAFF Habitat Conservation Report No. 2 Directorate for Nature Management, Trondheim, Norway

ISBN: 82-7072-204-9

Copyright: 1996 Directorate for Nature Management

#### Report available from:

Directorate for Nature Management, N-7005 Trondheim. Norway (fax: +47 73 91 54 33)

or

CAFF International Secretariat, Hafnarstrateti 97, P.O. Box 375, 600 Akureyri, Iceland (fax: +354 462 3390)

Overhead colour transparencies and larger paper copies of maps are available from:

UNEP/GRID-Arendal, N-4800 Arendal, Norway (fax: +47 37 03 50 50/e-mail:grid@grida.no)

### Table of contents

Introduct				
Summary	·			6
Introduct	ion			9
PART 1				
1 The Arc	tic - de	efinitions ar	nd limitations used	10
D. 200 320	100	Table 1.1	Total land area and percentage Arctic - by country	
			The Arctic Region	
			The Arctic - topography and bathymetry	
9 Eviction	nenta	oted areas i	n the Arctic	19
4 Existing	prote		Protected areas in the Arctic - by country as of 1996	
			Protected areas in the Arctic as of 1996	
		rigute 2.1	Froiected dreas in the Article as of 1990	14
3 The nee	d for	further pro	tection	15
3.1	Overv	iew		15
3.2	On the	e need for n	marine and coastal habitat conservation and the role of	
	marin	e and coasta	al protected areas in the Arctic	16
		Table 3.1	Protected areas of the World (1992) compared with	
			protected areas of the Arctic (1996)	15
		Table 3.2	Distribution of marine protected areas according to the	
			CNPPA (IUCN) Marine Regions	16
		Figure 3	Coastal and marine protected areas in the Arctic	
3.3	Needs	0	ts of strengthening transnational co-operation - transboundary	
			the Arctic	17
			proposed Arctic protected areas	
4.1	Overv	iew		19
			Proposed protected areas in the Arctic	
		Figure 4.1	Existing and proposed protected areas in the Arctic	20
4.2	Propo	sed Arctic p	rotected areas - by country	21
	4.2.1	Canada		21
	4.2.2	Finland		21
	4.2.3	Greenland	1	21
	4.2.4			
		Figure 4.2	Existing and proposed protected areas in Iceland	26
	4.2.5	Norway		
	4.2.6	Russia		22
	4.2.7	Sweden		22
		Figure 4.3	Existing and proposed protected Areas in North Scandinavia and Northwest Russia	
	4.2.8		ka	
			ed areas in the Arctic - by NGOs	
			ed areas in the Arctic - marine and coastal areas	
	1		Existing and proposed Arctic coastal and marine areas	
4.5	Propo	0	ed areas in the Arctic - transboundary areas	
4130,	- o - F -		Existing, and proposed Arctic border parks protected areas	
			Existing and proposed transboundary Protected Areas in North Scandinavia and	111111111111111111111111111111111111111
		2 8 000 1.5	Northwest Russia	96
46	Assess	ment of the	adequacy of the proposed areas in CPAN	
1.0	100000	Table 4.3	Summary of existing, proposed protected areas, new proposals and a	
		Tuble T.	potential estimation of Arctic protected areas	95
			posetissis essentiation of Artest protected areas	
5 Recom	nenda	tions on fre	ther action by CAFF	28

Par				
DI	RECTORY O	OF PROPOSED PROTECTED AREAS IN THE ARCTIC		
1	Canada			
2	Finland	53		
3	Greenland	d/Denmark57		
4	Iceland	61		
5	Norway			
6	Russia	117		
7	Sweden	149		
8	USA (Alas	ka)		
Par LIT				
Ap	oendix I	Summary of NGO proposals on marine protected areas		
	pendix II	BirdLife International - Important Bird Areas (IBA) in the Arctic		
Ap	pendix III	IUCN Policy statement on marine protected areas		
Ap	pendix IV	IUCN Guidelines for promoting effective management of transfrontier parks and reserves173		
		CAFF/CPAN questionnaire		
	pendix VI	List of protected areas in the circumpolar Arctic as of 1996 - by country		
		(Update of Habitat Conservation Report No. 1, 1994)		
Ap	pendix VII	Proposed protected areas database		

### **Preface**

It is with great satisfaction that we are now able to present CAFF Habitat Conservation report No. 2 - Proposed Protected Areas in the Circumpolar Arctic 1996. Together with the CAFF Habitat Conservation Report No. 1 - The State of Protected Areas in the Circumpolar Arctic 1994, this report hopefully provides a comprehensive overview of the present conservation status of habitat in the Arctic.

It has proved to be somewhat difficult to get satisfactory responses from some countries, which is assumed to be due to the temporary nature of this type of information. It has also taken a longer time to collect data than originally planned, and the completion of the report has therefore had to be postponed several times. Following the AEPS Ministers' endorsement of the *CPAN Strategy and Action Plan* (cf. CAFF Habitat Conservation Report No. 6), however, this report is now available in time for the upcoming actual implementation of CPAN.

I wish to thank all those who have provided data and other inputs for the report. Again a close and fruitful co-operation has taken place between the staff at the Directorate for Nature Management (DN), the Norwegian Polar Institute (NP), UNEP/GRID-Arendal and the World Conservation Monitoring Centre (WCMC). I wish to congratulate the Project Team, lead by Jan-Petter Huberth Hansen (DN), for the important job they have done in the production of this report. Special thanks goes to Finn Katerås (DN), Lars Kullerud and Frode Abrahamsen (GRID) and Michael Green (WCMC) for their work, as well as to Jeanne Pagnan, CAFF International Secretariat, for her assistance in retrieving information from member nations.

Sincere thanks are also due to *Vladimir Pisheliev* and *Igor Lysenko*, Ministry of the Protection of the Environment and Natural Resources of the Russian Federation, *Stefan Norris*, Norwegian Polar Institute, as well as to *Melanie Heath*, BirdLife International, *Peter Prokosch*, WWF International, and *Olav Nord-Varhaug* (DN) for their contributions to the report.

Making a Circumpolar Protected Areas Network in the Arctic (CPAN) a reality requires knowing where we stand at any given time. This report is valuable in that it tells us what is the present situation, and in that it also provides a benchmark against which future progress on the implementation of CPAN - jointly in AEPS and individually as CAFF members - can be assessed.

Nuuk, 15 June 1996

Peter Nielsen CAFF Chair

### Summary

This report provides an overview of proposals made by CAFF countries for new and/or enlarged protected Areas in the Arctic. Some proposals from non-governmental organisations (NGOs) are also mentioned. The report also focuses on the roles of coastal and marine protected areas and transboundary co-operation. Together with the report on the State of Protected Areas in the Circumpolar Arctic 1994 (CAFF Habitat Conservation Report No. 1), this report is intended to provide a comprehensive overview of the present situation with regard to the present conservation status of habitat in the Arctic.

The main source of data for the information contained in this report are the responses from CAFF member countries and various NGOs to a questionnaire circulated at the end of 1994. It proved to be somewhat difficult to get adequate information from some countries, but information on 118 new areas proposed for protection was received from the eight CAFF member countries Canada, Finland, Greenland/Denmark, Iceland, Norway, Russia, Sweden and the United States (Alaska). The report discusses in some detail the proposals made by these countries as well as the proposals received from NGOs.

The proposals presented for new or enlarged protected areas are at very different stages in the various national planning processes, and naturally much data is not yet available. For example is the size of 17 proposed areas not yet known. Furthermore, the amount of data, as well as the validity, provided for each of the proposals, varies considerably.

What is important, however, is that all countries appear to have a good overview of their candidate sites. The Proposed Protected Areas Directory in this report is contained in Part 2, and consists of a data sheet for each of the proposed areas.

As of 1996 there are 285 protected areas (larger than 10 km²) in the Arctic (cf. Appendix VI) covering some 14,1% of the Arctic land area. Large parts of this area consists of permanent snow or ice. For example North and East Greenland National Park, which is largely ice cap, constitutes roughly half of this area. Furthermore, several proposals, especially in Russia, consist of several separate units (often a long distance apart).

Table 4.2 in this report provides a summary of existing and proposed protected areas in the Arctic, as well as an estimate of the total planned for protection. If most of the 118 proposed protected areas identified by the eight Arctic countries are established, the number of protec-

ted areas in the Arctic will rise to about 400 areas within the foreseeable future.

Even if these proposals are all implemented, however, the North and East Greenland National Park will still constitute about 40 % of the total area afforded protection. Also, marine units are often not separated from terrestrial areas in data on existing protected areas, thus causing calculation problems and reduced reliability of figures on land area. Both the size and number of protected areas should therefore be seen as an indication, rather than an absolute reflection, of the level of protection accorded to the Arctic.

Based on the data available for the 101 proposals, however, it can nonetheless be stated the total area under protection (IUCN management categories I-V) will rise to at least some 318.000 km², or 16% of the terrestrial Arctic as defined by CAFF. This is more than three times the area of Iceland. Also, this overview of existing and proposed protected areas provides a basis for further work under the CPAN project.

However, the distribution of the present protected areas in the Arctic will still not be fully representative, with some key habitats - such as isolated islands, fjords and coastal areas, marine areas, forests, and wetlands - being under-represented. So even with 16% of the Arctic protected in accordance with current proposals, the network will not be adequately representative of the wide variety of Arctic ecosystems, nor will it contribute effectively to the maintenance of viable populations of all Arctic species and serve to fully maintain ecological and evolutionary processes.

Insufficient attention to the designation and planning of coastal and marine protected areas needs to be addressed by CAFF member countries. Major challenges include the inclusion of Arctic marine areas in CPAN, as a part of a global system of marine protected areas that is adequately representative of marine environments. Some 100 of the present 285 protected areas have a larger or - more often - a minor marine component. UNEP/GRID-Arendal has in this regard made a rough estimation, finding that about 440.000 km² may in the future be included in unique or mixed marine protected areas, representing however only about 2,5% of the marine part of the Arctic.

At present there are five transfrontier conservation areas in the Arctic. Another eight such areas are either proposed or under planning. Conserving ecologically important transboundary Arctic areas, *inter alia* through the establishment of protected areas, frequently with

complex international jurisdiction (e.g. marine areas), represents a major challenge.

Adequate implementation of the recommended actions on a national as well as at the AEPS level (cf. chapter 6 in the CPAN Strategy and Action Plan) will also be needed if the overall goal of CPAN is to be attained, namely "to facilitate implementation of initiatives to establish, within the context of an overall Arctic conservation strategy, an adequate and well managed network of protected areas that has a high probability of maintaining the dynamic biodiversity of the Arctic region in perpetuity".

In addition, active use must be made of the principles and guidelines that have been developed for CPAN (cf. CAFF Habitat Conservation Report No. 4), and appropriate attention must also be made to the national principles and mechanisms that have been identified for protected area selection in Arctic countries (cf. CAFF Habitat Conservation Report No. 3). Further gap analyses should also be carried out at the circumpolar level in order to better plan a fully representative CPAN (cf. CAFF Habitat Conservation Report No. 5).

Appropriate attention must also be made in the implementation of CPAN to the importance of smaller protected areas, i.e. in this context those that are smaller than 10 km<sup>2</sup>.

Based on the findings of this report, recommendations are made on the following items:

- increase the level of knowledge and data collection
- identify the most significant gaps in the national networks of protected areas, and to select candidate sites for further action
- secure the establishment of a Pan Arctic Protected Areas Register
- identify needs and opportunities for modifying existing protected areas

Other recommendations are made which pay particular attention to the need for new protected areas and on the importance of coastal and marine as well as transboundary areas. Recommendations in this report must clearly be seen in context with other recommendations on other, including more overall, aspects of CPAN (cf. CAFF Habitat Conservation Reports 3 - 6).

### PE3IOME

В данном отчете собраны предложения со стороны стран-членов CAFF по новым или/и расширенным охраняемым раойнам в Арктике. Отчет включает в себя и некоторые предложения от негосударственных организаций (NGO). Отчет - до определенной степсии - помещает в фокусе роль прибрежных и морских охраняемых районов, а также роль трансграничного сотрудничества. Вместе с отчетом "CAFF Habitat Conservation Report No 1: The State of Protected Areas in Circumpolar Arctic 1994" данный отчет намеривается описать сегодняшную ситуацию охраняемых районов Арктики.

Информация и данные, включающиеся в данный отчет, основываются на ответы от стран-членов CAFF и различных негосударственных организаций (NGO) на анкетирование, проведенное в кошу 1994 г. Оказалось немного трудным получить удовлетворительную информицию от некоторых стран, но была получена информация о 118 новых охраняаемых районах от восьми стран-членов CAFF - Канада, Финляндия, Гренландия/Дапия, Испандия, Порвегия, Россия, Шведдия и США (Аляска). В отчете обсуждены предложения этих стран, а также предложения поступившие от NGO.

Предложения по новым и расширенным охраняемым районам находятся в различных этапах обсжудения в различных странах. И, естественно, многие данные пока не являются доступными. Например, не хватает данных по площади 17 предложенных районов. Встречаются и значительные колебания касательно количества и обоснованность данных.

Самое главнос, однако, то, что у каждой страны есть яркий общий обзор по перспективным районам. Список предложенных охраняемых районов приложен в Часть 2, и содержает информацию об предложенных, повых рабонах.

К 1996 г. в Арктических районах существует 285 охраняемых районов (>10 км2), ссыд на приложение IV, площадь которых составляет ок. 14,1% общей площади Арктики. Большая часть площади покрыта постоянным снегом или льдом. Покрытый льдом Национальный Парк Северно-Восточной Гренландии охватывает половину общей площади этих районов. Кроме этого, некоторые предложения, особенно со стороны России, состоят из некоторых, отдельных единиц (которые часто расположены далеко друг от друга).

Целью сети общеномярных охраняемых районов (СРАN) является представление - как можно более комплектно - разнообразность арктических экосистем и эффективное содействование сохранению жизнеспособных популяций всех арктических видов, а также содействование сохранению экологических и эволюционных процессов.

Если 118 предложенных районов, идентифицированных восьми Арктическими странами, будут реализированы, то количество охраняемых районов в Арктике будет составлять ок. 400. На основе доступных в 101 предложениях цифр, можно определить, что площадь охраняемых районов с различными режимами охраны (категории I-V управления IUCN) увеличится на 318.000 км2 и будет составлять > 16% общей площади Арктики. Напиональный Парк Северо-Восточной Гренланции будет все-равно составлять ок. 40% общей площади охраняемых районов.

В связи с тем, что данные о морских единицах часто включены в данных о существующих охраняемых районах на суще, затрудняется калкуляция и возникают проблемы предоставить надежные данные по площадям наземных районов. Однако, можно констатировать, что общая площадь 101 из 118 предложенных районов составляет ок. 318.000 км2, - т.е. три раза больше, чем общая площадь Исландии.

Дальше, распределение сущетсвующих охраняемых районов Арктики не является полностью представителным или био-географически сбалансированным. Т.е. некоторые ключевые места распространения (habitats) - как например изолированные острова, фьюрды, прибрежные, морские и несные районы, а также болоты - представлены в небольшом количестве.

Поэтому, следует понимать площадь и количество предложенных охраняемых районов в качестве указателя - а не в качестве абсолютного отражителя - желаемого уровня увеляченной охраны.

Работа над сохранением морской среды и мест распространения морской флоры и фауны не является такой интенсивной как работа над сохранением наземной среды. Недостаточное внимание обращено на определении и запланировании прибрежных и морских охраняемых районов, и странами-членами САГГ следует более внимательно отсноситься к этому вопросу. Ок. 100 из существующих 285 охраняемых районов имеют морские компоненты разного размера. По предвартельной оценке UNEP/GRID-Arendal, ок 440.000 км2 может быть в будущем включено в упикальные или смещанные морские охраняемые районы. Но даже тогда общая площадь морских, охраняемых райнов будет составлять только ок. 2,5 %.

В ок. 100 местах по всему миру, парки и заповедники находятся в приграничных районах. Сстодная в Арктике имеется 5 трансграничных, охраняемых райнов. Кроме этого, предложено, или запланировано, основать еще 8 трансграничных заповедников. Сохранение экологически важных приграничных районов в Арктике путем основания совместных охраняемых райнов (в том числе в морских), подчиняющихся юрисдикции разных стран, является большим вызовом.

Так как районы, описанные в отчетах "CAFF Habitat Conservation Reports No 1 & 2" полностью пе соответсвуют с целями сети СРАN, необходимо принимать дополнительные меры как в националном уровне, так и в уровне AEPS, см. Статья 6 в отчете "CAFF Habitat Conservation Report no. 6" ("CPAN Strategy and Action Plan"), чтобы достичь целей СРАN.

Кроме этого следует активно пользоваться принципами и паправлениями, разработанными для CPAN, cf.CAFF Habitat Conservation Report No.4. Достаточное внимание следует обратить и на национальные принципы и моханизмы, согласованные для выбора охраняемых районов Арктических стран, ссыл. на отчет "CAFF Habitat Conservation Report No.3"

Следует обратить внимание и на применение сети СРАN для подчеркивания важности и более маленьких охраимемых районов, т.е. районов, площадь которых составляет меньше чем 10 км2.

На основе данного отчета рекомендуется:

- увеличить уровень знания и отбора данных
- выявить самыс значительные пробелы в национальных сетях охраняемых районов, а такде выбрать возможные районы для будущих мероприятий.
- обеспечивать осуществление регистра "Pan Arctic Protected Area Registry".
- выявить какие нужды и какие возможности существуют для модификации существующих охраняемых районов.

Кроме этого, рекомендуется обратить особенное внимание на потребность в новых охраняемых районах и на важность прибрежных, морских и трансграничных районов. Необходимо рассматривать рекомендации данного отчета в контексте с другими рекомендациями по более всеохватывающим аспектам СРАЙ, ссыл. на отчеты САРР Habitat Conservation Reports 3-6.

### Introduction

The CAFF Habitat Conservation Report No. 1 - The State of Protected Areas in the Circumpolar Arctic, published in 1994, provided a first step towards developing the Circumpolar Protected Areas Network (CPAN), initially called for in the Rovaniemi Declaration (1991) and the Arctic Environmental Protection Strategy (AEPS). The Arctic Ministers in the Nuuk Declaration (1993) requested that the CAFF Working Group continue its efforts by preparing a plan for the development of a Network of Protected Areas that will provide a common process for use by Arctic countries instrumental in ensuring the necessary protection of Arctic Ecosystems.

In response to this request, CAFF set up a CPAN Project, lead by Russia in co-operation with Norway. The activities of CPAN comprised the following:

- compile an overview of all proposed protected areas in the Arctic
- evaluate national principles and mechanism for creating protected areas
- propose principles and guidelines for Arctic protected areas
- identify gaps in the protected areas network through a preliminary gap analysis
- prepare a CPAN strategy and action plan

The strategy and action plan that has been developed for CPAN is contained in CAFF Habitat Conservation Report No. 6. The goal of the CPAN Strategy and Action Plan is to facilitate implementation of initiatives to establish, within the context of an overall Arctic conservation strategy, an adequate and well managed network of protected areas that has a high probability of maintaining the dynamic biodiversity of the Arctic region in perpetuity.

The strategy and action plan for CPAN was endorsed by the Third Ministerial Conference on the protection of the Arctic environment, which was held in Inuvik, Canada, 20-21 March 1996. Furthermore, the AEPS ministers stated in the Inuvik Declaration on Environmental Protection of and Sustainable Development in the Arctic that CAFF should give priority to continuing the development of the Circumpolar Protected Areas Network (CPAN).

This report is a response to the first CPAN activity: to provide an overview of proposed protected areas in the Arctic. The main sources of information for this report are the responses of CAFF member countries and non-governmental organisations (NGOs) to the Russian CPAN questionnaire which was distributed at the end of 1994.

Together with CAFF Habitat Conservation Report No. 1, this report is intended to give a comprehensive overview of the present situation with regard to habitat protection in the Arctic. This is crucially important for further development and planning of a representative CPAN. In addition to data on proposed protected areas, the report focuses on the challenges presented by coastal and marine areas and by transboundary co-operation. The report also includes a Directory of proposed protected areas, with more detailed data on each proposed area.

## 1 The Arctic - definitions and delimitations used

An overview of the Arctic environment and the most common definitions of the Arctic is provided in CAFF Habitat Conservation Report No. 1 (1994). For the purposes of that report, each of the eight CAFF member countries chose to use its own definition of "the Arctic". The total land area of the CAFF eight nations is about 39.5 million km², of which about one third or 14,8 million km² has been defined as Arctic by CAFF member countries. The distribution of the Arctic as defined by CAFF member countries is shown on Figure 1.1, together with distribution of permafrost, the 10°C July isotherm, the Arctic Circle, a phytogeographic Arctic boundary and an outline of the Euro-Arctic Barents Region.

For the purpose of this report, which seeks to provide some focus on coastal and marine protection, a new map showing the characteristics of the Arctic Ocean has been developed (Figure 1.2).

Though small in comparison with other oceans, the Arctic Ocean has a remarkable complex and varied sca-

bed relief. Some of the most critical areas from a biological point of view are those parts of the marine environment that are presently very productive, e.g where turbulence or upwelling has destroyed the stable water stratification allowing mixing of water and concentrating of nutrients from a large area. However, it must also be noted that many relatively unproductive areas may be critical for particular species or ecological functions (e.g. migratory corridors for key species, areas of high species richness). The IUCN Commission on National Parks and Protected Areas (CNPPA) has identified five biogeographical subregions for the Arctic Ocean. On a national level Canada for example has identified 29 natural marine regions. However, both on a regional and on a national level, protection of coastal and marine ecosystems lags far behind that of terrestrial areas. The marine area within the Arctic, as defined by CAFF, has by UNEP/GRID-Arendal been estimated to be 18 million km2, and is thus more extensive than the total land area.

Country	Total land area (km²)	Land area in the Arctic	% Arctic
Canada	9,970,610	5,260,777	52.8
Finland	304,623	79,547	26.1
Greenland/Denmark	2,175,600	2,175,600	100.0
Iceland	103,000	103,000	100.0
Norway	386,975	163,522	42.2
Russia	17,075,400	6,349,780	37.2
Sweden	411,000	95,000	23.1
USA (Alaska)	9,166,758	590,553	6.4
Total	39,593,966	14,817,779	37.4

### 2 Existing protected areas in the Arctic

As of September 1994, a total of 280 protected areas, covering some 2 million km², or approximately 14% of the land area in the Arctic, had been designated (CAFF Habitat Conservation Report No. 1). These are all protected areas larger than 10 km² or isolated islands larger than 1 km² and fall within IUCN Management Categories I-V, thereby qualifying for inclusion in the United Nations List of Protected Areas. About 100 of these protected areas have coastal or marine components.

As of 1 January 1996, there had been no additions to the protected area networks of Finland, Greenland, Sweden nor USA (Alaska) since the release of CAFF Habitat Conservation Report No. 1 in 1994.

In Canada, one new site has been designated. However, one site has been withdrawn from the list of protected areas as it is still a proposal, and transferred to the directory of proposed protected areas. Canada therefore still has 46 protected areas on the "CAFF-list", but the area (km²) has been reduced somewhat.

Iceland has designated two new protected areas, of which one is a large marine site.

In Norway, two new areas have been established.

Russia has designated one new area, and a large extension has been completed for one of the zapovedniks.

Furthermore, several areas in Russia have already been designated at a regional level, and are awaiting approval of the Russian Federal Government. Such areas have been listed in the Directory of proposed protected areas. One of these areas has the potential to become the second largest protected area in the Arctic, namely the extension of the Lena Delta Zapovednik to include the New Siberian Island and parts of the Laptev Sea, which will increase its area by 100,000 km<sup>2</sup> (cf. Figure 4.1).

Updating the figures shows that in 1996 there are 285 protected areas (> 10 km<sup>2</sup>) in the Arctic, covering some 14,1% of the terrestrial Arctic. It should be mentioned that some marine areas may be included in this figure.

Furthermore, the data are either unreliable or do not exist for most of the marine areas *de facto* protected. For instance has the marine component around the large protected areas in Svalbard, Norway, never been calculated.

The state of protected areas in the circumpolar Arctic was reviewed in CAFF Habitat Conservation Report No. 1, which also provides a directory of the then 280 protected qualified for inclusion in the United Nations List of Protected Areas. For further information on existing protected areas, reference should be made to that report. However, an up-to-date list of all 285 protected areas has been included in Appendix VI of this report.

**Table 2.1** Protected areas in the Arctic - by country as of 1996 (includes only areas qualified for inclusion in the United Nations List of Protected Areas)

Country	No. of areas category I-V	Total land area (km²) category I-V	% of Arctic land area <sup>1</sup>	No. of areas with coastal or marine components <sup>2</sup>
Canada	46	434,859	8,3	26
Finland	52	25,905	32.6	not relevant
Greenland/Denmark <sup>3</sup>	14	993,025	45.7	12
Iceland	25	12,160	11.8	9
Norway	38	41,637	25.5	15
Russia4	26	237,665	3.7	11
Sweden	43	19,623	20.7	not relevant
USA (Alaska)	41	331,425	56.1	28
Total	285	2,096,299	14.1	101

<sup>4</sup> Some marine components might be included

<sup>&</sup>lt;sup>2</sup> Calculated on the basis of provided data

Includes eleven designated Ramsar sites, of which nine are not protected under Greenland's Nature Conservation Act

<sup>&</sup>lt;sup>1</sup> Some additional areas already decided upon on a regional administrative level, but awaiting approval of the Russian Federal Government, are not included here

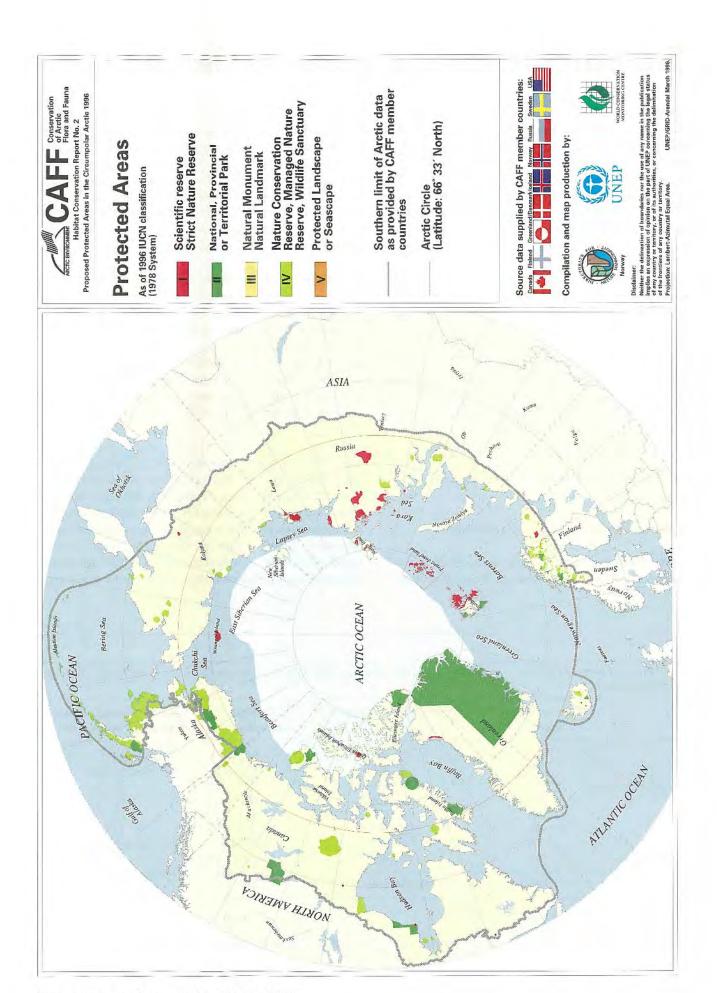


Figure 2.1 Protected areas in the Arctic as of 1996

### 3 The need for further protection

#### 3.1 Overview

Protected areas are seen as an integral part of any strategy for sustainable development, and constitute one effective means of protecting biological diversity and supporting its sustainable use. They are typically established to conserve a representative sample of an ecosystem or to protect a particular species, habitat or significant biogeographical or cultural feature. National Park, which is largely icc cap, constitutes roughly half of the total area under protection in the Arctic. Furthermore, a certain percentage of what has been considered to be terrestrial (land) area is actually marine, as information provided by the countries (except Finland and Sweden) does not always distinguish between terrestrial and marine components. In other words, both the size and number of protected areas should be seen as an indication, rather than an absolute

Table 3.1 Comparison between the global network of protected areas, based on the 1993 United Nations List of Protected Areas, and the Arctic network, based on those qualifying for the list in 1996

	Land area	No. of areas category I-V	Total area (km²) category I-V	% of area
World	149,007,606	8641	7,928,928	5.3
Arctic (CAFF)	39,593,966	285	2,096,299	14.1

Despite a growing recognition world-wide of the importance of national parks and other categories of protected areas, only about five percent of the planet's surface is presently afforded protection in protected areas that qualify for inclusion in the 1993 United Nations List of National Parks and Protected Areas (cf. Table 3.1).

It is often beneficial to take a regional approach when using protected areas as a measure for habitat conservation, and this also a backbone for the CPAN project. The goal of CPAN as described in the strategy and action plan is "to facilitate implementation of initiatives to establish, within the context of an overall Arctic conservation strategy, an adequate and well managed network of protected areas that has a high probability of maintaining the dynamic biodiversity of the Arctic region in perpetuity".

The resulting circumpolar network of protected areas is intended to represent as fully as possible the wide variety of Arctic ecosystems, contribute effectively to maintain viable populations of all Arctic species and serve to maintain ecological and evolutionary processes.

For a further discussion on the concept of protected areas and on the rationale for CPAN, reference is made to CAFF Habitat Conservation Report No. 6 ("CPAN Strategy and Action Plan").

In the Arctic about 14% of total land area is protected. While this is very much higher than the global average (cf. Table 3.1), it should be pointed out that much of what is protected in the Arctic consists of permanent snow or ice. For example the North and East Greenland

reflection, of the level of protection accorded to the Arctic.

Furthermore, the distribution of the present protected areas in the Arctic is not fully representative, with some key habitats - such as isolated islands, fjords and coastal areas, marine areas, forests, and wetlands - being underrepresented. For more details on this issue, reference is made to CAFF Habitat Conservation Report No. 1.

Addressing this problem will be a major challenge for CAFF and its CPAN project, requiring inter alia:

- development of guidelines based on a recognised set of criteria on of evaluat the present network of Arctic protected areas
- identification of major gaps in this network and the setting of targets to fill these gaps, and
- review of existing mechanisms and principles for establishing protected areas

For more details on CPAN's response to these issues, reference is made to the CAFF Habitat Conservation Reports Nos. 3 ("National Principles and Mechanisms for Protected Area Selection in Arctic Countries"), 4 ("CPAN Principles and Guidelines"), 5 ("Gaps in Habitat Protection in the Circumpolar Arctic - A Preliminary Analysis") and 6 ("CPAN Strategy and Action Plan").

It should here be pointed out that the information gathered for each of the 285 areas in the Directory of Arctic Protected Areas (cf. CAFF Habitat Conservation Report No. 1) is not sufficient for conducting a complete evaluation and gap identification at a national level

using the guidelines and criteria developed under the CPAN project. It is anticipated, however, that an initiative from the World Conservation Monitoring Centre (WCMC) to compile a comprehensive directory of "Northern (Arctic) Protected Areas", in collaboration with CAFF member countries, may do much towards meeting these data needs.

### 3.2 On the need for marine and coastal habitat conservation and the role of marine and coastal protected areas in the Arctic

Despite several initiatives, some stretching back several decades, to devise methods to manage and protect marine environments and resources, conservation of the marine environment has lagged far behind that for the terrestrial environment. A fully integrated approach to the conservation and management of marine ecosystems, therefore, is yet to be developed and implemented. Consequently, many marine areas world-wide now face serious problems, including over-exploitation of fish and other marine resources, pollution and physical alteration of the seabed or coastline.

The term "marine protected area" is defined by IUCN (McNeely et. al. 1994) as "any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment".

According to IUCN, the primary goal of marine conservation and management is "to provide for the protection, restoration, wise use, understanding and enjoyment of the marine heritage of the world in perpetuity through the creation of a global, representative system of marine protected areas and through the management, in accordance with the principles of the World Conservation Strategy, of human activities that use or affect the marine environment".

IUCN recommends that each national government as an integral component of its work on marine conservation and management should seek co-operative action between the public and all levels of government for development of a national system of marine protected areas (McNeely et. al. 1994).

Achieving ecological sustainability, conservation of biological diversity and maintenance of biological resources and ecological functions in the Arctic coastal marine environment will also be expected to depend on integrated planning and management regimes, of which the designation of protected areas is a major component.

IUCN's Commission on National Parks and Protected Areas (CNPPA), under its marine programme, distinguishes 13 marine regions within which a total of 1,182 marine protected areas have been identified to date. Of these, only 10 have been registered in CNPPA's Arctic Marine Region (Table 3.2). It should be mentioned, however, that this region is not identical with the Arctic as defined for CAFF purposes. Moreover, about 100 of the 285 protected areas registered by CAFF include a coastal or marine component.

None of the CNPPA Marine Regions, especially in the Arctic Marine Region, are adequately represented within marine protected areas. Action, therefore, is urgently required to identify the marine areas which require protection. The comprehensive IUCN reports on "A Global System of Marine Protected Areas" (1995) provide a sound basis for starting this work.

Insufficient attention to the designation and planning of coastal and marine protected areas also needs to be addressed by CAFF member countries. Major challenges include the inclusion of Arctic marine areas in CPAN, as a part of a global system of marine protected areas, that is adequately representative of marine environments.

**Table 3.2** Distribution of marine protected areas according to the CNPPA Marine Regions (McNeely et. al. 1994)

Marine Region	Approximate number of MPAs
1 Antarctic	23
2 Arctic	10
3 Mediterranean	46
4a NW Atlantic	45
4b NE Atlantic	34
4c N Atlantic-Baltic	24
5 Wider Caribbean	76
6 West Africa	125
7 South Atlantic	25
8a Indian Ocean	25
8b NW Indian Ocean	24
8c South East Africa	9
9 Southeast Asia	83
10 Central & South Pacific	49
11a NE Pacific	54
11b NW Pacific	201
12 SE Pacific	25
13 Australia	304
Total	1182

There is no doubt that the 10 Arctic marine protected areas identified by IUCN are not representative of the region. Even if the 100 protected areas having a coastal or marine component are considered, the marine protected areas network in the Arctic is still far from adequate (cf. also 4.3 below on proposed marine areas).

### 3.3 Needs and benefits of strengthening transnational co-operation - transboundary protected areas in the Arctic

The idea of establishing protected areas along international borders was introduced about 80 years ago in North America and about 60 years ago in Europe. Today, protected areas are situated on frontiers at an estimated 100 places around the world. Some countries have designated large areas along their borders as protected areas. For example one-sixth of the US border with Canada and one-fifth of its border with Mexico comprises protected areas.

Activities relating to the protection of areas occur primarily within individual countries or at sub-national level, but such political boundaries are artificial in biological and geographical terms. This means that where countries are numerous and often small, as in Africa or Europe, areas rich in biodiversity, such as river valleys, deltas, enclosed lakes and mountain ranges, often form the borders between countries. When using the designation of protected areas as a tool for conservation of biological diversity, therefore, some such areas may need to be protected in their entirety. In such cases, co-operation between responsible management bodies of the respective countries is of paramount importance.

Conserving trans-boundary Arctic marine areas, inter alia through the establishment of protected areas, is par-

ticularly sensitive and frequently fraught with complex international jurisdiction and represents a major challenge also to CPAN.

Fortunately, however there has in recent years been a growing interest in the role of protected areas in fostering international co-operation and understanding. One means by which this role is being expressed is through bilateral agreements between countries whose protected areas meet at their frontiers.

In order to promote the establishment of transfrontier protected areas, IUCN has prepared guidelines for their establishment and management. For further details on this, reference is made to Appendix IV.

At present there are five transfrontier protected areas in the Arctic. Another eight areas are either proposed or under planning (cf. Table 4.2 and Figure 4.5). In the Arctic the latest example of transboundary co-operation in nature conservation is the joint Norwegian-Russian protection area in Pasvik, on the border between Finnmark county (Norway) and Murmansk oblast (Russia). The area, comprising the Pasvik Nature Reserve (1993) and the Pasvik Zapovednik (1992), covers 165 km² of wetlands and natural forest, and is a result of recent bilateral agreements between the two countries. Nearby, another transfrontier conservation area is planned between Russia, Finland and Norway.

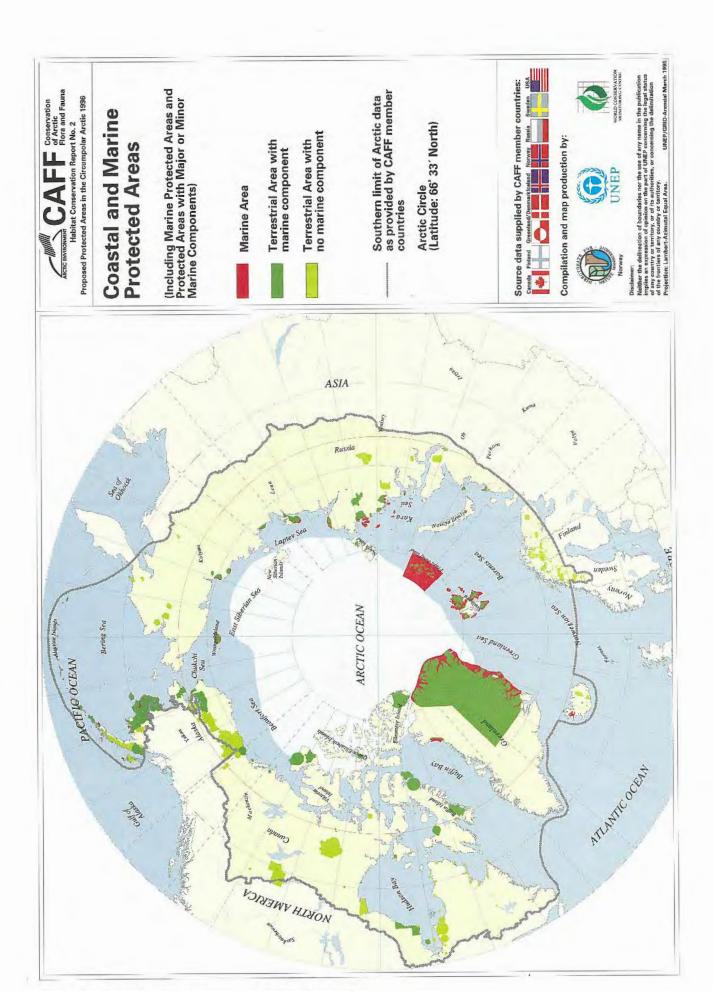


Figure 3.1 Coastal and marine protected areas in the Arctic

# 4 Expanding the network - proposed Arctic protected areas

#### 4.1 Overview

The main source of data for the information contained in this report on proposed protected areas has been the responses of CAFF member countries and non-governmental organisations (NGOs) to a CAFF/CPAN questionnaire, which was sent out by Russia at the end of 1994. The information collected is being used in several CPAN activities. A copy of the questionnaire is shown in Appendix V.

It has proved to be somewhat difficult to get satisfactory responses from some countries, which is assumed to be due to the temporary nature of this type of information. However, information provided by the eight CAFF member countries shows that 118 new areas have been identified for protection. Based on data for 101 of these sites, the total area proposed for protection is about 318.000 km². This is more than three time the size of Iceland or close to the size of mainland Norway (i.e. excluding Svalbard).

Table 4.1 gives an overview of the proposed protected areas in the Arctic, showing the number of proposed protected areas for each country and their corresponding approximate area, as well as the number of coastal and marine areas (including islands) and transboundary areas.

It should be noted that these proposals are in very different stages of their respective national planning processes, and consequently much data are not yet available. For statistical purposes, it should be noted that estimates of area size are missing for 17 of the proposed protected areas, mostly in Russia.

As discussed earlier, marine components are often not distinguished from terrestrial elements in data on existing protected areas, thus making it difficult to accurately account for terrestrial and marine areas under protection. For example, figures given for coastal areas (e.g river deltas, bird cliffs) may include marine components, or marine areas surrounding islands may have been included in terrestrial area totals.

As several areas consist of several separate units (often a long distance apart), especially in Russia, it should also be mentioned that the 118 identified proposed protected areas constitute an approximate number on potential new protected areas.

Furthermore, data are missing for one proposed protected area in Canada, two in Finland, one area with a large marine component in Norway and for 13 in Russia. For Greenland one large marine area (fjords) is included. For the USA, the figure relates to one new proposed area (the other proposal concerns mainly already existing protected areas).

Country	Proposed areas	Area* Hectares (ha) (approx.)	Coastal and marine areas (incl. islands)	Transboundary areas
Canada	21	>123,299	15	1
Finland	3	>344	not relevant	none
Greenland	3	13,950	3	none
Iceland	11	147	6	nonc
Norway	43	7,350	32	7
Russia	31	>166,867	15	1
Sweden	4	5,350	not relevant	1
USA (Alaska)	2	225	Ĭ.	1
Total	118	>317,532	72	11

<sup>\*</sup> It should be noted that area size is not available for 17 of the proposals.

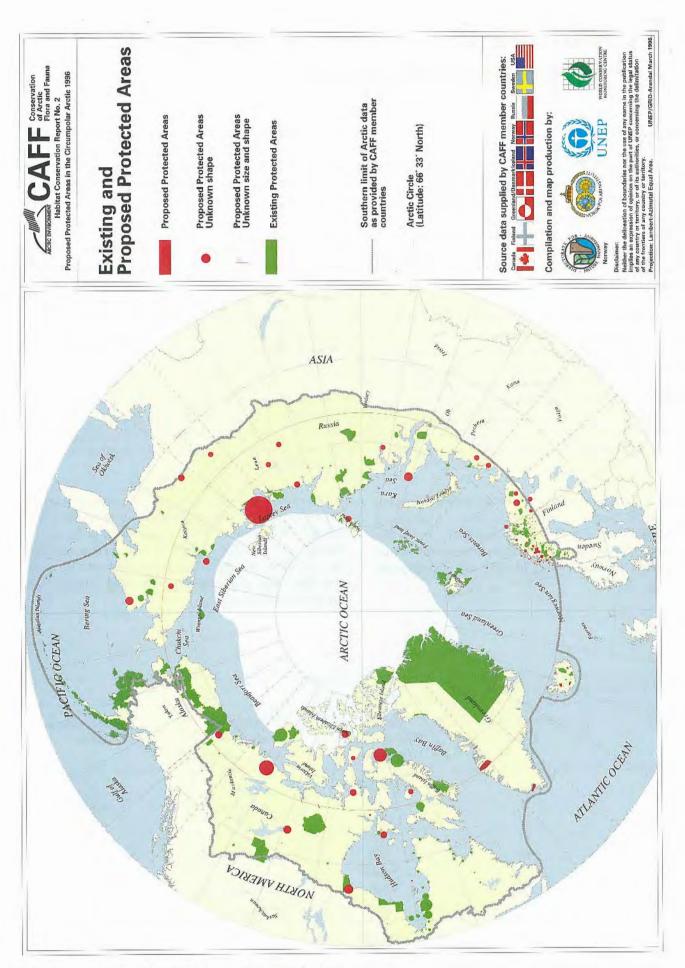


Figure 4.1 Existing and proposed protected areas in the Arctic

### 4.2 Proposed protected areas - by country

Below is given a brief overview of the proposals presented by the eight Arctic countries. Additional information on the proposed protected areas is to be found in the Proposed Protected Areas Directory, which is contained in Part 2 of this report.

The amount of data, as well as the validity, provided for each of the proposals, varies considerably. What is important, however, is that all countries appear to have a good overview of their candidate sites. The Proposed Protected Areas Directory in this report consists of a data sheet for each site, based entirely on the information provided by each country. Inevitably, data on proposed protected areas will be less complete than for existing ones, in particular for sites whose size and shape has not yet been decided.

#### 4.2.1 Canada

A total of 21 proposed protected areas have been reported for which protection is desirable within the next ten years. Figures taken from 20 of the 21 proposals indicate that Canada will increase the level of protection with about 30% (cf. also Table 4.2).

Canada has included 15 proposals with major coastal and marine components, and they have one proposal for a transboundary protected area.

It may also be mentioned that World Wide Fund Canada (WWF) as part of its "Endangered Spaces" project has prepared a national map series identifying the "gaps" in the existing protected areas network. It could prove useful to update these maps to take into account the 21 proposals. Even if the 21 proposed areas are designated, there would still be significant "gaps" in the network.

#### 4.2.2 Finland

Three new areas are proposed, Koitelainen Mire, Luire Mire and an extension to Pallas-Ounas National Park. Koitelainen Mire is already a designated Ramsar site (344 km²). The sizes of the two other proposals are not yet available. An Old Forest Conservation Programme has been established, and some 1,000 km² are under survey for possible protection.

No proposals have been made for coastal and marine areas nor for transboundary areas.

Through its designated wilderness areas in Northern Finland, several transboundary protected areas already exist (cf. also Table 3.3). In connection with the Old Forest Conservation Programme, further areas on the border may be proposed.

#### 4.2.3 Greenland

The Greenland Home Rule Government has agreed on

three areas being nominated for inscription on the World Heritage List as part of a common Nordic proposal on new World Heritage Sites. All three areas have coastal and marine components: they include fjords and reach either from the central ice cap or other minor glaciers to the sea. Part of one of the areas is a designated Ramsar site. The areas have important cultural and indigenous values.

#### 4.2.4 Iceland

Iceland points out that it has not made any long-term plan for area protection for the coming ten years (1995-2005). However, the Nature Conservation Council and the Ministry of the Environment is presently in the process of formulating protection regulations for several areas.

Iceland has a national Nature Conservation Register, which is an inventory of sites of special interest. Although not comprehensive, it lists more than 250 sites. Some of these are of international importance, e.g. as Important Bird Areas (cf. Appendix II).

At present, 11 proposed protected areas are either actually being worked on or likely to be in the nearest future.

A total of seven proposals are marine and coastal areas, all of which are small, many of them with large seabird colonies and/or geological features.

#### 4.2.5 Norway

Four comprehensive nature conservation plans, all with concrete proposals for new protected areas, are underway in the Norwegian part of the Arctic. These are the National Park Plan, the Coastal Protected Areas Plans for Nordland and Troms counties, and the Regional Protection Plan for Coniferous Forest (Northern Norway). A total of 43 new protected areas are planned for the Norwegian Arctic. In addition, more than 200 minor protected areas (i.e. smaller than 10 km²) are proposed in the above four plans and in other protection plans. 10 of the 43 proposals are new or expansion of existing national parks/other protected areas.

A national inventory has been completed for coastal areas along mainland Norway, and this will constitute the basis for a future national plan for marine protected areas. Furthermore, marine inventories are ongoing in the Barents Sea (including Svalbard and Bear Island) and around the isolated island of Jan Mayen.

In a new Parliament Report on environmental protection in Svalbard, the isolated Bear Island is proposed for protection. Furthermore, it is said that existing protected areas, which make up about 56 % of the archipelago, will be evaluated and the need for further protection assessed.

In the next few years an assessment of conservation needs on Jan Mayen will be carried out.

Norway has established a total of 32 proposals for areas with major coastal and marine components. Most of these are minor archipelagos along the coast of Nordland and Troms counties.

Norway has made a total of seven proposals for transboundary protected areas, of which four are extensions to existing national parks, two are new national parks and one is to strengthen an existing plant conservation area.

#### 4.2.6 Russia

For the Russian Arctic, data on 31 new proposals have been provided, some of which involve several separate protected areas. Despite inadequate data for 13 of the proposals, Russia seems to be on its way to doubling the percentage of protected areas in the Arctic part of Russia (cf. also Table 4.2).

Some of the proposals have already been decided upon at regional level, and are awaiting approval of the Russian Federal Government. These include the zapovedniks on Yamal, Gydan and Severnaya Zemlya (an extension of the Great Arctic Reserve), as well as a large 100.000 km² extension to the Lena Delta zapovednik, to include the New Siberian Islands and parts of the Laptev Sea.

Russia has included 15 proposals for coastal and marine areas and one proposal for a transboundary area, namely a "twin-project" between USA and Russia for the Bering Sea.

Designation of the large protected area in and around Franz Josef Land (1994) has been presented as a major step towards the realisation of the NGO proposal for a "Barents Sea International Park" (cf. Appendix I).

#### 4.2.7 Sweden

In the Swedish National Park Plan of 1989, two new protected areas are proposed. One of these, Kirunafjallen National Park, is very large (4,400 km²) and is located along the border with Norway. If realised, it will include two existing small parks - Vadvetjåkka (24 km²) and Abisko (77 km²). Furthermore, a small extension to Sarek National Park (one component) and Padjelanta National Park (two components) are planned. In addition to these four proposals there are plans to change the management status of Vindelfjallens Nature Reserve (5,506 km²) from existing IUCN Category IV to Category II. For Sjaunja Nature Reserve (2,850 km²) a change of management category is also being planned. Further protection of coniferous forests might result in some new proposals to the list.

The complex of existing Padjelanta National Park, Sarek National Park, Stora Sjøfallets National Park, Sjaunja Nature Reserve, Stubba Nature Reserve, Muddus National Park together with the proposed expansions of Sarek and Padjelanta have been nominated (1995) for inscription as a Natural Property in the World Heritage List. The total area of these protected areas is 9,400 km².

No coastal and marine areas have been proposed. One transboundary area has been proposed, namely an extension to the Padjelanta National Park, whose western component lies on the Norwegian border.

### 4.2.8 USA (Alaska)

Two areas in the State of Alaska are planned for protection in the next ten years. The first, Squirrel River (approximately 225 km²), draining into the Kobuk River, is partly forest and currently a "study area" for Congressional designation under the Wild and Scenic Rivers Act. The second is the Beringian Heritage International Park, which is being planned by the United States and Russia. The US component of this park is expected to come primarily from already existing protected areas in Alaska, while the Russian component has not yet been designated. The Beringa Heritage International Park, which represents a major transboundary proposal, includes important marine components.

### 4.3 Proposed protected areas - NGO proposals

Several international and national NGOs have played a role in the first phase of developing CPAN, and important inputs have been provided by NGOs for consideration by CAFF countries in the development of the various CPAN documents. NGOs often also play an important role on a national level in the field of habitat protection and the management of protected areas.

A number of important NGO proposals for protected areas have been identified earlier, and these are outlined in Annex 1 of Habitat Conservation Report No. 1. In general there is often significant overlap between government and NGO proposals for new or expanded protected areas.

For the purpose of this report NGOs involved with habitat protection in the Arctic were again invited to present new proposals for protected areas in the circumpolar Arctic (cf. also 4.1 above). BirdLife International provided a response, and its overview of Important Bird Areas in the Arctic is included in Appendix II. WWF has also supplied information, and they have also provided advice in the development of the Russian proposals. For information about the proposal made for a Barents Sea International Park, reference is made to Prokosch

Protected area system	Remarks
Existing	
Sarck, Padjelanta and Stora Sjøfallet National Parks and Sjaunja Nature Reserve (Sweden) and Rago National Park (Norway).	The proposed Tysfjord Hellemobotn National Park (Norway) could be added (National Park Plan).
Kasivarsi Wilderness Area (Finland) and Reisa National Park and Raisduottarhaldi Landscape Protection Area (Norway)	The proposed Goatteluobbal National Park (Norway, could be added (National Park Plan).
Pasvik Zapovednik (Russia) and Pasvik Nature Reserve (Norway).	Connection to other protected areas in Pasvik will be considered.
Lemmenjoki National Park and Poyrisjarvi, Pulju and Hammastunturi Wilderness Areas (Finland) and Øvre Anarjokka National Park (Norway).	A minor expansion of Øvre Annarjokka National Paris planned.
Arctic National Wildlife Refuge (USA) and Ivvavik National Park (Canada).	The proposed Vuntut National Park (Canada) could be added.
Proposed	
Proposals are made for Kirunafjallen National Park, incl. Vadvetjåkka and Abisko National Parks (Sweden) and Sørdalen-Isdalen National Park (Norway).	The proposed Kirunafjallen National Park will expand the area considerably.
Existing is Pasvik National Park (Norway) and Vatsari Wilderness Area (Finland), while a proposed area in Russia is to be specified.	A connection is possible to Pasvik Nature Reserve/ Pasvik Zapovednik.
Proposals are made for Beringian Heritage International Park (USA) and Beringiya National Park (Russia), while already existing protected areas in USA and the Beringia Ethno-Nature Park (Russia) are to be included.	There is also a NGO proposal on the "Beringia Sea Ecosystem".
Other ideas presented	
Existing is Malla Nature Reserve (Finland), while proposals are to be specified for the Palsta area in Sweden and for an area in Norway.	
Existing is Øvre Dividalen National Park (Norway) and proposals are made for Tavvavuoma National Park (Sweden).	An area between these two areas has to be included.
North and East Greenland National Park (Greenland and Ellesmere Island National Park Reserve (Canada).	These two areas could be linked (no concrete proposals).
An NGO Proposal has been made for a "Barents Sea International Park" to include the Svalbard Archipelago and Bear Island and large marine areas (Norway) as well as Franz Josef Land, Novaya Zemlya, Kolguev, Vaigach and the Dolgi Islands and large marine areas (Russia).	Such a park would include already existing protected areas in Svalbard (Norway) and Franz Josef Land (Russia).

(1995). Information on marine proposals which was received earlier is summarised in Appendix I.

It should also be mentioned that no information was received from those indigenous peoples' organisations which were invited to provide input.

### 4.4 Proposed protected areas - coastal and marine areas

Concerning coastal or marine protected areas, some 100 of the existing 285 protected areas have a coastal or marine component. In addition, about 70 of the 118 proposals have such components.

Figure 4.4 shows some 170 existing and proposed Arctic marine protected areas. UNEP/GRID-Arendal has estimated that about 440.000 km² may in the future be included in unique or mixed marine protected areas, representing however still only about 2,5% of the marine part of the Arctic.

### 4.5 Proposed protected areas - transboundary areas

Table 4.2 gives an overview showing existing and proposed transboundary Arctic protected areas. Other ideas that have been presented during the development of CPAN are also included for information. Remarks have also been included indicating *inter alia* other action that could be taken. Existing and proposed transboundary protected areas in Northern Scandinavia and Northwest Russia are shown in Figure 4.5.

### 4.6 Assessment of the adequacy of the proposed areas in CPAN

If most of the 118 proposed protected areas identified by the eight Arctic countries are established, the number of protected areas in the Arctic will rise to about 400 areas within the foreseeable future. Based on the data available for the 101 proposals, the total area under protection (IUCN management categories I-V) will rise to at least some 318.000 km², or 16% of the terrestrial Arctic as defined by CAFF. However, as pointed out earlier, some marine elements may have been included in the data on land area. Table 4.3 provides a summary of existing and proposed protected areas in the Arctic, as well as an estimate of the total planned for protection. Even if these proposals are all implemented however the North, and East Greenland National Park will still constitute about 40% of the total area afforded protection.

This overview of existing and proposed protected areas provides a basis for further work under the CPAN project. But even with 16% of the Arctic protected in accordance with current proposals, the network will not be adequately representative of the wide variety of Arctic ecosystems nor will it contribute effectively to the maintenance of viable populations of all Arctic species and serve to maintain ecological and evolutionary processes.

Adequate implementation of the recommended actions on a national as well as at the AEPS level (cf. chapter 6 in the CPAN Strategy and Action Plan) will also be needed if the overall goal of CPAN is to be attained, namely "to facilitate implementation of initiatives to establish, within the context of an overall Arctic conservation strategy, an adequate and well managed network of protected areas that has a high probability of maintaining the dynamic biodiversity of the Arctic region in perpetuity".

In addition, active use must be made of the principles and guidelines that have been developed for CPAN (cf. CAFF Habitat Conservation Report No. 4), and appropriate attention must also be made to the national principles and mechanisms that have been identified for protected area selection in Arctic countries (cf. CAFF Habitat Conservation Report No. 3).

Further gap analyses should also be carried out at the circumpolar level in order to better plan a fully representative CPAN. CAFF Habitat Conservation Report No. 5 provides a preliminary analysis of gaps in habitat protection in the circumpolar Arctic, and could be followed up by more extensive analysis covering a wide range of biodiversity elements.

Furthermore, consideration may be given to the various NGO proposals that have been presented to the CPAN project (cf. 4.2.9 above and Appendix I).

Although not strictly under the realm of CPAN, appropriate attention must also be made in the implementation of CPAN to the importance of smaller protected areas, i.e. in this context those that are smaller than 10 km², as these often play an important role as key habitats, e.g. as important bird areas.

Table 4.3 Summary of existing protected areas, new proposals and a potential estimation of Arctic protected areas

Country	Existing protected areas	Total land area (km²)	% of Arctic land area	New proposals	Total land area (km²)	% of Arctic land area	Potential no. of areas	Potential %
Canada	46	434,859	8.3	210	>123,299	2.4	67	>10.6
Finland	52	25,905	32.6	32)	>344	0,4	55	>33.0
Greenland	14	993,025	45.7	33)	13,950	0,6	17	46.3
Iceland	25	12,160	11,8	11	147	0,1	36	11.9
Norway	38	41,637	25.5	434)	>7,350	4.5	81	>30.0
Russia	26	237,665	3.7	315)	>166,867	2.6	57	>6.4
Sweden	43	19,623	20.7	4	5,350	5.6	47	26.3
USA (Alaska)	41	331,425	56.1	26)	225	0.0	43	56.1
Total	285	2,096,299	14.1	118	>317,532	2.1	403	>16.3

Data (area) is missing for one proposed area in Canada

<sup>2)</sup> Data (area) is missing for two proposed areas in Finland

<sup>3)</sup> A large marine area (fjords) is included for Greenland

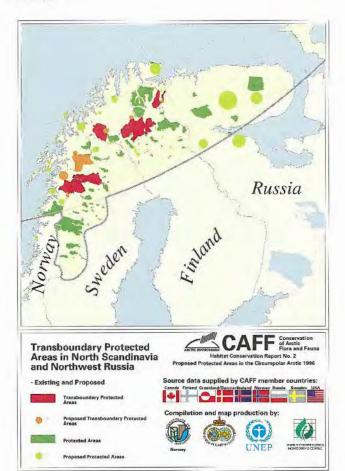
<sup>4)</sup> Data (area) is missing for one proposed area and large marine areas are included for Norway

<sup>&</sup>lt;sup>5)</sup> Data (area) is missing for13 proposed areas for Russia

<sup>&</sup>lt;sup>®</sup> For USA, the figure (area) relates to one new area (the other proposal concerns already existing protected areas)



**Figure 4.2** Existing (25) and proposed (11) protected areas in Iceland



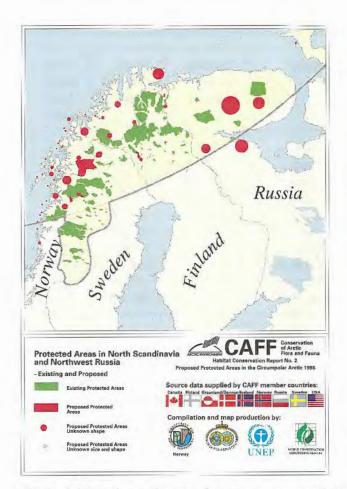


Figure 4.3 Existing and proposed protected areas in North Scandinavia and Northwest Russia

Figure 4.5 Existing and proposed transboundary protected area in Northern Scandinavia and Northwest Russia

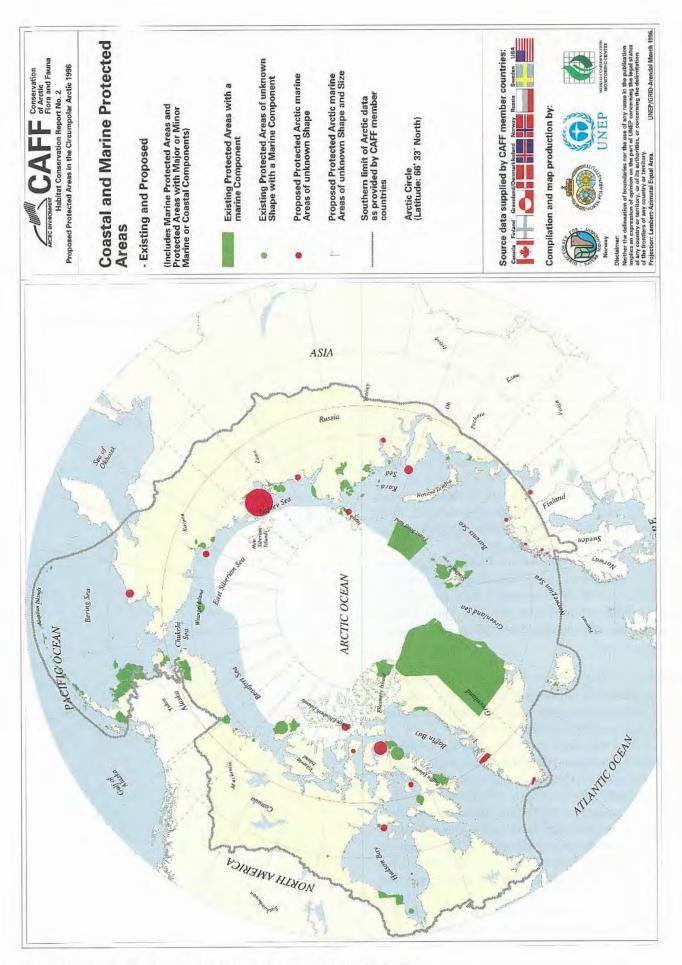


Figure 4.4 Existing and proposed Arctic coastal and marine protected areas

# 5 Recommendations on further action by CAFF

Based on the findings of this report, the following recommendations are made with regard to future work under CAFF on protected areas:

- to increase the level of knowledge and data collection on existing protected areas, including support to the World Conservation Monitoring Centre's (WCMC) initiative to prepare a comprehensive directory of Northern (Arctic) protected areas;
- to carry out further gap analyses and to identify the most significant gaps in national networks of protected areas
- to select candidate sites for further action, for the first time in 1997, giving priority to gaps in critical habitats, sites with threatened species, ecosystems with least representation and areas under imminent threat;
- on the basis of the common CPAN Principles and Guidelines and circumpolar gap analysis with input from member countries, to secure the establishment of a Pan Arctic Protected Areas Register of terrestrial, freshwater and marine candidate sites for future action, including inter alia protected areas under threat and priority sites not currently under protection;
- to identify needs and opportunities for modifying (i.e. expanding and buffering) existing protected areas and for improving connectivity between them, and to take action as feasible and appropriate;
- to identify joint projects, within CAFF or with other countries, to enhance the overall effectiveness of protected areas within the context of CPAN, for example the "twinning" of protected areas to meet habitat requirements of migratory or other wide-ranging species;

In addition, the following recommendations are made which pay particular attention to the need for new protected areas and on the importance of coastal and marine as well as transboundary protected areas:

- to assess and evaluate the need for marine protected areas and special protection of dynamic regions of ice edge ecosystems and international migratory routes as part of an integrated strategy for the protection of the marine environment, including marine areas which fall outside individual or shared national jurisdiction;
- to co-operate with and contribute to IUCN's efforts to establish a global system of marine protected areas representative of all major biogeographic types and ecosystems
- to support the guidelines proposed by IUCN to promote effective management of transboundary protected areas

It should also be mentioned that the above recommendations must clearly be seen in the context of other recommendations concerning CPAN, as specified in CAFF Habitat Conservation Reports 3 - 6.

Some of these recommendations are included also in the CPAN Strategy and Action Plan (Habitat Conservation Report No. 6), which lists the most important actions that will be required at both the national and at the international (AEPS) level in order to achieve the goal for CPAN. The CPAN Strategy and Action Plan also contains the most important elements necessary for the implementation, follow-up and evaluation of CPAN.

# Directory of proposed protected areas in the Arctic

1 Canada	(21)	31
2 Finland	(3)	53
3 Greenland/Denmar	k (3)	57
4 Iceland	(11)	61
5 Norway	(43)	73
6 Russia	(31)	117
7 Sweden	(4)	149
8 USA (Alaska)	(2)	154

### 1 Canada

CA		Proposed A	Areas, March 1996
number	Area name	IUCN	Area (hectare)
CA001	Igalirtuuq National Wildlife Area	4	551.000
CA002	Tombstone Mountain Territorial Park	2	3.700
CA003	Creswell Bay	4	217.800
CA004	Cape Searle	4	200
CA005	Reid Bay	4	500
CA006	Foxe Basin Island	4	300.000
CA007	Coats Island	4	300
CA008	Digges Sound	4	1.200
CA009	Akpatok Island	4	3.200
CA010	Sleeper Islands	4	22.600
CA011	Fishing Branch Ecological Reserve	4	16.500
CA012	Old Crow Flats Special (Wildlife) Management Area.	4	612.000
CA013	Northern Baffin Island National Park.	2	2.225.200
CA014	Rasmussen Lowlands	4	527.800
CA015	Bluenose Tuktut Nogait National Park.	2	2.800.000
CA016	Wager Bay National Park.	2	2,650.000
CA017	East Arm of Great Slave Lake National Park.	2	740.000
CA018	Northern Bathurst Island National Park.	2	650.000
CA019	Churchill National Park.	2	1.000.000
CA020	Southampton Plain National Park.	2	
CA021	Horseshoe Slough Habitat Protection Area	4	7.900
21 Aı	reas		12.329.900

CA001 Igalirtuu	uq National Wildlife Area		
IUCN: 4 Area (ha): 551000	Adm. region: (Northwest Territoric Location: 63° 30' 00" N	es) 84° 40' 00" W	
Ramsar: N.a Other: Relationship to other co	MAB: Yes - intend t	World Heritage:	
Ownership: Invit (Clyde Ri Management: Co - manage	iver). Gov't of Canada		
	ction of critical Bowhead Whale su		
Fjord: Au Other: Weltand Weltand	rer: Coniferous: Sirch: Mixed: Mixed: High Rush: Mixed	Taiga:  Mounfain:  Other:	Tundia:  Moist:   Wet:   Alpine:
Important species: Bowhe Red Data Book: Bowhe Locally rare species: Bowhe	ead Whale ead Whale		<del></del>
Antropogen pressur  Industrial development: Mineral or oil activity.: Population growth: Urbanisation: Infrastructure: Habitat fragmentation: Motorized vehicle use: Other:	L Expansion of tourism L Forestry practice L Deforestation L Fisheries practice L Wetland drainage L Erosion M Overgrazing	n: L expl s: L n: L ss: M e: L Airbo n: L Waterbo	otation of species:  Oil spills:  Cocean dumping:  Noise:  Norne contaminants:  Nuclear waste:  L  Toxic waste:
Main human activities: Sub Alternative land use: Wh	osistenec hunting , trapping and fis nale Research.	shing by Inuit of Clyde F	River. Bowhead
Indigenous populations: Inu	prox. 500 in Community of Clyde R it from Clyde River, NWT. Substister urism.		

CA002	ombstone M	ountain Territor	rial Park			
IUCN: 2	Adm.	region: Yukon				
<b>Area (ha):</b> 3700	Lo	ocation: 64° 25′	00" N 138° 2	20' 00" W		
Ramsar: Yes Other:	. U. a	MAB:	World	t Heritage:		
Relationship to	other conventior	is:				
Ownership: State Management: Author:	•					
Habitat						
Geographic regio Ecological functio		subarctic, alpine fe	eatures, unique v	ascular plants		
Marine:	Freshwater:	Forest:	Talga		fundra:	
Island:  Fjord:  Other:	River: Lake: Stream:	Coniferou Birch Mixed	n: 🔲 c	ntain:   Other:	Moist:  Wef:  Alpine:	
	Welland:	High Brush Low Brus				
Other):	Wetland: 📙					
Important specie Red Data Boo Locally rare specie	k:					
Antropogen p	ressure	(H=High / M=Medi	ium / L=Low / N=	Not specified):		
Industrial devek	opment: N	Expansion o	of tourism: N	explo	tation of species:	Ν
Mineral or oil o	activity.: N	Forestry p	oractices: N		Oil spills:	N
Population	growth: N	Defo	restation: N	ı	Ocean dumping:	N
· · · · ·	nisation: N	•	oractices: <u>N</u>		Noise:	
	tructure: N	Wetland (	drainage: N		ne contaminants:	N
Habitat fragme	1	_	Erosion: N	Waterbori	ne contaminants:	N
Motorized vehi	Yourus,		ergrazing: N		Nuclear waste:	N
	Other: N	Introduction o	f species: N		Toxic waste:	N
Main human activ Alternative land Total population	l use:	al density of prehisto	oric occupation			

Indigenous populations:

IUCN: 4	Adm. region:	(Northwest Territories	) Administered out o	f Yellowknife
10011.4		Northwest Territories.	, nariminatorea eare	r ronowkime,
<b>Area (ha):</b> 217800	Location:	72° 45' 00" N	93° 40' 00" W	
Ramsar:	MAB:		World Heritage:	
	al Wildlife Area. IBP site	)		
•	ther conventions:	at hab protoation	Mastern Hermischer	- Charabinal Dasas in
•	ory Birds Convention A ork - hab.p.	or - nab. profection.	western nemispher	e shorebild keserve
Ownership: Inuit o	f Resolute, NWT and Go	v't of Canada.		
Management: Co - m	nanaged by Inuit and G	Sovernment.		
Author: Inuit o	f Resolute and Gov't of	Canada.		
Habitat				
Geographic region	: Northern Arctic			
Ecological function	: Important nesting / sto and whales.	aging area for shorek	oirds, offshore feedin	g area for seabirds
Morine:	-	orest:	Taiga:	Tundra:
	River: 🗆	Coniferous:	Mountain:	Moist:
Island: ∐ Fjord: ⊠	Lake:	Birch:	Other:	Wet: 🖂
Other:	Stream:	Mixed:		Alpine:
	Welland:	High Brush: 🔲		
		Low Brush: 🔲		
Ofher):	Wetland: LLÍ			
Important specie	s:Shorebirds (at least 10			.tttiwake) - migratory.
Important specie	s:Shorebirds (at least 10 ::Waterfowl (King Eider)			iffiwake) - migratory.
Important specie	: Waterfowl (King Eider)			ittiwake) - migratory.
Important specie Red Data Book	; Waterfowl (King Eider)		Whale - migratory.	
Important species Red Data Book Locally rare species	:: Waterfowl (King Eider) :: essure (H=High	- migratory. Beluga	Whale - migratory.  w / N=Not specified;	
Important species Red Data Book Locally rare species Antropogen pr Industrial develop Mineral or oil a	:: Waterfowl (King Eider)  ::	- migratory. Beluga n / M=Medium / L=Lo xpansion of tourism: Forestry practices:	Whale - migratory.  w / N=Not specified;	: lotation of species: L Oil spills: L
Important species Red Data Book Locally rare species Antropogen pr Industrial develop Mineral or oil ac Population g	:: Waterfowl (King Eider) ::	n / M=Medium / L=Lo xpansion of tourism: Forestry practices: Deforestation:	w / N=Not specified; M exp	o: lotation of species: Oil spills: Ocean dumping:
Important species Red Data Book Locally rare species Antropogen pr Industrial develop Mineral or oil and Population g Urban	Waterfowl (King Eider)  CH=High  CH=High  Chivity.:  Cyrowth:  L  Isation:	n / M=Medium / L=Lo  xpansion of tourism: Forestry practices: Deforestation: Fisheries practices:	w / N=Not specified;  M exp	o: lotation of species:    Oil spills:    Ocean dumping:    Noise:
Important species Red Data Book Locally rare species Antropogen pr Industrial develop Mineral or oil and Population of Urbani	:: Waterfowl (King Eider) ::	n / M=Medium / L=Lo  xpansion of tourism:  Forestry practices:  Deforestation: Fisheries practices: Wetland drainage:	w / N=Not specified;  M exp  L L L Airbo	lotation of species:     Oil spills:      Ocean dumping:     Noise:      Drne contaminants:
Important species Red Data Book Locally rare species Antropogen pr Industrial develop Mineral or oil and Population of Urbani Infrastrial Habitat fragmen	e: Waterfowl (King Eider)  E:  Control  Control	n / M=Medium / L=Lo  xpansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion:	w / N=Not specified; M exp L L L Airbo	lotation of species:  Oil spills:  Ocean dumping:  Noise:  Drne contaminants:
Important species Red Data Book Locally rare species Antropogen pr Industrial develop Mineral or oil and Population of Urbani	e: Waterfowl (King Eider)  E:    CH=High  CH=High  CH: N	n / M=Medium / L=Lo  xpansion of tourism:  Forestry practices:  Deforestation: Fisheries practices: Wetland drainage:	w / N=Not specified;  M exp L L L Airbo N Waterbo	lotation of species:  Oil spills:  Ocean dumping:  Noise:  Drne contaminants:
Important species Red Data Book Locally rare species Antropogen pr Industrial develop Mineral or oil an Population of Urbani Infrastri Habitat fragmer Motorized vehice	e: Waterfowl (King Eider)  E:    CH=High  CH=High  CH: N	n / M=Medium / L=Lo  xpansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: oduction of species:	Whale - migratory.  w / N=Not specified;  M exp L L L Airbo N Waterbo	lotation of species: Oil spills: Ocean dumping: Noise: orne contaminants: Nuclear waste:

**Indigenous populations:** Inuit from Resolute, NWT, use area for subsistence hunting, fishing and a small tourism industry.

IUCN: 4		•	orthwest Territo	•		wknife, NWT.	
<b>Area (ha)</b> : 200	<b>Location:</b> 61° 14′ 00" N 62° 20			62° 28' 00	28' 00" W		
Relationship to a	nal Wildlife Area other convention tory Birds - Conv	ns:		<b>World He</b> i Bird Sanctuary			
Ownership: Inuit o Management: Inuit o Author: Inuit o							
labitat				_	_		
Geographic region Ecological function				Northern Fulme	ar.		
larine:	Freshwater:	Fon	rst:	Talga:		Tundra:	
Island: 🗵 Fjord: 🗌 Other: 🔲	River: Lake: Stream: Wellard:	H	eoniferous:  Birch:  Mixed:  Iigh Brush:  Low Brush:	Mountain Other	=	Moist: ☐ Wei: ☐ Alpine: ☐	
ther):	Wetland: 📙						
Important specie Red Data Bool Locally rare specie	k:	ar - migrat	tory				
Antropogen pi	essure	(H≃High /	M=Medium / L	=Low / N=Not :	specified):		
Industrial develo Mineral or oil a	ctivity.; L		cansion of touris	∋s: Ĺ	explo	otation of species: Oil spills:	
Population (	growth: L isation: L	5	Deforestation isheries practice	500,0000		Ocean dumping: Noise:	
	ructure: L		Vetland drainag		Airbo	rne contaminants:	
Habitat fragme	· · · · · · · · · · · · · · · · · · ·			on: L	Waterbo	rne contaminants:	
Motorized vehic	cle use: L Other: L	Introd	Overgrazir  Specion of specion			Nuclear waste: Toxic waste:	
Main human activ	***************************************		_		ughton Isla	and, recreational	

camping by Inuit.

IUCN: 4 Area (ha): 500	Adm. regio Locatio	n: (Northwest Territorie n: 66° 56′ 00″ N	s) Admin. out 61° 46′ 00″ V	***	
Relationship to other	conventions:	<b>B:</b> gratory Bird Sanctuary Act - hab. protection.		ge:	
Ownership: Inuit of Bro Management: Co - mana Author: Inuit of Bro	aged by Inuit of B				
Habitat				<u>-</u>	
Geographic region: Are Ecological function: Pro			ck - billed Muri	res.	
	hwater:		Taiga:	Tundra:	
Wel	River:	Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain: Other:	☐ Moist: ☐ Wet: ☐ Alpine: ☑	
Other):	etland: L				
Important species: Thi Red Data Book: Locally rare species:	ick - billed Murre	· migratory.			
Antropogen press	sure <sub>(H=H</sub>	igh / M=Medium / L=Lo	ow / N=Not spe	ecified):	
Industrial developme Mineral or oil activi Population grow Urbanisati Infrastructu Habitat fragmentati	ty.: L rth: L on: L ure: L	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing:	:	explotation of species: Oil spills: Ocean dumping: Noise: Airborne contaminants: Vaterborne contaminants: Nuclear waste:	<u>L</u>

Indigenous populations: Occational subsistence hunting and trapping by Inuit from Broughton Island.

CA006	Foxe Basin	Island					
IUCN: 4	A	dm. region: N	orthwest Territories	<b>S</b> .			
<b>Area (ha):</b> 300	0000	Location:	68° 00' 00" N	75° 05' 00" W			
Ramsar: Other: Na	tional Wildlife A	MAB: Area or Migrat	ory Bird Sanctuary	World Heri	tage:		
Mig	<b>o other conver</b> gratory Birds Co twork - hab. pr	onvention Act	· - hab. protection	. Western He	emisphere S	Shorebird Reserve	!
Ownership: Lo	cal Inuit and G	overnment of	Canada.				
Management: Co Author: Inu	- managed b it and Environn	*					
Habitat							
Geographic reg Ecological func			ral species of sea	duck, gulls, g	eese.		
Marine:	Freshwater	For	est:	Talga:	ī	undra:	
Island: 🔯 Fjord: 🔯 Other: 🗖	River: Lake: Stream: Welland:		Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain: Other	=	Moist:  Wet:  Alpine:	
Other):	Wetland:						
Important spe Red Data B Locally rare spec	ook:		Gull. Shorebirds.	King Eider. (	Common Ei	der. Oldsquaw.	
Antropogen	pressure	(H=High /	/ M=Medium / L=L	ow / N=Not s	pecified):		
Mineral or o Populatio Urb Infro	on growth: L canisation: L castructure: L nentation: L	ŗ	cansion of tourism Forestry practices Deforestation Fisheries practices Wetland drainage Erosion Overgrazing duction of species	: L : L : L	Airborn	Noise: ne contaminants:	
Alternative la Total populati	nd use: on size: Approx	1000 but not	and trapping by Ir t close to site. and trapping by Ir			Ť	

IUCN: 4	Adm. r	<b>egion:</b> Nor	thwest Territories.		
<b>Area (ha):</b> 300	Loc	ation:	62° 51' 00" N	82° 00' 00"	W
Ramsar:		MAB:		World Herit	age:
		•	y Bird Sanctuary.	IBP site.	•
Relationship to oth  Miarato			nab. protection).		
Ownership: Inuit and	•	`	, , , , , , , , , , , , , , , , , , , ,		
lanagement: Co - mo			ernment.		
•	•		invironment Can	ada.	
abitat					
abriar Geographic region: i	Vorthern Arctic				
			olony of Thick - bil	led Murres. C	Other seabirds in smaller
			xtensive coastal		
arine: Fr	eshwater:	Fores	l.	Talga:	Tundrat
Island: 🛛	River:	Co	niferous:	Mountain:	☐ Moist: ☐
Fjord:	Lake:		Birch:	Other:	☐ Wet: ⊠
Other:	Stream:		Mixed:		Alpine:
	elland:	Hiç	gh Brush: 🔲		
		È Le	ow Brush: 🔲		
	Wetland: 🔲				
ther):					
				emot - migrat	tory. Gulls (2 species) -
Red Data Book:	migratory. Wal	rus - migra	tory.		
Locally rare species:					
ntropogen pre	ssure (	H=High / N	/I=Medium / L=Lo	w / N=Not sp	pecified):
Industrial developr	nent: L	Expo	insion of tourism:	L	explotation of species
	ivity.: L	Fo	prestry practices:	·L	Oil spills
Mineral or oil act	1		Deforestation:	to precio	Ocean dumping:
Mineral or oil act Population gro		Fis	heries practices:	100.	Noise:
Mineral or oil act Population gro Urbanisc	· ·			- 1	Airborne contaminants
Mineral or oil act Population gro Urbaniso Infrastruc	cture: L	W	etland drainage:	Contract.	
Mineral or oil act Population gro Urbaniso Infrastruc Habitat fragmento	cture: L ation: L	W	Erosion:	L	Waterborne contaminants
Mineral or oil act Population gro Urbaniso Infrastruo Habitat fragmento Motorized vehicle	cture: L ation: L				Waterborne contaminants: Nuclear waste: Toxic waste:

**Total population size:** Approx. 1000 in Coral Harbour, 120 km. N of site. **Indigenous populations:** Very light use by subsistence hunters from Coral Harbour, NWT. Seabird Research.

CA008 Digg	es Sound			
IUCN: 4 Area (ha): 1200	Adm. region: h Location:	lorthwest Territories. 62° 33′ 00" N	Quebec. 77° 35' 00" W	
Relationship to other	MAB: /ildlife Area or Migro conventions: Bird Convention Act		<b>World Heritage:</b> r. IBP site.	
Ownership: Governme Management: Co - mana Author: Environme	aged by Inuit and G		c. Inuit of Ivujevil	<b>ι</b> .
Habitat  Geographic region: Not Ecological function: Pro		eeding colony of Thi	ick - billed Murres.	Smaller colonies of
Island: 🔯 Fjord: 🔯	River:  Lake:  ream:	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Taiga:  Mountain:  Other:	Tundra:  Moist:   Wet:   Alpine:
Other):  Important species: Thick Red Data Book: Locally rare species:	etland: 🔲 ck - billed Murre - mi	gratory.		
Antropogen press	ure (H=High	/ M=Medium / L=Lo	w / N=Not specifi	ed):
Industrial development Mineral or oil activity Population grows Urbanisation Infrastructure Habitat fragmentation Motorized vehicle us Other Main human activities: Alternative land use:	y:: L th:: L on:: L on:: L se:: L er:: L Subsistence hunting	pansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: duction of species: and trapping by In	L L A L Wate	oxplotation of species: Oil spills: Ocean dumping: Noise: irborne contaminants: orborne contaminants: Nuclear waste: Toxic waste:
Total population size:	Approx. 500 in com			Desegration segments

CA009	Akpatok Island				
IUCN: 4 Area (ha): 320	-	gion: Northwest 1 tion: 060° 25' (		08' 00" W	
Relationship to	Morional Wildlife Area or content on the conventions: gratory Birds Cenventions		anctuary. IBP site	d Heritage: e.	
Management: Go	vernment of Canada vernment of Canada rironment Canada.		C.	,	
	ion: Northern Arctic. ion: Protection of 2 la in summer.	rge breeding co	olonies of Thick-b	billed Murre. Ret	reat for polar bears
Marine:    Island:         Fjord:       Other:	River:   Lake:   Stream:   Wetland:	Forest  Coniferous  Birch  Mixed  High Brush  Low Brush	::	ntain:   Other:	undia:  Moist:   Wet:   Alpine:
Important spec Red Data Bo Locally rare spec	cies: Polar bear.				
Populatic Urb Infro Habitat fragn		Expansion of Forestry popular	ractices: L restation: L ractices: L drainage: L Erosion: L orgrazing: L	exploi ( Airborr	oli spills:  Oil spills:  Coean dumping:  Noise:  De contaminants:  Nuclear waste:  L  Toxic waste:  L
Alternative la	on size: Approx. 900 in				ds. Some tourism.

IUCN: 4 Area (ha): 22600	Adm. region Location	: Northwest Territories. : 057° 30' 00" N	079° 45' 00" W	
Relationship to other	conventions:	: ratory Bird Sanctuary. Act-hab.protect. Sand		
Ownership: Inuit from Management: Co-mana Author: Inuit and G	ged by Inuit from S			
Habitat  Geographic region: So  Ecological function: Pro		areas for Hudson Bay	Common Eiders.	
island: 🔯 Fjord: 🔲	nwater:   River:   Lake:   tream:	Coniferous:  Birch:  Mixed:	Taiga:  Mountain:  Other:	fundro:  Moist:   Wet:   Alpine:
***************************************	land:	High Brush: 📙 Low Brush: 🗍		
Important species: Co Red Data Book: Locally rare species:	ommon Eider-migro	atory.		
Antropogen press	sure (H=Hig	gh / M=Medium / L=Lo	w / N=Not specifi	ed):
Industrial developme Mineral or oil activi Population grow Urbanisati	ty.: L /th: L on: L	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices:	 	explotation of species: L Oil spills: L Ocean dumping: L Noise: L
Infrastructu Habitat fragmentati Motorized vehicle u Ott	on: L Ise: L	Wetland drainage: Erosion: Overgrazing: troduction of species:	L Wate	irborne contaminants: Letorne contaminants: Muclear waste: Letorne Toxic waste: Letorne
- ·	:	ng by Inuit from Sanikil nikilvag, 70 km S of site		

CA011 Fishing B	ranch Ecologic	al Reserve			
IUCN: 4 Area (ha): 16500	Adm. region:	66° 22' 00" N	135° 20' 00" W		
Ramsar: Other: Relationship to other conv	MAB: ventions:		World Heritage:		
Ownership: Management: Renewal Resou Author: Canadian Cou					
Habitat Geographic region: North C Ecological function: Taiga c	-	awning area			
Marine:    Island:   Rive     Fjord:   Lake     Other:   Stream     Wetland:     Wetland:	r: Con o: Con n: Higi	iferous:  Birch:  Mixed:  h Brush:  w Brush:	Taiga:  Mountain:  Other:	Tundro:  Moist:   Wet:   Alpine:	
Other):  Important species: Ursus Red Data Book: Locally rare species:	Canis Iupus, M	ustela vison, Ma			
Antropogen pressure	H=High / M	=Medium / L=Lo	w / N=Not specified	d):	
	N For N Fish We N Introduction	nsion of tourism: estry practices: Deforestation: eries practices: tland drainage: Erosion: Overgrazing: ction of species:	N N N N Airb N Watert	plotation of species: Oil spills: Ocean dumping: Noise: corne contaminants: Nuclear waste: Toxic waste:	
Main human activities: Scient Alternative land use:	ntific research				

Alternative land use: Total population size: Indigenous populations:

CA012	Old Crow Flats	Special (Wildlife)	Management Ar	ea.
IUCN: 4 Area (ha): 612		region: Yukon Territory cation: 067° 50′ 00″ 1	N 139° 30' 00" W	
<b>Other:</b> Thi <b>Relationship t</b> (W	o other conventions	it is about to	World Heritage of Wildlife Area and It is be proclameds as the s of the Vuntut Gwitch	nay one day be Old Crow Flats Special
pro		nt between Canada o	ection. Canada Wildli and the U.s. withe Con	
Ownership: Go	overnment of Cana	da and Vuntuit Gwitdi	u First Nation.	
_	s area will be coope overnment of Yukon		the Vantut Gwitdiu Fir	st Natipn and
Author: Go	overnment of Canad	da, Vantut Gwitdiu Firs	t Nation and Governm	nent og Yukon Territory.
• • •	(ducks). It also	hab tat in the Yukon vital for moose, grizzly		nigration and for nesting ne surrounding tvothills
Marine:	Freshwaler:	Forest:	Talga;	Tundia:
island: Fjord: Other:	River: 🖂 Lake: 🗟 Stream: 🖾 Welland:	Coniferous: Birch: Mixed: High Brush: Low Brush:	Mountain: ⊠ Other: □	Moist: ⊠ Wet: ⊠ Alpine: ⊠
Other):	Wetland: 🛚			
	ook: Canada geese		d squaw ducks, scoter: nanent resident - grizzly	s, Whitefront geese, / bears, moose, muskrat,
Locally rare spe	<b>cies:</b> Peregreie falco	ons.		
Antropogen	pressure	(H=High / M=Medium )	/ L=Low / N=Not specit	
Industrial dev	elopment: M	Expansion of tou	rism: M	explotation of species: M
	il activity.: H	Forestry prac	110000	Oil spills: H
='	on growth:	Deforesto	VVV 2 V	Ocean dumping:
	oanisation: L astructure: H	Fisheries prac Wetland drair	www.	Noise: M
	mentation: H		········	erborne contaminants: M
_	ehicle use: H	Overgro	~~~~	Nuclear waste: L
	Other: M	Introduction of spe	******	Toxic waste: M

Climate change could have an erupact because the area is underlain by permafrost.

Main human activities: Subsistence hunting, fishing and trapping by local Aboriginal people. Eco-

Alternative land use: tourismn (growing rapidly).

Possible extraction of oilareal gas. Mining.

Total population size: 250 (mostly abovigrial) residents in village of Old Crow, Yuka.

Indigenous populations: Vuntut Gwitchei First Nation (250 people) living in Old Crow. They Traditionally use

the area for hunting, fishing and trapping. On the future they hope to change in

eco tourism activies.

IUCN: 2	Adm. re	gion: No	orthwest Territorie	S.	
Area (ha): 22252		_	73° 00' 00" N	83° 00' 00"	W
Ramsar: Other: Relationship to	other conventions:	//AB:		World Herit	age: Not proposed.
Management: Man	nment of Canada, aged under the a ement expected 19	uthority			n formally established.
Habitat Geographic regio Ecological functio					
Marine:  Island:  Fjord:  Other:	River:   Lake:   Stream:   Wetland:	F	coniferous:  Birch:  Mixed:  Iigh Brush:  Low Brush:	Taiga Mountain: Other:	Tundic:  Moist:  Wet:  Alpine:
Important specie Red Data Boo Locally rare specie	ok: os: Na. 				
Antropogen p	ressure (H	=High /	M=Medium / L=l	.ow / N=Not sp	oecified):
*	growth: L nisation: L tructure: L ontation: L	F	cansion of tourism Forestry practices Deforestation Sheries practices Wetland drainage Erosion Overgrazing		explotation of species: Oil spills: Ocean dumping: Noise: Airbome contaminants: Waterborne contaminants: Nuclear waste: Toxic waste:
Alternative land	rities: Hunting, fishin	g, gene ans. The	eral subsistence u	ses, mining.	for other land uses including

employment in commercial mining operations.

<b>CA014</b> Ro	ısmussen Lowlan	as		
IUCN: 4	Adm. region	: Northwest Territories.		
<b>Area (ha):</b> 527800	Location	: 068° 40' 00" N	093° 00' 00" W	
Relationship to ott	al Wildlife Area. IBP si ner conventions: R Convention - wetla	te.	<b>World Heritage:</b> N - shorebird hab	itat. MBCA - mig. bird
Ownership: Inuot a	nd Government of C	anada.		
Management: Co-ma Author: Inuit an	naged by Inuit and G d Environment Cana			
Habitat				-
Geographic region:	Sothern Arctic.			
	Protection of importo species), passesines.	ant nesting/staging are	ea for shorebirds,	tundra swans, geese (s
Marine: F	reshwaler:	Forest:	Taiga:	Tundra
Island:  Fjord:  Other:	River:  Lake:  Stream:  Vetkand:	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Mountain:	Moist: ⊠ Wet: ⊠ Alpine: □
Other):	Wetland: $oxedsymbol{oxtime}$			
Important species: Red Data Book:	Tundra Swan, Greate (approx. 10 species), Benting.	er White-fronted Goos King Eider, Oldsquaw	e, Greater Snow ( r, Lapland Longsp	Goose, Shorebirds our, Horned Lark, Snoe
Locally rare species:				
Antropogen pre	essure (H=Hiç	gh / M=Medium / L=Lo	w / N=Not specifi	ed):
Industrial develop	3 200000	Expansion of tourism:	L e	explotation of species:
Mineral or oil ac	2000000	Forestry practices:	L	Oil spills:
Population gr	S-consens.	Deforestation:		Ocean dumping:
Urbanis Infraetra	cture: L	Fisheries practices: Wetland drainage:	A	Noise: ;   irborne contaminants:
Habitat tragment	0.00000;	Erosion:		rborne contaminants:
Motorized vehicle	parameter,	Overgrazing:		Nuclear waste:
	Transporti	troduction of species:	William .	Toxic waste:
Alternative land u	<b>se:</b> Potential for gas p	tence use by Inuit from Dipeline route in future mmunieties of Taloyod	•	

Indigenous populations: See 4.23.

CA015 Blue	enose Tuktut No	gait National Parl	k.	
IUCN: 2 Area (ha): 2800000	Adm. region Location:	Northwest Territories. 68° 30' 00" N	121° 30' 00" W	
Ramsar: Other: Relationship to othe	MAB: er conventions:		World Heritage:	
Ownership: Government Management: Management Author:		itional Park of Canad ly of the National Parl		y establishe in 1996.
Habitat  Geographic region: Ecological function:				
Morine: Fre	shwater. i	Ores):	Talga:	Tundia:
***************************************	River:  Lake:  Stream:  Stream:	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Mountain:  Other:	Moisł: 🔲 Wet: 🔲 Alpine: 🔲
Other):  Important species:  Red Data Book:  Locally rare species:	Vetland: 🔲			
Antropogen pres	ssure (H=Hig	h / M=Medium / L=Lo	w / N=Not specifie	d):
Industrial developm Mineral or oil acti Population gra Urbanisa Infrastruc Habitat fragmenta Motorized vehicle	vity.: M wth: L tion: L ture: L use: L	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: roduction of species:	L L L Airl L Watert	plotation of species: L Oil spills: L Ocean dumping: L Noise: L corne contaminants: L Nuclear waste: L Toxic waste: L
	P: No special plans. p: industrial purposes Approx. 1500	The area would remo s.	ain available for oth	ner land uses including ting of marine

CA016	Wager Bay Nati	ional Parl	k.		
IUCN: 2 Area (ha): 2650		_	west Territories 5° 00' 00" N	s. 88° 00' 00" W	
Ramsar: Other: Relationship to	other conventions:	MAB:		World Heritage:	
	rernment of Canado naged under the au				ablished.
Habitat Geographic region					
Marine:    Island:		N High	erous:  Birch:  Mixed:  Brush:  Brush:	Talga:  Mountain:  Other:	Moist:   Wet:   Alpine:
Locally rare speci	95:	=High / M=	Medium / L=L	ow / N=Not specif	ied):
	activity.: M n growth: L unisation: L structure: L entation: L	Fore Fishe Wetle	sion of tourism estry practices Deforestation ories practices and drainage Erosion Overgrazing ion of species	: L : L : L : L Wate	oxplotation of species: L Oil spills: L Ocean dumping: L Noise: L Lirborne contaminants: L Orborne contaminants: L Nuclear waste: L Toxic waste: L
Alternative land	vities: Hunting, fishin d use: No special pla n size: industrial purp Approx. 5000. ations: Approx. 4500. mammals, en	ans. The are poses. Main activ	ea would be o	available for other clude hunting, har	tand uses including vesting of marine

CA015 Blue	enose Tuktut No	gait National Parl	k.	
IUCN: 2 Area (ha): 2800000	Adm. region Location:	Northwest Territories. 68° 30' 00" N	121° 30' 00" W	
Ramsar: Other: Relationship to othe	MAB: er conventions:		World Heritage:	
Ownership: Government Management: Management Author:		itional Park of Canad ly of the National Parl		y establishe in 1996.
Habitat  Geographic region: Ecological function:				
Morine: Fre	shwater. i	Ores):	Talga:	Tundia:
***************************************	River:  Lake:  Stream:  Stream:	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Mountain:  Other:	Moisł: 🔲 Wet: 🔲 Alpine: 🔲
Other):  Important species:  Red Data Book:  Locally rare species:	Vetland: 🔲			
Antropogen pres	ssure (H=Hig	h / M=Medium / L=Lo	w / N=Not specifie	d):
Industrial developm Mineral or oil acti Population gra Urbanisa Infrastruc Habitat fragmenta Motorized vehicle	vity.: M wth: L tion: L ture: L use: L	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: roduction of species:	L L L Airl L Watert	plotation of species: L Oil spills: L Ocean dumping: L Noise: L corne contaminants: L Nuclear waste: L Toxic waste: L
	P: No special plans. p: industrial purposes Approx. 1500	The area would remo s.	ain available for oth	ner land uses including ting of marine

CA017	ast Arm of Gred	at Slave Lake Nati	ional Park.	
IUCN: 2 Area (ha): 74000	•	gion: Northwest Territori lion: 062° 50' 00" N	ies. 109° 00' 00" W	
Ramsar: Other: Relationship to c	$\mathbb{N}$ other conventions:	IAB:	World Heritage:	
•		, National Park of Can hority of the National F		ily established.
Habitat Geographic region Ecological function				
Marine:	Freshwater:	Forest:	Talga:	Tundra:
Island:  Fjord:  Other:	River:  Lake:  Stream:  Welland:	Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain:	Moist:  Wet:  Alpine:
Other): Important specie Red Data Bool Locally rare specie	k:			
Antropogen pi	ressure (H:	=High / M=Medium / L	=Low / N=Not specifie	d):
	growth: L hisation: L ntation: M	Expansion of touris Forestry practice Deforestation Fisheries practice Wetland drainag Erosion Overgrazir Introduction of specie	es: M  on: L  es: L  con: L  Waterl	oil spills:  Ocean dumping:  Noise:  borne contaminants:  Nuclear waste:  Toxic waste:
Alternative land	ities: Hunting, commuse: tourism, mining No special pla	nercial, sport and subs g, prospecting for mine ins. The area would re strial purposes. Part of	sistence fishing, gener erals. main available for fo	al subscistence uses, r other land uses
	electrical gene Approx. 500. ions: Approx. 500. N		•	·

CA018	Northern Bath	urst Island N	ational Park.		
IUCN: 2	Adm. ı	egion: Northwe	est Territories.		
<b>Area (ha):</b> 65	60000 Loc	cation: 75°	30' 00" N 98	s, 00, 00, M	
Ramsar: Other: Relationship	to other conventions	<b>MAB</b> :	Wo	rld Heritage:	
•	overnment of Canadanaged under the c			ct when formally	/ established
Habitat Geographic re Ecological fund	•				
Marine:	Freshwater:	Forest:	Talgo	1	Tundra:
Island: 🛭 Fjord: 🗖 Other: 🗖	River:   Lake:   Stream:   Wetland:		irch:	ountain: 🗌 Other: 🔲	Moist:  Weit:  Alpine:
Other):	Wetland: 🗌				
Important spe Red Data I Locally rare spe	Book:				
Antropogen	pressure	(H=High / M=M	edium / L=Low / N	N=Not specified)	:
Industrial dev	velopment: M	Expansio	n of tourism: M	expl	otation of species: M
Mineral or o	oil activity.: M	Forest	ry practices: L		Oil spills: M
-	ion growth:	_	eforestation: L		Ocean dumping: L
	banisation: L		es practices: L	A *	Noise:
	rastructure: L	Wettar	nd drainage: L		rne contaminants: L rne contaminants: L
_	mentation: L ehicle use: L		Erosion: <u>L</u> Overgrazing: L	Wdielbo	Nuclear waste: L
NOIDIZEG V	Other: N		n of species: L		Toxic waste: L
Alternative la	and use: for minerals. No special p lion size: industrial pu Approx. 500	plans. The area rposes.	ı would remain av	vailable for othe	esearch, prospecting r land uses including
Indigenous pop	<b>ulations:</b> Approx. 500 mammals, e		clude hunting, fish government servi		rvesting of marine

CA019	Churchill Nation	nal Park.			
IUCN: 2	Adm. re	gion: Province	e of Manitoba.		
<b>Area (ha):</b> 100	00000 <b>Loc</b> e	ation: 57°	00' 00" N	93° 00' 00" W	
Ramsar:		MAB:	٧	World Heritage:	
Other:					
Relationship t	o other conventions:				
•	overnment of Canad				
	anaged under the au jected Date for estal			Act when formal	ly established.
Author:	joered Date for estab		,0		
Habitat					
Geographic reg	gion:				
Ecological func	tion:				
Marine;	Freshwater	Forest	īc	lga:	Tundia
Island: 🔲	River: 🔲	Conifer	ous: 🔲 🕒	Mountain: 🔲	Moist: 🔲
Fjord: 🔲	Lake: 🔲		irch: 📙	Other:	Wet:
Other: L	Stream: 🔲		xed: 니		Alpine: L
	Welland	High Bı Low B			
	Wetland: 🗌		_		
Other):					
Important spe					
Red Data B Locally rare spe					
Antropogen		 {-High / M-M		/ N=Not specified	
_	,	_			olotation of species: L
Industrial dev Mineral or o		-	ry practices: L	- M ext	Oil spills:
	on growth:	•	eforestation: L		Ocean dumping:
Urk	oanisation: L		es practices: 💄		Noise: L
	astructure: M	Wetlar	nd drainage: L		orne contaminants:
Habitat fragi Motorized ve	mentation: L	,	ا: Erosion ا: Overgrazing: L	waterb	orne contaminants: L. Nuclear waste: :L.
WOODIZEG VE	Other:		n of species: L		Toxic waste:
Main human ac	<b>tivities:</b> Hunting, fishir	na. aeneral su	ıbsistence uses.	. tourism.commert	ial port activities.
	nd use: transportatio				,
<b>.</b>			would remain	available for othe	er land uses including
Total populati	on size: industrial purp Approx. 2000				
Indigenous popu	approx. 2000 Ilations: Approx. 1400		iclude huntina.	trappina, harvest	rina of marine
- ·	mammals, er	mployment in	transportation	and government	services sectors.

CA020	Southampton F	lain Natio	onal Park.				
IUCN: 2 Area (ha):		_	west Territories 1° 00' 00" N	s. 85° 00' 0	0"W		
Ramsar: Other: Relationship t	o other conventions:	MAB:		World He	ritage:		
•	evernment of Canad anaged under the au						
Habitat Geographic reg Ecological func							
Marine:	Freshwater	Forest		Talga		Tundra:	
Island:  Fjord:  Other:	River:  Lake:  Stream:  Wetland:	N High	erous:  Birch:  Aixed:  Brush:  Brush:	Mountair Othe	_	Moist:  Wet:  Alpine:	
Other):	Wetland: 🔲						
Important spe Red Data B Locally rare spec	ook:						
Antropogen	pressure (+	l=High / M=	Medium / L=Lo	ow / N=Not	specified	i):	
Urb Infre	il activity.: Non growth: Non	Fore Fishe Welld	ion of tourism: stry practices: Deforestation: ries practices: and drainage: Erosion: Overgrazing: on of species:	: N : N : N : N : N : N	Airb	plotation of species: Oil spills: Ocean dumping: Noise: corne contaminants: Nuclear waste: Toxic waste;	
Alternative la Total population	tivities: Hunting, fishir nd use: No special pl on size: industrial purp Approx. 500.	ans. The are poses.	ea would rem	ain availabl	e for oth	er land uses includin	g
indigenous popu	lations: Approx. 500. employment			y, narvesiin(	y or man	ne mammais,	

CA021	Horseshoe Slough	Habitat Protection	n Area	
IUCN: 4	Adm. regio	on:		
<b>Area (ha):</b> 790	00 Locatio	on: 63° 25′ 00″ N	135° 15' 00" W	
Ramsar: Other: Relationship to	MA o other conventions:	В:	World Heritage:	
Ownership: Management: Rer Dist	newal Resources, Govertrict Renewable Resourcenadian Council on Ecol	ces Council.	lacho Nyak Dun Firs	t Nation and Mayo
• • •	<b>lion:</b> Yukon Plateau-Norl l <b>ion:</b> Boreal cordillera	th, code: 176		
Marine:	Freshwater	Forest:	Talga	Tundia:
Island: Fjord: Other:	River: 🖂 Lake: 🖾 Stream: 🗀 Welland:	Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain:	Moist: ☐ Wet: ☐ Alpine: ☐
Other):	Wetland: 🗌	<b>-</b>		
Important spec Red Data Bo Locally rare spec		a zibethicus, Castor fib	er	
Antropogen	pressure (H=H	ligh / M=Medium / L=Lo	ow / N=Not specified	d):
Urb Infro Habitat fragn Motorized ve	il activity.: N on growth: N oanisation: N ostructure: N onentation: N ohicle use: N Other: L	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: ntroduction of species:	N N Airt N Watert	plotation of species: Oil spills: Ocean dumping: Noise: corne contaminants: Nuclear waste: Toxic waste:
Degree of disturba	nce minimal			
Main human ac Alternative la Total populatio Indigenous popu	on size:	ion, some grazing.		

## 2 Finland

FI		Proposed Areas, March 1996		
number	Area name	IUCN	Area (hectare)	
FI001	Koitelainen Mire	4	34.400	
FI002	Luiro Mire	4		
FI003	Expansion of Pallas-Ounas N.P.	2		
3	Areas		34.400	

	Adm. region: Province of La	pland, Lapland Enviro	onment Centre.
<b>Area (ha):</b> 34400	<b>Location:</b> 67° 15′ 00″	N 26° 53' 00" E	
Ramsar: Yes	MAB:	World Heritag	<b>je:</b>
Other: Relationship to other conve	entions:		
Ownership: State ownership	,		
Management: Finnish Board of Author:	Forestry		
Habitat			
	Porogl 7ono		
Geographic region: Northern Ecological function: Boreal for		tom	
Marine: Freshwafe	r Forest	Taiga	Tundra
Island: 🔲 River	: 🛛 Coniferous: 🛭	Mountain: [	☐ Moist: ☐
Fjord: 🔲 Lake	: 🔲 Birch: 🛚	Other:	☑ Wef: □
Other: U Stream		_	Alpine: 🔲
Wetland:	High Brush: L Low Brush: [	_	
Wetland		_	
Other):	· Lun		
Important species: Bean Go	oose, Whooper Swan, ducks	, waders.	
Red Data Book: Peregrin			
Locally rare species:			cified):
Locally rare species:  Antropogen pressure	(H=High / M=Medium	/ L=Low / N=Not spec	Jilleu).
	, ,		explotation of species: :L
Antropogen pressure Industrial development:	Expansion of to	urism: N	
Antropogen pressure	Expansion of to	urism: N	explotation of species:
Antropogen pressure  Industrial development:  Mineral or oil activity.:	Expansion of to Forestry pract Deforest	urism: N tices: N ation: N	explotation of species: L
Antropogen pressure  Industrial development:  Mineral or oil activity.:  Population growth:  Urbanisation: Infrastructure:	Expansion of to Forestry prac Deforest Fisheries prac Wetland drai	urism: N tices: N ation: N	explotation of species: L Oil spills: N Ocean dumping: N
Antropogen pressure  Industrial development:  Mineral or oil activity.:  Population growth:  Urbanisation:	Expansion of to Forestry prac Deforest Fisheries prac Wetland drai	urism: N ctices: N ctices: N nage: N	explotation of species: L Oil spills: N Ocean dumping: N Noise: N
Antropogen pressure  Industrial development:  Mineral or oil activity.:  Population growth:  Urbanisation: Infrastructure:	Expansion of to Forestry pract Deforest Fisheries pract Wetland drai Er	urism: N ctices: N ation: N ctices: N nage: N osion: N uzing: H	explotation of species: L Oil spills: N Ocean dumping: N Noise: N Alrborne contaminants: N

FI002	Luiro Mire					
IUCN: 4 Area (ha):		region: Province o		id Regional En 2' 00" E	vironment Centre.	•
Ramsar: Will b Other: Relationship to	e proposed other conventions	MAB: s:	World	Heritage:		
Ownership: State Management: Finnis Author:	•	ry.				
Habitat						
Geographic region Ecological function						
Morine:	Freshwoter	Forest	Talga		Tundra:	
Island: Fjord: Other:	River:  Lake:  Stream:	Coniferou Birc Mixe	h: O	tain:   ther:	Moist: 🔲 Wet: 🔲 Alpine: 🔲	
	Welland:	High Brus Low Brus	_			
Other):	Wetland: 🛚					
Important specie Red Data Boo Locally rare specie  Antropagen p	es:		ucks, waders. ium / L=Low / N=N	let enceified):		
Industrial develo	100000	Expansion (		-	otation of species:	L
Mineral or oil		•	practices: N	OAP.C	Oil spills:	
Population	growth: N		restation: N		Ocean dumping:	N
	nisation: N		practices: <u>N</u>		Noise:	bosson
	tructure: N	Wetland	drainage: L		ne contaminants:	·
Habitat fragme Motorized vehi	And reserve	04	Erosion: <u>N</u> ergrazing: N	waterbor	ne contaminants: Nuclear waste:	
WOOTIZED VEN	Other: N		of species: N		Toxic waste:	62,0000
Main human activ Alternative land Total population	<b>d use:</b> Forestry.		inds, reindeer hust ery near the areas		atching.	

F1003	Expansion of Pa	ıllas-Ounas N.P.			
IUCN: 2		gion: Province of Lapland		Environment Centre	
Area (ha):	Loca	ation: 067° 49' 00" N	027° 17' 00" E		
Ramsar:	ľ	MAB:	World Heritage:		
Other:	o other conventions:		•		
•					
Ownership: Sto	ate ownersnip. restry Research Institu	to			
Author: Na	· ·	ie.			
	···				
Habitat					
• • •	gion: Northern Boreal 2				
Ecological func	tion: Boreal forest and	d aapa-mire ecosystem.			
Marine:	Freshwaler	Forest	Taiga:	Tundra.	
Island: $\Box$	River: 🔲	Coniferous: 🔯	Mountain: $\Box$	Moist: 🔲	
Fjord: 🔲	Lake: 🔲	Birch: 🔲	Other:	Wet: 🔲	
Other: 🔲	Stream: 🔲	Mixed:		Alpine: 📙	
	Wetland:	High Brush: L_  Low Brush:			
	Wetland:	row Brush:			
Other): A					
Important spe	cies:Tetraonid birds. 1	ypical boreal forest faun	na and flora.		
Red Data B		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Locally rare spec	cies:				
Antropogen	pressure (H	l=High / M=Medium / L=l	.ow / N=Not specified	l):	
Industrial dev	elopment: N	Expansion of tourism	n: L exp	olotation of species:	N
	il activity.: N	Forestry practices	200000	Oil spills:	.,,
Population	on growth: N	Deforestation	n: N	Ocean dumping:	Ν
	panisation: $N$	Fisheries practices	IIIII III	Noise:	
	astructure: N	Wetland drainage	Lineare .	orne contaminants:	,copero.
	nentation: N	Erosion	contract.	orne contaminants:	********
IVIOTORIZACI VE	ohicle use: N Other: N	Overgrazing Introduction of species	\*********	Nuclear waste: Toxic waste:	
		-		TOAIC WUSIE.	:1.3
	_	sm, reindeer husbandry,	snowscootering.		
Altomativala					
	nd use: Forestry, touris	ed local peoples around	H	alone al La codella	

## 3 Greenland/Denmark

GL		Proposed Areas, March 1996		
number	Area name	IUCN	Area (hectare)	
GL001	Jacobshavn isfjord		79.600	
GL002	Søndre Strømsfjord		1.021.000	
GL003	Area in South Greenland		295.200	
3	Areas		1.395.800	

GL001 Jaco	bshavn isfjord				
IUCN: Area (ha): 79600	Adm. region: Location:	69°10'00 " N	50°00'00" W		
Ramsar: Other: Relationship to other (	MAB:		World Heritage: Yes		
Ownership: State Management: Author: Dorthe Yde	emann, Greenland I	nstitute of Natural R	esources		
Habitat Geographic region: Ecological function: Cul	tural monument				
Marine: Fresh	water: Fo	resi:	Talga	Tundra	
Island:  Fjord:  Other:  Str	River: C Lake: C ream: C	Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain:  Other:	Moist:  Wet:  Alpine:	
Other): Glaciær					
Important species: Hip Red Data Book: Locally rare species:	poglossus hippoglos	sus			
Antropogen press	ure (H=High	/ M=Medium / L=Lo	w / N=Not specified):	:	
Industrial developmer Mineral or oil activity Population growt Urbanisatio Infrastructur Habitat fragmentatio	y.: N th: N on: N re: N	pansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion:	N N M N Airbo	otation of species: Oil spills: Ocean dumping: Noise: me contaminants: me contaminants:	2 2 2 2 2
Motorized vehicle us Othe	- January	Overgrazing: duction of species:	N.	Nuclear waste: Toxic waste:	N
Main human activities: I			k		1

Alternative land use:

Total population size: Around 2000

	0 - 1 - 0	<b>a</b>				
GL002	Søndre Strøms	stjord				
IUCN:	Adm.	region:				
<b>Area (ha):</b> 102	:1000 La	cation: 67	°00'00" N	51°00'00" W		
Ramsar:		MAB:		World Heritage: Yes		
Other:						
Relationship to	o other convention	s:				
Ownership: Sta	te					
Management:						
Author: Do	rthe Ydemann, Gre	enland Institute	e of Natural R	esources		
Habitat			-			
Geographic reg	ion:					
	l <b>ion:</b> Cultural monu	ment, dry tundi	a vegetation			
Marine:	Freshwoten	Forest:		falga:	Tundra	
Island: 🛛	River: 🛛	Conife	rous: $\square$	Mountain:	Moist:	
Fjord:	Lake:		irch:	Other:	Wet:	
Other:	Stream:	_	xed: $\square$		Alpine:	
_		High B	rush: $\square$			
	Wetland:	Low B	Brush: 🔲			
	Wetland: 🗌					
Other):						
Important spec	cies: Anser albifros,	Rangifer tarand	dus			
Red Data Bo						
Locally rare spec	:ies:					
Antropogen	pressure	(H=High / M=M	edium / L=Lov	w / N=Not specified):	1	
Industrial deve	elopment: N	Expansio	n of tourism:	L expl	otation of species:	N
Mineral or oi	il activity.: N	Forest	ry practices:	N	Oil spills:	N
=	on growth: N	_	eforestation:	N	Ocean dumping:	0.000
	anisation: N		es practices:	N	Noise:	processed.
	astructure: N	Wetlai	nd drainage: Erosion:	(consent)	rne contaminants: rne contaminants:	Sycamore
Habitat fragn Motorized ve	hamma		erosion: Overgrazing:	N Waterbo	rne contaminants: Nuclear waste:	*******
MOIOIIZEG VE	Other: N		n of species:	L ·	Toxic waste:	femoreoi
Main burnes ==	Norman		· • · · · · ·	Name of the last o		4
Main numan ac Alternative lai	<b>tivities:</b> Reindeer h	unning, risnjing				
	na use. on size: Around 400	10				

GL003	Area in South Gr	eenland		
IUCN: Area (ha): 2952	Adm. reg	ion:	46°00'00" W	
Ramsar: Other: Relationship to	M other conventions:	AB:	<b>World Heritage:</b> Ye	es
Ownership: State Management: Author: Dort		land Institute of Naturo	al Resources	
Habitat  Geographic region  Ecological function		tion, cultural monume	nt	
Marine:	Freshwater:	Forest:	Taiga:	Tundra:
Island: 🔯 Fjord: 🔯 Other: 🗖	River:  Lake:  Stream:  Wetland:  Wetland:	Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain:  Other:	Moist: ⊠ Wet: □ Alpine: □
Olher):	Wetlana: L			
Important speci Red Data Boo Locally rare speci	ok:			
Antropogen p	ressure (H=	:High / M=Medium / L:	=Low / N=Not specified	d):
	activity.: N growth: N nisation: N tructure: N entation: N	Expansion of touris Forestry practice Deforestation Fisheries practice Wetland drainage Erosion Overgrazir Introduction of specie	es: N  es: N  es: N  es: N  con: L  Watert	oil spills: N Ocean dumping: N Noise: N Ocrne contaminants: N Nuclear waste: N Toxic waste: N
Alternative land	n size: Around 6000	fishing, hunting		

## 4 Iceland

IS		Proposed A	reas, March 1996
number	Area name	IUCN	Area (hectare)
IS001	Reykjanes (NCR No. 106)	3	1.250
I\$002	Hjörsey, Myrar (NCR No. 213)	4	2.700
I\$003	Reykjadalsá, Borgarfjodur (NCR No. 204)	3	700
IS004	Arnarvatnsheidi - Tvídægra (NCR No. 209)	4	2.800
IS005	Snæfellsnes, undir Jøkli (NCR No. 223)	2	2.000
IS006	Látrabjarg (NCR No. 307)	4	1.000
IS007	Flateyjardalur (NCR No. 512)	5	800
JS008	Langanes (NCR No. 543)	5	900
IS009	Snæfell (NCR No. 615)	4	1.000
18010	Hekla (NCR No. 730)	3	1.000
IS011	Stokkseyri (NCR No. 750)	8	600
11/	Areas		14.750

IUCN: 3 Area (ha): 1250		<b>egion:</b> Grindavik, Hafnahre :ation: 063° 48' 00" N	eppur, Gullgringusýsla. 022° 39' 00" W	
Ramsar: No Other: Relationship to oth	ner conventions.	MAB: No	World Heritage: No	
Ownership: State and Management: Nature Author: Nature	nd private. Conservation C	council.		
Marine:  Island:  Fjord:  Other:  W		Boreal zone. tures, sea cliffs with abunc  Forest:  Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	dant bird species.  Talga:  Mountain:  Other:	Tunctra:  Moist:   Wet:   Alpine:
Locally rare species:  Antropogen pre	essure /	U Lligh / M. Madium / L.		
Industrial develops Mineral or oil act Population gr Urbanis Infrastruc Habitat fragment Motorized vehicle	ment: M ivity.: N owth: N ation: N cture: M ation: N e use: H Other: N	H=High / M=Medium / L=L  Expansion of tourism  Forestry practices  Deforestation  Fisheries practices  Wetland drainage  Erosion  Overgrazing  Introduction of species	: L expl : N : N : N : N Airbo	lotation of species: Oil spills: Ocean dumping: Noise: Orne contaminants: Nuclear waste: Toxic waste:

<b>IS002</b> Hjörsey	, Myrar (NCR No. 213)		
IUCN: 4 Area (ha): 2700	Adm. region: Álftaneshre Location: 064° 32' (		•
Ramsar: Yes Other: IBA/ICBP. Relationship to other co	MAB: No	World Herito	age: No
Ownership: Private (most Management: Nature Const Author: Nature Const	ervation Council.		
	ern Boreal zone. Ilow bay with extensive inter al lakes.	tidal flats and saltmar	shes, numerous islands,
Fjord: Description Loss Controls Control	ver: Coniferous	Other:	Moist: Wet: Alpine:
Other):: Important species:Important species:Imp	tant for breeding seabirds (ears, and as a moulting, stagir	ng and wintering site fo loose (up to 10.000) a	or Wooper Swan (up to 1300 and waders (especially Knot)
Locally rare species:  Antropogen pressui	' <del>C</del> (H=Hiah / M=Mediu	ım / L=Low / N=Not sp	ecified):
Industrial development: Mineral or oil activity.: Population growth: Urbanisation: Infrastructure: Habitat fragmentation: Motorized vehicle use: Other:	N Expansion of N Forestry p N Defor N Fisheries p N Wetland d N Ove	tourism: N ractices: N estation: N ractices: N ractices: N rainage: H Erosion: N	explotation of species: NOII spills: NOCean dumping: NOCEAN Airborne contaminants: NOCEAN Waterborne contaminants: NOCEAN Waste:
Main human activities: Fa Alternative land use: Total population size:	ming.		

IUCN: 3 Area (ha): 700		region: Reykholtshreppur, H cation: 064° 48' 00" N	lalsahreppur, Borgat) 021° 10' 00" W	adarsýsla.
	LO			
Ramsar: No Other:		MAB: No	World Heritage: No	1
•	other convention	s:		
Ownership: Priva	te.			
Management: Natu		Council.		
	re Conservation			
Habitat				
	mu Aratia Alaina	zono and Northio Poroal za	ano.	
		zone and Northic Boreal zon abundant vegitation, with		ound it
_	***************************************			
Marines	Freshwater	Forest:	Taiga:	Turking.
Island: 🔲	River: 🛛	Coniferous:	Mountain: 🔲	Moist: 🔲
Fjord: 🔲	Lake: 🔲	Birch: 🔲	Other:	Wet: □
Other:	Stream: 🔲	Mixed: 🔲		Alpine: 🗌
	Welland:	High Brush: 📙		
		Low Brush:		
Other):	Wetland: 🔲			
Important specie				
Red Data Boo Locally rare specie				
	73. 			
Antropogen p	ressure	(H=High / M=Medium / L=L	ow / N=Not specified	):
Industrial devel	opment: N	Expansion of tourism	: N exp	lotation of species:
Mineral or oil o	- (************************************	Forestry practices	parameter and a second	Oil spills:
Population	growth: N	Deforestation	: <u>N</u>	Ocean dumping:
Urbai	nisation: N	Fisheries practices	: <u>N</u>	Noise:
	tructure: N	Wetland drainage	Summer Commercial Comm	ome contaminants:
	entation: N	Erosion		ome contaminants:
Habitat fragme		Overgrazing	: N	Nuclear waste:
Habitat fragme Motorized vehi	1010 0001	• •		Taula made
_	icle use: N Other: N	Introduction of species		Toxic waste:
_	Other: N	• •		Toxic waste:
Motorized vehi	Other: N vities: Farming. 1 use: No special	Introduction of species		Toxic waste:

I Arnon	ratocholdi Triida	mara (NCD Na	. 200)	
IUCN: 4 Area (ha): 2800		ægia (NCR No rarsýsla, V-Húnav 065° 00' 00" N	•	
Ramsar: Yes. Other: IBA/ICBP. Relationship to other c	MAB: No onventions:		World Heritag	e:No
Ownership: State and p Management: Nature Con Author: Nature Con	servation Council.			
Habitat				•
Geographic region: Arcti Ecological function: A va	•	nels, lakes, pounc	ds and associate	ed marches.
Marine: Freshy	vater; Fore	st	Taiga.	Tundro
Fjord: L	ake: 🛛 eam: 🔲 ndt	oniferous:  Birch:  Mixed:  gh Brush:	Mountain: Cother:	☐ Moist: ☐ Wet: ☑ Alpine: ☐
***************************************	land:	ow Brush: 🔲		
Important species: Impo Red Data Book: Dunl			n, Great Northe	rn Diver, Long-tailed Duck,
Locally rare species:				
Antropogen pressu	I <b>re</b> (H=High / l	M=Medium / L=Lo	w / N=Not spec	cified):
Industrial development Mineral or oil activity. Population growth Urbanisation Infrastructure Habitat fragmentation Motorized vehicle use	:: N Fi :: N Fi :: N Fi :: N Fi :: N W	ansion of tourism: orestry practices: Deforestation: sheries practices: fetland drainage: Erosion: Overgrazing: uction of species:	N N N WC	explotation of species: N Oil spills: N Ocean dumping: N Noise: N Airborne contaminants: N Iterborne contaminants: N Nuclear waste: N Toxic waste: N
Main human activities: SI Alternative land use: N	, , ,	<b>]</b> .		

<b>ISO05</b> Snæ	fellsnes, undir Jøkli (NC	R No. 223)		
IUCN: 2 Area (ha): 2000	Adm. region: Snæfellsr Location: 064° 4	nessýsla. 7' 00" N 023° 55	5' 00"W	
Ramsar: No Other: Relationship to other	MAB: No	World i	<b>Heritage:</b> No	
Ownership: State and Management: Nature Co Author: Nature Co	-			
Habitat  Geographic region: Not Ecological function: NB				
Island:  Fjord:  Other:  St  Wett	ream: Mixe	ch: Otl ed: sh: D		Moist:  Wet:  Alpine:
Important species: Red Data Book: Locally rare species:	area, constantino			
Antropogen press	UIE (H=High / M=Me	dium / L=Low / N=N	ot specified):	
Industrial developme Mineral or oil activit Population grow Urbanisatio Infrastructu Habitat fragmentatio Motorized vehicle u	y.: N Forestry th: N De on: N Fisheries re: N Wetland on: N	of tourism: M r practices: N forestation: N s practices: N d drainage: N Erosion: N vergrazing: N of species: N	Oc Airborne Waterborne	on of species: Oil spills: ean dumping: Noise: contaminants: contaminants: Nuclear waste: Toxic waste:
Main human activities: Alternative land use:	Farming.			

IS006	Látrabjarg (NCR	No. 307)		
IUCN: 4	_	<b>jion:</b> Vestur-Bardastro	•	
<b>Area (ha):</b> 1000	Local	ion: 065° 29' 00" N	I 024° 30' 00" W	
Ramsar: Yes Other:	N	IAB: No	World Heritage: N	10
	other conventions:			
Ownership: State	e and private.			
Management: Natu	ıre Conservation Co	uncil.		
Author: Natu	re Conservation Cou	uncil.		
Habitat	<del>-</del>	<del></del>	_	
Geographic region	on: Northern Boreal z	one.		
-	vegetation. In se colony including cent of the Icelar in Iceland), Uria c 000 pairs, the larg population), and	veral places rockfall approximately one radic population of Full alge (400 000 pairs), lest colony in the wo Fratercula arctica (	have formed screes. A	n more than one per 20? pairs, largest colony (s), Alca torda (c. 250 half of the world preeding species
Marine:	Freshwaler:	Forest:	Taiga;	Tundra:
Island: 🔲	River: 🔲	Coniferous:	Mountain:	Moist: 🔲
Fjord: ⊠ Other: □	Lake: ∐ Stream: □	Birch: ∐ Mixed: ☐	Other: L	Wet: ∐ Alpine: □
<b>U</b>	Welland:	High Brush:		ліріне. Ш
	Wetland:	Low Brush:		
Other):	weilana: 🗀			
Important speci Red Data Boo Locally rare specie	ok:			
Antropogen p	ressure (H=	:High / M=Medium /	L=Low / N=Not specifie	d):
Industrial devel	\/\text{\tiny}\exiting{\text{\text{\text{\text{\text{\text{\text{\text{\tinx}\\ \text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tiny}\xint{\text{\text{\text{\text{\text{\text{\text{\text{\tiny}\xint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tiny}\xint{\text{\text{\text{\text{\text{\text{\text{\text{\tiny}\xint{\text{\text{\tiny}\xint{\text{\text{\text{\tiny}\tiny{\tiny}\xiniting{\text{\tin}\tint{\text{\tin}\tinity}\\\ \tinx}\\tinttitex{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\tint{\text{\tin}\tint{\tex{\text{\texi}\tinity}\\\ \tinttint{\text{\text{\text{\text{\tin}\	Expansion of tou	townse	plotation of species: N
Mineral or oil	· · · · · · · · · · · · · · · · · · ·	Forestry practi	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Oil spills:
Population Urba	growth: N nisation: N	Deforesta Fisheries practi	postand	Ocean dumping: N Noise: N
	tructure: N	Wetland drains		borne contaminants: N
Habitat fragme	Acceptance			borne contaminants: N
Motorized veh	house,	Overgra	• ••••	Nuclear waste: N
	Other: N	Introduction of spec	cies: <u>N</u>	Toxic waste: N
	vities: Farming, egg o			
VIIAIII MA IOLI	a aaa no special bia	ı 10 <sub>1</sub>		

IS007	Flateyjardalur (N	CR No. 512)		
IUCN: 5	Adm. reg	i <b>on:</b> Grýtubakkahreppu pingeyjarsýslu.	r, Hálshreppur, Ljosav	vatnshreppur, S-
<b>Area (ha)</b> : 800	Locat		018° 00' 00" W	
Ramsar: No Other: Relationship to	M o other conventions:	AB: No	<b>World Heritage:</b> N	0
Management: Na	te and private. ture Conservation Cou ture Conservation Cou			
Habitat				
	i <b>on:</b> Northern Boreal zo i <b>ion:</b> Landscape divers	one. ity, abundant vegetatio	on.	
Marine:	Freshwater:	Forest:	Taiga:	Tundra
island:  Fjord:  Other:	River:  Lake:  Stream:	Coniferous:	Mountain:  Other:	Moist: ☐ Wet: ☐ Alpine: ☒
	Wetland:	High Brush: 🔲 Low Brush: 🗍		
Other):	Wetland:	_		
important spec Red Data Bo Locally rare spec	ook:			
Antropogen	pressure (H=	:High / M=Medium / L=L	ow / N=Not specified	
Urb	activity.: Non growth: Non gro	Expansion of tourism Forestry practices Deforestation Fisheries practices Wetland drainage Erosion Overgrazing Introduction of species	: N : N : N : N Airb : N Waterb	plotation of species: N Oil spills: N Ocean dumping: N Noise: N Corne contaminants: N Oorne contaminants: N Nuclear waste: N Toxic waste: N

S008	.anganes (NCI	R No. 543)			
IUCN: 5		<b>egion:</b> Pórshafnarh		•	
<b>Area (ha):</b> 900	Loc	cation: 066° 23′ 0	014° 32'	' 00" W	
Ramsar: No		MAB: No	World H	<b>leritage:</b> No	
Other: IBA/IC					
Relationship to a	other conventions:	•			
Ownership: State	and private.				
Management: Natur	re Conservation C	Council.			
<b>Author:</b> Natur	re Conservation C	ouncul.			
					-
labitat					
Geographic region				akaa adabad a abaadaa a dhii	
Ecological function				nt seabird colonies, with mor Rissa tridactyla, Urig aalge, L	
				s glacialis, Sula bassana (280	
		nd Fratercula arcti		0	
Acrine:	Freshwater	Forest	Taiga:	Tundra:	
Island:	River:	Coniferous	: Mounte	gin: Moist: 🗆	
Fjord:		Birch		her: Wet:	
Other:	Stream:	Mixed	_	Alpine:	
-		High Brush:		,	
	Welland:	Low Brush	r: 🔲		
	Wetland: 🗌				
Other):					
Important specie	es:				
Red Data Boo					
Locally rare specie	s:				
Antropogen p	ressure (	H=High / M=Mediu	 um / L=Low / N=N(		
Industrial develo	·	Expansion of		explotation of specie	 es: 1
Mineral or oil o	• • •	Forestry p	*******	Oil spi	
Population	- yaman	• •	estation: N	Ocean dumpin	***
•	nisation: N	Fisheries p	ractices: N	Nois	sө: 🧍
Infrast	ructure: N	Wetland d	rainage: N	Airborne contaminan	ıts: ຼື
Habitat fragme	(22.00)		Erosion: N	Waterborne contaminan	500
		Ovo	rgrazing: :N	Nuclear was	te: i
Motorized vehi	cle use: N Other: N	Introduction of		Toxic was	

**Alternative land use:** No special plans but increased interest for recreation.

<u>IS009</u>	Snæfell (NCR	No. 615)	•			
IUCN: 4 Area (ha): 100		region: S-Múlasý cation: 064° 4		015° 43' 00" W		
Ramsar: No Other: Relationship to	o other convention	MAB: No	,	<b>World Heritage:</b> No		
•	te. ture Conservation ture Conservation					
• • •	i <b>ion</b> : Arctic - Alpine i <b>ion:</b> A vast vegeta footed Geese	ted highland are	ea. Calfing ar	ea for Reindeer, s	taging area for Pinf	
Marine:	Freshwater	Forest:	To	iga	Tundra:	
Island: Fjord: Other:	River: Lake: Stream: Welland:		rch: 🔲 sed: 🔲 ush: 🔲	Mountain:	Moist: ☐ Wet: ☐ Alpine: ☒	
Other):	Wetland:					
Red Data Be Locally rare spec	ook:					
Antropogen	pressure	—————————————————————————————————————	edium / L=Low	/ N=Not specified		
Industrial deve Mineral or o Populatio Urb	elopment: N il activity.: N on growth: N onaisation: N onstructure: N onentation: N ohicle use: M Other: H	Expansior Forestr De Fisherie Wetlan	of tourism: y practices: oforestation: es practices: d drainage: Erosion:	N Airb N Waterb	olotation of species: Oil spills: Ocean dumping:	N N N N N N N
		-				

IS010 Heklo	a (NCR No. 730)				
IUCN: 3	Adm. region: R	angárvallasýsla.			
<b>Area (ha):</b> 1000	Location:	064° 00' 00" N	019° 34′ 00" W		
Ramsar: No	MAB: N	lo	World Heritage: No		
Other: Relationship to other	conventions:				
•					
Ownership: Private ans Management: Nature Co					
_	nservation Council.				
	—————————	<u> </u>			
Habitat					
Geographic region: Nor	thern Boreal zone.				
Ecological function: Vol	canic area.				
Marine: Fresh	waler: Fo	rest;	Talga:	Tundra:	
Island:	River:	Coniferous:	Mountain:	Moist:	
	Lake:	Birch:	Other:	Wet:	
Other: St	ream: 🗆	Mixed: 🔲		Alpine: 🛛	
Wells	and	High Brush: 🔲			
		Low Brush:			
We Other): Volcanic	<b>rliand: L.</b> area				
Important species: Red Data Book:					
Locally rare species:					
Antropogen press	ure (H=High	/ M=Medium / L=Lo	w / N=Not specified)	:	
Industrial developmer	nt: N Ex	pansion of tourism:	ехр	lotation of species:	Ν
Mineral or oil activity	- Luciani,	Forestry practices:	N	Oil spills:	N
Population growl	(Contract)	Deforestation:	N	Ocean dumping:	N
Urbanisatio	j. men.	Fisheries practices:	N Aide	Noise:	N
Infrastructur Habitat fragmentatio	piolicial	Wetland drainage: Erosion:	hammed	orne contaminants:	N
Motorized vehicle us		Overgrazing:	N	Nuclear waste:	N
Othe	jannessei.	duction of species:	N	Toxic waste:	N
Main human activition		-	•		******
Main human activities:   Alternative land use:	~				
Total population size:	ito special plains.				

<b>ISO11</b> Sto	kkseyri (NCR No. 7	<b>'50</b> )			
IUCN: 8	Adm. region: S	tokkseyrarhreppur, <i>i</i>	Árnessýsla.		
<b>Area (ha):</b> 600	Location:	063° 55′ 00″ N	021° 07' 00" W		
Ramsar: Yes. Other: IBA/ICBF Relationship to oth		lo	World Heritage: N	lo	
Ownership: Private of Management: Nature of Author: Nature of					
Habitat					
Geographic region:	Oceanic Middle Borea	Izone.			
Ecological function: S	Small coastal wetland	and extensive intert	idal area. Freshwo	rter pounds and sea.	
Marine: Fr	eshwalen Fa	rest:	Talga:	Tundra:	
· · · · · · · · · · · · · · · · · · ·	Lake:  Stream:  etiand:	Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain:  Other:	Moist: ☐ Wet: ☐ Alpine: ☐	
Other):  Important species:\ Red Data Book; '	Wetland: U  Waterfowl: staging are numbers (1-5 pairs, ma Woulting, staging and w	x 20 pairs), Arctic Te	rn, Ringed Plover o	and Oystercatcher.	
Locally rare species:	- <del></del>				
Antropogen pre	<b>ssure</b> (H=High	/ M=Medium / L=Lo	w / N=Not specifie	d):	
Habitat fragmento Motorized vehicle	ovity.: N  owth: N  ation: L  cture: N  outer: N	pansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing:	N N N N Airl N Waterl	plotation of species: Oil spills: Ocean dumping: Noise: borne contaminants: corne contaminants: Nuclear waste:	22222
C	Other: N Intro	duction of species:	IN I	Toxic waste:	N
		dustry.			

## 5 Norway

NO	•	Proposed A	Areas, March 1996
number	Area name	INCM	Area (hectare)
NO001	Varanger Peninsula National Park	2	180.000
NO002	Seiland National Park	2	8.000
NO003	Goatteluobbal National Park	2	33.500
NO004	Lyngsalpene National Park	2	86.000
NO005	Rebenesøy Landscape Protected Area and Nature Re	5	15.000
NO006	Kvænangsbotn Landscape Protected Area.	5	12.000
NO007	Sørdalen - Isdalen National Park.	2	24.000
NO008	Indrefjord Øksfjord National Park.	2	12.000
NO009	Svellingsflaket Landscape Protected Area.	5	23.000
NO010	Tysfjord - Hellemobotn National Park.	2	100.000
NO011	Røstøyene Landscape Protected Area and Nature Re	5	12.000
NO012	Mistfjorden-Sjunkfjorden- Ø. Valnesfjorden Nat. Park/LP	2	40.000
NO013	Junkerdal - Balvatnet National Park.	2	35.000
NO014	Sundfjordfjella National Park.	2	1.000
NO015	Øvre Pasvik National Park.	2	13.000
NO016	Stabbursdalen National Park .	2	45.000
NO017	Øvre Anarjohka National Park.	2	16.720
NO018	Øvre Dividalen National Park.	2	3.000
NO019	Ånderdalen National Park.	2	5.000
NO020	Bear Island	2	17.800
NO021	Store Sametti Nature Reserve.	1	2.210
NO022	Skjelvatnet Nature Reserve.	1	2. <del>9</del> 50
NO023	Grunnfjorden Nature Reserve	1	1.470
NO024	Risværet/Sandværet Nature Reserve	1	2.250
NO025	Innmyken/Valværet Nature Reserve	1	12.110
NO026	Selsøyvær Nature Reserve	1	1.390
NO027	Støttværet Nature Reserve	1	1.490
NO028	Flatværet/Varkgård Nature Reserve	1	2.250
NO029	Fugløyværet Nature Reserve	1	4.300
NO030	Bliksvær Nature Reserve ***	1	1.825
NO031	Engelværet Nature Reserve	1	1.670
NO032	Forøya Nature Reserve	1	1.374
NO033	Osen/Sandværet Nature Reserve	1	1.285
NO034	Sunnlandsfjorden Nature Reserve	1	1.190
NO035	Borgværet Nature Reserve	1	1.740
NO036	Skorpa-Nøkian Landscape Protected Area/Nature	5	1.480
NO037	Tjyvdalen Landscape Protected Area	5	1.200
NO038	Bjørnøya Landscape Protected Area	5	1.750
NO039	Auvær Nature Reserve	1	2.400
NO040	Bergsøyan Landscape Protected Area	5	1.910
NO041	Teistevika LPA and Sandsvika NR	5	1.431
NO042	Steinavær Landscape Protected Area	5	3.315
NO043	Central Spitsbergen		
43	Areas		735.010

NO001 Vara	ınger Peninsula I	National Park			
IUCN: 2 Area (ha): 180000		innmark County 070° 20' 00" N	030° 10' 00" E		
Ramsar: Other: Relationship to other	MAB:		World Heritage	:	
Ownership: State Management: State (The Author: Ministry of	•	Environmental Depo	artment)		
Habitat Geographic region: Arc Ecological function:	ctic - Alpine zone				_
Island:  Fjord:  Other:  S  Well	River:	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	idiga:  Mountain:  Other:	Tundra:  Moist:   Wet:   Alpine:	
Other):  Important species:  Red Data Book: Ny Locally rare species: Pa		renaria pseudofrigio	da, Alopex lagop	ous.	
Antropogen press	GUTE (H=High	/ M=Medium / L=Lo	w / N=Not specif	ied):	
Industrial developme Mineral or oil activit Population grow Urbanisatio Infrastructu Habitat fragmentatio Motorized vehicle u	ty:: N tth: N on: N ire: H on: N se: M	pansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: duction of species:	N N N N Wate	Oil spills: Ocean dumping: Noise: Airborne contaminants: erborne contaminants:	N N N N N N N
Main human activities: Alternative land use: Total population size:	Road-making Powe		or life.		

NO002	Seiland Nation	al Park			
IUCN: 2 Area (ha): 8000		egion: Finnmark County ation: 070° 25' 00" N	023° 15' 00" E		
Ramsar: Other: Relationship to	other conventions	MAB:	World Heritage	<b>9</b> :	
-		ernor's Environmental Do	epartment)		
Habitat	an Aratia Alpina				
Ecological function	on: Arctic - Alpine z on:	one			
Morine:	Freshwater	Forest:	Talga	Tunctro	
Island: 🛭 Fjord: 🗖 Other: 🗖	River:  Lake:  Stream:  Welland:	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Mountain: Cother:	Moist: ☐ Wet: ☐ Alpine: ☒	
Other):	Wetland:	_			
Important speci Red Data Boo Locally rare specie	ok:				
Antropogen p	ressure (	H=High / M=Medium / L	=Low / N=Not spec	ified):	
Industrial develonment Mineral or oil of Population	growth: N	Expansion of touris Forestry practice Deforestation	es: N en: N	Oil spills: Ocean dumping:	N N
Infras Habitat fragme	Surveyor.	Fisheries practic Wetland drainas Erosia	ge: N on: N Wa	Noise: Airborne contaminants: terborne contaminants:	Z Z Z
Motorized veh	icle use: N Other: N	Overgrazir Introduction of speci		Nuclear waste: Toxic waste:	N
	vities: Grazing land d use: Mineral-minic				

NO003 G	A alice				
IUCN: 2	-	ion: Finnmark County ion: 69° 00' 00" N	000 001 0011 5		
<b>Area (ha):</b> 33500	Locat	ion: 69° 00' 00" 19	22° 20' 00" E		
Ramsar:	М	AB:	World Heritage:		
Other:					
Relationship to oth	ner conventions:				
Ownership: State.					
Management: State (1	The County Gover	nor's Environmental Dep	artment)		
Author: Ministry	of Environment				
Habitat					
Geographic region:	Arctic - Alpine zon	10			
Ecological function:	•				
	_				
Marine: F	reshwaler.	Forest:	Talga:	Tundra:	
Island: 🔲	River: 🔲	Coniferous:	Mountain: 🔲	Moist: 🔲	
Fjord: 🔲	Lake: 🔲	Birch: 🔯	Other:	Wet: 🔲	
Other:	Stream: 🔲	Mixed: 🔲		Alpine: 🔲	
V	Vetland:	High Brush: 📙			
****		Low Brush:			
Other):	Wetland: 🛚				
Important species:	1				
Red Data Book:					
Locally rare species:	Saxifraga Lirculus				
Antropogen pre	essure (H=	:High / M=Medium / L=Lo	ow / N=Not specified	 d):	
Industrial develop	ment: N	Expansion of tourism:	N ex	plotation of species:	N
Mineral or oil ac	tivity.: N	Forestry practices:	N	Oil spills:	N
Population gr	rowth: N	Deforestation:	N	Ocean dumping:	N
Urbanis	ation: N	Fisheries practices:	N	Noise:	N
Infrastru	Namenal	Wetland drainage:	Summer.	oorne contaminants:	N
Habitat fragment		Erosion:	jummu	oorne contaminants:	N
Motorized vehicle	howani	Overgrazing:	*********	Nuclear waste:	<u>N</u>
(	Other: N	Introduction of species:	<u> N;</u>	Toxic waste:	N
Main human activiti	<b>es:</b> Hunting, grazin	g land.			
Alternative land u	se: No special plar	ns.			
Total population si	ze:				

76

NO004 Lyngs	salpene Nationa	ıl Park			
IUCN: 2 Area (ha): 86000	Adm. region: Tro Location:	oms County. 69° 30' 00" S	20° 00' 00" E		
Ramsar: Other: Relationship to other o	MAB:		World Heritage:	:	
Ownership: Private.  Management: State (The Author: Ministry of E		nvironmental Depo	artment)		
Habitat  Geographic region: Nor Ecological function:	thern Boreal zone.				
Marine: Fresh	water: Fas	est:	Taigo:	Tundra:	
Fjord:	Lake: ream: H	coniferous:  Birch:  Mixed:  digh Brush:  Low Brush:	Mountain:	Moist: ☐ Wet: ☐ Alpine: ☑	
We Other):	tland: 🗌	_			
Important species: Red Data Book: Locally rare species:					
Antropogen press	UIO (H=High /	M=Medium / L=Lo	w / N=Not specif	 ied):	
Industrial developmer Mineral or oil activity Population growt Urbanisatio Infrastructur Habitat fragmentatio Motorized vehicle us	y.: H	pansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing:	N N N	explotation of species: Oil spills: Ocean dumping: Noise: Airborne contaminants: erborne contaminants: Nuclear waste:	Z Z Z Z Z
Othe	/commercial control of the control o	duction of species:	Schoolson,	Toxic waste:	SAMONANO.
Main human activities: ( Alternative land use: )	-	g land (sheep/reind	deer)		

Area (ha): 15000	IUCN: 5	Adm.	region: Troms Coun	ntv.			
Other: Relationship to other conventions:  Ownership: Private.  Management: State (The County Governor's Environmental Department).  Author: Ministry of Environment.  Habitat  Geographic region: Oceanic Middle Boreal Zone. Ecological function: Important bird cliff. Important nesting area for waterfowl.  Matthes:  Freshwaler:  Freshwaler:  Forest:  Italga:  Itundra:  Island:  River:  Coniferous:  Mountain:  Moist:  Fjord:  Lake:  Birch:  Other:  Wetland:  High Brush:  Low Brush:  Wetland:  Wetland:  Wetland:  Wetland:  Wetland:  Wetland:  Wetland:  Industrial development:  Mineral or oil activity.:  Population growth:  N  Forestry practices:  Mineral or oil activity.:  Population growth:  N  Fisheries practices:  High Maledium / LeLow / N=Not specified):  Noise:  Noise:  Red data Book:  Coll spills:  Population of ocean dumping:  Infrastructure:  N  Wetland drainage:  N  Airborne contaminants:  Habitat fragmentation:  N  Waterborne contaminants:			-	=	00" E		
Relationship to other conventions:  Ownership: Private.  Management: State (The County Governor's Environmental Department).  Author: Ministry of Environment.  Habitat  Geographic region: Oceanic Middle Boreal Zone. Ecological function: Important bird cliff. Important nesting area for waterfowl.  Marine:    Freshwaler:			MAB:	World H	leritage:		
Management: State (The County Governor's Environmental Department).  Author: Ministry of Environment.  Habitat  Geographic region: Oceanic Middle Boreal Zone. Ecological function: Important bird cliff. Important nesting area for waterfowl.  Matine: Freshwater. Forest: Talga: Tundia:  Island: River: Coniferous: Mountain: Moist: Moist: High Brush: Mixed: Mixe		o other conventions	<b>5:</b>				
Geographic region: Oceanic Middle Boreal Zone. Ecological function: Important bird cliff. Important nesting area for waterfowl.  Matine:	Management: Sta	te (The County Go		ntal Department).			
Biland:   River:   Coniferous:   Mountain:   Moist:   Fjord:   Lake:   Birch:   Other:   Wet:   Alpine:   High Brush:   Low Brush:   Low Brush:   Bind:   Low Brush:   Continuous:   Mountain:   Moist:   Wet:   Alpine:   Wet:   Alpine:   Mixed:   High Brush:   Low Brush:   Wet:   Alpine:   Wet:   Alpine:   Wet:   Alpine:   Wet:   Alpine:   Wet:   Alpine:   Wet:   Alpine:   Wet:   Wet:   Alpine:   Wet:   W	Habitat		<del></del>	_			
Island:   River:   Coniferous:   Mountain:   Moist:   Fjord:   Lake:   Birch:   Other:   Wet:   Alpine:   High Brush:   Low Brush:   Wetland:   Low Brush:   Expansion of tourism:   N exploitation of species:   Mineral or oil activity.:   N Population growth:   N Expansion:   N Deforestation:   N Deforestation:   N Deforestation:   N Deforestation:   N Defore static practices:   Habitat fragmentation:   N Wetland:   N Wetland:   N Wetland:   N Street   N Sies:	• •						
Island:   River:   Coniferous:   Mountain:   Moist:   Fjord:   Lake:   Birch:   Other:   Wet:   Alpine:   Mixed:   High Brush:   Low Brush:   Wetland:   Low Brush:   Wetland:	Ecological funct	ion: Important bird	cliff. Important nes	ting area for wate	erfowl.		
Fjord:   Lake:   Birch:   Other:   Wet:   Other:   Stream:   Mixed:   Alpine:   Wetland:   Low Brush:   Wetland:   Wetland:   Wetland:   High Brush:   Low Brush:   Wetland:   Low Brush:   Wetland:   Low Brush:   Wetland:   Wetland:   Wetland:   High Mean   Wetland:   Mean   W	Marine:	Freshwaler:	Forest	Talga:	Ti Ti	mara:	
Wetland:    Wetland:   Low Brush:	Fjord:	Lake:	Birch	: 🔲 💮		Wet:	
Wetland:  Important species: Red Data Book: Locally rare species:  Antropogen pressure  (H=High / M=Medium / L=Low / N=Not specified):  Industrial development: Mineral or oil activity.: Mineral or oil activity.: Population growth: Urbanisation: Urbanisation: Mineral or oil activity.:  Wetland drainage: Mineral or oil activity.:		Wetland:	**	_			
Important species: Red Data Book: Locally rare species:  Antropogen pressure  (H=High / M=Medium / L=Low / N=Not specified):  Industrial development: Mineral or oil activity.: Mineral or oil activity.		Wetland:	20 ( ) 2.40.				
Red Data Book: Locally rare species:  Antropogen pressure (H=High / M=Medium / L=Low / N=Not specified):  Industrial development: N Expansion of tourism: N explotation of species: N Oil spills: N Oil spills: N Oil spills: N Ocean dumping: N Ocean dumping: N Oil spills: N Ocean dumping: N Oil spills: N Ocean dumping: N Oil spills: N Ocean dumping: N Ocean dumpin	Umer):						
Industrial development:  Mineral or oil activity.:  Population growth:  Urbanisation:  Infrastructure:  Habitat fragmentation:  N  Expansion of tourism:  N  Expansion of tourism:  N  Forestry practices:  N  Oil spills:  N  Deforestation:  N  Fisheries practices:  W  Wetland drainage:  N  Waterborne contaminants:  W  Waterborne contaminants:	Red Data Bo	ook:					
Mineral or oil activity.:       N       Forestry practices:       N       Oil spills:         Population growth:       N       Deforestation:       N       Ocean dumping:         Urbanisation:       N       Fisheries practices:       H       Noise:         Infrastructure:       N       Wetland drainage:       N       Airborne contaminants:         Habitat fragmentation:       N       Erosion:       N       Waterborne contaminants:	Antropogen	pressure	(H=High / M=Medio	um / L=Low / N=Ne	ot specified):		
Population growth: N Deforestation: N Ocean dumping: N Urbanisation: N Fisheries practices: H Noise: N Noise: N Wetland drainage: N Airborne contaminants: N Habitat fragmentation: N Erosion: N Waterborne contaminants: N	Industrial deve	elopment: N	Expansion of	f tourism: N	explote	ation of species:	Ν
Urbanisation: N Fisheries practices: H Noise: Infrastructure: N Wetland drainage: N Airborne contaminants: N Erosion: N Waterborne contaminants: N		- Summe		:		•	N
Infrastructure: N Wetland drainage: N Airborne contaminants: N Habitat fragmentation: N Erosion: N Waterborne contaminants: N	=	- /		polostores.	C		N
Habitat fragmentation: N Erosion: N Waterborne contaminants: 1		himmed	•	, mailin	A full a see		n mareat
,		Janes,	wetiana a	,,			N
Motorized vehicle use: N Overgrazing: N Nuclear waste: 1	•	· · · · · · · · · · · · · · · · · · ·	Ove	rgrazing: N	MOGIBOLIA	Nuclear waste:	N
Other: H Introduction of species: N Toxic waste:	MOIOILEGG			· · · · · · · · · · · · · · · · · · ·			*********
Main human activities: Hunting - Fishing - Berry-picking -Boating excursion.		·····		***************************************			*********
	Alternative la	nd use: No special i	olan				
Alternative land use: No special plan.  Total population size:			Jian.				

Area (ha): 12000 Location: 69° 45' 00" N 22° 25' 00" E  Ramsar: MAB: World Heritage: Other: Relationship to other conventions:  Ownership: State.  Management: State (The County Governor's Environmental Department) Author: Ministry of Environment.  Habitat  Geographic region: Arctic - Alpine zone. Ecological function:					
Ramsar: MAB: World Heritage: Other: Relationship to other conventions:  Ownership: State.  Management: State (The County Governor's Environmental Department) Author: Ministry of Environment.  Habitat  Geographic region: Arctic - Alpine zone. Ecological function:  Marine: Freshwater: Forest: Taiget iundrat:  Island: River: Coniferous: Mountain: Moist: Moist: High Brush: High Brush: Low Brush: Wetland: Low Brush: Low Brush: Mountain: Moist: Plant Brush: Mountain: Moist: High Brush: Mountain: Moist: Mountain: Mountain: Moist: Mountain:	IUCN: 5		=	00° 051 0011 F	
Other: Relationship to other conventions:  Ownership: State.  Management: State (The County Governor's Environmental Department)  Author: Ministry of Environment.  Habitat  Geographic region: Arctic - Alpine zone. Ecological function:  Marine:    Figshwater:	Area (na): 1200	U LO	cation: 69° 45' UU" IN	22° 25' 00" E	
Relationship to other conventions:  Ownership: State.  Management: State (The County Governor's Environmental Department)  Author: Ministry of Environment.  Habitat  Geographic region: Arctic - Alpine zone. Ecological function:  Marine: Freshwater: Forest: Talgat: Tundat:  Island: River: Coniferous: Mountain: Moist: Mountain: Mou			MAB:	World Heritage:	
Ownership: State.  Management: State (The County Governor's Environmental Department)  Author: Ministry of Environment.  Habitat  Geographic region: Arctic - Alpine zone. Ecological function:  Warine: Freshwater: Forest: Talga: Tundra:  Island: River: Coniferous: Mountain: Moist: Moist: Mountain: Moist: Mountain: Moist: Moist: Mountain: Moist: Moist: Mountain: Moist: Mountain: Moist: Moist: Moist: Mountain: Moist: Mo	•	other convention	•		
Management: State (The County Governor's Environmental Department)  Author: Ministry of Environment.  Habitat  Geographic region: Arctic - Alpine zone. Ecological function:  Marine: Freshwater: Forest: Talgat Jundro:    Island: River: Coniferous: Mountain: Moist: Mountain: West: Mountain: Moist: Mountain: Moist: Mother: Met. Mixed: Mountain: Moist: Mother: Met. Mixed: Mother: Met. Mixed: Mother: Met. Mixed: Mother: Met. Mixed: Mother: Met. Met. Met. Met. Met. Met. Met. Met.			<b>.</b>		
Geographic region: Arctic - Alpine zone.  Ecological function:  Marine: Freshwater: Forest: Talga: Tundra:  Island: River: Coniferous: Mountain: Moist: Mountain: Moist: Moist: Mountain: Moist: Mountain: Moist: Moist: Mountain: Moist: Moist: Mountain: Moist: Mountain: Moist: Moist: Moist: Mountain: Moist: Moist: Mountain: Moist: Moi	Management: State	e (The County Go		partment)	
Ecological function:   Marine:   Freshwater   Forest:   Talgat   Tundrate     Island:   River:   Coniferous:   Mountain:   Moist:     Fjord:   Lake:   Birch:   Other:   Wet:     Other:   Stream:   High Brush:     Wetland:   Low Brush:     Wetland:   Low Brush:     Talgat   Tundrate     Moist:   Mountain:   Moist:     Wet:   Alpine:     High Brush:     Low Brush:     Low Brush:     Talgat   Tundrate     Wet:   Mountain:   Moist:     Wet:   Alpine:     High Brush:     Low Brush:     Low Brush:     Low Brush:     Low Brush:     Wetland:   Lelow / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):   Industrial development:   New Medium / L=Low / N=Not specified):		on: Arctic - Alpine	70ne		
Island:   River:   Coniferous:   Mountain:   Moist:   Fjord:   Lake:   Birch:   Other:   Wet:   Alpine:   Mixed:   Low Brush:   Low B	<del>-</del>	· ·	201101		
Island:   River:   Coniferous:   Mountain:   Moist:   Fjord:   Lake:   Birch:   Other:   Wet:   Alpine:   Mixed:   Low Brush:   Low B	Marine:	Freshwater	Forest	Talga:	Tundra:
Fjord:					
Other: Stream: Mixed: High Brush: Low Brush: Stream: Wetland: Low Brush: Low Brush: Low Brush: Metland: Stream: Wetland: Low Brush: Low Brush: Metland: Metland: Metland: Low Brush: Low Brush: Metland:		=			
Wetland: Low Brush: Lo	· —	=======================================		•	
Wetland:	_				
Important species: Red Data Book: Locally rare species:  Antropogen pressure  (H=High / M=Medium / L=Low / N=Not specified):  Industrial development: Mineral or oil activity.: Mineral or oil activity.: Population growth: Urbanisation: Urbanisation: N Fisheries practices: M Oil spills: Deforestation: N Ocean dumping: N Infrastructure: N Wetland drainage: N Airborne contaminants: Motorized vehicle use: N Overgrazing: N Nuclear waste:			Low Brush:		
Important species: Red Data Book: Locally rare species:  Antropogen pressure  (H=High / M=Medium / L=Low / N=Not specified):  Industrial development: Mineral or oil activity.: Population growth: Urbanisation: Urbanisation: N Fisheries practices: N Ocean dumping: N Fisheries practices: N Airborne contaminants: Motorized vehicle use: N Overgrazing: N Nuclear waste:		Wetland: $\square$			
Red Data Book: Locally rare species:  Antropogen pressure (H=High / M=Medium / L=Low / N=Not specified):  Industrial development: N Expansion of tourism: N explotation of species: N Oil spills: N Forestry practices: M Oil spills: N Population growth: N Deforestation: N Ocean dumping: N Oil spills: N Ocean dumping: N Noise: N N Noise: N N N N N N N N N N N N N N N N N N N	Other):				
Industrial development:       N       Expansion of tourism:       N       explotation of species:         Mineral or oil activity.:       N       Forestry practices:       M       Oil spills:         Population growth:       N       Deforestation:       N       Ocean dumping:         Urbanisation:       N       Fisheries practices:       N       Noise:         Infrastructure:       N       Wetland drainage:       N       Airborne contaminants:         Habitat fragmentation:       N       Erosion:       N       Waterborne contaminants:         Motorized vehicle use:       N       Overgrazing:       N       Nuclear waste:	Red Data Boo	ok:			
Mineral or oil activity.:       N       Forestry practices:       M       Oil spills:         Population growth:       N       Deforestation:       N       Ocean dumping:         Urbanisation:       N       Fisheries practices:       N       Noise:         Infrastructure:       N       Wetland drainage:       N       Airborne contaminants:         Habitat fragmentation:       N       Erosion:       N       Waterborne contaminants:         Motorized vehicle use:       N       Overgrazing:       N       Nuclear waste:	Antropogen p	ressure	(H=High / M=Medium / L=	Low / N=Not specifie	d):
Population growth:       N       Deforestation:       N       Ocean dumping:       N         Urbanisation:       N       Fisheries practices:       N       Noise:       N         Infrastructure:       N       Wetland drainage:       N       Airborne contaminants:       N         Habitat fragmentation:       N       Erosion:       N       Waterborne contaminants:       N         Motorized vehicle use:       N       Overgrazing:       N       Nuclear waste:       N		100000;	Expansion of tourism	n: N ex	
Urbanisation: N Fisheries practices: N Noise: Noise: N Infrastructure: N Wetland drainage: N Airborne contaminants: N Habitat fragmentation: N Erosion: N Waterborne contaminants: N Motorized vehicle use: N Overgrazing: N Nuclear waste: N		- ,		Street	
Infrastructure:       N       Wetland drainage:       N       Airborne contaminants:       N         Habitat fragmentation:       N       Erosion:       N       Waterborne contaminants:       N         Motorized vehicle use:       N       Overgrazing:       N       Nuclear waste:       N	•	200000		(manage)	
Habitat fragmentation: N Erosion: N Waterborne contaminants: N Motorized vehicle use: N Overgrazing: N Nuclear waste: N		·	· · · · · · · · · · · · · · · · · · ·	·	
Motorized vehicle use: N Overgrazing: N Nuclear waste:		20.000	_	3330009	
, , , , , , , , , , , , , , , , , , ,	_	**********		·	
	MOIDINEG VOI	*******		- Manager	
	main numan activ		<b>).</b>		
Main human activities: Outdoor life.  Alternative land use: Forestry.	Allowallia I	dunos Corostas			

Total population size: Indigenous populations:

NO007	Sørdalen - Isde	alen No	ational Park.			
IUCN: 2 Area (ha): 24		<b>region:</b> Tr <b>cation:</b>	oms County. 68° 35' 00" N	18° 30' 00" E		
	to other convention oposed Transnation		vation Area.	World Heritage:		
<del></del>	ate. ate (The County Go inistry of Environmen		Environmental Depo	artment)		
Habitat  Geographic re	gion: Arctic - Alpine tion:	zone.				
Morine:	Freshwater	For	esi:	Talga:	Tundra:	
Island:	River:   Lake:   Stream:   Weiland:		Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain:  Other:	Moist: ☐ Wet: ☐ Alpine: ⊠	
Important spe Red Data E Locally rare spe	<b>Book:</b> Wolverine (Gu	lo - Gulo) 	) 			
Antropogen	pressure	(H=High	/ M=Medium / L=Lo	w / N=Not specifie	d):	
Uri	on growth: N banisation: N rastructure: N mentation: L	!	pansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: duction of species:	N N N Airl N Waterl	plotation of species: Oil spills: Ocean dumping: Noise: borne contaminants: borne contaminants: Nuclear waste: Toxic waste:	X
Main human ad Alternative la		kking.				

Alternative land use: Total population size: Indigenous populations:

111(C'N+')	Adm re	gion: Nordland County.		
IUCN: 2 Area (ha): 12000		ation: 68° 32′ 00″ N	15° 35′ 00" E	
_ ` '	200			
Ramsar: Other:		MAB:	World Heritage:	
	other conventions:			
•	rivate - 23% State.			
		ernor's Environmental Depo	artment)	
_	ry of Environment	entor's crivitor interitor Depo	ummem)	
Habitat				
Geographic regio	n: Oceanic Middle	Boreal zone		
Ecological function	n: Nesting.			
Marine:	Freshwater:	Forest;	Talga:	Tundres
Island:	River:	Coniferous:	Mountain:	Moist:
Fiord:	Lake:	Birch:	Other:	Wet:
Other:	Stream: 🔲	Mixed: 🔲		Alpine: 🛛
	Welland:	High Brush: 🔲		-
	_	Low Brush:		
Other):	Wetland: 📙			
Omer);				
Important specie				
•	ka Ealaa Dustiaalus			
Red Data Boo				
•				
Red Data Boo Locally rare specie	s:	H=High / M=Medium / L=Lo	w / N=Not specified)	):
Red Data Boo	ressure (H			: lotation of species:
Red Data Boo Locally rare specie Antropogen p	s: ' <b>essure</b> (F	H=High / M=Medium / L=Lo Expansion of tourism: Forestry practices:		:
Red Data Boo Locally rare specie Antropogen pour  Industrial development	s:  Cessure (Figure 1)  Ce	Expansion of tourism:	L exp	lotation of species:
Red Data Boo Locally rare specie Antropogen pole Industrial develor Mineral or oil of Population Urbar	ressure (Hossure (Hos	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices:	L exp	lotation of species: Oil spills: Ocean dumping: Noise:
Red Data Boo Locally rare specie  Antropogen poly Industrial develor Mineral or oil of Population Urbar Infrast	ressure (H	Expansion of tourism: Forestry practices; Deforestation: Fisheries practices: Wetland drainage:	L exp	lotation of species: Oil spills: Ocean dumping: Noise: orne contaminants:
Red Data Boo Locally rare specie  Antropogen pi Industrial develor Mineral or oil or Population Urbar Infrast Habitat fragme	pment: N ctivity.: N growth: N isation: N ructure: H ntation: M	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion:	L exp	lotation of species: Oil spills: Ocean dumping: Noise: orne contaminants: orne contaminants:
Red Data Boo Locally rare species Antropogen poly Industrial develor Mineral or oil of Population Urbar Infrast	pment: N ctivity.: N growth: N isation: N ructure: H ntation: M	Expansion of tourism: Forestry practices; Deforestation: Fisheries practices: Wetland drainage:	L exp	lotation of species: Oil spills: Ocean dumping: Noise: orne contaminants:

NO009 Svel	lingsflaket Landsc	ape Protected	l Area.		
IUCN: 5 Area (ha): 23000	Adm. region: No Location:	ordland County. 68° 17' 00" N	15° 20' 00" E		
Ramsar: Other: Relationship to othe	MAB:		World Heritag	e:	
Ownership: Private.  Management: State (The Author: Ministry o		nvironmental Depo	artment).		
• • •	ceanic Middle Boreal z esting, Living - Import		owl.		
Marine: Fre	shwater: Pore	et;	(a)ga:	Tundra:	
	Lake:   Stream:   Honord:	oniferous:  Birch:  Mixed:  Gligh Brush:  Low Brush:	Mountain: [ Other: [	Moist: Alpine:	
W Ofher):	/etland: 🔲				
Important species: Red Data Book: Pt Locally rare species:	nalacrocorax carbo, Pt	nalacrocorax arest	totelis, Haliaeet	rus albivilla, Lutra lutra	
Antropogen pres	SUIP (H=High /	M=Medium / L=Lo	w / N=Not spec	cified):	
Industrial developme Mineral or oil activ Population grov Urbanisat Infrastruct Habitat fragmentat Motorized vehicle u	ity.: N F wth: N ion: N Fi ure: N W ion: N W use: N	cansion of tourism: forestry practices: Deforestation: Isheries practices: Vetland drainage: Erosion: Overgrazing: uction of species:	N	explotation of species: Oil spills: Ocean dumping: Noise: Airborne contaminants: aterbome contaminants: Nuclear waste: Toxic waste:	Z Z Z Z Z Z
Main human activities Alternative land use		shing - Recreation	area.		

Total population size: Indigenous populations:

IUCN: 2	Adm. region:	Nordland County.		
Area (ha): 100000	Location:	•	16° 40' 00" E	
Ramsar: Other:	MAB:		World Heritage: Yes	i
Relationship to other	r <b>conventions:</b> Transnational Cons	ervation Area.		
Ownership: State.				
Management: State (The Author: Ministry of		s Environmental Depo	artment).	
Habitat				
Geographic region: Al	pine zone.			
Ecological function:				
Vicinine: Fres	hwoter: F	ciesi:	Talga:	Tundra:
Island: $\square$	River: 🗌	Coniferous:	Mountain:	Moist:
Fjord: 🔯	Lake: 🗌	Birch: 🛛	Other:	Wet: □
Other: S	Stream: 🔲	Mixed: 🗌		Alpine: 🗌
	land:	High Brush: 🔲		
		Low Brush:		
W 2- Alpine -(	etland:   glacier.			
	<b>9</b>			
Important species: Red Data Book:				
Locally rare species:				
Antropogen pres	SUI'O (H=Higi	h / M=Medium / L=Lo	w / N=Not specified)	
Industrial developme	ent: N E	expansion of tourism:	N expl	otation of species:
Mineral or oil activi	ily.: N	Forestry practices:	H	Oil spills:
Population grov	vth: N	Deforestation:	N	Ocean dumping:
Urbanisati	ion: N	Fisheries practices:	N	Noise:
Infrastruct	,	Wetland drainage:	Similar .	orne contaminants:
Habitat fragmentati	80000000	Erosion:	viction,	rne contaminants:
Motorized vehicle u	y	Overgrazing:	N	Nuclear waste:
Off	ner: N Intr	oduction of species:	N	Toxic waste:

**Total population size:** 1 person in the area. **Indigenous populations:** 100 - 200 in the buffer zone.

NO011 R	≀østøyene Land	scape Protected A	rea and Nature	Reserve.
IUCN: 5	•	<b>gion:</b> Nordland County.		
<b>Area (ha):</b> 12000	Loca	tion: 67° 28' 00" N	11° 57' 00" E	
Ramsar:	M	IAB:	World Heritage:	
Other:	other conventions:			
•				
-	Private - 20% State.	roorle Environmental Dev	a auton a at)	
-	ry of Environment.	nor's Environmental Dep	oanmenr).	
Habitat				
Geographic region	n: Oceanic Middle I	Boreal zone.		
Ecological function	n:			
Vicrine:	Freshwater:	Forest:	Taiga	Tundra:
Island: 🛛	River:	Coniferous:	Mountain:	Moist:
Fjord:	Lake:	Birch:	Other:	Wet:
Other:	Stream: 🔲	Mixed: 🔲		Alpine: $\square$
	Welland:	High Brush: 🔲		
	Wetland:	Low Brush:		
Other):	wetiana: 🗀			
Important specie	\o.			
Red Data Bool				
Locally rare specie				
Antropogen pi	ressure (H:	=High / M=Medium / L=I	ow / N=Not specified	
Industrial develo		Expansion of tourism	,	plotation of species:
Mineral or oil a	Senoway.	Forestry practices	1000000	Oil spills:
<b>Population</b>	- ,	Deforestation	(11111-111)	Ocean dumping:
Urbar	nisation: N	Fisheries practices	***************************************	Noise:
	ructure: N	Wetland drainage	hammi,	oome contaminants:
Habitat fragme Motorized vehic	************	Erosior Overgrazinç	··········i	orne contaminants:  Nuclear waste:
INIOIOLIZACI VAUL	cle use: N Other: M	Introduction of species	- parameter	Toxic waste:
	Canada	•	** (I.M)	TOXIO TIGOTO: (5
	<b>rities:</b> Fishing - Grazir	ng Iana (Sneep). tc. (marine industries).		
Total population	-	ic. (maine inausines).		

Area (ha): 40000	IUCN: 2	Adm region: N	ordland County			
Ramsar: MAB: World Heritage: Other: Relationship to other conventions:  Ownership: 75% Private - 25% State.  Management: State (The County Governor's Environmental Department).  Author: Ministry of Environment.  Habitat  Geographic region: Northern Boreal zone. Ecological function: Living - Nesting/Breeding.  Mathe: Foshwater Forest: Gag: Tundra  Island: River: Coniferous: Mountain: Moist: Moist: High Brush: Mixed: Mixed: Alpine: Metical Lake: Birch: Other: Metical Low Brush: Low Brush: Metical Low Brush: Metical Low Brush: Stream: Mixed: Low Brush: Stream: Mixed: Low Brush: Stream: Metical Low Brush: Stream: Metical Low Brush: Stream: Metical Low Brush: Stream: Metical Low Brush: Stream: Mixed: Low Brush: Stream: Mixed: Low Brush: Stream: Mixed: Low Brush: Metical Stream: Material Stream: Metical Stream: Metic	******	_	•	15° 10' 00" F		
Other: Relationship to other conventions:  Ownership: 75% Private - 25% State.  Management: State (The County Governor's Environmental Department).  Author: Ministry of Environment.  Habitat  Geographic region: Northern Boreal zone. Ecological function: Living - Nesting/Breeding.  Mathe: Freshwater Forest: Giga: Tundra:  Island: River: Coniferous: Mountain: Moist: Moist: High Brush: Other: Met: Metical Lake: Birch: Other: Metical Lake: Birch: Other: Metical Lake: Birch: Mixed: Alpine: Meticand: Low Brush: Low Brush: Meticand: Locally rare species:  Red Data Book: Aquila chrysaetos, Falco rusticolus, Lutra lutra. Locally rare species: Metical development: Metical developmen			0, 20 00 11			
Relationship to other conventions:  Ownership: 75% Private - 25% State.  Management: State (The County Governor's Environmental Department).  Author: Ministry of Environment.  Habitat  Geographic region: Northern Boreal zone. Ecological function: Living - Nesting/Breeding.  Mathe: Freshwater: Foest: Taiga: Tundra:  Island: River: Coniferous: Mountain: Moist: Wet; Alpine: High Brush: Low Brush: Low Brush: Low Brush: Low Brush: Coniferous: Mountain: Moist: Metiand: Low Brush: Low Brush: Metiand: Low Brush: Low Brush: Metiand: Low Brush: Metiand: Locally rare species:  Red Data Book: Aquila chrysaetos, Falco rusticolus, Lutra lutra. Locally rare species:  Antropogen pressure (H=High / M=Medium / L=Low / N=Not specified):  Industrial development: N Expansion of tourism: N explotation of species: N Oil spills: N Operation of the propulation growth: N Deforestation: N Ocean dumping: N Urbanisation: N Fisheries practices: N Noise: N Noise: N Noise: N Habitat fragmentation: N Wetland drainage: N Airborne contaminants: N Motorized vehicle use: N Overgrazing: N Waterborne contaminants: N Nuclear weste: N		MAB:		world Heritage:		
Ownership: 75% Private - 25% State.  Management: State (The County Governor's Environmental Department).  Author: Ministry of Environment.  Habitat  Geographic region: Northern Boreal zone. Ecological function: Living - Nesting/Breeding.  Management: State (The County Governor's Environmental Department).  Author: Ministry of Environment.  Habitat  Geographic region: Northern Boreal zone. Ecological function: Living - Nesting/Breeding.  Management: State (The County Governor's Environmental Department).  Author: Ministry of Environment.  Mountain: Mountain: Moist: Moist: Mountain: Moist: Moist: Mountain: Moist: Moist: Moist: Mountain: Moist:		er conventions:				
Management: State (The County Governor's Environmental Department).  Author: Ministry of Environment.  Habitat  Geographic region: Northern Boreal zone. Ecological function: Living - Nesting/Breeding.  Mathe: Freshwater: Ferest: Tolga: Tundra:    Island:	Ownership: 75% Priv	rate - 25% State.				
Author: Ministry of Environment.  Habitat  Geographic region: Northern Boreal zone. Ecological function: Living - Nesting/Breeding.  Mathe:	-		nvironmental Depo	artment).		
Geographic region: Northern Boreal zone. Ecological function: Living - Nesting/Breeding.  Mathè: Fieshwater: Forest: Falaga: fundro:    Island:	- ·		, who is the Bopt	<u></u>		
Geographic region: Northern Boreal zone. Ecological function: Living - Nesting/Breeding.    Matthe:   Frestwater:   Forest:   Taiga:   Tundra:						
Ecological function: Living - Nesting/Breeding.						
Island:   River:   Coniferous:   Mountain:   Moist:   Fjord:   Lake:   Birch:   Other:   Wet:   Alpine:   High Brush:   Low Brush:   Low Brush:   Low Brush:   Low Brush:   Low Brush:   High Brush:   Low Brush:	• • •					
Island:   River:   Coniferous:   Mountain:   Moist:   Fjord:   Lake:   Birch:   Other:   Other:   Wet:   Alpine:   High Brush:   Low Brush:   Wetland:   Low Brush:   Low Brush:   Wetland:   Low Brush:   Low Brush:   Wetland:   Low Brush:   Low Brush:   Low Brush:   Wetland:   Low Brush:	Ecological function: I	Living - Nesting/Breeding	g.			
Fjord:	Marine: Fr	eshwater: For	est:	Taiga:	Tundra:	
Fjord:	Island:	River:	Coniferous:	Mountain:	Moist:	
Other: Stream: Mixed: High Brush: Low Brush: Stream: Low Brush: Low Brush: Metiand: Low Brush: Metiand: Low Brush: Mixed: Low Mixed: Mi	Fjord: 🗵	===	Birch: 🛛	Other:	· · · · · · · · · · · · · · · · · · ·	
Wetland:  Wetland:  Wetland:  Low Brush:  Important species: Red Data Book: Aquila chrysaetos, Falco rusticolus, Lutra lutra. Locally rare species:  Antropogen pressure  (H=High / M=Medium / L=Low / N=Not specified):  Industrial development: Mineral or oil activity.:  Population growth: Urbanisation: Urbanisation: N Fisheries practices: N Airborne contaminants: N Habitat fragmentation: Motorized vehicle use: N Covergrazing: N Nuclear waste: N N N Nuclear waste: N N N N N N N N N N N N N N N N N N N	Other:	Stream: $\square$	Mixed: 🔲			
Wetland:  Metland:  Metland:  Metland:  Metland:  Metland:  Mimportant species:  Red Data Book: Aquila chrysaetos, Falco rusticolus, Lutra lutra.  Locally rare species:  Mindustrial development:  Mineral or oil activity.:  Population growth:  Mineral or oil activity.:  Mineral or oil activity.  Mineral or oil activity.  Mineral or oil activity.  Mineral or oil activity.	W	etione! I	_		•	
Important species: Red Data Book: Aquila chrysaetos, Falco rusticolus, Lutra lutra. Locally rare species:  Antropogen pressure (H=High / M=Medium / L=Low / N=Not specified):  Industrial development: Mineral or oil activity.: Mineral or oil activity.: Population growth: Urbanisation: Urbanisation: Minfrastructure: Minfrastructure: Mineral or oil activity.: Mineral or oil activity. Mineral or oil	******		Low Brush:			
Important species: Red Data Book: Aquila chrysaetos, Falco rusticolus, Lutra lutra. Locally rare species:  Antropogen pressure (H=High / M=Medium / L=Low / N=Not specified):  Industrial development: Mineral or oil activity.: N Forestry practices: N Oil spills: N Population growth: N Urbanisation: N Fisheries practices: N Ocean dumping: N Urbanisation: N Fisheries practices: N Airborne contaminants: N Habitat fragmentation: N Erosion: N Overgrazing: N Nuclear waste: N		· · · · · · · · · · · · · · · · · · ·				
Red Data Book: Aquila chrysaetos, Falco rusticolus, Lutra lutra.  Locally rare species:  Antropogen pressure (H=High / M=Medium / L=Low / N=Not specified):  Industrial development: N Expansion of tourism: N explotation of species: N Oil spills: N Oil spills: N Oil spills: N Ocean dumping: N Oce	Ones. Alpine	•				
Locally rare species:  Antropogen pressure	•					
Antropogen pressure  (H=High / M=Medium / L=Low / N=Not specified):  Industrial development: N Expansion of tourism: N explotation of species: N Oil spills:		Aquila chrysaetos, Falco	o rusticolus, Lutra lu	tra.		
Industrial development: N Expansion of tourism: N explotation of species: N Mineral or oil activity.: N Forestry practices: N Oil spills: N Population growth: N Deforestation: N Ocean dumping: N Urbanisation: N Fisheries practices: N Noise: N Noise: N Habitat fragmentation: N Erosion: N Waterborne contaminants: N Motorized vehicle use: N Overgrazing: N Nuclear waste: N	Locally rate species:			<del></del>		
Mineral or oil activity.:       N       Forestry practices:       N       Oil spills:       N         Population growth:       N       Deforestation:       N       Ocean dumping:       N         Urbanisation:       N       Fisheries practices:       N       Noise:       N         Infrastructure:       N       Wetland drainage:       N       Airborne contaminants:       N         Habitat fragmentation:       N       Erosion:       N       Waterborne contaminants:       N         Motorized vehicle use:       N       Overgrazing:       N       Nuclear waste:       N	Antropogen pre	SSU!O (H=High /	M=Medium / L=Lo	w / N=Not specified	i):	
Mineral or oil activity.:       N       Forestry practices:       N       Oil spills:       N         Population growth:       N       Deforestation:       N       Ocean dumping:       N         Urbanisation:       N       Fisheries practices:       N       Noise:       N         Infrastructure:       N       Wetland drainage:       N       Airborne contaminants:       N         Habitat fragmentation:       N       Erosion:       N       Waterborne contaminants:       N         Motorized vehicle use:       N       Overgrazing:       N       Nuclear waste:       N	Industrial develop	nent: N Exp	pansion of tourism:	N ext	olotation of species:	N
Urbanisation: N Fisheries practices: N Noise: N Infrastructure: N Wetland drainage: N Airborne contaminants: N Habitat fragmentation: N Erosion: N Waterborne contaminants: N Motorized vehicle use: N Overgrazing: N Nuclear waste: N	Mineral or oil acti	/many -		-	<del>-</del>	50000000
Infrastructure: N Wetland drainage: N Airborne contaminants: N Habitat fragmentation: N Erosion: N Waterborne contaminants: N Motorized vehicle use: N Overgrazing: N Nuclear waste: N	Population gro	owth: N	Deforestation:	N	Ocean dumping:	N
Habitat fragmentation:NErosion:NWaterborne contaminants:NMotorized vehicle use:NOvergrazing:NNuclear waste:N	Urbanisa	ation: N F	isheries practices:	<u>N</u> .	Noise:	N
Motorized vehicle use: N Overgrazing: N Nuclear waste: N		formand	•	postorial		baccaso
	•	journey.				·
Other: IN Infroduction of species: IN IOXIC waste: IN		hamman		1		,
	C	omer: N Introd	auction of species:	(IN	loxic waste:	N.
		•				
Alternative land use: Forestry.	Total population siz					

NO013 Junk	erdal - Balvatne	t National Park.			
IUCN: 2	Adm. region: N	Nordland County.			
<b>Area (ha):</b> 35000	Location:	66° 55′ 00" N	15° 45' 00" E		
Ramsar: Other: Relationship to other	MAB:		World Heritage:		
Ownership: 95% State					
Management: State (The Author: Ministry of	•	Environmental Depo	artment).		
Habitat Geographic region: Alp Ecological function: Im		nts.			
Marine: Fres	waler: Fo	rest:	Taiga:	Tundra:	
Island:  Fjord:		Coniferous: 🛛 Birch: 🖾 Mixed: 🔲	Mountain:	Moist: 🔲 Wet: 🔲 Alpine: 🔲	
Weil	and:	High Brush: Low Brush:			
We Other): Alpine.	etland: 🔲				
Important species:  Red Data Book: Wo Locally rare species: Co	olverine (Gulo gulo). arex scirpoidea, Saxl				
Antropogen press	sure (H=High	/ M=Medium / L=Lo	w / N=Not specified	d):	
Industrial developme Mineral or oil activi Population grow	hy.: N	cpansion of tourism: Forestry practices: Deforestation:	N ex	plotation of species: Oil spills: Ocean dumping:	**********
Urbanisatio	jtanni'	Fisheries practices:	N	Noise:	N
Infrastructu	Microsol.	Wetland drainage:		oorne contaminants:	50000000
Habitat fragmentation  Motorized vehicle u	-	Erosion: Overgrazing:	N Watert	oorne contaminants: Nuclear waste:	
	januaren.	oduction of species:	*******	Toxic waste:	
Main human activities: Alternative land use:	Forestry.				

86

NO014	Sundfjordfjella Nati	onal Park.		
IUCN: 2 Area (ha): 1000 Ramsar: Other:	Location MAB		14° 30′ 00" E World Heritage:	
Ownership: State Management: State	other conventions: e. e. (The County Governor stry of Environment.	's Environmental Depo	artment).	
Habitat Geographic region	on: Alpine zone. on: Living - Nesting / Bree	eding.		
Marine:    Island:	River:  Lake:  Stream:  Welland:  Wetland:	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Talga:  Mountain:  Other:	fundita  Moist:   Wet:   Alpine:
Important speci Red Data Boo Locally rare speci	ok: Gulo gulo, Lutra lutra	ı, Haliaeetus albicilla,	Falco rusticolus, Ny	ctea scandiaca.
Antropogen p	pressure (H=Hiç	gh / M=Medium / L=La	w / N=Not specifie	d):
	activity.: None of the control of th	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: troduction of species:	N N N N Airl N Watert	oplotation of species: Noil spills: Nocean dumping: Noise: Noise: Norne contaminants: Norne contaminants: Nuclear waste: Noice waste: Noice Noil Noil Noil Noil Noil Noil Noil Noil
Main human acti Alternative land Total population Indigenous popula	d use: Development of v	water power.		

IUCN: 2	Adm. region:	Finnmark County.		
<b>Area (ha):</b> 13000	Location:	69° 05' 00" N	29° 05′ 00" E	
Ramsar: Other:	MAB:		World Heritage:	
<b>Relationship to other</b> Proposed	conventions: Transnational Cons	servation Area.		
Ownership: State.				
Management: State (The Author: Ministry of	•	s Environmental Depo	artment).	
Habitat				
Geographic region: No Ecological function: No				
Marine: Fres	hwater: F	orest:	Taiga: -	Tundra:
Island:  Fjord:  Other:  S	River:   Lake:  tream:	Coniferous:   Birch:   Mixed:	Mountain:	Moist: ☐ Wet: ☐ Alpine: ☐
Wal	land:	High Brush: 🔲 Low Brush: 🗍		
Wo Other):	ətland: 🛮	<del></del>		
Important species:  Red Data Book: An  Locally rare species:	ser fabalis, Mergus	albellus, Pandion hal	liaetus, Limicola fal	cinellus, Ursus arctos.
Antropogen press	SUIP (H=Hig	h / M=Medium / L=Lo	ow / N=Not specifie	d):
Industrial developme Mineral or oil activi	A Control of the Cont	expansion of tourism: Forestry practices:	(manage)	xplotation of species: Oil spills:
Population grow Urbanisati	, many	Deforestation: Fisheries practices:	· · · · · · · · · · · · · · · · · · ·	Ocean dumping: Noise:
Infrastructu	positive :	Wetland drainage:	A4000400.	borne contaminants:
Habitat fragmentati		Erosion:	innered .	borne contaminants:
Motorized vehicle u Oth	hosessed	Overgrazing: roduction of species:	www.	Nuclear waste: Toxic waste:
Main human activities: Alternative land use: Total population size:	Forestry - Road mo			
Indigenous populations:				

IUCN: 2		egion: Finnmark County.	2.48.201.00II F	
Area (ha): 45000 Ramsar:	J LOC	cation: 70° 00' 00" N  MAB:	24° 30' 00" E World Heritage:	
Other:		MIAD.	wond Hemage.	
Relationship to	other conventions	:		
=		vernor's Environmental Dep :	oartment).	
Habitat		<u> </u>		_
Geographic regio		zone.		
Marine:	Freshwater	Forest	Talga	Tundra:
Island: 🔲	River: 🔲	Coniferous: 🗵	Mountain: 🔲	Moist: 🔲
Fjord:	Lake: 🔲	Birch:	Other:	Wet: □
Other: L	Stream: U Wetland:	Mixed: ☐ High Brush: ☐ Low Brush: ☐		Alpine: L
	Wetland: 🗌			
Other): Alp	ine.			
Other): Alp  Important specie  Red Data Boo  Locally rare specie	ine. es: ek:			
Important specie Red Data Boo	ine. 9s: 9k: 9s:	H=High / M=Medium / L=L	ow / N=Not specified;	):
Important specie Red Data Boo Locally rare specie	ine. es: ek: es: ressure	H=High / M=Medium / L=L Expansion of tourism		): lotation of species:
important specie Red Data Boo Locally rare specie Antropogen p Industrial develo Mineral or oil o	ine.  ps: pk: ps: ressure  ppment: N pactivity.: N	Expansion of tourism Forestry practices	: <u>L</u> exp	lotation of species: Oil spills:
important specie Red Data Boo Locally rare specie Antropogen p Industrial develo Mineral or oil o Population	ine.  es:  ok:  es:  ressure  opment: N  activity.: N  growth: N	Expansion of tourism Forestry practices Deforestation	: L exp : N	lotation of species: Oil spills: Ocean dumping:
Important specie Red Data Boo Locally rare specie Antropogen p Industrial develor Mineral or oil of Population Urbai	ine.  ps: pk: ps: ressure  ppment: pactivity.: N growth: N nisation:	Expansion of tourism Forestry practices Deforestation Fisheries practices	exp : N : : N :	olotation of species: Oil spills: Ocean dumping: Noise:
Important specie Red Data Boo Locally rare specie  Antropogen p  Industrial develo Mineral or oil o Population Urbai	ine.  ps: pk: ps: ps: ps: ppment: popment: protivity.: N prowth: N inisation: N	Expansion of tourism Forestry practices Deforestation Fisheries practices Wetland drainage		olotation of species: Oil spills: Ocean dumping: Noise: orne contaminants:
Important specie Red Data Boo Locally rare specie  Antropogen p  Industrial develo  Mineral or oil o  Population  Urbai	ine.  ps:  ps:  ps:  ressure  ppment:  pactivity.:  prowth:  nisation:  nitructure:  N  pontation:  N	Expansion of tourism Forestry practices Deforestation Fisheries practices	E L exp	olotation of species: Oil spills: Ocean dumping: Noise:

NO017	Øvre Anarjohka	National Park.			
IUCN: 2	_	gion: Finnmark County.			
<b>Area (ha):</b> 16720	loca	tion: 69° 05′ 00" N	25° 20' 00	O'' E	
Ramsar:	N	1AB:	World Hei	ritage:	
Other:	albar aanvanlians				
	other conventions:				
Ownership: State					
-		rnor's Environmental D	epartment).		
Author: Milhis	try of Environment.				_
Habitat					
Geographic regio	<b>n:</b> Northern Boreal z	one.			
Ecological functio	n:				
Marine:	Freshwater	Forest	Talga:	Tundra	
Island:	River: $\square$	Coniferous:	Mountain	ı: 🗆 Mois	t: 🗆
Fjord:	Lake:	Birch:	Other	r: 🔲 We	t: 🔲
Other:	Stream: 🔲	Mixed: 🔲		Alpine	<b>∍</b> : □
	Wetland:	High Brush: L Low Brush:			
	Wetland: 🛛				
Other):					
Important spécie	es:				
Red Data Boo	k:				
Locally rare specie	es:				
Antropogen p	ressure (H	=High / M=Medium / L	=Low / N=Not s	specified):	
Industrial develo	opment: N	Expansion of touris	m: N	explotation of s	pecies: N
Mineral or oil o	activity.: M	Forestry practic		C	Dil spills: N
Population		Deforestation	Vinninae	Ocean du	9,000
	nisation: N	Fisheries practic	,	A *	Noise: N
Intrasi Habitat fragme	tructure: N entation: N	Wetland drainag	ge: <u>N</u> on: N	Airborne contan Waterborne contan	***************************************
Motorized vehi	'Announce'	Overgrazii			r waste: :N
	Other: N	Introduction of speci			waste: N
Main human activ		ng - Berry-picking-Graz		deer	***************************************
	<b>l use:</b> Forestry - Rein	-	ing idna (iein (	u <del>co</del> i <i>j</i> .	
Total population	•	acci gidalig.			

NO018 Ø	vre Dividalen	National Park.			
IUCN: 2		gion: Finnmark County.			
<b>Area (ha):</b> 3000	Loc	<b>ation</b> : 68° 45′ 00″ N	19° 48' 00" E		
Ramsar:		MAB:	World Heritage	:	
Other:					
Relationship to of	ner conventions:				
Ownership: State.					
- ·	•	ernor's Environmental De	epartment).		
Author: Ministry	y of Environment	•			
Habitat					
Geographic region	· Arctic - Alpine z	one			
Ecological function		0110.			
		•			
Marine:	reshwater:	Foresti	Talga:	Tundra:	
Island:	River: 📙	Coniferous:	Mountain:	Moist:	
Fjord:	Lake: 📙	Birch:	Other: L	Wet: ∐	
Other: L	Stream: 📙	Mixed:		Alpine: 니	
3	Wettand:	High Brush: L			
	Wetland:	LOW DIGGIN.			
Other): Geol	ogical (quarterg	eology).			
Important species	•				
Red Data Book					
Locally rare species					
	<del></del>				
Antropogen pre	essure (	H=High / M=Medium / L=	:Low / N=Not speci	fied):	
Industrial develop	oment: N	Expansion of touris	m: N	explotation of species:	N
Mineral or oil ac	tivity.: N	Forestry practice	es: N	Oil spills:	N
Population g	rowth: N	Deforestation	restant.	Ocean dumping:	N
Urbani	homen	Fisheries practice			N
Infrastr	Name and	Wetland drainag	- coming		N
Habitat fragmen	, manage	Erosio		erborne contaminants:	N
Motorized vehic	Annound.	Overgrazin	- man		N
	Other: N	Introduction of specie	95: N	Toxic waste:	Ν
Main human activit	ies:				
Alternative land u	ıse:				
Total population s	ize:				

IUCN: 2	Adm. rec	gion: Troms County.			
Area (ha): 5000	Loca	•	17° 13' 00" E		
Ramsar:	N	MAB:	World Heritage:		
Other: Relationship to	other conventions:				
•	State - 30 % Private				
•		rnor's Environmental Der	oartment).		
•	try of Environment.	·	·		
Habitat	-			-	_
	n: Oceaninc Middle	e Boreal zone.			
<b>Ecological function</b>	n:				
Marine:	Freshwater	Forest	Talga	Tundra:	
Island:	River: $\square$	Coniferous: 🛛	Mountain:	Moist: $\Box$	
Fjord: 🗵	Lake: 🔲	Birch: 🔯	Other:	Wet: □	
Other:	Stream: 🔲	Mixed:		Alpine: 🔲	
	Welland:	High Brush: 🔲 Low Brush: 🗍			
	Wetland:	LOW Blushi.			
Other): Alp	ine.				
Important specie	<b>∍s</b> :				
Red Data Boo					
Locally rare specie	)s: 				
Antropogen p	ressure (H:	=High / M=Medium / L=L	.ow / N=Not specifie	d):	
Industrial develo	opment: N	Expansion of tourism	: М ө	plotation of species:	N
Mineral or oil o	- (""""	Forestry practices	h-1-1-1-1-1	Oil spills:	,
Population	· · · · · · · · · · · · · · · · · · ·	Deforestation	marcant.	Ocean dumping:	N
	nisation: N tructure: N	Fisheries practices Wetland drainage		Noise: borne contaminants:	N
	jerenti)	Erosion	********	bome contaminants:	N
	Simini	Overgrazing		Nuclear waste:	N
Habitat fragme Motorized vehi	icle use: N	Overgrazing	· ·		,
Habitat fragme	icle use: N Other: H	Introduction of species	everage control	Toxic waste:	N

NO020 Bear Isl	and			
IUCN: 2	Adm. region: Sv	ralbard		
<b>Area (ha):</b> 17800	Location:	74° 30' 00" N	19° 00' 00" E	
Ramsar: Other: Relationship to other co	MAB:		World Heritage:	
Ownership: State  Management: Govenor of S  Author: Norwegian Pe	valbard	stry of Environment		
	tant nesting area colony of commo		ialge hyperborea)	vorlds northernmost . Important auntum
Marine: Freshwa	ater: For	est	Talga	Tundia:
Fjord: La Other: Stree Wettan	ke: 🛭 um: 🗵	coniferous:  Birch:  Mixed:  digh Brush:  Low Brush:	Mountain:  Other:	Moist: ⊠ Wei: ⊠ Alpine: □
Other):				
lomvio Locally rare species: Gavio	orda pica, Brant b a, Uria aaglge hyp	pernicia hrota, Frate Perborea, Ursus mai	ercula arctica nau ritimus, Balenopter	manni, Larus fuscus, Uria a acutorostrata,
Antropogen pressui	'e (H=High /	M=Medium / L=Lo	w / N=Not specifie	-d):
Industrial development: Mineral or oil activity.: Population growth: Urbanisation: Infrastructure: Habitat fragmentation: Motorized vehicle use: Other:	L N N N N N N	pansion of tourism: Forestry practices: Deforestation: isheries practices: Wetland drainage: Erosion: Overgrazing: duction of species:	N N N N Air N Water	oil spills: N Ocean dumping: N Noise: N borne contaminants: H borne contaminants: H Nuclear waste: N Toxic waste: N
Main human activities: We Alternative land use: Of			es in adjacent sea	areas. Test drilling s.w.
Total population size: 10-				

\_

NO021	Store Sametti N	ature Reserv	e.			
IUCN: 1 Area (ha): 2210		gion: Finnmark Cation: 69° 30′	•	35' 00" E		
Ramsar: Other: Relationship to	other conventions:	MAB:	World	d Heritage:		
-	te. re (The County Govi istry of Environment.	ernor's Environme	ental Departmen	t).		
Habitat						_
• • •	i <b>on:</b> Northern Boreal i <b>on:</b> Important for sp		rly untouched for	rest.		
Marine:	Fleshwater:	Forest	Taigat	1	undra:	
Island:  Fjord:  Other:	River: □ Lake: ☒ Stream: □	Coniferou Birc Mixe High Brusi	h:	ntain:   Other:	Moist:  Wet:  Alpine:	
	Wetland:	Low Brus	_			
Other):	Wetland: 🗌					
	cies: cok: Brown bear (Ursies: Brown bear (Urs	•				
Antropogen p	oressure (i	l=High / M=Med	ium / L=Low / N=l	Not specified):		
	activity.: L n growth: N anisation: N structure: N nentation: N	Defa Fisheries Wetland	oractices: M orestation: N oractices: N drainage: N Erosion: N oractices: N	Airborr	oation of species:  Oil spills:  Docean dumping:  Noise:  No contaminants:  Nuclear waste:  Toxic waste:	77777
	livities: Recreation, r nd use: No special pl on size:		herding.			

<b>NO022</b> S	kjelvatnet Na	ture Reserv	ve.			
IUCN: 1	Adm. ı	<b>egion:</b> Finnmo	ark County.			
<b>Area (ha):</b> 2950	Loc	cation: 69	° 27' 00" N	29° 30' 00" E		
Ramsar:		MAB:		World Heritage:		
Other:						
Relationship to a	other conventions	;				
Ownership: State			nmental Depo	artment).		
Management: Minist	-	ī.				
——————————————————————————————————————	ern Boreal zone.					
Habitat						
Geographic region	n: Important for sp	ecies living ir	n nearly untou	ched forest.		
Ecological function	n: Forest (conifer	ous) - Freshwa	ıter (lakes).			
Marine:	Freshwaler:	Forest:		Taiga:	Tundre:	
Island:	River: 🗌	Conife	erous: 🛛	Mountain:	Moist:	
Fjord: 🔲	Łake: 🗌		Birch: 🔲	Other:	Wet:	
Other:	Stream: $\square$	M	flixed: 🔲		Alpine: 🔲	
	Wetland:	33	Brush:			
	Wetland:	" Low	Brush:			
Other):	wellana: L					
Important specie	s:					
Red Data Bool	k: Brown bear (Ur	sus arctos).				
Locally rare species	<b>s:</b> Brown bear (Ur	sus arctos).				
Antropogen pr	essure	H=High / M=I	Medium / L=Lo	w / N=Not specific	ed):	
Industrial develo	pment: N	Expansi	ion of tourism:	N e	explotation of species:	N
Mineral or oil a	ctivity.:	Fore	stry practices:	M	Oil spills:	N
Population (	growth: N	Į	Deforestation:	N	Ocean dumping:	N
	isation: N		ries practices:	N	Noise:	himming
	ructure: N	Wetle	and drainage:	Torrotte	irborne contaminants:	200000000
Habitat fragme	,,,,,,,,,,		Erosion:	bosevoni	rborne contaminants:	
Motorized vehic	Jonnesson'	Introduct	Overgrazing:	N	Nuclear waste:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Other: N	iniroducii	on of species:	<u>N</u>	Toxic waste:	N.
Main human activi		einder grazing	g / herding.			
Alternative land						
Total population	SIZO:					

NO023	Grunnfjorden N	lature Reserve			
IUCN: 1 Area (ha): 1470		gion: Nordland County ation: 068° 55' 00" N	y 015° 10' 00" E		
Ramsar: Other: Relationship to	other conventions:	MAB:	World Heritag	<del>e</del> :	
-		ernor's Environmental C	Department)		
• • •	on: Oceanic Middle	Boreal zone ag and resting area for	waterfowl		
Island:  Fjord:  Other:  Important species Red Data Boolocally rare species	ok:	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Talga:  Mountain: [ Other: [	Moist:   Wet:   Alpine:	
Antropogen p	pressure (		L=Low / N=Not spec	rified):	
Urbo	activity.: N n growth: N nnisation: N structure: N entation: N	Expansion of touri Forestry practic Deforestati Fisheries practic Wetland draina Erosi Overgrazi Introduction of spec	ces; N ion: N ces; N ige; H ion: N Wo	explotation of species: Oil spills: Ocean dumping: Noise: Airborne contaminants: aterborne contaminants: Nuclear waste: Toxic waste:	22222
	vities: Road traffic. d use: Cultivation	Some area used as gro	azing land		

Total population size: Indigenous populations:

NO024 Ris	været/Sandvære	t Nature Reserv	е	
IUCN: 1	•	Nordland County		
<b>Area (ha):</b> 2250	Location:	066° 19' 00" N	012° 40' 00" E	
Ramsar:	MAB:		World Heritage:	
Other:				
Relationship to oth	er conventions:			
Ownership:				
Management: State (T		Environmental Dep	artment)	
Author: Ministry	of Environment			
Habitat				
Geographic region:	Oceanic Middle Bored	al Zone		
Ecological function:				
Victin <b>e</b> s Fr	eshwaler: Fo	rest:	Talga:	Tundra:
Island: 🖾	River:	Coniferous:	Mountain:	Moist:
Fjord:	Lake:	Birch: 🔲	Other: 📙	Wet: 📙
	Stream: $\square$	Mixed: U High Brush: U		Alpine: L
W	etland:	Low Brush:		
	Wetland: 🔲			
Other):				
Important species:				
Red Data Book:				
Locally rare species:				
Antropogen pre	SSUI'O (H=High	. / M=Medium / L=La	w / N=Not specifie	d):
. • .	·			cplotation of species:
industrial developr Mineral or oil act		xpansion of tourism: Forestry practices:	N	(ploidilon of species.       Oil spills:
Population gr	· · · · · · · · · · · · · · · · · · ·	Deforestation:	N	Ocean dumping:
Urbanisa	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Fisheries practices:	Jane 1997	Noise:
Infrastruc	·	Wetland drainage:	***************************************	borne contaminants: 🗓
Habitat fragment	ation: N	Erosion:		borne contaminants: 🗓
Motorized vehicle	Scorobord	Overgrazing:	3000000	Nuclear waste:
C	Other: N Intro	oduction of species:	N	Toxic waste: 🗈
Main human activitie	es:			
	e: No special plans			
Total population siz				

IUCN: 1	_	ion: Nordland County		
<b>Area (ha):</b> 12110			012° 35' 00" E	
Ramsar: Other:	M	AB:	World Herita	ge:
	other conventions:			
=	(The County Gover ry of Environment	nor's Environmental D	epartment)	
Habitat				
	n: Oceanic Middle &			
_	n: Nesting area for v			
Marine:	Freshwater:	Forest:	Talga:	Tundra:
Island:	River:	Coniferous:	Mountain:	Moist:
Fjord: ∐ Other: ☐	Lake: 📙	Birch:	Other:	∐ Wet: ∐
	Stream: $\square$	Mixed: ∐ High Brush: ☐		Alpine: $\square$
	Welland:	Low Brush:		
	Wetland: $\square$	_		
Other):				
	k: Larus fuscus, Phal	us grylle, Anser anser, s acrocorax areatotelis,		
Locally rare specie				
Antropogen p	essure (H	:High / M=Medium / L	=Low / N=Not spe	cified):
Antropogen pi	pment: N	Expansion of touris	m: N	explotation of species: N
Antropogen pi Industrial develo	pment: N ctivity.: N	Expansion of touris Forestry practic	es: N	explotation of species: NOII spills: N
Antropogen pi Industrial develo Mineral or oil a Population	pment: N ctivity.: N growth: N	Expansion of touris Forestry practic Deforestation	es: N	explotation of species: NO Oil spills: NO Ocean dumping: NO Ocean
Antropogen pi Industrial develo Mineral or oil a Population Urbar	pment: N ctivity.: N growth: N isation: N	Expansion of touris Forestry practic Deforestation Fisheries practic	es: N	explotation of species: NOII spills: NOCEAN dumping: NOCEAN NOISE: NO
Antropogen pi Industrial develo Mineral or oil a Population Urbar	pment: N ctivity.: N growth: N isation: N ructure: N	Expansion of touris Forestry practic Deforestation	es: N es: N es: N ge: N	explotation of species: NOII spills: NOCEAN dumping: NOCEAN NOISE: NOISE: NOCEAN NOISE: NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE
Antropogen pi Industrial develo Mineral or oil a Population Urbar Infrast	pment: N ctivity.: N growth: N isation: N ructure: N	Expansion of touris Forestry practic Deforestation Fisheries practic Wetland drainag	es: N es: N ge: N W	explotation of species: NOII spills: NOCEAN dumping: NOCEAN Airborne contaminants: NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE

NO026 Sels	øyvær Nature Re	serve			
IUCN: 1 Area (ha): 1390		ordland County 066° 36' 00" N	012° 50' 00" E	:	
Ramsar: Other:	MAB:		World Herita	ge:	
Relationship to othe	or conventions:				
Ownership: Management: State (The Author: Ministry of	•	Environmental Depo	artment)		
Habitat  Geographic region: C  Ecological function: Ir	Oceanic Middle Boreal Interesting flora	Zone			
Marine: Fre	shwater; For	est:	(diga:	Tundra:	
	Lake:   Stream:	Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain: Other:	☐ Moist: ☐ Wet: ☐ Alpine: ☐	
Other): Important species: G				s hiaticula, Arenaria interp	
Red Data Book: <sup>l</sup> Locally rare species:	satis tinctoria, Polemor	nium caeruleum, O <sub>l</sub>	phioglossum v	rulgatum, Ruppia maritimo	ג
Antropogen pres	SSUTE (H=High ,	/ M=Medium / L=Lo	w / N=Not spe		—–
Industrial developm Mineral or oil activ Population gro Urbanisa Infrastruci Habitat fragmenta Motorized vehicle	vity.: N wth: N tion: N ture: N use: N	pansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: duction of species:	N	explotation of species: Oil spills: Ocean dumping: Noise: Airbome contaminants: /aterborne contaminants: Nuclear waste: Toxic waste:	Z Z Z Z Z Z
Main human activities Alternative land use		nd downs			

Total population size: Indigenous populations:

IUCN: 1 Area (ha): 1490	Adm. region: Location:	: Nordland County : 066° 55' 00" N	013° 26' 00" E	
Ramsar:	MAB:		World Heritage:	
Other:	WAD.		wond nemage.	
Relationship to other	er conventions:			
Ownership: Management: State (Th Author: Ministry o	· ·	s Environmental Depo	artment)	
			-	
Geographic region: C	Oceanic Middle Bore	eal Zone		
<b>Ecological function:</b> in	mportant area for flo	ora and fauna. Nestin	g and wintring area	or waterfowls.
Acanne: Fre	shwater: F	orest:	Talga	Tundra
Island:	River:	Coniferous:	Mountain:	Moist:
Fjord:	Lake:	Birch:	Other:	Wet:
Other:	Stream:	Mixed: 🔲		Alpine: 🔲
	otland:	High Brush: 🔲		•
3000000		Low Brush: 🔲		
V Siner):	Vetland: 📙			
Important enaciae: le		onium caeruleum - C	Circaea alpina - Arfer	nisia vulgaris
•	ialiaetues albicillia			
Red Data Book: H				
Red Data Book: H Locally rare species:				
Red Data Book: H Locally rare species:	SSUI'E (H=Hig	h / M=Medium / L=Lo	w / N=Not specified)	:
Red Data Book: H Locally rare species:	,	h / M=Medium / L=Lo Expansion of tourism:		: otation of species:
Red Data Book: H Locally rare species: Antropogen pres	ient: N			Г
Red Data Book: H Locally rare species: Antropogen pres Industrial developm Mineral or oil activ Population gro	nent: N I	Expansion of tourism: Forestry practices: Deforestation:	N N N N N N N N N N N N N N N N N N N	otation of species: Oil spills: Ocean dumping:
Red Data Book: H Locally rare species: Antropogen pres Industrial developm Mineral or oil activ Population gro Urbanisa	eent: N I vity.: N wth: N tion: N	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices:	N exp	otation of species:  Oll spills:  Ocean dumping:  Noise:
Red Data Book: H Locally rare species: Antropogen pres Industrial developm Mineral or oil activ Population gro Urbanisa Infrastruc	nent: N I vity.: N wth: N tion: N ture: N	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetiand drainage:	N exp	otation of species:  Oll spills:  Ocean dumping:  Noise:  ome contaminants:
Red Data Book: H Locally rare species: Antropogen pres Industrial developm Mineral or oil active Population gro Urbanisa Infrastruc Habitat fragmenta	with: N with: N tion: N tion: N tion: N	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetiand drainage: Erosion:	N exp	otation of species: Oll spills: Ocean dumping: Noise: orne contaminants: orne contaminants:
Red Data Book: H Locally rare species: Antropogen pres Industrial developm Mineral or oil activ Population gro Urbanisa Infrastruci Habitat fragmenta Motorized vehicle	with: N I I I I I I I I I I I I I I I I I I	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetiand drainage:	N exp	otation of species:  Oll spills:  Ocean dumping:  Noise:  ome contaminants:

IIIANI. 1			re	
IUCN: 1 Area (ha): 2250	Adm. reg Loca	gion: Nordland County lion: 066° 50' 00" N	013° 14' 00" E	
Ramsar: Other:	Marconventions:	IAB:	World Heritage:	
=	The County Gove	nor's Environmental Dep	partment)	
-labitat				
Geographic region Ecological function		Boreal Zone or flora and birds. Nestin	g and wintring area fo	r div birds.
Victine:	reshwaler	Forest:	Talga	Tundra
Island: 🛭 Fjord: 🔲 Other: 🔲	River:  Lake:  Stream:   Welland:	Coniferous:   Birch:   Mixed:   High Brush:  Low Brush:	Mountain:  Other:	Moist: ☐ Wet: ☐ Alpine: ☐
Other):	Wetland:	LOW Blush.		
	::Gavia stellata, La : Haematopus ostr	irus argentatus, Larus m alegus, Cepphus grylle	arinus, Somateria mollis	sima, Anser anser,
Important species Red Data Book	•			
Red Data Book Locally rare species	:			
Red Data Book	:	=High / M=Medium / L=L	Low / N=Not specified):	

Total population size: Indigenous populations:

<b>NO029</b> Fu	ıgløyværet Nature	Reserve			
IUCN: 1	•	lordland County	-10- 404 004 -		
<b>Area (ha)</b> : 4300	Location:	067° 13' 00" N	013° 40' 00" E		
Ramsar:	MAB:		World Heritage:		
Other: Relationship to ot	her conventions:				
•	The County Governor's E of Environment	Environmental Depo	artment)		
Habitat					
	: Oceanic Middle Boreal	Zone			
	: Nesting area for birds				
Marine:	reshwater For	est:	(diga:	Tundia:	
Island: 🛛	River: 🗌 💢	Coniferous:	Mountain:	Moist:	
Fjord: 🔲	Lake: 🔲	Birch: 🔲	Other:	Wet: □	
Other:	Stream:	Mixed: 🔲		Alpine:	
	Velland:	High Brush: 🔲 Low Brush: 🗍			
	Wetland:	LOW Brush:			
Other):	Wolldid.				
-	:Larus argentatus, Larus :Fratercula arctica, Halio		mollissima, Haem	atopus ostralegus,	
Locally rare species	:				
Antropogen pre	9ssure (H=High	/ M=Medium / L=Lo	w / N=Not specifie	od):	
Industrial develop	oment: N Ex	pansion of tourism:	N ex	xplotation of species:	N
Mineral or oil ac	·	Forestry practices:	N	Oil spills:	N
Population g		Deforestation:	parame	Ocean dumping:	N
	**********	Fisheries practices:	'average'	Noise: borne contaminants:	N
ınırasırı Habitat fragmen	huma	Wetland drainage: Erosion:	Annabase	borne contaminants:	* isotore.
Motorized vehic		Overgrazing:	N	Nuclear waste:	N
	parameter,	duction of species:	N	Toxic waste:	N
	ies: Collection of eggs o Jse: No special plans ize:	and downs			

NO030 Riiks	svær Nature Re	.con/o ***			
NO030 Bliks  IUCN: 1  Area (ha): 1825		n: Nordland County	014° 10' 00" E		
Ramsar: Other: Relationship to othe	MAB	:	World Heritage:		
Ownership: Management: State (The Author: Ministry o		r's Environmental Depo	artment)		
Habitat  Geographic region: O  Ecological function: In					
Island: 🖾 Fjord: 🔲 Other: 🗍	Sinwaler:  River:   Lake:   Stream:   Stream:   Vetland:   Sinwaler:   Sinwale	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	faiga:  Mountain:  Other:	Tundra:  Moist:   Wet:   Alpine:	
Important species: Red Data Book: Locally rare species:	/etiana: 🗔				
Antropogen pres	SUITO (H=Hiç	gh / M=Medium / L=Lo	w / N=Not specified	i):	
Industrial developme Mineral or oil activ Population grov Urbanisat Infrastruct Habitat fragmentat Motorized vehicle (	vity.: N wth: N tion: N ture: N tion: N use: N	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: troduction of species:	N N Airk	plotation of species: Oil spills: Ocean dumping: Noise: corne contaminants: corne contaminants: Nuclear waste: Toxic waste:	22222
Building huts	ıı <del>o</del> ı. <u>IVI</u> IN	moduction of species:	EN.	IOAIC WOSTO:	IN.
Main human activities Alternative land use Total population size	: Building huts				

NO031 Enge	elværet Nature F	Reserve			
IUCN: 1 Area (ha): 1670	Adm. region: N Location:	Nordland County 067° 52′ 00″ N	014° 40' 00" E		
Ramsar: Other: Relationship to other	MAB:		World Heritage:		
Ownership: Management: State (The Author: Ministry of	-	Environmental Depo	artment)		
Habitat Geographic region: Oc Ecological function: Im			a birds.		
Island: 🔯 Fjord: 🗖 Other: 🗖 s	River:  Lake:  tream:	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Mountain:  Other:	function  Moist:   Wet:   Alpine:	
Other):  Important species: Go		-		Sterna,	
Antropogen press	SUITE (H=High	/ M=Medium / L=Lo	w / N=Not specifie		
Industrial developme Mineral or oil activi Population grow Urbanisati Infrastructu Habitat fragmentati Motorized vehicle u	ty.: N  tth: N  on: N  on: N  on: N  see: N	pansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: duction of species:	N N N N Air N Water	xplotation of species: Oil spills: Ocean dumping: Noise: rbome contaminants: rbome contaminants: Nuclear waste: Toxic waste:	ZZZZZZ
Main human activities: Alternative land use: Total population size:	No special plans	and downs - Fish farr	ming		

IUCN: 1	Adm. region:	Nordland County			
<b>Area (ha):</b> 1374	Location:	068° 02' 00" N	015° 27' 00" E		
Ramsar: Other: Relationship to othe	MAB:		World Heritage:		
Ownership: Management: State (The Author: Ministry o		Environmental Depo	artment)		
Habitat  Geographic region: O  Ecological function: In			g area for sea birds		
Marine: Fre	thwater: Ft	rest:	Talga:	Tundra	
	River:   Lake:   Stream:   Hand:	Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain:  Other:	Moist:  Wet:  Alpine:	
Citier):  Important species: C	etland: L Farex vacillans, Care Quisetum fluviatile, Ly		k salina, Nymphaea	alba occidentalis,	
Locally rare species:					
Antropogen pres	SUIP (H=High	/ M=Medium / L=Lo	w / N=Not specified	):	
Industrial developm Mineral or oil activ Population grov Urbanisat Infrastruct Habitat fragmentat Motorized vehicle Ot	vity.: N wth: N tion: N tion: N tion: N tion: N	xpansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: oduction of species:	N N N Airb N Waterb	olotation of species: Oil spills: Ocean dumping: Noise: ome contaminants: ome contaminants: Nuclear waste: Toxic waste:	Z Z Z Z
	. Collection of occa	and downs			
Main human activities Alternative land use Total population size Indigenous populations	: Cultivation :	and downs			

NO033	Osen/Sandværet N	ature Reserve			
IUCN: 1 Area (ha): 1285	•	Nordland County 068° 19' 00" N	016° 11' 00" E		
Ramsar: Other: Relationship to	MAB: other conventions:		World Heritage:		
•	e (The County Governor's stry of Environment	s Environmental Depo	artment)		
• . •	on: Oceanic Middle Bore		ea birds.		
Marins:	River:	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Talga:  Mountain:  Other:	Tundia:  Moist:   Wet:   Alpine:	
Other): Important speci Red Data Boo Locally rare speci	i <b>es:</b> Carex paleacea, Asto ok: Sterna	er tripolium, Arrhenati	herum elatius, Poler	nonium caeruleum,	
Antropogen p	oressure (H=High	h / M=Medium / L=Lo	w / N=Not specified		
	activity.: N n growth: N nnisation: N structure: H entation: N nicle use: N	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: roduction of species:	N N Airb	plotation of species: Oil spills: Ocean dumping: Noise: corne contaminants: corne contaminants: Nuclear waste: Toxic waste:	
	vities: Collection of eggs d use: Road-making n size:	and downs			

NO034	Sunnlandsfjord	len Nature Reserve			
IUCN: 1 Area (ha): 1190		region: Nordland County cation: 068° 22' 00" N	014° 25' 00'	'E	
Ramsar: Other: Relationship to	other conventions	MAB:	World Herit	age:	
_	e (The County Gov stry of Environmen	vernor's Environmental De	epartment)		
Habitat					
• • •	on: Oceanic Middl				
Ecological function	<b>on:</b> Imortant area 1	or flora and fauna. Nestir	ng area for wa	terfowl	
Marine:	Freshwater:	Forest:	Talga:	Tundia	
Island: 🖾 Fjord: 🔲 Other: 🔲	River:  Lake:  Stream:	Coniferous: Birch: Mixed:	Mountain: Other:	☐ Moist: ☐ Wet: ☐ Alpine: ☐	
	Welland:	High Brush: 📙 Low Brush: 🗍			
Other):	Wetland: $\square$	30 W 27450W C			
	ok: Anas acuta	materia mollissima, Stern	a ssp, Tadorna	tadorna, Ruppia maritima	
Antropogen p	pressure	(H≍High / M=Medium / L=	Low / N=Not sp	pecified):	
Industrial devel	lopment: N	Expansion of tourisr	n: N	explotation of species:	N
Mineral or oil	activity.: N	Forestry practice		Oil spills:	N
Population	n growth: N	Deforestatio	50000000	Ocean dumping:	N
	anisation: N	Fisheries practice	***************************************	Noise:	بستست
	structure: N	Welland drainag		Airborne contaminants:	40000000
Habitat fragm	200000	Erosio		Waterborne contaminants: Nuclear waste:	· · · · · · · · · · · · · · · · · · ·
Motorized vet	nicle use: N Other: N	Overgrazin Introduction of specie	·	nuciear waste: Toxic waste:	20000000
	vities: Collection o	f eggs and downs			Management

NO035 Borg	været Nature Re	eserve			
IUCN: 1 Area (ha): 1740		Nordland County 068° 19' 00" N	013° 48' 00" E		
Ramsar: Other: Relationship to other	MAB:		World Heritage:		
Ownership: Management: State (The Author: Ministry of		Environmental Depo	artment)		
Habitat					
Geographic region: Oc Ecological function: Ne					
Marine: Fresh	water: Fo	(est)	(diger:	Tundra****	
Island: ⊠ Fjord: □ Other: □ si	River:  Lake:  ream:	Coniferous:   Birch:   Mixed:	Mountain:	Moist:  Wet:  Alpine:	
Weil		High Brush:		Дршо. 🗀	
	otland: 🔲	Low Brush:			
Ofher):					
Important species: An Red Data Book: Lut Locally rare species:	ser anser, Larus arge ra lutra, Phalacroco			<b>:</b>	
Antropogen press	ure (H≃High	/ M=Medium / L=Lo	w / N=Not specifi	ed):	
Industrial developme Mineral or oil activit Population grow Urbanisatio	y.: N th: N	pansion of tourism: Forestry practices: Deforestation: Fisheries practices:		explotation of species: Oil spills: Ocean dumping: Noise:	2
Infrastructu	,	Wetland drainage:	·	irborne contaminants:	
Habitat fragmentation Motorized vehicle us	,	Erosion: Overgrazing:	N Wate	rborne contaminants: Nuclear waste:	-
Oth	Accessed:	duction of species:	N	Toxic waste:	2 Statement
Main human activities: Alternative land use:		and downs			

Total population size: Indigenous populations:

NO036	Skorpa-Nøklar	Landscape	Protected /	Area/Nature		
IUCN: 5	Adm.	region: Troms Co	unty			
<b>Area (ha):</b> 148	0 <b>Lo</b>	<b>cation:</b> 069° 56	5' 00" N 02	21° 42' 00" E		
Ramsar: Other: Relationship to	o other convention:	MAB:	W	Vorld Heritage:		
•	te (The County Go listry of Environmen		nental Departr	ment)		
Habitat						
Geographic reg	ion: Arctic - Alpine	Zone				
Ecological funct	ion: Rich and div. f	ora and fauna. N	Nesting and fe	eeding area for s	ea birds.	
Morine:	Freshwaler	Forest	Tal	ga	Tundra:	
Island:  Fjord:  Other:	River:   Lake:   Stream:	Conifero Biro Mixe	h: 🔲	Mountain:	Moist:  Wet:  Alpine:	
<b>U</b>	Welfand:	High Bru			Аршо. 🖂	
		Low Bru	ısh: 🗌			
Other):	Wetland: 🗌					
	cies:Sterna paradis ook:Trichophorum p		tatus, Rissa tric	dactyla, Anser a	nser, Cepphus grylle	•
Locally rare spec	ies:					
Antropogen	oressure	(H=High / M=Med	dium / L=Low /	/ N=Not specified	d):	
Industrial deve	olopment: N	Expansion	of tourism:	9х	plotation of species:	N
Mineral or oi		-	practices: N		Oil spills:	hanne
-	n growth: N		orestation: N		Ocean dumping:	WANT OF THE PERSON
	anisation: N Istructure: N		practices: N	·····(	Noise:	
Inira Habitat fragn	········	Weilding	drainage: N Erosion: N	nove,	orne contaminants: come contaminants:	hommon
Motorized ve	· · · · · · · · · · · · · · · · · · ·	0\	ergrazing: N		Nuclear waste:	,
	Other: M	Introduction	· ·		Toxic waste:	
Building huts						
	tivities: Grazing land ad use: Building hut on size:					

109

NO037	Tjyvdalen Land	dscape Prot	tected Are	∍a	
IUCN: 5		<b>egion:</b> Troms C	· ·		
<b>Area (ha):</b> 1200	Loc	cation: 070°	07' 00" N	020° 44' 00" E	
Ramsar: Other: Relationship to	other conventions	MAB: :		World Heritage:	
Ownership: Management: State Author: Minis	e (The County Gov stry of Environment		nmental Dep	oartment)	
Habitat			- <u> </u>		
Geographic region	on: Oceanic Middl	e Boreal Zone			
• . •	on: Quartergeolog				
Morine:	Freshwaler:			Talga:	Tundia:
Island:	River:	Conife	rous:	Mountain:	Moist:
Fjord:			Birch:	Other:	Wet:
Other:	Stream:	_	ixed:		Alpine:
	Weiland:	High B	krush: 🔲		•
		Low I	Brush: 🗌		
	Wetland: 📙				
Other):					
Important spec Red Data Bo Locally rare speci	ok:				
Antropogen p	ressure	H=High / M=N	ledium / L=Lo	ow / N=Not specifie	ed):
Industrial deve	lopment: N	Expansio	on of tourism	: N e	xplotation of species:
Mineral or oil	,	Fores	try practices	: N	Oil spills:
Populatio	n growth: N		eforestation:	parame,	Ocean dumping:
	anisation: N		ies practices	2000000	Noise:
	structure: N	Wetla	nd drainage	,,,,,,,,,	rborne contaminants:
Habitat fragm	***************************************		Erosion		rborne contaminants:
Motorized vet	homme		Overgrazing	///www.	Nuclear waste:
	Other: N	iniroduciic	n of species	• <u>IN</u>	Toxic waste:
	ivities: Grazing land d use: No special p n size:		reindeer)		

NO038 Bjørn	øya Landscap	e Protected Ared	a	
IUCN: 5 Area (ha): 1750	Adm. region: Location:	Troms County 069° 46' 00" N	018° 05' 00" E	
Ramsar: Other: Relationship to other	MAB:		World Heritage:	
Ownership: Management: State (The Author: Ministry of		s Environmental Depo	artment)	
Habitat				
Geographic region: Oc Ecological function: Nes			a birds	
Marine: Fresh	water: Fi	orest:	Talgar	Tundra: 14
Fjord: 🗌 Other: 🔲 St Wette	River: Lake: ream: and:	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Mountain:	Moist: ☐ Wet: ☐ Alpine: ☐
We Other):	tland: LJ			
<b>Important species:</b> Ans <b>Red Data Book:</b> Pho par	alacrocorax areato			arinus, Larus canus,
Locally rare species:				
Antropogen press	ure (H=High	n / M=Medium / L=Lo	w / N=Not specifie	d):
Industrial developme Mineral or oil activit Population growl Urbanisatio	y.: N lh: N	expansion of tourism: Forestry practices: Deforestation: Fisheries practices:	N 9) N N	oplotation of species: NOII spills: NOIS NOIS NOIS NOIS NOIS NOIS NOIS NOIS
Infrastructu	house	Wetland drainage:	· · · · · · · · · · · · · · · · · · ·	borne contaminants: N
Habitat fragmentation  Motorized vehicle us	paramo	Erosion: Overgrazing:	N Water	borne contaminants: Nuclear waste: N
Othe	\$100000C	oduction of species:	Someones'	Toxic waste: N
Building huts				
Main human activities: Alternative land use: Total population size: Indigenous populations:	•	and downs - Some	new huts	

IUCN: 1	Adm. r	<b>egion:</b> Tro	oms County			
<b>Area (ha):</b> 2400	Loc	ation:	069° 53' 00" N	018° 03' 00	"E	
Ramsar: Other: Relationship to other	r conventions	MAB:		World Heri	tage:	
Ownership: Management: State (The Author: Ministry of			nvironmental Dep	artment)		
Habitat						
Geographic region: O	ceanic Middle	e Boreal	Zone			
Ecological function: Ne				a for sea bid	rs. Imortant area for	
Ho	alichoerus gry	pus				
Acirine: Fres	hwaler:	Fon	est:	Taiga,	Tundro	
Island: 🛛	River: 🔲	c	coniferous:	Mountain:	☐ Moist: ☐	
Fjord: 🔲	Lake: 🔲		Birch: 🔲	Other	Wet:	
Other: 🗌 🤱	Stream: 🔲		Mixed: 🔲		Alpine: 🔲	
We	tand:	F	ligh Brush: 🔲			
r	etland:	•	Low Brush:			
VV VV	eliana: 🗀					
Other):						
Important species:So				argentatus,	Stercorarius parasiticus,	
Important species: So Red Data Book: Ph	nalacrocorax	areatote	elis, Larus fuscus		Stercorarius parasiticus, Halichoerus grypus,	
Important species: So Red Data Book: Ph	nalacrocorax	areatote	elis, Larus fuscus		•	
Important species: So Red Data Book: Ph gr Locally rare species:	nalacrocorax ylle, Haemato	areatote opus ostr	elis, Larus fuscus	phaeopus, ł	Halichoerus grypus,	
Important species: So Red Data Book: Ph gr Locally rare species:	nalacrocorax ylle, Haemato sure (	areatote opus ostr H=High /	elis, Larus fuscus alegus, Numenius	phaeopus, ł	Halichoerus grypus,	
Important species: So Red Data Book: Ph gr Locally rare species: Antropogen pres	nalacrocorax ylle, Haemato sure ( ent: N	areatote opus ostr H=High / Exp	elis, Larus fuscus alegus, Numenius ' <b>M=Medium / L=L</b> o	phaeopus, ł	Halichoerus grypus, pecified):	77
Important species: So Red Data Book: Ph gr  Locally rare species:  Antropogen pres:  Industrial developme Mineral or oil activi Population grov	sure ( pant: N ity.: N N	areatote ppus ostr  H=High /  Exp	elis, Larus fuscus alegus, Numenius  M=Medium / L=Lo cansion of fourism: Forestry practices: Deforestation:	phaeopus, ł	Halichoerus grypus,  pecified):  explotation of species:  Oil spills:  Ocean dumping:	7
Important species: So Red Data Book: Ph gr  Locally rare species:  Antropogen press  Industrial developme Mineral or oil activi Population grov Urbanisati	sure ( su	areatote opus ostr H=High / Exp	elis, Larus fuscus alegus, Numenius M=Medium / L=Lo consion of fourism: Forestry practices: Deforestation: Fisheries practices:	phaeopus, ł	Halichoerus grypus,  pecified):  explotation of species:  Oil spills:  Ocean dumping:  Noise:	717
Important species: So Red Data Book: Ph gr  Locally rare species:  Antropogen press  Industrial developme Mineral or oil activi Population grov Urbanisati Infrastructu	sure ( su	areatote opus ostr H=High / Exp	elis, Larus fuscus alegus, Numenius M=Medium / L=Lo cansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage:	phaeopus, ł	Halichoerus grypus,  pecified):  explotation of species:  Oil spills:  Ocean dumping:  Noise:  Airbome contaminants:	7777
Important species: So Red Data Book: Ph gr  Locally rare species:  Antropogen press  Industrial developme Mineral or oil activi Population grov Urbanisati	sure ( su	areatote opus ostr H=High / Exp	elis, Larus fuscus alegus, Numenius M=Medium / L=Lo consion of fourism: Forestry practices: Deforestation: Fisheries practices:	phaeopus, ł	Halichoerus grypus,  pecified):  explotation of species:  Oil spills:  Ocean dumping:  Noise:	717

NO040	Bergsøyan Lan	dscape Prot	rected Area			
IUCN: 5	Adm. r	<b>egion:</b> Troms Co	ounty			
<b>Area (ha):</b> 191	0 <b>Lo</b> o	cation: 069° 2	7' 00" N 01	7° 08' 00" E		
Ramsar: Other:		MAB:	W	orld Heritage:		
Relationship t	o other conventions	:				
-	ite (The County Gov histry of Environment		nental Departm	nent)		
Habitat						
Geographic reg	<b>jion:</b> Oceanic Middl	e Boreal Zone				
<b>Ecological func</b>	tion: nesting and mo	oulting area for :	sea birds. Impoi	rtant area for Ph	noca vitulina	
Marine:	Freshwater:	Forest:	Taig	ja:	Tundra:	
Island: 🗵	River: 🔲	Conifero	ous: 🔲 💮 M	lountain: 🔲	Moist: 🔲	
Fjord: 🔲	Lake: 🔲		ch: 🔲	Other:	Wet: 🔲	
Other:	Stream: 📖	Mix	<b>-</b>		Alpine: 🔲	
	Wetland:	High Bru Low Br				
Other):	Wetland:			la Camataria m	allinaima Starna	
•	cies: Larus argentatu bok: Phalacrocorax Haematopus o laciniatum	areatotelis			ca vitulina, Heracleu	nm
Locally rare spec						
Antropogen	pressure (	H=High / M=Me	dium / L=Low /	N=Not specified	d):	
Industrial dev	elopment: N	Expansion	of tourism: M	9х	plotation of species:	N
Mineral or o	-	-	practices: N	**	Oil spills:	1000000
•	on growth: N		forestation: N	•	Ocean dumping:	30000000
	anisation: N astructure: N		s practices: N d drainage: N	"	Noise: :orne contaminants	ACADETO S
Habitat fragr		Welland	Erosion: :N	J	oorne contaminants: oorne contaminants:	· · · · · · · · · · · · · · · · · · ·
Motorized ve	pau	0	vergrazing: !N		Nuclear waste:	,
	Other: N		of species: N	75	Toxic waste:	
		• •	/ns - Some hut:	s		

NO041 T	eistevika LPA a	nd Sandsvika NR		
IUCN: 5 Area (ha): 1431	Adm. regi Locati	ion: Troms County ion: 069° 23' 00" N	016° 55' 00" E	
Ramsar: Other: Relationship to o	$M_{\!\scriptscriptstyle 0}$	AB:	World Heritage:	
-	(The County Govern try of Environment	nor's Environmental De	partment)	
Ecological functio				
Island: Sport State Stat	River:   Lake:   Stream:   Wetland:	Forest:  Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Mountain:  Other:	Andro:  Moist:   Wet:   Alpine:
Important specie Red Data Boo Locally rare specie	ok:			
Antropogen p	ressure (H=	High / M=Medium / L=I	Low / N=Not specific	ed):
	growth: N growth: N nisation: N tructure: N entation: N	Expansion of tourism Forestry practice Deforestation Fisheries practice Wetland drainage Erosion Overgrazing Introduction of specie	s: N n: N s: N e: N A n: N Wate	xplotation of species: N Oil spills: N Ocean dumping: N Noise: N Irborne contaminants: N Irborne contaminants: N Nuclear waste: N Toxic waste: N
Main human activ	vities: Some huts d use: No special plan	ns		

Total population size: Indigenous populations:

NO042 Ste	einavær Landscar	ne Protected Are	<b>-</b> 0		
IUCN: 5 Area (ha): 3315	Adm. region: 1 Location:		016° 35' 00" E	<u>:</u>	
Ramsar: Other: Relationship to ott	MAB:		World Herita	ge:	
	The County Governor's of Environment	Environmental Depo	artment)		
	Oceanic Middle Bored Nesting area for sea b		or corals and I	Halichoerus grypus	
Island: 🔯 Fjord: 🔲 Other: 🔲		Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Adga:  Mountain:  Other:	Tundita:  Moist:  Wet:  Alpine:	
	Phalacrocorax areato		argentatus,La	rus canus, Cepphus grylle,	,
Antropogen pre		/ M=Medium / L=Lo	w / N=Not spe	 ecified):	
Industrial develop Mineral or oil ac Population gr Urbanis Infrastru Habitat fragment Motorized vehicl	ment: N Extivity.: N rowth: N sation: N sation	rpansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion: Overgrazing: oduction of species:	M N N N N	explotation of species: Oil spills: Ocean dumping: Noise: Airborne contaminants: Vaterborne contaminants: Nuclear waste: Toxic waste:	ZZZZZZ
Main human activiti Alternative land u Total population si	<b>ise:</b> Building huts/house	S			

NO043	Central Spit	sbergen				
IUCN:	Ad	<b>m. region:</b> Sv	ralbard			
Area (ha):		Location:	78° 00' 00" N	16° 30' 00	)" E	
Ramsar: Other:		MAB:		World Her	itage:	
Relationship to	o other convent	ions:				
Ownership: State Management: Gov Author:		ard				
Habitat						
Geographic regi		ic. Central S ated mount		valleys with l	owl <b>ands</b> 1	tundras separated by
Ecological functi			tundra valleys. Key d waterfowl, arctic			and important habita
Marine:	Freshwater:	Fon	961:	Taiga:		Tundra
Island:  Fjord:  Other:	River: 2 Lake: 2 Stream: 2 Welland:	<u> </u>	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Mountain: Other	=	Moist: ⊠ Wet: ⊠ Alpine: ⊠
Other):	Wetland: $ar{f D}$	3	_			
•	cies:Rangifer ta bok: Branta berr Plectrophe	icla hrota	rhynchus, Alopex	lagopus, Cal	lidris mari	tima, Phalaropus
Locally rare spec	i <b>es:</b> Branta berr Pluvialis apı		Calidris alpina, Cho	aradirus hiati	cula, Pha	ılaropus lobata,
Antropogen p	oressure	(H≃High /	/ M=Medium / L=Le	ow / N=Not s	pecified)	
Industrial deve	- 30,000000	-	cansion of tourism	Section 2	өхр	lotation of species: L
Mineral or oil			Forestry practices:			Oil spills:
Populatio Urb	n growth: Nanisation: N		Deforestation: isheries practices:	success!		Ocean dumping: Noise: L
	istructure: L		Wetland drainage:	,	Airbo	ome contaminants: L
Habitat fragm	promoved.		Erosion	COMMONS.		orne contaminants: N
Motorized ve	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Overgrazing			Nuclear waste:
	Other: N	Introd	duction of species			Toxic waste: N
	nd use: prospec		y of planned proto ing for petroleum,			
	Dovelor	ment nlans r	related to coal mi	nina includir	na constr	uction of road and

## 6 Russia

RU		Proposed A	Areas, March 1996
number	Area name	IUCN	Area (hectare)
RU001	Beringiya	2	
RU002	Novozemelsky	1	
RU002	Novozemelsky (6 components)	1	
RU002	Novozemelsky (6 components)	1	
RU002	Novozemelsky (6 components)	1	
RU002	Novozemelsky (6 components)	1	
RU002	Novozemelsky (6 components)	1	
RU003	Extention of Ust-Lensky Zapovednik, New Siberian isla		10.000.000
RU004	Ymaisky	1	900.000
RU005	Yano - Indigirsky	1	
RU006	Nenetskiy	1	
RU007	Gydanskiy	1	
RU008	Bolshezemelsky.	1	
RU009	Kunovatskiy	1	
RU010	Severnaya Zemlya	2	421.701
RU011	Terskiy shore	2	250.000
RU012	Kutsa	2	115,000
RU013	Seidozero	2	500.000
RU014	Ponoiskiy	2	200.000
RU015	Indiga Jewels	2	300.000
RU016	The Pearl of the North	2	300.000
RU017	Brechovskiye Islands		270.000
RU018	Vilyuy-Delta		
RU019	Yakutsky Gorny		500.000
RU020	Molodo		300.000
RU021	Terney Tumus		400.000
RU022	Beke		300.000
RU023	Tukular		280,000
RU024	Medvezhyi Islands		500.000
RU025	Pribrezhnyy		800.000
RU026	Central - Chukchi	2	350.000
RU027	Kaninskiy	2	
RU028	Kolguevsky	2	
RU029	More-u	2	
RU030	Popigaisky	2	
RU031	Novosibirskie ostrova	1	
36 <i>F</i>	Areas		16.686.701

RU001	Beringiya					
IUCN: 2	Adm re	gion: Chukota	Autonome D	ogion		
Area (ha):		-	20101101113 K	egion. 174° 00' 00" W		
, ,						
Ramsar: Other:		MAB:		World Heritage:		
	to other conventions:			•		
O1		ents (June 1990	)), and joint s	statement of the P	residents of Russia and	t
Ownership: St	ate (Federal).					
Author: Dr	ussian Federation. Mir . L. Bogoslovskaya (IN Russia), Dr. G. Elyaka	Istitute of the C	ultural and N	latural Heritage of	tural Resources the Ministry of Culture	€
Habitat		_				_
Geographic re	gion: Lowland tundra	s with weakly d	leveloped no	ature use. Chukot	ka Peninsuka.	
Ecological fund					ukotka, historical and e aboriginal people.	ĺ
Marine:	Freshwater:	Forest	Ţ	diga:	Tundra:	
island: 🗵	River: 🛛	Conifero	ous: 🔲	Mountain: 🔲	Moist: 🔲	
Fjord: 🗵	Lake: 🔲		ch: 📙	Other:	Wet: □	
Other: 📙	Stream: 🖾	Mix			Alpine: 📙	
	Wetland:	High Bru Low Br				
	Wetland:	TOM BI	usii. [_]			
Other):						
Important spe	ecies:Rhododenrum k	(amtschaticum	, Salix pulchr	a, Alopex lagopus	, Grus canadensis,	
-					Monodon monoceros	•
Locally rare spe		caerulescens, A	Anser canagi		a, Falco rusticolus,	
Antropogen	pressure (I	H=High / M=Me	dium / L=Lov	v / N=Not specified	d):	
	/elopment: M		of tourism:	L ex	plotation of species:	Μ
Mineral or o	oil activity.: M			N	Oil spills:	L
-	ion growth: N			<u>N</u>	Ocean dumping:	.020000
	banisation: N		s practices:		Noise:	
ını Habitat frag	rastructure: L mentation: L	wetian	d drainage: Erosion:	********	oorne contaminants:	L L
_	ehicle use: M	0	verarazina:	Second	Nuclear waste:	·
	Other: M	_	of species:	None	Toxic waste:	24444400
Fires of the Clador	nia rangiferina associo		-	•		
Alternative k Total populat	ctivities: Reineer - bre and use: No alternativ ion size: Within 6000 p ulations: 5000 people	e plans. Deople in the cl	ose neighbo	urhood : 165 000 p	eople.	

IUCN: 1					
Area (ha):		Adm. region Location	ı: Arkhangelsk Province ı:         76° 50′ 00′′ N	∋. 67° 45' 00" E	
, ,					
Ramsar: Other:		MAB	1	World Heritage	<b>∍</b> :
	to other co	nventions:			
Ownership: S	atate (Feder	al).			
	,	•	Environment and Natu	ural Resources.	
Author: F	rof. S.Uspens	ski, Dr.G.Khahn	, Inst. of Natural Protec	ction.	
labitat					
Geographic r	egion:				
•		nous sea bird c	olonies		
icrine:	Freshwo	tier:	Forest:	isiga:	Tundra:
		ver: 🗆	Coniferous:	Mountain:	Moist: □
Island: ∟ Fjord: ⊠		ver: 🗀 ıke: 🔲	Birch:	Other:	Moist: ☐ Wet: ☐
Other:	Stree	=======================================	Mixed:	Oo	Alpine:
Co	act		High Brush:		,p
	Welton		Low Brush:		
ither):	Wetla	ınd: 📙			
THE TRANSPORT OF THE PARTY OF T					
Important sr			je, Fratercula arctica,	Cepphus grylle	, Rissa tridactyla, Sterna
	BOOK: Parac	isce.			
Red Data		ola arctica. Sa	xifraga groenlandica,	Rangire tarand	us pearsoni,
Red Data	ecies: Rhodi				
Red Data			ıh / M=Medium / L=Lo	w / N=Not spec	ified):
Red Data Locally rare sp	n pressur	′ <b>e</b> (H=Hiç	gh / M=Medium / L=Lo	ļ	•
Red Data Locally rare sp Antropoger Industrial de	n pressur	re (H=Hiç	Expansion of tourism:	N	explotation of species:
Red Data Locally rare sp Antropogel Industrial de Mineral of	n pressur evelopment: oil activity.:	re (H=Hiç		N N	•
Red Data Locally rare sp Antropogel Industrial de Mineral or Populo	n pressur	P (H=Hiç	Expansion of tourism: Forestry practices:	N N	explotation of species: Oil spills:
Red Data Locally rare sp Antropogel Industrial de Mineral or Populo	n pressure velopment: oil activity.:	P (H=Hiç	Expansion of tourism: Forestry practices: Deforestation:	N N N	explotation of species: Oil spills: Ocean dumping:
Red Data Locally rare sp Antropoger Industrial de Mineral or Populo Ir Habitat fra	n pressure velopment: oil activity.: tion growth: trbanisation: trastructure: gmentation:	(H=Hig	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion:	Z Z Z Z Z	explotation of species: Oil spills: Ocean dumping: Noise: Airborne contaminants: terborne contaminants:
Red Data Locally rare sp Antropogel Industrial de Mineral or Populo Ir Habitat fra	n pressure velopment: oil activity.: tition growth: brbanisation: frastructure:	(H=Hig	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage:	X	explotation of species: Oil spills: Ocean dumping: Noise: Airborne contaminants:

Indigenous populations: No aboriginal populations.

RU003	Extention of Ust	-Lensky Zapovednil	k, New Siberian isl	ands, Laptew sea
IUCN: Area (ha): 100	Adm. re 00000 Loco	gion: ation: 73° 00′ 00″ N	135° 00' 00" E	
Ramsar: Other: Relationship to	o other conventions:	MAB:	World Heritage:	
Ownership: Management: Author:				
Habitat Geographic reg Ecological funct				
Marine:  Island:  Fjord:  Other:	Freshwater:  River:  Lake:  Stream:  Wetland:  Wetland:	Coniferous: Birch: Mixed: High Brush: Low Brush: Low Brush: Mixed: Mixed: Control of the control	Mountain:  Other:	iundra:  Moist:   Wet:   Alpine:
Other): Important specified Parts Both Locally rare specified Parts Both L	ook:			
Antropogen	pressure (H	l=High / M=Medium / L=	Low / N=Not specified	i):
Urb	Il activity.: Non growth: Non growth: Non growth: Non growth: Non growth: Non growth non growth.	Expansion of tourisr Forestry practice Deforestatio Fisheries practice Wetland drainag Erosio Overgrazin Introduction of specie	S:   N	Oil spills: N Ocean dumping: N Noise: N Ocrne contaminants: N Nuclear waste: N Toxic waste: N
Main human ac Alternative la Total populatio Indigenous popul	nd use: on size:			

<i>p.</i>				
RU004	Ymaisky			
IUCN: 1 Area (ha): 90000	•	on: Yamal - Nehetsk Au on: 73° 15′ 00" N	tonomous District. 70° 48' 00" E	
Ramsar: Other:	MA other conventions:	В:	World Heritage:	
•				
_	try of Protection of the	e Environment and Nat tral Project - Prospectii		
Habitat			-	
	on: with weakly develor aquatory of the Ka	ped nature use. West ra sea.	Siberia. Belyi Island	, a part of the
Ecological function	n: Preservation of the	typical and uniqe arct	ric ecosystems of the	e Yamal.
Monne:	Freshwater.	Forest:	Talga	Tunara:
Island: 🗵 Fjord: 🗌 Other: 🗌	River:  Lake:  Stream:  Welland:	Coniferous:  Birch:  Mixed:  High Brush:	Mountain:	Moist:  Wet:  Alpine:
	<b>Wetland:</b> □ Irine aquatory.	<b>Low Brush:</b> ∐ s punctata. Vaccinium	n vitis - idaea. Cladi	ina. Dieranum.
Red Data Boo		anta ruficollis. wickii. Somateria spec actyla. Lagopus mutu		ooreus. Clangyla
Locally rare specie		dobenus rosmarus rosm cus. Uria Iomvia. Bran		
Antropogen p	ressure (H=H	igh / M=Medium / L=Lo	ow / N=Not specifie	d):
Urba	growth: N nisation: N tructure: N	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion:	N	plotation of species: M Oil spills: L Ocean dumping: N Noise: N corne contaminants: N corne contaminants: L
Motorized vehi	www.v.	Overgrazing: ntroduction of species:		Nuclear waste: N
Main human activ	rities: Prospection of I use: Hunting.	gas deposition. Ga	s extraction. Reinde	Toxic waste: Neer - Breeding. Fishing.
Total population	-	the modern types of exithin the territory. In th	•	
			in along the Right in Adliti	ood ood poople.

Indigenous populations: No aboriginal population within the territory.

<b>RU005</b> Y	'ano - Indigirsk	ov.				
	_					
IUCN: 1 Area (ha):		<b>egion:</b> Republic cation: 71° (	c of Sakha (Y 00' 00" N	'akutiua). 145° 00' 00'	'F	
Ramsar:	200	MAB:	30 00 11	World Herit		
Other:	ther conventions					
•	other conventions					
Ownership: State Management: Repul	, ,	•	ant.			
•	N. G. Solomonov,	•		nstitute of Bio	ology)	
Habitat	. With asmall incl	usion of the Ar	otio donosta c	and tundras	East Sibaria	. Vana Indiairka
Geographic regior	inter - river area		che desens c	aria tunatas.	rasi - siberia	a, Yana - inaigirka
Ecological function	n: Preservation of endangered ar	•	ıral complex	es of the No	rthern Yakut	a, rare and
Manne:	Freshwater:	Forest:		Talga:	Tu	ndra:
Island:	River: 🛛	Conifer	ous:	Mountain:		Moist: 🛛
Fjord: 🔲	Lake: 🔲	В	irch: 🔲	Other:		Wet: □
Other: L	Stream: 🗌		ked: 📙			Alpine: 🔲
	Welland:	High Br Low B				
	Wetland: 🛛	LOW				
Other);						
Important specie Red Data Bool	s:Arctus alpina. [ k:Grus leucogera		a. Potentilla (	elegans. Cla	adina rangif	erina. Rangifer
Locally rare specie	s: Coregonus mul Squatarola squ					hyemalis.
Antropogen pr	essure (	H=High / M=M	edium / L=Lo	w / N=Not sp	ecified):	
Industrial develo	- "		n of tourism:	N	explota	tion of species: H
Mineral or oil a			ry practices:	N.	•	Oil spills: N
Population (	growth: N isation: N	_	eforestation: es practices:	M	O	cean dumping: 🛝 Noise: N
	ructure: N		nd drainage:	20mmerous	Airbome	contaminants:
Habitat fragme	ntation: N		Erosion:	M		contaminants: L
Motorized vehic	5. e-veet		Overgrazing:	house, was		Nuclear waste:
	Other: N	Introduction	n of species:	<u>IN</u>		Toxic waste: N
Main human activi	-	-		-		
Alternative land	use: Peservation	of the present	traditional no	ature use.		

**Total population size:** No permanent population.

**Indigenous populations:** No aboriginal people within the protected territory.

<b>RU006</b> N	enetskiy			
IUCN: 1 Area (ha):		enetsk Authonomo 068° 00' 00" N	ous District. 051° 00' 00" E	
Ramsar: Other: Relationship to o	MAB:		World Heritage:	
Ownership: Statl (F Management: Author: Dr. Evg	ederal) geny E. Syroechkovsky (Ins	stitute of Problems	of Ecology and Evolu	ition of RAS)
	: developed nature use. sengeisky Is and of : Preservation of typical a activity of the aborigina	thers, part of the G and unique natural	Golodnays Gula Lake.	
Island:  Fjord:  Other:	River: C Lake: Stream: H		Taiga:  Mountain:  Other:	Moist:   Wet:   Alpine:
Important species	s:Cladina rangeferina, Ru : Haliaeetus albicilla. timidus, Ursus arctos, Laç			
Locally rare species	: Paparer lapponicum, Pc bewickii, Somateria spec			albicilla, Cygnus
Antropogen pro	essure (H=High /	M=Medium / L=Lo	w / N=Not specified):	
Infrastru Habitat fragmen Motorized vehic	ctivity.: M F prowth: N sation: N F ucture: N V tation: N	cansion of tourism: Forestry practices: Deforestation: isheries practices: Vetland drainage: Erosion: Overgrazing: suction of species:	N L N Airbor L Waterbor	Oil spills: N Ocean dumping: N Noise: N rne contaminants: N Nuclear waste: N Toxic waste: N
Alternative land t	ies: Reindeer-Breeding. Fuse: Industrial exploitation ize: Within the territory 380	of oil depositions.		

Indigenous populations: Ca. 200 people. Main activityis reindeer-breeding.

RU007   (	Adm. regior	ı: Yamalo - Nenetsk Aı	ntonomous District	
Area (ha):	Location		077° 30' 00" E	•
Ramsar: Other: Relationship to	MAB other conventions:	:	World Heritage:	
Ownership: State	e (Federal).			
	an Federation, Minstry ( oly V. Maximuk (Centro			Natural Resources
Habitat			-	
• . •	on: North of the Gydans on: Preservation of the to and economic activ	· ·	ctic ecosystems of	
Marine:	Freshwater:	Forest	Talga:	Tundra:
Island: 🔲 Fjord: 🖂 Other: 🗌	River:  Lake:  Stream:  Wetland:	Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain:  Other:	Moist: ☐ Wet: ☒ Alpine: ☐
<b>Other):</b> Ma	<b>Wetland:</b> ☐ rine Aquatory			
	es: Cladina, Ledum dec k: Ursus maritimus, Bran ruficollis, Lagopus m	ta rificollis, Haliaeetus	•	daea, Coregonus
Locally rare specie	es: Ursus maritimus, Odo Branta leucopsis, Cy		arus, Haliaeetus all	oicilla, Falco rusticolus,
Antropogen p	ressure (H=Hig	gh / M=Medium / L=Lo	ow / N=Not specifie	ed):
Industrial develo Mineral or oil o Population	growth: N	Expansion of tourism: Forestry practices: Deforestation:	N N	xplotation of species: Oil spills: Ocean dumping:
	nisation: N tructure: N	Fisheries practices: Wetland drainage:	Accounted.	Noise: rborne contaminants:
Habitat fragme	Norma	Erosion:	house,	rborne contaminants:
Motorized vehi	processor.	Overgrazing:	9101110n	Nuclear waste: Toxic waste:
	Other: N In	troduction of species:	N '	Toxic waste:

Main human activities: Exploitation of the oil and gas depositions. Fishindustry. Reindeer-breeding.

Alternative land use: Industrial exploitation of the oil and gas depositions.

Total population size: No polulation within the territory. In the close neighbourhood 900 people.

Indigenous populations: No aboriginal people within the territory.

RU008	Bolshezemelsky			
IUCN: 1 Area (ha):		gion: Nenets Autonomo	ous District. 63° 00' 00" E	
Ramsar: Other: Relationship to	other conventions:	MAB:	World Heritage:	
•	stry of the Environme	ental Protection and No vsky (Institute of Probler		olution of RAS).
•	tundra. Pai-Khoe		eninsula.	ands. Bolshaya Zenlys
Marine:  Island:  Fjord:  Other:	Freshwaler.  River:  Lake:  Stream:  Welland:  Wetland:	Forest:  Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Taiga:  Mountain:  Other:	Tundia:  Moist:   Wet:   Alpine:
Red Data Bo	ok: Haliaeetus albici leucopsis, Somat es: Rhodiola rosea, I	lla, Anser erythropus, Ur eria mollissima, Dicrosto Paparer Iapponicum, Po , Falco rusticolus, Falco	sus maritimus. onys torguatus, Alope aeonia anomala, Rai	nunculus nivalis,
Antropogen p		=High / M=Medium / L=	Low / N=Not specifie	d):
Urbo	activity.: L n growth: N inisation: N structure: L entation: L	Expansion of tourist Forestry practice Deforestation Fisheries practice Wetland drainag Erosion Overgrazin Introduction of specie	95: N 90: M 95: M 96: N Air 97: L Water	oil spills: M Oil spills: M Ocean dumping: N Noise: N borne contaminants: L borne contaminants: L Nuclear waste: N Toxic waste: N
Alternative lan		eding, Fishing, Hunting oitation of the oil depo		

**Total population size:** Within 300 people. In the close neighbourhood 1500 people. **Indigenous populations:** 120 people. Main activity is reindeer-breeding and hunting.

RU009	Kunovatskiy			
IUCN: 1 Area (ha):	Adm. reg Locat	ion: Yamal-Nenetsk Aut ion: 066° 00' 00" N	onomous District. 067° 00' 00" E	
Ramsar: Yes Other: Relationship to	M other conventions:	AB:	World Heritage:	
•	ian Federation, Minst	ry for Protection ogf the Institute of Nature Protec		atural Resources
-		ains, wetlands. Western e unique natural compl animals,		
Marine:  Island:  Fjord:  Other:	River: \( \subseteq \text{Lake: } \subseteq \text{Stream: } \subseteq \text{Wetland: } \subseteq \text{Wetland: } \subseteq \text{Vetland: } \subseteq \text	Coniferous:  Birch:  Mixed:  High Brush:  Low Brush:	Talga:  Mountain:  Other:	Tundro:  Moist:   Wet:   Alpine:
Red Data Bo	ok: Grus leucogeranu arctica.	ex aquatilis, Calamagro ıs, Rifibrenta ruficollis, Ar is, Anser erythropus, Par	nser erythropus, Halic	aeetus albicilla.
Antropogen p	oressure (H=	:High / M=Medium / L=L	ow / N=Not specified	d):
	activity.: M n growth: N anisation: N structure: N entation: L	Expansion of tourism Forestry practices Deforestation Fisheries practices Wetland drainage Erosion Overgrazing Introduction of species	: M : L : M : L Airb : M Watert	plotation of species: L Oil spills: L Ocean dumping: N Noise: N corne contaminants: L corne contaminants: N Nuclear waste: N Toxic waste: N

Alternative land use: No alternative plans.

**Total population size:** No people within the territory. In the close neighbourhood 2300 people.

**Indigenous populations:** No aboriginal people within the protected territory.

Buoto I c	ou com au ca Zonolu ca			
<b>RU010</b> Se	evernaya Zemlya			
IUCN: 2	Adm. region: T	aimyr Autonomous	District,	
<b>Area (ha):</b> 421701	Location:	079° 00' 00" N	098° 00' 00" E	
Ramsar: Other:	МАВ:		World Heritage:	
Relationship to o	ther conventions:			
•	(Federal). y of the Environmental P Badukin (The great arcti			ural Protection).
Habitat				
	a: Glaciers, Arctic deserts a: Protection of the typica and endangered anim	al and unique natur	al complexes of the	e Arctic islands, rare
Marine:	Freshwater: Fo	rest:	Talga:	Tundia:
Island: 🖾 Fjord: 🔲	River: 🗌	Coniferous:   Birch:	Mountain:	Moist:
Other:	Stream: 🗌	Mixed: 🔲		Alpine: 🗌
	Welfand:	High Brush: ☐		
·	Wetland:	Low Brush: 🔲		
Wild - Proposition and American Reduction A	olar deserts. 2. Glaciers.	_	_	
•	s: Cladina u Graphis, Dici :: Ursus maritimus.	rostonys torguatus, .	Alopex lagpus, Cep	ophus grylle, Rissa
Locally rare species	: Ursus maritimus, Mustel barbatus, Phoca hispic			
Antropogen pro	essure (H=High	/ M=Medium / L=Lo	w / N=Not specified	:(t
Industrial develop	oment: N Ex	pansion of tourism:	L ex	plotation of species: N
Mineral or oil ac	ctivity.: M	Forestry practices:	N	Oil spills: N
Population g	, , , , , , , , , , , , , , , , , , ,	Deforestation:	Toronto.	Ocean dumping: N
Urbani	sation: N	Fisheries practices:	N	<b>Noise:</b> N
Infrastr	i i i i i i i i i i i i i i i i i i i	Wetland drainage:	N Airk	oorne contaminants: L
Habitat fragmen	Science St.	Erosion:	Monorana.	oome contaminants: L
Motorized vehic		Overgrazing:	Vowen	Nuclear waste: N
	Other: N Intro	duction of species:	<u>N</u>	Toxic waste: N
Alternative land ( Total population s	ties: Search and extracti use: No alternative plans size: No permanent pop	s. ulation.		
Indigenous population	ons: No aboriginal popul	ation.		•

RU011 Te	erskiy shore			
IUCN: 2	·	n: Murmansk Region.		
<b>Area (ha):</b> 250000	Location	n: 066° 10' 00" N	033° 30' 00" E	
Ramsar: Other: Relationship to ot	MAB	<b>:</b> :	World Heritage:	
Ownership: Murmo Management: Federo Author:	ŭ	ttee for the Environme	ental Protection.	
Habitat				
	: The south of region.	the basin of river Vars	uga. seashore of the	White Sea.
Ecological function	from the Red Book: Nalbicilla), places for	Margaritifera, Pandior	haliateus, Aquila cl iae, monuments of c	s of animals (incl. those nrisaetos, Haliaetus archeology, history and
Marine:	reshwoter:	Foresti	Talga:	Tundra:
Island:  Fjord:  Other:	River:   Lake:  Stream:   Wetland:   Wetland:	Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain:  Other:	Moist: □ Wet: □ Alpine: □
Other):	welland.			
Important species Red Data Book Locally rare species	:			
Antropogen pre	essure (H=Hi	gh / M=Medium / L=Lo	ow / N=Not specified	I):
Industrial develop	oment: N	Expansion of tourism:	N exp	olotation of species: N
Mineral or oil ac	tivity.: N	Forestry practices:	Accessed.	Oil spills: N
Population g	hammer	Deforestation:	terment.	Ocean dumping: N
Urbani	**************************************	Fisheries practices:	37,000,000	Noise: N
Infrastru	1.00.02.2	Wetland drainage:	parament	orne contaminants: Norne contaminants: N
Habitat fragmen Motorized vehic		Erosion: Overgrazing:	· · · · · · · · · · · · · · · · · · ·	Nuclear waste: N
	possesse;	troduction of species:	processor and the same of the	Toxic waste: N
Main human activit Alternative land u Total population s	ise:			

RU012 Kutsa			
IUCN: 2 Area (ha): 115000	Adm. region: Murmans Location: 66° 50	sk Region. 0' 00" N 30° 30' 00" E	
Ramsar: Other: Relationship to other co	MAB:	World Heritag	ge:
Ownership: Murmansk Re Management: Federal. Author:	gional Committee for the	e Environmental Protectlor	n.
Habitat  Geographic region: South- Ecological function: Protection rare specific process.	•	ie watersystem of Kutsayo	•
Fjord: La Other: Stree  Wellan	rer: Conifero ke: Mixe am: Mixe High Bru Low Bn	ch: Other: Ced: Ish: I	Tundra:  Moist:  Wet:  Alpine:
Wetla  Cither):	nd: 🗆		
Antropogen pressur	e (H=High / M=Me	dium / L=Low / N=Not spe	cified):
Industrial development: Mineral or oil activity.: Population growth: Urbanisation: Infrastructure: Habitat fragmentation: Motorized vehicle use: Other:	N Forestry N Def N Fisheries N Wetland N O	vergrazing: N	explotation of species: N Oil spills: N Ocean dumping: N Noise: N Airborne contaminants: N aterborne contaminants: N Nuclear waste: N Toxic waste: N
Alternative land use:  Total population size:			

RU013 Seido	ozero				
IUCN: 2 Area (ha): 500000	Adm. region: Mu Location:	urmansk Region. 67° 45' 00" N	34° 50' 00" E		
Ramsar: Other: Relationship to other	MAB:		World Heritage:		
Ownership: Murmansk Management: Regional. Author:	. Committee for the Er	nvironmental Prote	ction.		
Habitat  Geographic region: The Ecological function: Pro hist		nountain-valley ge	ological and minera		
Island:  Fjord:  Other:  St	Lake: tream: H	oniferous:  Birch:  Mixed:  ligh Brush:  Low Brush:	aiga:  Mountain:  Other:	Moist:   Wet:   Alpine:	
Important species: Red Data Book: Locally rare species:	ətland: 🔲				
Antropogen press	GUIP (H=High /	M=Medium / L=Lo	w / N=Not specified	<b>)</b> :	
Industrial developme Mineral or oil activit Population grow Urbanisatic Infrastructu Habitat fragmentatic Motorized vehicle u Oth Main human activities:	ty.: N F  tth: N F  ire: N V  on: N Se: N	cansion of tourism: Forestry practices: Deforestation: isheries practices: Wetland drainage: Erosion: Overgrazing: luction of species:	N N N Airb N Waterb	olotation of species: Oil spills: Ocean dumping: Noise: orne contaminants: orne contaminants: Nuclear waste: Toxic waste:	N N N N N N N N N N N N N N N N N N N
Alternative land use: Total population size:					

<b>RU014</b> Po	noiskiy			
IUCN: 2 Area (ha): 200000	Adm. reç Loca	gion: Murmansk Reg tion: 67° 10' 00" t		"E
Ramsar: Other: Relationship to oth	-	IAB:	World Heri	tage:
Ownership: Murma Management: Region Author:	•	nmittee for the Emvi	ronmental Protec	tion.
Habitat				
	Middle part of the Pesochnos-Lake.	Ponoy-River, the P	iatchina-River an	d the Losinga-River, the
Ecological function:	Picturesque lands birds (Falco rustic		etus, Aquila chrisc	oreeding for rare species of letos, Haliaetus albicilla)
Marine: F	eshwater.	Forest:	Talga:	Tundro:
island:  Fjord:  Other:	River:  Lake:  Stream:  Vetland:  Wetland:	Coniferous: Birch: Mixed: High Brush: Low Brush:	] Mountain: ] Other: ] ]	
Other):	Welland.			
Important species: Red Data Book: Locally rare species:				
Antropogen pre	essure (H:	:High / M=Medium /	/ L=Low / N=Not s	pecified):
Industrial develop Mineral or oil ac Population gr Urbanis Infrastru Habitat fragment Motorized vehicle	tivity.: N owth: N ation: N cture: N ation: N		tices: N tition: N tices: N	explotation of species: Oil spills: Ocean dumping: Noise: Airborne contaminants: Waterborne contaminants: Nuclear waste: Toxic waste:
Main human activiti Alternative land u Total population si	se:			

RU015 Indigo	a Jewels				
IUCN: 2	Adm. region: N	Venets Autonomous	District		
Area (ha): 300000	Location:	67° 15' 00" N	49° 00' 00" E		
Ramsar: Other: Relationship to other c	MAB:		World Heritage:		
Ownership: Administrati Management: Regional Author:	on of Nenets Auto	nomous District.			
Habitat					_
<b>Geographic region:</b> Kani the r Cap	reivers Sula, Volong			Gate", upper flow of neshsky Bay, Barmin	
<b>Ecological function:</b> Proto (Hali		nd unique nature co ijgnus bewickii, Papo			
Marine: Freshy	woter: Fo	rest;	laiga;	Tundica	
Fjord: L Other: Stre	.ake: 🔲 eam: 🔲	Coniferous:   Birch:   Mixed:   High Brush:	Mountain:  Other:	Moist:  Wet:  Alpine:	
AMACONOCIONA	nd:	Low Brush:			
Wet Other):	land: 🔲				
Important species: Red Data Book: Locally rare species:					
Antropogen pressu	Ire (H=High	/ M=Medium / L=Lo	w / N=Not specified	):	
Industrial developmen	t: N Ex	pansion of tourism:	N exp	plotation of species: $\mathbb{N}$	1
Mineral or oil activity	.: N	Forestry practices:	N	Oil spills: N	ī
Population growth	3000000	Deforestation:	N.	Ocean dumping: $N$	uu.
Urbanisation	processor.	Fisheries practices:	N	Noise: N	~~~
Infrastructure	\$ morney	Wetland drainage:	Surveyer.	orne contaminants: $N$	***
Habitat fragmentation	********	Erosion:	imani	ome contaminants: N	m
Motorized vehicle use Othe	permone	Overgrazing: duction of species:	N N	Nuclear waste: N	ښښ
Main human activities: Alternative land use: Total population size: Indigenous populations:		and the second of	Entered	.calo il dalo.	J

	Auiii. iei	gion: Nenets Autono	mous District.		
Area (ha): 300000	Loca	_		00" E	
Ramsar: Other: Relationship to othe		MAB:	World H	eritage:	
•		riot Administration			
Ownership: Nenets At Management: Regional. Author:		ner Administration.			
Habitat		=			
Geographic region: M	alozemelsky Tu	ndra, the Charitono	vo Lake, forest	sites, the Kuia Riv	er.
	aleontology, sp	unique natural land awning places of so pewickii), habitats o	ılmon fishes, wo	aterfowl (Anser fo	ıbalis, Cygnus
Vicinine: Free	ihwcfer:	Forest:	Taiga	Tund	rc:
Wei	River:  Lake:  Stream:  Rand:	Coniferous: Birch: Mixed: High Brush: Low Brush:	] Mounta ] Oth ]	er:	Moist:  Wet:  Alpine:
W Dither):	etiand: 🔲				
Important species: Red Data Book: Locally rare species:					
Antropogen pres	sure (H	=High / M=Medium	/ L=Low / N=No	t specified):	
Industrial developme	ent: N	Expansion of tou	ırism: N	•	on of species: N
Mineral or oil activ	*	Forestry prac Deforeste	- harrana	000	Oil spills: N
Population grov Urbanisati	,	Fisheries prac	anniew/	OCO	an dumping: [N Noise: N
Infrastruct	homeon,	Wetland drain		Airborne c	ontaminants: N
Habitat fragmentati	ion: N		sion: N	Waterborne c	ontaminants: N
	use: N	_	zing: N		ıclear waste: N

RU017 Brech	ovskiye Islar	nds			
IUCN: Area (ha): 270000	Adm. regio Locatio	on: Taimyr Authonom on: 70° 30′ 00″ N	nous District 82° 30' 0	0" E	
Ramsar: Yes Other:	MA	AB:	World He	ritage:	
Relationship to other o	conventions:				
<b>Ownership:</b> Great Arcti District.	c Reserve, Cor	nmittee of Ecology o	and Natural Re	esources of Talmyr Autonomo	ous
Management: Regional Author:					
Habitat	_	-		-	
Geographic region: The	delta of the En	isev-River.			
• •		•	value as wate	erfowl habitats (Ramsar site o	ıf
197	1). The main sp	ecies under protect	ion: Rufibrent	a ruficollis (Red-breasted	
. God	ose). Branta be	ernicia, Cygnus bewi	Ckii.		
Marine: Fresh	water:	Forest:	Talga:	Tundra	
Island:	River:	Coniferous:	Mountair	n: 🔲 Moist: 🗀	
	Lake: 🔲	Birch:	Othe	·	
· · · · · · · · · · · · · · · · · · ·	eam:	Mixed:		Alpine:	
	ind:	High Brush: 🔲			
***************************************		Low Brush:			
Other):	iland: 🛄				
Important species: Red Data Book: Locally rare species:					
Antropogen pressu	ure (H=I	ligh / M=Medium / L	=Low / N=Not	specified):	
Industrial developmer	nt: N	Expansion of touris	sm: N	explotation of species:	<u>N</u>
Mineral or oil activity	/.: <u>N</u>	Forestry practic	es: N	Oil spills:	: <u> N</u>
Population growt	hammed	Deforestati	· · · · · · · · · · · · · · · · · · ·	Ocean dumping:	imairio.
Urbanisatio	Y-www.w	Fisheries practic	20020-00-01	Noise:	Name of the last
Infrastructur	3 44*****	Wetland draina	***/*******	Airborne contaminants:	2 constat
Habitat fragmentatio	susaini,		on: N	Waterborne contaminants:	311117711
Motorized vehicle us	,	Overgrazi		Nuclear waste:	***********
Othe	or: N	Introduction of speci	l⊕s: ⊣N	Toxic waste:	, IN
Main human activities:					
Alternative land use:					
Total population size:					
Indigenous populations:					

RU018	Vilyuy-Delta				
IUCN:	Adm. re	egion: Republic	of Sakha Yakutiy	'a	
Area (ha):	Loc	ation: 64° 20	0' 00" N 126°	20' 00" E	
Ramsar: Other: Relationship t	o other conventions:	MAB:	Wor	rld Heritage:	
•	nistry of the Environm	ental Protectio	n of the Sakha Re	epublic.	
Habitat  Geographic reg Ecological function	tion: Protection and		taiga complexes deer, fur animals	,	reading of
Marine:	Freshwater:	Forest:	Taiga	a n	india:
Island:  Fjord:  Other:	River:  Lake:  Stream:  Wetland:	Conifero	us:	untain:  Other:	Moist:  Wet:  Alpine:
Other):	Wetland: 🗌	LOW BIL	ısn. ∐		
important spec Red Data Bo Locally rare spec	ook:				
Antropogen	pressure (1	- 	dium / L=Low / N	=Not specified):	
Urb	il activity.: Non growth: Non	Forestry Def Fisheries Wetland	of tourism: N r practices: N forestation: N s practices: N d drainage: N Erosion: N vergrazing: N of species: N	O Airbome	Oil spills: N Oil spills: N Ocean dumping: N Ocean dumpin
Main human ac Alternative la Total populatio Indigenous popu	nd use: on size:				

<b>RU019</b> Yakut	sky Gorny			
IUCN:	Adm. regior	n: Republic of Sakha Y	/akutiya	
Area (ha): 500000	Location	n: 63° 30′ 00" N	143° 00' 00" E	
Ramsar:	MAB	) <b>:</b>	World Heritage:	
Other:				
Relationship to other c	onventions:			
<b>Ownership:</b> The Govern Republic.	ment of Sakha R	Republic and Ministry	of the Environment	al Protection of Sakha
Management: Federal.				
Author:				
-labitat				
Geographic region: The	eastern part of S	sakha, south - west ra	nges of Chersky Mo	ountains.
Ecological function: Prot			•	
bigh	orn sheep, Marr	nota camtschactaar	nd others. ).	
Acrine: Fresh	water:	Forest:	Taiga:	Tundra
Island:	River: 🗆	Coniferous:	Mountain:	Moist:
	.ake: 🔲	Birch:	Other:	Wet:
	eam: $\square$	Mixed:		Alpine:
	nd:	High Brush: 🔲		
300000000		Low Brush: 🔲		
Wet Other):	land: 🗌			
Important species:				
Red Data Book:				
Locally rare species:				
Antropogen pressu	Jre (H=Hig	gh / M=Medium / L=Lo	ow / N=Not specifie	
Industrial developmen	t: N	Expansion of tourism	: N e	xplotation of species:
Mineral or oil activity	.: N	Forestry practices	: N	Oil spills:
Population growth	n: N	Deforestation	: N	Ocean dumping:
Urbanisation	n: <u>N</u>	Fisheries practices	: <u>N</u>	Noise:
Infrastructure	(Accessing)	Wetland drainage	: <u>N</u> Ai	rbome contaminants:
Habitat fragmentation		Erosion	A	rborne contaminants:
Motorized vehicle use	proceed	Overgrazing	braceror*	Nuclear waste:
Othe	r: N In	troduction of species	: <u>N</u>	Toxic waste:
Main human activities:				
Alternative land use:				
Total population size:				
Indigenous populations:				

RU020 Moloc	do		
IUCN: Area (ha): 300000	Adm. region: Republic o		
Ramsar: Other: Relationship to other c	MAB:	World Heritage	<b>»:</b>
Ownership: Management: Ministry of the Author:	ne Environmental Protection	ı of the Sakha Republic.	
Habitat Geographic region: Prote Ecological function: Reg	ection of watrfowl, fur and h ional.	noof animals.	
Island: Figure 1 Street	Nafer: Forest:  River: Coniferoul  .ake: Birch  eam: Mixe  High Brus	h: Other: C	Undra:   Moist:       Wet:       Alpine:
Wello Wel Offici):	Icw Bru	_	
Important species: Red Data Book: Locally rare species:			
Antropogen pressu	Jre (H=High / M=Med	lium / L=Low / N=Not speci	fied):
Industrial developmen Mineral or oil activity Population growth Urbanisatior Infrastructure Habitat fragmentatior Motorized vehicle use Othe Main human activities:	:: N Forestry n: N Defc n: N Fisheries e: N Wetland n: N	practices: N prestation: N practices: N drainage: N Erosion: N Watergrazing: N	explotation of species: NO Oil spills: NO Ocean dumping: NO Noise: NO Airborne contaminants: NO Nuclear waste: NO Nuclear waste: NO Noice wast
Alternative land use: Total population size:			

A (b>- 400000	Location:	epublic of Sakha Y 73° 15' 00" N	akutiya 116° 30' 00" E	
<b>Area (ha):</b> 400000		73° 15' 00" N		
Ramsar: Other:	MAB:		World Heritage:	
Relationship to other c	onventions:			
Ownership: Regional				
Management: Ministry of Er	nvironmental Prote	ction of Sacha Rec	public.	
Author:				
Habitat				
Geographic region: The I	North - West of Sakl	ha. The seashore o	of the Laptev Sea t	o he west of Olenek
Bay.			, ,	
Ecological function: Prote			n Jakutia, places c	f waterfowl beeding,
	tats of polar bear o			
Marine: Freshy	rater: For	est:	Talga	Tundra:
Island: 🔲 R	iver: 🔲 🤇	Coniferous: 🔲	Mountain: 🔲	Moist: 🔲
· /-··· 👼	ake: 📙	Birch: 📙	Other: $\square$	Wet: ∐
Other: 🗵 Stre	oam: L	Mixed: Ц		Alpine: L
Wetla	nd:	High Brush: 🔲 Low Brush: 🗍		
Wati	and: 🗆	LOW BIUSII:		
Other):	ини. Ш			
Important species:				
Red Data Book:				
Locally rare species:	· · · · · · · · · · · · · · · · · · ·	_		
Antropogen pressu	re (H=High)	/ M=Medium / L=Lo	ow / N=Not specifie	d):
Industrial development	: N Ex	pansion of tourism:	N e	kplotation of species: 🧓
Mineral or oil activity.	ļ	Forestry practices:	N	Oil spills: 📗
Population growth	Proposition,	Deforestation:	immoor	Ocean dumping: 📗
Urbanisation	house	Fisheries practices:	*********	Noise: Noise:
Infrastructure	[motorer]	Wetland drainage:	2000000	borne contaminants:
Habitat fragmentation	· country	Erosion:	resident.	borne contaminants: 🔝
Motorized vehicle use	: N	Overgrazing:		Nuclear waste: 1

<b>RU022</b> B	eke			
IUCN:	Adm. re	egion: Republic of Sal	cha Yakutiya	
Area (ha): 300000	Loc	ation: 68° 00' 00" I	V 116° 00' 00	" E
Ramsar: Other: Relationship to ot		MAB:	World Heri	itage:
Ownership: Region Management: Ministry Author:	nal		akha Republic.	
• • •		of Sacha, the Olene Dical nature complex	•	ga.
Marine: F	reshwaten	Forest.	Taiga:	Tundra
Island:  Fjord:  Other:	River:  Lake:  Stream:   Velland:	Coniferous: Birch: Mixed: High Brush: Low Brush:	Mountain: Other:	
Ofher):	Wetland:	LOW DIGGIN	•	
Important species: Red Data Book: Locally rare species:				
Antropogen pre	essure (	l=High / M=Medium /	/ L=Low / N=Not s	pecified):
Main human activiti	tivity.: N rowth: N rowth: N roture: N	Expansion of tou Forestry prace Deforesto Fisheries prace Wetland drain Erc Overgro Introduction of spe	tices: N tition: N tices: N tices: N tices: N tices: N tices: N	explotation of species: NOII spills: NOIS SP
Alternative land u  Total population si				

kular				
Adm. reg	<del>-</del> ,	•		
Loca	ition: 64° 15′ 00″ N	133° 30' 00	"E	
N	ЛАВ:	World Heri	tage:	
er conventions:				
al. of the Environme	ental Protection of Sak	ha Republic.		
Verchoyansky Ro Jakutiya.	ange, the upper flow o	of the Sartang R	iver, the sentral part of	
			fish, habitats of Marmo	ta
eshwoler:	Forest	Talga	Tundra:	
River: 🗆	Coniferous:	Mountain:	☐ Moist: [	
Lake:	Birch:	Other:	Wet: [	⋽
Stream: 🔲	Mixed: 🔲		Alpine: [	
effond	High Brush: 🔲		-	
and the second s	Low Brush: 🔲			
wettana: 🗀				
ssure (H:	=High / M=Medium / L	.=Low / N=Not s	pecified):	
nent: N	Expansion of touris	sm: N	explotation of spe	cies: N
ivity.: N	Forestry practic	es: N	Oil s	pills: N
owth: N	Deforestati	on: N	Ocean dump	oing: N
ation: N	•	home	= =	oise: N
January .	`	ionno.		Same
present.		,		
Xiwan.	_	- house	Nuciear wa Toxic wa	when the
·		ree is a		
e:				
	er conventions:  al.  of the Environme  Verchoyansky Robakutiya.  Protection of spaceamtschtica, Overshwater:  River:  Lake: Stream:  Stream:  ettond:  Wetland:  Nowth: N	Adm. region: Republic of Sakh Location: 64° 15' 00" N  MAB:  er conventions:  al. of the Environmental Protection of Sak  Verchoyansky Range, the upper flow of lakutiya. Protection of spawning places of value camtschtica, Ovis nivicola, rare specie shwater.  River: Coniferous: Birch: Birch: High Brush: High Brush: High Brush: Low Brush: Wetland: Wetland: Forestry practice with: N  Expansion of tourist Forestry practice with: N  Deforestation: N  Expansion of tourist Forestry practice wetland drainal strong N  Expansion of species. N  Overgrazi  Other: N  Introduction of species.	Adm. region: Republic of Sakha Yakutiya Location: 64° 15'00" N 133° 30'00  MAB: World Heri  er conventions:  al.  of the Environmental Protection of Sakha Republic.  Verchoyansky Range, the upper flow of the Sartang R Idakutiya.  Protection of spawning places of valuable species of plants.  Sakwater: Forest: Mountain: Lake:	Adm. region: Republic of Sakha Yakutiya Location: 64° 15' 00" N 133° 30' 00" E  MAB: World Heritage:  er conventions:  al. of the Environmental Protection of Sakha Republic.  Verchoyansky Range, the upper flow of the Sartang River, the sentral part of lakutiya.  Protection of spawning places of valuable species of fish, habitats of Marmo camtschtica, Ovis nivicola, rare species of plants.  Shivater: Coniferous: Mountain: Moist: Mountain: Moist: Mixed: M

RU024 Medvez	hyi Islands		
IUCN:	Adm. region: Republic o	of Sakha Yakutiva	
Area (ha): 500000	Location: 70° 50'	· ·	0" E
Ramsar: Other: Relationship to other con	MAB:	World He	ritage:
Ownership: Regional.  Management: Ministry of the Author:	Environmental Protection	of Sakha Republic	
Habitat	•		
Geographic region: Medve Ecological function: Protect	•		ies of plants.
Monne: Freshwa	er: Forest	Talga:	lundra:
Island: A Rive Fjord: A Lak Other: Stream	e: Birc m: Mixe	h: Othe d: _	" <b>=</b> =
Welland	Low Brus	_	
Wetlan Other):	d: 🗀		
Important species: Red Data Book: Locally rare species:			
Antropogen pressure	H=High / M=Med	ium / L=Low / N=Not	specified):
Industrial development:	N Expansion o	of tourism:	explotation of species: N
	N Forestry	practices: N	Oil spills: N
• • •	, manage	restation: N	Ocean dumping: N
Urbanisation:	'ayaran'	practices: N	Noise: N
Infrastructure:		drainage: N	Airborne contaminants: N
Habitat fragmentation: Motorized vehicle use:	N Ov	Erosion: N ergrazing: N	Waterborne contaminants: N Nuclear waste: N
	yourses;	of species: N	Toxic waste: N
Main human activities: Alternative land use: Total population size:			

RU025 Prib	rezhnyy			
IUCN:	Adm. regior	n: Chukotka Autonomo	ous District.	
<b>Area (ha):</b> 800000	Location	: 62° 40' 00" N	177° 00' 00" E	
Ramsar: Other: Relationship to othe	MAB	:	World Heritage:	
Ownership: Federal.  Management: Pacifice Author:		f Geography, Acader	ny of Sciences of R	ussia.
Habitat				
<b>Geographic region:</b> The Broad	earing sea includin ounderis.	g a part of the sea, A	tyrei range up to Ko	-
	abitats of Grus Car	y of nature complexes nadensis. Cignus cignu places of salmous.		
Maidne: Fre	shwater.	Forest	Talgat	Tundra:
M0.000000	River:  Lake:  Stream:  Stream:	Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain:	Moist:  Wet:  Alpine:
Other): 15 18 18 18 18 18 18 18 18 18 18 18 18 18	/etland: 🗌	2011 214311.		
important species: Red Data Book: Locally rare species:				
Antropogen pres	SSUTO (H=Hi	gh / M=Medium / L=Lo	w / N=Not specifie	
Industrial developm Mineral or oil activ Population gro Urbanisa Infrastruci Habitat fragmenta	vity.: N wth: N tion: N ture: N tion: N	Expansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion:	N	plotation of species: NO Oil spills: NO Ocean dumping: NO Noise: NO Dorne contaminants: NO DORNE CONTAMINATE NO NOISE NO
Motorized vehicle Oi  Main human activities Alternative land use	ther: N In	Overgrazing: troduction of species:	*c.*******	Nuclear waste: N

Total population size: Indigenous populations:

RU026	Central - Chuko	chi			
IUCN: 2 Area (ha): 3500		gion: Chukotka A ation: 67° 25' 0			
Ramsar: Other:		MAB:	World H	leritage:	
Ownership: Reg Management: Polit Author:	ional tical Research Institu	ite of Geography,	RussiaAcademy	of Science.	
		ique natural moni	ument of the Algy undra, habitats o	gytgyn - Lake a	•
Morine:	Freshwaler:	Forest	Talga	Tur	cira:
Island:  Fjord:  Other:	River:  Lake:  Stream:  Wetland:	Coniferous: Birch: Mixed: High Brush: Low Brush	Off	ain: 🗌 ner: 🔲	Moist:  Wet:  Alpine:
Other):	Wetland: 🛄				
important spec Red Data Bo Locally rare speci	ok:				
Antropogen p	oressure (H		m / L=Low / N=No	ot specified):	
	activity.: N n growth: N nnisation: N structure: N entation: N	Fisheries pr Wetland di	actices: N estation: N actices: N ainage: N Erosion: N grazing: N	Oc Airborne Waterborne	on of species: NO Oil spills: NO Oil spills: NO OIS OIL NO OIS OIL NO OI
Main human acti Alternative lan Total population	d use:				

RU027_	Kaninskiy				
IUCN: 2	Adm. r	<b>eaion:</b> Nenets	: Autonomus [	District.	
Area (ha):		_	00' 00" N	44° 00' 00" E	
Ramsar: Other: Relationship t	o other conventions:	MAB: :		World Heritag	<b>)e</b> :
_	, ,	•		invironment and	d Natural Resources
Habitat Geographic reg Ecological func	-				
Marine:	Freshwater:	Forest		Tdiga:	Tinda:
Island: Fjord: Other:	River:  Lake:  Stream:  Welland:	M High E	Birch: 🔲 lixed: 🔲	Mountain: [ Other: [	Moist: Alpine:
Other):	Wetland: 🗌				
Important spe Red Data B Locally rare spec	ook:				
Antropogen	pressure (	H=High / M=N	/ledium / L=Lo	ow / N=Not spec	cified):
Urb	oil activity.: Non growth: Non growth: Non growth: Non growth: Non growth: Non growth No	Fores E Fisher Wetic	on of tourism: stry practices: Deforestation: ies practices: and drainage: Erosion: Overgrazing: on of species:		explotation of species: Oil spills: Ocean dumping: Noise: Airbome contaminants: aterbome contaminants: Nuclear waste: Toxic waste:
Main human ac Alfernative la Total populati Indigenous popu	nd use: on size:				

RU028	Kolguevsky				
IUCN: 2 Area (ha):		•	s Autonomus   ° 00' 00" N	Region 48° 30' 00" E	
Ramsar: Other:	o other conventions	MAB:	00 00 11	World Heritage:	
~	ate (federal) ssian Federation, Mil netsk Regional Com				atural Resources
Habitat Geographic reg Ecological func					
Island: Fjord: Other:	Freshwaler:  River:   Lake:   Stream:   Wetland:   Wetland:	M High I		Tolga:  Mountain:	Moist: U Wet: U Alpine: U
Other): important spe Red Data B Locally rare spec	cies: ook:				
Antropogen	pressure (	H=High / M=N	 √ledium / L=Lo	ow / N=Not specifie	d):
Urb	elopment: N il activity.: N on growth: N oanisation: N astructure: N mentation: N	Expansi Fores [ Fisher Wetto	on of fourism: stry practices: Deforestation: ries practices: and drainage: Erosion: Overgrazing: on of species:	N e) N N N N N N N N N N N N N N N N N N N	cplotation of species: NOI spills: NOI spi
Main human ac Alternative la Total populati Indigenous popu	nd use: on size:				

RU029	More-u				
IUCN: 2	Adm. r	e <b>aion:</b> Ne	enetsk Autonomus	Republik	
Area (ha):		ation:	68° 20' 00" N	60° 00' 00" E	
Ramsar: Other: Relationship t	o other conventions	MAB:		World Heritag	ge:
•		,			d Natural Resources
Habitat Geographic reg Ecological func					
Marine:	Freshwater:	Fore	eft.	Talga:	Tundia:
Island:  Fjord:  Other:	River:  Lake:  Stream:  Welland:	н	oniferous:  Birch:  Mixed:  igh Brush:  Low Brush:	Mountain: Other:	☐ Moist: ☐ Wet: ☐ Alpine: ☐
Other); Important spe- Red Data B	ook:				
Antropogen			M=Medium / L=Lo	w / N=Not spe	cified):
Industrial devo Mineral or o Populatio Urb	elopment: N il activity.: N on growth: N oanisation: N astructure: N mentation: N	Exp F V	cansion of tourism: Forestry practices: Deforestation: isheries practices: Vetland drainage: Erosion: Overgrazing: luction of species:	X	explotation of species:  Oil spills:  Ocean dumping:  Noise:  Airborne contaminants:  aterborne contaminants:  Nuclear waste:  Toxic waste:
Main human ac Alternative la Total populati Indigenous popu	nd use: on size:				

RU030	Popigaisky				
IUCN: 2	Adm. r	egion: ??? Au	ıtonomus Re	aion	
Area (ha):		•	00' 00" N	110° 00' 00" E	
Ramsar: Other:	o other conventions	MAB:		World Heritage	:
Ownership: ?  Management: Rus	sian Federation, Mir U. Karbainov, Taimy	nistry for Prote	ction of the	Environment and I	Natural Resources
Habitat  Geographic reg Ecological funct					
Marine:	Freshwater:	Forest		Talga	Tundia
Island:  Fjord:  Other:	River:  Lake:  Stream:  Welland;  Wetland:	M High E	Birch: 🔲 lixed: 🔲	Mountain:  Other:	Moist:  Wet:  Alpine:
Other):	Wellana.				
Important spec Red Data Bo Locally rare spec	ook:				
Antropogen	pressure (	H=High / M=N	/ledium / L=l	ow / N=Not specif	ied):
Industrial deve Mineral or oi Populatio Urb	elopment: N Il activity.: N on growth: N canisation: N castructure: N nentation: N	Expansion Fores  Fisher  Wetla	on of tourism try practices Deforestation ies practices and drainage Erosior Overgrazing on of species	1: N 5: N 1: N 5: N 6: N 6: N Wate	explotation of species: NOII spills: NOII sp
Main human ac Alternative la Total populatio Indigenous popul	nd use: on size:				

RU031	Novosibirskie os	strova			
IUCN: 1	Adm. re	gion: Re	epublik of Sakha		
Area (ha):	Loc	ation:	75° 30' 00" N	140° 00' 00" E	
Ramsar: Other:		MAB:		World Heritage:	
•	o other conventions:				
•	ife (Fedral) sian Federation, Min if. N.Soiomonov (Yak	•		nvironment and No	atural Resources
Habitat					
Geographic reg Ecological funct					
Marine:	Freshwaler:	For	est	(diga:	Tundros
Island:  Fjord:  Other:	River:   Lake:   Stream:   Welland:		Coniferous:   Birch:   Mixed:   High Brush:   Low Brush:	Mountain:  Other:	Moist: 📑 Wet: 🗔 Alpine: 🔲
Other):	Wetland: 🗌		<b>-</b>		
Important spec Red Data Bo Locally rare spec	ook:		,		
Antropogen	pressure (	l≃High /	/ M=Medium / L=Lo	w / N=Not specifle	d):
			pansion of tourism: Forestry practices: Deforestation: Fisheries practices:	N 9x N N N N N N N N N N N N N N N N N N	plotation of species: NOII spills: NOIS NOIS NOIS NOIS NOIS NOIS NOIS NOIS
	astructure: N		Wetland drainage:	······································	oome contaminants: N
Habitat fragn	(********		Erosion:	Linia.	porne contaminants: N
Motorized ve	ohicle use: N Other: N	Intro	Overgrazing: duction of species:	N	Nuclear waste: N
Main human ac Alternative la Total populatio Indigenous popul	tivities: nd use: on size:		.,	· umud	Vain

#### 7 Sweden

SE		Proposed A	Areas, March 1996
number	Area name	IUCN	Area (hectare)
SE001	Tavvavuoma National Park	2	40.000
SE002	Kirunafjällens National Park	2	440.000
SE003	Expansion of Sarek National Park (two parts)	2	22.000
SE004	Expansion of Padjelanta National Park	2	23.000
4	Areas		525.000

*****			al Park				
IUCN: 2 Area (ha): 400		n. region: No Location:	orbotten County 68°40'00" N	20° 30'00'	'E		
Ramsar: Yes Other: Relationship to	other convention	MAB:		World Heril	age:		
Ownership: Star Management: Fas Author: Swe		ntal Protecti	on Agency				
Habitat Geographic regi Ecological functi	-		oals mires, extreme	ely rich birdlif	e		
Marine:	Freshwater	For	96f;	Taiga:		Tundra	
Island:  Fjord:  Other:  Other):	River: Lake: Stream: Wetland: Wetland:	] ]	Coniferous:  Birch:  Mixed:  digh Brush:  Low Brush:	Mountain: Other:		Moist: ☐ Wet: ☑ Alpine: ☑	
Important spec Red Data Bo Locally rare spec	ok: Falco rustico	-	chrysaetus, Circus nius phaeopus	cyaneus, Nyo	ctea scai	ndiaca	
Antropogen i	oressure	(H=High /	M=Medium / L=Lo	ow / N=Not sp	oecified):		
	n growth: N anisation: N structure: N	j	pansion of tourism: Forestry practices: Deforestation: Fisheries practices: Wetland drainage: Erosion:	N	Airbo	otation of species: Oil spills: Ocean dumping: Noise: rne contaminants: rne contaminants:	N N N

Alternative land use: No plans Total population size: None

**Indigenous populations:** No aboriginal population within the proposed area.

IUCN: 2 Area (ha): 440000		gion: Norbotten	•	· 50' 00" E	
Ramsar: Other: Relationship to ot	ı	MAB:		ld Heritage:	
Ownership: State of Management: Fasterh Author: Swedis	•	Protection Agen	су		
labitat			<del>-</del>		
Geographic region Ecological function	=	•	blished hiking t	ourism	
larine: 📲 💮 🖠	reshwater:	Forest	Taiga		lundra:
Island:  Fjord:  Other:	River:  Lake:  Stream:	Coniferous Birch Mixed	n: 🛛 I: 🔲	untain: 🛚 🖂 Other: 🔲	Moist: ☐ Wet: ☐ Alpine: ☒
•	Welfand:	High Brush Low Brus	_		
ther):	Wetland:				
Locally rare species	s: : Lutra lutra, aulo : ; fabalis				peregrinus, Anser
Important species Red Data Book Locally rare species Antropogen pre	s: : Lutra lutra, aulo : : fabalis <b>essure</b> (H	=High / M=Medi	um / L=Low / N	=Not specified):	
Important species Red Data Book Locally rare species Antropogen pro Industrial develop	s: : Lutra lutra, aulo : : fabalis <b>essure</b> (H oment: N	=High / M=Medi	um / L=Low / N f tourism: M	=Not specified):	tation of species:
Important species Red Data Book Locally rare species Antropogen pro Industrial develop Mineral or oil ac	essure (H	=High / M=Medi Expansion o Forestry p	um / L=Low / N f tourism: M	=Not specified): explo	
Important species Red Data Book: Locally rare species  Antropogen pro Industrial develop Mineral or oil ac Population g	essure (H	=High / M=Medi Expansion o Forestry p	um / L=Low / N f tourism: M oractices: N restation: N	=Not specified): explo	tation of species: Oil spills:
Important species Red Data Book Locally rare species  Antropogen pro Industrial develop Mineral or oil ac Population g Urbani Infrastr	essure  chivity.: N prowth: N prowth: N proture: M	=High / M=Medi Expansion o Forestry p Defo	um / L=Low / N f tourism: M practices: N restation: N practices: N drainage: N	=Not specified): explo Airbori	tation of species: Oil spills: Ocean dumping: Noise: ne contaminants:
Important species Red Data Book Locally rare species  Antropogen pro Industrial develop Mineral or oil ac Population g Urbani	estion:    Continue   Continue	=High / M=Medi Expansion o Forestry p Defo Fisheries p Wetland o	um / L=Low / N f tourism: M practices: N restation: N practices: N	=Not specified): explo Airbori	tation of species: Oil spills: Ocean dumping: Noise:

Total population size: Indigenous populations:

IUCN: 2	Adm. region: No	orbotten County		
Area (ha): 83000	Location:	67°20'00" N	17°30'00" E	
Ramsar: Partly Other:	MAB:		World Heritage: Yes	S
Relationship to other co	nventions:		•	
Ownership: State				
Management: Fasterhetsve				
Author: Swedish Envi	ronmental Protectio	on Agency		
Habitat				
Geographic region: North	_	_	-	
Ecological function: Alpin	e landscape, strong	g wilderness charc	icter, wetland	
Varine: Freshw	aler: Fore	<b>(6)</b>	Talga	Tundra
		oniferous: 🔲	Mountain: 🗵	Moist: 🔲
	ıke: 🛚	Birch: 🗵	Other:	Wet: 🔲
Other: L. Stre	am: ∐ 	Mixed:		Alpine: 🖂
	L H	igh Brush: 🖂		
Welten	u.	_		
	ınd: 🛛	Low Brush:		
	***************************************	_		
<b>Wetld</b> <b>Other):</b> Alpine	ınd: 🛛	_		
Wetle	alces	Low Brush: 🔲	cygnus	
Wetle Other): Alpine Important species: Alces	alces	Low Brush: 🔲	cygnus	
Wetle Other): Alpine Important species: Alces Red Data Book: Ursus	alces arctos, Gulo gulo, F	Low Brush:  Felis lynx, Cygnus c	:ygnus :w / N=Not specified)	:
Wetle Other): Alpine Important species: Alces Red Data Book: Ursus Locally rare species: Antropogen pressu	alces arctos, Gulo gulo, F	Felis lynx, Cygnus c	w / N=Not specified)	r
Wetle Other): Alpine Important species: Alces Red Data Book: Ursus Locally rare species:	alces arctos, Gulo gulo, F  (H=High /  N Exp	Low Brush:  Felis lynx, Cygnus c	w / N=Not specified)	
Wetle Dither): Alpine Important species: Alces Red Data Book: Ursus Locally rare species: Antropogen pressul Industrial development:	alces arctos, Gulo gulo, F  (H=High / N Exp	Felis lynx, Cygnus o  M=Medium / L=Lo  ansion of tourism:	w / N=Not specified)	lotation of species:
Wetle Dither): Alpine Important species: Alces Red Data Book: Ursus Locally rare species:  Antropogen pressul Industrial development: Mineral or oil activity.: Population growth: Urbanisation:	alces arctos, Gulo gulo, f  (H=High / N Exp N F	Felis lynx, Cygnus of M=Medium / L=Lo ansion of tourism: Forestry practices: Deforestation: isheries practices:	w / N=Not specified)  N exp  N  N	lotation of species: OII spills: Ocean dumping: Noise:
Wetle  Important species: Alces Red Data Book: Ursus Locally rare species:  Antropogen pressul  Industrial development: Mineral or oil activity.: Population growth: Urbanisation: Infrastructure:	alces arctos, Gulo gulo, F  (H=High /  N Exp  N F  N F  N F	M=Medium / L=Lo ansion of tourism: Deforestation: isheries practices: Vetland drainage:	N exp N N N N N N N L N Airbo	Old species: Under the contaminants: Under the contaminant contami
Wetle  Ther): Alpine  Important species: Alces Red Data Book: Ursus Locally rare species:  Antropogen pressul  Industrial development: Mineral or oil activity.: Population growth: Urbanisation: Infrastructure: Habitat fragmentation:	alces arctos, Gulo gulo, F  (H=High /  N Exp  N F  N F  N F	M=Medium / L=Lo ansion of tourism: forestry practices: Deforestation: isheries practices: Vetland drainage: Erosion:	N exp N N N N N N N N N N N N N N N N N N N	Old spills: 1 Ocean dumping: 1 Noise: 1 One contaminants: 1 One contaminants: 1
Wetle  Important species: Alces Red Data Book: Ursus Locally rare species:  Antropogen pressul  Industrial development: Mineral or oil activity.: Population growth: Urbanisation: Infrastructure:	alces arctos, Gulo gulo, F  (H=High /  N Exp  N F  N F  N F  N F	M=Medium / L=Lo ansion of tourism: Deforestation: isheries practices: Vetland drainage:	N exp N N N N N N N L N Airbo	Old species: Old spills: Ocean dumping: Noise: Ome contaminants:

Indigenous populations:

IUCN: 2	A des	ocion: Ne	orbotton Countr			
Area (ha): 23000		egion: No cation:	orbotten County 67°20'00" N	16°40'	M' F	
Ramsar:	LOC	MAB:	07 20 00 11		eritage: Yes	
Other:						
Relationship to other	er conventions	:				
Ownership: State						
Management: Fastighe	tsverket					
Author: Swedish	Environmenta	l Protectio	on Agency			
Habitat						
Geographic region: N	<del>-</del>	ountain i	region			
Ecological function: A	Alpine heaths					
Marine: Fré	shwaler:	Fore	est;	Taiga:	Jundra:	
Island:	River:	c	oniferous:	Mounta	in: 🔲 Moist: 🗆	7
Fiord:	Lake: 🖾	•	Birch:	Oth		j
Other:	Stream:		Mixed:		Alpine:	₫
· · · · · · · · · · · · · · · · · · ·		<sub>8</sub> Н	ligh Brush: 🔲		/p	
<b>XX</b>	rland:		Low Brush: 🖂			
V	Vetland: 🗌					
Other): Glacie	r, Alpine					
Important species:						
Red Data Book:						
Locally rare species:						
Antropogen pres	ecura					
Ailliopogeti pies	,,,,,,,,	H=High /	M=Medium / L=Lo	)W / N≡NO	r specinea):	*******
Industrial developm	nent: N	-	ansion of tourism:	N. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	explotation of spec	ies: L
Mineral or oil activ	vity.: N	ļ	orestry practices:	N.	Oil sp	oills: <u>N</u>
Population gro	XCA.TA		Deforestation:	knownes	Ocean dump	
Urbanisa	) miner		isheries practices:	CARCINE.		ise: L
1 d 1	Name of the last o	V	Vetland drainage:		Airborne contamina	januara.
infrastruc			Erosion:	N.	Waterborne contamino	ınts: 🔃
Habitat fragmenta	parameter .					
Habitat fragmenta Motorized vehicle	parameter .		Overgrazing: luction of species:		Nuclear wa Toxic wa	

Total population size: No population. Indigenous populations: No ind. population

#### 8 USA (Alaska)

US Proposed Areas, March 1996

numberArea nameIUCNArea (hectare)US001Squirrel River.22.500

US002 Beringian Heritage International Park.

2Areas 22.500

**Grand Total:** 31,744.061

US001	Squirrel River.					
IUCN: Area (ha): 225	Adm. re	egion: ation: 067° 00' 00" 1	N 161° 00	' 00" W		
Ramsar: Other: Relationship t	o other conventions:	MAB:	World I	Heritage:		
Management: Wil	d and Scenic Rivers .	M (land) and State o Act, and Alaska Land I Management, Kobl	is Act.		avigable).	
Habitat				<u>_</u>		
	tion: Watershed impo	Indra and Alaska Bor ortant for anadromou nusual for this latitude	ıs fish; on carib	oou migration	route; presence o	of
Marine:	Freshwater:	Forest	Talga:		Tundra	
Island: Fjord: Other:	River:  Lake:  Stream:  Welland:  Wetland:	Coniferous: Birch: Mixed: High Brush: Low Brush:	Mount Ot	ain: 🗌 her: 🗍	Moist: ⊠ Wet: ⊠ Alpine: ⊠	
Other):	Wellding:					
Red Data Bo	_	grayling, moose, carib	oou.			
Antropogen	pressure (	l=High / <b>M=M</b> edium ,	/ L=Low / N=N	ot specified):		
Industrial deve	***************************************	Expansion of tou	31443414	explo	tation of species:	,,,,,,,,
Mineral or of	- 3	Forestry pract Deforesto	year-		Oil spills:	
•	on growth: N canisation: N	Deroresto Fisheries prac	Since Since	'	Ocean dumping: Noise:	N
	astructure: N	Wetland drain		Airbor	ne contaminants:	******
Habitat fragn	houses		osion: N		ne contaminants:	Secretar
Motorized ve	; he manner;	Overgro	ızing: N		Nuclear waste:	N
	Other: N	Introduction of spe	cies: N		Toxic waste:	N

Main human activities: Subsistence hunting; recreational hunting and fishing.

Alternative land use: Highway/utility transportation corridor is possible over the long term.

Total population size: None within area; 700-800 people within 100 mile radius.

Indigenous populations: None in area; closest are Inupiat,

US002	Beringian Herita	ge Internati	onal Park.		
IUCN:	Adm. reç	<b>jion:</b> U.S. Nation	nal Park Servi	ce, Alaska Regio	on
Area (ha):	Loca	lion: 65° 40	00" N 100" N	67° 00' 00" W	
-	No other conventions: 5./Russian Environment	<b>1AB:</b> al Agreement.		Vorld Heritage:	
Ownership: Management: Author:		Ü			
Habitat					<del></del>
Geographic reg	<b>gion:</b> Unknown until spe	ecific areas are	e selected for	inclusion.	
Ecological func	tion: To promote and p about the history distrubition of pla areas of scenic a	of the earth a nts and anima	nd evolution (	of flora and fau	
Marine:	Freshwater:	Forest	Tal	ga	Tundra:
Island: Fjord: Other:	River:  Lake:  Stream:  Wetland:  Wetland:	Coniferou Bird Mixe High Brus Low Bru	ch:	Mountain:  Other:	Moist: □ Wet: □ Alpine: □
Other):	Welldid.				
Important spe Red Data B Locally rare spe	ook:				
Antropogen	pressure (H:	:High / M≃Mec	dium / L=Low ,	/ N=Not specifie	d):
Url Infr Habitat frag	- '''''''	Defe Fisheries Wetland	of tourism:  practices:  practices:  practices:  drainage:  Erosion:  vergrazing:  of species:	N N N N Mater	oil spills: N Ocean dumping: N Noise: N borne contaminants: N Nuclear waste: N Toxic waste: N
Alternative la Total populati	i <b>on size:</b> ı <b>lations:</b> Siberian Yupik,	. Inupiat, Chuk	chi. All three	Ü	lved in reindeer herding be maintained.

#### LITERATURE

#### General

Conservation of Arctic Flora and Fauna (CAFF), 1994. The State of Protected Areas in the Circumpolar Arctic 1994. CAFF Habitat Conservation Report No. 1. Directorate for Nature Management. Trondheim, Norway. 163 pp.

Conservation of Arctic Flora and Fauna (CAFF), 1995. Co-operative Implementation Strategy for the Convention on Biological Diversity in the Arctic Region. CAFF Biodiversity Task Force. Ottawa. 31 pp. (Draft as of August, 1995).

Conservation of Arctic Flora and Fauna (CAFF), 1996. Gaps in Habitat Protection in the Circumpolar Arctic: A Preliminary Analysis. CAFF Habitat Conservation Report No. 5. Ministry of Environmental Protection and Natural Resources of the Russian Federation, Moscow and World Conservation Monitoring Centre, Cambridge. 31 pp. 3 maps.

Great Barrier Reef Marine Park Authority, the World Bank, the World Conservation Union (IUCN), 1995. A Global Representative System of Marine Protected Areas. Volume I: Antarctic, Arctic, Mediterranean, Northwest Atlantic, Northeast Atlantic and Baltic. Washington D.C. USA 219 pp. 6 maps.

IUCN Commission on National Parks And Protected Areas, 1994. Parks for Life - Action Plan for protected Areas in Europe. IUCN. Gland, Switzerland and Cambridge, UK. 154 pp.

Kelleher, G. & Kenchington, R. 1992. Guidelines for Establishing Marine Protected Areas. A Marine Conservation and Development Report. IUCN. Gland, Switzerland. 79 pp.

McNeely, J.A. et al. (eds). 1994. Protecting Nature: Regional Review of Protected Areas. IUCN. Gland, Switzerland and Cambridge, UK. 402 pp.

Prokosch, P. 1995. *The Barents Sea International Park - More than a Vision?* Presentation by Peter Prokosch, WWF Arctic Co-ordinator, at the Working Meeting of the Norwegian MAB Committee for Biosphere Reserves in Norway, Sundvollen, 15 and 16 March 1995

Thorsell, J.W. (Ed) 1990. Parks on the Borderline: Experience in Transfrontier Conservation. IUCN. Gland, Switzerland and Cambridge, UK. 98 pp.

#### Canada

Government of Canada. 1991. The State of Canada's Environment. Ottawa.

Beckmann, L. 1994. *Marine Conservation in the Canadian Arctic*. In: Northern Perspectives. Vol. 22. No. 2-3. Canadian Arctic resources Committee. Ottawa. 7 pp.

#### Finland

The Finnish Forest and Park Service. 1995. The Northern Lapland District for Wilderness Management. Booklet. Ivalo, Finland.

#### Norway

Directorate for Nature Management. 1995. New Protected Areas in the Norwegian Arctic. Concrete Proposals  $> 10 \text{ km}^2$  Trondheim, Norway. 93 pp. 29 maps. (Working Paper).

Miljøverndepartementet. 1992. Ny landsplan for nasjonalparker og andre større verneområder i Norge. Stortingsmelding nr. 62 (1991-92). Oslo. 133 pp.

Miljøverndepartementet. 1995. *Om miljøvern på Svalbard*. Stortingsmelding nr. 22 (1994-95). Oslo. 91 pp.

#### Sweden

Naturvårdsverket. 1989. Nationalparksplan for Sverige. Solna, Sweden. 126 pp.

Swedish Environmental Protection Agency. 1995. The Lapponian World Heritage Area: Precious Nature - Saami Culture. For inclusion in the World Heritage List - Natural Property. Stockholm. 6 pp.

#### Russia

Krever, V. et al (Eds) 1994. Conserving Russia's Biological Diversity: An Analytical Framework and Initial Investment Portfolio. World Wildlife Fund and Ministry of Environmental Protection and Natural Resources. Washington and Moscow. 207 pp.

#### APPENDIX I

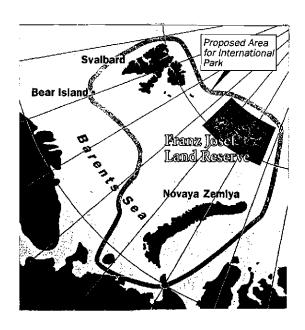
#### NGO PROPOSALS ON MARINE PROTECTED AREAS

NGOs in the Arctic nations are actively promoting the conservation of Arctic ecosystems and several organizations are cooperating in this work. The NGOs point out serious threats to the Arctic environment and put forward recommendations for action to meet these threats. They support an international system of large-scale protected ecosystems, in terrestrial as well as marine areas, and point out that marine areas are least protected by existing systems. See Annex I in CAFF Habitat Conservation Report No. 1 (1994). A summary of the NGO proposals on marine protected areas is given here (IUCN 1995).

The following areas have been identified as priorities:

#### "The Barents Sea International park":

Norwegian NGOs have proposed a plan for an international park in the Barents Sea to secure the last great wilderness in Europe. The proposal comprises Bear Island, Svalbard, Novaja Semlja, Frans Josefs Land and the sea area between these islands. According to the NGOs, this area is one of the most productive in the Arctic. It is an important growing and feeding area for the rich stocks of fish farther south. In the summer, there are probably 13-15 million seabirds in the area. Some 55.000 whales live here, as do 1.2 million seals and several thousand polar bears. The park should have the proposed size to encompass the whole ecosystem. The NGOs emphasize that the protected area must include the important biological processes taking place where ice meets sea. It must also cover the seasonal fluctuations of the ice. Oil and gas exploration and development, increased marine traffic through the area, and dumping of nuclear wastes are serious threats to the environment in the Barents Sea.



#### Beringia Heritage International Park:

Formation of an international park along the Bering Land Bridge was endorsed by the president of the U.S. and Russia at their 1990 and 1992 Summits. The existing Bering Land Bridge National Preserve, Cape Krustenstern National Monument, Noatak National Preserved, and Kobuk Valley National Monument will make up the U.S. contribution, while a new ethnic park has been proposed on the Chukotsk Peninsula in Russia to protected a shared cultural and natural heritage. The marine and nearshore environments of the Bering Strait serve as an international crossroad for wildlife and indigenous people as well as being the most biologically productive ecosystems in the region. The area is a treasure trove for world paleoecology, anthropology, archeology, and history. Member nations of the IUCN passed a resolution in February 1988 urging the two nations to designate this rich and diverse environment as a World Heritage Site. (Figure in CAFF Habitat Conservation Report No. 1)

#### "Arctic Ring of Life":

International Marine Biocultural Reserve: This proposal encompasses the dynamic and productive region shoreward of the permanent Arctic ice cap or the zone of leads of open water and polynyas beyond. This environment provides critical habitat for feeding, staging, resting, reproduction and migration of birds and marine mammals. The polar ice supports the basis of the arctic marine food web that are the foundation for rich populations of fish, marine birds and mammals that dwell along the ice edge. The lead system has been used for thousands of years by native peoples of the Arctic for access and as hunting areas for essential subsistence resources. The Arctic Ring of Life is particularly vulnerable to large-scale industrial activity resulting from oil and gas development, mining, shipping, military operations, nuclear-powered transportation and nuclear waste disposal. NGOs have proposed the establishment of a biocultural marine reserve because case-by-case consideration of mitigating measures for development activities is falling short of the extent of protection that is warranted for the Arctic Ring of Life. According to the NGOs, there should be a full exploration and consideration of the variety of tools available for protecting the Arctic Ring of Life. (Figure in CAFF Habitat Conservation Report No. 1)

(Text from "A Global Representative System of Marine Protected Areas" IUCN et al 1995)

#### APPENDIX II

#### **BirdLife International: IMPORTANT BIRD AREAS (IBA) IN THE ARCTIC**

BirdLife International, founded in 1922 under its original name of the International Council for Bird Preservation, is a global conservation federation with a worldwide network of Partner organizations, Representatives and committed individuals. BirdLife seeks to conserve all bird species on earth and their habitats and, through this it works for the world's biological diversity. It recognizes that the problems affecting birds, their habitats and our global environment are inseparably linked with social, economic and cultural factors and that these can only be resolved if human societies function in an ecologically sustainable manner and if the needs, welfare and aspirations of people form an integral part of all conservation action.

Birds are a uniquely valuable focus: they are sensitive indicators of biological richness and environmental trends and fulfil many key ecological functions; they contribute greatly to our understanding of natural processes; they are an important economic resource; and they have inspired and delighted people of many cultures for centuries, which makes them excellent ambassadors for the promotion of conservation awareness and international collaboration.

BirdLife International pursues a programme of scientific research and analysis to identify and monitor worldwide the most threatened bird species and the most critical sites for the conservation of avian diversity; advocacy and policy development to promote the conservation of birds and biodiversity through sustainability in the use of all natural resources; field action and country conservation programmes, ranging from community-based land use and management projects to species recovery programmes benefiting both wildlife and humans; and network and capacity building to expand and strengthen the global partnership of global conservation organizations and to promote worldwide interest in the conservation of birds and the environment.

One important BirdLife International programme is the Important Bird Areas (IBA) Programme which seeks to use birds to identify, document and protect sites of critical significance for biodiversity conservation. IBAs are selected such that, taken together, they form a network throughout the species' biogeographic distributions. This network may be considered as a minimum essential to ensure the survival of these species across their ranges should remaining habitat elsewhere be lost through anthropogenic, or other, modification. These sites may include the best examples of the species' natural habitat, in terms of distinctively high numbers/densities (particularly in habitats already much degraded) or 'typical examples' (particularly in habitats as yet little modified) but because all are, or may increasingly become, refuges, the consequences of the loss of any one of them may be disproportionately large.

All IBAs are places of international significance for the conservation of birds at the global, regional or sub-regional level and are practical tools for conservation. Vigorous protection of the most critical sites is one important approach to conservation and many bird species may be effectively conserved by this means.

IBAs are carefully identified on the basis of the bird numbers and species complements they hold using standardized, agreed criteria applied with common sense. Ideally, each site is large enough to support self-sustaining populations of as many of the species as possible for which it was identified or, in the case of migrants, provide their requirements for the duration of their presence. Importantly IBAs are amenable to conservation and, as far as possible, delimitable from surrounding areas. While sites are selected using scientifically defensible, quantitative criteria, the IBA concept is a pragmatic one. Thus, the existing protected area network is taken fully into consideration and will, in many cases, form the backbone of the network with additional sites proposed to fill in the gaps.

Many bird species are, however, not amenable to conservation through a sites-based approach and require different treatment. For others, the sites-based approach needs to be combined with conservation measures in the wider environment. IBAs should therefore form part of a wider, integrated approach to conservation that embraces sites, species and habitat protection.

The publication of *Important Bird Areas* in Europe (Grimmett and Jones 1989) represented a major contribution to the realization of a bird conservation strategy for Europe. This book formed the basis of the European IBA Programme, which started in 1990 with the aim of enhancing the conservation status of all European IBAs. Within the Arctic region 230 IBAs were identified and described in this publication. These are shown on accompanying map and details of name, location and area given in the tables. See next pages.

Since the publication of *Important Bird Areas in Europe* a considerable amount of new data has become available. BirdLife has completed and published a revision of the conservation status of Europe's birds in *Birds in Europe: their conservation status* (Tucker and Heath 1994) and a revised checklist of Globally Threatened Species (*Collar et al* 1994). Also updated information on migrating and wintering waterfowl has been published by the International Waterfowl and wetlands Research Bureau (*Rose and Scott 1994*). Additionally amended criteria have been produced as described in detail in CAFF Habitat Conservation Report No. 4. All these data will be incorporated into the IBA Programme Europe wide. The review of the inventory was initiated in 1994 and will culminate in a revised publication in 1998. As part of the review further data will be gathered, and subsequently several new IBAs identified within the Arctic region, particularly Arctic European Russia. In North America and Canada the IBA Programme was initiated in 1996. The inventory of IBAs, including the Arctic region will be complete by the year 2000. Important international sites will be identified by this process and be available for incorporatation in the Circumpolar Protected Areas Network. Similarly in Asian Russia, the IBA Programme will be underway in the near future.

It is important to recognize that the identification of sites is a dynamic process, with more field work and increased data gathering efforts our knowledge of sites and species populations will improve. Also the status of species and their habitats will change over time. It is thus necessary to include these sites and changes in revised inventories and site protection programmes.

In Europe, the presence of a site-orientated conservation agenda has proved a catalyst for a wide range of action. One of the most effective ways to ensure the long-term conservation of IBAs is to provide statutory protection for them. BirdLife Partners are therefore working together with national and regional governments to promote the designation of IBAs at the highest possible level.

#### References

Collar, N. J., Crosby, M. J. and Stattersfield, A. J. (1994). Birds to watch 2: the world list of threatened birds. Cambridge, U.K.: BirdLife International (BirdLife Conservation Series no. 4).

Grimmett, R. F. A. and Jones, T. A. (1989) *Important Bird Areas in Europe*. International Council for Bird Preservation. (Techn. Publ. no. 9).

Rose, P. M. and Scott, D. A. (1994) Waterfowl population estimates. Slimbridge, U. K.: International Waterfowl and Wetlands Research Bureau (Spec. Publ. 29).

Tucker, G. M. and Heath, M. F. (1994) Birds in Europe: their conservation status. Cambridge, U.K.: BirdLife International (BirdLife Conservation Series no. 4).

#### Finland

Site Name	IBA code	Central Co-or	Central Co-ordinates		
Koitilaiskaira Lätäseno	FI033 FI002	67°45'N 68°34'N	27°15′E 22°19′E	Area (ha) 34400 26000	
Sammuttijänkä	FI001	69°30'N	27°30'E	100000	

#### Greenland

Site Name	IBA code	Central Co	Central Co-ordinates		
Aarrussaq (Hvalø)	GL049	72°40'N	56°18'W		
Appaarsuit (Hakluyt Ø)	GL060	77°25'N	72°37'W	_	
Appalersalik (Horse Head)	GL052	73°37'N	57°1'W	300	
Apparsuit (Agparssuit or Kap Shackleton)	GL054	73°46'N	56°45'W	248	
Appat (Saunders Ø)	GL058	76°34'N	70°3'W		
Appat Appai	GL056	76°4'N	68°25'W	_	
Appat, Ritenbenk	GL032	69°48'N	51°13'W	_	
Appatsiaat (Agpatsiait),	GL040	72°42'N	55°49'W	_	
island of Qaersorssuaq	OLU-O	12 7211	33 47 11		
Aqajarua - Sullorsuaq	GL033	69°42'N	52°15'W	30000	
(Mudderbugten and Kvandalen)	CLC55	05 1211	32 13	30000	
Assissut (Braendvinsskaerene)	GL034	69°4'N	53°31'W	_	
near Kronprinsens England	GEOS.	0, 111	33 31		
Avannarleq (Nordø)	GL048	72°45'N	56°25'W	50	
Booth Sund area	GL063	76°52'N	70°49'W	1200	
Danmarks Havn and surrounding area,	GL009	76°49′N	18°49'W	4000	
including Skibsso	GEOO	70 1711	10 17 11	4000	
Eqalummiut Nunaat - Nassuttuup Nunaa	GL026	67°25'N	51°0'W	500000	
Flade Bugt, Germania Land	GL008	77°15'N	19°45'W	10000	
Foxfaldet, Ilorput (Arsuk Fjord)	GL000	61°19'N	48°0'W	10000	
Hochstetter Forland	GL015	75°27′N	20°0'W	140000	
Hurry Fjord including Fame Øer and	GL003 GL014	70°52'N	20°30'W	25000	
Kap Stewart, Jameson Land	GLUIT	70 32 14	22 JU 11	25000	
Hvalrosodden - Slamodden, Germania Land	GL007	76°49'N	20°0'W	10000	
Igannaq (Dalrymple Rock)	GL064	76°28'N	70°13'W	15	
Ikkattoq tamatumalu kitaaniittut Qeqertat	GL004 GL020	62°43'N	50°10'W	35000	
(Ikkattoq Fjord and islands)	GE020	02 4514	30 10 11	33000	
Issortussoq (Ivsortussoq)	GL042	72°15'N	55°43'W	_	
Itinnera	GL025	67°0'N	52°19'W	_	
Kap Brewster and Volquart Boon's Coast,	GL023	70°10'N	23°22'W	1000	
Scoresbysund	GLOIT	70 1011	25 22 11	1000	
Kilen	GL010	81°15'N	14°0'W	3000	
Kingittoq Apparsuit (Kingigtoq Agparssuit),	GL041	72°39'N	55°52'W	-	
island of Qaersorssuaq	GL041	72 3714	33 32 11	_	
Kingittuarsuk (Kingigtuarsuk) II	GL046	72°55'N	56°37'W	_	
Kingittuarsuk (Kingigtuarsuk) II	GL047	73°15'N	56°49'W	5	
Kippaku (Kipako)	GL053	73°43'N	56°45'W	15	
Kitsissorsuit (Ederfugleøer)	GL035	74°1'N	57°49'W	150	
Kitsissunnguit (Gronne Ejland)	GL030	68°49'N	51°49'W	16000	
Kitsissut (Carey Øer)	GL059	76°35'N	72°0'W	-	
Kitsissut Avalliit	GL018	60°45'N	48°30'W	8000	
(Ydre Kitsissut or Ydre Kitsigsut)	GLOID	00 4511	40 50 11	0000	
Kjoveland	GL013	71°22'N	24°47'W	20000	
Kuannersuit Kuussuat	GL036	69°40'N	53°16'W	4500	
(Kuannesuit at Sorte Hak, Disko)	QL050	07 40 11	35 10 11	1500	
Liverpool Land coast and Scoresbysund	GL016	71°0'N	21°40'W	60000	
Lyon Øer	GL061	77°28'N	66°42'W	15	
Myggbukta, Hold With Hope	GL001	73°28'N	21°34'W	-	
Naternaq (Lersletten)	GL029	68°25'N	51°45'W	150000	
Nipissat, Diskofjord	GL025	69°27'N	54°13'W	100000	
Nuna masarsuttalik Jameson Land -	GL033	71°0'N	24°7'W	125000	
imiittoq kitaanittoq (Heden)	02013	,1 014	21711	125000	
Nunatsiaq (Rotten)	GL028	68°52'N	53°22'W	_	
	OLIVEO .	00 02 14	<u></u> !!	_	

Parker Snow Bugt	GL057	76°10'N	68°30'W	-
Qegertat (Schades Øer)	GL038	71°22'N	53°49'W	-
Qeqertaarsuit (Ederfugleøer)	GL065	76°30'N	70°4'W	5
Qinnguata Marraa - Kuussuaq	GL037	69°55'N	54°1 <i>6</i> ′W	6000
(Nordfjord and adjacent valley)				
Rifkol	GL027	67°58'N	53°49'W	-
River valleys entering Fleming Fjord,	GL012	71°37'N	23°7'W	20000
Jameson Land				
Saatoq (Store Fladb)	GL043	72°15'N	55°55'W	1600
Saatut (Sabine Øer)	GL062	76°3'N	64°58'W	40
Sanderson's Hope (Upernavik Apparsuit),	GL039	72°42'N	56°10'W	-
island of Qaersorssuaq				
Sarqaqdalen	GL031	70°7'N	52°10'W	10000
Sermilinnguaq	GL022	65°40'N	52°37'W	-
Shannon	GL006	75°15'N	18°30'W	-
Stordal - Moskusoksefjord - Badlanddal -	GL004	73°30'N	22°0'W	300000
Loch Fyne				
Søndre Isortoq	GL023	65°25'N	52o°10'W	_
Taateraat	GL021	66°0'N	52°33'W	_
Tasersuaq	GL024	67°0'N	51°45'W	3000
Timmiakulussuit (Tingmiakulugssuit),	GL055	72°39'N	55°45′W	-
island of Nutaarmiut				
Tobias Dal, Hold With Hope	GL003	73°45'N	21°10′W	10000
Torqussaarsuk (Torqussarssuk)	GL050	73°22′N	56°40'W	25
Torqussaq	GL051	73°22'N	56°37'W	532
Uigorluk (Lille Fladø)	GL044	72°18'N	55°58'W	<b>9</b> 6
Ørsted Dal and Coloradodal,	GL011	71°40'N	23°22'W	40000
Scoresby Land and Jameson Land				
Østersletten and Knudshoved,	GL002	73°34'N	20°30'W	15000
Hold With Hope				

#### Iceland

Site Name	IBA code	Central Co	o-ordinates	Area (ha)
Amarvatnsheidi-Tvídægra	IS033	65°0′N	20°30'W	60000
Austara Eylendid	IS034	65°45′N	19°27'W	2500
Borgarfjördur	IS023	64°30′N	22°0'W	7000
Breidafjördur	IS028	65°19′N	23°0'W	270000
Brúará-Laugarvatn	IS011	64°10′N	20°34'W	2000
Drangey	IS040	65°57'N	1 <b>9°40'W</b>	1500
Eldey	IS016	63°43'N	22°58'W	1
Eyjavatn	IS035	65°15'N	19°42'W	240
Eylendid	IS037	65°31'N	20°19′W	2550
Ferjubakkaflói-Nordur	IS024	64°36'N	21°40'W	1500
Gardskagi	IS018	64°4'N	22°42'W	600
Grímsey	IS <b>04</b> 1	66°33'N	18°0′W	700
Hjaltastadablá	IS050	65°30'N	14°19'W	2600
Hjörsey-Straumfjördur	IS025	64°31'N	22°15'W	6000
Hombjarg	IS032	66°28'N	22°24'W	1100
Hælavíkurbjarg	IS031	66°28'N	22°36'W	1000
Hólmarnir	IS043	65°39'N	18°4'W	700
Höfdavatn	IS039	65°57'N	19°27'W	800
Hörgárósar	IS038	65°48'N	18°12'W	100
Krísuvík	IS015	63°52'N	22°4'W	1200
Langanes	IS049	66°°22'N	14°31'W	3400
Laxárvogur	IS021	64°19'N	21°40′W	695
Leirárvogar	IS022	64°22'N	21°55'W	1400
Látrabjarg	IS029	65°28'N	24°30'W	2000
Lónsfjördur	IS001	64°25′N	14°40'W	2700
Löngufjörur	IS026	64°45'N	22°30'W	17000
Mývatn-Laxá	IS046	65°36'N	17°0'W	20000
Oddaflód	IS008	63°46'N	20°27'W	700
Papey	IS052	64°36'N	14°10′W	540
Pollengi	IS010	64°10'N	20°25′W	1000
Ritur	IS030	66°22′N	23°12′W	700
Safamýri	IS009	63°46'N	20°34'W	2000

Sandur-Sílalækur	IS044	65°58'N	17°31'W	500
Skardsfjördur	IS002	64°16'N	15°10'W	1050
Skoruvík	IS048	66°22'N	14°46'W	1900
Skrúdur	IS051	64°54'N	13°37'W	400
Skógar	IS036	65°42'N	19°34'W	1550
Skúmsstadavatn	IS007	63°40'N	20°30'W	800
Sog	IS013	64°10'N	21°0′W	500
Steinsmýrarflód	IS003	63°40'N	18°0'W	2100
Stokkseyri	IS012	63°52'N	21°7'W	100
Svarfadardalur	IS042	65°57'N	18°31'W	600
Thjórsárver	IS005	64°34'N	18°40'W	37500
Veidivötn	IS004	64°10'N	18°49'W	5000
Vestmannaeyjar	IS006	63°25'N	20°19'W	27500
Vestmannsvatn	IS045	65°46'N	17°19'W	500
Álftafjördur-Hamarsfjördur	IS053	64°34'N	14°30'W	3500
Álftafjördur-Hofsstadavogur	IS027	65°0'N	22°40'W	3000
Álftanes	IS020	64°4'N	22°0′W	1000
Ástjörn	IS019	64°3′N	21°57'W	25
Ósar	IS017	63°57'N	22°42'W	400
Ölfusforir	IS014	63°57'N	21°15′W	1000
Öxarfjördur	IS047	66°7′N	16°45'W	2500

#### Norway

Site Name	IBA code	<u>Central Co</u>	o-ordinates	Area (ha)
Alta-Kautokeino watercourse	NO013	69°33′N	23°37'E	30000
Anda	NO020	69°10′N	15°10'E	10
Bleiksøy	NO018	69°16'N	15°52'E	20
Ekkerøy	NO003c	70°4'N	30°10'E	160
Fuglenyken and Nykvåg	NO021	68°46′N	14°27'E	20
Gjesværstappan	NO011	71°10'N	25°19'E	720
Grunnfjorden	NO022	68°55′N	15°10'E	390
Hjelmsøy	NO012	71°4′N	24°45'E	430
Hornøy and Reinøy	NO014	70°24'N	31°10'E	200
Hovsflesa	NO023	68°22'N	14°1'E	25
Kongsøy, Helløy and Skarvholmen	NO006	70°43'N	29°30'E	280
Loppa	NO014	70°22'N	21°24'E	720
Neiden and Munkefjord	NO002	69°40'N	29°34'E	1150
Nesseby	NO003a	70°10'N	28°49'E	74
Nord Fugløy	NO015	70°16'N	20°13'E	2130
Omgangstauran	NO008	70°55'N	28°30'E	750
Røst	NO025	67°30'N	12°0'E	1500
Saltstraumen	NO026	67°15'N	14°34'E	200
Skogvoll including Skarvklakken	NO019	69°10'N	15°40'E	300
Stabbursneset	NO010	70°10'N	24°40'E	1620
Sværholtklubben	NO009	70°58'N	26°40'E	220
Syltefjordstauran	NO005	70°34'N	30°30'E	11600
Sør Fugløy	NO016	70°7'N	18°30'E	100
Sørkjosen	NO017	69°15'N	19°15'E	400
Tanamunningen	NO007	70°30'N	28°27'E	3450
Vadsøy and Vadsøysundet	NO003b	70°4'N	29°45'E	120
Varangerfjord	NO003	70°12'N	29°52'E	60000
Værøy	NO024	67°45'N	12°45'E	500
Øvre Pasvik	NO001	69°4'N	29°0'E	20000
Svalbard				
Alkefjellet	SJ005e	79°34'N	18°30'E	-
Alkhomet	SJ012	78°13′N	13°45'E	-
Austplana	SJ001m	79°46'N	11°52'E	-
Bjørnøya (Bear Island)	SJ017	74°30′N	19°0'E	-
Boheman Bird Sanctuary	SJ010	78°22'N	14°40'E	-
Casimir-Perierkammen	SJ001b	79°7′N	11°52'E	-
Daudmansöyra	SJ013	78°15'N	13°0'E	-
Dunøyane Bird Sanctuary	SJ007c	77°4'N	15°0'E	120
Flathuken	SJ001k	79°51'N	11°49'E	-

Forlandet National Park	SJ004	78°32'N	11°15'E	56700
Forlandsøyane Bird Sanctuary	SJ004a	78°19'N	11°36'E	60
Fuglehuken	SJ004c	78°52'N	10°30'E	-
Grumant	SJ011	78°13'N	15°15'E	-
Guissezholmen Bird Sanctuary	SJ001a	79°4'N	11°30'E	-
Gåsøyane Bird Sanctuary	SJ008	78°25'N	16°10'E	100
Hermansenøya Bird Sanctuary	SJ003	78°34'N	12°15'E	-
Hopen	SJ016	76°25'N	76°40'E	-
Hornbækfjellet	SJ0011	79°49'N	11°49′E	-
Hárfagrehaugen, Kongsøya	SJ005c	78°55'N	28°10'E	-
Ingeborgfjellet	SJ015	77°45'N	14°25'E	-
Isøyane Bird Sanctuary	SJ007b	77°7'N	14°48′E	30
Jan Mayen	SJ018	71°0'N	<b>9</b> °0′W	-
Klovningen	SJ001j	79°52'N	11°30'E	-
Knoffberget	SJ001e	79°22'N	10°52′E	-
Kongressfjellet	SJ009	78°31'N	15°19′E	-
Kongsfjorden Bird Sanctuary	SJ002	78°55'N	12°10′E	140
Kongshamaren	SJ001c	79°13'N	11°49′E	-
Kovalskifjella	SJ007f	77°3'N	17°18'E	_
Kvalpynten, Edgeøya	SJ006b	77°27′N	20°52'E	_
Liefdefjorden	SJ001n	79°40'N	13°0'E	-
Moffen Nature Reserve	SJ001o	80°4'N	12°45'E	_
Moseøya Bird Sanctuary	SJ001f	79°40'N	11°0'E	_
Negerpynten, Edgeyøa	SJ006a	7 <b>7°</b> 15'N	22°40'E	_
Nilsfjellet	SJ001d	79°16'N	11°33'E	-
Nissenfjella	SJ001p	79°24'N	10°51'E	-
Nordenskiöldkysten including	SJ014	77°49'N	13°49'E	-
Kapp Linn Bird Sanctuary				
North Hakluythovden, Amsterdamøya	SJ001i	79°46'N	10°48'E	-
North-east Svalbard Nature Reserve	SJ005	79°45'N	22°47'E	1555000
North-west Spitsbergen National Park	SJ001	79°37'N	12°30'E	328300
Olsholmen Bird Sanctuary	SJ007a	77°15'N	14°15'E	_
Plankeholmane Bird Sanctuary	SJ004b	78°12'N	12°°0'E	-
Retziusfjellet, Kongsøya	SJ005a	78°54'N	28°7'E	_
Rundisdammen, Kongsøya	SJ005f	78°54'N	29°6'E	_
Sjøgrenfjellet, Kongsøya	SJ005b	78°52'N	27°55'E	_
Skorpa Bird Sanctuary	SJ001g	79°40'N	11°0'E	-
Sofiekammen, Gnålberget	SJ007g	77°1'N	15°54'E	_
South Spitsbergen National Park	SJ007	77°0'N	15°°45'E	467300
South-east Svalbard Nature Reserve	SJ006	77°45'N	22°47′E	645000
South-west Amsterdamøya	SJ001h	79°45'N	10°45'E	-
Stellingfjellet	SJ007e	77°6'N	17°19'E	-
Sørkapp Bird Sanctuary	SJ007d	76°30'N	16°30'E	_
Tusenøyane, Edgeøya	SJ006c	77°4'N	22°10'E	_
Wahlbergøya (north-east)	SJ005d	79°22'N	19°49'E	-
·				

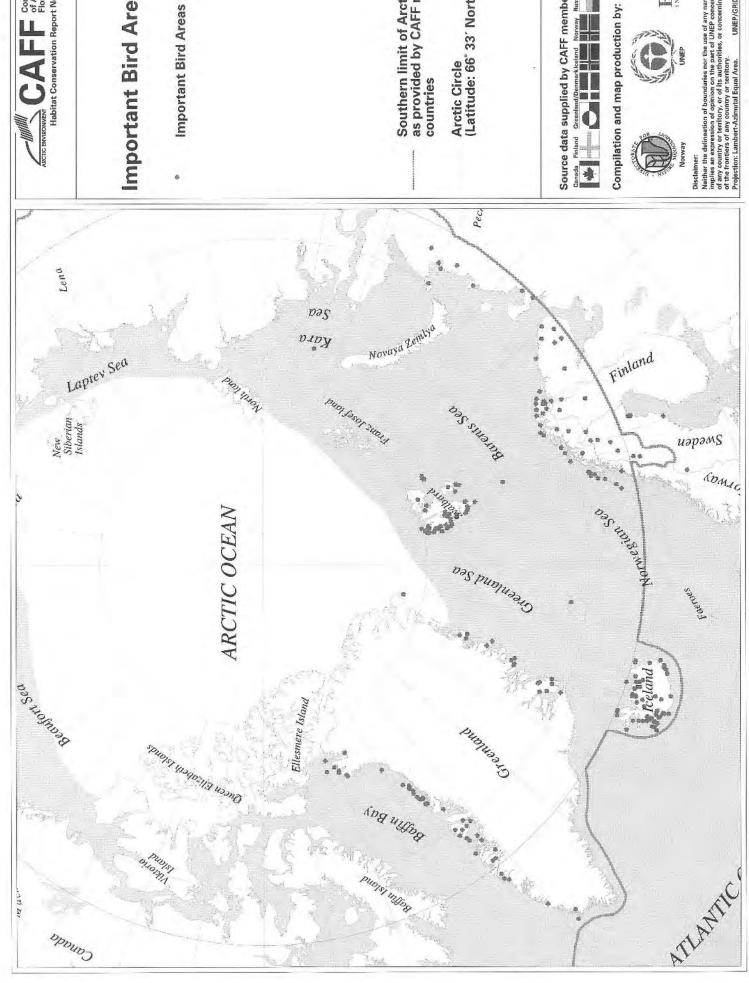
#### Russia

Site Name	IBA code	Central Co-ordinates		Area (ha)
A: II 1 D 1	DI1120	70°0'N	32°0'E	260
Ainov Islands, Pechenga	RU128			260
Chalmny-Varre, Lovozero	RU134	67°0'N	37°10′E	20000
Coastal belt of eastern Murmansk, Lovozero	RU130	68°0'N	39°0'E	260
Kandalaksha Bay	RU137	66°7'N	32°4'E	208000
Kanin Peninsula, Nenetski	RU126	66°40'N	44°40'E	500000
Khaypudyrskaya Bay	RU121	68°34'N	59°45'E	•
Lapland, Monchegorsk	RU136	67°55'N	33°0'E	161254
Middle reaches of the River Ponoy	RU133	67°0'N	39°0'E	60000
between the River Losinga & Ponoy Zakaznik	C			
River Chernaya, Bolshezemelskaya tundra	RU123	68°7'N	57°0'E	200000
Russki Zavorot Peninsula, Nenetski	RU124	68°34'N	53°0'E	50000
Seven islands, Teriberka	RU129	69°0'N	37°0'E	1000
Southern coast of Cheshskaya Guba (Bay),	RU125	66°49'N	46°30'E	-
Nenetski				
Varandeyskaya Lapta Peninsula	RU122	68°49'N	59°0'E	350000
Vashutkiny, Padimeyskiye and	RU119	68°0'N	62°0'E	25000
Khargeyskiye Ozera (Lakes) (Arkhangelsk)				

Vaygach Island	RU120	70°0'N 67°30'N	59°30'E 37°1 <b>5</b> 'E	270000
Watershed of the Rivers Iokanga and Ponoy Reka, Lovozero	RU135	6/30'N	3/ 15E	30000
Watershed of the Rivers Lumbovka and Ponov Reka, Lovozero	RU131	67°30'N	40°30′E	260

#### Sweden

Site Name	IBA code	Central Co	o-ordinates	Area (ha)
Lake Gammelstadsviken	SE028	65°37'N	22°0'E	440
Lake Laidaure	SE030	67°7'N	17°45'E	4150
Lake Persöfjärden	SE029	6 <b>5</b> °46'N	22°7'E	3350
Lake Tjälmejaure - Laisdalen Valley	SE027	66°18'N	16°1 <b>5</b> 'E	22200
Lake Annsjön	SE024	63°16'N	1 <b>2°33'E</b>	11300
Mountains of Vindelfjällen	SE026	65°54'N	15°58'E	550000
(including Lake Tärnasjön)				
Påkketan	SE032	68°5'N	20°22'E	24000
River Umeälven Delta	SE025	63°45'N	20°19'E	1150
Sjaunja	SE031	67°22'N	19°24'E	208000
Taavavuoma	SE033	68°30'N	20°42'E	28400



## CAFF Conservation of Arctic Habitat Conservation Report No. 2

# Important Bird Areas

Important Bird Areas in the Arctic

Southern limit of Arctic data as provided by CAFF member countries

Arctic Circle (Latitude: 66° 33' North)

Greenland/DenmarkIceland Norway Russia Sweden USA Source data supplied by CAFF member countries:





UNEP/GRID-Arendal March 1996. undaries nor the use of any name in the publication ion on the part of UNEP concerning the legal status of its authorities, or concerning the delimitation

### **IUCN Policy Statement on Marine Protected Areas**

#### Introduction

This statement sets out the position of the IUCN General Assembly (1988) on the role of Marine Protected Areas in the protection of and sustainable utilization of the marine environment. It derives from Resolution GA17.38 of the 17th General Assembly of IUCN adopted at San Jose, Costa Rica in February 1988. This resolution recognized that the marine environment must be managed in an integrated way if it is to be able to sustain human use in the future, without progressive degradation. Integrated management can be achieved either by establishing a series of relatively small marine protected areas as a component of a broader framework of integrated ecosystem management or by establishing a large, multiple zone marine protected area encompassing a complete marine ecosystem.

This policy statement and these Guidelines were derived for application particularly to coastal marine areas that are within the jurisdiction of individual nations or groups of nations acting in concert.

#### **Primary Goal**

The primary goal of marine conservation and management is:

"To provide for the protection, restoration, wise use, understanding and enjoyment of the marine heritage of the world in perpetuity through the creation of a global, representative system of marine protected areas and through the management in accordance with the principles of the World Conservation Strategy of human activities that use or affect the marine environment".

#### **Definition**

The term "marine protected area" is defined as: "Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment".

#### **Background**

The area of sea and seabed is more than two and a half times as great as the total area of land masses of the world but less than one per cent of that marine area is currently within established protected areas. Clearly, the extent to which the marine environment is conserved through the application of the protected area concept lags far behind the terrestrial environment.

The marine environment is an integral part of the natural and cultural heritage of the world with its vital diversity of marine and estuarine animals, plants, and communities which are vital components of self sustaining systems of local, regional, national and international significance.

While there are already areas which have become seriously degraded by the direct or indirect effects of human activities and the rate of degradation is increasing rapidly, it is important in any policy for marine protected areas that consideration is given for the continued welfare of people who have customarily used marine areas.

The nature of the marine environment is such that there are national and international responsibilities for the proper stewardship of the living and non-living resources of coastal and deeper ocean seas and the seabed to ensure their maintenance and appropriate use for the direct benefit and enjoyment of present and future generations. The development of such stewardship requires coordination and integrated management of a number of potentially competing uses at international, regional, national, and local levels. A number of initiatives have been taken at international, regional, and national levels for the establishment of marine protected areas and for managing the use of marine areas on a sustainable basis, including:

- the Regional Seas Programme of the United Nations Environment Programme (UNEP) and the regional protocols on protected areas it fosters;
- the Man and the Biosphere Programme of the United Nations Educational, Scientific and Cultural Organization (UNESCO);
- the Marine Science Programme of UNESCO;
- the South Pacific Regional Environment Programme;
- initiatives of the Food and Agriculture Organization of the United Nations (FAO), the International Maritime Organization (IMO), the International Whaling Commission (IWC) and other international organizations; and
- the establishment of marine protected areas by many nations.

However, there is much more that remains to be done and the establishment of a global system of marine protected areas is a key means of conserving the marine environment for its intrinsic values and its contribution to sustainable utilization.

#### **Policy Statement**

To meet this need, it is the policy of IUCN - The World Conservation Union - to foster marine conservation by encouraging governments, the non-governmental community and international agencies to cooperate in:

- a. Implementing integrated management strategies to achieve the objectives of the World Conservation Strategy in the coastal and marine environment and in so doing to consider local resource needs as well as national and international conservation and development responsibilities in the protection of the marine environment;
- b. Involving local people, non-governmental organizations, related industries and other interested parties in the development of these strategies and in the implementation of various marine conservation programmes.

It is also the policy of IUCN to recommend that, as an integral component of marine conservation and management, each national government should seek cooperative action between the public and all levels of government for development of a national system of marine protected areas.

Such a system should have the following objectives:

- to protect and manage substantial examples of marine and estuarine systems to ensure their long-term viability and to maintain genetic diversity;
- to protect depleted, threatened, rare or endangered species and populations and, in particular to preserve habitats considered critical for the survival of such species;
- to protect and manage areas of significance to the lifecycles of economically important species;
- to prevent outside activities from detrimentally affecting the marine protected areas;
- to provide for the continued welfare of people affected by the creation of marine protected areas;
- to preserve, protect, and manage historical and cultural sites and natural aesthetic values of marine and estuarine areas, for present and future generations;
- to facilitate the interpretation of marine and estuarine systems for the purposes of conservation, education, and tourism;
- to accommodate within appropriate management regimes a broad spectrum of human activities compatible with the primary goal in marine and estuarine settings;
- to provide for research and training, and for monitoring the environmental effects of human activities, including the direct and indirect effects of development and adjacent land-use practices.

#### **Implementation**

The development by a nation of such a system will be aided by:

- agreement on a marine and estuarine classification system, including identified biogeographic areas; and
- review of existing protected areas, to establish the level of representation of classification categories within those areas; which may require:
- determination of existing and planned levels of use of the marine and estuarine environment and the likely effects of those uses;
- delineation of potential areas consistent with the objectives listed above and determination of priorities for their establishment and management;
- development and implementation of extensive community education programmes aimed at specific groups, to stimulate the necessary community support and awareness and to achieve substantial self-regulation;
- allocation of sufficient resources for the development and implementation of management plans, for regulatory statutory review processes, interpretation, education, training, volunteer programmes, research, monitoring, surveillance and enforcement programmes.

Commission on National Parks and Protected Areas, IUCN:

#### PROMOTING EFFECTIVE MANAGEMENT OF TRANSFRONTIER PARKS AND RESERVES GUIDELINES

Management of large natural areas is a complex process involving scientifically-based selection of key habitats, establishment of objectives, definition of management steps required to attain the objectives, implementing action, monitoring results and feeding adjustments back into the management system. Managers usually regard their business of managing a park within national frontiers as difficult enough without adding the complication of the cooperative effort required when dealing with international frontiers. Although there are practical pressures and limits to what can be accomplished, the conservation benefits and political advantages of border parks are worth the extra effort. Without political and managerial commitment, border parks have no better hope of success than any other, but the very fact that these areas do meet on a border may be a contributory factor in ensuring that commitment.

The following guidelines, prepared first in draft and discussed at the First Global Conference on Tourism - A Vital Force for Peace (Vancouver, Canada, October 1988), are proposed to promote effective management of trans-frontier reserves:

- a) Review existing protected natural areas along the border of the nation. Each country should possess an inventory of shared natural sites along their frontiers such as waterfalls and mountain complexes and be aware of cross-border movements of migratory species, tourism patterns and other trans-boundary interactions.
- b) Examine potential border areas to complement the existing protected area system. Ideally, the boundaries of trans-frontier parks are coincident and incorporate the main ecological values of the border area. More commonly, however, selection has been based on other criteria and boundaries either do not match up or do not include all the key biophysical elements. A map of potential additions and boundary adjustments should be available to display the gaps.
- c) Formulate cooperative agreements for integrated management of border protected areas. Once border parks are recognised as areas of special importance by governments, the agencies concerned should develop a set of detailed measures for cooperative management. This may involve ensuring that management plans prepared for each side are consistent, that a working-level consultative committee is established, law enforcement regulations are harmonised, and other mechanisms are designed to foster neighbourly relations. As the sovereignty question can often be a sensitive one, care must be taken to avoid the inference that such agreements imply relinquishing control over national territory. Private associations (NGOs) should be encouraged to initiate action where government 'officialdom' is slow to act.

- d) Identify practical management activities in border parks to facilitate more effective conservation. Day-to-day concerns of the border park field manager include law enforcement, search and rescue, border crossing points, indigenous populations, fire prevention, wildlife disease and re-introductions among others. Close liaison with park staff in the adjoining country is necessary to address all of these types of activities. Regular staff exchanges and compatible communication systems are two means that are in operation in some border parks. Special allowances to facilitate and accommodate sustainable activities of resident human populations should be given careful attention
- e) Design joint visitor use facilities and programmes. Trans-frontier parks can benefit from joint tourism marketing efforts and also ensure that certain facilities and publications can be shared and are complementary. Acting together, border park administrations can better influence the location of and access to visitor facilities and development of areas adjacent to the parks themselves, thereby enhancing their role in regional development. Public education programmes can emphasise the symbolic message that international peace parks should represent.
- f) Formulate cooperative research programmes and share results. Cost-savings and sharing of research results are potential benefits of cooperative border park management. Clearances for customs permits and exchange of bona fide specimens can often be facilitated between adjoining park agencies.
- g) Build on bilateral and international agreements related to boundary cooperation. Some countries have established special legal and administrative commissions to deal with boundary questions (such as cross-border poaching) and to promote good relations. The protected area agency should be familiar with these as well as articles of international conservation conventions that encourage such cooperation (e.g. the the World Heritage, Wetlands and Migratory Species Conventions).
- h) Prepare joint nominations of border parks meriting inclusion on the World Heritage List. There are currently 16 natural World Heritage properties found along international boundaries. Only two of these were jointly inscribed (Kluane and Wrangell-St. Elias in the United States and Canada, and Mt.Nimba in Guinea and Ivory Coast). In the spirit of the Convention, countries are encouraged to nominate their adjacent reserves and consider joint nominations of others. International biosphere reserves and Ramsar sites should be similarly pursued.

#### APPENDIX V

#### PROPOSED CIRCUMPOLAR NETWORK OF PROTECTED AREAS QUESTIONNAIRE (Prepared and distributed by Russia December, 1994)

- 1. Please provide an overview on how you develop your system of Protected Areas in the Arctic and what basic principles you apply. As a guide, please complete 1.a, 1.b and 1.c.
- 1.a. Being as specific as possible, please explain if primary or secondary considerations are to conserve: a) habitat; b) species; c) ecosystems; d) culture and/or heritage; e) geophysical sites; f) scenic areas; g) tourist and recreational areas; h) multiple use; and i) Other.
- 1.b. Is your Protected Area system designes to form a Network and if so, what type?
- 1.c. What type of obstacles or problems to you encounter in developing your Protected Area system?
- 2. Please list the main organizations (Governmental and NGO) which are involved in the process of planning and creating Protected Areas in your country.
- 2.a. Brief description of each organization and its main goals and objectives.
- 2.b. Goals of the organizations re: the Arctic
- 2.c. Addresses, Faxes, Telephone, E-mail, Name of Senior Official/Director for Each Organization
- 3. Please provide information about the official standard procedures in place to create Protected Areas of differents types in your country and nay that apply specifically to the Arctic portion. Please provide details on:
- 3.a. Site Selection Criteria
- 3.b. Planning Process
- 3.c. Legal Requirements and Process
- 3.d. Flow Diagram on Process used Create a Protected Area (Please also attach a copy)
- 4. Please provide information about Protected Areas you plan to create in the Arctic to the year 2005.
- 4.1. Area Name
- 4.2. Status According to pre-1994 IUCN Category (ten category system)
- 4.3. Status According to Post-1994 IUCN Category (six category system)
- 4.4. For Multiple Use Areas, Breakdown, by Total Hectares, Into Pre-1994 IUCN Classification (ten category system)
- 4.5. For Multiple Use Areas, Breakdown, by Total Hectares, Into Post-1994 IUCN Classification (six category system)
- 4.6. Proposed Ramsar Site (s)
- 4.7. Proposed World Heritage Site (s)
- 4.8. Man and the Biosphere Reserves (MAB Site) (s)
- 4.9. Other Type of Site

#### APPENDIX V

4.10.

4.11.	Administrative Region
4.11.a.	Latitude, longitude (centre of the area)
4.11.b.	Original (not fax) digitized map or a good map base that can be used for digitizing or alternatively, a sketch of the proposed area made on an original/genuine map sheet (scale 1:1 mil or larger)
4.11.c.	Map projection and reference coordinates
4.12.	Planned ownership
4.13.	Planned management authority
4.14.	The author of the project
4.15.	Physical Geographic Region (please use the categories used on page 24 of the CAFF Protected Areas Report (Figure 2.1 Physical Geographical Regions Classifications) as the basis of your reply)
4.16.	Main/Special Ecological Function
4.17.	Please Check Habitat Type. If more than one, Use (1) to indicate Main Type, (2) to indicate secondary and (3) tertiary, etc.)
4.18.	Important Species in Proposed Protected Area (Plant and Animal: Permanent Resident or Migratory)
4.19.	International Red Data Book species of animals and plants within proposed Protected Area
4.20.	Most important locally rare species of animals and plants within proposed Protected Area
4.21.	Anthropogenic Pressures on Proposed Protected Areas
4.22.	
4.23.	Main kinds of human activities in the region
4.24.	Alternative land use or other plans for the site if not established as a Protected Area (e.g. industrial or urban development, recreation, no special plans, etc.)
4.25.	Total population in (and around) the proposed Protected Area
4.26.	Indigenous populations in the proposed Protected Area including buffer zone, and a description of their site use
5.	Other information you feel may be of use in developing the Circumpolar Protected Area Network
6.	Confidentially of information provided
7.	Other comments/suggestions/views on the Circumpolar Network that you wish to offer

Relationship to other international Conventions, bilateral og multilateral agreements

#### APPENDIX VI

LIST OF PROTECTED AREAS IN THE CIRCUMPOLAR ARCTIC AS OF 1996 - BY COUNTRY (Update of CAFF HCR No.1)

Cana	ada					_	_		-	Main habitat type	Ecological function
CAFF Code	Name	Year	Area ha	Lati- tude	Longi- tude	geo.unit primary/ secondary		омпег	manag.	delta cultural alpine glacier tundra geolog, forest marine wetland jso.isl.	noulting noulting living wintering resting feeding nesting breeding
CAN026	Banks Island No.1 Migratory Bird Sanct	1961	2.051.800	72 44	123 19	NA10		FE	МВ	Several rivers, deltas, sand, gravel cover much of the areas.	Large colony of Leaser snow geese. Wintring: Peary Caribou.
CAN027	Banks Island No.2 Migratory Bird Sanct	1961	14.200	74 00	119 45	NA10		FE	МВ	Thomson River dominates the area.	Lesser snow geese Black grant, Musk ox, Arctic fox.
CAN028	Bowman Bay Wildlife Sanctuary	1957	107.900	65 30	73 40	NA10		MU	WP		
CAN030	Bylot Island MBS	1965	1.087.800	73 13	78 39	NAII NAIO		FE	мв		
CAN031	Cape Dorset Migratory Bird Sanctuary	1958	25.900	64 15	76 00	NA10		FE	МВ	Three disjunct groups of rocky islands.	
CAN032	Dewey Soper-Res. Migratory Bird Sanct	1957	815.900	66 01	73 40	NA10	R	FE	МВ	Extensive sedge lowland. A tidal zone up to 15 km inland.	The worlds largest goose colony.
CAN033	East Bay Migratory Bird Sanctuary	1959	116.600	64 05	82 12	NA8 NA10		FE	МВ	Flat sedge meadows.	
CAN034	Harry Gibbons Migratory Bird Sanctuary	1959	148.900	63 50	85 55	NAB		FE	МВ	Boas R. flows through an extensive sedge lowland. Tidal flats	
CAN035	Kendall Island Migratory Bird Sanctuary	1961	60.600	69 13	135 19	NA8		FE	МВ		
CAN036	McConnell River Migratory Bird Sanct	1960	32.900	60 40	94 20	NA8	R	FE	МВ		
CAN037	Prince Leopold Island MBS	1992	5.040	70 02	90 00	NA10		FE	МВ	One island. Vertical cliffs on all sides of the island.	A major seabird community.  Marine manimals.
CAN038	Rasmussen Lowlands	1982	300.000	68 40	93 00	NA 10	R	TE	RA		
CAN039	Queen Maud Gulf MBS	1961	6.278.200	66 55	101 04	NA8		FE	МВ		
CAN040	Niriutiaavvik National Wildlife Area	1995	17.800	75 50	79 25						
CAN041	Hay-Zamma Lake	1982	50.000	58 30	119 00	NA7	R	PR	RRA		
CAN042	Hershel Island Territorial Park	1989	11.200	69 36	139 20	NAI		TE	PV		
CAN043	Thelon Game Sanctuary	1927	2.396.000	63 56	102 49	NA8 NA9		ΜŲ	WE		
CAN044	Twin Islands Wildlife Sanctuary	1939	142.500	53 06	79 53	NA12		ΜU	WF	The biggest island is mainly unconsolidated sand and gravel	Polar bear: Summer retreats and maternity defining areas.
CAN045	Hanna Bay Migratory Bird Sanctuary	1939	29.800	51 20	79 38	NA12		FE	ME	Coastal marsh, tidal flats.	
CAN046	Moose River Migratory Bird Sanctuary	1958	1.450	51 20	80 25	NA12		FE	ME	3	
CAN047	Boatswain Bay Migratory bird Sanctuary	1941	17.700	51 50	78 55	NAI2		FE	ME	Coastel mud flats, sedge grass lowland, willow and spruce.	Very import for variety of migrating and moulting waterbirds
CAN049	Cape Churchill Wildlife MGMT Area	1978	13.707.210	57 47	93 29	NA12		PR	. WN	ı	
CAN055	Intowin Wildlife Sanctuary	1976	8.800	56 15	67 00	NA9		PR	w	4	
25 areas	in IUCN CategoryIV		27.873.200	ha, tota	ıl						
46 areas	in IUCN Category I - V		43,485.895 1	na, 8,3	% of to	tal Arct	ic a	rea i	in Ca	anada 	
IUCI	N Categoty VII										
CAN013	Waskaganish	1975	78.476	51 09	78 20	NAL2		ΑI	A.E	3	
CAN016	6 Wemindji	1975	51.282	53 00	78 49	NA9		Αŀ	A.E	3	
CAN048	3 Inukjuak	1975	56.120	58 27	78 06	NA8		AI	3 AI	3	

Canada							Main habitat type	Ecological function
CAFF Code Name	Year	Area ha	Lati- tude	Longi- tude	geo.unit primary/ secondary	manag. owner ramsar	delta cultural alpine glacier tundra gpolog forest merine wetland	alvlembing moulting living wintering resting feeding pesting breeding
CAN051 Akulivik	1975	55.830	60 48	78 12	NAI0	AB AB		
CAN052 Aupaluk	1975	63.040	59 21	69 41	NAP	AB AB		
CAN054 Chisasibi	1975	130.956	53 47	78 53	NA9	AB AB		
CAN057 Eastmain	1975	48.953	52 11	<b>7</b> 8 10	NA12	AB AB		
CAN058 Inujivik	1975	52.491	56 25	77 55	NA9	AB AB		
CAN060 Kangiqsuajuaq	1975	60.670	61 36	71 58	NA8	AB AB		
CAN061 Kangiqsualujuaq	1975	62.980	58 41	65 57	NA8	AB AB		
CAN062 Kangirsuk	1975	62.960	60 01	70 02	NA8	AB AB		
CAN063 Kawawachikamach	1975	32.634	54 52	66 46	NA9	AB AB		
CAN064 Kiggaluk	1975	4.510	53 30	78 13	NA9	AB AB		
CAN065 Killinik	1975	29.100	60 25	64 50	NA10	AB AB		
CAN066 Kuujjuaq	1975	63.070	58 06	68 24	NA9	AB AB		
CAN067 Kuujjuarapik	1975	1.535	55 17	77 45	NA9	AB AB		
CAN068 Povungnituk	1975	62.657	60 02	77 17	NA8	AB AB		
CAN069 Quaptak	1975	58.240	61 02	69 37	NAB	AB AB		
CAN070 Salluit	1975	62.570	62 13	75 59	NAI0	AB AB		
CAN071 Tasiujak	1975	63.390	58 42	69 56	NA9	AB AB		
CAN072 Umiujak	1975	57.100	56 57	76 34	NA8	AB AB		
21 areas in IUCN CategoryVII		1.158.564	ha, tuta	al 				
IUCN Categoty VIII								
CAN029 Whapmagoostui	1975	31.620	55 17	77 45	NA9	AB AB		
CAN050 Cape Tatnam Wildlife Managment Area	1973	522.267	57 10	90 58	NA12	PR WM	1	
CAN053 Fort George Wildlife Sanctuary	1976	1.816.600	54 15	78 00	NA9	PR WM	1	
CAN056 Nouveau Comptoir Wildlife Sanct	1976	752.100	53 00	78 00	NA9	PR WM	1	
CAN059 Post de la Baleine Wildlife Sanct	1976	535.400	55 17	77 45	NA9	PR WM	1	
5 areas in IUCN CategoryVIII		3.657.987	ha, tota	al			_	_
26 areas in IUCN Category > V		4.816.551	ha, 0,9	% of to	otal Arctic	c area in Ca	anada	

<sup>72</sup> areas in Canada

48.302.446 ha protected Arctic area (all classes)

<sup>9,2%</sup> protected Arctic area of 526.077.700 ha total Arctic area

<sup>4,8%</sup> protected Arctic area of 997.061.000 ha total land area

Finland							_		_	Main habitat type	Ecological function
CAFF Code	Name	Year	Area ha	Lati- tude	Longi- tude	geo.unit primary/ secondary	ramsar	0Wner	manag.	delta caltural alpine glacier tundra geolog. forest marine verland	advlembing moulting living living wintering resting feeding nesting breeding
IUCN	Categoty I										
FIN005	Kevo	1956	71.170	69 31	26 35	NC3	S	3	s	Forest; mainly birch. Wetland; mires.	Untouched area.
FIN006	Malla	1938	3.088	69 04	20 41	NCI	8	S	S	Calcium rich soil.	Very rich flora.
FIN007	Maltio	1956	14.686	67 24	28 41	NC3	5	S	S	Mainly spruce.	
FIN008	Sompio	1 <b>95</b> 6	17.912	68 10	27 25	NC3	S	5	S	Forest; mainly spruce and birch.	Bear, otter, golden eagle.
FIN009	Vaerrioe	1982	12.412	67 43	29 38	NC3	5	S	S	Forest, mainly birch.	
5 areas i	n IUCN CategoryI		119.268	ha, tota	l					<u></u> _	
IUCN	N Categoty II										
FIN001	Lemmenjoki NPark	1956	285.484	68 42	25 39	NC3		S	s	Forest, spruce, pine, birch. Wetland, mainly bogs.	Untouched forest area. Bear, wolf, wolvering, geese, swans.
FIN003	Pyhatunturi NPark	1938	4.231	67 01	27 08	NC3	5	S	s	Forest; spruce; pine, Wetland; mires.	
2 areas	n IUCN CategoryII		289.715	ha, tota	I					444	
IUC	N Categoty IV										
FIN002	Pallas-Ounastunturi NPark	1938	49.558	68 03	23 53	NC3		S	S	Forest, spruce, pine, birch. Wedland, mainly bogs.	
FIN004	Urho Kekkonen NPark	1983	253.719	68 14	28 26	NC3	:	S	S	Forest; spruce, pinc, birch. Wetland; mires.	Untouched area.
FIN010	Mustaoja-Nunaravuoma	1988	1.036	67 40	25 23	NC3				Mire	
FIN011	Haikara-aapa-Vitsikkoaapa	1988	1.298	66 <b>5</b> 6	26 53	NC3				Mire	
FIN012	Ahvenvuoma	1988	1.382	67 35	25 01	NC3				Mire	
FIN013	Jietanasvuoma	1988	1.510	68 27	22 34	NC3				Mire	
FIN014	Silmasvuoma	1988	1.609	67 34	25 35	NC3				Mire	
FIN015	Siukatanjarvi	1988	1.935	68 11	25 01	NC3				Mire	
FIN016	Leppavuoma-Mustavuoma	1988	2.038	67 47	24 38	NC3				Mire	
FIN017	Sotkavuoma	1988	2.190	68 22	23 16	NC3				Mire	
FIN018	<b>Uura-aapa</b>	1988	2.279	67 54	28 54	NC3				Mire	
FIN019	Terstojanka	1988	2.318	69 04	<b>2</b> 6 40	NC3				Mire	
FIN020	Tollovuoma-Vasanvuoma	1988	2.365	67 36	25 17	NC3				Mire	
FIN021	Piessuo-Luomusjoki	1988	2.593	69 23	26 05	NC3				Mire	
FIN022	Peran Marinjanka	1988	2.610	69 25	27 12	NC3				Mire	
FIN023	Sota-aapa	1988	2.848	68 18	27 12	NC3				Mire	
FIN024	Kaarreramia-Kellovuotso	1988	2.869	67 31	28 55	NC3				Mire	
FIN025	Vaaranaapa	1988	3.460	68 05	27 41	NC3				Mire	

Finl	and								Main habitat type Ecological function
CAFF Code	Name	Year	Area ha	Lati- tude	Longi- tude	geo.unit primary/ secondary	ramsar	0Wner	moulting moulting living watering resting feeding neeting breeding breeding column dotts cultural alpine glacier tmatn geolog forest marine wertand iso.isi.
FIN026	Hanhijanka-Pierkivaaranjanka	1988	3.973	69 12	27 09	NC3			Mire
FIN027	Lamsanaapa-Sakkala-aapa	1988	4.164	67 18	27 42	NC3			Mire
FIN028	Poyrisvuoma	1988	4.270	68 42	23 60	NC3			Mire
FIN029	Loukisen latvasuot	1988	4.277	<b>67 5</b> 0	25 33	NC3			Mire
FIN030	Teuravuoma-Kivijarvenvuoma	1988	4.290	67 19	24 03	NC3 NC5			Mire
FIN031	Viiankivuoma	1988	4,404	67 31	26 50	NC3			Mire
FIN032	Kuortanovuoma-Saivinvuoma	1988	5.855	67 60	24 49	NC3			Mine:
FIN033	Raakevuoma-Vuossijanka	1988	6.831	68 12	24 26	NC3			Mire
FIN034	Naatavuoma-Sotkavuoma	1988	7.180	67 25	25 23	NC3			Mire.
FIN035	Naatsukka-aapa	1988	8.894	68 13	25 55	NC3			Mire
FIN036	Joutenaapa-Kaita-aapa	1988	10.290	67 02	28 48	NC3			Mire
FIN037	Saaravuoma-Kuoskisvuoma	1988	15.460	68 29	24 30	NC3			Mire
FIN038	lataseno-Hietajoki	1988	43.640	68 41	22 21	NC3 NC1			Mire
FIN039	Pomokaira-Tennioaapa	1988	43.785	67 50	26 27	NC3			Mire
FIN040	Sammuttijanka-Vaijoenjanka	1988	51.812	69 29	27 44	NC3			Mire
FIN042	Hammastunturi	1991	220.625	68 31	26 34	NC3			
FIN043	Kaldoaivi	1991	293.643	69 42	27 53	NC3 NC1			
FIN044	Kemihaara	1991	30.597	67 57	28 41	NC3			
F1N045	Käsivarsi	1991	293.643	69 00	21 39	NCL			
F1N046	Muotkatunturi	1991	156.772	69 10	26 12	NC3			
FIN047	Paistunturi	1991	181.878	69 43	26 2 <b>5</b>	NC3 NC1			
FIN048	Pulju	1991	61.434	68 18	24 41	NC3			
FIN049	Pöyrisjärvi	1991	1 <b>27.7</b> 97	68 36	24 15	NC3			
FIN050	Tarvantovaara	1991	66.590	68 36	22 53	NC3			
FIN051	Tsarmitunturi	1991	15.268	68 41	28 25	NC3			
FIN052	Tuntsa	1991	21.183	67 38	29 32	NC3			
FIN053	Vätsäri	1991	155.340	69 09	28 28	NC3			
45 area	s in IUCN CategoryIV		2.181.512	ha, tota	al				
52 areas	s in IUCN Category I - V		2.590.495	ha, 32,	6% of t	otal Arci	tic ar	ea i	in Finland
Ram	sar sites								
FIN041	Koitelaiskaira	1980	34.400	67 15	26 53	NC3	R	s	s
1 Rams	ar site		34.400	ha, tota	ai				
1site		_	34.400	ha, 0,4	% of to	tal Arcti	c are	a in	n Finland

Finland

CAFF Area Lati- Longi- primary/ Code Name Year ha tude tude tude Tude to the tude

53 areas in Finland

2.624.895 ha protected Arctic area (all classes)

33,0% protected Arctic area of 7.954.700 ha total Arctic area

8,6% protected Arctic area of 30.463.200 ha total land area

Gree	enland									Main habitat type	Ecological function
CAFF Code	Name	Year	Area ha	Lati- tude	Longi- tude	geo.unit primary/ secondary	THEST	0Wner	manag.	delta cultural alpine glacier tundra geolog forest marine wetland	calvisming anoutting living living wintering resting feeding nesting breeding
IUCN	Categoty I										
GRE013	Melville Bay NR	1977	1.050.000	76 21	60 31	GL1					
GRE014	Arnangarup Qoorua	1989	8.000	66 30	51 21	GL3					
2 areas i	n IUCN CategoryI		1.058.000	ha, tota	1						
IUCN	I Categoty II										
GRE012	Northeast Greenland NPark	1974	97.200.000	72 33	23 20	GL1 GL2				Mainly glacier.	E.g.Polar bear, musk ox, geese.
1 area ir	IUCN CategoryII		97.200.000	ha, tota	1						
3 areas i	n IUCN Category I - V		98.258.000	ha, 45,2	2% of t	otal Arcti	c ar	ea i	n G	reenland	
Ram	sar sites										
GRE001	Aqajarua-Sullorsuaq	1988	30.000	69 42	52 00		R				Waterfowls.
GRE002	Qinguata marraa - Kuussuaq	1988	6.000	69 56	54 17		R				Waterfowls.
GRE003	Kuannersuit Kuussuat	1988	4.500	69 40	53 17		R				Waterfowls.
GRE004	Kitsissunnguit	1988	16.000	68 50	51 50		R			Group of flat, rocky islands, large shallow area.	Waterfowls.
GRE005	Naternaq	1988	150.000	68 20	52 00		R				Waterfowls, and also of great bounically interest.
GRE006	Eqalummiut Nunaat - Nassuttuup Nunaa	1988	500.000	67 25	50 30		R				
GRE007	Ikkattoq	1988	35.000	62 35	49 50	ı	R			Shallow fjord area.	Waterfowls, importet moulting area for Mergus serrator.
GRE008	Ydre Kitsissut	1988	8.000	60 45	48 25		R			Rocky islands.	
GREOX	Heden	1988	125.000	71 00	24 00	l	R				Waterfowls, inc. Anser brachyrhynchus and Branta leucopsis.
GRE010	Hochstetter Forland	1988	140.000	73 30	20 00	1	R	s	s		
GRE011	Kilen	1988	30.000	81 15	13 30	ı	R	s	s		
11 Ram	sar sites		1.044.500	ha, tota	al						
11 sites			1.044.500	ha, 0,5	% of to	tal Arctic	ar	ea ir	ı Gı	reenland	

14 areas in Greenland

99.302.500 ha protected Arctic area (all classes)

45,6% protected Arctic area of 217.560.000 ha total Arctic area

45,6% protected Arctic area of 217.560.000 ha total land area

Icela	ınd									Main habitat type	Ecological function
CAFF Code	Name	Year	Area ha	Lati- tude	Longi- tude	geo.uni primary/ secondary		оумпег	-Senement	dolta cultural alpine glacier tundra geolog forest marine wetland juojal.	nouthing Iving Windering resting feeding nesting feeding nesting
IUCN	Categoty I										
ICE012	Surtsey NR	1965	0.270	63 20	20 35	NC6		s	s	Volcanic island	Lifeform settlement and
ICE025	Eldey NR	1940	0.002	63 42	23 00	NC6		s	s	ls lænd	succession monitoring  Birdeliffs, large gannet colony
2 areas i	n IUCN CategoryI		0.272	ha, tota	I						
IUCN	Categoty II										
ICE003	Jökulsargljufur NPark	1973	15.100	65 54	16 32	NC3 NC1		S	S	Canyon, craters, birch wood	
ICE004	Skaftafell NPark	1967	160.000	64 16	17 08	NC11 NC3		s	S	Birch wood	
ICE005	Thingvellir NPark	1928	5.000	64 15	21 04	NC1 NC3		S	S	Geological formations	
3 areas i	n IUCN CategoryII		180.100	ha, tota —	1						
IUCN	N Categoty III										
ICE013	Alftaversgigar NM	1975	3.650	63 30	18 30	NC6 NC3		P	S	Volcanic craters	
ICE014	Askja i Dyngjufjöllum NM	1978	5.000	65 03	16 47	NC1		P	s	Volcanic crater	
ICE015	Lakagigar NM	1971	16.000	64 06	18 11	NC1 NC11		S	S	Volcanic craters	
ICE016	Skogafoss NM	1987	2.204	63 33	19 30	NC1 NC11		s	s	Waterfall	
4 areas i	n IUCN CategoryIII		26.854	ha, tota	l 						
IUCN	N Categoty IV										
ICE001	Myvatn-Laxa	1974	440.000	65 22	16 41	NCI NC3	R	PS	S	lake, river, and surrounding wetlands, geological formations	Waterfowl
ICE007	Flatey NR	1975	0.100	65 21	22 50	NC3		s	s	Island	
ICE008	Geitland NR	1988	11.750	64 41	20 37	NC11 NC1		P	S		
ICE010	Kringilsarrani NR	1975	8.500	64 45	15 55	NCI NCII		S	S	Morains	
ICE011	Miklavatn NR	1977	1.550	65 43	19 34	NCI NC3		P	S		
ICE020	Hvannalindir i Krepputungu NR	1973	4.300	64 51	16 19	NCI		S	S		
ICE026	Breidafiödur	1995	300.000	65 20	23 00						
ICE027	Skrúdur	1995	0.100	64 54							
o areas	n IUCN CategoryIV		766.300	ual, tota	13						
IUC	N Categoty V					vai					
ICE002	Thjorsarver NR	1981	37.500	64 38	18 46	NCI NCII	R	М	S		Breeding area of Pink-footed Geese
ICE006	Fjallabak NR	1979	<b>47.00</b> 0	64 01	19 10	NC1		M	S	Mountain; volcanoes geothermal activity, lava, sands, rivers.	
ICE009	Herdisarvik NR	1988	4.000	63 52	21 51	NC6		s	s	Coastal area. lavafields	
ICE017	Esjufjöll NR	1978	27.000	64 13	16 30	NCH		M	S	Nunatak	
1CE018	Herdubreidarfridland NR	1974	17.000	65 17	16 08	NCI		M	S	Lavaficids	

Icela	nd								Main habitat type	Ecological function
CAFF Code	Name	Year	Area ha	Lati- tude	Longi- tude	geo.unit primary/ secondary	OWNEI	manag.	delta cultural alpine alpine glacier tunda geolog, foreat marine wetland	calvismbing moulting living wintering resting feeding nesting breeding
ICE019	Homstrandir NR	1975	58.000	66 23	22 36	NCI	PS	s [		Birdcliffs, seabird colonies
ICE021	Lonsöraefi NR	1977	32.000	64 35	15 11	NC1 NC11	s	s [	Birch wood, rivers	
ICE022	Vatnsfjördur NR	1975	20.000	65 37	23 06	NC1 NC3	s	s [	Fjord with birchwood	
8 areas i	n IUCN CategoryV		242.500	hu, total						
25 areas	in IUCN Category I - V		1.216.026 }	—— 12, 11,8	% of te	otal Arcti	c area i	in Icel	land	
IUCN	Categoty VIII									·
ICE023	Blafjöll CP	1973	8.400	64 00	21 40	NC6	C	sc [		
ICE024	Reykjanesfolkvangur CP	1975	30.000	63 55	21 58	NC6	С	sc [		
2 areas i	n IUCN CategoryVIΠ		38.400	ha, total						
2 areas i	n IUCN Category > V	<del>-</del>	38.400 I	ha, 0,49	of to	tal Arctic	area ir	ı Icela	and	
	<del></del> —		A= 1 4= 1						<del></del>	<del></del>

<sup>27</sup> areas in Iceland

<sup>1.254.426</sup> ha protected Arctic area (all classes)

<sup>12,2%</sup> protected Arctic area of 10.300.000 ha total Arctic area

<sup>12,2%</sup> protected Arctic area of  $10.300.000\,\mathrm{ha}$  total land area

**Ecological function** Norway geo.unit delta
cultural
alpine
glacier
tundra
geolog,
fræss
murine
wetland
jso.isl. Lati-Longi-Area ha tude tude Code Year IUCN Categoty I 1989 66 33 14 58 SP S NOR002 Storlia, NR 2.400 Complex subalpin forest The northernmost natural spruce system with intact flora and forest, rich birch forest. NOR003 Semska-Stødi, NR 1976 1.300 66 37 15 24 S Mixed wetland, includes also morain Complex wetland area with intact flora and fauna. NC<sub>6</sub> S 1970 0.350 67 14 13.57 NOR007 Bliksvær NR Coastel area with many small islands NC6 14 39 1977 0.800 67.34 NOR008 Karlsøyvær NR Constal area with many small islands. Important waterfowl area. NC6 69 09 15 53 1983 2.800 NOR011 Skogvoll NR Mainly mixed mires. NCI 1981 3.000 69 32 21 12 S NOR016 Javreoaivit NR Unique flora NC6 70 16 20 15 S 1975 2.130 NOR018 Nord-Fugley NR Bird cliff. One island. 70 16 25 17 S 1981 1.300 NOR022 Reinøya NR Porsanger-dolomitt NC1 69 58 26 58 S NOR023 Ovdaldasvarri NR 1983 1.430 NCI S 1983 11.350 7037 30 09 S NOR024 Makkaurhalvøya NR Steep cliffs. Important bird cliff. NCI S NOR025 Blodskytodden-Barvikmyran NR 1983 2.650 70 25 30.54 S NCI 69 44 S 1972 1.200 29 15 NOR028 Færdesmyra NR Mixed bogs. NO1 79 36 24 48 S S NOR033 North-east Svalbard NR 1973 1.903.000 NO3 Mainly glaciers. NO<sub>2</sub> 1983 1.600 80 02 14 29 NOR034 Moffen NR NO3 638.000 77 41 25 05 S NOR035 South-east Svalbard NR 1973 NO1 1.910 69 09 29 12 NC3 PS 1993 NOR036 Pasvik NR Bogs and bogs with pinetrees, lake Waterfowl 1.290 69 15 18 30 1995 NOR037 Målselvutløpet Nature Reserve 69 58 18 30 1995 1.430 NOR038 Risøya 2.577.940 ha, total 18 areas in IUCN CategoryI **IUCN Categoty II** NC2 1989 210.500 66 39 14 28 NOR001 Saltfjellet-Svartisen, NPark NC11 Complex mountain area with Includes birch forests, lime-rich areas. intact flora and fauna. NC2 67 26 S 1971 16 720 15.58 NOR010 Rago NPark NC3 NCI S S 74.280 68 41 19 46 NOR012 Øvre Dividal NPark 1971 Mainly moutain area. Also pine and Complex landscape with rich birth forests and mires. NC3 NOR013 Ånderdalen NPark 1970 6.900 69 13 17 18 S S NC6 Natural oceanic pine and birch Mountain, pine and birch forests. forests. NC1 1986 80.300 69 14 22.00 NOR014 Reisa NPark Untouched mountain and vally Vegetation zones from lowland to high altitude, rich floraarea NC3 S 68 50 24 38 NOR019 Øvre Anarjokka NPark 1975 139.870 Birch forests, bogs, treeless plateaus. Large varied unspoilt forest and plateau. NCI 1970 9.820 70 07 24 29 NOR021 Stabbursdalen NPark The nothernmost pine forest of the world (10 km2). NC3 NOR029 Øvre Pasvik NPark 1970 6.660 69 06 28 56 Virgin forest area, mainly pine forest.

Main habitat type

Norway Main habitat type								Ecological function			
CAFF Code	Name	Year	Area ha	Lati- tude	Longi- tude	geo.unit primary/ secondary		Jawe	Seutem.	datta cultural alpine glacier tundra geolog forest marine wetland iso.ist.	alviambing moulting living wintering reating feeding nesting breeding
NOR030	South-Spitsbergen NPark	1973	530.000	76 55	15 36	NOI NO2		S	s	65 % glacier.	Sea binds.
NOR031	Forlandet NPark	1973	64.000	78 33	11 14	NO2		S	S	Mainly tundra, from shore to mountain, many small glaciers.	Common seal and sea birds.
NOR032	North-west Spitsbergen NPark	1973	356.000	79 24	11 05	NO2 NOI		s	s		Sea birds, walrus, svalbard reindeer.
11 areas	in IUCN CategoryII		1.495.050	ha, tota	]						
IUCN	N Categoty V										
NOR004	Saltfjellet, LPA	1989	50.800	66 40	15 35	NC2 NC3		s	S	Mixed Farest	In connection with RegNo.: NOR001, NOR002, NOR005
NOR005	Gåsvatnan, LPA	1989	12.000	66 59	15 04	NC3		P	S	Subterranean river, areas with very rich flora.	
NOR006	Østerdalen LPA	1983	2.700	67 09	15 16	NC3			5	Bogs, small lakes, rivers. Rich deciduous forests.	Rich and div. flora and fauna.
NOR009	Strandå-Os LPA	1983	1.670	67 31	14 57	NC6			s		
NOR01	Raisduottarhaldi LPA	1986	8.000	69 20	21 22	NC1			s		
NOR017	Skipsfjord LPA	1978	4.200	70 09	19 49	NC6			s		
NOR020	Vassbotndalen LPA	1991	7.550	69 59	22 46	NC1				Gray alder.	
NOR026	Brannsletta LPA	1983	1.880	69 58	29 13	NC1		S?	5	Quartergeology.	
NOR027	Garsjøen LPA	1983	2.000	69 <b>5</b> 3	28 54	NC1		s	s	Quartergeology.	
9 areas i	in IUCN CategoryV		90.800	ha, tota	1						
38 areas	in IUCN Category I - V		4.163.790	ha, 25,	5% of 1	otal Arct	ic ar	ea i	n N	lorway	

<sup>38</sup> areas in Norway

25,5% protected Arctic area of 16.352.200 ha total Arctic area

10.8% protected Arctic area of  $38.697.500\,\mathrm{ha}$  total land area

<sup>4.163.790</sup> ha protected Arctic area (all classes)

Russ	sia								_	Main habitat type	Ecological function
CAFF Code	Name	Year	Area ha	Lati- tude	Longi- tude	geo.unit primary/ secondary	ramsar	owner	manag.	delta cultural alpine glacier tundra geolog forest marine westland isoxiel	alvlembing moulting living wintering resting feeding nesting breeding
IUCN	I Categoty I										
RUS001	Kandalakshsky NR	1932	70.527	66 25	33 48	RU8 RU15			s	North taiga, wetland. 5 distinct areas.	Important for the genofond of wild northern animals.
RUS002	Laplandsky NR	1930	268.400	67 60	31 55	RU15			s	Very varied landscapes and habitat types.	
RUS003	Pasvik NR	1992	14.600	69 18	29 25	RU15			s	Mixed wetland.	
RUS004	Taimyrsky NR	1979	2,700.000	72 24	101 54	RU14			S		
RUS005	Putoransky NR	1988	1,887.300	69 15	93 25	RU20 RU21			S		
RUS006	Lena Delta NR	1985	1,433.000	72 12	127 19	RU8				The reserve consist of two parts.	
RUS007	Wrangel Island NR	1976	795.700	71 23	175 42	RUI3			s		
RUS018	Franz Josef Land NR	1994	4.200.000	81 04	55 49	RU1 RU19		S	S		Large populations of endangered rare arctic biota species.
RUS022	Great Arctic NR	1993	4.169.200	72 60	79 04	RU15 RU9					Waterfowls, Reindeer, Wolf,
RUS026	Magadansky NR (Seimohanski part)	1982	117.839	63 46	153 08	RU21					
10 areas	in IUCN CategoryI		15,656.566	ha, tota	ıl						
ШС	N Categoty IV			_							
	Nenets Sanctuary	1987	440.000	68 37	53 29	RU8			s		
RUS010	Murman tundra Sanctuary	1987	295.000	67 39	38 07	RU8 RU15			s		
RUS011	Lower Ob-river Sanctuary	1987	128.000	66 40	69 <b>5</b> 4	D110			s		
RUS012	Chaigurgino Sanctuary	1983	2.375.600	69 15	158 59	RU8			CS		
RUS013	Purinsky Sanctuary	1990	787.500	72 24	87 09	RUI4 RUI3			s		
RUS014	Vaigach Sancyuary	1983	270.000	70 01	59 29				C		
RUS015	Yamal Sanctuary	1977	1,402.000	68 05	71 15	RU8			С		
RUS016	Messo-Yakhinsky Sanctuary	1976	103.500	68 48	78 48	RU8			С		
RUS017	Ust-Yansky Sanctuary	1979	185.600	71 28	135 52	RUB			С		
RUS020	) Kan-Lake Sanctuary	1989	65.700	67 00	34 25	RU9			s		
RUS021	Tulomsky Sanctuary	1989	33.700	67 02	34 24	RU9			S		
RUS02	3 Lebedinkys Sanctuary	1987	50.200	65 08	171 25	RU8		s	s		
RUS024	1 Tundorovyi Sanctuary	1971	500,000	64 03	175 54	RU8		M	L		
RUS02	5 Ust-Tanyrersky	1974	450.000	65 03	174 10	RU8 RU21		M	L		
RUS02	7 Teyukuul Sanctuary	1971	20.000	66 31	177 35	B7100					
RUS02	8 Koryaksky Zapovednik	1995	1.003.156	61 30	165 00	)					
16 area	s in IUCN CategoryIV		8.109.956	ha, tot	al 			_			

26 areas in IUCN Category I - V

23.766.522 ha, 3,7% of total Arctic area in Russia

Rus	sia										N	/ai	n h	abit	at i	type	:		E	olo	gic	ai f	unç	tion o	
CAFF Code	Name	Year 	Area ha	I∠ati- tude	Longi- tude	geo.unit primary/ secondary	Tamsar	owner	шапав.	iso, isl.	wetland	marine	forest	geolog.		altrine	cultural	delta	breeding	nesting	feeding	resting.	Minderine EVIDE	noulting	
IUC	N Categoty VI																								
RUS019	Novo-Siberia islands	1992	3.840.000	74 50	142 40	RU13			С	Ц	Ι	X	Π		1					П	Ι		Ι	Τ <u>ι</u>	]
1 area i	n IUCN CategoryVI		3.840.000	ha, tota	al .							_													-
IUCI	N Categoty VII																								
RUS009	Beringia ethno-nature park	1993	3.053.300	65 56	173 46	RU8 RU20			С	Γ	I	X	П		I					П	I	][		П	]
1 area i	n IUCN CategoryVII		3.053.300	ha, tota	ıl																				
2 areas	in IUCN Category > V		6.893.300	ha, 1,1	% of to	tal Arctic	are	a in	Ru	ıssi	A														
28 are	as in Russia	3	 0.659,822	ha pro	tected	Arctic :	are	a (a	11 (	clas	SSE	s)													

 $4,\!8\,\%$  protected Arctic area of 634.780.000 ha total Arctic area

1,8% protected Arctic area of 1.707.540.000 ha total land area

Sweden							Main habitat type	Ecological function
CAFF Code Name	Year	Area ha	Lati- tude	Longi- tude	geo.unit primary/ secondary	owner ramsar	della cultural alpine glacier tundra geolog, forest marine wetland iso.isil.	alviambing monthing living wintering resting feeding pesting breeding
IUCN Categoty II								
SWE001 Vadvetjakka NPark	1920	2.630	68 33	18 25	NCI		Birch.	Birds, flora, caves.
SWE002 Abisko NPark	1909	7.700	68 19	18 42	NC1 NC2			Dillis, IRria, Caves.
SWE003 Stora Sjøfallet NPark	1909	127.800	67 31	17 57	NC2		Mainly birch, extreme rich flora.	
SWE004 Sarek NPark	1909	197.000	67 21	17 34	NC2		Mixed mountain, virgin pine forest.	
					NC2		Mixed alpine area, birch forest.	
SWE005 Padjelanta NPark	1962	198.400	67 26	16 41			Alpine heaths, great takes.	
SWE006 Muddus NPark	1942	49.340	67 01	20 08	NC3 NC5		Vast mire complex, extensive virgin pine and spruce forests.	Rich wildlife.
SWE007 Peljekaise NPark	1909	15.340	66 18	16 58	NC3 NC2		2/3 mountain birch. Alpine heaths, lakes.	
7 areas in IUCN CategoryII		598.210	ha, tota	1				
IUCN Categoty IV								
SWE008 Stordalen NPres	1980	1.000	68 21	19 03	NC1			
SWE009 Alajaure NPres	1980	17.000	68 10	20 12	NC3			
SWE010 Pakketanjaure NPres	1988	21.000	68 09	20 23	NC3			
SWE011 Vittangi-Soppero NPres	1988	18.800	67 56	21 16	NC3			
SWE012 Rautusakkara NPres	1988	1.200	67 52	21 04	NC3			
SWE013 Pessinki NPres	1988	51.500	68 01	22 25	NC3			
SWE014 Kaitum NPres	1988	40.100	67 36	20 36	NC3			
SWE015 Lina NPres	1988	8.600	67 19	20 30	NC3			
SWE016 Stubba NPres	1988	8.300	67 06	20 04	NC3			
SWE017 Dundret	1986	5.500	67 05	20 38	NC3			
SWE018 Sjaunja	1986	285.000	67 26	19 25	NC2 NC3			
SWE019 Kartevare	1966	2.400	66 57	19 30	_			
SWE020 Harrejaure	1988	26.700	67 01	18 46	NC2 NC3			
SWE021 Parialven	1988	56.600	66 48	18 13	NC2 NC3			
SWE022 Kallovaratjeh	1974	2.235	67 0 <b>7</b>	16 47	NC2			
SWE023 Serri	1970	3.687	66 35	20 13	NC5			
SWE024 Palkåive	1988	1.400	66 18	19 24	NC5			
SWE025 Nuortap-Antivaratj	1988	7.600	66 22	18 53	NC3			
SWE026 Arvesjäkkå	1988	8.000	66 31	18 20	NC3			
SWE027 Tjeggelvas	1988	32.100	66 27	17 57	NC3			
SWE028 Långsjøen	1974	2.200	66 21	18 19	NC3			
SWE029 Hornavan	1988	12.000	66 16	17 47	NC3			
SWE030 Plassa	1988	1.200	66 21	16 12	NC2			
SWE031 Palja	1988	4.300	66 13	19 19	NC5			

Sweden									Main habitat type	Ecological function
CAFF Code Name		Year	Area ha	Lati- tude	Longi- tude	geo.unit primary/ secondary	ramsar	owner	delta cutharal alpine glacier tundra goolog, forest merine vecland iso.ial.	alviambing mouthing living living wintering resting feeding neeting breeding
SWE032 Bårgå		1988	4.100	66 14	18 16	NC3				
SWE033 Nimtek	:	1988	4.400	65 59	18 29	NC3				
SWE034 Tjadnes	svare	1988	4.000	65 48	18 37	NC3				
SWE035 Delikal	ven	1988	8.800	65 60	17 09	NC3				
SWE036 Nalova	rdo-Storgidna	1988	4.400	65 46	17 28	NC3				
SWE037 Vindeli	fjallen	1974	550.630	65 48	15 25	NC2 NC3				
SWE038 Marsfja	allet	1988	86.000	65 07	15 27	NC3 NC2				
SWE039 Gitsfjal	llet	1988	40.000	64 50	15 28					
SWE040 Bjuralv	ren	1982	2.290	64 55	14 06	NC2				
SWE041 Daimae	dalen	1990	28.400	64 49	14 36	NC2 NC4				
SWE042 Oxfjall	et	1988	1.700	64 40	15 24					
SWE043 Blaikfj	allet	1988	11.000	64 30	16 14	NC3				
36 areas in IUC	N CategoryIV		1.364.142	ha, tota	]					
43 areas in IUC	N Category I - V		1.962.352	ha, 20,7	7% of t	otal Arct	ic ar	ea i	n Sweden	

<sup>43</sup> areas in Sweden

1.962.352 ha protected Arctic area (all classes)

20,7% protected Arctic area of 9.500.000 ha total Arctic area

4,8% protected Arctic area of 41.100.000 ha total land area

USA Main habitat type **Ecological function** geo.unit CAFF Area Lati-Longi-Code Name tude tude Year **IUCN Categoty II** NA2 ALA016 Gates of the Arctic NPark 1978 2.458 700 67.50 153.00 F Indigenous people follow patterns of life. NA6 ALA017 Katmai NPark 1978 1.384.000 58 30 155 00 F Lakes, rivers, glacier, constline of Cretical for the Brown bears survival in Alaska. NA2 1978 67 15 159 00 F ALA019 Kobuk Valley NPark 275.400 Large active sand dune field Remnant flora. Great caribou herds. 3 areas in IUCN CategoryII 4.118.100 ha, total **IUCN Categoty III** F ALA013 Walker Lake NNL in Gates of the Ω 32,700 67 15 154 33 Arctic NPark ALA021 Walrus Island NNL in ADP&G O 3.600 58 40 160 22 S Walrus Island SGS NA6 F ALA033 Unga island NNL in Shumagin 0 1.200 55 22 160 45 Village Corp. NA6 F 0 8.300 ALA034 Aniakchak Crater NNL in 56 54 158 06 Aniakchak NM ALA035 Arrigetch Peaks NNL in Gates of the 0 14.300 67 23 154 03 F Arctic NP NAI F 53 55 168 02 ALA036 Bogoslov Island NNL in Alaska 0 0.050 Maritime NWR F ALA037 Clarence Rhode NNL in Yukon 0 1.281.100 60 36 164 39 Delta NWR NA6 S ALA038 McNeil River NNL in McNeil River 0 280.700 58 45 154 15 SGS NA6 F ALA039 Mt. Veniaminof NNL in Alaska 0 324.200 56 00 159 30 Peninsula NWR ALA040 Shishaldin Volcano NNL in Alaska 0 25.700 54 40 163 40 F MaritimeNWR ALA041 Simeonof Island NNL in Alaska 0 4.400 54 54 159 15 Maritime NWR 11 areas in IUCN CategoryIII 1.976.250 ha, total IUCN Categoty IV NA1 ALA001 Alaska Maritime NWR 1909 2.037.900 54 00 170 00 NA6 Approximately 2.400 islands, rocks, Diverse range of seabirds and wildlife. reefs etc. ALA002 Alaska Peninsula NWR 1980 1.817.000 56 15 159 00 F Diverse landscape with volcanos, Diverse mammals, sea lakes, rivers, coastline. mammals and birds F ALA003 Arctic NWR 1960 5.056.900 69 00 144 00 The most northern of all refuges. Porcupine caribou, other mammals, migratory wateriowi ALA004 Kodiak NWR 1941 695.100 57 45 153 00 F  $oxed{oxed}$ ALA005 Becharof NWR 1978 588.900 57 50 156 00 F Becharof lake and wetlans dominate. Salmon spawning streams ALA006 Izembek NWR 1960 118.400 55 15 162 30 R F Also tundra, glaciers, volcanoes Import, for Black grant and

Empire geese during migration.

USA						Main habitat type	Ecological function	
CAFF Code Name	Year	Area ha	Lati- tude	Longi- tude	geo.unit primary/ secondary	оwпег	delta cultural alpine glacier tundra geolog forest marine wetland iso.lsl.	alviambing moulting living wintering resting feeding nesting breeding
ALA007 Selawik NWR	1978	958.000	66 45	159 00	NAI	F	The tundra wetlands are the most prominent.	Situated where the Bering Land Bridge once existed.
ALA008 Togiak NWR	1978	1.864.700	59 30	160 00	NA6	F		
ALA009 Yukon Delta NV	WR 1909	8.516.400	61 30	164 00	NAI	F	The Yukon and Kaskokwim Rivers dominate the landscape.	56 Yupik villages in the refuge depend on wildlife resources.
ALA010 Aniakchak NM	1978	55.500	56 5 <b>5</b>	158 10	NA6	F	Volcanic features, hot springs.	
ALA011 Aniakchak NPro	es 1978	188.000	56 50	157 45	NA6	F	Volcanic features, hot springs.	
ALA012 Bering Land Bri	idge NPres 1978	1.091.300	66 00	164 00	NAI	F		
ALA014 Cape Krustenste	ern NM 1978	262.800	67 30	163 30	NAI	F	Gravel beachscape.	Archaeological sites. Beach ridges describe land growth.
ALA015 Gates of the Arc	ctic NPres 1978	133.200	67 45	155 00	NA2	F		Indigenous people follow tradicional patterns of life.
ALA018 Katmai NPres	1978	129.100	58 30	155 00	NA6	F	Lakes, rivers, glaciers, coasline of cliffs and islets.	Cretical for the Brown bears survival in Alaska.
ALA020 Noatak NPres	1978	2.622.700	68 00	159 00	NAI NA2	F		Large untouched river basin. E.g.carnivores,dall sheep,birds
ALA022 Tugidak Island	SCHA 1988	64.100	<b>5</b> 6 30	154 45	NA6	s		
ALA023 Cape Newenhar	n SGR 1960	3.600	58 47	161 42	NA6	S	Vast celgrass beds.	Ducks, geese, shorebirds. Critical to Black brant.
ALA024 Cinder River So	CHA 1972	7.600	57 22	158 00	NAI	S	Large wegetated, intertidal areas.	E.g.ducks.geese.shore bird, particul.import.to Canada geese.
ALA025 Egegik SCHA	1972	1.800	58 09	157 09	NAI	S	Extensive areas of tideflats, wetlands and nearshore waters.	Waterbirds,
ALA026 Izembek SGR	1960	73.000	55 20	162 53	NAI	S	One of the world's largest eelgrass beds.	Millions of watwerfowl
ALA027 McNeil River S	GS 1967	160.500	59 10	154 30	NA6	s		
ALA028 Pilot Point SCH	IA 1972	30.100	57 30	157 50	NAI	S	Extensive tideflats and flat lowland tundra.	Large flocks of waterbirds.
ALA029 Port Heiden SC	HA 1972	27.600	56 48	158 55	NA1	S	Extensive estuarine environment of tideflats and wetlands.	Large flocks of waterbirds.
ALA030 Port Moller SC	HA 1972	49.800	55 55	161 00	NAI	s		Large flocks of waterbirds.
ALA031 Walrus Islands	SGS 1960	79.200	58 42	160 18	NA6	S	7 craggy islands fronted by rocky beaches and steep cliffs.	Regularly land-based walrus haulout. Seabirds.
ALA032 Wood-Tikchik	SP 1978	415.000	60 00	159 00	NA6	S	Diversed area; from boreal forest to arctic fundra.	
27 areas in IUCN Categ	oryIV	27.048.200	ha, tota	aI				
41 areas in IUCN Categ	ory I - V	33.142.550	ha, 56,	1% of t	otal Arct	ic area i	in USA	

<sup>41</sup> areas in USA

56,1% protected Arctic area of 59.053.300 ha total Arctic area

3,6% protected Arctic area of 916.675.800 ha total land area

<sup>33.142.550</sup> ha protected Arctic area (all classes)

### APPENDIX VII

#### PROPOSED PROTECTED AREAS DATA BASE

The report presents the contents of the protected areas databases through maps and a table of protected areas. In addition, the databases contains several other datasets used for reference.

The three main parts of the databases are:

- 1. Two tabular databases giving information on the protected areas. The tabular databases are identical to the tables of existing and proposed protected areas. The digital tabular databases exists as a Microsoft Access database that can easily be exported to other formats including common spread sheet formats. The key of the tabular databases is the CAFF No, an arbitrary selected sequence number consisting of a letter country part and a 3 digits serial number part. A few countries have unique national codes for protected areas, these are included in the database when available, but not shown in the table.
- 2. A Geographical Information System (GIS) database that contains the polygons containing the outline of the existing and proposed protected areas. In the GIS databases each polygon is given its correponding CAFF No for identification. A mapping from the GIS system's CAFF No to the number in the tabular databases is used to assign colour code for IUCN class etc. The data are managed with the GIS software ARC/Info from ESRI.
- 3. GIS databases with various reference data. These datasets are only included for reference and have varying quality.

The following sections describe the data that are included in the maps as shown in the report. Each data layer is presented with a reference to its source(s), formats, scale, GRID-Arendal processing and a comment on quality.

### The Arctic Region

Data Set	Source Institution	Source Format	Approx Nominal Scale	GRID-A Processing	Comments on Quality
10° July isotherm	EPA's Global Climate Research Programme and NOAA-NGDC Global Change Database Programme	CD-ROM	1:50 Mill	Interpolated	
Phytogeographica l boundary	Yurtev, B.A. 1994, Floristic Subdivision of Circumpolar Arctic	Digital	1:50 Mill	Digitised	Digitized by USGS EROS, ALASKA
Permafrost	International Permafrost Association	Digital	1:10 Mill	Digitzing	Generalized based on a preliminary map. Final version will be ready during 1996
Southern limit of					
Arctic data.					
USA	Based on Ecoregions of Alaska. USGS/EROS- Alaska	Digital	1:5 Mill	Extraction	
Canada	Based on North American Ecological Areas. Environment Canada, US-EPA, USGS/EROS-Alaska	Digital	1:25 Mill	Extraction	
Norway	Arctic circle				
Sweden	Arctic circle + northern treeless areas	Paper	1:50 Mill	Digitised	Poorly defined line
Finland	Arctic circle				
Russia	Various descriptions	Paper	1:50 Mill	Digitised	Poorly defined line
Barents Region		Digitized by GRID-A	1:25 Mill	Extraction	1:25 mill

The Arctic data limit is defined as given above. It is of importance to note that each country have different approaches to the definition of the southern limits of data relevant for CAFF. Some of the lines are based low resolution descriptions and thus of low quality.

# APPENDIX VII

# **Topography and Bathymetry**

Data Set	Source Institution	Source Format	Approx. Nominal Scale	GRID-A Processing	Comments on Quality
ETOPO-5	UNEP	Digital	5 minutes raster	Projection	Poor elevation resolution in some areas

# **Existing Protected Areas**

Data Set	Source Institution	Source Format	Approx. Nominal Scale	GRID-A Processing	Comments on Quality
Сапада	State of the Environment Canada	Digital and paper		Projected, digitised	Many areas have no polygons, they are plotted as points
USA, Alaska	US Fish & Wildlife Service, USGS/EROS- Alaska	Digital		None	
Greenland	Hjemmestyrelsen på Grønland	Digital	1:1 Mill		
Iceland	Protected Areas and sites of special interest of Iceland. Nature conservation Council 1991	Paper	1:750000	Digitised	
Norway	Directorate for Nature Management/The Norwegian Mapping Authority	Digital	mostly 1:250000	None	
Sweden	Naturvårdsverket	Digital	1:50 000	Projected	
Finland	Environmental Data Center/MoE Finland	Paper/ Digital	1:50 000 - 400 000	Digitised	
Russia	WWF Russia. I. Lyssenko	Digital	1:1 Mill	Projected	Most IUCN Class I areas
Russia	WCMC	Digital	1:4 Mill	Projected	Some IUCN Class IV
Russia	MoE Russia, WWF International	Paper	1:25 Mill	Digitised	Many IUCN Class IV areas very low precision

As can be seen from the above table the GIS data precision and quality various a lot and even lacks for many of the Canadian areas. The maps have only IUCN class I - V areas plotted but the GIS database also contains polygons or points for IUCN class VI - X areas in the tabular database. For some of the countries the GIS data also include polygons for protected areas not included in the CAFF report.

## **Proposed Protected Areas**

Data Set	Source Institution	Source Format	Approx. Nominal Scale	GRID-A Processing	Comments on Quality
Point data	Reports as delivered from All countries	Digital			Point locations and areas are use to produce size proportional areas
Iceland	Protected Areas and sites of special interest of Iceland. Nature conservation Council 1991	Digital	1:750000	Digitizing	
Sweden	Coarse paper, maps	Paper	1:1 Mill	Digitizing	
Finland	MoE Finland	Digital and paper	1:50000	Digitizing projection	2 out of 3 areas delivered have polygons

### **CAFF Habitat Conservation Reports**

- The State of Protected Areas in the Circumpolar Arctic 1994 (CAFF Habitat conservation Report No.1)
- Proposed Protected Areas in the Circumpolar Arctic 1996
   (CAFF Habitat Conservation Report No. 2)
- National Principles and Mechanisms for Protected Areas on in Arctic Countries (CAFF Habitat Conservation Report No. 3)
- Circumpolar Protected Area Network (CPAN)
   Principles and Guidelines
   (CAFF Habitat Conservation Report No. 4)
- Gaps in Habitat Protection in the Circumpolar Arctic – a Preliminary Analysis (CAFF Habitat Conservation Report No. 5)
- Circumpolar Protected Areas Network (CPAN)
   Strategy and Action Plan
   (CAFF Habitat Conservation Report No. 6)









