



Arctic Bulletin



No 1.04 • PUBLISHED BY THE WWF INTERNATIONAL ARCTIC PROGRAMME



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WWF Arctic Bulletin

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Date of publication:

March 29, 2004
ISSN 1023-9081

Cover: Arctic fox

Photo: Staffan Widstrand

Printed at Merkur-Trykk AS
on 100% recycled paper.

This publication was made possible through the support of the Canadian Department of Foreign Affairs and International Trade.



Department of Foreign Affairs
and International Trade

Ministère des Affaires étrangères
et du Commerce international

Editorial

Time for an arctic convention?

OVER THE LAST DECADE, a growing number of researchers, institutions and NGOs, such as IUCN, have called for an arctic treaty. WWF believes that it is time for arctic governments to think seriously about a binding legal regime for conservation and sustainable use of the arctic marine environment.

Sea ice, darkness, lack of infrastructure and distance to market have been natural barriers to industrial uses of arctic seas, such as large-scale shipping and minerals development. The lack of large-scale commercial activity, other than fisheries, has helped to keep tensions low over the Arctic's numerous disputed maritime boundaries and shipping routes.

Within this century, climate change will alter this picture dramatically. Projections of sea ice extent show that large parts of the Arctic Ocean, and the northern coastlines of Canada, Alaska and Russia, may well be ice-free during the summer by the middle of this century.

A reduction of sea ice extent in the Arctic, coupled with a northward shift of commercially important fish stocks, has significant implications. In addition to direct impacts on the environment, these changes will affect national access to valuable fish stocks, rights to and the feasibility of minerals development, the feasibility of seasonal commercial shipping in the Arctic, and – not least – national security for arctic rim states. And the outcome of these questions of rights, access, shipping and security will have major consequences for the arctic environment.

If sea ice projections and some government scenarios come to pass, we may be looking at a future that includes the following:

- commercial shipping through the Arctic Ocean on a seasonal basis;
- disputes over commercial and military access to the Northern Sea Route;
- increased offshore oil and gas development and seabed mining in areas that currently are covered by sea ice;
- large, seasonally accessible coastal border areas along the northern coasts of Canada, Alaska and Russia;
- serious conflicts over disputed maritime boundaries and the resources in them; and
- the movement northward of valuable arctic fish stocks such as herring and cod, out of national waters and into High Seas areas or into the national waters of bordering states.

While some see this as a bright but distant future, others – including WWF, some arctic countries and arctic coastal peoples – are deeply concerned. Climate change will put the arctic region as a whole under extreme environmental stress. The loss of sea ice habitats may lead to local extinctions of sea-ice dependent species, such as ringed seal and polar bears.

When we add to this a potential free-for-all for resources, shipping routes and military access, we see a clear need for a regime with strict environmental protections, including marine protected areas; environmental standards for any operations that do take place; and established mechanisms for determining access to and rights in arctic High Seas areas. There's no need to repeat the lessons we've learned elsewhere from the tragedy of the commons, where unregulated access for all quickly turns into a race to use up resources before others get there first.

Why do we need yet another environmental convention, when some of the arctic states have not ratified the ones we have? Because existing instruments, such as the United Nations Convention on the Law of the Sea (UNCLOS), the Convention on Biodiversity and decisions of the International Maritime Organization, do not adequately cover potential uses of arctic seas outside of Exclusive Economic Zones (EEZs) and the continental shelf.

In WWF's view, the best platform for an arctic treaty is – unfortunately – the Arctic Council. It's unfortunate, because the Arctic Council will need significant institutional development before it can be the basis for negotiations. Moreover, the Council's current dispute over an assessment of arctic climate issues does not inspire confidence in the ability of member states to agree on a regional treaty. Nonetheless, there really is no other forum where necessary parties such as arctic states, arctic peoples and other stakeholders are present, and where infrastructure and expertise on relevant issues already exist.

Though 2050 seems to be far off in the future, governments are already thinking about what that future might bring. That thinking should include conserving the Arctic's seas.



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DIAMOND MINING

■ Four diamond mines are to start operating in the Canadian North in the next three years, with more to follow. A public hearing into De Beers' application for the Snap Lake Diamond Project in Nunavut concluded on January 28, 2004 and the company is on target to begin diamond extraction in 2007. The Jericho mine, also in Nunavut, has received approval and is set to begin extracting diamonds at the end of 2005. As diamonds make it economically viable to move into the north, they also pave the way for other forms of development and resource exploration.

EPA RELAXES AIR POLLUTION RULES

■ Under pressure from the oil and gas industry, the US Environmental Protection Agency is weakening air pollution limits for production and exploration operations on Alaska's North Slope, according to agency records released on February 9, 2004, by Public Employees for Environmental Responsibility (PEER). As a result of these rule changes, North Slope oil operations will be emitting as much nitrogen oxides (NOx) as the entire Washington DC metropolitan area. Elevated levels of nitrogen oxides represent a serious health problem for workers and native communities in the region.

NEW ROAD FOR PRUDHOE BAY OIL FIELD

■ While debate rages about the prospect of opening up the Arctic National Wildlife Refuge, the unprotected wilderness of Alaska's North Slope continues to be developed. A new 60-mile road from Prudhoe Bay to Bullen Point is in the works as oil companies continue their expansion. According to the Alaska Department of Environmental Conservation, in the North Slope region there have been an average of 395 spills and 59,208 gallons of oil a year from 1996–2002. The Prudhoe Bay oil fields, the largest in the US, are west of the Arctic National Wildlife Refuge.

New MPA for Svalbard

Norway's ambition for Svalbard to be one of the best managed wilderness areas in the world has moved a step closer with the announcement that additional marine areas of 40,000 square kilometers are now safe from mining, oil and gas exploration and production, and other infrastructure development.

There is still debate, however, over the level of protection for some marine species in the new protected areas.

Bottom trawling in waters less than 100 meters deep has been banned, however it can still take place in waters more than 100 meters deep.

WWF also understands that there will be a further exemption to hunting and fishing bans in the new protected areas; minke whale hunting will be allowed to go ahead. All other so-called 'resident' marine mammals will be protected.

Stefan Norris, head of conservation with WWF's Arctic Programme, said: "We're currently looking at how much of the protected zone is actually more than 100 meters deep. This will give us an indication of whether there will continue to be threats to the seabed despite the areas being protected."

He said, however, that WWF was delighted with the gains in protected area status that have been made on Svalbard. "Of particular importance is the ban on bottom trawling in waters less than 100 meters deep: this will give the seabed ecosystem a chance to recover," he said.

Last year, the Norwegian Government created five new protected areas on the arctic islands totalling 4,449 square kilometers, or eight per cent of Svalbard's land area. But at the time the seas off the coast of the protected areas were only protected to four



The waters around Svalbard.

nautical miles. This has now been extended to 12 nautical miles. The total marine protected area is therefore around 80,000 square kilometers.

Arctic Council progress on marine

Under the leadership of the working group Protection of the Arctic Marine Environment (PAME), the Arctic Council is developing an overall arctic marine strategic plan (AMSP).

The second draft of the plan is being reviewed by members, permanent participants and observers to the Council.

Stefan Norris, head of

conservation with WWF's Arctic Programme, said: "We are pleased the Arctic Council is initiating this work and attempting to incorporate into it core principles such as ecosystem-based management, sustainable development, indigenous peoples' involvement, integrated and comprehensive spatial planning, and the precautionary and 'polluter pays' principles."

He said WWF would be following closely how such principles are interpreted in the AMSP, and how they will be translated into actions by the Arctic Council working groups, and by the countries and indigenous peoples themselves.

The AMSP builds on existing national, regional, and international marine strategies and conventions, but will specifically be



Photo: WWF-Campan/Peter Prokosh

WWF has also recently learned that debates continue in the Norwegian Parliament over the status of some of the new terrestrial protected areas, in particular

in the Reindalen area, where the Norwegian coal mining industry has substantial interests.

WWF has worked for the last ten years to achieve

protected area status for the most valuable and vulnerable areas of Svalbard, including the seas around the islands.

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ine strategic plan

addressing arctic issues.

As the Arctic Council is not directly involved in fisheries issues, it was not immediately clear how the AMSP would address this issue.

WWF believes that fisheries issues, currently the one with the greatest impact on arctic marine ecosystems, must be central to the AMSP.

Governance issues, including those in international waters, are topics that

must be addressed in the AMSP, particularly in the light of climate change which is likely to lead to more ice-free transport routes and rapidly increasing shipping pressures in the Arctic.

Stefan Norris said: "The strategic plan must be very clear and ambitious on the need for a large and representative network of marine protected areas, including coastal zones and estuaries.

"It's good that these topics are being debated in the process of developing the AMSP. It is our hope that the Arctic Council will show leadership by using the AMSP as a pro-active tool in addressing these issues, some of which are shaping the arctic marine environment already, and some of which are looming large on the horizon."

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UPDATE ON INTERNATIONAL POLAR YEAR

■ The US National Committee (USNC) to the International Polar Year (IPY) has set up a new website at <http://us-ipy.org>. On the downloads page visitors can view the ideas proposed by the international science community for inclusion in the IPY 2007–2008. To date the planning committee has received over 140 ideas and 14 nations have established national committees or national points of contact for the IPY. A draft white paper outlining thoughts on the upcoming IPY will be available on their website for comment by May, 2004.

KOLSKY BAY OPEN FOR BUSINESS

■ According to Russian newspaper *Pravda* the Belokamenka Oil Terminal in Kolsky Bay has begun taking oil. The terminal will handle more than two million tonnes of oil this year. The oil is being shipped from Arkhangelsk to Kolsky Bay in the Murmansk region of North-west Russia via the White Sea. From Kolsky Bay it is shipped to Rotterdam in the Netherlands.

RUSSIAN RIVER DIVERSION PLAN

■ A report in UK science magazine *New Scientist* says that Russian scientists are reviving an old Soviet plan to divert some of Siberia's largest rivers to solve a growing water crisis in the former Soviet republics of central Asia. The \$40 billion scheme could gain international support claims the magazine. "Recent increases in the flows of Siberia's rivers, probably due to global warming, have raised fears that a less salty Arctic Ocean could shut down the Gulf Stream and trigger icy winters across Europe. Diverting part of the flow of the rivers could prevent that. But some experts say that the hugely ambitious scheme will cause social, economic and environmental disaster," says the *New Scientist*.

TRADITIONAL INUIT ICE TREKS GUIDED FROM SPACE



Inuit are using satellite technology supplied by the European Space Agency (ESA) to navigate their way across the ice. The ESA-backed Northern View Floe Edge Information Service, <http://www.northernview.org>, provides regularly updated ice maps of inlets around Lancaster Sound, part of Baffin Bay in Canada's Nunavut Territory. Users can access maps from the Floe Edge service directly via a dedicated website, or consult print-outs posted for the public by the local Parks Canada office. Inhabitants of this region depend directly on fish and game from the ice edge for sustenance, and journeying there has a strong cultural significance as well. The biological diversity encouraged by plankton-rich waters at the ice edge also attracts a growing number of tourists.

CLIMATE BRIEF

WWF-US' chief climate scientist Lara Hansen testified before the full US committee of the Senate Committee on Commerce, Science and Transportation in March. The Senate Committee on Commerce, Science and Transportation was conducting an oversight hearing on the impacts of climate change. Dr. Hansen's testimony covered the impacts of climate change on biodiversity, including polar bears and sea ice, with a focus on the impact of climate change on corals and coral reef ecosystems. Dr. Robert Correll, chair of the Arctic Council's Arctic Climate Impact Assessment, also testified before the Senate committee.

Inuit conflict resolution

In the Canadian North, the last generation of Inuit elders to experience the traditional way of life is now in its final years. Once they've gone, the Inuit's first hand accounts of the traditional approach to conflict prevention and resolution will go too.

Yet their way of life won't be lost completely. A new initiative has set out to document Inuit elders' thoughts on peace, using dialogue, interviews and community-based research.

Launched in May 2003, the Inuuqatigiit Forum on Conflict Resolution recognises the need for community-based conflict resolution in the Arctic.

The initiative was developed with help from the Canadian Institute for Conflict Resolution.

The plan is to develop a community-based strategy for training in dialogue and facilitation rooted in Inuit values and culture, with the input of Inuit elders being central to the process.

The Forum was developed in response to the extraordinary changes experienced by the Inuit. In the last few decades the Inuit have gone from a nomadic to contemporary existence.

There is also an increased need for dialogue between



Noah Hiqiniq demonstrates the traditional drum dance, used by groups in greeting each other to reduce the anxiety of unfamiliarity.

the northern peoples and southern Canadians to promote mutual respect and understanding.

In Inuktitut, the language of Canadian Inuit, the word Inuuqatigiit means 'people-to-people' implying co-operation, togetherness and interdependence. This has been the essential approach to survival that allowed Inuit to survive in one of the harshest climates in the world for centuries.

The Forum is jointly sponsored by Saint Paul University's new Master's Degree programme in conflict studies and the Canadian Institute for Conflict Resolution, both based in Ottawa.



Mark Kalluak elaborates on principles of Inuit Qaujimajatuqangit, at the opening launch of the Forum.

Forum coordinator Janet McGrath explains, "Time is of the essence as the last of the traditional Inuit of Canada grow older. We aim to take their lead and learn all we can about the Inuit traditional approaches, values and principles. Inuit are world renowned for their non-violence and peacefulness. We want to understand the values and principles behind this reputation better from people who have personally experienced it, and we want to share in developing this human capacity in our own contemporary communities."

The Forum has gatherings every two months, and posts the talks and presentations on the web at: www.inuuqatigiitforum.com

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Inuit Council meets in Iqaluit

Inuit leaders from Alaska, Canada, Chukotka (Russia), and Greenland met in Iqaluit for the Executive Council of the Inuit Circumpolar Conference (ICC) in January.

Their agenda included

social, cultural, economic, and environmental issues.

Sheila Watt-Cloutier, chair of ICC, hosted a reception at which she officially opened ICC's head office. She thanked, in particular, the Government of Nunavut and Nunavut Tunngavik

Incorporated for their support to ICC in opening the office.

"Since 2002 I have operated the Office of the Chair out of my home office. It is good now to have a formal office in downtown Iqaluit," said Watt-Cloutier.

Inuit child in Pond Inlet.

Scientists map arctic vegetation

Scientists have compiled the first comprehensive map to show plant life in the Arctic.

The Circumpolar Arctic Vegetation Map (CAVM) shows the types of vegetation that occur across the Arctic, between the ice-covered Arctic Ocean to the north and the northern limit of forests to the south.

An international team of arctic vegetation scientists representing six arctic countries – Canada, Greenland, Iceland, Norway, Russia, and the United States – prepared the map.

The CAVM team grouped over 400 described plant communities into 16 different physiognomic units based on plant growth forms.

The map is available from the University of Alaska, Fairbanks at www.geobotany.uaf.edu/cavm

Environmental and climatic conditions in the Arctic are extreme, with a short growing season and low summer temperatures. The region support plants such as dwarf shrubs, herbs, lichens and mosses, which grow close to the ground.

Moving southwards, away from the Pole, the amount of warmth available for plant growth increases considerably. Warmer summer temperatures cause the size, abundance, and variety of plants to increase.

Climate and other environmental controls, such as landscape, topography, soil chemistry, soil moisture, and the available plants that historically colonized an area, also influence the distribution of plant communities.

“International issues have an increasing impact on the lives of Inuit. It is vital that we are well organized to deal with them. This is why we have opened our downtown office here in Iqaluit.”

The Executive Council discussed Watt-Cloutier’s report of her activities at the December 2003 meeting in Milan of the Conference of Parties to the United Nations Framework Convention on

Climate Change.

“Many countries and non-governmental organizations are keenly interested in the connections ICC is drawing between global climate change and the human rights of Inuit,” she said.

Natalia Rodionova, President of ICC Chukotka reported extraordinary success on a Canadian-supported arts and crafts marketing project in

Chukotka. This project connects artists and carvers in small Inuit communities in Chukotka with marketing agencies in Western Europe.

The President of ICC Alaska gave the Executive Council an initial briefing on plans to hold the next ICC General Assembly in Alaska in Summer 2006.

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Fresh hope for Iceland park

Iceland could have a giant new national park by November. A special committee is expected to deliver a proposal for the park to Iceland's environment minister by May.

The Icelandic Parliament is likely to adopt a resolution on establishing the park by the autumn, allowing the Government to make an official announcement at the next Arctic Council Ministerial Meeting in Reykjavik in November.

The new national park would protect one of three glacial rivers running north from the Vatnajökull Glacier, the Joekulsa a Fjoellum. Two

other glacial rivers, Joekulsa a Dal and Joekulsa i Fljotsdal, have been earmarked to supply hydropower through the Karahnukar Power Plant which, in turn, supplies a new Alcoa aluminium smelter.

The new national park will link the Joekulsargljufur National Park in the north to the Skaftafell National Park south of the glacier.

Samantha Smith, director of WWF's Arctic Programme, said: "WWF and the Iceland Nature Conservation Association have been campaigning for the creation of a large national park in Iceland since 1997. If the proposal for a new

park becomes a reality, it will be a fantastic boost for conservation in Iceland."

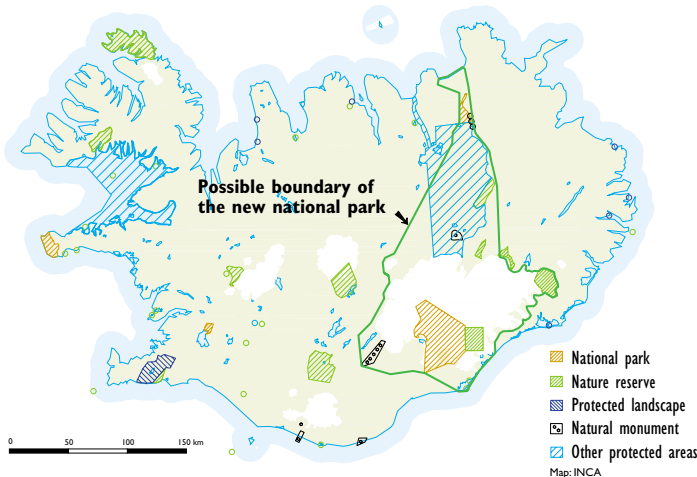
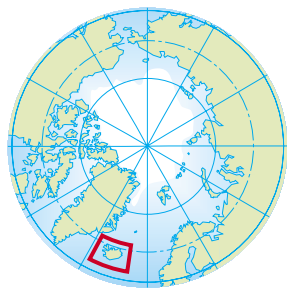
The Government committee is not only considering the size of the new national park and how best to create different zones in accordance with IUCN categories but also how to promote tourism and related activities in the park.

Environment Minister Siv Fridleifsdottir, who leaves office in September, wants to establish the park all but officially before she departs the Ministry.

The special committee consists of representatives from four political parties and is chaired by Magnus Johannesson, Secretary General of the Environment Ministry. It started work in autumn 2002.

The committee has met representatives from communities to the north, east and south of the glacier. They include community leaders, environmental NGOs, farmers, energy companies and other landowners. There is general acceptance of the park vision presented by the committee.

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New report supports protected areas

A new report by Canada's former Northwest Territories Premier Stephen Kakfwi describes the Northwest Territories Protected Areas Strategy as an excellent tool for communities in the North to find an effective long-term balance between the benefits of economic development, and the protection of culturally and environmentally significant lands.

The report, *A Review and Assessment of the NWT Protected Areas Strategy: Special focus on preparations for new hydrocarbon developments*, was supported by WWF-Canada, and calls for the implementation of the Mackenzie Valley Five-Year Action Plan (2004–2009), and for the federal

government to follow through with its commitment of \$9 million to help fund the plan.

The Action Plan is an integral part of the NWT Protected Areas Strategy, a joint federal-territorial initiative which the Department of Indian Affairs and Northern Development and the Government of the Northwest Territories Department of Resources, Wildlife and Economic Development have been implementing since 1999, in partnership with representatives from all regional aboriginal organisations, the oil and gas and mining industries, and environmental non-government organizations.

The impetus for the five-year Action Plan is the increasing pace

and scale of oil and gas development within the NWT and, in particular, along the Mackenzie Valley.

"These are times of great economic opportunity in the north," said Stephen Kakfwi. "But not at any cost. We must be very careful to seize these opportunities without taking great risks and degrading the land, its renewable resources and the cultural traditions that have evolved over thousands of years."

Kakfwi cites several examples where the Protected Areas Strategy has been successfully applied to advance aboriginal priorities with respect to economic development and protection of land.

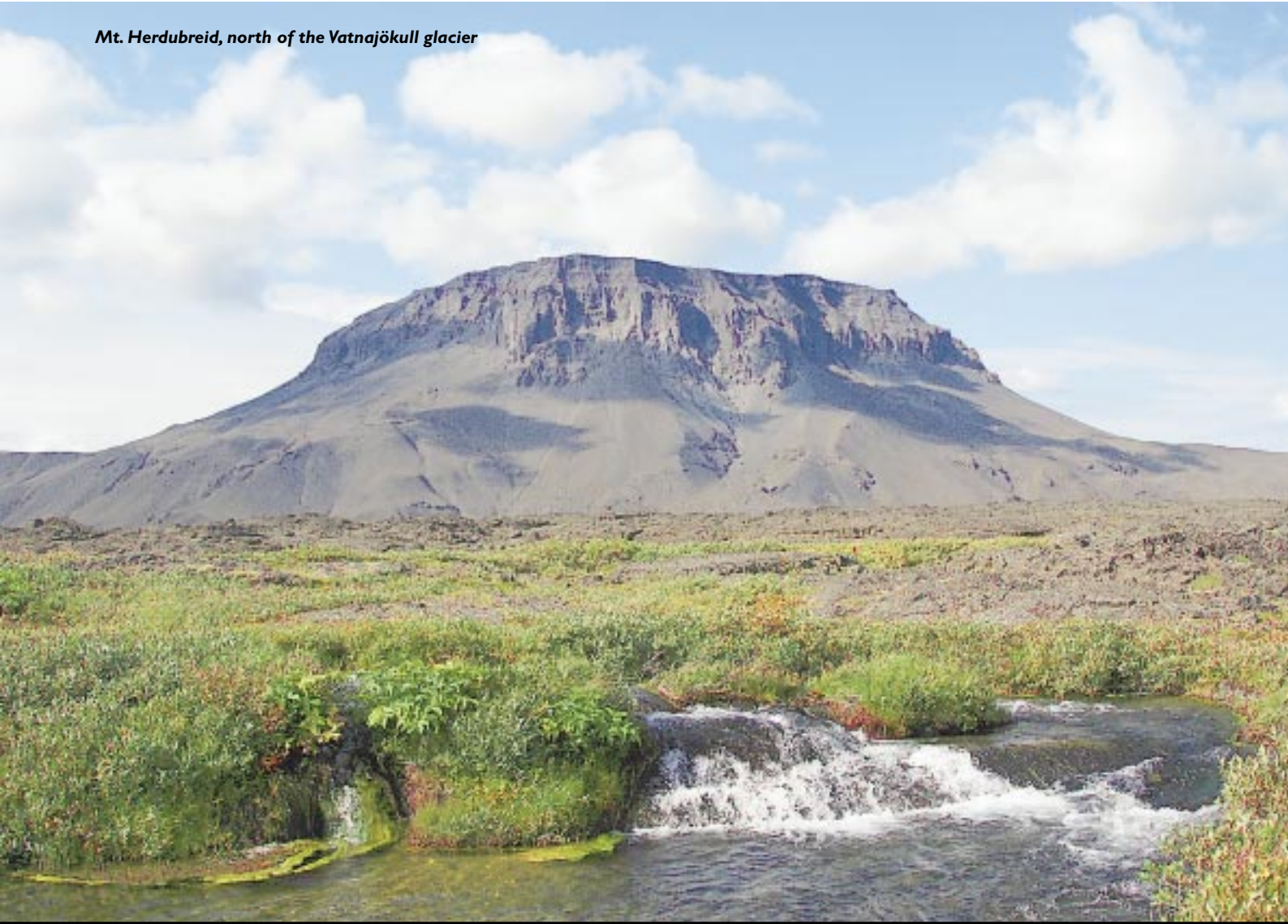
Mt. Herdubreid, north of the Vatnajökull glacier

Photo: Johann Isberg

strategy

In the Deh Cho, a large site between Fort Simpson and Fort Providence, Edézhíe (The Horn Plateau), has been protected under the Protected Areas Strategy while allowing for a pipeline corridor at its western margin, all with the full support of the communities.

The report notes that communities, NGOs and the regional government have demonstrated their support of the Protected Areas Strategy by making firm commitments to help fund and implement the Mackenzie Valley Action Plan.

He concludes that it is time for the federal government to do the same. The reason, Kakfwi warns, is that time is running out. "The proponents of the proposed gas

pipeline expect to file an application this year," says Kakfwi. "They have been preparing and planning for the last three years and are very well resourced. The communities need more resources to prepare effectively to deal with the huge changes about to happen, because these changes will impact the future of our grandchildren."

WWF-Canada is very supportive of the report and its findings, especially because it reflects the views of the communities.

"When Stephen says in the report that Protected Areas Strategy partners should lobby and promote responsible economic development within a sound environmental management frame-

work in the NWT, he is speaking on behalf of northerners," said Bill Carpenter, WWF's Regional Conservation Director in the NWT. "His knowledge of the territory and the goals of the communities in the NWT is second to none. There could not be a better champion for the Protected Areas Strategy and the well-balanced approach."

Further details about the NWT Protected Areas Strategy and the Mackenzie Valley Action Plan are available in the newsroom on WWF-Canada's website, www.wwf.ca

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Photo: WWF-Canoa/Peter Prokosh

Burning off gas at an oil field, Prudhoe Bay, Alaska.

Conservationists challenge US Administration

In an effort to restore a balance between development and wildlife protection in Alaska's western arctic, conservation groups have announced a lawsuit challenging a plan to open up the entire north-west portion of the National Petroleum Reserve-Alaska (the Reserve) to oil and gas leasing.

The groups are challenging the January 22, 2004 decision to open 100 percent of the 8.8-million-acre north-west portion of the Reserve, with a corresponding failure to permanently protect any of the region's most important wildlife habitat or hunting and fishing grounds.

Secretary of the Interior Gale Norton, the Bureau of Land Management (BLM) and the US Fish and Wildlife Service (USFWS) are named in the suit, which alleges that the January 22 decision violated the National Environmental Policy Act and the Endangered Species Act among other laws, and that the agencies did not adequately assess the impacts from and alternatives to oil development in the Reserve, which is located in America's western arctic.

"The Administration had a chance to strike a real balance between conservation and development in the western arctic, but instead they took the most extreme option," said Deirdre McDonnell, attorney for Earthjustice in Juneau.

"Instead of looking for the middle ground, they said, 'Let's drill it all: permanently protect nothing, make environmental rules even weaker, and put wildlife and people at risk.'"

The Reserve contains the country's largest block of unprotected land, including areas of unsurpassed beauty and essential habitat that are vital for wildlife and for the people who depend on them for subsistence. On January 22, 2004, the Bush Administration announced that it would make the entire 8.8-million-acre north-west planning area of the Reserve available for oil leasing.

Conservationists say that the decision to open so much of the Reserve to oil and gas leasing ignores the need for permanent protection for sensitive wildlife habitat and makes misleading claims about the effects of oil and gas development.

The lawsuit highlights several violations of federal environmental law. The decision violates the National Environmental Policy Act by failing to provide adequate analysis of potential oil and gas leasing and development activities in the Reserve, the impacts of these activities, or the proposed mitigation measures.

"The Department of the Interior was hoping that no one would look closely at what they're doing in the western Arctic," said Eleanor Huffines, the Wilderness Society's Alaska Region Director. "But when you read the details of their plans, all their claims about protecting special areas turn out to be smoke and mirrors. The 'special areas' don't get special treatment, and the 'strict environmental rules' are weaker than what we have now."

The agency failed to consider all reasonable alternatives to the lease-it-all course adopted by Secretary Norton. The National Audubon Society's Alaska State Office published a report outlining a wildlife habitat alternative in December 2002, which was

supported by tens of thousands of public comments, but it was never taken seriously by the BLM.

“The Interior Department has ignored the public, the science, and the law in the rush to open every possible acre of the western Arctic to oil drilling,” said Stan Senner of the Audubon Society. “Audubon’s two-year study demonstrated that the Reserve is large enough to balance oil drilling and wildlife protection, if you protect the right places. We’re asking Interior to go back and try again – and, this time, to do it right.”

The status of threatened bird species that could be adversely affected by oil and gas development is also ignored in the decision. The Reserve contains extremely important breeding, molting and migrating habitat for birds, including Steller’s and spectacled eiders, which are listed as threatened under the federal Endangered Species Act, and the rare yellow-billed loon.

“The USFWS has a clear obligation to ensure that their actions will not jeopardize the survival of these threatened birds,” said Corrie Bosman, Alaska Program Director with the Center for Biological Diversity based in Sitka, Alaska. “By approving this project without carefully considering the full impacts of additional oil and gas leasing on the eiders and their habitat, the USFWS has violated the law and put the survival of these species at risk,” Bosman said.

“The Reserve is supposed to be our oil of last resort. We didn’t tap it during World War II and we don’t need to destroy its most important habitat areas now. This is just another oil patch on the road to progress by an Administration bent on doing anything to delay the development of clean fuel sources,” said Charles Clusen, Alaska project director for the Natural Resources Defense Council.

The lawsuit was filed Monday, February 16, in federal district court in Juneau by Earthjustice on behalf of the Northern Alaska Environmental Center, Alaska Wilderness League, Center for Biological Diversity, National Audubon Society, Natural Resources Defense Council, Sierra Club and The Wilderness Society.

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Landmark toxics treaty to become law

A historic treaty that will significantly reduce toxic threats to arctic wildlife and people throughout the world is set to become law in the next two months.

France became the 50th country to join the Stockholm Convention on Persistent Organic Pollutants (POPs) on February 17 so triggering the final implementation phase of the Convention.

“POPs weaken the immune systems of whales and polar bears, contaminate the food of Inuit communities in the Arctic, and are wreaking havoc in wildlife and people throughout the world,” said Samantha Smith, director of WWF’s Arctic Programme. “The Stockholm POPs Convention will ban or severely restrict these dangerous chemicals.”

The treaty targets 12 extremely harmful chemicals, including PCBs, dioxins, and several pesticides, with provisions to add additional chemicals in the future.

POPs are hazardous because they are toxic, persistent, resisting normal processes that break down contaminants, accumulate in the body fat of people, marine mammals, and other animals and are passed from mother to fetus. They can travel great distances on wind and water currents. Even small quantities of POPs can cause nervous system damage, diseases of the immune system, reproductive and developmental disorders, and cancers.

WWF played a lead NGO role in the treaty negotiations which concluded in May, 2001, and has been pressing governments to expedite their ratifications.

“Achieving the requisite 50 parties in less than three years is a huge victory,” said Smith. “The Stockholm Convention is unique in attacking the problem at its source, banning outright or severely restricting some of the world’s most dangerous chemicals.”

The United States is conspicuously absent from the list of parties to the Convention. Although the



Photo: WWF-Camden/Morten Lindhard

US signed the treaty in May 2001, there remains considerable disagreement about how to amend existing laws to implement the treaty. The Bush Administration’s proposed legislation would create burdensome new administrative and cost-benefit requirements, making it more rather than less difficult to regulate any POPs that are later added to the treaty.

WWF and other environmental and public health groups want the United States to become a party to the Stockholm Convention but to do so in a way that fully and effectively implements the treaty.

POPs accumulate in the body fat of harbour seals and other arctic wildlife.

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Arctic fox a victim of climate change?

A new project aims to study the impact of climate change on arctic species and, in particular, the arctic fox. Nina Eide, the project's leader, explains what she hopes to achieve.

Arctic fox populations declined rapidly throughout Fennoscandia in the early decades of the 20th century. By the late 1920s, the arctic fox was close to extinction in many areas. As a result, the fox was protected from hunting and trapping in 1928, 1930 and 1940 in Sweden, Norway and Finland, respectively.

But despite more than 70 years of protection there has been no recovery of populations in Fennoscandia where today the arctic fox is found in very low numbers on only a few of the alpine plateaus which they once inhabited. This decline is probably strongly influenced by the disconnected spatial distribution in "islands" of alpine habitat, surrounded by a "sea" of boreal forest. Yet, although less pronounced, and not well documented, a decline in arctic fox populations also seems to be happening throughout the Arctic, even in areas where populations occur in continuous distributions.

The changes in population sizes across several continents all happened around 1900, implying that there are common changes happening at larger spatial scales. Many hypotheses have been put forward to explain the non-recovery of the arctic fox; one of them is indirect effect of a warmer climate.

The southern, and lower altitudinal distribution of arctic foxes is most likely constrained by the distribution of its main competitor, the red fox. The larger red fox exploits the same resources, food and den sites, and they have also been known to kill arctic foxes. Arctic foxes usually avoid direct encounters with their bigger cousins and are therefore found mainly in areas where biological productivity is too low for the red fox to survive.

From 1900 to 1940 there was an overall rise in average temperature in the northern hemisphere. During this time the numbers of arctic fox also declined. Rising temperatures in the north create good conditions for the red fox, which leads to a decline in good arctic fox habitat.

This process has apparently already begun, as red foxes are increasingly occupying former arctic fox dens in low-lying areas in Fennoscandian Mountains. In Canada and Russia red foxes also have expanded to the north during this century.

A recent review of several species in both terrestrial and marine ecosystems shows that arctic species tend to be stable or declining, whereas temperate species at the same sites have increased

Arctic fox.



Photo: Saffin/Wikstrand



Red fox.

in abundance and even expanded their ranges. The arctic fox is an “arctic” species, while the red fox is a typical “temperate” species.

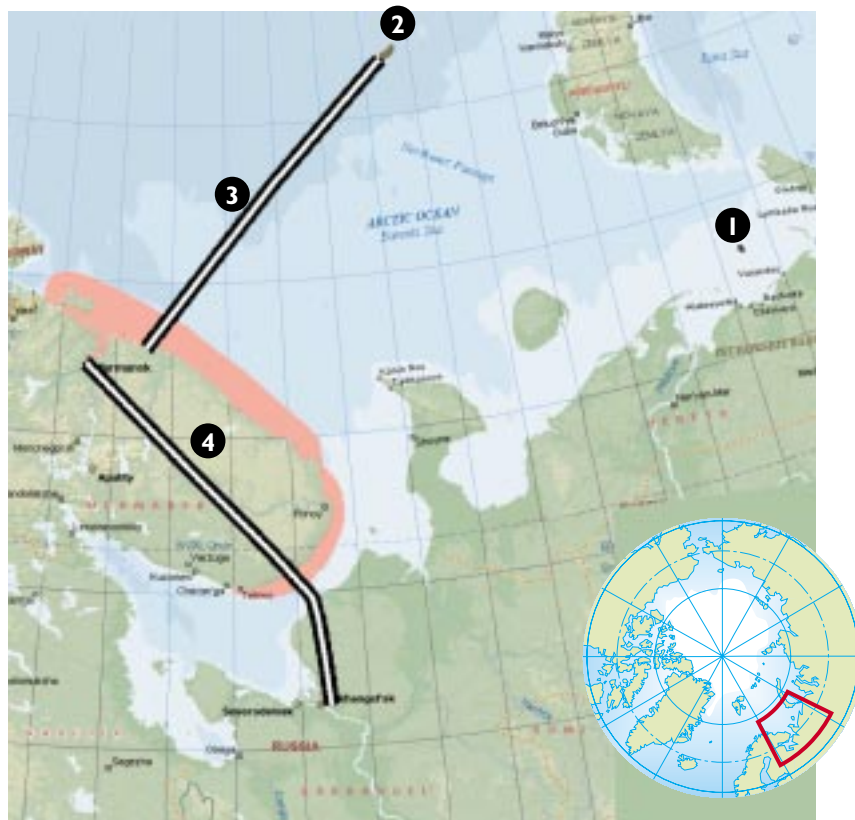
The main objective of our new study is to improve our understanding of possible influences of climate changes on community structure in alpine ecosystems, with a main focus on the relationship between the arctic fox and the red fox. We plan to compile historic and current data on the distribution and abundance of arctic fox and red fox in alpine and tundra ecosystems. We also want to see if there are any parallel changes in the abundance of species that have the same food niche as the arctic fox, such as the snowy owl, rough-legged buzzard and long-tailed skua, which could indicate larger changes in the structure of alpine and tundra ecosystems. And we also want to know whether any changes in the distribution and abundance of these species could relate to the climatic changes that have occurred over the last 100–150 years.

Our main study areas will be in Norway at Børgefjell and Hardangervidda. Børgefjell contains the largest remnant arctic fox population in Norway, while Hardangervidda has one of the largest red fox populations in the alpine zone. The distribution of arctic fox den sites is known on many of the larger mountain plateaus in Norway, like Hardangervidda, and in Sweden and Finland because arctic foxes return year after year to the same denning sites. After decades or even centuries of use, the dens remain very visible in the alpine landscape even when arctic foxes have been absent from the area for many years. Mapping dens provides a unique impression of the species former distribution.

We will also be looking at changes on a global scale, making use of data on fox trapping from across the Arctic. Records are available in North America and Canada that date back to 1900. We also have access to village specific data on arctic fox trapping from Greenland that extends back to 1800 as well as from Svalbard from 1900–1940 and 1946–1960. The latter provides information on arctic fox population dynamics in areas where red foxes are not present.

The Arctic Bulletin will be reporting on the findings of the research in a future issue.

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The maps shows the Barents Sea region and White Sea with the Prirazlomnoye oil field (1), the Shtokmanovskoye gas field (2), the proposed gas pipeline towards the Teriberka settlement (3), and the vulnerable area along the Kola Peninsula coast (red area). It also shows the proposed oil pipeline from Siberia towards Murmansk (4) and the ecologically vulnerable area along the Terskiy coast of the White Sea (red area).

Pechora Sea threatened by oil

Environmentalists and scientists are becoming increasingly worried about the threat posed to the Russian Pechora Sea by oil development.

Development of the Prirazlomnoye oil field in the Pechora Sea, a south-eastern extension of the Barents Sea, has already started.

The Sea is home to thousands of ducks, geese and waders, while some of largest populations of Brünnich's guillemots breed on the Novaya Zemlya archipelago.

It is also home to a major walrus colony in the Atlantic, at Dolgiy Island, near the Prirazlomnoye oil field. The walrus is on the list of rare species in the Red Book of the Russian Federation.

Future large-scale development of the Prirazlomnoye oil field and the realisation of other oil and gas pipeline

projects, such as the oil pipeline from Siberia to Murmansk, the gas pipeline from Shtokmanovskoye gas field to Teriberka settlement, and large scale oil shipping from Murmansk, will impact wildlife habitats across the region.

Samantha Smith, director of WWF's Arctic Programme, said: "It is evident that any accidental situation either during the extraction of oil or during shipping, could have disastrous consequence for wildlife in the region."

"Any response to an oil spill will be difficult in this region due to the extreme climate. It is also impossible to predict a distribution pattern of oil spillage during the ice-cover period. As it currently stands, the Russian Arctic is one of the regions most susceptible to oil pollution given the fast rate of development and the difficulties of emergency response."

Oil escaping from the wrecked Braer tanker, 10 January 1993. Shetland Islands, UK.



Photo: WWF/Dominique Hallaux

A dense flock of king eider ducks.



Photo: Maria Gavrilov

Coastal zone of the Pechora Sea.



Photo: Yuri Krasnov

➤ Unfortunately, the present development of hydrocarbon fields on the Russian arctic shelf takes priority over the preparation of proper nature protection management plans, she said.

WWF is now calling for further measures to reduce the possibility of oil spills. In addition WWF wants oil companies to train employees to rescue wildlife affected by oil spills. They also want special centres to help rescued wildlife and they want clean-up chemicals and equipment stockpiled at key locations.

The strait connecting the White Sea with the Barents Sea, known as Gorlo (Russian for "throat"), also needs special attention. Shallow waters on the western part of the Gorlo are home to a large number of marine ducks year round, mainly the common eider as well as the king eider and Steller's eider. In

winter the Barents Sea harp seal population use the ice-cover of this area as a breeding ground and molting area.

On the Murmansk coast of the Kola Peninsula is a narrow offshore zone where more than 100,000 marine ducks, mainly common eider and Steller's eider, spend the winter. Three large seabird colonies are found on the mainland and tens of thousand of shags, kittiwakes and guillemots occupy their nest sites here in the breeding period. A rich diversity of seabirds breed in colonies in three archipelagos: Ainov Islands, Gavrilovskiye Islands and Seven Islands. The only large breeding grounds of the grey seal in Russia are also found in these archipelagos.

WWF-Russia in cooperation with the Murmansk Marine Biological Institute and the Arctic

and Antarctic Institute from Saint Petersburg voiced their concerns about the growing threat to the region from oil and gas at the 7th International Effects of Oil on Wildlife Conference last year.

Natalia Nikolaeva from WWF-Russia said: "Taking into consideration the present lack of finance for state nature protection organisations, led by the Ministry of Natural Resources, we are not sure that what needs to be done will be done. We hope that the influence of environmental NGOs, including international organisations in the region, will help achieve a reasonable compromise between the interests of the oil and gas companies and the natural environment in which they operate."

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Is Canada's arctic sovereignty threatened?

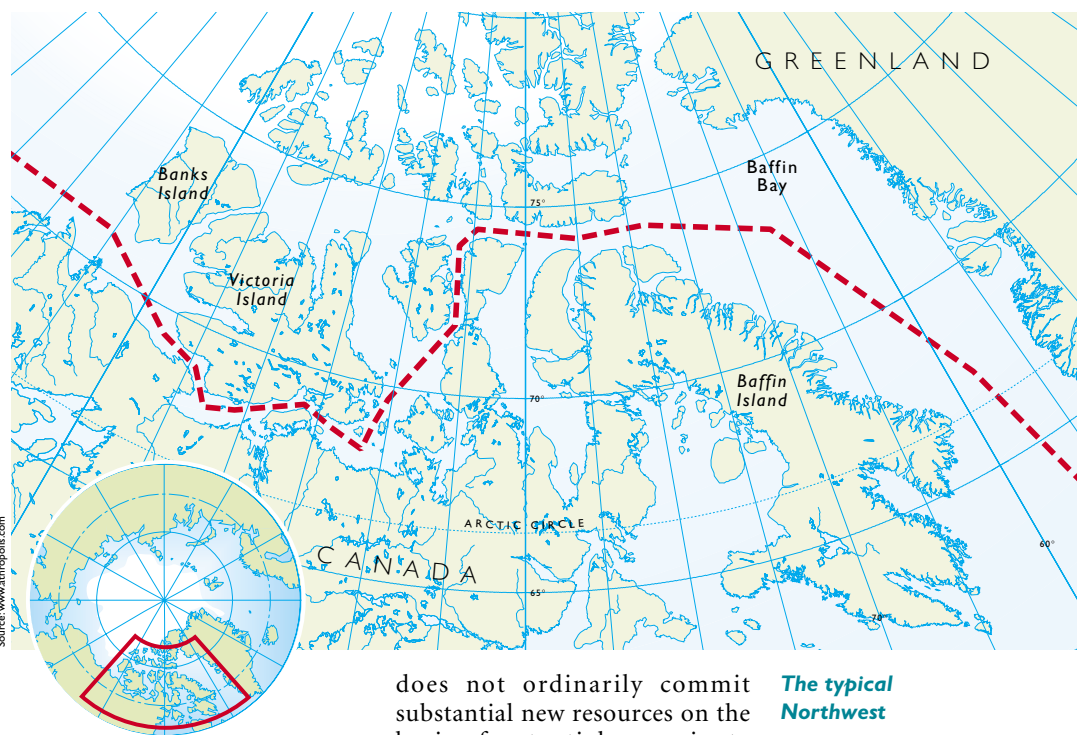
Will thinning sea ice in Canada's Northwest Passage see an increase in international shipping, and a shipping-based challenge to Canada's sovereignty over its arctic waters? Franklyn Griffiths thinks not.

It's my view that Canada has no serious sovereignty problem in the Northwest Passage. But we may well have a need to prepare for a gradual increase in summer-months foreign shipping which offers little or no direct challenge to Canada's occupancy of the high arctic archipelago.

Ice cover is indeed thinning in the Arctic Ocean as a whole, and in the Canadian archipelago in particular. However, the constricted waters of the archipelago and those of the open ocean are different. Canadian Ice Service data show that summer-month ice conditions have varied very greatly and in all likelihood will continue to do so from one shipping season to the next, and also from one sub-region to the next across the archipelago. Variable means unpredictable for shipping companies.

Projections generated by the Service also suggest that even if the rate of ice-cover reduction over the past three decades were to persist into the 2030s, we'd still be held to a shipping season of relatively unimpeded access for eight weeks out of 52 in a given year. So, we should be on guard when we hear talk of an 'ice-free' Northwest Passage.

Presented with such uncertainty, it seems to me that major shipping firms would not find it a 'tremendously' appealing business proposition to make extensive summer-months use of the Northwest Passage in the course of the next 30 years.



Scrutinized for its assumptions about climate change and shipping, the entire scenario of a commercial shipping threat to Canadian arctic sovereignty strikes me as highly unrealistic and all but wishful in its desire to construct a threat. Instead, thinning ice presents us with a limited challenge at the very most.

To be sure, there are rogue ship owners and foolish captains who could pose a law-enforcement and not a sovereignty hazard to Canada and Canadians. As well, Canada is faced with the potential for a small and slowly increasing number of north-south continental and conceivably also east-west inter-continental voyages in the summer months by ship owners and operators who have no business interest in offering a challenge to Canadian arctic sovereignty.

New means of law enforcement and support for navigation could be acquired in preparing for practical eventualities such as these, once they have been sized up carefully. But the Canadian Government

does not ordinarily commit substantial new resources on the basis of potential sovereignty threats, and rightly so.

I have also advanced the view that the events of September 11 may well have altered the international politics of the Northwest Passage. Both Canada and the United States now share a greatly increased interest in security cooperation against terrorist and related non-traditional threats. Issues that threaten sharply to divide the two countries, most notably the status of the Northwest Passage, must more than ever be managed to the satisfaction of both, or common security will suffer. I believe they will be managed to good effect.

Despite all this, sovereignty-on-thinning-ice is becoming the conventional wisdom for those who pay attention to such things in Canada. Media references to thinning ice are frequent. The same applies, if less so, to endangered arctic sovereignty. It's obvious that the notion of arctic sovereignty on thinning ice has considerable appeal. It is dramatic.

However, where the future of arctic sea ice is concerned, we ought

The typical Northwest passage route, often undertaken with the assistance of an icebreaker. Canada claims the waters of the Canadian archipelago fall under its jurisdiction, but that claim cannot be taken for granted.



➤ also to be aware of a phenomenally large and growing uncertainty about the onset of a catastrophic cooling of the northern hemisphere, this as another expression of climate change and global warming. For those who prefer drama, this one could involve the entirety of human civilization and, the past shows, could do so in short order.

International discussion of the global chilling phenomenon is sufficiently far advanced that it has to be taken into account and not avoided. What this means, at a minimum, is greater acceptance of uncertainty in the estimate of future ice conditions in the archipelago. More challenging, it also means new openness to non-linear phenomena which figure increasingly in state-of-the-art global climate science, and which could see the northern climate start to flicker back and forth between warm and colder states before locking into a new condition.

As to major firms taking the trouble to find ways of challenging Canadian sovereignty, rather than

These things we do not insist upon since we do not wish to destabilise our agree-to-disagree arrangement with the United States. Accordingly, whereas permission in advance is required for foreign state ships, private vessels entering without permission do so without offering any direct challenge to the Canadian claim.

A direct challenge arises when a foreign state vessel contravenes the Canadian claim, when a private ship does so with state backing, or when a state proposes adjudication in law. Canada, it goes without saying, is not going to take itself to court to test its claim. Nor is it likely to bring on a test in pursuit of environmental or other damages from a rogue company's flag state or other governments which might somehow be held responsible. Instead, the main route to possible defeat of the claim is for Canada to be taken to court by another state, which objects to some or other act of law enforcement by the Government of Canada in the waters of the archipelago. But states will hardly resort to the World Court against Canadian jurisdiction when the case involves a rogue vessel or vessels whose actions are by definition in some way illicit. Rogue shipping brought on by thinning ice, I conclude, does not and cannot pose a credible threat to Canadian arctic sovereignty.

To sum up, the evolution of ice conditions in the archipelago does not portend an increase in sovereignty-threatening use of the Northwest Passage by major inter-continental shipping companies. Nor do rogue ships pose a sovereignty challenge. Arguably, no other state will make or back a challenge to Canada's claim without the backing of the United States. And as long as Canada and the United States agree to disagree, and indeed strengthen their agreement to this effect, the Canadian claim is unlikely to be tested in court. Canada does not have a large and growing arctic sovereignty problem. Talk of sovereignty offers no reliable basis for new and sustained federal action in the arctic archipelago.

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Co-ordinating

**James Robinson, the
global co-ordinator of
the Wetlands
International/IUCN
Duck Specialist Group,
reports on the develop-
ment of a flyway
management plan for
the East Canadian High
Arctic light-bellied
brent goose.**

The East Canadian High Arctic light-bellied brent goose, *branta bernicla hrota*, breeds in the eastern Queen Elizabeth Islands, from eastern Melville Island east to northern Ellesmere Island, in arctic Canada, with the majority wintering on the coastline of Ireland, the Channel Islands and northern France. The population migrates through Greenland, over the ice-cap, and Iceland in spring and autumn, undertaking one of the most hazardous migrations of any arctic-breeding goose.

This population of geese is protected in Europe under the general provisions of the European Union Birds Directive and the Bern Convention, and in arctic Canada under the Migratory Birds Convention Act 1917 (revised 1994). The population is also listed under Category A (2) of the African-Eurasian Waterbird Agreement (AEWA), prepared under the Bonn Convention on Migratory Species, because there are only around 20,000 individuals in the population. There is, however, a need for co-ordinated conservation action across the flyway.

The main threats to the population are habitat loss and degradation, natural disasters, changes in native species dynamics (*Zostera* wasting disease) and pollution, directly through oil or chemical spills, or indirectly through the effects of climate change on breeding and wintering grounds.

Other less important threats include legal and illegal harvesting, accidental mortality, disturbance, invasive alien species, for example,



Sea ice beneath
midnight sun in
June.

steering clear of the Passage or proceeding in accordance with Canadian regulations, the idea is a total non-starter as long as commercial considerations prevail. And if they don't, the actions of shipping companies will be governed by strategic concerns having little to do with thinning ice, and much to do with year-round navigation using heavily ice-strengthened bulk carriers.

There have also been concerns that a limited number of voyages made by rogue vessels without Canada's permission could actually defeat the Canadian claim. Canada, however, does not require commercial vessels to notify, much less to seek and obtain permission, before entering Canadian arctic waters.

Photo: WWF-Canon/Kenn Schaller

conservation action across the Atlantic



**Brent geese (left) and
Brent goose nest in
the Lena Delta.**

competition with Canada geese, *branta canadensis*, and intrinsic factors such as restricted range and low productivity.

In light of the small number of countries involved, and given the history of cooperative international conservation and research initiatives, it has been deemed appropriate to take an international conservation perspective on this population of arctic-breeding geese by producing a Flyway Management Plan (FMP).

To this end, the Wildfowl & Wetlands Trust (WWT; the UK's largest conservation charity dedicated to the conservation of wetlands and their biodiversity) has taken the lead in producing an FMP for these birds.

This international FMP provides a framework for the conservation of this population of light-bellied brent geese and is based on the format for the AEWA International Single Species Action Plan prepared by BirdLife International.

Successful implementation of this plan will require effective international co-ordination of organisation and action. The broad aim of this Action Plan will be to maintain or improve the East Canadian High Arctic light-bellied brent goose in favourable conservation status.

In the short-term, the aim of the plan is to maintain the current population and distribution of the population throughout its range, and in the medium to long-term to

promote increase in population size and range. The plan has been developed using internationally agreed standards for identifying actions and has been prepared specifically to facilitate the monitoring and evaluation of subsequent implementation, linking threats, actions and measurable objectives.

The first international workshop held for this species was convened at the WWT centre at Castle Espie (Belfast, Northern Ireland) in autumn 2003. Experts attended from throughout the range of the light-bellied brent goose and gave various presentations on the biology of the species and its conservation. They also identified key threats and the actions required to ensure the conservation status of this arctic-breeding goose population is maintained or improved in the future.

This plan will need implementation in five countries. The activities identified in this Action Plan focus on the protection of the species and its habitats, appropriate management of key sites, reducing mortality and interspecific competition, developing our understanding of the species and its conservation through research and monitoring, and the production of educational materials. Activities have been identified for each of the countries in the range.

In 1989, the Canadian Wildlife Service (CWS) signed a Memorandum of Understanding

with the Irish National Parks & Wildlife Service twinning Polar Bear Pass National Wildlife Area (NWA) with three nature reserves in County Dublin (North Bull Island, Rogerstown Estuary and Baldoyle Estuary), Ireland, as 'Sister Reserves'. In the same year, CWS and the Northern Ireland Department of the Environment and the Northern Ireland National Trust signed a Statement of Intent linking Polar Bear Pass NWA with areas in Strangford Lough protected by the Strangford Lough Wildlife Scheme. These agreements were implemented for a five-year period in the first instance; unfortunately, neither has been formally reviewed since. It will be one of the key aims of the FMP to review and promote this scheme to enhance the conservation of this important goose population.

The East Canadian High Arctic light-bellied brent goose Working Group is the International Species Working Group (ISWG) for implementation of this Action Plan. This group comprises representatives of each National Species Working Group (NSWG), governmental representatives (where NSWGs have not yet been created) and representatives of relevant international interest groups, including each of the relevant treaties and several technical advisors.

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Sandpiper at risk

Connected to the Arctic



For years the broad-billed sandpiper, *Limicola falcinellus*, was a mystery to Norway's bird-watchers. Between ten and 30 birds each year were seen on migration, but otherwise little was known about them. The mystery is at least partly a result of their migration route, which sees the birds leave their staging posts on the northern shores of the Black Sea and head straight for the wettest and blackest parts of the aapa mire systems in northern Scandinavia and Finland. New studies, however, are beginning to shed light on the elusive sandpiper, and highlight the risks it now faces.

When the Norwegian Bird Atlas was published in 1994, there were an estimated 300 breeding pairs in Norway. Since then the Norwegian Institute of Nature Research (NINA) has carried out research in Kautokeino Kommune in

Finnmark which indicates that as many as 1500 pairs may in fact be breeding there. That's around 20 to 25 percent of the world population. Norway, in other words, has a considerable

responsibility for protecting this vulnerable species.

The total breeding population of the sandpiper extends from Finnmark to Sweden, Finland and the westernmost parts of Russia, particularly the Kola and Kanin Peninsulas.

The broad-billed sandpiper has a winter range that extends from East Africa to India and Pakistan. Wintering grounds have even been recorded as far east as western Xingjian in China. However, the main wintering area is probably

around the Persian Gulf, although this is still uncertain. There is also a small population wintering in north-west Africa: these birds may belong to a small mid-Norway/Sweden population of birds.

So is the broad-billed sandpiper at risk? After all it prefers only the wettest and most inaccessible mires for breeding. Normally this would make it extremely difficult for predators, such as the red fox, to reach the nesting-grounds. Their coloration is also a fabulous adaption to their habitat of dark mosses. This is especially true of the downy chicks, which are almost impossible to see.

However, humans have become one of the biggest threats to the survival of the sandpiper. In Finland and Sweden, sandpiper habitat has disappeared due to large forestry operations. In Norway the largest threats are from small 4-WD vehicles used first by reindeer herds, but in the last five to ten years by people elk hunting, sport fishing or berry-picking on the Finnmarksvidda tundra. The vehicles are doing severe damage to the mires and wetlands. In a two-week study done by NINA in 1997 more than 90 percent of the marshes investigated were affected by wheel tracks. It's hard to believe that the number is not greater today.

The sandpiper is not only threatened in its breeding grounds but also at its migration stopover sites. One of the most important areas is the huge wetland area in Ukraine called Sivash. The Sivash is under pressure from agriculture and industrial development. Situated between the Crimean Peninsula and the mainland of Ukraine, Sivash consists of a 2500-square kilometre mosaic of brackish water and mudflats. Only one percent of the area is protected in spite of its Ramsar-status.

It's a vital area for hundreds of thousands of migratory birds, and more than 50 percent of the world population of broad-billed sandpiper. Research done by the Azov Sea Ornithological Station revealed the connection between Sivash and Norway when two Ukraine-ringed broad-billed sandpipers were found on a nest in Kautokeino in 1997.

Norway, Sweden, Finland and Russia have an immense responsibility to protect the sandpiper. Every step possible should be taken to ensure its future in the aapa mire systems but steps should also be taken to ensure that their staging and wintering areas are secured.

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Photo: Stein Nilsen

Broad-billed sandpiper nesting in the mires of Finnmark, Norway.

Conservation boost for bowheads

A new plan to promote the recovery and long-term viability of bowhead whales in Canada's eastern Arctic was launched in February.

The Bowhead Conservation Strategy was prepared by the Canadian Department of Fisheries and Oceans, and written in collaboration with the Nunavut Wildlife Management Board (NWMB) and the WWF-Canada.

Bowhead population numbers in the Canadian Eastern Arctic were severely depleted by commercial whaling during the 19th and 20th centuries. Low numbers of bowhead whales, and the lack of information about their recovery, prompted the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) to designate this population as endangered in 1980. Inuit knowledge supported by scientific research indicates that the number of whales in the region has been increasing in recent years.

The Bowhead Whale, called *arvik* or *arviq* by Inuit, has played an important role in the Inuit traditional way of life. Inuit have used bowhead whales for food, fuel, shelter and other products for at least 2,000 years and the subsistence hunt remains a symbolic and spiritual link to their cultural heritage.

"Bowhead whales have been a key element of Inuit culture for centuries. The completion of this Bowhead Conservation Strategy, in conjunction with the Inuit Bowhead Knowledge Study and ongoing research on bowhead whales in Nunavut, will help ensure that Inuit can continue their sustainable use of bowhead whales for generations to come," said Ben Kovic, chairperson of the NWMB.

Current scientific assessments indicate that a hunt of one whale every two years from the Hudson Bay-Foxe Basin population and one whale every 13 years from the Baffin Bay-Davis Strait population would not jeopardise the conservation status of this species.

The Canadian Department of Fisheries and Oceans worked with the NWMB, WWF, and Inuit from key communities to develop a long-term (100-year time frame)

Conservation Strategy for Eastern Canadian arctic bowhead whales.

Such a long time frame is necessary because these whales can live for more than 200 years – making them the longest-lived animals on the planet. Recovery is expected to be slow because their reproductive rate is relatively low compared with other mammals.

"WWF welcomes the publication of this team effort, which provides a clear roadmap for dealing with the key threats and needs of bowheads in Nunavut, on a timescale relevant to this stunning

not adversely affect bowhead whales or their habitat, and,

- communicate the Strategy to the public in Nunavut and beyond.

A number of actions aimed at meeting these objectives are identified in the Strategy such as surveying the range of bowhead whales to identify important habitats, determining current population levels, and developing and carrying out plans to monitor the effects of threats. Some of these initiatives have already been completed or are underway:



Photo: WWF Canada

animal. This gentle giant of silent arctic waters clearly needs its critical marine habitats protected from all industrial development, for the long-term," said Pete Ewins, WWF-Canada's Arctic Conservation director.

The goal of the Strategy is to promote the recovery of bowhead whale populations in Nunavut. This Strategy is unique in that it integrates scientific and Inuit traditional knowledge and encourages the full participation of Inuit communities. The Strategy identifies threats, information gaps, and five short-term recovery objectives:

- identify and protect important whale habitat,
- establish a long-term monitoring and research program that will continue to combine scientific and Inuit knowledge,
- ensure a sound, sustainable and continuing Inuit subsistence harvest of bowhead whales,
- ensure that human activities do

- A three-year habitat stewardship program, involving research and stewardship training and activities, for *Igaliqtuuq* (near the community of Clyde River) was just completed.
- The third and final year of population surveys will be conducted in 2004.
- The Canadian Department of Fisheries and Oceans is also conducting ongoing scientific research on bowhead stock relationships, distribution and movements with the involvement of Inuit communities.

Bowhead whale.

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■ The Conservation Strategy is posted on Environment Canada's Species At Risk web site:

English: http://www.speciesatrisk.gc.ca/publications/plans/default_e.cfm

Français:

http://www.especesenperil.gc.ca/publications/plans/default_f.cfm

Inuktitut: http://www.speciesatrisk.gc.ca/publications/plans/default_e.cfm

Interview with Kim Traavik

Norway's State Secretary of Foreign Affairs Kim Traavik was raised only a few kilometers south of the Arctic Circle and has had a life-long interest in northern and arctic issues. WWF's Samantha Smith interviewed him on issues ranging from Norway's new foreign policy for the Arctic to climate change.

Samantha Smith: *The Norwegian Government is in the process of developing a foreign policy for the North, including north-western Russia, the Barents Sea and the Arctic. As part of this process, the Government brought together a Committee of Experts on the Northern Areas (Nordområdeutvalget) to analyse the issues and develop recommendations. They submitted a report, Look North!, to the Ministry of Foreign Affairs in December 2003. What are your views on the report?*

Kim Traavik: There has been a lot of interest in the report both nationally and internationally. Indeed, one of the main reasons why we appointed the Committee was to put the northern and arctic issues higher up on the national agenda, and to evaluate how Norway could address these issues in a more holistic way.

We wanted concrete, well-founded and creative recommendations. We therefore avoided creating a purely political or partisan committee. Instead, we tried to appoint real experts, representing a wide range of interests and with a broad range of experience. Given the Committee's mandate and the limited amount of time they had, they've done a fantastic job.

Now the Ministry of Foreign Affairs will evaluate the Committee's recommendations, as part of the larger process of developing a white paper for the Norwegian Parliament. Others will be involved in this evaluation, including a large number of national and local NGOs and interest groups. We see this as a unique chance to form a national consensus on Norway's foreign policy in the North.

SS: *What are some of the new foreign policy challenges facing Norway and other arctic countries in the North?*

KM: The situation in the Arctic has changed dramatically over the last 12 years, since the end of the Cold War. The political and economic picture is less black-and-white, and much more nuanced. New political alliances and new issues can arise as a result of the exploitation and production of energy resources, as well as seller-purchaser relationships.

The two most significant variables in the Arctic now are the strongly increased interest in exploitation of oil and gas resources, both those under the sea floor and on land; and climate change. In the political situation, security and environmental issues are now the two most important and dynamic factors.

Environment, use of living and other resources, security and economic issues are tightly connected in the northern areas. The Norwegian government wishes to have a policy, and a framework for developing policy, where we evaluate, work with and address these issues together.

SS: *The Arctic Climate Impact Assessment (ACIA), to be released in November 2004, is a product of the eight arctic governments. Originally, it was to include a scientific assessment of current and future climate changes in the Arctic; a set of policy recommendations for arctic governments; and a popular summary. Due to US objections, the process for developing policy recommendations is now at a standstill. What is the Norwegian position on this issue?*

KM: Norway has very big ambitions for ACIA. We would like to see the

process produce more than just an assessment of the scope of the problem. In our view, governments should review the scientific basis and respond with shared solutions that are as strong and broad as possible, including a joint agreement on how ACIA should be followed up.

We see, however, that some other countries do not share our big ambitions. Norway's role is to push for as strong a response as possible, while at the same time avoiding a division in the Arctic Council. It's a constant balancing act and it will be very demanding to put together a joint political response to the assessment between now and the Arctic Council Ministerial meeting in November.

With respect to the policy recommendations, Norway wanted to follow the original process (that was agreed in 2000) – we thought that it was a good process. We see as well, however, that there is no longer consensus for that process.

ACIA is in some ways a test of how far governments are willing to go in cooperation on a problem that is very clearly transboundary, and indeed global. It will test our ability to evaluate the problem and to respond to it. ACIA's success will most certainly affect the way in which the Arctic Council is viewed, both by researchers and not least by governments.

In this context, government responses can be national policy, common conclusions and common actions. Norway will look at national initiatives in addition to common initiatives, and we will discuss these issues bilaterally with the other arctic countries, for example the US and Canada.

SS: *Look North! suggests that Norway now has more interests in common with Russia than with some of its other, traditional partners abroad. What ability does Norway have to influence Russia?*

KM: Norway has a fundamentally good and close cooperation with Russia on a variety of fronts. Our focus is on achieving concrete

The two most significant variables in the Arctic now are the strongly increased interest in exploitation of oil and gas and climate change.



results, and our Russian counterparts share this view. Norway and Russia share a common geographic fate and resources as well.

In the energy sector, Norwegian oil industry has very good technological solutions that are commercially interesting for Russia. Russia also is quite interested in Norway's regulatory framework for oil and gas development. Norway began its oil age well after other countries, so we had an opportunity to learn from their early mistakes. When we have resolved the issue of the disputed area (in the Barents Sea), it will release a significant potential for cooperation on use of resources.

SS: *At present Norwegian foreign policy in the North is focused on reducing environmental and other threats from the concentration of nuclear reactors, weapons, fuel and waste in north-western Russia. This work has been very successful, not least with the Global Partnership pledge of the G-8 to commit 20 billion USD over ten years to nuclear cleanup in Russia. Norway itself has followed up by pledging 120 million NOK this year to decommissioning of nuclear submarines, and is leading an international consortium to replace strontium-powered navigation lights along the Kola Peninsula. Given your earlier remarks about the importance of environment and energy in the Arctic, do you think it's time for Norway to shift its focus towards these issues?*

KM: I don't see any reason to reduce our focus on nuclear issues. It's important to build capacity and expertise in research and the private sector on these issues, especially in northwestern Russia.

In my view our work on nuclear issues is just beginning to bear fruit. The involvement of the G-8 countries and the Global Partnership have created a unique political basis for action. There is, however, a big difference between these political commitments and getting the job done. We need to make things happen – “just do it”! That's why Norway was the first country to prioritise and finance decommissioning of tactical nuclear submarines, which pose a really substantial threat.

Moreover the stakes are pretty high if something goes wrong. A major accident could have significant impacts on Norwegian interests, for example fisheries markets. But in addition to environmental issues, this initiative is part of Norway's work on security and nonproliferation, and part of the fight against international terrorism. Understandably, this work has become much more important for other countries after September 11.

The Global Partnership has a ten-year perspective, until 2012. The work won't be done by then but it will be well on its way. This might be Norway's time perspective as well. We should look, however, at the problem of contaminated former military bases in northwest Russia. I've visited some of these areas and the scope, amount and seriousness of the problems are really huge.

SS: *Is coal mining on Svalbard consistent with Norway's environmental goals for the archipelago, or is a change of course needed?*

KM: There's no need for a change of course on Svalbard. It's been a gradual development, but coal mining has become less and less important for maintenance of Norwegian settlement on Svalbard. At the same time, there's been a tremendous growth in environmentally friendly tourism on Svalbard and in arctic research.

Another question is how long the coal reserves on Svalbard will last. We can already see that they will not last forever, which means that the end of the coal era is in sight. Now our goal is to ensure that the mining that takes place, does so within safe environmental limits.

SS: *There are a number of political fora covering northern and arctic issues and they overlap to a significant extent. It's been suggested that Norway should focus on either the Barents Euro-Arctic Council (BEAC) or on the Arctic Council, but not on both. What is the government's view?*

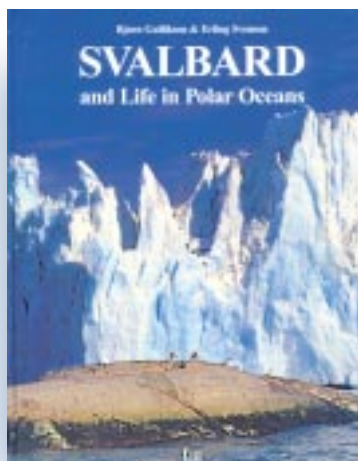
KM: This is really a question about which international fora Norway should use to promote its interests. In my view this isn't a real conflict – this is not an either/or situation. The differences between the Arctic Council and BEAC are so great, and the two organizations serve such different purposes, that Norway will continue to work within both. At the same time, there's a need to increase the dynamism and activity level in both the Arctic Council and the BEAC.

The Arctic Council has a unique function as a meeting place and discussion forum for high-level political representatives, for bureaucrats, for scientists and for indigenous peoples. It promotes coordination and cooperation between the arctic rim states. Within the Council, Norway prioritizes the Arctic Monitoring and Assessment Program and the Arctic Climate Impact Assessment.

BEAC has functioned well in some areas but not as well in business or economic cooperation. One should just acknowledge this. This is connected to larger developments in Russia, which has come a long way towards developing the kind of framework that business needs in order to feel secure.

■ Kim Traavik started his professional career as a researcher at the Fridtjof Nansen Institute, a center of expertise on environmental and political issues in the Arctic, before going on to a distinguished career in Norway's Ministry of Foreign Affairs, with a special focus on security policy. During his term as State Secretary, he has been instrumental in major breakthroughs in efforts to reduce environmental and security risks from nuclear weapons, waste and fuel in northwestern Russia.

Another question is how long the coal reserves on Svalbard will last. We can already see that they will not last forever, which means that the end of the coal era is in sight.



■ *Svalbard and Life in Polar Oceans*
Bjorn Gulliksen & Erling Svensen
Kom forlag a/s, 2004 (Publishers)
160pp 322 colour photos
ISBN 82 92496 03 3

Svalbard and Life in Polar Oceans, as the Foreword by Olav Orheim of the Norwegian Polar Institute says, is a popular scientific presentation of marine organisms and marine ecology in polar waters.

Covering the properties and peculiarities of marine plants and animals and the physical characteristics of the marine environment of fjords and coastal waters of Svalbard, the book includes excellent information on the Arctic as well as the Antarctic.

Packed impressively with both historical and natural history photographs, the book gives a fascinating insight into Svalbard life and wildlife. Particularly impressive is the chapter on Conspicuous Marine Taxa; for the uninitiated this gives a stunning view on the underwater world around Svalbard, which seems more tropical than arctic.

The authors are both experi-

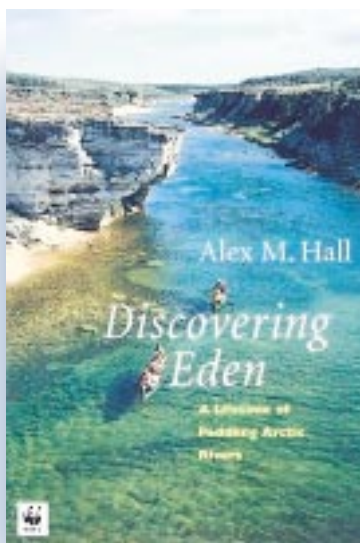
enced divers – there is a short section on diving in Svalbard – and one is a trained biologist and one an experienced amateur biologist. Their obvious enthusiasm for Svalbard comes through in their words and pictures. Thoughtfully they have even provided a glossary of difficult words at the end of the book as well, a useful addition for the general reader.

Svalbard and Life in Polar Oceans is a must-have addition to any arctic library.

Julian Woolford, jwoolford@wwf.no

■ *Discovering Eden: a lifetime of paddling arctic rivers*
Alex M. Hall
Key Porter Books Ltd., Canada, 2003,
224 pp.
ISBN 1-55263-221-0

In this passionate, practical and entertaining book, readers experience the barrenlands of Canada's



central Arctic through the story of the author's life. From a boy hunting, to a biologist, to a career of wilderness canoe expeditions, the journey culminates in a vision for one of the largest conservation areas on earth.

The author Alex Hall considers the area to be Eden. He tells of phenomenal journeys in his youth, and then of how he created Canoe Arctic Inc., allowing him to be in the land he loves for extended periods. He shares with the reader evocative, funny, frightening, and unique experiences gathered over three decades, from stories about galloping grizzlies and playful wolf pups, to herds of caribou and quirky expedition guests. His biology background helps to provide insights into the wildlife species he encounters.

With extensive first hand knowledge, he explains the changes the land has endured and describes the threats that may destroy it. The vision of connecting two existing conservation areas to form a 50 million-acre conservation area is an alternative to a bleak future where the land is lost to development.

Alex Hall shows us that the people of the north, with aboriginal stakeholders and support from the wider public, can save an area that makes up only six percent of Canada's Northwest Territories. But he warns that we need to do it now, before mineral exploration and the results of diamond mining make the opportunity impossible.

The only thing missing is an examination of the inner self of this remarkable human being. For that, you'll have to go on one of Canoe Arctic's expeditions.

Leslie Leong



■ Nigel Allan began a six-month internship with WWF's Arctic Programme in January. With a

degree in social ecology, majoring in environmental education and advocacy, Nigel is working as the assistant editor of the Arctic Bulletin as well as co-coordinating the re-launch of two websites for the Arctic

Programme. Originally from Australia, Nigel is now a native of Fort Smith, North-West Territories in Canada's sub-arctic, where he will return in July.

Nigel's internship is funded by the Canadian Department of Human Resources Development, Canada and is organised by the International Institute of Sustainable Development in partnership with the WWF International Arctic Programme.



WWF is the world's largest and most experienced independent conservation organisation, with almost five million supporters and a global network active in 90 countries. WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature. WWF continues to be known as World Wildlife Fund in Canada and the United States of America.

Forthcoming arctic meetings & events

Arctic Council events

Emergency, Prevention, Preparedness and Response Working Group meeting

- WHERE: Inuvik, NWT, Canada • WHEN: April 19–23
- CONTACT: Vicki McCulloch, +1 613 478 2020

Arctic Climate Impact Assessment workshop

- WHERE: Nuuk, Greenland • WHEN: April 21–22

Senior Arctic Officials Meeting

- WHERE: Selfoss, Iceland • WHEN: May 4–5
- CONTACT: Arctic Council Secretariat, Ministry for Foreign Affairs of Iceland, Tel. + 354 545 9900

Arctic Climate Impact Assessment International Scientific Symposium on Climate Change in the Arctic

- WHERE: Reykjavik, Iceland • WHEN: November 9–12
- CONTACT: Barb Hameister; E-mail: bhameister@iarc.uaf.edu www.amap.no/MiscTempFiles/ACIA-Symp.htm

Conferences and workshops

12th International Boreal Forest Research Association Conference

- WHERE: Fairbanks, Alaska • WHEN: May 3–7
- CONTACT: Dave McGuire, E-mail: ffadm@uaf.edu, www.iter.uaf.edu/ibraf/default.cfm

2004 Annual Meeting & Arctic Forum: Recent Decrease of the Arctic Sea Ice

- WHERE: Washington DC, USA • WHEN: May 13–14
- CONTACT: Email: info@arcus.org, www.arcus.org/annual_meetings/2004/index.html

5th International Congress of Arctic Social Sciences

- WHERE: Fairbanks, Alaska • WHEN: May 19–23
- CONTACT: www.uaf.edu/anthro/iassa/icass5sessab.htm

4th Conference on Contaminants in Freezing Ground

- WHERE: Fairbanks, Alaska • WHEN: May 30–June 3
- CONTACT: Conference Secretariat, conferencesecretariat@freezingground.org

International Symposium on Problems of Adaptation of Human to Ecological and Social Conditions of the North

- WHERE: Syktyvkar, Komi Republic, Russia • WHEN: June 1–3
- CONTACT: Dr. Evgeny Bojko Email: erbojko@physiol.komisc.ru

8th Circumpolar Symposium on Remote Sensing of Polar Environments

- WHERE: Chamonix, France • WHEN: June 8–12
- CONTACT: mti.univ-fcomte.fr/thema/circum_polar/default.html

U.S.-Baltic International Symposium on Advances in Marine Environmental Research, Monitoring & Technologies

- WHERE: Klaipeda, Lithuania • WHEN: June 15–17
- CONTACT: E-mail: lineka@delfi.lt or j.barbera@ieee.org

Life in the Cold 2004

- WHERE: Inside Passage, Alaska • WHEN: July 25–31
- CONTACT: www.alaska.edu/litc/

14th Inuit Studies Conference: Bringing Knowledge Home—Communicating Research Results to the Inuit

- WHERE: Calgary, Alberta, • WHEN: August 11–14
- CONTACT: Karla Jessen Williamson, Phone: (403) 220-7515, E-mail: wkjessen@ucalgary.ca, www.ucalgary.ca/aina/inuit/inuit_studies.html

For more on these events and other meetings, please visit:

<http://www.arcus.org/Calendar/upcomingEvents.shtml> • <http://www.iasc.no/SAM/samtext.htm>

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Arctic Bulletin readership survey – win an arctic prize!

■ The Arctic Bulletin is a free publication published quarterly by WWF's International Arctic Programme in Oslo, Norway. In order to help us deliver content that is informative and relevant, we welcome your ideas and comments. Please fill out the following survey to let us know what you think works and what you think needs changing. All completed questionnaires will go into the draw for a pair of reindeer antler salad servers hand-made by the wife of our head of conservation! You can either send your completed questionnaire to WWF International Arctic Programme, Kristian Augusts Gate 7A, Postboks 6784, St Olavs Plass, NO-0130, Norway or fax it to us on +47 22 20 06 66. The survey deadline is May 31, 2004.

1. Where do you live (country and region)?

2. What is your occupation?

3. What is your level of education?

☐ School ☐ College/Uni. ☐ Post-grad

4. What is your age?

☐ 18-25 ☐ 25-35 ☐ 35-45 ☐ 45-65 ☐ 65+

5. How important is the Arctic Bulletin to you?

☐ Not relevant at all
☐ Not very relevant
☐ Important but not my main source of news
☐ Very important
☐ Indispensable

6. How would you rate the Arctic Bulletin overall

☐ Poor ☐ Fair ☐ Good ☐ Very Good ☐ Excellent

7. How would you rate the quality of writing?

☐ Poor ☐ Fair ☐ Good ☐ Very Good ☐ Excellent

8. How do you rate the magazine's design?

☐ Poor ☐ Fair ☐ Good ☐ Very Good ☐ Excellent

9. Do you think the balance of news stories and feature-length articles is:

☐ About right ☐ Too many news stories
☐ Too many features

10. Does the Arctic Bulletin provide balanced geographical coverage?

☐ Yes ☐ No

What areas need more coverage?

11. Are there particular topics which you would like to see covered better in the Arctic Bulletin?

12. Please tell us how interested you are in the reading about the following topics. Using a scale of one to five, where one indicates "not at all interested" and five "very interested," how interested are you in:

A. Arctic Council news	
B. National news from arctic countries	
C. Industrial development	
D. Biodiversity including species specific updates	
E. Contaminants	
F. Climate change	
G. Protected Areas	
H. Indigenous people	
I. Tourism	
J. WWF's views and work in the Arctic	
K. In depth interviews	
L. Politically relevant news from outside the Arctic	
M. Book reviews	
N. Other issues	

13. Can you tell us what other general news sources you use to keep abreast of what is happening in the Arctic? Do you rate any of them especially highly?

14. Do you prefer to receive

☐ A "hard copy" of the magazine, or
☐ an electronic copy of the magazine?

15. How would you feel if the Arctic Bulletin as a hard copy publication stopped publication and stories were published on a website on the internet on a more regular basis?

16. Do you have other comments which you would like to share with us?

17. Do you wish to continue receiving the Arctic Bulletin?

☐ Yes ☐ No

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You can also fill out the survey on our website at <http://www.ngo.grida.no/wwfap/>