



WWF

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# THE CIRCLE



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WWF'S ARCTIC HISTORY:

## 20 YEARS OF THE GLOBAL ARCTIC PROGRAMME



"Voyage for the Future" ambassadors bathing in the cold Arctic sea of Spitsbergen, Norway. In June 2008, 18 students from nine countries around the world joined WWF on the "Voyage for the Future." This 10-day voyage in the Arctic launched young people as fresh new voices and ambassadors for the Arctic's future.

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## WWF'S ARCTIC HISTORY: 20 YEARS OF THE GLOBAL ARCTIC PROGRAMME

Foto: WWF-Camryn/Sindre Kinmerod

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Northern lights. Nuuk, Greenland.

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# The Panda's Arctic Habitat

**THE ARCTIC** is the last remaining vast and mostly pristine area on Earth. WWF has worked in the Arctic for many, many years, and as the founder of the WWF Global Arctic Programme, Peter Prokosh explains in this special edition of *The Circle*, we have had a formal Arctic initiative now for two decades.

One of WWF's earliest Arctic projects was, appropriately, in a collaboration with Inuit artists in Canada to raise money for conservation. This has been an abiding principle of our Arctic work – recognizing the pivotal role peoples of the Arctic must have in conservation initiatives and decisions. Indeed, this issue of *The Circle* features some of our local partners recounting their memories of projects with WWF.

WWF holds a unique position in the Arctic. We have staff and supporters in every Arctic country except Iceland. Thus WWF brings a distinctive breadth of vision – we look at the Arctic as a whole without being led by local interest.

We bring that voice for conservation to the Arctic Council, the premier governance body for the Arctic – we are the only circum-polar environmental NGO present at the Arctic Council, where we hold observer status, and we work with nations and Indigenous peoples there to map out a sustainable future for the region.

WWF also brings capacity to the Arctic. It's a big place, with few people. Those people are often focused on other priorities – housing, health, transitioning from a traditional economy to a more modern mixed economy. We provide the capacity for local people to engage with conservation values.

Thus, for example, in Chukotka, we have supported the Umky (polar bear) patrol that helps reduce conflict between people and wildlife. In the Lofoten and Vesteralen regions of Norway, we have worked with fishermen to keep oil drilling out of

some of Norway's most biologically diverse and richest fishing grounds. In Canada, we have supported local Inuit communities and governments in efforts to establish the population size and distribution of the largely unstudied narwhal. In Alaska, we are helping to examine the effects of underwater seismic exploration on marine life.

Looking back over our history, one appreciates how long conservation in the Arctic can take – gaining protection for an area, or drafting appropriate regulations that recognize and balance development and conservation needs can be many years in the making.

As our Vice President of Marine

and Arctic Policy, Bill Eichbaum writes, despite important progress in the Arctic, much more remains to be done. In light of the rapid physical changes in the Arctic, we must find ways to manage Arctic habitats to maximize their resilience. Robust spatial planning and

ecosystem-based management must be the cornerstones of Arctic policy, and are prerequisites to large-scale industrial development.

In this context, we welcome the growing importance of the Arctic Council, and, in particular, its foray into making rules for the Arctic states. We want to encourage this development, and help the Council fill gaps in Arctic governance, while increasing transparency and participation.

We pledge to continue the work we have begun, together with Arctic peoples, to build a place where in keeping with WWF's mission, humans live in harmony with nature. ○



**JIM LEAPE** has been the Director General of WWF International since 2005. He has worked in conservation for more than three decades. A graduate of Harvard College and Harvard Law School, he began his career as an environmental lawyer – bringing environmental protection cases in the United States, advising the United Nations Environment Programme in Nairobi, Kenya, and co-authoring the leading American text on environmental law.

**“WE PROVIDE THE CAPACITY FOR LOCAL PEOPLE TO ENGAGE WITH CONSERVATION VALUES.”**

# GAP – a New Circumpolar Spirit

**With WWF celebrating its 50th anniversary in 2011, there are numerous milestones within that half century that warrant special recognition. One of those is the creation of the WWF Global Arctic Programme, a task handed to its first director and coordinator, PETER PROKOSCH.**

**TWENTY YEARS AGO MARKED** the beginning of an unprecedented era of circum-Arctic environmental cooperation. In 1991, Finland had invited the environment ministers from all eight

Arctic countries to a summit in the city of Rovaniemi, resulting in the creation of the Arctic Environmental Protection Strategy. Subsequently, the AEPS became the Arctic Council, today a high level intergovernmental forum that promotes cooperation, coordination and interaction among the Arctic states

with the involvement of Indigenous communities and other Arctic inhabitants.

## A PIVOTAL MEETING

My former colleague and then-coordinator of WWF's Baltic Programme,

Bertil Hägerhäll, recognized that WWF – with national offices in six Arctic countries – was in a unique position to get involved in this new initiative. There were already highly-effective WWF regional offices in the Baltic, the North Sea, the Wadden Sea and the Mediterra-

**“BACK THEN, THERE WAS VERY LIMITED UNDERSTANDING OF THE ARCTIC, ITS IMPORTANCE OR ITS GEOGRAPHY.”**

nean. Inspired by that original meeting in Rovaniemi, Hägerhäll invited his colleagues from Arctic countries to a meeting in Copenhagen in November 1991 to create an over-arching WWF-Global Arctic Programme. I attended this pivotal meeting as the only non-Arctic WWF representative. At the time, I was working for WWF-Germany and

its Wadden Sea Programme aimed at protecting the millions of shorebirds and geese migrating between the Wadden Sea and the Arctic tundra.

I had also been privileged to lead expeditions to the Taimyr peninsula in the northernmost reaches of Siberia. In 1993 this resulted in the establishment of the 42,000 square kilometer “Great Arctic Reserve” or Zapovednik, which was WWF's first project in the Soviet Union, as the Russian Federation was then called.

Those exciting developments in Russia were the crucial preconditions to think and cooperate in a true circumpolar manner. When I was asked to establish and coordinate the Arctic Programme of WWF International in 1992, hosted by WWF Norway, I primarily focused on the Russian Arctic and on establishing a complete circumpolar Arctic WWF team. Back then, there was very limited understanding of the Arctic, its importance or its geography. We even took circumpolar maps and rotated them to show the Arctic from each country's perspective and raise recognition and understanding.

Since Russia encompasses half of the entire Arctic, WWF's reach in the circumpolar region was significantly enhanced with the establishment of WWF- Russia in 1994. That left Iceland as the only remaining Arctic country with no WWF presence. We completed the WWF Arctic Team and proper circumpolar oversight by collaborating with the Icelandic Nature Conservation Association. Its director, Arni Finnsson,



**PETER PROKOSCH** is the Managing Director of GRID-Arendal – United Nations Environmental Program's Polar Centre. He founded and was the first Director of the WWF Global Arctic Programme in 1992.

## WWF in the Arctic



### 1967: First WWF-sponsored protected area in the Arctic

WWF collaborated with the Icelandic government to create Skaftafell National Park. This mountainous icy park has since grown to become the largest National Park in Europe, growing to almost 5,000 km<sup>2</sup> from its original 500 km<sup>2</sup>.



WWF-expedition 1987 following coastal birds from the German Wadden Sea to Northern Greenland (Peter Prokosch with colleagues in the Thule area).

became a natural member of our team and is one of the contributors to this special edition of *The Circle*

With representation from all eight Arctic countries, WWF became the only NGO with a complete, environmental circumpolar perspective.

Indeed WWF can look back on numerous concrete achievements in the Arctic, often in cooperation with other non-governmental or governmental partners. Here are some from the first 10 years of the WWF-Arctic Programme:

In the Russian Arctic, protected areas have doubled to approximately 350,000 square kilometers, roughly the size of Germany or Norway. These include

the 1993 creation of the Great Arctic Reserve in northern Taimyr and the extension of the Lena Delta reserve. In 1995 HRH Prince Philip and the Sakha Republic's President Mikael Nikolaev inaugurated the Lena Nordenskiöld Bio-

logical Station in the Lena delta, with the financial support of WWF-Sweden.

WWF Guidelines for the Consumptive Use of Species were tested in First Nations communities in the Canadian Arctic, with results demonstrating

### WWF in the Arctic



## 1975-1978: Creating a baseline for polar bears

The three-year "polar bear and man" project was a partnership with the University of Guelph, Richard Ivey Foundation, the Canadian Wildlife Service, and the governments of Manitoba and the Northwest Territories. This study gave scientists, for the first time, baseline information on polar bears.



Peter Prokosch with local Nenets children in the Pechora Delta/Northwest Russia (1997).

- ▶ that Inuit communities are examples of how wild species can be ecologically sustainable and contribute to the socioeconomic and cultural needs of Arctic Peoples.

In Greenland, WWF Denmark supported the establishment of a local nature conservation organization which saw the re-colonization of the world's once-largest Arctic tern colony on the Green Islands in Disko Bay.

WWF-US was successful in preventing oil drilling in the Arctic Wildlife Refuge. To this day, this pristine nature reserve in northern Alaska remains untouched.

WWF supported a campaign by the Iceland Nature Conservation Association to protect the Icelandic Highlands from industrial fragmentation. It became the largest environmental movement in Iceland, resulting in the establishment of that country's largest national park, the Vatnajökull National Park.

WWF-Finland financially supported the development and publication of Arctic Tourism Guidelines. These have been published in all Arctic languages and continue to be widely used by Arctic tour operators with an annual award

to the operator demonstrating the best example of linking tourism and conservation.

A campaign between WWF and tourism partners was a major success in protecting the pristine wilderness archipelago of Svalbard from a planned, long distance road to the Svea coal mine. The Norwegian government instead released progressive environmental laws and created several new national parks completing the most intensive network of protected areas in the Arctic with a wide range of different habitats.

In 1994 WWF launched the *WWF-Arctic Bulletin*, an important and influential information tool, distributed quarterly to Indigenous organizations, decision-makers, participants and

observers of the Arctic Council. It was succeeded in 2009 by *The Circle*.

## A REGION ENVIRONMENTAL COOPERATION

Today the knowledge of and interest in the Arctic is much greater than it was 20 years ago. Many more countries and organizations want to have a role in the Arctic and it has also become a top issue in the media, particularly concerning climate change and oil and gas exploitation.

I believe it is much more likely that the Arctic will continue to be a region of peace and environmental cooperation than one of increased conflict over resources. My hope is that WWF and others will continue to see the potential of the Arctic to become the leading region on earth demonstrating what environmental protection and sustainable development means in a practical sense. The Arctic belongs to the most developed and powerful countries in the world, with influence and responsibilities far beyond the polar region. Twenty years of circumpolar cooperation have established and implemented some of the best monitoring and scientific programs in existence. This should also be the region where it is possible to implement the best environmental philosophies and policies. It should be the region that other countries learn from. In the decades ahead, I would like to see WWF challenging the Arctic nations to become world leaders in environmental protection and sustainable development, showing the rest of the world the way. ○

### WWF in the Arctic



## 1978: The art of Arctic conservation 1

WWF forms partnerships with Inuit artists in the Canadian Arctic to market a series of prints. These works were sold worldwide, and a portion of the proceeds went to support community-based research on gyrfalcons, polar bears and arctic fox.

# An environmental success story

The protection of the Icelandic highlands has been called the largest environmental conservation movement Iceland has ever seen, both in terms of policy and sheer land mass.

**ARNI FINNSSON** of the Iceland Nature Conservation Association, says support from the WWF Arctic Programme was crucial to this environmental success story.

## VATNAJÖKULL GLACIER NATIONAL PARK

was established in June 2008, and covers roughly 15,000 square kilometers, or 13 per cent of Iceland. It is already the largest national park in Europe with plans to add the Langisjór Lake area to the park in conjunction with a government-confirmed conservation and management plan for the park, which will be effective for the next 10 years. Another preserve, Skaftafell National Park, established in 1967 with financial assistance from WWF is part of that plan.

## THREATENING EUROPE'S LARGEST WILDERNESS AREAS

This environmental success story began in 1997 when the Iceland Nature Conservation Association was established with the primary objective of conserving and protecting Iceland's wilderness. INCA's goal was to establish a national park in the highlands, encompassing some 40 per cent of Iceland's total land mass of about 100,000 square kilometers. The catalyst was a government plan to build

a huge hydropower complex in Eastern Iceland, damming two of three major glacial rivers running north from the Vatnajökull Glacier. This project would have destroyed waterfalls, and drowned valuable highland areas and wilderness. The construction would have affected Europe's largest remaining wilderness area of some 15 thousand square kilometers.

In 1997 the government announced that the Norwegian aluminium corporation, Norsk Hydro, wanted to build a new smelter in Reydarfjoerdur, East Iceland, and would also invest in the new power plant needed in the first phase. While Norsk Hydro withdrew

**“THE PROJECT WOULD IRREPARABLY DAMAGE A RARE OASIS OF HIGHLAND VEGETATION.”**

from investing in the power plant – no doubt because there was no profit to make – it continued talks about building a smelter.

Landsvirkjun, the National Power Company, intended to build the new power plant, sinking the Eyjabakkur Wetlands without producing an Environmental Impact Assessment. Through support from the WWF Arctic Programme, INCA was able to take a leading role in demanding a formal environmental assessment which enjoyed overwhelming public support.

Norsk Hydro relented, and, Landsvirkjun had to follow suit. From 1999–2004 INCA received financial support from WWF, allowing us to focus our campaign to protect the highlands. Our first victory came in February 2000 when Norsk Hydro requested Landsvirkjun to launch a formal EIA for the power plant. Subsequently, a new design of the power plant, the Karahnjúkar Project was announced in spring 2000 and an EIA report was



**ARNI FINNSSON** was a founding member of the Icelandic Nature Conservation Association – Iceland's largest environmental NGO – and remains its sole employee. He has been a consultant to the WWF Arctic Programme on Icelandic environmental matters and on whaling issues, marine pollution, ozone depletion, fisheries and radioactive waste matters for Greenpeace as well as a member of the board of directors for Greenpeace Nordic.

## WWF in the Arctic



### 1983: Ice whales work begins

The “Whales Beneath the Ice” programme started in this year, and continued for several years afterwards. The WWF-supported programme was designed to conduct research into whales often found associated with ice - beluga, narwhal, and bowhead. The programme engaged Inuvialuit community members in the research, and culminated in a publication in 1986 “Whales Beneath the Ice”.

► published in May 2001. Never before had such a report, published in Iceland, been subject to such heavy criticism.

In short, INCA pointed out that construction of a 690 MW hydropower plant would flood or permanently change a vast wilderness in Iceland's central highlands region. In total, about 1,000 kilometers in the central highlands north of the Vatnajökull Glacier would be directly affected although the overall impact area would be much larger. The project would irreparably damage a rare oasis of highland vegetation, characterized by diverse plant communities and rare geological formations and landscapes. The project would

## “WWF PRESSURE WAS KEY.”

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dam the glacial river, Joekulsa a Bru, as well as damming and diverting the large glacial river Jökulsá in Fljótsdalur Valley along with about a dozen other smaller clear water rivers. As a result of habitat destruction and drowning in murky reservoirs, many species in the affected lakes and wetlands would be reduced or disappear.

INCA also published a report questioning the economic viability of the project; that the price for energy was way too low for Landsvirkjun to make

profit with Iceland taking all the risk because the price for energy was to be set relative to the price for aluminum.

### **A MAJOR LOSS, A STUNNING VICTORY**

The Physical Planning Agency ruled against the Karahnjúkar Project, in no uncertain terms, stating that the environmental consequences were too great and the economic benefits uncertain. Landsvirkjun appealed to Iceland's environment minister, who ignored





her own planning agency and granted permission to proceed with the project on December 20, 2001.

This was a major loss for the conservation movement even though Norsk Hydro withdrew from the project in March 2002. American Alcoa soon filled the gap left by Norsk Hydro and the fate of eastern part of the highlands was sealed in a contract between Alcoa, Landsvirkjun and the Icelandic government one year later. Yet, this was not the end of it, largely because of the WWF Arctic Programme.

The idea of Vatnajökull Glacial Park had been introduced in a parliamentary resolution some years earlier. To

begin with the park was only to be the glacier itself, but with WWF support, the demand for enlarging the park with one of Iceland's most powerful glacial rivers and its tributaries gained support. WWF pressure was key in convincing Icelandic authorities that such a park would benefit local communities, the national economy and Iceland's image with the result that a new law creating the Vatnajökull National Park was adopted unanimously by the Icelandic Parliament in 2007

Since then, public support for conservation has grown considerably. An opinion poll conducted by Gallup Iceland in 2004 for INCA, showed 69.7

percent of Icelanders support a new national park, north of the Vatnajökull Glacier. Likewise, more than 66 percent were in favour of protecting Jökulsá á Fjöllum, the only glacial river left north of the glacier, previously slated for development

The Icelandic government is considering a Master Plan for energy Resources and Conservation. This Master Plan will call for protection of large and valuable areas in the Highlands. Although some of the areas are being contested, the scientific assessment is clear and strong. Thus, that primary objective of INCA, to protect the Icelandic Highlands, wasn't such a long shot. Thank you WWF. ○

Skaftafell National Park, was established in 1967 with financial assistance from WWF.

Photo: Andrea Schaffer/Creative Commons



# Living on the front lines of Climate Change

In 2009, **PATRICIA COCHRAN** chaired the first Indigenous Peoples Global Summit on Climate Change in Anchorage, Alaska. She says WWF's support and involvement in what she says was an historic summit helped lay valuable groundwork for future collaborations.

**INDIGENOUS PEOPLES** the world over aren't just watching changes to the environment, we are living them. And as much as possible, we are attempting to adapt to them through traditional knowledge and skills. We don't really have a choice. In the Arctic, for example, many of us rely on healthy, sustainably-harvested caribou herds, seal, walrus and other marine mammals for survival. We have to adapt and we have to do this at a time when our cultures and livelihoods are already undergoing significant changes largely caused by conditions and interests outside our control.

I was privileged to chair the first Indigenous Peoples Global Summit on Climate Change in Anchorage – a most appropriate location, since warming

trends in the Arctic are undeniable. Sea ice is shrinking, while permafrost is also melting, making it more difficult to hunt traditional foods.

## TELLING CLIMATE CHANGE STORIES

This was an historic summit attended by more than 400 people from around the world who shared stories, observations and strategies. This summit could not have been possible without the financial and organizational support of allies such as the WWF Global Arctic Programme. WWF also convened a panel session on how non-governmental organizations and Indigenous peoples can better work together on climate issues.

The stories and first-hand knowledge



shared at the summit were, at times, bleak. Speakers from the South Pacific talked about watching their crops wither in the heat. Delegates from the Caribbean spoke of living in fear of increasingly violent and frequent storms, while those from the Arctic spoke of the sudden, sometimes deadly unpredictability of time worn travel routes, the disappearance of sea ice and the effect of oil and gas development on centuries-old caribou migration routes. Scientific studies can certainly be persuasive. But I believe there is nothing more effective than these authentic experiences and stories about climate to persuade non-believers that climate change is real for all of us.

Climate change has been felt most intensely in the Arctic. In the past few decades, the average Arctic temperature has increased twice as much as the global temperature. Satellite images

## WWF in the Arctic



### 1989-2009: Making a whale sanctuary

1989 marks the official start of WWF's work with local people to establish the bowhead whale sanctuary on the northeast coast of Baffin Island, near the community of Clyde River. The world's first bowhead whale also referred to as Isabella Bay or Igaliktuuq, this area is a pristine late summer and fall feeding and resting stopover for up to 200 bowhead whales at any one time.

WWF-Canada worked with the community of Clyde River for over 20 years to establish protection for this key area and its bowhead whales. In 2009 the protected area was finally celebrated.



show Arctic Ocean sea ice has shrunk to new record lows, opening previously ice-jammed waterways such as the Northwest Passage for navigation.

### LIVING CLIMATE CHANGE CONSEQUENCES

Climate change is also having a negative impact on the health of Indigenous Peoples in the Arctic. We know that in order to adapt to rapidly changing circumstances while preserving important elements of our culture, Indigenous peoples of the Arctic need to find a balance between old and new ways, between scientific and experience-based knowledge.

Indigenous peoples see WWF as an ally in this struggle, because WWF recognizes us as the key to promoting international action on climate change. We have a very direct relationship with the environment. We can speak first

Arctic Indigenous peoples catalyzed global Indigenous action on climate change.

hand to environmental changes.

Going into the summit, we had a number of objectives. We wanted to raise the visibility, participation and role of Indigenous peoples in local, national, regional and international processes that engage local communities and other stakeholders to respond to the impacts of climate change. We wanted to increase public awareness of climate change as well as the impacts and consequences of programs and proposals for tackling it from the perspective of Indigenous peoples.

### SOLIDARITY AND A CALL TO ACTION

Were we successful? Yes, in that this first summit was to be a beginning, not

an end. It resulted in the adoption of The Anchorage Declaration, a statement of solidarity and a call to action by all Indigenous peoples the world over reaffirming our sacred connection to land, lakes, sky and all of the resources Mother Earth provides us with. It was a vow to protect and nurture her in this period of environmental crisis. The summit also saw the formation of the Indigenous Peoples Global Network on Climate Change and Sustainable Development ([www.indigenoussummit.com](http://www.indigenoussummit.com)) to carry on the work set out by the delegates.

The Global Summit strengthened the research, advocacy, communication, outreach and fundraising of Indigenous peoples' organizations already dealing with climate change, while articulating recommendations to national and international decision-makers.

The Global Summit was organized with long-term legacies in mind. But the next few years will be critical if the concerns, interests and rights of Indigenous Peoples are to influence global debate on climate change. As Winona LaDuke told the Summit: "We are a fortunate people. We have a shot at making a difference." But we are very much aware that this can come about only through strong partnerships between Indigenous Peoples and organizations such as the WWF Global Arctic Programme. ○



**PATRICIA COCHRAN** was born and raised in Nome, Alaska. She is the Executive Director of the Alaska Native Science Commission, which brings together research and science in partnership with Alaska Native communities. She is Co-Chair of the Indigenous Peoples' Global Network on Climate Change and Sustainable Development. She is the past Chair of the Inuit Circumpolar Council, an international organization representing 160,000 Inuit of Alaska, Canada, Russian and Greenland; and former Chair of the Indigenous Peoples' Secretariat of the Arctic Council.

# Russia's Golden Window

**WWF began conservation projects in the Russian Arctic in the late 1980s, when political changes allowed foreign scientists to visit that region. In 1989, WWF Germany supported the first large research project on the Taimyr Peninsula in the central Russian Arctic. In 1993, the establishment of the Great Arctic Natural Reserve – the largest in Eurasia and Russia – marked the beginning of large-scale projects by WWF, with the goal of developing a network of protected natural reserves in the north. A WWF-Russia office quickly followed in 1994. Here, **YAKOV SIVTSEV** chronicles the significant WWF initiatives in the Russian Arctic.**

**MORE THAN 30** Natural Protected Areas (NPAs) with a total area of more than 35 million hectares have been created in Russia with WWF support. Included in these new areas are three state reserves: the Great Arctic, the Gydansky and the Koryak while the Taimyr Reserve has

been considerably expanded. Overall, WWF projects have more than doubled the area of natural reserves, parks and Arctic sanctuaries.

## A NETWORK OF PROTECTED NATURAL AREAS

The creation of a network of NPAs in the largest region of the Russian Federation – the Republic of Sakha

(Yakutia), which occupies more than 20 per cent of the country – is an excellent illustration of WWF's conservation work in Russia. WWF supported the plans for this network and provided financial assistance for the construction of the Biological Station "Lena-Nordesheld" in the Lena River delta, in the "Ust-Lensky" reserve. A WWF delegation led by then-president Prince Philip officially opened the station in 1995.

The president of Yakutia, Mikhail Nikolayev pledged to create a system of NPAs covering more than 700 thousand square kilometers by the year 2000. Again, WWF supported this initiative, through its "Gift to the Earth" program. This first "gift" set a standard in numerous countries committed to preserving biodiversity. WWF has since registered about 100 "Gifts to the Earth" and it is safe to say that first step by Yakutia, helped launch WWF's "Living Planet" initiative.

Continued work by WWF in the Russian Arctic has seen significant progress in creating NPAs in the Taimyr and Nenets autonomous districts with a total of 8 new nature reserves created there.

In addition to helping to establish new protected areas, WWF has always been mindful of supporting existing nature reserves. This included measures such as building offices for the Great Arctic and Koryak reserves, staffing the reserves and environmental inspections in Yakutia, and providing Koryakia with radio communications, means of transportation and uniforms.

## PROTECTING RARE SPECIES

In recent years, one of WWF's priorities has been the preservation of the rarest Eastern Siberian population of the Siberian white Crane. Through WWF support, the state of Yakutia now protects about 80 per cent of all the nesting sites of the Siberian Crane near the Yana and Indigirka rivers – an area of about 3.5 million hectares. As a rule, indigenous populations regard the creation of new reserves with fear of the numerous inspections that could disrupt their traditional lifestyles. In this case, WWF partnered with local communities to rescue the Yakut population of the Siberian crane and to preserve the tundra ecosystem of the valley of Yana-Indigirka while respecting traditional use of the region.

There are about 20-25 thousand

**YAKOV SIVTSEV** is the head of the Biological Resources Department, for the Ministry of Nature in the Sakha Republic (Yakutia) of Russia.



## WWF in the Arctic

### 1992: The WWF Arctic Programme is born

Although WWF had already been undertaking projects in the Arctic before this time, the programme brought a new circumarctic focus to WWF's work. This happened just as the eight Arctic countries and Arctic Indigenous peoples were joining together in the Arctic Environmental Protection Strategy, the forerunner of the Arctic Council.

## Protected areas in the Taimyr Autonomous Region



Map: Kelli Berger, Film & Form

polar bears in the Arctic. The size of the Alaska-Chukotka population is currently unknown, though two decades of intensive polar bear hunting in the 1950s and 60s significantly reduced their numbers. Polar bears in this region continue to be threatened by habitat loss from global warming, poaching, pollution, and industrial expansion. WWF is working with federal, regional, and local partners to protect key habitats on land and prevent illegal harvest in the Russian north.

### NATURAL HERITAGE IN THE RUSSIAN ARCTIC

In 2004, WWF was also instrumental in having the state nature reserve, Wrangel Island, included on the list of UNESCO World Natural Heritage sites. It was the

first area in the Russian Arctic to receive this prestigious status which will help attract financial support for ongoing environmental protection.

Five years ago, WWF created a number of Kids Clubs in Yakutia

and Kamchatka, recognizing that the children's environmental movement is an excellent way to foster long-term conservation goals. They now boast more than 5,000 members in 13 regions of Russia. ○

### WWF in the Arctic



### 1993: The Great Arctic Reserve

With the help of the WWF, Russia set aside 42,000 km<sup>2</sup> of the Taimyr Peninsula, including a Kara Sea archipelago, as the Great Arctic Reserve. WWF not only helped fund the reserve, but also helped organize three important scientific expeditions that contributed to establishing the ecological importance of the region.

# WWF projects in the Arctic

**From past to present: The twenty years of the Arctic Programme, and the work by WWF offices before the programme existed have built a solid base for WWF's Arctic work. This map provides a sampling of the reach and diversity of WWF's current Arctic projects.**



## PROTECTED AREAS

7. WWF continues its work on a protected areas strategy in northern Canada, working with local people and governments to create parks.

13. WWF has been working with a coalition to bring permanent protection from industrial development to Bristol Bay. This area is referred to as America's "fishbasket" because of the value of the fisheries there.

21. WWF has helped establish many protected areas in Russia, including the recently announced "polar bear park" on Novaya Zemlya.

24. WWF is working on the creation of two national parks in Russia: "Onezhskoe Pomor'e" and "Ber- ingiya".



## CONSERVATION

2. Reducing polar bear/human conflict: WWF has helped supply polar bear proof fences and food bins to keep them away from conflict with local people

9. WWF has developed a species plan for Arctic whales: bowhead, narwhal, and beluga are designated as priority species by our Arctic Programme.

11. The Umky Patrol (polar bear patrol) - WWF supports Chukchi villages in their efforts to use non-lethal methods of keeping polar bears at a safe distance. The patrols have also been protecting walrus that have been showing up on shore in record numbers.

12. WWF addresses the protection of polar bears at the international, national and local levels. Internationally, we facilitate cross-border information exchanges in support

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of the U.S.- Russia Agreement on the Conservation and Management of the Alaska-Chukotka Polar Bear Population.

15. Brown bear conservation and improving management in protected areas are priorities for WWF in Kamchatka.

18. WWF is developing an Arctic-wide conservation plan for wild reindeer and caribou.

25. WWF is working with Saami to explore ways of reducing future cumulative impacts of different pressures (eg. mining, wind power, forestry, tourism and large carnivores) on reindeer herding in Sweden.



## SUSTAINABLE USE

6. The WWF office in Inuvik is taking part in a ground-breaking marine spatial planning exercise, along with local people and government

17. WWF has engaged international experts to advise on how the Arctic Ocean might be better regulated.



## RESEARCH

1. WWF supports research on polar bears in southern Hudson Bay - this population is showing signs of stress as climate change eats away at the summer sea ice the bears need.

20. WWF is supporting Norwegian scientists on Svalbard who are researching the local polar bear population



## FISHERIES

4. WWF is advising Greenland on sustainability of its fisheries

10. WWF advocates for improved fishing practices in the Bering Sea,

such as the reduction of salmon bycatch in the US Pollock fishery and the use of streamer lines in the Russian long line fishery to reduce seabird bycatch.

16. WWF works in Kamchatka with local residents and fishing businesses to promote the sustainability of salmon fishing. We are also advocating for an end to drift-net fishing and the resulting wasteful bycatch, and fighting illegal fishing.





Map: Kaitill Berger, Film & Form

WWF has participated in the design and implementation of a shipping risk assessment and further north, we are beginning to work with local partners to research measures to protect marine resources from the threat of shipwrecks and related oil spills, invasive species, ship strikes, and pollution.

19. WWF is making representations to the International Maritime Organization to ensure a stringent set of rules to govern the increasing Arctic shipping.

 **OIL**

8. WWF has presented to a Canadian government inquiry on regulating offshore oil drilling in the Arctic.

22. WWF's Barents Sea office tackles a variety of issues in the Barents and Kara Seas, including opposing oil drilling plans in places where there is not enough information on the impacts of a spill.

26. WWF is working in Norway to make areas such as Lofoten permanently off limits to oil drilling, because of the natural values of the region, and the economic value of the local fishery.

 **GLOBAL WARMING**

3. WWF is working around the Arctic on a project to define what areas are best placed to cope with the coming level of climate change.

5. WWF supports scientific work to investigate the effects of climate change in the Arctic.

**OTHER**

27. Sweden chairs the arctic council from 2011-2013. WWF is an official observer at the council, and contributes to the council's work in promoting sustainability, conducting research, and in providing direction to minimize environmental damage from human activities.

28. WWF also works outside the Arctic on Arctic issues: we were part of a group that recently presented the British government with ideas for a set of principles that could govern the work of the UK government, and UK companies in the Arctic.

23. With WWF support, fishing companies representing about 20% of the Barents sea cod and haddock harvest are beginning the process of certification against Marine Stewardship Council principles.

 **SHIPPING**

14. As the Arctic sea ice diminishes, shipping through the Bering Sea will increase. In the Aleutian Islands,

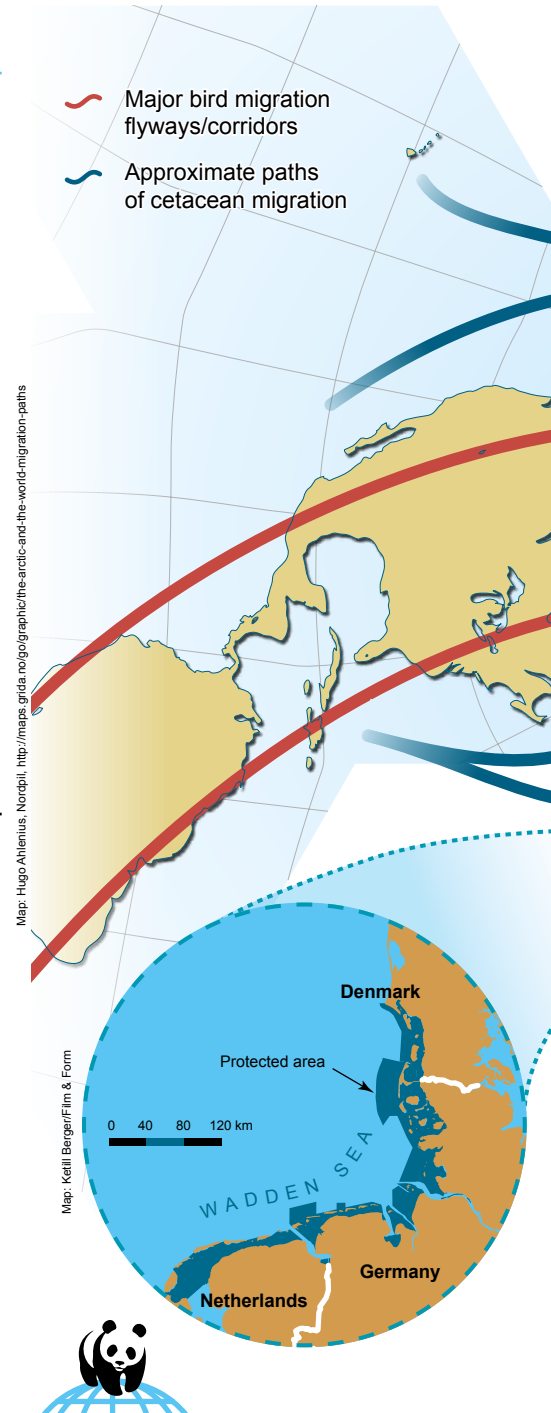
# WWF-Netherlands collaboration takes wings

The centuries-old connection between the Netherlands, the Arctic and WWF is best illustrated by the millions of migratory waders and geese from high north breeding areas in northern Canada, Greenland, Scandinavia and the Russian Arctic. The Dutch Wadden Sea, part of the international Wadden Sea area shared by Germany and Denmark, can host more than one million birds on any given day with numbers peaking at approximately 10 million birds en route to destinations such as West Africa. Dr. GERARD BOERE writes about WWF collaboration in The Netherlands.

**THE WADDEN SEA** is one of the top ten most important refuge areas for migratory Arctic waders in the world. More than one million Arctic geese winter in other parts of the Netherlands, so protection of the Dutch Wadden Sea by both by the government and private conservation organizations, including WWF-The Netherlands, has long been a priority. Historically, WWF has invested a great deal toward conservation and research of the Wadden Sea and its migratory birds. This includes support for part of my own research on the importance of Arctic breeding waders.

WWF-Germany also had a team working in the Wadden Sea on a conservation program which included long term research on Arctic breeding waders and geese. The two research teams had frequent contact and were often joined by researchers from the UK. We all shared a strong desire to extend our research into the breeding areas in the Russian Arctic. That became possible in 1989 when the WWF team headed by Dr. Prokosch became the first to be invited by the Russian Academy of Science to visit the Taimyr Peninsula in the Russian Arctic.

We joined forces with WWF-Germany



## WWF in the Arctic

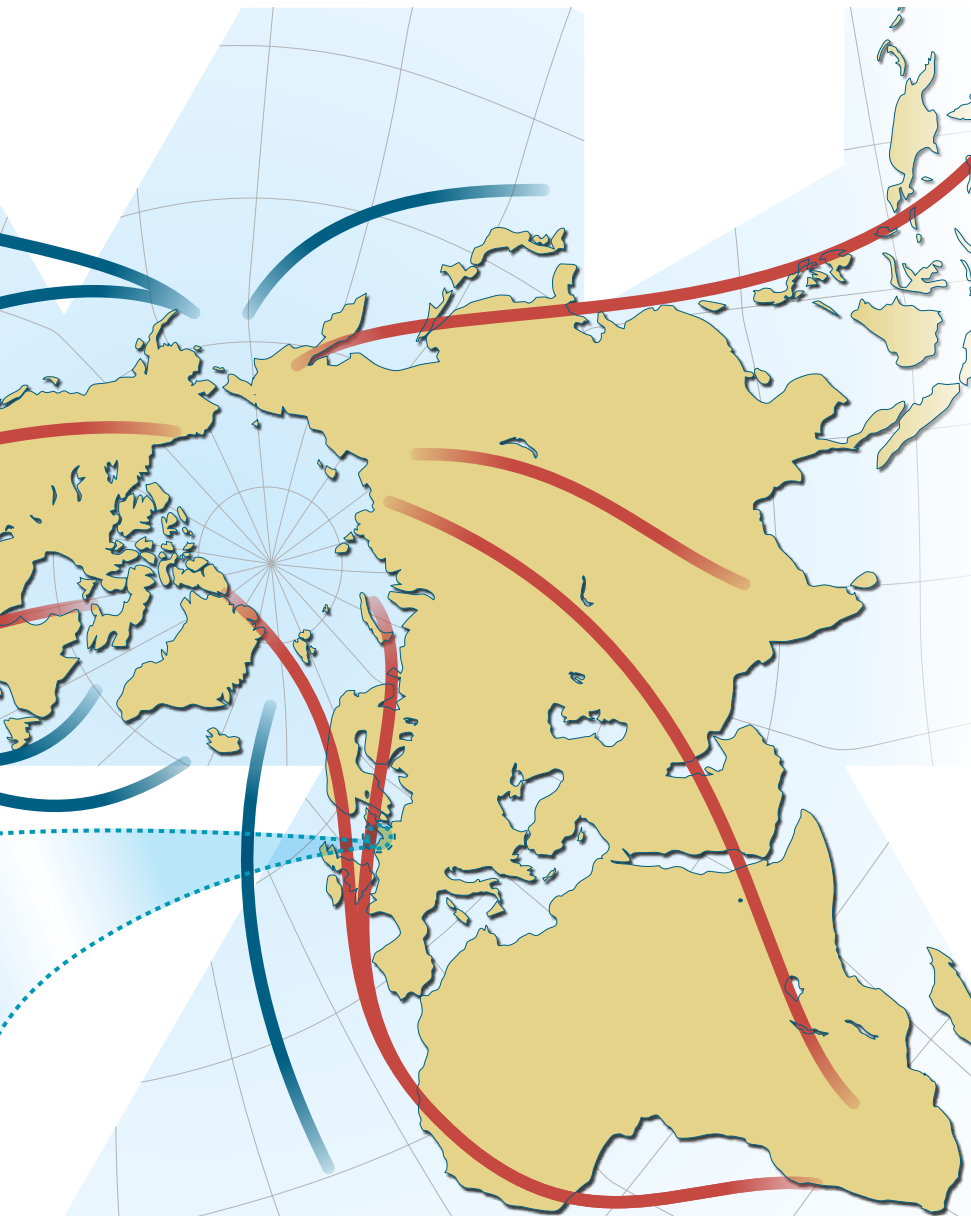
### 1994: Bringing the Arctic to the world

WWF publishes the first edition of the Arctic Bulletin, a publication that brings conservation-related news about the circumpolar world to an influential audience of thousands.

### 1997: Fishing for sustainability

WWF co-founded the MSC (Marine Stewardship Council) to encourage sustainable fishing practices. Increasing numbers of fisheries around the Arctic – in Norway, Alaska, and Russia – are now MSC certified.





and beginning in the breeding season of 1990, a number of expeditions took place to Taimyr, highly facilitated by ground-work laid by WWF field experience.

The WWF Arctic Program developed beautiful booklets on the Taimyr and Lena delta reserves with printing and distribution supported by the Netherlands. The WWF Arctic Program and the Netherlands worked closely at many international meetings, such as the Conservation of Arctic Flora and Fauna (CAFF) working group of the Arctic Council to promote protection of the Arctic, often focusing on the millions of migratory Arctic breeding birds in their international flyways and migratory routes.

This cooperation between WWF and The Netherlands government to protect migratory Arctic birds and their flyways also remains in place outside the Arctic, most notably in West Africa, on Banc d'Arguin, an important site for wintering Arctic waders. This dates back to the early seventies of the last century. It is unfortunate that the capacity in the Russian Arctic has substantially slowed down due to changes in the Russian policy towards joint Russian-foreign expeditions to Taimyr and the extremely high costs associated with them.

Last but not least, the personal contact between the main coordinators has greatly facilitated this successful synergy between the Netherlands government and the WWF Arctic Program in conserving migratory Arctic birds and their habitats. ○



**DR. GERARD C. BOERE** has received numerous national and international honours, including being knighted by HRH Queen Beatrix and receiving the Russian Gold Medal for his conservation work. He is an internationally acclaimed expert in zoogeography, bird migration, taxonomy and paleontology. His PhD research focused on the international importance of the Dutch Wadden Sea for migratory Arctic waders. He continues to work as a conservation consultant to numerous countries and conventions.

## WWF in the Arctic



### 1999-2003: Tracking ringed seals

The ringed seal is a key species in the Arctic – it is the most numerous and widespread of all the seal species. WWF supported a four-year project that used satellite tagging to track the seals' travelling patterns, diving depths and time spent on the surface. Participants in the project included Inuvialuit hunters and trappers' organizations and the Canadian Department of Fisheries and Oceans.

# Protecting an Arctic gem

**Svalbard is a unique, high-arctic archipelago internationally regarded as one of the best-protected wilderness areas in the world. Conservationist and tourism consultant ULF PRYTZ says WWF was instrumental in helping to develop tourism guidelines for this region and the entire Arctic.**

**WHEN I FIRST** travelled to Svalbard in the 1980's there was almost no infrastructure available for tourists. Longyearbyen was a mining town run by the local coal company.

The few people who wanted to experience the island's renowned scenery and wildlife could fly in, but then had to find their own means of transportation, accommodation and provisions.

Management of the islands was mainly in the hands of Sysselmannen, the Governor of Svalbard after an international treaty made Svalbard part of Norway in 1925. Since then, one of the main objectives of the Norwegian government has been to preserve the unique wilderness of Svalbard. Beginning

in 1973, large areas in the north, east and south of the archipelago were protected as national parks or nature

reserves. But during the 1980s sustaining Norwegian activity on the islands became increasingly costly even while there was growing interest from tourists to visit the islands.

## A TOURIST GATEWAY

In 1990, I had established Svalbard Polar Travel, an adventure tour operation. Longyearbyen was our gateway for activity that largely took place in the wilderness. We chartered small vessels for

**“TOURISM HAD TO OCCUR RESPONSIBLY AND WITH RESPECT FOR THE ENVIRONMENT...”**

transport and established tented camps in the west and north of the islands.

Soon it became evident that we needed a stronger base in Longyearbyen, both for accommodation, operation and in order to extend the tourism seasons. We built a full-service hotel in 1995, and an operations centre in 1997.

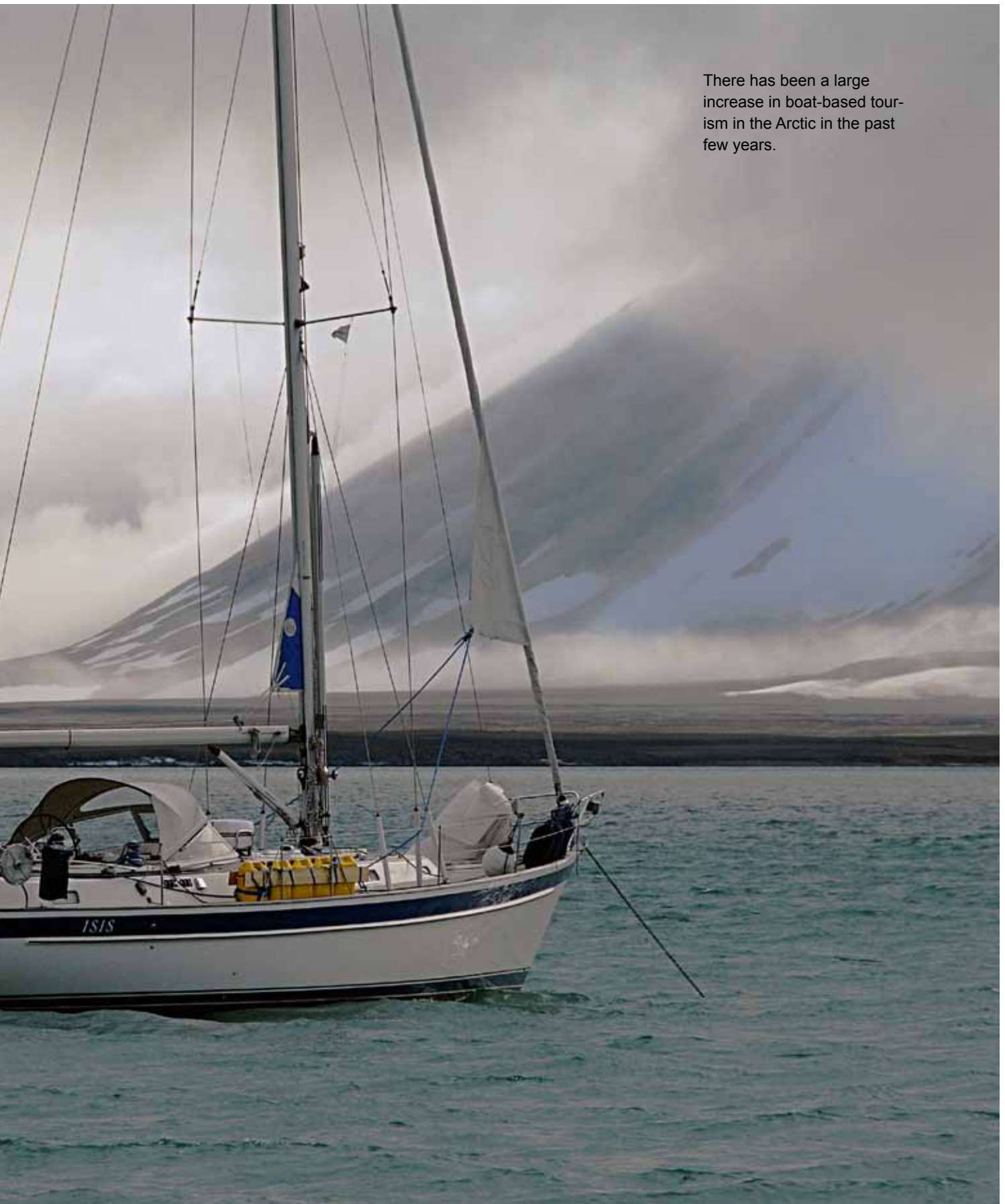
Throughout that decade, we saw an increase in the number of visitors to Svalbard, as excursions and accommodations were offered both by ourselves and a growing number of other tour- ➤



**ULF PRYTZ** is a self-proclaimed adventurer and globetrotter. Educated in hotel-management and social sciences, he established Svalbard Polar Travel A/S in 1990 based on a long history of wilderness experience, nature conservation activities, worldwide adventure travel operations and tourism consultancy in the Tanzanian national parks. He was one of the leaders in the 1971 watershed confrontation to save the Mardøla waterfalls in the Norwegian fjord-district.



There has been a large increase in boat-based tourism in the Arctic in the past few years.



► ism operators in Longyearbyen. Even though this occurred according to official Norwegian policy, some of us in the local and ship-based tourism industry felt development had to happen responsibly. We understood the need for public regulations, but also saw that we needed to take more responsibility and regulate our own activities. By the early 1990s some environmental NGO's wanted to ban tourism altogether.

The WWF Global Arctic Programme felt a ban was extreme, but they did agree tourism had to occur responsibly and with respect for the environment, the people and various species of birds and wildlife on Svalbard. We welcomed a collaboration which ultimately saw WWF develop a set of tourism guidelines. The Ten Principles of Arctic Tourism, Code of conduct for Arctic Tourism and Code of Conduct for Arctic Tourists, became an important influence and template for the tourism industry when individual companies as well as the Svalbard Tourism Board later developed their own guidelines and policies.

That spurred Norwegian authorities to launch a new Environmental Act for Svalbard in 2001, further regulating human activities on the islands through a strict management regime.

## DIFFERING OPINIONS, ONGOING DIALOGUE

In 2001 I sold Svalbard Polar Travel but I have since held a seat on the board of directors of Spitsbergen Travel. In 2003

I set about initiating and developing the Association of Arctic Expedition Cruise Operators (AECO), with the primary aim of organising cooperation and self-regulation in the expedition cruise industry. Safety, environment, and relations with authorities, NGOs and other stakeholders are the organizations's main focus areas. Again, collaboration with the WWF Arctic Program has been highly valuable. AECO now has 14 members with 20 ships from seven countries, and operates on Svalbard, Jan Mayen and Greenland.

The dialogue continues, with the inevitable emergence of conflicting views. In a process aimed at more detailed regulations of tourism in the large east-coast nature reserves, differing positions have emerged both within the governmental bureaucracy and between the tourism industry and WWF. However, we all still recognize and work to maintain Svalbard as one of the most precious and best-protected conservation areas in the world.

As a "not so young" man anymore, I tend to be sceptical of too-tight regulations and bureaucratic limits. I fear getting to the point where people will only be allowed to look at the wilderness and deprived of the deep and fulfilling experience of being part of nature. That is why two years ago I sailed my yacht, S/Y ISIS from mainland Norway as far up as I could get into the ice of North-eastern Svalbard without being trapped, and while it is still allowed. ○



## WWF in the Arctic

### 2006: Keeping the Kamchatka salmon

WWF launched its Kamchatka Salmon Conservation Initiative to help protect five species of Pacific salmon and the spawning grounds for one quarter of all Pacific wild salmon in 2006. In 2009, WWF worked with the Kamchatka Fisheries Ministry and one of the regional governments to develop a regional management council that would include a broad diversity of the public in salmon management. WWF has also started a summer internship program at Kamchatka State Technical University to train future fisheries managers and scientists.

## The Lena Delta - an Arctic Laboratory

**THERE IS STILL** much that we do not understand about the ecology of the Arctic, and how human impacts affect that ecology. Throughout its history in the Arctic, WWF has helped fill those knowledge gaps. In 1995 His Royal Highness the Duke of Edinburgh, WWF president from 1981-1996, took part in an event that positioned the Lena River Delta of the Russian Arctic as a key site for the environmental monitoring of Arctic ecosystems.

Prince Philip officially opened the International Biological Station Lena-Nordenskjold, a scientific facility brought about through a memorandum of understanding between the Republic of Sakha and WWF-Sweden. The station's mission is to undertake complex research of arctic ecosystems, observe their biodiversity and conduct ecological monitoring.

The research station was located here because the Lena River Delta is one of the key regions in the Arctic due to its sheer land mass, unique research opportunities, flora, fauna and range of species.

Spanning more than 28,000 square kilometres, the region offers nearly every main type of Arctic landscape. Typical northern tundra is found in the northwest of the delta, while to the southwest and the southeast are islands with their own specific landscape. The foothills of the Kharaulahsky mountain range and Chekanovsky chain of hills form complex mountain terrain.

There are numerous bodies of water, river branches and a nearby estuary zone. The flora and fauna in the delta are particularly rich and varied. 373 plant species, 106 types of moss and 74 lichen species are found there.

Mammals range from tundra, mountain and northern-boreal species. Caribou and Arctic fox are the most important species from the viewpoint of those Indigenous peoples who rely on them for their own consumption. There are also five species of sea mammals, including walrus, whose herd populations are under threat. Ongoing studies



Photo: Peter Prokoshch

Prince Philip (left) at the inauguration of the Lena Delta station, with the President and the Environment Minister of the Sakha Republic.

undertaken by the researchers at the IBS will help to monitor declines and hopefully protect these species.

The Lena River Delta is a main nest-

ing habitat for migratory birds. The intercontinental ties, flight paths and distances flown by delta birds are quite likely unique in the Arctic. The study



Photo: Peter Prokoshch

The International Biological Station Lena-Nordenskjold.

of these birds such as Bewick's swan, black brant, the snow goose, common and Steller's Eiders, Sabine's and Ross' gulls and peregrine falcon is of particular interest and value to the type of research undertaken by the IBS Lena-Nordenskjold.

The delta is also a site for assessing human impact on its many species, as it is a significant accumulator of pollution from runoff along the river's course. As the region contains both protected lands and industrial areas, it allows for the study of human influence on the region's environment and natural biological processes. ○

View from the north to the Bykovskay branch of the Lena Delta. The mountain chain in front is the location of the Lena Delta station.



Photo: Peter Prokoshch

# Bowhead Whale Sanctuary created in Nunavut

The chin of a bowhead whale surfaces at Nigin-ganiq, Nunavut, Canada.

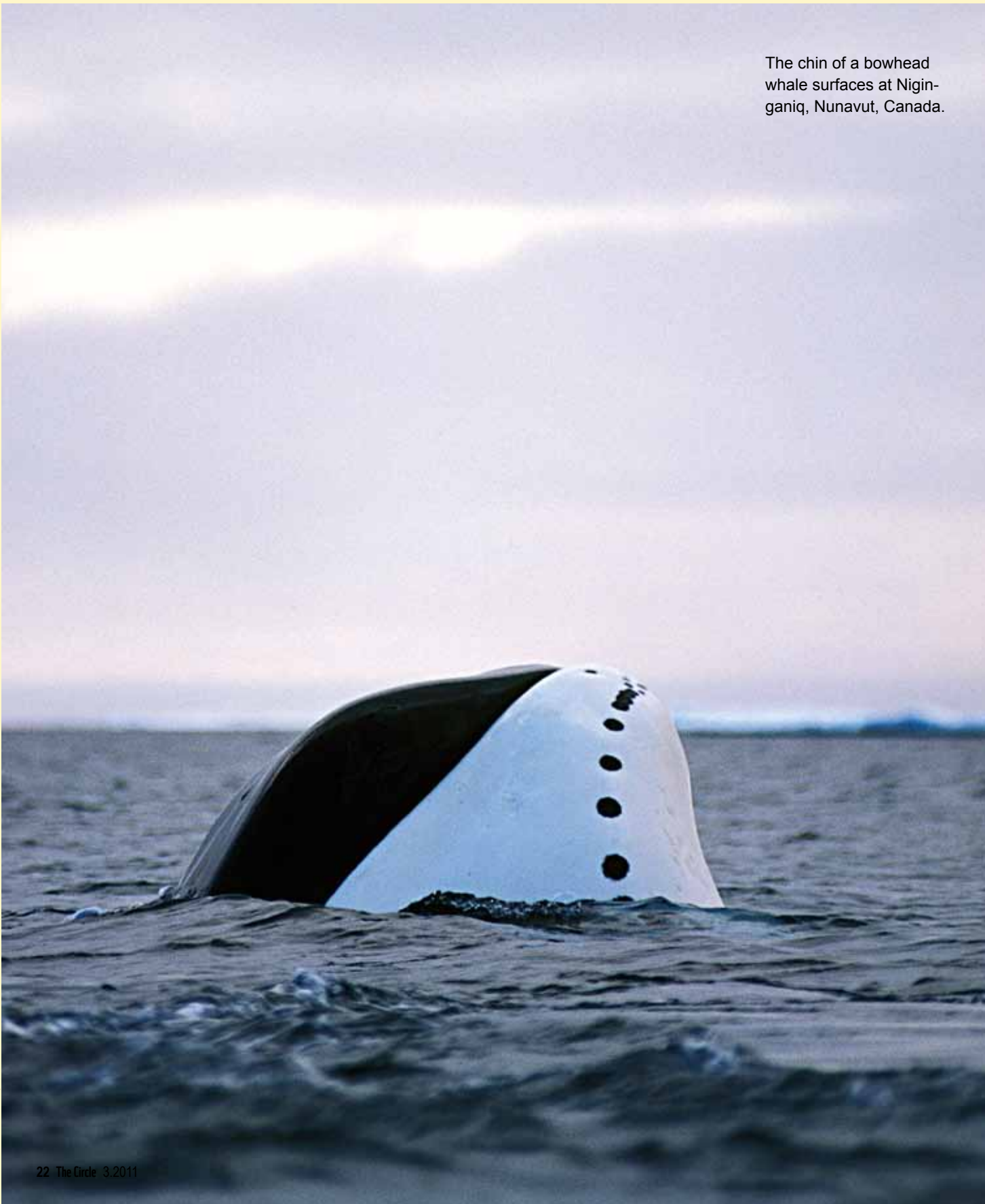


Photo: Paul Nicklen/National Geographic, Stock/WWF-Canada

# People and bears sharing space

**When NORA JANE BURNS came to work for the mayor's office in the North Slope Borough seven years ago, she was told safeguarding residents and reducing conflicts with polar bears was a priority. Bears are common in the area, and most people prefer to walk to and from school, work and around the village. WWF helped the community by providing information, experts and materials to help keep people and bears safely apart.**

**POLAR BEARS TYPICALLY** start sniffing around Kaktovik in late August, particularly in the early morning and evening hours when mothers with yearling cubs venture closer to the village looking for easy food. Initially, we set up a community meeting with the North Shore Borough Wildlife Department to discuss these safety concerns and how to work with the community for more secure food storage. In the first few years, WWF recommended residents put their muktuk (whale skin with

blubber) and meat in a secure place, particularly if they wanted to age or dry muktuk, oogruk (bearded seal meat) and other traditional foods. We also worked with the federal Fish and Wildlife department and North Slope Borough to develop safety posters and an information kiosk, and spoke with local school children to raise awareness ▶



**NORA JANE BURNS** is the North Slope Borough's Village Liaison for the community of Kaktovik, Alaska. The Mayor's office tasked her with forming a Polar Bear Patrol for this community of about 300 residents on the north shore of Barter Island, between the Okpilak and Jago rivers on the coast of the Beaufort Sea.

**IN A CAMPAIGN** spanning 26 years, WWF-Canada worked with the Inuit community of Clyde River to create Canada's first national Marine Wildlife Area. Also known as Ninginganiq, this extensive area off the coast of Baffin Island, Nunavut, became a sanctuary for bowhead whales in 2008.

"Isabella Bay is a pristine late summer and fall, feeding and resting stop for many of the Davis Strait-Baffin Bay bowhead whale population," Mike Rus-sill, then CEO of WWF-Canada said at the time. "This is not only a day to celebrate the protection of the threatened bowhead whale, but also to celebrate a community effort led from the beginning by the Inuit of Clyde River."

At the community's request, WWF-Canada invested over \$1 million for scientific studies and to support Inuit requests for protection of this important area. This included two press conferences with Prince Philip, President of WWF-International from 1980-95, who joined with Inuit voices calling for a protected area for the bowhead. WWF also negotiated with all levels of government and Inuit organizations to develop a management plan for this magnificent northern bay.

The sanctuary includes two deep offshore troughs that are rich in copepods, a main food source for the 18 metre-long, 70-tonne bowhead whale. A shallow shelf at the entrance to the bay provides protection from predatory orca whales. Polar bears, ringed seals, Arctic char, halibut, narwhal, Canada geese, snow geese and king eider also benefit from the sanctuary.

Also referred to as Isabella Bay or Igaliquuuq, an estimated 1,500 to 2,000 bowhead whales stop over in Ninginganiq. Bowhead whales can live for over 200 years, making them the longest-lived wild mammal on the planet.

Thought to once number in the tens of thousands, surveys from 2003 found an estimated 1,500-2,000 bowheads in the Davis Strait-Baffin Bay population. The decline was brought about through unregulated commercial whaling of the 18th & 19th centuries. Ninginganiq was the first Inuit-initiated whale sanctuary in the world.

## WWF in the Arctic



### 2008: Watching for the Umky's

The UMKY (polar bear) patrol, was developed by people in Vankarem, a village on the Arctic shores of Chukotka, Russia, and the World Wildlife Fund. The patrol was developed to prevent encounters between polar bears and people ending in death. Polar bears are increasingly common in some communities, a development that some people put down to the fact that the bears have less access to their normal sea ice habitat in the Arctic summer. The patrols have spread to other communities in Russia, and also to north America.

# Protecting America

**The Bristol Bay fishery generates approximately \$80 billion over 40 years for Alaska's economy – far more than the \$7.7 billion in oil and gas revenue from this region that the federal government estimates could be generated during the same time period. GARY CLINE says WWF has long recognized the cultural, economic and environmental importance of this region.**

**THE VIBRANT WATERS** of Bristol Bay serenely flow into the Bering Sea, providing nourishment to all life forms in the Pacific Northwest. This vast, opulent region is not only home to residents of southwest Alaska, it is also America's Fish Basket, producing roughly half of the wild-caught seafood in the United States. This remarkable self-sufficient marine ecosystem – one of the most productive in the world – contains the largest wild salmon runs on the planet, important nursery grounds for red king crab and Pacific halibut as well as staging areas and wintering grounds for tens of millions of seabirds. It is a feeding ground and migration corridor for marine mammals, including five endangered species.

## UNTOUCHED BY EXPLOITATION, FOR NOW

The harvest of fish, wildlife and plants from the region is essential to the maintenance of cultural traditions and is a primary source of sustenance for



WWF supported local development of UMKY or polar bear patrols in communities like Rirkaipti, Chukotka

### ► about confrontations with bears.

All of this work is ongoing as we continue to work closely with the community. We now have a Polar Bear Committee made up of community members while we work with WWF to develop experimental bear-proof containers to store traditional foods. WWF sent six of these containers to us last year, and we plan on trying them out come whaling season this fall. The containers have vents to allow for air circulation so meat, muktuk and other traditional foods won't spoil.

In 2010, I also attended a meeting in Barrow Alaska with WWF and NSB Wildlife and with the Russian representatives from the Chukotka Russia Umky Patrol program which gave us further



Keeping food where bears cannot get it is one strategy for keeping them away from people.

ideas and methods for Polar Bear Patrol and safety. It was an excellent opportunity to hear how other communities work to protect and care for the polar bears and residents. ○

## WWF in the Arctic



### 2009: The big tent

During climate change negotiations in Copenhagen WWF pitches an arctic tent on the city's busiest shopping street. For three weeks, the 200 person tent draws attention to the urgency of global warming, by providing an exhibition and speaking space for voices from the Arctic.



# America's fish basket

many Native Alaskans. For many native families in Bristol Bay, wild salmon accounts for almost half of their diet. Wild salmon feeds and employs thousands of people, and plays a vital role to all living organisms in the region, especially marine mammals. The North Aleutian Basin planning area provides critical habitat for marine mammals that are relied upon for cultural traditions of subsistence harvests and is internationally recognized for containing one of the largest concentrations of migratory water fowl and several endangered marine mammals. The Pacific Right whale, walrus, Stellar sea lions are among those species that reside in the planning area for offshore development.

So far, this region is virtually untouched by human mineral exploitation. Yet Bristol Bay has been threatened by offshore drilling for forty years with only transitory protections. For 13 years it was protected through a congressional moratorium because of its cultural importance, ecological sensitivity, and valued fisheries. Thanks to the Honorable Secretary of the Interior Ken Salazar and the Obama administration, the North Aleutian Basin of Bristol Bay will be protected until 2017. However,

federal legislators should be working towards permanent protection from offshore drilling which would benefit Bristol Bay along with a dozen state and federal protected areas surrounding the Bay that could be threatened by oil spills or other development-related mishaps.

**“WILD SALMON FEEDS AND EMPLOYS THOUSANDS OF PEOPLE, AND PLAYS A VITAL ROLE TO ALL LIVING ORGANISMS IN THE REGION, ESPECIALLY MARINE MAMMALS.”**

WWF has long recognized the cultural, economic and environmental significance of this region and has united with Nunamta Aulukestai to make permanent protection and prevention of offshore oil and gas leasing one of its highest priorities. WWF knows this

would benefit Alaskans – especially those whose livelihoods depend on the fisheries of the Bristol Bay – and the national economy. Defeat would leave in its wake a trail of destruction, as damage from offshore oil and gas production begins with seismic surveys and lingers long after the last barrels of oil and gas are shipped away.

There were several key decisions in 2010, all of which WWF pushed for, to bring us closer to reaching permanent protection of these waters:

■ In March, U.S. Secretary of Interior Ken Salazar removed the bay from the Bush Administration's five-year offshore oil and gas leasing plan.

■ In May, President Obama announced that new exploratory drilling off the coast of Alaska that was set to begin in July 2010 be put on hold until at least 2011.

■ In July, President Obama announced that a national oceans policy will be created. The policy will, among other things, identify and protect remarkable places – like Bristol Bay – and prevent the ad hoc development of our oceans.

## ESTABLISHING A VOICE AGAINST DRILLING

WWF is continuing to work with fishermen, community leaders, Native Alaskans, the U.S. Congress and the Executive Branch to stop offshore



**GARY CLINE** is the Permanent Protection Coordinator with Nunamta Aulukestai (Caretakers of Our Lands), a non-profit corporation established to provide a sustainable base for community development and sustain cultural values. He is a native Yupik, who says his parents taught him from an early age about traditional knowledge, the importance of renewable resources and that living off the land “is the foundation of our lifestyle passed down for generations with a focus on taking only what you need, respect the environment and share with others.” He has a degree in International Business.

## WWF in the Arctic



### 2009: The art of Arctic conservation part 2

The ‘bear in the square’ is born when renowned British wildlife sculptor Mark Coreth teams up with WWF to create an ice sculpture of a polar bear in Britain's bustling Trafalgar Square. The bear, carved from ice on a bronze base slowly melts away to reveal the skeleton beneath, a poignant warning of the effects of climate change in the Arctic. The bear is seen by thousands of people in the UK, then by thousands more in Denmark, Canada, and Australia in the next two years.

## “FEDERAL LEGISLATORS SHOULD BE WORKING TOWARDS PERMANENT PROTECTION”

- ▶ leasing in Bristol Bay and ensure that the bay receives permanent protection.

We understand the significance of becoming more reliant on domestic products and energy to help stabilize the nation's economy. After all, here in Bristol Bay we pay some of the highest energy rates in the country. But as a Bristol Bay resident, commercial fisherman, and subsistence fisherman, I feel we should not threaten a multi-billion dollar industry that literally feeds the world and stabilizes local economies.

First of all, the region does not have the proper infrastructure and technology for a proper oil spill clean up in the rough, icy waters of the Bering Sea. The tragic Deepwater Horizon disaster and Exxon Valdez demonstrated the industry's inability to execute a successful clean up. If anything were to contaminate our renewable resources it would disrupt our local economies and way of life, inevitably increasing event-related physiological stress that can last decades.

The WWF and several others have recognized the economic, cultural, and global importance of Bristol Bay. They have helped locals and fishermen establish a voice in opposition to offshore mineral extraction in Bristol Bay. As a result, we have formed the Fish-Basket Coalition to protect the last great fisheries on earth.

Nunamta Aulukestai greatly appreciates the assistance from WWF and all of our partners. They have shown respect to our way of life, and are determined to protect the renewable resources that we rely on. They have provided us with additional funding for employment and travel expenses and ignited a spark within our campaign to permanently protect Bristol Bay from offshore mineral development. ○

WWF perspective

# The Arctic of the future

**I**N LATE MAY I had the opportunity to visit Murmansk, Russia for the first time. Murmansk is the largest city north of the Arctic Circle and Russia's only year-round, ice-free port opening directly to ocean waters. Although only founded in the early 20th century, Murmansk has played an extraordinarily important role in Russia's history beginning with the earliest days of the revolution, through the darkest days of World War II and into the tense years when the Soviet Union and the United States faced each other across the North Pole in the contest of wills known as the Cold War.

Since the fall of the Soviet Union, Murmansk – like many other Russian cities far beyond Moscow – has undergone considerable stress and change. This is starkly measured by a roughly 25 percent decline in population to around 300,000 people.

### A HOPEFUL FUTURE

But the people of Murmansk and the Russian government envision a very bright future. This was dramatically illustrated while walking through an important public space which was decorated with a large mural depicting an artist's perspective of the city in

2050. The mural showed elegant new high-rise office and apartment buildings with gleaming automobiles and mass transit whizzing through efficient roadways. Dominating all was a vibrant port facility servicing ships bringing products from around the world. This was a stunning and captivating picture

**“I CAN ENVISION A RICH, NEW LIFE FOR THE PEOPLE OF THE NORTH”**

of a future, and a stark contrast to the current reality of the city outside my hotel lobby.

This hopeful future for Murmansk and indeed that envisioned by many for the Arctic as a whole can be attributed to two factors. One is the opening up of the Arctic Ocean as global warming causes the eventual decline of sea ice to small remnants. The other is the world economy's insatiable demand for raw natural materials which will increasingly be available as the ice melts. In addition to new access to materials, an

WWF in the Arctic



### 2010: The art of Arctic conservation part 3

Dutch artist Ap Verheggen collaborates with WWF and local Inuit in Greenland to create an abstracted sculpture of a dog sled, and mounts it on an iceberg to symbolize the threats to Inuit livelihoods from climate change.

ice-free Arctic ocean offers important new lanes for global shipping.

I can appreciate the excitement and anticipation with which many residents of the Arctic look forward to these opportunities. However, part of my heart and my brain wishes there would be no change. I hope that the world will limit its emissions of greenhouse gases and that the Arctic will remain a frozen land of vast seascapes and frozen tundra providing a hospitable home to the unique flora and fauna that have evolved over millennia. And I hope that the people of the north who have evolved a complex lifestyle that depends on and thrives in harmony with that natural world will continue their traditional ways for years to come.

Unfortunately, another part of my brain tells me that this is not to be. Change is coming and will come even more rapidly to the Arctic. The Arctic warms at about twice the rate of the global average. My choice cannot be to resist change and hold unthinkingly to what has been. Instead I choose to imagine what a vibrant Arctic future can be and will ask how we can ensure that we achieve it.

## AN ARCTIC FACING PROFOUND CHANGE

Confronting the need to respond to Arctic change in a positive way provides society for the first time with an opportunity to truly plan for the sustainable future of a vast part of the globe. In order to seize this opportunity however, we need to do things in ways that are a departure from the past. In the past,

development has been opportunistic and driven by immediate economic gain – not by long term benefits for human development or sustaining the natural fabric necessary to that development. At all costs we need to avoid the haphazard industrialization that too often characterizes human activity as is the unfortunate case in places like Prudhoe Bay in Alaska which has become the focal point of industrial oil and gas development on the North Slope.

Important principles should guide our actions to achieve this new direction in the Arctic:

## “WE NEED TO DO THINGS IN WAYS THAT ARE A DEPARTURE FROM THE PAST.”

- We need to understand the underlying science and traditional knowledge of the region and how its bio-physical processes operate so that we ensure increased human activity and interventions do not disrupt critical sustaining natural functions.
- Development should be carefully planned according to this science while accommodating the full range of human needs and interests in the Arctic. We need to plan for extractive development along with the cultural resources that will enhance the lives of miners and their families.
- We need to ensure that the peoples

of the Arctic fully and appropriately participate in decisions and reap the benefits of new economic activity in this region.

■ The rich biological resources of the Arctic must be afforded every opportunity to survive through the coming decades which will inevitably be a period of intense stress. Strong standards for economic and human development activities are essential along with protecting certain areas which are especially unique, fragile or otherwise important for the wild world.

■ Governments, civil society and economic interests will have to collaborate in new and innovative ways to develop a shared process in deciding how to move into the future in ways that respond to these principles and benefit the people living in the Arctic today and their future generations.

Therefore I do not cling to a future Arctic frozen in the image of the Arctic found by either the Indigenous peoples thousands of years ago or western scientists a hundred years ago. I see an Arctic facing profound change. But within that change I can imagine the vibrant city imagined by the people of Murmansk. I can envision a rich, new life for the people of the north including social and material advances grounded in traditional values. And I can have hope that the wildlife of the north will have an opportunity to thrive in those special and unique places in the Arctic. ○



**BILL EICHBAUM** is the Vice President, Marine and Arctic Policy and the Acting Vice President, US Government Relations for WWF-US. He works to end destructive fishing practices, reduce pollution and establish a network of effectively managed, ecologically representative marine protected areas. He is also focused on stopping oil and gas drilling that can negatively affect Arctic wildlife and local communities.

**BILL EICHBAUM**

### WWF in the Arctic

## 2010: Oil and Arctic waters

In 2010, thanks in part to WWF research and advocacy, Bristol Bay in Alaska (a major fishery and ecological resource) is taken off the US government's five year plan for oil leasing. The US government also announced the creation of a national oceans policy that will among other things identify and protect remarkable places in the offshore area of Alaska.



The picture

## The first map of the Arctic



Renowned cartographer, Gerhard Mercator, 1512-1594, created this first full map of the Arctic, an expansion of Mercator's inset of the area in his world map of 1569. Mercator explained the source for his cartography in a 1577 letter to English mathematician and astrologer, John Dee: "In the midst of the four countries is a Whirlpool ... into which empty these four indrawing Seas which divide the north. And the water rushes round and descends into the earth just as if one were pouring it through a filter funnel. It is four degrees wide on every side of the Pole, that is to say eight degrees altogether ..."



### Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

[www.panda.org/arctic](http://www.panda.org/arctic)