

Lessons from the Svalbard ice

For seven days in August this year seven Ministers of the Environment, one US Assistant Secretary and one UN representative swam in the Arctic freezing water, traveled from Longyearbyen to Ny-Ålesund on board a research vessel, and slept in basic accommodation in northern Norway on the islands of Svalbard. They came from South Africa, China, Iceland, England, Russia, Sweden, Denmark and Canada to talk about polar environmental issues.

Børge Brende, the Norwegian Minister for the Environment and the host of the trip, wrote in his invitation to his colleagues: "After the Johannesburg Summit, we are all facing the task to find new and effective ways to tackle the world's growing environmental chal-

lenges. To get a thorough discussion on these issues, and in surroundings that will give us both new knowledge and a new perspective, I have the pleasure to invite you, together with a group of our colleagues, to a study tour to the Svalbard Archipelago."

The tour gave the Ministers an opportunity to study the consequences and combined effects of global emissions on the Arctic ecosystems and to informally discuss possible responses that could be made at the international level. The *Polar Environment Times* features some of the Ministers thoughts and ideas on these issues.

The ministers who went to Svalbard included Irina Osokina (Russia), Xie Zenhua (China), Mohammed Valli Moosa

(South Africa), David Anderson (Canada), Elliot Morley (the UK), Lena Sommestad

(Sweden), Hans Christian Schmidt (Denmark), Siv Friðleifsdóttir (Iceland), John

Turner (the USA), Klaus Töpfer (UNEP) and Børge Brende (Norway).



OLE MAGNUS RAPP

Memorable Svalbard

This summer's tour to Svalbard was an extremely enlightening experience. It offered a welcome opportunity for ministers from both the north and the south to discuss the global environmental agenda. Our discussions were greatly enhanced by outstanding excursions led by Arctic scientists. The truly fascinating nature and historical developments of the region were unforgettable.

Svalbard is the perfect setting for discussions about the important global and regional environmental challenges faced by all countries. With the Arctic

experiencing the effects of global change almost twice as fast as the rest of the world, it provides us with an early warning indicator. Here we see, for example, how climate change may affect

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other parts of the world. Here we also begin to understand the importance of international cooperation in research and knowledge.

The natural environment of Svalbard

is almost indescribable. Even though humans have used this area for more than 400 years, its nature still captivates us with its large tracts of unspoiled wilderness. With an area of 62,700 km²,

Svalbard represents a significant part of Norway and Europe's last wilderness. At the same time the harsh climatic conditions here have played an important factor in preserving its cultural heritage.

Svalbard is truly an important part of our global heritage.

Svalbard, however, and indeed the entire Arctic, presents a paradox. This seemingly clean environment is subjected to substantial environmental pressures. A changing climate will have dire consequences for many species that already live under marginal conditions. Many environmental pollutants are transported here by wind and ocean currents from industries further south. These toxic substances threaten the health of Arctic wildlife and the humans

that rely on them.

We are utterly dependent on international cooperation to succeed in the protection of Arctic ecosystems. As Svalbard showed us, the Arctic is a memorable place. It is only through our actions today that we can ensure that future generations will have the same opportunities to build their own memories of this wild nature

KLAUS TÖPFER
Executive Director, UNEP

Why we need to protect the Arctic

The Arctic is a vulnerable region in an ecological respect and has become increasingly exposed to the effects of industrial and agricultural activities worldwide. Wind, precipitation and currents carry pollution to the Arctic region. Thus, protecting the environment of the Arctic is an international obligation.

Already, emissions of mercury from coal burning in other parts of the world affect flora and fauna in the Arctic. Specifically, Polychlorinated Biphenyls (PCBs), a mixture of industrial chemicals, are thought to have severe impact on the animals' immune and hormone systems and their reproductive abilities. In the Norwegian Arctic, polar bears with genital characteristics resembling both sexes have been found. We also see

negative effects from other contaminants on seals, seabirds and white whales.

The Arctic is of special interest as indications suggest that the effects of climate change will appear here first. Due to the fragility of the Arctic ecosystem, climate change may lead to profound negative

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consequences for the biological diversity. Many scientists warn that climate warming in the Arctic will have effects which extend far beyond the region, as changes in ice cover and deep water circulation may affect global climate patterns. The Arctic may serve as a window for future climate changes, as well as forewarning

of possible regional and global consequences of these changes.

Although large parts of the Arctic environment are relatively undisturbed, the threat it faces are intensifying and spreading within the area itself. Economic and other demands on the

Arctic and its resources are increasing. Petroleum and mineral development, tourism, shipping, hydroelectric dams and commercial fishing are among the activities with large potential and actual impact. The Arctic can easily become a waste bucket, if we don't take action to counteract negative trends.

What can we do to save the Arctic? First we need to monitor and understand the environmental changes that are taking place over time in the region. The precautionary principle must be the guiding principle. The global nature of these challenges calls for the widest possible co-operation by all countries.

The Kyoto Protocol is an important first step to address climate change, but ultimately we need a broader global and political response to combat the challenges of climate change. There is also a need to increase our understanding of the potential impacts of climate change in the Arctic. In this respect, Norway participates actively in the Arctic Climate Impact Assessment Cooperation (ACIA), which was started by the Arctic Council in 2000 and

will present its findings in 2004.

According to the Director of NASA, Mr Sean O'Keefe, Svalbard has become the world's most important monitoring and research station with regard to the environment. This assertion is due to the fact that early effects on the global eco-system can be detected at these islands, and in the Arctic. Norway has a specific obligation related to the Svalbard Treaty. Through tight regulations of the islands' wild and unspoiled nature, we try to keep this part of the Arctic as a window to better understanding of the global environment.

BØRGE BRENDE
Minister of the Environment, Norway

The world's eyes are on the Arctic

Canada's Arctic is a magnificent place. It has been my privilege to visit our far north on a number of occasions and witness the landscape of endless variety and unique beauty. This year I also travelled to many polar nations and saw first-hand the inspiring land we all share.

It is difficult to imagine how human-kind could possibly make an impression on a land of such seeming power, or do harm to any creature tough enough to survive an Arctic winter.

Yet aboriginal leaders tell me their people can no longer rely on the traditional knowledge of the land that has guided them for centuries – the sea ice is different, there is more run-off from snow pack and glaciers, winter comes

later and spring comes earlier.

More than 40 percent of Canada's landmass is in the Arctic. It accounts for 65 percent of our marine coastline, and holds 30 percent of our freshwater resources. Clearly, we have an interest in protecting it, but few of its environmen-

aboriginal leaders tell me their people can no longer rely on the traditional knowledge of the land that has guided them for centuries – the sea ice is different

tal problems are native – they originate thousands of kilometers away. Thus, fostering global cooperation is a priority for Canada. It is especially important for Arctic states to work together, which we have been doing since 1996 in the Arctic Council.

Declaring new national parks, conducting research and signing international agreements are an important part of protecting the delicate Arctic environment – and Canada is doing all of these – but they are only a beginning. If we do not respect the land the parks protect, if

we do not act on the knowledge we have already gained, if we do not implement the treaties we have signed, we will have accomplished little.

As I discussed with colleagues in Russia, Norway, Finland and Iceland this fall, the Arctic states are important

strategic allies for Canada. We face similar environmental threats and northern economic challenges and share similar northern values.

Collaboration among us is essential for the diagnosis and remedy of threats to the Arctic ecosystem. Just as the Arctic Council's work on long range transport of Persistent Organic Pollutants (POPs) provided the catalyst for international action, the Council's work on climate change, if positioned properly, could do the same.

Canada's priorities over the next several years include the completion of the Arctic Climate Impact Assessment, the Arctic Human Development Report and the Arctic Marine Strategic Plan. These three projects will be the foundation for

the collaborative work that will stimulate regional, and indeed, global action.

There is a sense of urgency among Arctic states to focus on climate change. We are the nations who are already experiencing it. It is up to us to lead response.

The world's eyes will turn northward in 2004 and remain so as we move towards the International Polar Year in 2007, when we will all celebrate the Arctic. Let us be resolved, throughout actions now to protect this harsh yet fragile environment, to ensure that generations to come may be so fortunate to celebrate the Arctic in the future.

DAVID ANDERSON, P.C., M.P.
Minister of the Environment, Canada