## **POLAR REGIONS**

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## **Summary**

The polar regions are some of the most inhospitable places on Earth, with extremely cold temperatures, long winters and short summers, and very little human infrastructure. Yet, both the Arctic and the Antarctic are endowed with copious amounts of natural resources. Not surprisingly, commercial exploitation of living and nonliving natural resources has been at the center of human enterprise in the polar regions for quite some time. However, the competition for these resources has at times led to unsound harvesting and/or extractive practices which have impacted polar environments in negative ways.

Since the early 1980s, the polar regions have been increasingly viewed by the scientific community as unique biophysical regions that serve as unrivaled laboratories for investigating the impacts of modern life on the global environment. Indeed, the increasing amount of scientific activity at the poles has taught humanity much about the

causes and potential consequences of complex environmental problems such as ozone depletion and global warming.

The confluence of competing interests such as scientific research and natural resource usage has placed the polar regions squarely on the national agendas of a host of countries. Consequently, such interest has led to the adoption of a number of international accords to manage these two areas in ways that allow scientific inquiry and resource harvesting to flourish, while at the same time protecting the natural environment. This paper offers individual synopses of these agreements as well as commentary on their overall effectiveness to protect the polar regions.

#### 1. Introduction

Geographically speaking, the polar regions are a considerable distance from the massive industrial infrastructure found in many countries located in the midlatitude regions of the planet. Such distance, however, has not insulated the Arctic, or the Antarctic, from the negative externalities generated by modern industrial practices. Ozone depletion and global warming, two phenomena that have their roots in modern industrial society, have had a marked impact on the polar regions. Perhaps the starkest example is the increasing rate of melting occurring at the polar ice caps and the potential impact it may have on phenomena such as planetary cooling processes/climate change, fluctuation in global sea levels, and the flooding of low-lying areas.

Moreover, the Arctic and the Antarctic share a long history of direct human intervention courtesy of the prodigious amounts of living and nonliving resources located within them. For example, both regions are flush with numerous marine species including finfish, seals, and whales. As for nonliving resources, the Arctic has been heavily exploited over the past century for its mineral and hydrocarbon wealth. While deposits of minerals and trace amounts of hydrocarbons are also known to exist in Antarctica, humanity has yet to tap these resources. However, resource extraction in the polar regions has not come without environmental costs. Cogent examples include massive depletions in whale and some fin-fish populations, as well as the disastrous grounding of the *Exxon Valdez* supertanker in Prince William Sound, Alaska, in 1989.

Since the early 1980s, the polar regions have witnessed increasing amounts of scientific activity as scientists from around the globe conduct experiments to learn more about the planet's natural processes and the impacts modern industrial society is having on these processes. The high-profile media exposure of such issues as global warming and ozone depletion, coupled with the political posturing of nations looking to demonstrate their green credentials, have further served to increase the international spotlight on the polar regions.

In response to the growing human presence in the Arctic and the Antarctic, nation-states have looked to better manage these areas through the adoption of international accords. These accords cover such areas as fisheries management, the conservation of terrestrial species and habitats, nonliving resource extraction, and sovereignty arrangements. This paper looks at a number of these accords and discusses their respective scope, operation, and principle objectives. Chronological summaries of each accord are also presented in

table form and provide information on their respective territorial ambits, dates of entry into force, and major provisions. The paper closes with a discussion of the effectiveness of polar accords and the degree to which these arrangements are impacting the quality of the natural environment.

## 2. Arctic Accords

Governance of the Circumpolar North falls under the jurisdictional ambit of a number of different legal arrangements including global accords, regional accords, and domestic statutes promulgated by the eight Arctic nations. Because of the amalgam of legal prescriptions in place to manage the region, concerns have been raised with respect to regime overlap and/or policy gaps that have left parts of the region underprotected. One Arctic scholar argues that while such institutional interplay can prove mutually beneficial, it can also foster policy disconnects or even conflict within the region. Another consideration is that large swaths of Arctic territory have often been regarded as peripheral concerns to countries whose domestic political and economic concerns lie in the midlatitude regions of the globe. Many times this has resulted in an inability, or unwillingness, on the part of the international community to invest the requisite political and economic resources to ensure sound management of the region, its resources, and its people. In sum, governance of the Arctic is a complex phenomenon.

To simplify some of the legal complexity surrounding the Arctic, as well as focus attention on environmental matters unique to the Circumpolar North, the ensuing review of Arctic environmental accords is limited to those that are regional in scope. This line of reasoning reflects policy trends over the past decade whereby the Arctic nations have looked to manage region through regional arrangements that focus on environmental problems unique to the Circumpolar North. Such a flurry of diplomatic activity has not only raised consciousness about the Arctic as a distinct region of the globe, but it has also heightened awareness about the region's environmental problems.

Before beginning our review of Arctic regional accords let us briefly take note of a few international accords that make special provisions for the Polar Regions. Article 234 of the 1982 UN Conference on the Law of the Sea (UNCLOS) states that coastal nations have the right to adopt laws and regulations for preventing or reducing pollution from vessels in ice-covered areas within the limits of the exclusive economic zone. Such protections are to ensure that pollution from ships will not cause major harm to, or irreversibly disturb the ecological balance of, polar ecosystems. In 1992, the UN Earth Summit and Agenda 21 led to the Adoption of the 1995 Global Program of Action for the Protection of the Marine Environment from Land-based Activities. This program has been given an Arctic focus through the Regional Program of Action for the Protection of the Marine Environment from Land-based Activities endorsed by the Ministers of the Arctic Council within the Iqaluit Declaration adopted in 1998. Lastly, the International Maritime Organization (IMO) is currently in the process of drafting an International Code of Safety for Ships Navigating in Polar Waters. This document sets specific safety and antipollution standards for ships plying the waters of both the Arctic and Antarctic.

## 2.1. Treaty of Svalbard

The Treaty Concerning the Archipelago of Spitsbergen was adopted in February of 1920 and entered into force in August of 1925. The accord gives the Kingdom of Norway full and absolute sovereignty over the archipelago that includes Bear Island (Beeren-Eiland) and all islands between 10° and 35° longitude east of Greenwich and 74° and 81° latitude north. However, the accord stipulates that the contracting parties (presently 41) shall enjoy the same rights as Norway to engage in all maritime, industrial, mining, and commercial operations, including fishing and hunting, on a footing of absolute equality.

The accord charges Norway with the right to take or decree measures to ensure the preservation and, if necessary, remediation of the fauna and flora of the Svalbard region including the territorial waters of the archipelago. Moreover, Norway is to articulate mining regulations that manage extractive operations as well as collecting revenues that will be used exclusively to the governance and maintenance of the treaty area. Furthermore, the accord prohibits any of the contracting parties, including Norway, from creating or establishing naval bases or other types of fortifications that can be used for military purposes. These demilitarization provisions are in many ways similar to those found in the 1959 Antarctic Treaty.

Because Svalbard is considered to be the most easily accessible area of the Circumpolar North it is more vulnerable to environmental perturbations than other Arctic territories with similar ecosystems. For over 75 years the Treaty of Spitsbergen has looked to balance the demands of the contracting parties to harvest the region's living (predominately fin-fish) and nonliving resources (coal) while at the same time protecting the archipelago from the environmental externalities generated by such enterprises.

## 2.2. Pacific Halibut Convention

The Pacific Halibut Convention was adopted in March of 1953 and entered into force in October of that year. The convention is a bilateral accord between the governments of Canada and the USA to preserve the halibut fishery of the Northern Pacific Ocean and the Bering Sea. Specifically, the territorial scope of the accord encompasses the waters off the west coasts of Canada and the USA, which includes the southern and western coasts of Alaska.

The main operational mechanism of the treaty is the International Pacific Halibut Commission (IPHC), which was established to manage and conserve halibut stocks in the treaty area to levels which will achieve and maintain the maximum sustainable yield of the fishery. The primary functions of the IPHC are to coordinate scientific studies of the halibut fishery and formulate regulations that will develop halibut stocks to levels that will permit optimal utilization of the resource. The IPHC also has the power to set the total allowable catch (TAC) of halibut within the treaty area.

Measures recommended by the IPHC are submitted to the Governments of Canada and the USA for approval. Once approved such measures are implemented and enforced by the appropriate domestic agencies of the two countries. The IPHC meets annually to review all regulatory proposals made by the scientific staff and the various subadvisory

bodies. These include the Conference Board, which represents vessel owners and fishermen; the Processor Advisory Group, which represents halibut processors; and the Research Advisory Board, which consists of fishing and processing experts who offer suggestions to the IPHC Director and staff on where the commission's research priorities should be focused.

## 2.3. Agreement on Conservation of Polar Bears

The Agreement on Conservation of Polar Bears was adopted in November of 1973 and entered into force on 26 May 1976. The five contracting parties are Canada, Denmark, Norway, the Russian Federation, and the USA. The overall objective of the accord is to protect the polar bear as a significant resource of the Arctic region through conservation and management measures. To that end, the accord calls on the contracting parties to recognize the special responsibilities that Arctic states have in relation to the protection of the fauna and flora of the region.

Under the terms of the agreement, the taking of polar bears is prohibited except for bona fide scientific or conservation purposes. Exceptions are allowed to prevent serious disturbance of the management of other living resources, or by indigenous people using traditional methods in accordance with their local laws and customs. The contracting parties are also charged with prohibiting the exportation, importation, or trafficking of polar bears or polar bear by-products that are secured in ways that violate the agreement. Lastly, the parties are required to conduct national research programs into the conservation and management of the species, coordinate and consult with other appropriate research entities, and exchange data and research results.

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#### **Biographical Sketch**

**Tom Cioppa** holds a PhD in political science from Colorado State University, Fort Collins, Colorado, USA. He is currently instructor and head of the political science department at Brookdale Community College in Lincroft, New Jersey, USA. His research interests include international environmental policy, environmental institutions, and the polar regions. He served as a research assistant in the McMurdo Dry Valleys, Antarctica, during the 2002-2003 austral summer studying the impact of climate change on soil ecology.