

Regulating Arctic Biodiversity

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The Arctic contains vast ice sheets, glaciers, tundra landscapes, and marine ecosystems – features that support its rich biodiversity. It is home to more than 21,000 known species adapted to cold temperatures. The diverse range of species includes magnificent mega-fauna, such as the region’s iconic polar bears, walruses, seals, and whales. The ecosystem also hosts a wide range of bird species and terrestrial animals, such as Arctic foxes. In addition, it supports a variety of fish, plants, fungi, and microbe species. This extensive biodiversity provides essential ecosystem services and a wealth of material as well as non-material benefits to the Arctic environment and its people.

Arctic biodiversity is regulated and governed through various international and regional regulatory and institutional arrangements as well as national regulatory and policy processes. What follows offers an overview of the most relevant international and regional perspectives.

From an international law perspective, the primary legal instrument for biodiversity management is the Convention on Biological Diversity (CBD), adopted in 1992. The CBD aims to promote conservation of biodiversity and sustainable use of its components. The Convention also underscores the norm of fair and equitable sharing of the benefits arising from the utilization of genetic resources, which is codified under the Nagoya Protocol, a supplementary protocol to the CBD adopted in 2010 and providing a legal framework for this purpose. The Protocol focuses on access to genetic resources and the transfer of associated traditional knowledge, typically held by local and Indigenous communities. The objectives of the CBD reflect the implementation of principles such as the precautionary principle and the principle of common but differentiated responsibilities.

A number of other international legal instruments covering the Arctic merit mention. One is the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which regulates the international trade of endangered wild animals and plants, protecting them from extinction. The Ramsar Convention on Wetlands focuses on the conservation and sustainable

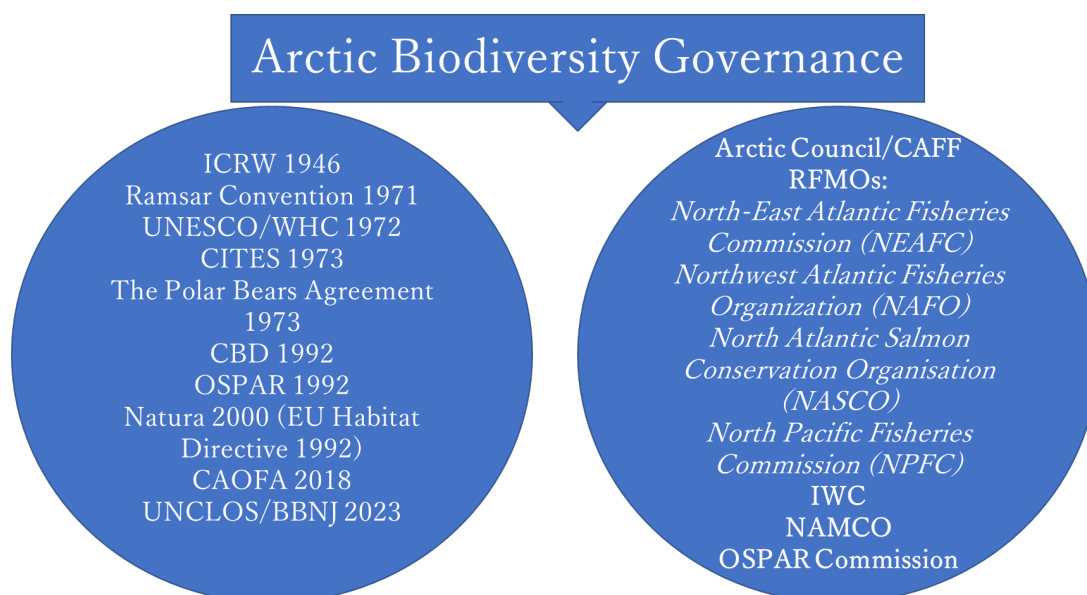
use of wetlands, which are essential for biodiversity as they support a wide range of plant and animal species. The UNESCO World Heritage Convention of 1972 aims to identify and protect sites of outstanding universal value, including natural sites of exceptional importance for biodiversity conservation, such as national parks and biosphere reserves. On June 19, 2023, under the United Nations Convention on the Law of the Sea (UNCLOS), the Biodiversity Beyond National Jurisdiction (BBNJ) treaty was adopted, addressing issues such as protection of vulnerable marine ecosystems, impact assessments of human activities, access to and sharing of marine genetic resources, transfer of marine technology, creation of marine protected areas beyond national jurisdiction, and use of "area-based management tools" to manage ocean resources more sustainably.

The more Arctic-specific conservation regulations include the 1973 Agreement on the Conservation of Polar Bears and the 2018 Central Arctic Ocean Fisheries Agreement (CAOFA). The former was adopted by all five Arctic coastal states, the aim being to prohibit random, unregulated sport hunting of polar bears and outlaw hunting of polar bears from aircraft and icebreakers. The latter agreement was concluded by five Arctic coastal states, four other nations (China, Iceland, Japan and South Korea) and the EU – all actors with fishing interests in the region. The CAOFA is a proactive regulatory arrangement to impose a moratorium on commercial fishing because of the lack of scientific evidence enabling estimation of the resource, ensuring that any future commercial fisheries will be based on scientific understandings and sustainable management principles; here it can be seen as implementing the precautionary principle. Also, of importance for the Arctic are the 1946 International Convention for the Regulation of Whaling (ICRW), which aims to conserve whale species, and the 1992 Protection of the Marine Environment of the North-East Atlantic (OSPAR), which identified and designated certain areas in the North-East Atlantic, including parts of the Arctic, as ecologically or biologically sensitive areas requiring enhanced protection measures.

For the European Arctic countries – either as members of the EU (Denmark, Finland and Sweden) or participants through the European Economic Area (EEA) agreement (Iceland and Norway) – Natura 2000 provides a nature conservation framework. It is a network comprising protected areas established by the EU to safeguard Europe's most valuable and threatened

species and habitats. These comprise Special Areas of Conservation (SACs), designated under the Habitats Directive, and Special Protection Areas (SPAs), established under the Birds Directive. The European Arctic countries are responsible for designating and managing these protected areas within their national territories.

The international and regional mechanisms described above provide a framework enabling the Arctic countries to collaborate and develop strategies for conserving biodiversity and its sustainable use. The framework offers normative guidance to establish national biodiversity strategies and action plans, strengthen protected areas, promote sustainable practices, and support scientific research and capacity-building efforts. Since scientific knowledge on Arctic biodiversity is constantly developing, regulations and governance evolve in step with new challenges and scientific discoveries. Cooperation among the Arctic states is supplemented by various institutional efforts that address the biodiversity crisis and seek to ensure the long-term survival of species and ecosystems.



As regards institutional arrangements, the Arctic Council plays a crucial role, particularly through its Working Group on the Conservation of Arctic Flora and Fauna (CAFF). CAFF promotes the conservation of biodiversity and sustainable use of biodiversity in the Arctic through activities such as conducting scientific assessments, managing monitoring programs, and

developing conservation strategies. As part of these efforts, CAFF engages the Arctic's Indigenous communities and incorporates their traditional knowledge in conservation work. In another of its responsibilities, the Working Group coordinates the Circumpolar Biodiversity Monitoring Program (CBMP), which aims to improve the monitoring of and reporting on Arctic biodiversity. The CBMP develops standardized monitoring protocols and facilitates data sharing among Arctic countries to better track changes in Arctic ecosystems over time. By promoting ecosystem-based approaches to conservation and advocating for sustainable development practices in the Arctic, CAFF also contributes to climate change adaptation efforts.

In addition to the Arctic Council, several other institutions play a crucial role in the conservation of biodiversity in the Arctic. These include a number of regional fisheries management organizations (RFMOs), the International Whaling Commission (IWC), the North Atlantic Marine Mammal Commission (NAMMCO) and the OSPAR Commission, all instrumental actors in the sustainable and responsible use of marine living resources. For example, the IWC, which operates under the ICRW of 1946, has imposed a moratorium on commercial whaling and set limits on scientific and subsistence whaling. The coverage of these institutional set-ups includes the Arctic Ocean.

For more on this, read...

Barry T and Others, 'How Does the Arctic Council Support Conservation of Arctic Biodiversity?' (2020) 12(12) Sustainability <https://doi.org/10.3390/su12125042>

