
Mapping a Path Forward for Arctic Cooperation with Russia: A Biodiversity Case Study

MARGARET WILLIAMS, NADEZHDA FILIMONOVA,
JENNIFER SPENCE, AND FRAN ULMER

ABSTRACT

For most of this century, the Arctic has been a place of peaceful cooperation in science and environmental protection, an approach built on a foundation of multiple agreements reached in the twentieth century. The Russian invasion of Ukraine and the geopolitical reverberations of the war have disrupted or outright halted most collaboration between Western and Russian scientists and conservationists. As the world's largest country, Russia encompasses one-half of the Arctic Ocean shoreline, almost half of the northern hemisphere's permafrost zone, significant expanses of wildlife habitat, rich wildlife diversity, and is home to Arctic Indigenous communities whose cultures are closely tied to the health of these natural values. This article presents an overview of Russia's unique role in securing Arctic biodiversity and offers examples of the consequences of disrupted collaboration in the Arctic. With a focus on the Bering Strait, this article suggests several options for Western institutions to explore to maintain some level of information exchange and to allow for the conservation and monitoring of Arctic species and natural systems.

Margaret Williams is Arctic Initiative Senior Fellow at the Harvard Kennedy School's Belfer Center for Science and International Affairs. She specializes in Arctic biodiversity conservation and geopolitical challenges in the region. Ms. Williams is a member of the board of the Trustees for Alaska and a lifetime member of the Council on Foreign Relations. **Jennifer Spence** is Arctic Initiative Senior Fellow at the Harvard Kennedy

Geopolitical upheaval erupting from Russia's war in Ukraine, tensions between China and the United States, and the emerging conflicts in the Middle East are among the many challenges now confounding responses to global environmental challenges. Until recently, various factors, particularly cooperative Arctic science diplomacy, discussed below, have largely insulated the Arctic region from these tensions. This paper explores the issue of Arctic cooperation through the lens of environmental protection. Focusing on biodiversity, it examines the importance of cooperation in research and conservation between the West and Russia and considers the consequences of the disruption of cooperative initiatives and mechanisms that have existed since the Cold War. Finally, assuming that tensions over the war in Ukraine (and the war itself) are likely to endure for the foreseeable future, the paper explores opportunities for new modalities of collaboration between Russia and other Arctic nations.

FROM COOPERATION TO CONFLICT: A NEW ERA FOR THE ARCTIC?

Extraordinary cultural and ecological features are at stake in the Arctic where some of the world's last great stretches of intact, wild nature are found. These remaining areas of still-unfragmented terrestrial and marine ecosystems are critical for the planet, as they provide a buffer against climate impacts. They offer refuge for declining species of flora and fauna, allow for the movement of migratory wildlife, and serve as repositories for genetic diversity. Throughout the Arctic, including in the Bering Strait region, such areas also provide important food resources and form the basis of cultural identity for five linguistically distinct peoples: Yu'pik, Siberian Yu'pik, Inupiaq, Evenki, and Chukchi. Today, 70 percent of the world's

*School's Belfer Center for Science and International Affairs with expertise in sustainable development, international governance, institutional effectiveness, and public policy. She has previously served in the Government of Canada in senior positions for eighteen years. **Nadezhda Filimonova** is postdoctoral research fellow at the Arctic Initiative at the Belfer Center for Science and International Affairs at the Harvard Kennedy School. Her current research explores urban environmental governance and sustainability in the Arctic. **Frances Ulmer** is Arctic Initiative associate at the Harvard Kennedy School's Belfer Center for Science and International Affairs and senior fellow since 2019. She was chair of the U.S. Arctic Research Commission (USARC) from March 2011 to August 2020 and Special Advisor on Arctic Science and Policy at the State Department between 2014 and 2017. Ms. Ulmer served as an elected official for eighteen years as the mayor of Juneau, state representative and lieutenant governor of Alaska.*

remaining wilderness areas exist in just five countries—three of which are Arctic Nations: the United States (given the vast stretches of wild lands in Alaska), Canada, and Russia.¹

Most Arctic wildlife species are highly mobile, migrating across political boundaries. Therefore, understanding the condition of many of these populations, particularly at a time of rapid climate change, depends on collaboration with Russia considering that it is home to 90 percent of Arctic species,² encompasses 46.7 percent of the world’s permafrost-covered regions,³ and occupies half of the Arctic Ocean’s coastline.⁴

ARCTIC ENVIRONMENTAL COOPERATION: FROM THE 1970s TO TODAY

For most of this century, the Arctic region has been a place of peace and cooperation in science and environmental protection, built on a foundation of multiple agreements signed in the twentieth century. Even before the end of the Cold War, along with non-proliferation and space exploration, the protection of the environment

was among the few areas of cooperation between the Soviet Union and Western countries. The 1972 United Nations Conference on the Human Environment was the first global conference to focus on environmental issues. It sparked a new era of transboundary efforts to address the world’s most pressing environmental problems as reflected in its outcome The Stockholm Declaration. Shortly thereafter, the United States and the USSR

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signed a bilateral agreement, prioritizing collaboration in several environmental fields.⁵ This agreement identified eleven subject areas for joint research and information exchange, ranging from air and water pollution to the conservation of wildlife and natural areas. Notably, the agreement singled out Arctic and sub-Arctic ecosystems as a specific area for collaboration⁶ and created momentum for similar transboundary efforts between the two countries, like the U.S.-USSR Migratory Bird Convention of 1978.⁷ Multilateral cooperation also arose in response to the near depletion of the global polar bear population due to decades of trophy hunting. By the early 1970s, concerned about the fate of the species, representatives from polar bear range states—Denmark, Canada, Norway, the United States, and

the USSR—began negotiations on measures to protect the iconic Arctic species. Ultimately, the five nations signed the International Polar Bear Agreement of 1973.⁸

In 1987, in the waning years of the Soviet Union, Mikhail Gorbachev highlighted the need for collaboration in energy development and encouraged nations to work together to establish the Arctic as a zone of peace where that could be achieved. In his “Murmansk Speech,” Gorbachev urged nations to “hurry to protect the nature of the tundra . . . and the northern forest areas.”⁹ His call to action led to the signing of the historic Arctic Environmental Protection Strategy in 1991. Under this new multinational arrangement, experts from Arctic countries formed working groups to collaborate in monitoring air and water pollution, protecting the marine environment, conserving the Arctic flora and fauna, and preventing, preparing against, and responding to environmental emergencies.¹⁰ In 1996, these four working groups were reconstituted into the structure of a new body, the Arctic Council, the first intergovernmental forum uniting all Arctic states—Canada, Finland, Sweden, Denmark, Russia, Iceland, Norway, and the United States—in the shared mission of sustainable development and environmental protection. The Council also set up a unique role for the region’s Indigenous peoples through the creation of the Permanent Participant designation.¹¹ Since its beginning, six primary Indigenous peoples’ organizations have been engaged and consulted on all aspects of the Council’s work.

As this new format of circumpolar collaboration grew, other organizations embraced the opportunity to connect across newly-opened borders in the wake of the USSR’s dissolution. A wave of Western non-governmental organizations (NGOs) and scientific organizations flooded Russia, meeting their local counterparts and exchanging optimism, ideas, questions, curiosity, and technology.^{12,13,14} With funding from Western charitable foundations and government sources, dozens of green groups across northern Eurasia blossomed, re-energizing the region’s youth movement and existing conservation community with new opportunities.¹⁵ American organizations such as the World Wildlife Fund (WWF), Pacific Environment, Wild Salmon Center, Wildlife Conservation Society, Baikal Watch, and the Audubon Society developed extensive programs with Russian counterparts in endangered species conservation and protected areas establishment. Agencies such as the U.S. Forest Service, the National Oceanic Atmospheric Administration, the U.S. National Park Service, and the U.S. Fish and Wildlife Service invested decades of expertise and funds in monitoring the trade in wildlife products, studying shared populations of wild-

life, and training Russian and U.S. protected areas staff in wildfire control. Other areas of professional exchanges included environmental education, media training, eco-tourism, sustainable management and monitoring of forests and fisheries, and application of technical tools such as Geographic Information Systems, wildlife population modeling, and remote sensing. These entities also collaborated with Russian organizations to involve civil society in nature conservation actions through public outreach, school programs, citizen science, and building membership organizations.

The Arctic Council evolved during this period, both in thematic scope and in size. The inclusion of non-Arctic states and NGOs as observers in the Council nurtured the Arctic's spirit of peace and cooperation. Within the field of biodiversity conservation, these entities work with Arctic Council member states and Permanent Participants (Arctic Indigenous peoples' organizations) to address emerging issues such as biodiversity loss. For instance, the working group Conservation of Arctic Flora and Fauna (CAFF) launched the Arctic Migratory Bird Initiative to identify major breeding areas and stopover sites for particular bird species of major conservation concern, protect coastal habitat, and integrate Indigenous knowledge into these efforts.¹⁶ Another Arctic Council working group, Protection of the Arctic Marine Environment (PAME), published a seminal report on underwater noise in the Arctic, a problem affecting marine life that has arisen from declining sea ice and increasing marine vessel traffic.¹⁷ As the convener of these initiatives, the Arctic Council has become the preeminent intergovernmental forum for sharing information and pooling financial and intellectual resources to advance environmental protection and sustainable development—until February 2022, that is.¹⁸

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FROM COOPERATION TO CONFLICT: CHALLENGES IN A FRACTURED ARCTIC

Russia encompasses a significant portion of the Arctic Ocean coastline, Arctic wildlife, intact ecosystems, and other natural assets. Russian

engagement in Arctic conservation and science is important not only because of the presence of these elements and values but also because of the country's long history of conserving natural habitats in an extensive system of protected areas. In the Russian Arctic, examples of the various categories include strict nature reserves (*zapovedniks*)—where, except for ecological monitoring and research, all human activities, including tourism, are prohibited or severely restricted—such as Wrangel Island Nature Reserve (also known as the “polar bear nursery” for its large concentration of maternity dens). This network of conservation areas includes special-purpose preserves called *zakazniks*, such as the recently established New Siberian Islands Wildlife Sanctuary (encompassing habitat for the endangered Atlantic walrus), and national parks. This latter category includes Beringia National Park, which protects ecological and cultural features common to both Alaska and the Chukotka province.

In response to Russia's full-scale invasion of Ukraine in February 2022, the seven other Arctic nations paused their involvement in the Arctic Council, signaling the first major diplomatic rupture in the Council's twenty-six-year history.¹⁹ With only Russia remaining—and, coincidentally, at the time serving as Chair of the Arctic Council—even the most basic operations within the Council came to an abrupt halt, bringing the Arctic's future into question.

Meanwhile, other international bodies forged ahead on the conservation front, and in December of 2022, nearly 200 nations agreed on a new Global Framework for Biodiversity, an ambitious agreement seeking, among other goals, to protect 30 percent of the world's waters and land by 2030. As a signatory to the Convention on Biodiversity, Russia joined this consensus-based decision and, in theory, should be contributing to its implementation. Indeed, considering the scale of the Arctic, this global charter to conserve unique and representative biodiversity would not be possible without the world's largest country, Russia. However, even outside the Arctic Council, most bilateral science and conservation cooperative programs with Russia have halted, creating new challenges for the realization of this important roadmap for biodiversity protection.

Managing shared Arctic economic resources will be more challenging without the ability of Western experts to communicate with their Russian counterparts. For example, the Bering Sea pollock fishery—one of the world's largest fish stocks—generates over USD 1 billion annually in the United States and straddles the U.S.-Russia maritime boundary.²⁰ As ocean temperatures increase and the Bering Sea “cold pool”—a cold water barrier that historically has segmented the distribution of certain fish species—

vanishes, biologists have recorded the presence of pollock much further north and more westerly in years of high ocean temperatures.²¹ This movement of the stock into Russia's portion of the Bering Sea, and even north of the Bering Strait, means that sustainable management of the population would be best served through bilateral cooperation or, at the very least, information sharing about the status of stocks. Similarly, Norway and Russia share a common stock of cod in the Barents Sea, and since the 1950s, the two sides have collaborated on fisheries and ecosystem management. Despite the war in Ukraine, Norway has continued to partner with Russia on managing Barents Sea fisheries.²²

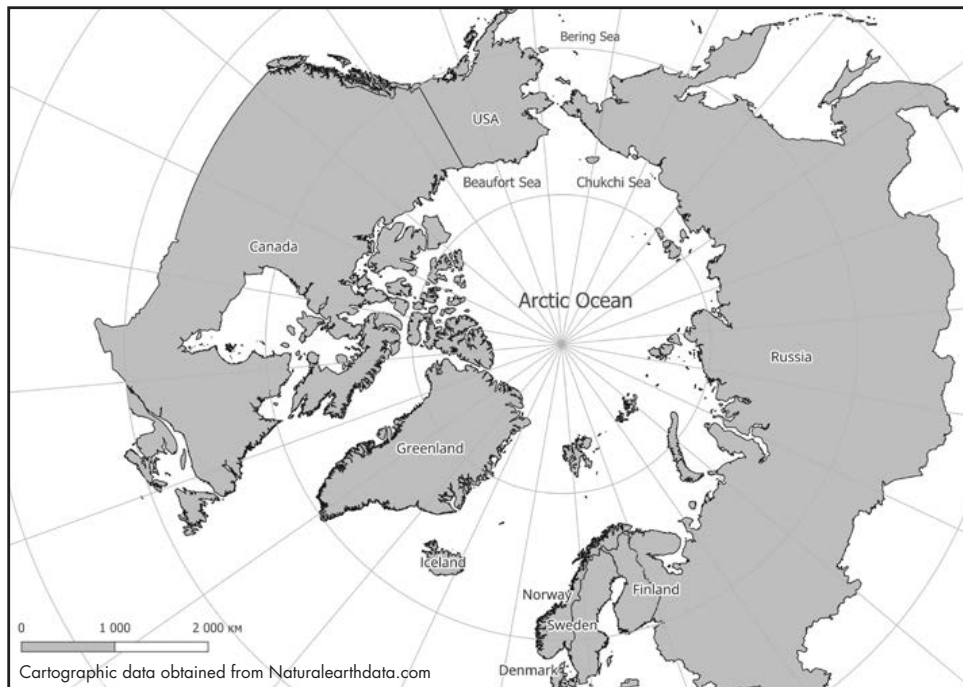
In May 2023, Norway assumed the Arctic Council chairmanship from Russia through a successful transfer that required the commitment of all Arctic States and months of delicate negotiations. Norway's leadership of the organization for its two-year term now provides a window of opportunity to reinvigorate cooperation on biological diversity at a time when climate change is rapidly impacting the abundance and distribution of wildlife, and industrialization and other human pressures are transforming natural landscapes.

HIGH COSTS OF SEVERING U.S.-RUSSIA COOPERATION IN THE BERING STRAIT

Besides the immense human tragedy wrought by Russia's war in Ukraine, the war has ruptured transboundary conservation efforts, which will have long-term consequences on wildlife and ecosystems in the Arctic. As discussed above, for decades, Russian, European, and American scientists—often through cooperation with Indigenous communities—worked together to conserve biodiversity and protect changing Arctic habitats. As a result of the war in Ukraine, biologists in Russia and Western countries have had to pause their joint work indefinitely and cease all communication, leaving a significant information vacuum.

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One of the adverse outcomes resulting from the breakdown in cooperation is the disruption in joint efforts to manage ship traffic in the Bering Strait. In the early 2000s, a coalition of NGOs in the United States and



From the Pole: The Arctic Ocean and Neighboring Landmass

Map source: Nadezhda Filimonova, Belfer Arctic Initiative, and Scott Walker and Belle Lipton, Harvard Map Collection.

Russia, as well as Alaska Native Organizations (ANOs), became concerned about the environmental risks posed by growing ship traffic in Arctic waters. In the Bering Strait, increasing vessel transits signified a greater potential for collisions with whales and small watercraft, groundings, oil spills, and increased underwater noise, which disturb marine mammals' ability to communicate. In response, these groups advocated for the International Maritime Organization (IMO) to designate a specific route for ships to follow. They also proposed the designation of Areas To Be Avoided (ATBAs), zones that exclude maritime vessels from ecologically-sensitive or navigational-risky sites. In America, the ANOs and NGOs worked with the U.S. Coast Guard, while in Russia, conservation groups worked with their country's federal Marine Rescue Service. Throughout the process, Russian and American environmental groups were in regular communication. Then in 2017, the United States and Russia submitted a joint proposal to the IMO for those routing measures.²³ The IMO approved the establishment of the new shipping route and some ATBAs in U.S. waters in 2018, an achievement that would not have been possible without bilateral coordination. However, some proposals were not adopted, leaving the protection of other Bering Strait sites to be decided by future joint efforts.

One area that was considered—but ultimately not included—in

the 2017 joint proposal was the Diomed Islands, a pair of islands in the middle of the strait divided by the international maritime boundary. On the American side is the Alaska Native community of Little Diomed, while on the Russian side is Big Diomed, whose Indigenous population was removed from the island during World War II, when the Soviet military established a base there.

The islands explode with wildlife every summer, hosting vibrant seabird colonies, large walrus haul-outs on the south side of Big Diomed, and rich marine life, from fish to snow crabs.²⁴ American conservation groups continue to push the U.S. Coast Guard to work with Russia to submit a joint proposal for an ATBA to protect the islands. But Russia's war in Ukraine eliminated any chance for progress. Now that bilateral communication on the conservation and management of this exceptionally special area has stopped, the Diomed Islands remain all the more vulnerable to the negative impacts of ship traffic.

Given the tremendous scale of Russia's geography, and the urgency of stabilizing global climate systems, collaboration with Russia is essential to resolving both global and Arctic environmental issues.

In another example, in September 2021, the U.S. Coast Guard and Russia's Marine Rescue Service agreed on plans to conduct in-water oil spill response exercises in the Bering Strait the following spring. Each party planned to bring response vessels and equipment to the region to practice how to work together in the event of an oil spill. Unsurprisingly, these plans are now shelved, leaving questions about what sort of response would be launched in the event of a spill.

ALL HOPE IS NOT LOST

Many experts seem resigned to a protracted conflict between Russia and the West. The desire to significantly restrict contact with Russia—as expressed in policy by most Western nations in the immediate aftermath of Russia's invasion of Ukraine—is understandable. However, for the long-term well-being of humanity and planetary health, the preservation of Arctic ecosystems is critical. Given the tremendous scale of Russia's geography, and the urgency of stabilizing global climate systems, collaboration with Russia is essential to resolving both global and Arctic environmental issues. As the war in Ukraine grinds on, the planet continues to warm and biodiversity continues to vanish. In the interim, to have any hope of mitigating the

worst impacts of these problems, we believe that some cooperation between Russia and the West is warranted in Arctic research and conservation.

Although Russia disdains some multilateral fora (recently bristling at UNESCO's focus on an imperiled Russian World Heritage Site as having a "political orientation" imposed by Western nations²⁵ and withdrawing from the Barents-Euro Arctic Council in September 2023),²⁶ the Putin administration appears to remain committed to the Arctic Council. Indeed, just before the hand-off of its duties as chair of the Arctic Council to Norway,²⁷ Russia amended its national Arctic Strategy and continued to affirm the Arctic Council's leading role in overseeing international activities in the region.²⁸

Under Norway's leadership, a new approach is now cracking open a door for dialogue on Arctic Council projects that include Russia.²⁹ All Arctic states, in consultation with the permanent participants, have agreed by consensus on new guidelines for decision-making via written procedure, an approach that is permissible under the Arctic Council's existing operating guidelines.³⁰ Such a process is likely to be more time-consuming and cumbersome than face-to-face communication. However, it at least establishes a means for all Arctic countries to communicate with each other and has allowed for the resumption of Arctic Council activities.

In a media interview, the Norwegian Chair of the Senior Arctic Officials, Morten Høglund, acknowledged Russia's apparent interest in remaining part of the organization, noting that "when needed, we have contact and meetings with the Russian side and the conversation is constructive... and the other countries are interested in resuming the Council's work."³¹

As the international science community struggles to figure out whether abandoned and interrupted research programs can be salvaged, some experiments are underway that may offer useful models. For example, the U.S. Geological Survey is working to uphold a shared data management arrangement. Nearly thirty years ago, when Soviet-era walrus management agencies were collapsing, Russian researchers reached out to establish a mechanism with their U.S. counterparts to protect hard-won walrus biology and survey data. The bilateral agreement, known as the Pacific Walrus International Database, placed these data in the hands of U.S. counterparts who agreed to maintain the data and only share the data with the permission of a Russian scientist representing the successor to the Soviet research agency. Current requests to access these data for research studies are on hold until the U.S. agency has permission to resume communications with Russian counterparts.³²

One effort to allow for the sharing of data is an open-access online platform launched in 2021 by WWF’s U.S. Arctic Program and the Alaska Ocean Observing System (AOOS). Together, these two NGOs created a user-friendly online tool for Russian and American emergency responders in the Bering Strait region. The Bering Strait Online Response Tool is a visualization tool comprised of maps of sensitive areas and data about the distribution of wildlife species on both sides of the Bering Strait. Even before the war in Ukraine, the project faced some challenges, particularly inadequate data from Russia. When collaboration between U.S. and Russian NGOs paused in the spring of 2022, AOOS pivoted from making this a bilateral tool toward using it to inform Oil Spill Response Organizations (OSROs) and the U.S. Coast Guard.³³ Although this particular joint project was postponed, in theory, the approach of making biological and bathymetric information publicly available both in English and Russian could represent an acceptable form of cooperation in the absence of direct communication. Another venue facilitating limited contact between Western and Russian experts on Arctic issues is ArcticPortal, an online forum hosted by the Arctic Foundation in Akureyri, Iceland, which organizes workshops and seminars between Russian and Western scholars on Arctic issues.³⁴

Fortunately, despite the many disruptions in work across the Arctic, some research relationships are continuing. One of those is the Joint Russian-Norwegian Group on Arctic Fisheries. A critical outcome of the group’s work is the production of a report aimed at filling data gaps resulting from Russia’s temporary suspension from the International Council for the Exploration of the Sea (ICES).³⁵ This

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program may serve as an important collaborative platform to build upon when geopolitical circumstances allow full-fledged cooperation to resume.

Finally, a promising area to maintain communication is the joint work conducted under the umbrella of established agreements such as the Central Arctic Ocean Fisheries Agreement. The agreement creates a framework for international collaboration on scientific research in the Central Arctic Ocean. Ongoing discussions have been facilitated by Canada and South Korea, enabling some progress to be made.³⁶

THE PATH FORWARD

To ensure that conservation and science can resume in the future, priority must be given to maintaining networks of collaborators and communication among long-time partners. Relationships that developed over three decades and contributed significantly to improving understanding of the Arctic are still valuable and important. At this time, academic institutions, NGOs, and Indigenous peoples' groups can use their relative flexibility to maintain some of these connections by, for example, facilitating webinars and moderating online discussions. To prevent the complete isolation of once-active contributors to Arctic science and conservation, Western research entities should allow Russian authors to be considered, on a merit basis, for publication in peer-reviewed scientific journals. Additionally, to lay a foundation for much-needed future generations of scientists and conservationists who can work together, Western entities can facilitate the participation of young Russians—now increasingly isolated from the West—in conferences, even if that involves waiving registration fees, which are often costly for students and technically difficult due to the disabled SWIFT banking system.

Also, during this time of heightened tensions, governments of the Arctic and other Western nations, along with Indigenous peoples' organizations and the science and conservation communities, can evaluate the key lessons learned from three decades of Western-Russia collaboration and identify opportunities for new institutions and third countries to enter the realm of cooperation as potential mediators, catalysts, implementers, and bridges for communication. Government and non-governmental bodies alike should consider potential sources of future funding and modes of distribution of financial support for future projects. Together, all of these entities should invest in strategic thinking about research in climate, biodiversity, ocean health, and fisheries and develop a prioritized plan to move forward as soon as more direct and open communication is possible with the Russian government. Such interim measures can help preserve collegiality, a foundation on which future collaboration could be built.

This overview of the challenges and benefits encountered by the Arctic countries through decades of cooperation in biodiversity conservation serves as a compelling justification for sustaining dialogue amid current geopolitical tensions. The ecosystems and residents of the Arctic as well as those located far beyond the Arctic region are feeling the acute impacts of climate change and environmental degradation. The core rationale for continuing communication among adversaries is grounded in the understanding that the planet cannot wait for action. *f*

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