

PERSPECTIVE

On ice but not broken: Norwegian–Russian relations in polar science since 24 February 2022

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Abstract

Western countries responded to the full-scale Russian attack on Ukraine on 24 February 2022 by imposing strong sanctions to isolate Russia. Norway has adhered to this policy, with exceptions for cooperation on border control, search and rescue, and fisheries research and management in the Barents Sea. Bilateral cooperation within polar science is on ice but has not broken off completely as some scientist-to-scientist contact has been maintained. This Perspective article outlines how these sanctions have greatly reduced cooperation between Norwegian research entities (especially the Institute of Marine Research and the Norwegian Polar Institute) and Russian institutes and scientists in various fields of marine and polar science. Some scientist-to-scientist contact remains, but the nature of these communications has become scantier during the course of the last three years. Maintaining some form of contact is vital for the sustainable management of the living marine resources that Russia and Norway share.

A history of scientific and environmental management cooperation

For centuries, a shared presence in the Arctic has underpinned relations between Norway and Russia in the North. These relations have mainly been to the advantage of both countries and have developed through trade, other forms of economic activity, exploration, scientific cooperation and cooperation on environmental management. They have been forged through institutional and person-to-person contacts and collaboration through periods of shifting national constellations: Norway was under Danish, then Swedish, rule and then became fully independent; Russia became part of the Soviet Union, which later dissolved.

The Pomor trade between the northern counties of Norway and north-western Russia developed centuries ago, as fish, fur, timber, grain and other natural resources changed hands. Russian and Norwegian hunters and trappers took polar bears, seals, reindeer and foxes in Svalbard when it was a no man's land (Arlov 2003).

Scientific cooperation can be dated back to the 1890s. There was a contact between the Russian polar explorer

Nikolai Knipovitch and the Norwegian explorer and scientist Fridtjof Nansen. Russia was proud to show its new ocean research vessel, the *Andrey Pervozvanny*, in Oslo in 1898 on her maiden voyage to the Kola Peninsula (Jakobsen & Ozhigin 2011). A few years later, the new Norwegian ocean research vessel *Michael Sars* visited Murmansk. Russia initiated the Kola oceanographic transect in 1900, and it has been repeated annually ever since. This oceanographic transect is among the oldest and most valuable of its kind.

Fisheries cooperation started in 1958, when a Russian delegation approached Norway's IMR, headquartered in Bergen, because they were worried about the consequences of the European trawl fishery for the cod (*Gadus morhua*) stock in the Barents Sea. The following year, an IMR delegation visited PINRO, in Murmansk. Since the early 1960s, Norway and Russia have annually conducted cooperative surveys of the joint fish stocks in the Barents Sea (Jakobsen & Ozhigin 2011). The Joint Norwegian–Russian Fisheries Commission was established in 1975 and has been functioning since 1976 (Joint Fish undated a). Through this cooperation, the parties have agreed on the division of the North-east Arctic cod stock (43% to

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Abbreviations

ATCM: Antarctic Treaty Consultative Meeting
COMNAP: Council of Managers of National Antarctic Programs
IMR: Institute of Marine Research, Norway
IUCN: International Union for Conservation of Nature
NPI: Norwegian Polar Institute
PINRO: Polar Research Institute of Marine Fisheries and Oceanography, Russia
VNIRO: Russian Federal Research Institute of Marine Fisheries and Oceanography

each and 13% to others). Similar fixed shares have been agreed for haddock (*Melanogrammus aeglefinus*), redfish (*Sebastes mentella*) and Greenland halibut (*Reinhardtius hippoglossoides*). For capelin (*Mallotus villosus*), Norway has a 60% share, and Russia has 40%. The quotas are set annually based on scientific assessments and recommendations by the International Council for the Exploration of the Sea, and the Barents Sea fisheries are generally regarded as being sustainably managed (Gullestad et al. 2014). This is an excellent example of cooperation between neighbouring countries managing shared natural resources in a sustainable way (Jakobsen & Ozhigin 2011).

I have been involved in this cooperation for many years and in many capacities, especially as research director (2000–2012) at IMR and director (2017–2023) at the NPI (Haug et al. 2009; Misund 2024). Initially, I became involved as a relatively junior scientist at the joint IMR–PINRO symposium in Bergen in 1994 (Valdemarsen & Misund 1995), and, from 2005 to 2011, as leader of the Norwegian scientific delegation to the Joint Norwegian–Russian Fisheries Commission (Misund 2024). The minutes from these formal meetings are available (in Norwegian) on the commission’s website (Joint Fish undated b). Here, I share the perspective of a participating eyewitness. Over the years, the numerous disagreements and difficulties that arose were sorted out, one by one, through discussion and diplomatic channels. The principles for this cooperation have been equality and respect, with scientifically based advice on management measures as a foundation. One of the most difficult issues was Russian overfishing of cod in the Barents Sea in the late 1990s and early 2000s (Torsvik 2023). By about 2009, this overfishing was considered to have ended.

Gradually, an interest in environmental cooperation increased. For the Barents Sea region, this was formalized in 1992 when the Joint Norwegian–Russian Commission on Environmental Protection was established. One of the commission’s activities planned for 2022 was a 30-year jubilee. For reasons I shall come back to, this event was not held.

Norway was given sovereignty over Svalbard in the Svalbard Treaty during the post-WWI negotiations in Versailles. Subsequently, the Soviet Union developed two settlements on the archipelago, both based on coal mining. Pyramiden was abandoned in 1996 after a tragic plane crash on Opera Mountain (Arlov 2003). Being the site of coal mining, research and tourism, Barentsburg is still a viable settlement. The Governor of Svalbard represents the Norwegian government in Svalbard and enforces Norwegian laws and regulations, including in the Russian settlements. There is a Russian governor in Barentsburg, but Norwegian sovereignty is not challenged.

After the dissolution of the Soviet Union, Thorvald Stoltenberg, then Norway’s Minister of Foreign Affairs, developed a policy to improve cooperation within the Russian Barents region. Especially after the NPI moved from Oslo to Tromsø nearly 30 years ago, cooperation with Russian institutions has expanded substantially. Since then, many contacts between the NPI and Russia have developed on the bilateral, institutional, project and personal level. The Joint Norwegian–Russian Commission on Environmental Protection has been functioning for 30 years.

Cooperation following Russia’s invasion of Ukraine

Just a few months after Russia’s invasion of Ukraine, on 24 February 2022, I participated in a seminar about Nordic perspectives on security policy in the Arctic, held in Tromsø. Below, I further explore the ideas and experience that I first presented at that seminar regarding how cooperation between two Norwegian research entities—the IMR and NPI—and Russia has been affected by Russia’s aggression against Ukraine.

After Russia unleashed a full-scale war on Ukraine, Norway (not part of the EU) followed the EU sanctions policy. The bilateral cooperation between the countries at the national level was put on ice. The same applied to institutional cooperation, but there were exceptions to the sanction policy and the Norwegian authorities left openings for scientist-to-scientist contact, so that important series of climate and ecological data could be maintained. This policy was developed within a few days after the Russian invasion. During this time, the Norwegian research community had much contact with, and received much guidance from, the Ministry of Foreign Affairs and the Ministry of Climate and Environment regarding how to handle the situation. Scientist-to-scientist contact within collaborations that was active when the war started was permitted to continue, to ensure that data were collected and processed, and long time series were maintained. However, nearly three years after the war broke out, these contacts are reported to be less frequent and to have shifted in character, becoming more technical. The Norwegian scientists involved say that information provided by their Russian counterparts does not extend beyond the subject at hand.

Fisheries

Norwegian–Russian fisheries cooperation continues to some extent as before (Table 1). Russia was suspended from the International Council for the Exploration of the

Table 1 The status of activity carried out by bilateral commissions on fisheries, polar science and environmental management involving the IMR, NPI and Russian partners VNIRO and PINRO, from March 2022 to the present.

Bilateral commission	2022	2023	2024
Joint Norwegian–Russian Fisheries Commission	Functional	Functional	Functional
IMR–VNIRO/PINRO symposium	Delayed	Delayed	Online
Joint IMR–VNIRO/PINRO assessment meeting	Bergen, June	Online	Online
Annual meeting	Online	Online	Online
Joint Norwegian–Russian Commission on Environmental Protection	Paused	Paused	Paused

Table 2 The status of activity carried out by international organizations related to polar science, environmental management and fisheries management involving the IMR, NPI and Russian partners Arctic and Antarctic Research Institute, VNIRO and PINRO, from March 2022 to the present.

International organization	2022	2023	2024
International Council for the Exploration of the Sea (Russian participation paused)	Functional	Functional	Functional
Arctic Council	Temporarily paused	Partly functional (via e-mail)	Partly functional (via e-mail)
Antarctic Treaty Consultative Meeting	Functional	Functional	Functional
Scientific Committee on Antarctic Research	Functional	Functional	Functional
Council of Managers of National Antarctic Programs	Functional	Functional	Functional
Commission for the Conservation of Antarctic Marine Living Resources	Functional	Functional	Functional

Sea in spring 2022 (ICES 2024; Table 2), but Norwegian and Russian fisheries scientists met in Bergen in early June of that year to prepare their annual recommendations to the Joint Norwegian–Russian Fisheries Commission, and the commission’s 52nd session was held digitally in the autumn of 2022 (Joint Norwegian–Russian Fisheries Commission undated). This cooperation continued in digital format in 2023 and 2024. In June 2024, an online scientific symposium on marine ecosystem research involved the IMR and its Russian counterparts: VNIRO, in Moscow, and its polar branch, PINRO, in Murmansk (Table 1). The symposium had about 80 participants and is said to have been a rather successful arrangement. Selected contributions are being prepared for a proceeding’s publication. In 2024, Russia left the International Council for the Exploration of the Sea (ICES 2024).

Russia and Norway continue to cooperate regarding fisheries science and management in the Barents Sea, albeit with some limitations: meetings are mostly held digitally (Norwegian Government 2024), and the dialogue is rather limited. Norway and Russia both participate as before in the North Atlantic Fisheries Commission, the North-east Atlantic Fisheries Commission, the UN Food and Agriculture Organization and the Commission for the Conservation of Antarctic Marine Living Organisms—all international management bodies that consider fishing from transborder marine resources.

Cooperation regarding other kinds of environmental management and science

Projects regarding the state of Arctic biodiversity, the Barents Sea environment and climate have been running (Table 1). A large part of the cooperation takes place under the auspices of the Arctic Council, such as the Conservation of Arctic Flora and Fauna working group and the Arctic Monitoring and Assessment Programme (Table 1). Russia had the chairmanship of the Arctic Council when war broke out in February 2022, and the other member countries decided to pause the work of the Arctic Council (Steinveg et al. 2024). The seven western member countries of the Arctic Council later decided to continue work on projects that did not include Russia (Steinveg et al. 2024). In a digital meeting on 11 May 2023, Norway took over the Arctic Council chairmanship as planned. Attempts are now being made to gradually restart the working mode of the Arctic Council: information is being exchanged through e-mails and letters, and digital meetings are held. These efforts include Russian participants.

The NPI has had much contact with Russian scientists through the IUCN’s Pinniped and Polar Bear specialist groups. The NPI is also represented in the Norwegian delegation to meetings of the Polar Bear Range States. The five parties to the Agreement on the Conservation of Polar Bears—Canada, Denmark, Norway, Russia and the US—met in Canada in May 2023.

Following the development of the Norwegian management plan for the Barents Sea and the waters off Lofoten, a large project was launched to study and map the distribution and ecology of seabirds in the Arctic. This project is financed through Norwegian sources, but Russian institutions have been contracted to conduct fieldwork on seabirds in the Russian areas of the Barents Sea. This project is still running, and fieldwork is being conducted on the Russian side without Norwegian support. There are also institutions from Russia participating in the EU-funded projects, which are aimed at developing an oceanographic monitoring system in the Arctic. NPI is a partner in both projects. The Arctic and Antarctic Research Institute, which is headquartered in St. Petersburg, leads the Kola Science Centre in Barentsburg, Svalbard. The NPI's Management Group visited the centre (which was then called the Russian Science Centre) on 29 May 2021 (Jenssen 2021). Those of us who had visited the centre in previous years noted during this visit that it had undergone a substantial upgrade, featuring modern laboratory facilities, among other improvements. Our hosts told us about their clear ambitions for developing the centre's scientific activity, which at that time involved about a dozen Russian research institutes. Until 2022, the NPI was involved in a few projects with the centre, and the University Centre in Svalbard sent students to the Russian research centre in Barentsburg for lectures. After the Russian invasion of Ukraine, these contacts ceased.

An important forum for information about research issues and activity in Svalbard is the Svalbard Science Forum, led by the Norwegian Research Council. The scientific leaders of the Norwegian and non-Norwegian research units and stations in Svalbard are members of this forum. The Kola Science Centre in Barentsburg used to have a representative at the annual Svalbard Science Forum meetings. After February 2022, the Russian representative has no longer been invited to these meetings.

The NPI is the host of the Ny-Ålesund Research Station in Svalbard. Russian institutions have been involved in a handful of projects through the Ny-Ålesund flagship programmes. For the past two years, this involvement has paused.

Contact via international organizations and fora

Since the establishment of the International Arctic Science Committee in the early 1990s, Arctic Science Summit Weeks have been arranged annually by the different member countries in the Northern Hemisphere. At the 2022 Summit Week, jointly organized by International Arctic Science Committee, UiT The Arctic University of

Norway and NPI in Tromsø in March, Russian scientists were not allowed to participate. At the Arctic Frontiers Conference in Tromsø in May 2022, there were 12 Russian participants; one even spoke at the podium in a debate with Norway's Minister of Climate and Environment. At the Arctic fox symposium arranged by the NPI in Longyearbyen in late August 2022, Russian scientists were allowed to participate and to give presentations virtually (NPI 2022). At the Arctic Frontiers Conferences in 2023 and 2024, in Tromsø, there were no Russian participants.

With longstanding interests in Antarctica (Fig. 1), Norway and the Soviet Union were among the 12 countries that played a role in developing the Antarctic Treaty; they both signed in 1959. Norwegian and Russian scientists, experts and diplomats met in the context of international organizations that handle Antarctic management and cooperation throughout 2022 and in the following years to discuss issues related to Antarctica (Table 2). The activities involved staff from the NPI's advisory, operations and logistics, and scientific departments.

About three months after the attack on Ukraine, both Norway and Russia were represented at the 44th ATCM in Berlin. Staff from the NPI led the Committee for Environmental Protection during that meeting. Russia is one of the 42 countries participating in these committee meetings. Norway and Russia are among the 29 countries participating in the Commission for the Conservation of Antarctic Marine Living Resources. The NPI and Russian research entities were represented in the scientific committee and relevant projects of this commission in 2022. As a director of the NPI (2017–2023), I was the Norwegian delegate to the general meeting of the Scientific Committee on Antarctic Research in Goa, in September 2022, and sat beside and talked to my Russian colleagues. At the 45th ATCM and the Committee for Environmental Protection meeting in Helsinki in May 2023, a Russian and a Norwegian delegation participated. At previous meetings of these groups, NPI representatives participated as part of the Norwegian delegation.

NPI staff also meet Russian participants in COMNAP. In 2022, the COMNAP annual meeting and general assembly were held digitally, with participants from both the NPI and Russia. In 2023, a COMNAP symposium, annual meeting and general assembly were held in Hobart, again with NPI and Russian representatives participating.

Through the Dronning Maud Land Air Network, information is exchanged about flights to the Russian Novolazarevskaya Station and the Norwegian Troll Research Station (Fig. 1). Vital for aviation security in

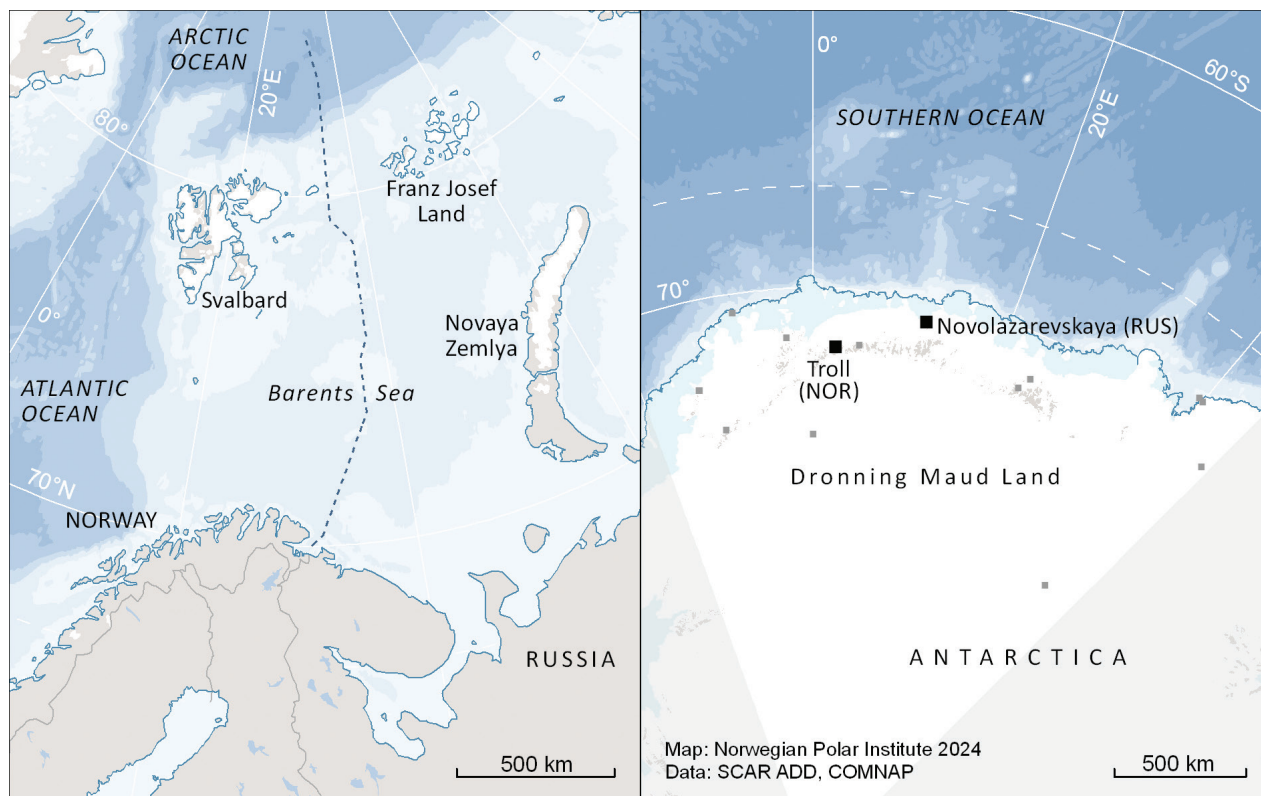


Fig. 1 (a) Norway and Russia share borders on land and in the sea in the Arctic. (b) Russia's Novolazarevskaya Station lies within the Norwegian sector claim of Antarctica, in Dronning Maud Land. Norway's Troll Research Station is nearby, by Antarctic standards.

Antarctica, this cooperation and information exchange continues as before.

Border control and search and rescue cooperation

As Norway and Russia border one another in the Arctic, both on land (200 km) and at sea (1600 km; Fig. 1), it is natural that close cooperation regarding border control and search and rescue developed between the two countries (Sydnes et al. 2017). There is still operational contact and cooperation regarding border control and search and rescue in the Arctic (Vyvial 2023). Through this cooperation with Russia, the Governor of Svalbard arranged the emergency evacuation of a sick person from the Russian research vessel *Severnnyi Polus* in the Arctic Ocean in September 2023. The Governor of Svalbard monitors all activity in and around Svalbard and keeps regular contact with the Barentsburg settlement.

The pandemic

The covid pandemic preceded the invasion and complicated matters. Norway went into lockdown on 12 March

2020. Monitoring activities at the Ny-Ålesund Research Station and elsewhere in Svalbard continued as planned. Through procedures of quarantine and testing, the NPI was able to conduct its planned field activity and cruises in 2020 and 2021. There was little contact with Russian polar researchers during this period. The NPI and other polar institutes expected to be able to meet with their Russian counterparts during 2022 and 2023 to exchange data, discuss the analyses and results, and identify gaps and deficiencies caused by the pandemic. Instead, the Russian invasion of Ukraine led to at least another three years of little or no Arctic science exchange.

Reflections on the current state of affairs and the future

Through fisheries cooperation, aspects of oceanographic and ecosystem development in the western and eastern Barents Sea are exchanged, in addition to data that underpin assessments of the commercially important fish stocks that are distributed throughout the Barents Sea and scientific advice on their sustainable management. To ensure the scientifically based management of these joint fish

stocks in the Barents Sea, Norway will most likely continue bilateral cooperation with Russia regarding the living marine resources in the area. Apart from this, formal contact between Norwegian and Russian institutions regarding environmental issues has stopped, but scientist-to-scientist contacts are still in place. The frequency of these contacts is much lower than before. To be well-prepared if formal contact should be re-established, project activity on the Norwegian side under the Joint Norwegian–Russian Commission on Environmental Protection has been maintained through 2022–24. This means that projects have been running, data for important time series have been collected and compiled and reports on environmental themes are being prepared. But the exchange of data with Russia, dialogue regarding their preparation and processing, and analysis and reporting have not taken place. We now lack five years' worth of scientific information about what is happening in Russian Arctic ecosystems. Since the Russian Arctic constitutes about 45% of the terrestrial and marine Arctic, this is rather concerning (Øvretveit 2023; Rees & Büntgen 2024).

Except for the fisheries research cooperation, there seems to be a contrast between the Arctic and the Antarctic regarding scientific cooperation. The organizations and arenas for scientific cooperation regarding Antarctica are functional, whereas the arenas for similar scientific cooperation in the Arctic are partly functional, or Russian participation in them has been paused (Tables 1, 2). This may be because the Arctic science organizations are more directly affected by the Western sanction policy against Russia, following its attack on Ukraine. The Antarctic organization has a more global domain and can therefore function even if some member states are engaged in regional conflicts.

A difference between marine and terrestrial issues in the Arctic can also be discerned.

Due to the pause of the Norwegian–Russian environmental commission, there is little cooperation regarding terrestrial issues like biodiversity, permafrost and pollution. However, through the restart of the Arctic Council in 2023, there are now activities—with Russian involvement—in the working groups of the council that deal with terrestrial issues.

The Russian–Ukrainian war is entering its fourth year. If the war drags on, Western sanctions against Russia will most probably continue. In such a scenario, Arctic science cooperation will likely continue at the same low level as now. If cooperation under the auspices of the Arctic Council peters out—for instance, if Russia withdraws or is expelled from the organization—it will be detrimental for holistic scientific cooperation on Arctic issues. International organizations with a broader global scope,

like the IUCN, are functional but will probably not be able to provide the regional focus that the Arctic Council provides when it is fully functional. This is because the IUCN is a non-governmental organization with voluntary membership, whereas the Arctic Council is an intergovernmental forum chartered by its member states.

Although Russia constitutes a large part of the Arctic and operates several stations in Antarctica, other nations publish more polar research results. In a review in connection with an evaluation of Norwegian polar research, Russia ranked tenth in the international publication of polar research results (Research Council of Norway 2017). There are indications that Russian scientists became less active in international publication of polar science since 2014 (Rees & Büntgen 2024). Another analysis showed that only 7% of the NPI's scientific publications between 2015 and 2018 had Russian co-authors (Aksnes 2019). Over the same period, 85% of the 436 articles to which NPI scientists contributed had international co-authors. These statistics can be interpreted as an indication of the comparatively limited involvement of Russian scientists in international knowledge production about the polar areas. Nevertheless, data from the Russian part of the Arctic are vital for a complete understanding of the development of marine and terrestrial ecosystems in times of accelerating climate change. In particular, there is concern about thawing of the vast permafrost regions in the Russian Arctic (Rees & Büntgen 2024).

Whether the national and institutional relations on polar research that were put on ice in late February 2022 should be allowed to thaw is a political issue, closely linked to the sanction policy implemented in response to the Russian war against Ukraine. Continuing to allow scientist-to-scientist contact, so that important environmental data series and projects are carried on, is a pragmatic way to avoid cutting off contact completely. Similarly, the gradual resumption of work in the Arctic Council, through the exchange of information via letters, e-mails and digital meetings, is a way of maintaining a steady baseline of contact in important fields of polar science in a difficult and tense geopolitical context. Cooperation in Arctic natural sciences has the potential to be used as a channel for other kinds of contacts between Norway and Russia. We can look back on long traditions in this context.

If the war continues, and serious hostilities between Russia and the West escalate, the existing scientist-to-scientist contacts will be difficult to maintain. Many may deteriorate, and the exchange of information on important aspects of the polar environment and joint living marine resources will be further reduced. In such a scenario, scientists on both sides will have a responsibility to

inform their national authorities about what is at stake if the natural environment of the Arctic becomes divided into two blocks that do not communicate.

As this article goes to press, talks have begun to the end the war that Russia started against Ukraine in February 2022. Let us hope a just and lasting solution can be reached, and that scientific contacts regarding the development of the polar regions may be resumed through formal channels.

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Disclosure statement

As an IMR scientist, section leader and research director, I had much contact with Russian scientists, mainly from PINRO, Murmansk, in the years 1994–2011. I participated regularly in the bi-annual Norwegian–Russian Science Symposia from 1994 onwards, and I led the Norwegian Science delegation in the Joint Norwegian–Russian Fisheries Commission in 2005–2011. As a director of the University Centre in Svalbard, from 2012 to 16, I visited the Kola Science Centre in Barentsburg several times. As the NPI's director (2017–2023), I was invited to, and participated in, a science conference in St. Petersburg in 2019 and online conferences during the pandemic in 2020–21. In this article, rather than writing on behalf of the NPI, I express my own views based on many years of professional engagement with the topic.

References

- Aksnes D.W. 2019. *Vitenskapelig publisering ved Norsk Polarinstitutt. En analyse av instituttets publisering i perioden 2011–2018. (Scientific publication at the Norwegian Polar Institute. An analysis of the institute's publishing in the period 2011–2018.) Arbeidsnotat 2019:17.* Oslo: Nordic Institute for Studies of Innovation, Research and Education.
- Arlow T.B. 2003. *Svalbards historie. (The history of Svalbard.)* Trondheim: Tapir Academic Press.
- Gullestad P., Aglen A., Bjordal Å., Blom G., Johansen S., Krog J., Misund O.A. & Røttingen I. 2014. Changing attitudes 1970–2012: evolution of the Norwegian management

framework to prevent overfishing and to secure long-term sustainability. *ICES Journal of Marine Science* 71, 173–182, doi: 10.1093/icesjms/fst094.

- Haug T., Røttingen I., Gjørseter H., Misund O.A., Fenchel T. & Ublein F. 2009. Fifty years of Norwegian–Russian collaboration in marine research. *Marine Biology Research* 5, 1–3, doi: 10.1080/17451000802512747.
- ICES (International Council for the Exploration of the Sea) 2024. Navigating changes. Accessed on the internet at <https://www.ices.dk/news-and-events/news-archive/news/Pages/Council112.aspx> on 17 February 2025.
- Jakobsen T. & Ozhigin V. 2011. *The Barents Sea—ecosystem, resources and management. Half a century of Russian–Norwegian cooperation.* Trondheim: Tapir Academic Press.
- Jenssen E.V. 2021. *På besøk til det russiske forskningscenteret i Barentsburg. (Visit to the Russian research centre in Barentsburg.)* Norwegian Polar Institute. Accessed on the internet at <https://www.npolar.no/nyhet/pa-besok-til-det-russiske-forskningscenteret-i-barentsburg/> on 14 February 2025.
- Joint Fish. undated a. History. Joint–Russian Norwegian Fisheries Commission. Accessed on the internet at <https://www.jointfish.com/eng/THE-FISHERIES-COMMISSION/HISTORY.html> on 12 February 2025.
- Joint Fish. undated b. Protokoller. (Protocols.) Accessed on the internet at <https://www.jointfish.com/OM-FISKERIKOMMISJONEN/PROTOKOLLER.html> on 20 February 2025.
- Joint Norwegian–Russian Fisheries Commission. undated. Protokoll for den 52. sesjon i Den blandete norsk-russiske fiskerikommisjon. (Protocol for the 52nd session of the Joint Norwegian–Russian Fisheries Commission.) Accessed on the internet at <https://www.jointfish.com/content/download/512/6950/file/52-norsk.pdf> on 12 February 2025.
- Misund O.A. 2024. Why should scientists lead? To underpin policy on marine and polar ecosystems. *ICES Journal of Marine Science* 81, 823–832, doi: 10.1093/icesjms/fsae045.
- Norwegian Government 2024. Enighet om norsk–russisk fiskeriavtale for 2025. (Agreement about the Norwegian–Russian fishery agreement for 2025.) Accessed on the internet at <https://www.regjeringen.no/no/aktuelt/enighet-om-norsk-russisk-fiskeriavtale-for-2025/id3072312/> on 5 March 2024.
- NPI (Norwegian Polar Institute) 2022. Arctic Fox Conference 2022. Accessed on the internet at <https://www.npolar.no/en/arrangement/arctic-fox-conference-2022/> on 20 February 2020.
- Øvretveit O. 2023. *The future of Arctic science and science diplomacy.* Bergen: Academia Europaea Bergen.
- Rees G. & Büntgen U. 2024. Russian dilemma for global Arctic science. *Ambio* 53, 1246–1250, doi: 10.1007/s13280-024-02038-z.
- Research Council of Norway 2017. *Norwegian polar research: an evaluation.* Oslo: Research Council of Norway.
- Steinveg B., Rottem S.V. & Andreeva S. 2024. Soft institutions in Arctic governance—who does what? *Polar Record* 60, e1, doi: 10.1017/S0032247423000335.

- Sydnes A.K., Sydnes M. & Antonsen Y. 2017. International cooperation on search and rescue in the Arctic. *Arctic Review on Law and Politics* 8, 109–136, doi: 10.23865/arctic.v8.705.
- Torsvik N. 2023. *Milliardranet i Barentshavet. (The billion kroner robbery in the Barents Sea.)* Harstad, Norway: Utenfor Allfarvei Forlag.
- Valdemarsen J.W. & Misund O.A. 1995. Trawl designs and techniques used by Norwegian research vessels to sample fish in the pelagic zone. In A. Hysten (ed.): *Precision and relevance of pre-recruit studies for fishery management related to fish stocks in the Barents Sea and adjacent waters. Proceedings of the Sixth IMR–PINRO Symposium, Bergen, 14–17 June 1994.* Pp. 135–144. Bergen: Institute of Marine Research.
- Vyvial J.O. 2023. *Videreføring av samarbeid: norsk–russisk kontakt i en geopolitisk anstrengt tid. (Continued cooperation: Norwegian–Russian contact in a geopolitically tense period.)* Oslo: Fridtjof Nansen Institute.