

While the Arctic Looms Large, the Antarctic Treaty is Under Threat

"Whoever rules the waves rules the world," wrote American naval officer Alfred Mahan in his 1890 book *The Influence of Sea Power upon History*. More than a century later, Mahan's words continue to ring true. States compete to influence sea lanes and control the resources of the seas, home to [trillions in natural resources](#) and the backbone of global trade routes with over [90% of goods](#) shipped by sea. These activities are governed by the 1982 UN Convention on the Law of the Sea ([UNCLOS](#)), which establishes a legal framework for states in maritime environments and arbitrates border disputes. Even though this framework exists, of the 460 possible maritime boundaries in the world, there are currently [180 unresolved maritime disputes](#). Some disputes exacerbate historical rivalries: NATO allies Greece and Turkey have a historic rivalry over the territorial waters of the [Aegean Sea](#). Others are global flashpoints: great powers and their allies currently dispute control over the [South China Sea](#) and [the Arctic](#).

Among these flashpoints, the Arctic has come under increased focus thanks to climate change, which has had outsized effects on the [North](#) and [South](#) Poles compared to the rest of the oceans. The melting glaciers have created new possibilities for undersea drilling, Arctic tourism, and trade routes in warmer months, causing countries to pool money into [icebreakers](#) and innovative technologies to exert influence in the area. While disputes over influence in the Arctic dominate current discourse, the Arctic's polar opposite is facing growing ecological threats and climate disputes that threaten to upend the peace in Antarctica. Dwindling sea ice creates [catastrophic breeding failures among emperor penguins](#), but also spurs new interests in increasingly accessible Antarctic resources, disrupting the fragile moratorium on exploitation protecting the continent.

The Antarctic Treaty System

Antarctica's historical disputes originated from competing claims between seven countries during the Cold War, which had the potential to start violent disputes over the region. From these disputes emerged the [Antarctic Treaty System](#) (ATS), which froze claims between the seven historic claimants, America, and Russia (then the Soviet Union). The ATS is built upon the 1959 Antarctic Treaty and a collection of international agreements that agree to set aside the continent for peaceful and non-exploitative purposes, prohibit military activities from taking place on the continent, and establish protocols that prohibit commercial practices but allow for scientists and conservationists to conduct research. Since its ratification [by 12 countries](#) in 1959, 44 additional countries have become parties to the treaty. Notably, the ATS makes

Antarctica the only landmass in the global commons, a concept of shared resources and ecosystems owned by all of humanity, that goes beyond national jurisdiction. From this treaty emerged the mantra “[leave no trace](#)” for tourists and researchers alike, encapsulating the scientific mission to preserve the natural beauty of Antarctica through limiting the impacts of human presence and climate change.

Leaving Traces Behind

In the decades that followed, interest in the region surged. Antarctic tourism [has increased ten-fold](#) since 1990, welcoming academics, hobbyists, and travelers alike. In this environment, [self-regulation is no longer enough](#) to police the effects of tourism. Plastic pollution levels continue to rise from trash left behind, threatening the species and ecosystems [around commonly visited regions](#).

Commercial interests have also grown since the treaty was signed. Although the ATS is meant to regulate and prevent overfishing that could impact the Antarctic ecosystem, krill is a valuable commodity eyed by fisheries from China to Norway. Even though current precautionary levels of krill fishing already have [damaging effects on penguins](#) and other species in the ecosystem, countries and companies are [looking to expand](#) their operations. [Scientists have called for a moratorium](#) on fishing in the region for years, but the [vetoes of China and Russia](#) prevent the formation of new Marine Protected Areas (MPAs) that could protect areas and ecosystems vulnerable to overfishing. This is nothing new—China and Russia have vetoed such measures each year [for decades now](#).

Even the *magnum opus* of the ATS has emerging problems with commercialization. The ATS prohibits any activity relating to Antarctica’s mineral resources, with the sole exception of scientific research. [Antarctic bioprospecting](#), a process where companies harvest flora and fauna in Antarctica to patent commercially viable genetic and chemical resources, raises questions about the enforcement of Article III, which stipulates that scientific findings should be available to all. Would patenting and commercializing discoveries from bioprospecting count?

All of this is happening as the ATS approaches an inflection point that could end the “global commons” of Antarctica. In 2048, any of the parties can request revisions to the Protocol on Environmental Protection to the Antarctic Treaty ([Madrid Protocol](#)), the part of the ATS that prohibits mining and non-scientific activities in Antarctica. Any revisions would go into force with a simple majority and the assent of at least three-fourths of the original parties.

What Happens in 2048?

The answer to that question is still up in the air. 2048 could be harmful for the ATS, but as the editors of Nature note, all hope is not lost: [“an entire generation across the world has grown up seeing science as a priority for Antarctica under the treaty... \[they\] would surely object to the idea of science and conservation being tossed aside so that the Antarctic wilderness can be fished, mined, polluted or developed.”](#) They suggest an increased and relentless focus on Antarctica in the mindset of policymakers and the public, which would help safeguard against future threats to the ATS that would dismantle the continent’s protections. After all, increased attention would help strengthen a call for enforcement mechanisms that could proactively protect Antarctica while solidifying the strength of articles that protect the ATS from being dismantled for resource extraction.

It is also important to consider that 2048 could just as easily be a boon to the fragile ATS, as any revision to the ATS would bypass China and Russia’s current veto powers. Currently, scientific participation in Antarctica is required to become a party to the ATS. Instead, countries could [democratize participation in the ATS](#) by reducing the requirements for scientific participation. If done effectively, the addition of new parties would expand the ATS to the entire international community and reduce the influence that parties with outsized exploitative interests in the region have. Doing so would realize the vision Malaysian Prime Minister Mahathir Mohamad suggested to the UN General Assembly in 1982, declaring that Antarctica should be made accessible to all nations regardless of their [“scientific development and capabilities”](#).

The world’s sights might be [set on the Arctic](#), but just as important disputes are emerging in Antarctica that threaten to commercialize the last untouched lands of the earth. The crown jewel of the global commons, Antarctica, is at a fork in its path that could either preserve the common heritage of Antarctica or destroy the last vestiges of a global commons for all of humanity. The clock is ticking. The ice is melting. Arctic policymakers are watching. Whatever we choose, there is no going back.