

Antarctica: International relations in a cold climate

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The Vernadsky Research Base, an Ukrainian Antarctic Station at Marina Point on Galindez Island, Antarctica

Winter is coming, and like many scientists posted in Antarctica, Bogdan Gavrylyuk is looking forward to going home.

It has been a year since the 43-year-old Ukrainian geophysicist started his latest posting, monitoring climatic phenomena on an island off

western Antarctica.

"Everybody misses home. Everybody has a family or a girlfriend and of course we miss them," he says. "But here, there is a job we have to do."

He will ship out from Vernadsky Research Station in early April to make way for his replacement, before the sea freezes over.

Scientists call Antarctica the Earth's last wilderness. For some, it is also a paradise of international cooperation.

It is home to thousands of researchers and technicians from various countries who share the territory under the Antarctic Treaty.

In Gavrylyuk's office, blinking computer screens show graphs of data from meteorological instruments deployed around the wind-swept base.

"We share a lot of important, interesting information between different Antarctic countries—data on the ozone layer, meteorological information, geophysical information. All the countries here are doing the same," he says.



Gentoo penguins pictured on the shore of Vernadsky Research Base, a Ukrainian Antarctic Station at Marina Point on Galindez Island, Antarctica

He also shows off a pair of keyboards on which he plays rock music in his free time.

"I have a guitar, a flute, harmonica, keyboards. It helps me relax when I'm working hard on my project," Gavrylyuk explains.

Science and peace

Diplomats cherish the Antarctic Treaty that has governed this continent since 1959.

"It has lasted for over 50 years. It brings us all together for science and for peace," says Ray Arnaudo, who was formerly the US State

Department's top official for Antarctica.



Researchers at Palmer Station, the only US research station in Antarctica located north of the Antarctic Circle, pictured on Anvers Island, Antarctica

"If you extended the boundaries of Antarctica by five degrees every couple of years, in 50 years you would have world peace," he says. "Some say I'm a dreamer."

But when it comes to protecting the region, the Antarctic Treaty is prey to international politics beyond its icy shores.

"Antarctica has traditionally been a place where people have been able to cooperate more than they would on other issues. However there is an outstanding list of to-dos," says Claire Christian, acting director of the

Antarctic and Southern Ocean Coalition, a grouping of environmental NGOs.

Run by Britain until it was sold to Ukraine in 1996, Vernadsky Station was one of the research bases whose atmospheric readings revealed the hole in the ozone layer in the 1980s, Gavrylyuk says.

Now the focus is on climate change. Antarctica's western peninsula has warmed by three percent on average over the past half-century, according to environmental groups.



The barman who works at the Vernadsky Research Base, an Ukrainian Antarctic Station at Marina Point on Galindez Island, Antarctica

They hope the Antarctic Treaty's environmental commission, CCAMLR,

can agree on measures to protect the continent.

"There are a lot of political obstacles," says Christian. "It's been very difficult, for example, for countries in CCAMLR to agree to marine protected areas."

Antarctic climate change

At Argentina's Almirante Brown Station, biologist Rocio Fayo and her 10 colleagues lead an isolated life.

"There is no Internet connection here, so the group has a very strong bond," says Fayo, 31, standing under the gray skies of Paradise Bay outside the red wooden hut where the team sleeps.



Palmer Station, the only US research station in Antarctica located north of the Antarctic Circle

"We've been up the peak over there a few times. We climb up and slide back down fast on our bottoms in the snow. It's good fun."

Fayo has spent the summer studying micro-algae. Another researcher has set up a camera for monitoring penguins in the bay.

Conservationists fear the penguins are threatened by climate change and fishing.

Campaigners complain that some countries are resisting conservation efforts by fellow CCAMLR members.

Andrea Kavanagh, head of the penguin campaign of The Pew Charitable Trusts, a US non-government organization, says Russia and China "want to be free to catch as much krill as possible near the Antarctic Peninsula, including right next to penguin colonies that have been in decline for the last three decades."



An Ukrainian biologist points at a sea spider at Vernadsky Research Base, an Ukrainian Antarctic Station at Marina Point on Galindez Island, Antarctica

Hiking the frozen sea

Far away from their countries, on the bases, staff say Antarctic relations run smoothly, however.

"There's this great international collaboration. Politics is set aside here more than in most places," says laboratory supervisor Carolyn Lipke, 35.

She is getting ready for a break after spending her sixth year at Palmer Station, one of several US Antarctic bases.

Among various research projects at her station, chemists are examining spongy invertebrates on the seabed that they think give off toxins with

potentially cancer-fighting qualities.

When they're not deep-sea diving for specimens or working in the lab, she says, the 40 or so staff here play cards, watch movies and hold open-mic talent shows.

In winter, they can hike across the frozen sea to neighboring islands. A satellite Internet and phone link helps them keep in touch with loved ones.

"That makes it easier to be here for long periods, and also for the scientists to communicate," Lipke says.

"You can communicate with your family but you can also get a ton of work done."

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