



The New York Times | <http://nyti.ms/1FJ9Oo2>

ASIA PACIFIC

China, Pursuing Strategic Interests, Builds Presence in Antarctica

By **JANE PERLEZ** MAY 3, 2015

HOBART, Tasmania — Few places seem out of reach for China's leader, Xi Jinping, who has traveled from European capitals to obscure Pacific and Caribbean islands in pursuit of his nation's strategic interests.

So perhaps it was not surprising when he turned up last fall in this city on the edge of the Southern Ocean to put down a long-distance marker in another faraway region, Antarctica, 2,000 miles south of this Australian port.

Standing on the deck of an icebreaker that ferries Chinese scientists from this last stop before the frozen continent, Mr. Xi pledged that China would continue to expand in one of the few places on earth that remain unexploited by humans.

He signed a five-year accord with the Australian government that allows Chinese vessels and, in the future, aircraft to resupply for fuel and food before heading south. That will help secure easier access to a region that is believed to have vast oil and mineral resources; huge quantities of high-protein sea life; and for times of possible future dire need, fresh water contained in icebergs.

It was not until 1985, about seven decades after Robert Scott and Roald Amundsen raced to the South Pole, that a team representing Beijing hoisted

the Chinese flag over the nation's first Antarctic research base, the Great Wall Station on King George Island.

But now China seems determined to catch up. As it has bolstered spending on Antarctic research, and as the early explorers, especially the United States and Australia, confront stagnant budgets, there is growing concern about its intentions.

China's operations on the continent — it opened its fourth research station last year, chose a site for a fifth, and is investing in a second icebreaker and new ice-capable planes and helicopters — are already the fastest growing of the 52 signatories to the Antarctic Treaty. That gentlemen's agreement reached in 1959 bans military activity on the continent and aims to preserve it as one of the world's last wildernesses; a related pact prohibits mining.

But Mr. Xi's visit was another sign that China is positioning itself to take advantage of the continent's resource potential when the treaty is expected to come up for review in 2048 — or in the event that it is ripped up before, Chinese and Australian experts say.

“So far, our research is natural-science based, but we know there is more and more concern about resource security,” said Yang Huigen, director general of the Polar Research Institute of China, who accompanied Mr. Xi last November on his visit to Hobart and stood with him on the icebreaker, Xue Long, or Snow Dragon.

With that in mind, the polar institute recently opened a new division devoted to the study of resources, law, geopolitics and governance in Antarctica and the Arctic, Mr. Yang said.

Australia, a strategic ally of the United States that has strong economic relations with China, is watching China's buildup in the Antarctic with a mix of gratitude — China's presence offers support for Australia's Antarctic science program, which is short of cash — and wariness.

“We should have no illusions about the deeper agenda — one that has not even been agreed to by Chinese scientists but is driven by Xi, and most likely his successors,” said Peter Jennings, executive director of the Australian Strategic Policy Institute and a former senior official in the Australian Department of Defense.

“This is part of a broader pattern of a mercantilist approach all around the world,” Mr. Jennings added. “A big driver of Chinese policy is to secure long-term energy supply and food supply.”

That approach was evident last month when a large Chinese agriculture enterprise announced an expansion of its fishing operations around Antarctica to catch more krill — small, protein-rich crustaceans that are abundant in Antarctic waters.

“The Antarctic is a treasure house for all human beings, and China should go there and share,” Liu Shenli, the chairman of the China National Agricultural Development Group, told *China Daily*, a state-owned newspaper. China would aim to fish up to two million tons of krill a year, he said, a substantial increase from what it currently harvests.

Because sovereignty over Antarctica is unclear, nations have sought to strengthen their claims over the ice-covered land by building research bases and naming geographic features. China’s fifth station will put it within reach of the six American facilities, and ahead of Australia’s three.

Chinese mappers have also given Chinese names to more than 300 sites, compared with the thousands of locations on the continent with English names.

In the unspoken competition for Antarctica’s future, scientific achievement can also translate into influence. Chinese scientists are driving to be the first to drill and recover an ice core containing tiny air bubbles that provide a record of climate change stretching as far back as 1.5 million years. It

is an expensive and delicate effort at which others, including the European Union and Australia, have failed.

In a breakthrough a decade ago, European scientists extracted an ice core nearly two miles long that revealed 800,000 years of climate history. But finding an ice core going back further would allow scientists to examine a change in the earth's climate cycles believed to have occurred 900,000 to 1.2 million years ago.

China is betting it has found the best location to drill, at an area called Dome A, or Dome Argus, the highest point on the East Antarctic Ice Sheet. Though it is considered one of the coldest places on the planet, with temperatures of 130 degrees below zero Fahrenheit, a Chinese expedition explored the area in 2005 and established a research station in 2009.

“The international community has drilled in lots of places, but no luck so far,” said Xiao Cunde, a member of the first party to reach the site and the deputy director of the Institute for Climate Change at the Chinese Academy of Meteorological Sciences. “We think at Dome A we will have a straight shot at the one-million-year ice core.”

Mr. Xiao said China had already begun drilling and hoped to find what scientists are looking for in four to five years.

To support its Antarctic aspirations, China is building a sophisticated \$300 million icebreaker that is expected to be ready in a few years, said Xia Limin, deputy director of the Chinese Arctic and Antarctic Administration in Beijing. It has also bought a high-tech fixed-wing aircraft, outfitted in the United States, for taking sensitive scientific soundings from the ice.

China has chosen the site for its fifth research station at Inexpressible Island, named by a group of British explorers who were stranded at the desolate site in 1912 and survived the winter by excavating a small ice cave.

Mr. Xia said the inhospitable spot was ideal because China did not have a presence in that part of Antarctica, and because the rocky site did not have much snow, making it relatively cheap to build there.

Anne-Marie Brady, a professor of political science at the University of Canterbury in New Zealand and the author of a soon-to-be-released book, “China as a Polar Great Power,” said Chinese scientists also believed they had a good chance of finding mineral and energy resources near the site.

“China is playing a long game in Antarctica and keeping other states guessing about its true intentions and interests are part of its poker hand,” she said. But she noted that China’s interest in finding minerals was presented “loud and clear to domestic audiences” as the main reason it was investing in Antarctica.

Because commercial drilling is banned, estimates of energy and mineral resources in Antarctica rely on remote sensing data and comparisons with similar geological environments elsewhere, said Millard F. Coffin, executive director of the Institute for Marine and Antarctic Studies in Hobart.

But the difficulty of extraction in such severe conditions and uncertainty about future commodity prices make it unlikely that China or any country would defy the ban on mining anytime soon.

Tourism, however, is already booming. Travelers from China are still a relatively small contingent in the Antarctic compared with the more than 13,000 Americans who visited in 2013, and as yet there are no licensed Chinese tour operators.

But that is about to change, said Anthony Bergin, deputy director of the Australian Strategic Policy Institute. “I understand very soon there will be Chinese tourists on Chinese vessels with all-Chinese crew in the Antarctic,” he said.

Correction: January 5, 2016

An article on May 4 about a promise by China's leader, Xi Jinping, to heighten the country's already robust presence in Antarctica referred incorrectly to a treaty that bans mining in Antarctica. It is expected to come up for review by 2048; it does not expire then.

Yufan Huang contributed research from Beijing.

A version of this article appears in print on May 4, 2015, on page A1 of the New York edition with the headline: Chinese Aspirations in Antarctica Fuel Concern .

© 2016 The New York Times Company