

6 Why is ice melt in Antarctica a problem?

7 How many scientific bases are there on Antarctica?

9 Where do most of the tourists visiting Antarctica come from?

1 Is Antarctica a continent or a country?

2 What is the organization called that meets to discuss issues in Antarctica?

3 What kind of topics does the ATS have to discuss?

4 Why is Antarctica so important to the world?



The fight to own Antarctica

Antarctica is a continent with no government. The closest thing it has is small office with 10 workers in Buenos Aires, Argentina. It is the job of these 10 people who work for the Antarctic Treaty System (ATS) to keep things running smoothly among the 53 nations that together govern Antarctica. "One of the amazing things is that Antarctica is the only continent where people work together for peace and science," says Jane Francis, head of the British Antarctic Survey. However, not everyone does agree on what should happen in Antarctica. At a recent meeting in Argentina there were a growing number of topics that led to disagreements including climate change and fishing. Some of the other things they have to discuss at these meetings include rules for drone use and guidelines for heritage sites (like the hut built by Ernest Shackleton and his team more than 100 years ago). More difficult discussions include what happens when countries break the rules, how tourism should be managed and whether mining should ever be allowed (at the moment it is banned). At stake is the last pristine continent, one that contains the world's largest store of freshwater, huge potential reserves of oil and gas and the key to understanding how quickly climate change will impact the world through rising sea levels. Antarctica is covered in an ice sheet up to a mile thick and represents a window into how the planet is changing.

Temperatures in some parts of Antarctica are rising much faster than the global average, and the pace of glacial melting there will help determine how quickly global sea levels rise in future. The number of permanent scientific research stations on the island has grown to more than 75. China has built 4 bases and started building a 5th before it had been properly approved. This made some other countries angry that China is breaking the rules. The Southern Ocean, which surrounds Antarctica, is becoming a significant fishing ground, as resources in other seas are depleted. And it plays a crucial role in absorbing heat and carbon from the atmosphere, in ways that are not yet fully understood. The number of visitors to the region rose to more than 51,000 last season, an increase of 17 per cent on the previous year. That number is expected to keep growing. There are already 33 tour boats and 20 more are being built. For most tourists — who pay between \$10,000 and \$100,000 for a trip — visiting Antarctica involves stepping off the boat at just a handful of highly regulated landing sites. But there are loopholes in the system, such as private yachts that flout permitting rules, as well as a growing number of tours that involve activities such as kayaking or skiing. "It's becoming a bit of an adventure playground, and the trouble is the unregulated tourism," says Prof Francis, at the British Antarctic Survey. "It has become much easier for people just to sail their yachts to Antarctica, to fly their private aircraft to Antarctica."

The fastest-growing source of new visitors last year was China, which was second only to the US in the ranking of total tourists. At the same time Beijing is investing heavily in missions to Antarctica, part of its plan to become a "polar great power". China spends more on its Antarctic research programme than any other country. China is interested in the potential natural resources in Antarctica including gas and oil. At the moment mining is banned but only until 2048 when it might be possible. Having a ground station near the South Pole can increase the accuracy of global satellite navigation systems. Water resources are also important. Cape Town in South Africa has been suffering from severe water shortages and the idea of towing an iceberg from Antarctica to South Africa, to ease the crisis, was discussed. More and more people are fishing krill in the Southern Ocean and China and Russia have opposed the idea of creating a marine 'national park' which will protect the wildlife in the Oceans. Another controversial issue is bio-prospecting — taking biological samples from Antarctica to study in a lab. Species in Antarctica could be valuable to industries. But because no one officially owns any part of Antarctica, who should be able to make money from these species?

10 Which country spends the most on research in the Antarctic?

11 Why might South Africa need icebergs from Antarctica?

12 How much does it cost to go to Antarctica on holiday?

5 How thick is the ice in Antarctica?

8 Why are more people fishing in Antarctic waters?

