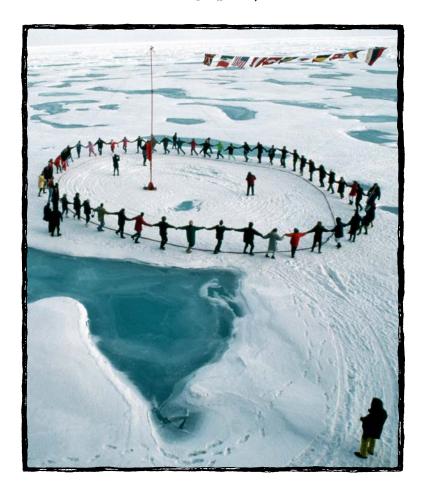
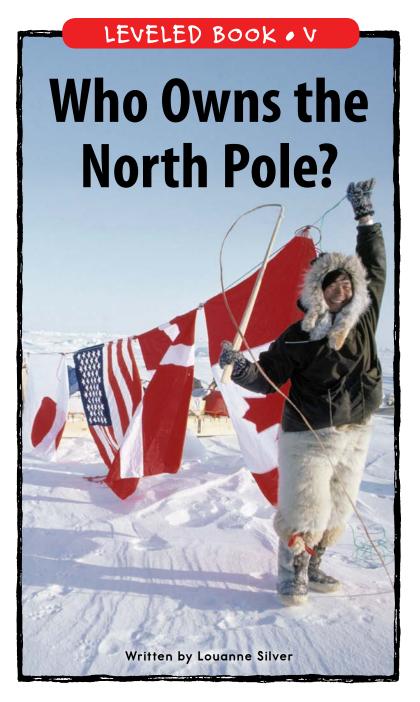
Who Owns the North Pole?

A Reading A-Z Level V Leveled Book
Word Count: 1.312





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Who Owns the North Pole?



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Front cover: Japanese explorer Naomi Uemura reaches the North Pole on a dogsled.

Back cover: A group of tourists form a circle around the North Pole and dance through all the time zones.

Title page: Admiral Peary's 1920 expedition members placed flags at the North Pole.

Page 3: Ships with towers drill for oil in the Arctic's Beaufort Sea.

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Correlation

LEVEL V	
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Introduction

When you hear the words North Pole, do you think of a cold, empty place out in the middle of nowhere? Yes, it's cold and remote, but it's far from empty. Actually, the North Pole and the area around it—the Arctic region—are filled with natural treasures.

Who should those treasures belong to separate countries, all people, or the planet itself? Several countries are competing to own parts of the Arctic region beyond their own borders. Future changes in ownership will affect not only the North Pole but all of Planet Earth.



Sea ice surrounding the North Pole is visible from outer space.

4

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Geography

The North Pole is the northernmost place on Earth—and no, there isn't actually a pole that marks the spot!

The North Pole is in the Arctic Ocean. It's surrounded by sea ice, which forms the Arctic ice cap. The size of the Arctic ice cap changes during different seasons as temperatures rise and fall. Overall, the Arctic ice cap has been shrinking at a rate of 3.2 percent per decade since 1981. Scientists have evidence that the cause is **climate change**—

long-term, lasting changes in Earth's weather patterns.

Climate Change

Earth's climate patterns have been shifting over the past one hundred years, and average temperatures have been rising. Most scientists agree that an important cause of higher temperatures is carbon dioxide in Earth's atmosphere produced by burning coal and petroleum products. This and other gases in the atmosphere trap the Sun's heat energy, preventing it from escaping into space. As a result, the trapped heat is causing glaciers and

A Shrinking Arctic Ice Cap
1979 to 2000
cap boundary
2012

Each September, scientists measure the sea ice at its lowest level for the year. The map shows the 2012 minimum level of sea ice (white) and the 1979 to 2000 average (dashed white line). The 2012 minimum was 49 percent below the 1979 to 2000 average minimum.

polar ice caps to melt and sea levels to rise.

Five countries surround the North Pole:
Norway, Russia, Canada, the United States
(because of Alaska), and Denmark (because
of Greenland). The country of Greenland is part
of the Kingdom of Denmark. Each one owns an
area that measures 200 nautical miles (230 mi.,
or 370 km) out from its coastline. Within those
200 nautical miles, each country or region controls
the rights to **resources**. Those resources include
water and wind for energy production as well
as **minerals** and fish.

Beyond that boundary are **international** waters, sometimes called the "high seas." The International Seabed Authority (ISA) sets rules about taking mineral resources from the seafloor of the high seas. The ISA is part of a United Nations agreement between countries. The agreement states that international waters are supposed to benefit all people, not separate countries.

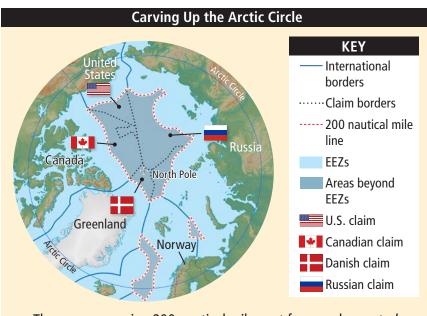
The United Nations

The United Nations, or UN, is an international organization with representatives from almost every nation. The UN works to promote peace, security, and cooperation among countries. Its headquarters is in New York City.



Who Owns the North Pole? • Level V 5

As of early 2014, 165 countries plus the European Union had ratified, or approved, this UN agreement. After ratification, a country has ten years to file a request if it believes it deserves any areas beyond its exclusive economic zone (EEZ). If the UN approves a country's request, all resources in the larger area belong to that country. Why might a country want to expand its **territory**?



The area measuring 200 nautical miles out from each country's coastline is called an exclusive economic zone (EEZ).

Exclusive: not shared by others

Economic: related to buying and selling

Zone: an area with a special purpose or set of rules

Beyond those EEZs, some areas in the Arctic Circle belong to no

one—at least for now.

Why the North Pole Is Valuable

The Arctic region—the area north of the Arctic Circle—has a wealth of natural resources. One of the most important is petroleum, which includes both oil and natural gas. Although located under the Earth's surface, petroleum is easier to reach now than in the past because the Arctic ice cap is melting. Right now, the Arctic region provides about 10 percent of the world's oil and 25 percent of its natural gas. Experts estimate that an even larger supply of each may be discovered near the North Pole in the future. No one knows how much of that supply might be located beyond the EEZs of all five countries.

According to the Environmental Protection Agency, using petroleum-based energy causes a lot of pollution and is a main cause of climate change. Still, petroleum products are currently the main energy sources around the world. We depend on them for more than half of our energy. They're nonrenewable, meaning they will run out someday—possibly as soon as forty to fifty years from now. As a result, many countries are scrambling for new supplies of petroleum.

The Arctic also contains valuable mineral deposits, including copper, coal, nickel, gold, iron, and diamonds. Thawing ice is making it easier to explore for and get more of these natural resources as well.

Beyond natural resources, the Arctic offers the promise of new shipping **routes**. Right now, most of those routes can only be used during warmer months, when much of the sea ice melts. However, with continued melting, routes may be open during much more of the year. More shipping routes would be helpful for business and for tracking climate change.

Risky Business

Obtaining natural resources in the Arctic region is riskier and more expensive than in most other parts of the globe. Here's why:

- Regular equipment can't always handle the climate. Special equipment must be used (or, in some cases, developed) that can work in the extreme cold, wet conditions.
- Transporting materials and people to and from such a remote location is expensive.
- Higher wages need to be paid to people to work in such a remote place.
- If accidents happen, the distance from search-andrescue facilities might mean additional loss of life or



Oil spills are hard to clean up. Animals, such as this sea otter, end up coated in oil.

increased damage to equipment or the environment.

 Regular clean-up equipment can't handle Arctic oil spills. Cleaning up oil spills in sea ice is much more complicated than in liquid water.

Source: U.S. Energy Information Administration

Scientists and environmental groups argue that the Arctic region is not only valuable to humans. It's also valuable because of the natural environment and the wide variety of life forms it supports. These include

Do You Know?

The Northern Sea Route could cut a trip from Western Europe to East Asia by up to 15 days and shorten the distance from roughly 13,000 miles (21,000 km) to 8,000 miles (12,800 km).

tundra vegetation, caribou, polar bears, whales, and seals. Using more Arctic resources could upset the natural environment in many ways.

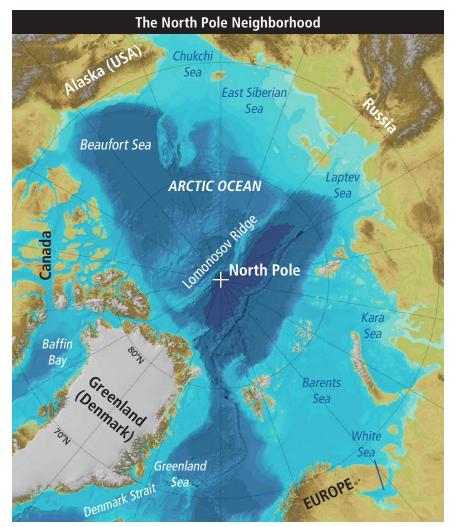


Who Wants the North Pole?

Four of the five countries that surround the Arctic Ocean—Norway, Russia, Canada, and Denmark (because of Greenland)—have filed requests for larger territories than they now own. (The United States has not officially filed because it hasn't ratified the United Nations agreement yet.) In other words, those four countries want more of the Arctic region than just their EEZ. In some cases, they want territory all the way to the North Pole.

Russia's Arctic coastline is about 4,300 miles (7,000 km) long. It has the longest of any country bordering the Arctic Ocean. In 2007, Russia sent a small research ship to the seafloor at the North Pole. The ship gathered samples of soil and water from an underwater land feature called the Lomonosov Ridge. Scientists hoped to prove that the ridge is part of Russia and should belong to Russia. Ownership would give Russia the right to any natural resources found there.

However, across the Arctic Ocean, the Lomonosov Ridge connects to Canada, which has the second-longest Arctic coastline. Canada also claims this underwater mountain ridge as part of its seabed. Denmark, too, seeks ownership of the ridge because of its relationship with Greenland.



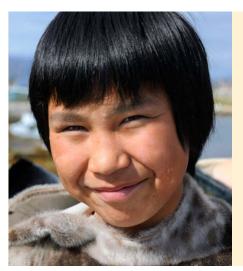
The bright blue on the map indicates shallower water and the dark blue is deep water. The Lomonosov Ridge—the bright blue line just left of the North Pole—is 1,110 miles (1,800 km) long.

Canada and the United States disagree about ownership of another area—the Beaufort Sea, which is north of both western Canada and Alaska. All these **disputes** have to do with mineral rights as well as control of shipping routes.

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Russia, Norway, and possibly other nations are also interested in expanding their territories for military purposes. They are worried that they might someday need to defend their Arctic resources. They also want good locations for military bases in case of a war between Eastern and Western Hemisphere countries. Arctic routes would shorten travel distances for military planes and ships to reach their targets.

No decisions have been made yet about countries' requests to own more of the Arctic region. Each country believes it has good reasons to expand its territory. The disputes continue to set the countries at odds with each other. Might there be a different approach to the changing Arctic region?



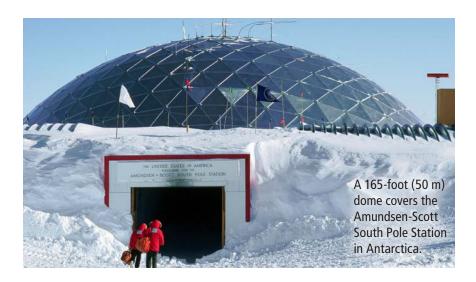
Do You Know?

The Arctic regions of Alaska, Canada, and Greenland are the homeland of native peoples, mainly the Inuit (formerly called Eskimos). Close relatives live in Russia. These people have lived in the region (originally in Alaska and later east of there) for at least four thousand years.

What About the South Pole?

The South Pole, at the other end of Earth's axis, is also a place of extreme cold. Unlike the North Pole, however, it's on a huge landmass—Antarctica, which is large enough to be called a continent. Since 1956, the United States has had a research station at the South Pole. Researchers study glaciers, Earth's atmosphere, outer space, and more. Discoveries benefit all countries, not just the United States.

An international agreement prevents any country from owning Antarctica or using its resources. The continent is set aside for scientific research and peaceful purposes only. No military activity is permitted there. Should those same guidelines be applied to the Arctic region?



Conclusion

Fifty or one hundred years from now, who will own the Arctic region, including the North Pole? Which path will win: peaceful **cooperation** or competition for control? Which direction do you think the Arctic countries should choose?

A changing climate has changed our view of the Arctic region. As the region thaws and natural resources there become more available, countries are looking to the far north for new energy resources. In the years to come, as petroleum is likely to become much scarcer, this interest will only intensify.

The countries that want to expand their areas of control in the Arctic region face important decisions. They need to consider economic, military, and other national concerns. They also need to take into account the well-being of all people, other life forms, and the planet as a whole.



Should anybody own the top of the world?

Glossary

Arctic (adj.)	having to do with the area around the North Pole, including the Arctic Ocean (p. 4)
climate change (n.)	the long-term, lasting changes in Earth's weather patterns or the weather patterns of a region (p. 5)
cooperation (n.)	the act of working together toward a shared goal (p. 15)
disputes (n.)	arguments or disagreements (p. 12)
international (adj.)	concerning two or more nations, or countries (p. 6)
minerals (n.)	solid, natural materials that do not come from living things (p. 6)
petroleum (n.)	a liquid mixture that occurs naturally under Earth's surface and is used to make fuels and many other products (p. 8)
remote (adj.)	distant or isolated (p. 4)
resources (n.)	supplies of valuable or very useful things (p. 6)
routes (n.)	ways or directions from one place to another (p. 9)
territory (n.)	an area of land or water under the control of a specific state or country; a geographic area (p. 7)
tundra (n.)	a cold, treeless Arctic region where the ground is always frozen (p. 10)