On the west coast of Greenland, huge **glaciers** inch their way to the sea. At the water's edge, a glacier growls. Then it moans. A crack as long as a football field rips across the ice. A huge chunk of ice splits from the rest of the glacier.

The massive chunk leans forward. Crrrreeeek. Then, splash! The chunk breaks away. It falls into the sea. It is now an **iceberg,** or a large chunk of ice floating in the sea. Whenever a new iceberg appears, I keep an eye on it. That's because I track icebergs for the Canadian Ice Service. To do my job, I need to know as much about icebergs as I can.

All Sorts of Sizes

One of the first things I learned is that there's no such thing as a typical iceberg. An iceberg can come in almost any size. It can be as small as a person. It can be as big as a house or as big as a shopping mall. An iceberg can even be as large as an entire U.S. state.

The biggest iceberg ever recorded was called B-15. It **calved,** or broke away, from the ice sheet in Antarctica. That was back in March 2000. B-15 was larger than the states of Rhode Island and Delaware put together!

Icebergs in the open ocean are constantly melting. Size plays a part in how long they last. Smaller icebergs, called growlers, usually melt fast. Larger icebergs can float around in the ocean for several years before completely melting. The temperature of the air and ocean also affects how quickly an iceberg melts.

Strange Shapes

Another thing I learned is that icebergs keep changing. Pounding wind and strong waves carve holes in icebergs. They can sculpt an iceberg into spectacular shapes.

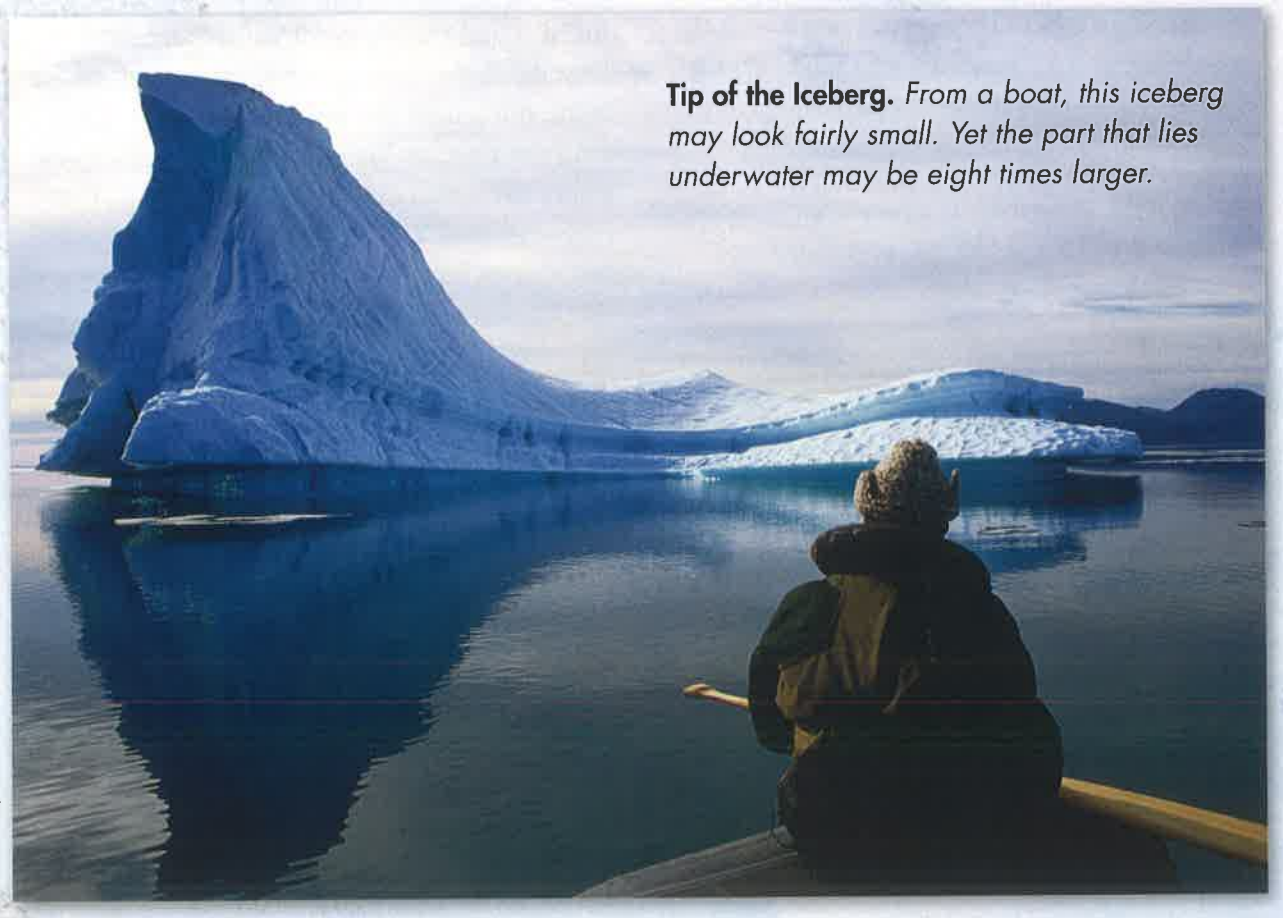
Every spring, tourists come to Northeast Canada to see icebergs shaped like castles, dinosaurs, and shells. They also see lots of sea life. That's because melting icebergs release soil into the ocean. The soil is rich in minerals, attracting sea life. Large numbers of shrimp, seagulls, and whales keep close to icebergs.

No matter what their size or shape, all icebergs have two parts. The **sail** is what sticks out of the water. The **keel** is everything else. The keel is usually about eight times the size of the sail. It is also the more dangerous part of an iceberg. Sailors can't see the keel. So they may steer a ship too close. That can cause trouble.

RALPH LEE HOPKINS/NATIONAL GEOGRAPHIC STOCK

Ice Sculpture. *This iceberg formed in Antarctica. Wind and water carved it into a unique shape.*

Birth of an Iceberg. *This iceberg is calving, or breaking away, from a glacier in Argentina.*



Tip of the Iceberg. *From a boat, this iceberg may look fairly small. Yet the part that lies underwater may be eight times larger.*

Tragedy at Sea

The most famous example of an iceberg causing big trouble is the story of *Titanic*. It was a ship. But not just any ship. *Titanic* was the largest, grandest ship of its time. The ship was a proud symbol of people's imagination.

A little before midnight on April 14, 1912, *Titanic* was steaming across the North Atlantic Ocean. A watchman stood high up in the **crow's nest.** He stared at the glassy sea. A ghostly shape appeared in the distance. The watchman rang warning bells and called the ship's crew. He spoke words no sailor ever wants to hear: "Iceberg right ahead!"

The ship turned hard. The iceberg towered over the ship's right side. Below the waterline, the keel pressed hard against the ship.

The pressure opened six small holes in the ship's side. Seawater poured in. *Titanic* began sinking. Two hours and 40 minutes later, the ship was gone.

More than 1,500 people lost their lives that night. It was one of the worst ocean accidents in history. News of the disaster shocked people around the world. It also inspired them to take action. That's where I come in. I work with the International Ice Patrol to try to make sure a tragedy like *Titanic* never happens again.

Sinking Ship. *An ad for a newspaper announces the sinking of* Titanic. *Today, scientists track icebergs to help keep ships safe.*

Keeping Ships Safe

No one wants another *Titanic* disaster. Yet it's always a possibility. That's because the North Atlantic is a fairly crowded place. Every day, hundreds of fishing vessels, passenger ships, and cargo ships share the ocean. The farther south you go, the more ships you find.

Lurking in the same water, of course, are icebergs. The icebergs crash and collide into one another. Pulled or pushed by ocean currents, they can travel long distances. The iceberg that sank *Titanic* probably floated 1,600 kilometers (1,000 miles) or more from where it first calved.

People have tried almost everything to keep ships safe from icebergs. They have bombed large icebergs. They have cut icebergs into pieces. They have even tried towing them out of the way.

Now people realize that the best thing to do about an iceberg is just to move out of its way. The Canadian Ice Service and International Ice Patrol try to help people do just that. We study pictures taken by satellites and airplanes to track the icebergs. We listen to eyewitness reports. We try to figure out exactly where icebergs lie.

Each day, we add what we've learned to a large database. Using a computer program, we figure out where the icebergs might go. Then we send out reports. These reports let ships know where the iceberg is and where it is not. Then ships can plan a safe course. That helps ensure that stories like *Titanic* remain where they should—as part of history.

WORDWISE

calve: to break away from a glacier or ice sheet and become an iceberg

crow's nest: lookout spot high on a ship's mast

glacier: large body of ice moving across land

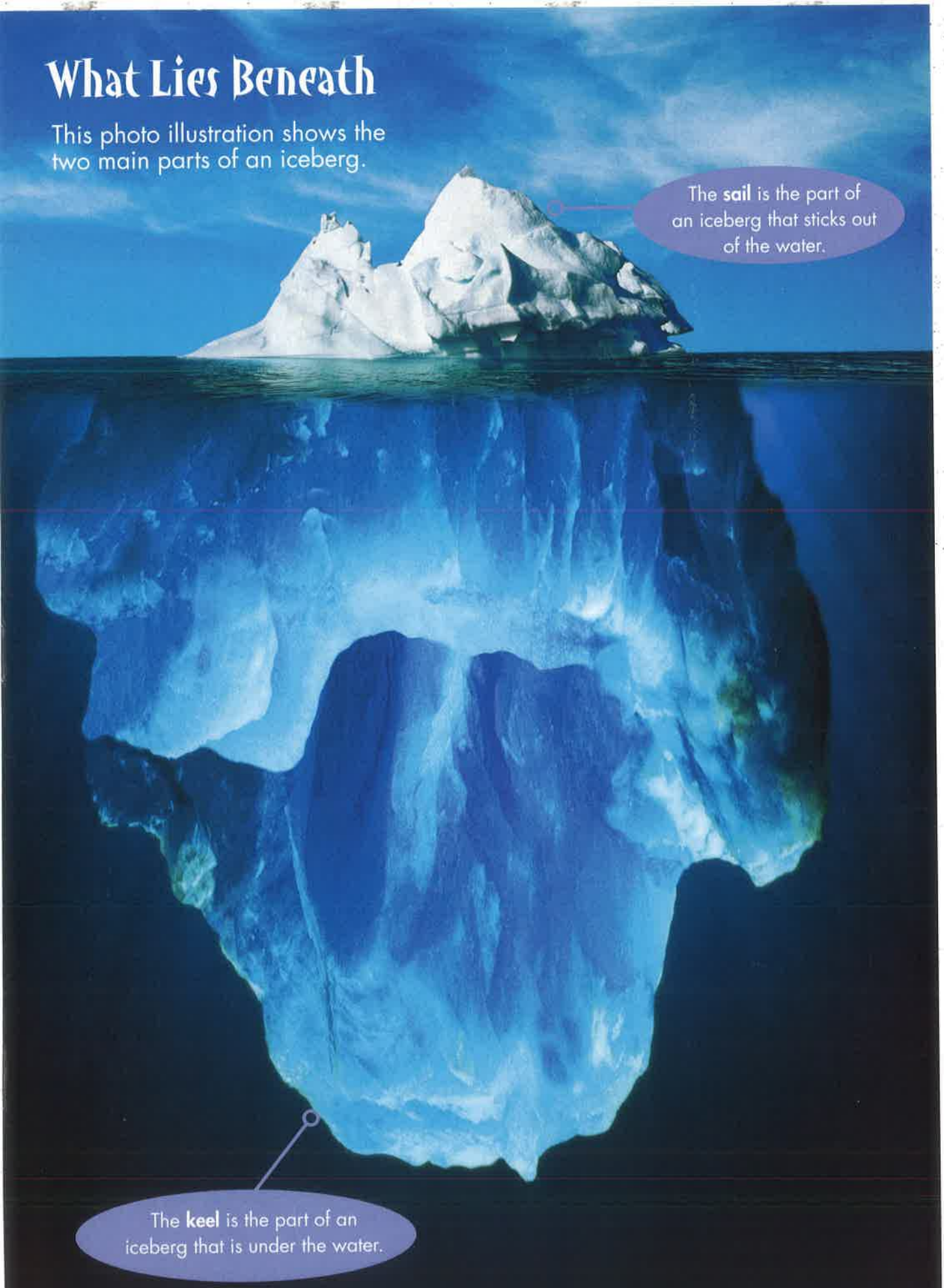
iceberg: large chunk of freshwater ice floating in the sea

keel: part of an iceberg that is below water

sail: part of an iceberg that is above water

What Lies Beneath

This photo illustration shows the two main parts of an iceberg.



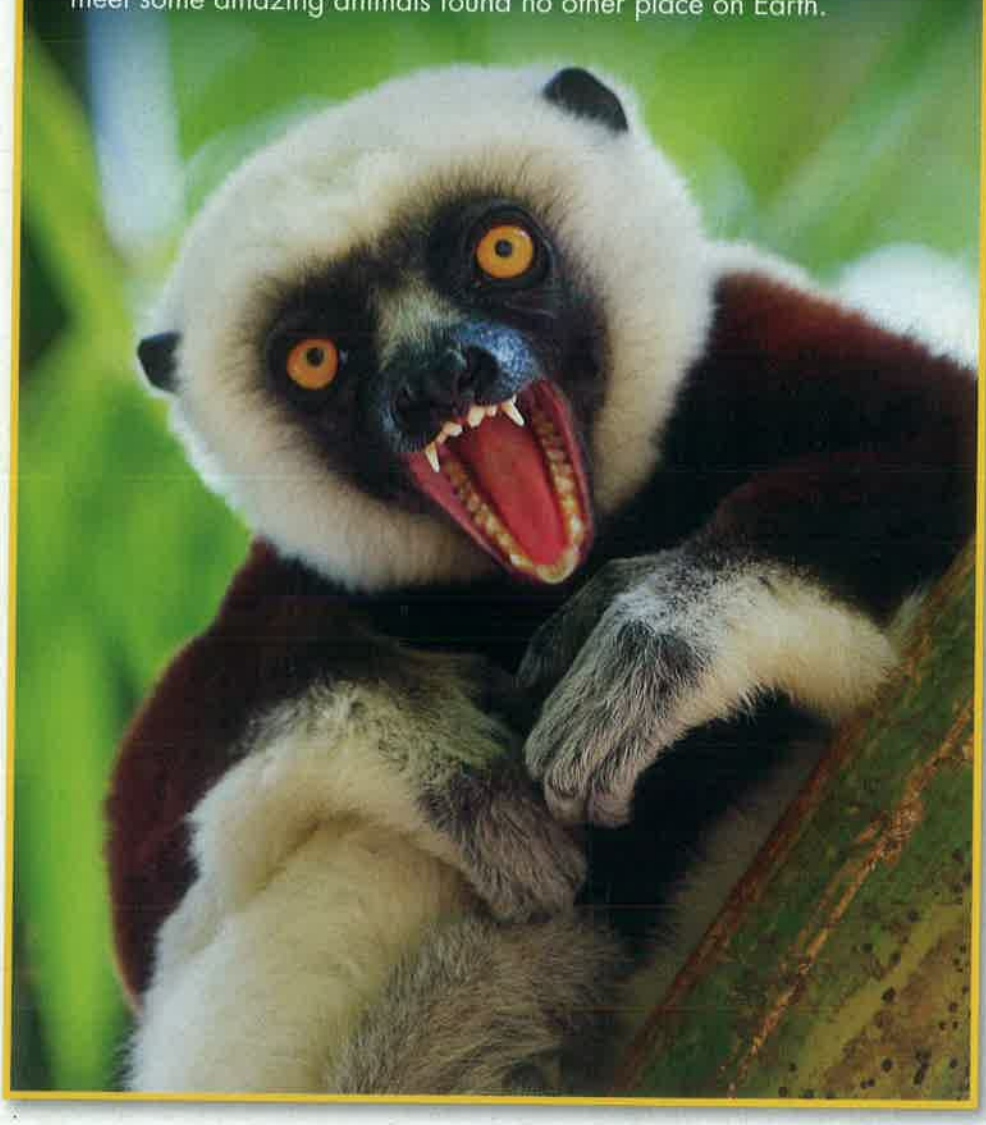
Coming in March

Spirals: Take a look at the swirling shape of a galaxy, or the curl of a ram's horn. Learn why nature is full of dizzying spirals.

Timbuktu: Travel to ancient Africa and discover how salt, gold, and books turned a desert town into a powerful city.

Inside the Human Body: How does your body work through the day? Get a look inside the amazing human machine.

Animals of Madagascar: From leaping lemurs to jumping rats, meet some amazing animals found no other place on Earth.



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Cover: Pacific seahorse

(Photo by © MARK CONLIN/V&W/IMAGE QUEST MARINE)