

# Special Feature

An iceberg is a large mass of floating ice, which has broken off glaciers or polar ice sheets laid down over 15,000 years ago. Icebergs in the Northern Hemisphere mostly originate from Greenland, and those in the Southern Hemisphere from Antarctica.

Icebergs mainly occur during the spring and summer seasons in each hemisphere, when the weather warms up. The breaking off or separation of an iceberg is called calving and about 10,000-13,000 icebergs are calved each year from the Greenland coast.

Icebergs are made of fresh water, which is slightly less dense than seawater, allowing icebergs to float in the sea. However, only about 10% of an iceberg is visible on the surface, with the rest hidden underneath.

Icebergs are mostly white. The ice is full of tiny air bubbles and the surfaces of these bubbles reflect white lighting, giving overall white appearance. Blue streaks through some icebergs are areas of ice that do not contain air bubbles and so reflect blue in a similar way to the sky. Icebergs are classified by their shape and size. They can range from flat-topped to domed to having a central pyramid and have interesting names ranging from "Growler" (which is a berg less than 1m above the sea surface and less than 5m in length) to a "Very Large Berg" (which is greater than 75m above the sea surface and greater than 200m in length). Icebergs from Greenland and the North Atlantic are more often peaked and irregular in shape, while those from Antarctica are more often flat-topped with straight sides.

It is hard to predict how long an iceberg will survive before it melts. Weather conditions play a big part. If an iceberg remains in cold waters, it can survive for many, many years, only melting a little during the summer months. However, if the iceberg drifts into warmer waters it will melt rapidly, helped by wind and wave action.

## Did you know...!



The tallest iceberg in the North Atlantic was located in 1958 off the coast of Greenland. It measured 168m and was the same height as a 55-storey building.

The biggest iceberg on record is an iceberg covering more than 4,000 square miles, which broke off the Ross Ice Shelf in Antarctica, in early 2000. It measured 183 miles by 22 miles.

# ICEBERGS



Above: Only about 10% of an iceberg is above water, the rest is hidden underneath.

Right: Icebergs, which have calved (or separated) from a glacier or ice sheet.



Icebergs from Greenland can move up to 7 km per year. On average, about 375 icebergs float into the North Atlantic shipping lanes each year, where they are a hazard to navigation, particularly because so much of an iceberg is hidden under water.

Following the loss of the *Titanic* in 1912, due to a collision with an iceberg, a patrol of the North Atlantic shipping channels began in 1914. 13 nations came together and agreed to fund an *International Ice Patrol*, which would be managed by the United States Government. Each year, they monitor the icebergs that threaten the main shipping routes in the North Atlantic, between Europe, the US and Canada. This is usually between the months of February and July.

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