Encyclopedic Entry

iceberg

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<u>Icebergs</u> are large chunks of <u>ice</u> that break off from <u>glaciers</u>. This process is called <u>calvin</u>. Icebergs float in the ocean, but are made of frozen freshwater, not saltwater.

Most icebergs in the Northern Hemisphere break off from glaciers in Greenland. Sometimes they drift south with currents into the North Atlantic Ocean. Icebergs also calve from glaciers in Alaska.

In the Southern Hemisphere, almost all icebergs calve from the continent of Antarctica.

Some icebergs are small. Bergy bits are floating sea ice that stretch no more than 5 meters (16.5 feet) above the ocean. Growlers are even smaller.

Icebergs can also be huge. Some icebergs near Antarctica can be as big as Sicily, the largest island in the Mediterranean Sea. As little as one-eighth of an iceberg is visible above the water. Most of the mass of an iceberg lies below the surface of the water. This is where the phrase "tip of the iceberg" came from, meaning only part of an idea or problem is known.

There are many different kinds of icebergs. Brash ice, for instance, is a collection of floating ice and icebergs no more than 2 meters (6.5 feet) across. A tabular berg is a flat-topped iceberg that usually forms as ice breaks directly off an ice sheet or ice shelf.

The ice below the water is dangerous to ships. The sharp, hidden ice can easily tear a hole in the bottom of a ship. A particularly treacherous part of the North Atlantic has come to be known as Iceberg Alley because of the high number of icebergs that find their way there. Iceberg Alley is located 250 miles east and southeast of Newfoundland, Canada.

In 1912, the *Titanic*, a large British ocean liner on its way to New York, struck an iceberg and sank in Iceberg Alley. More than 1,500 people drowned. Soon after the *Titanic* sank, an International Ice Patrol was established to track icebergs and warn ships. That patrol continues today.

Iceberg patrols now use global positioning system (GPS) technology to help locate icebergs and prevent more tragedies like the *Titanic*. In 1999, the National Ice Center lost track of an iceberg the size of Rhode Island. It was found drifting toward the Drake Passage, an important shipping route south of Argentina. Dr. David Long of NASA's SeaWinds science team used satellite data to track the iceberg, the first time satellite technology was used for that purpose. Since that time, the SeaWinds team has used satellites to track the world's ice.

Icebergs that drift into warmer waters eventually melt. Scientists estimate the <u>lifespan</u> of an iceberg, from first snowfall on a glacier to final melting in the ocean, to be as long as 3,000 years.

VOCABULARY

Term	Part of Speech	Definition
bergy bit	noun	sea ice floating not more than 5 meters (16.5 feet) above the ocean, and not more than 10 meters (33 feet) across.
brash ice	noun	floating fragments of ice and icebergs no more than 2 meters (6.5 feet) across
calving	noun	process where a glacier cracks and breaks apart.
continent	noun	one of the seven main land masses on Earth.
current	noun	steady, predictable flow of fluid within a larger body of that fluid.
data	plural noun	(singular: datum) information collected during a scientific study.
Ernest Hemingway	noun	(1899-1961) American author and journalist.
estimate	verb	to guess based on knowledge of the situation or object.
freshwater	noun	water that is not salty.
glacier	noun	mass of ice that moves slowly over land.
Global Positioning System (GPS)	noun	system of satellites and receiving devices used to determine the location of something on Earth.
growler	noun	small chunk of floating sea ice, extending less than one meter (3.3 feet) above the ocean, and fewer than five meters (16 feet) in length.
ice	noun	water in its solid form.
iceberg	noun	large chunks of ice that break off from glaciers and float in the ocean.
Iceberg Alley	noun	area in the North Atlantic Ocean with a large number of icebergs.
ice sheet	noun	thick layer of glacial ice that covers a large area of land.
ice shelf	noun	mass of ice that floats on the ocean but remains attached to the coast.
island	noun	body of land surrounded by water.
lifespan	noun	length of time from when an organism is born to when it dies.
ocean liner	noun	large ship used to transport people or goods to and from ocean ports on established routes, or lines.
satellite	noun	object that orbits around something else. Satellites can be natural, like moons or made by people.
shipping route	noun	path in a body of water used for trade.
snowfall	noun	amount of snow at a specific place over a specific period of time.
tabular berg	noun	flat-topped iceberg, usually formed by ice breaking off from an ice shelf.
Titanic	noun	luxury cruise ship that sank in the North Atlantic Ocean in 1912.
treacherous	adjective	very dangerous.

For Further Exploration

Articles & Profiles

- National Geographic News: 'Singing' Iceberg Recorded in Antarctica
- RMS Titanic & Nautical Resource Center: RMS Titanic Iceberg FAQ

Worksheets & Handouts

• International Ice Patrol: Iceberg Chart Information Sheet



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