

IAATO: *see* **International Association of Antarctica Tour Operators**

IAC: *see* **Inter-American Convention for the Protection and Conservation of Sea Turtles**

ICCL: *see* **International Council of Cruise Lines**

Ice Edge The ice edge is the seaward extent of the **pack ice** found off the continent and **islands** of the **Antarctic** (see Fig. I1). The ice edge is a dynamic zone where the pack moves, grows and disintegrates in the wind, **waves**, ocean **currents** and **tides**. The ice edge usually represents the first opportunity tourists have to view ice, Antarctic species breeding or foraging in the ice and their predators lurking nearby. It is a zone where the seas are much calmer than the stormy **Southern Ocean** or Drake Passage, and it is therefore a welcome sight for travel-weary

tourists. The ice edge may also be defined as either the edge of land-fast ice or an **ice shelf**.

Related internet sources

ASPECT Project: <http://www.aspect.aq/seaice.html>

National Snow and Ice Data Center: <http://nsidc.org>

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Ice Fishing Ice fishing is the sport of catching fish through holes cut in the ice of lakes or rivers. This is a popular activity in the USA (in Alaska and around the Great Lakes), Canada, Finland, Norway, Sweden and Russia. Pike and perch are common catches. Fisherman may sit on a stool on the open expanse of a frozen lake or sit in a man-made structure (called a fish house, bobhouse, ice shanty or ice hut). These structures range from easily moved, tent-like structures to a house equipped with amenities such as lighting, heat, bunks and cooking facilities. **Fishing** techniques range from small, light fishing rods to **spearfishing**.



Fig. I1. Ice edge (photograph courtesy of R. Suisted).

Related internet sources

Ice Fishing:

<http://www.hickorytech.net/~jbusby/iceangler.html>

Everything you need to know about ice fishing: <http://dnr.wi.gov/org/caer/ce/eeek/nature/icefish.htm>

IceShanty (ice fishing discussion group): <http://iceshanty.com>.

Ice Team: <http://www.iceteam.com>

Dagmar Fertl

Ice Sheet The ice sheet is formed from the accumulated snow that covers the **Antarctic** continent. This continent is a desert with very low precipitation rates but, over millions of years, the cold temperatures have ensured that any precipitation that does fall does not melt. Over time, the ice sheet covering the continent has grown to more than 4 km at its thickest. This has produced a dome of solid ice above the bedrock that extends to the coastline and beyond (see Fig. I2). Only about 2% of the vast Antarctic continent is ice-free. Many glaciers have formed within the ice sheet and slowly advance towards the sea.

The ice sheet is spectacular, particularly in the pure, clear air of Antarctica, but very few tourists actually experience its splendour although parts of the ice sheet can be seen as it and its **glaciers** meet the coast. Travelling over the ice sheet is more problematic. Due to

weather conditions and logistic difficulties, there is limited opportunity for adventure tourists to make expeditions that travel across the ice sheet and that are supported by a private logistics company. Unsupported activities of this kind are generally expensive, dangerous and not encouraged by the Antarctic Treaty parties, which manage the commercial uses of the Antarctic.

Related internet source

National Snow and Ice Data Center: <http://nsidc.org>

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Ice Shelf The ice shelf is the floating seaward extension of the **ice sheet**. In parts, the shelf may also be grounded on the ocean floor. The ice shelf is often many tens of metres high when it reaches the coast. It is spectacularly sculptured and tourists never tire of photographing its facets (see Fig. I3). The edge of an ice shelf is fragile and many **icebergs** calve from it. One, which was named B-15, calved off from the Ross Ice Shelf in 2000. At the time it measured 10,000 km² in area. Remnants of the original berg can be seen in the **Ross Sea**, and these provide tourists with an experience of the massive size of icebergs originating from ice shelves.

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Fig. I2. The Antarctic ice sheet where it meets the coast; where it extends into the ocean and floats or becomes grounded, it is called the ice shelf (photograph courtesy of R. Suisted).