

November Geography report by Jane Harrison (photos by David Yeadon)

Gerald Blake's talk on 'The Geography of Ice' looked at the physical, political and social geographies of ice. It introduced us to the cryosphere, which encompasses those parts of the Earth where water exists as ice. It includes snow, glaciers, ice caps, ice sheets, sea ice, frozen rivers and lakes, and permafrost.

Although 60% of the world's population live frost-free, the cryosphere affects all life on Earth. The high reflectivity of ice and snow helps to reflect solar energy back into space, whilst ice sheets and glaciers act as stores of freshwater and feed meltwater streams. Increasing temperatures cause loss of ice which affects global sea levels.

For the 10% of the world's population who live in high latitudes, ice presents a challenge. Indigenous populations have adapted to live in these harsh environments. Sometimes the advance of winter can be used to people's advantage. In northern Canada frozen rivers and lakes become essential transport routes for about 8 weeks of the year

Polar regions have attracted explorers and claimed lives. Lives were lost on the HMS *Erebus* and HMS *Terror* in the 1840s trying to find the North-West Passage and on Scott's ill-fated expedition to the South Pole, in 1912. Icebergs still present a hazard to shipping in the northern Atlantic, long after the loss of the Titanic.

Arctic shipping routes have been of strategic importance since the days of Russia's Tsar Peter the Great. Countries have disputed land in polar regions and now claim their extended continental shelves hoping to exploit untapped resources. Fortunately, in Antarctica, the 1959 Antarctic Treaty set aside the continent for scientific research rather than exploitation.

Even in temperate Britain ice has an impact. Roads must be ploughed and pavements gritted. Between the 14<sup>th</sup> and 19<sup>th</sup> centuries there was a period of global cooling, known as the Little Ice Age, which was depicted by contemporary artists. Huge 'frost fairs' were held on the River Thames. Thomas Wyke's painting shows the longest fair (1683-84) when temperatures remained below freezing for two months.

Prior to the arrival of refrigeration, ice houses were often built in the grounds of stately homes. In the 19<sup>th</sup> century there was a world-wide trade in natural ice from North America to places as far away as India and Australia.

Gerald concluded his excellent talk by looking at recreation. From the 18<sup>th</sup> century, ice sports became popular in Britain. Skating, ice hockey and curling took place on frozen rivers and lakes. Today tourists head off to Everest base camp and cruise to the Arctic and Antarctic.



Photos by David Yeadon

Next meeting: Thursday 19<sup>th</sup> February, The Witham 2pm. Ian Royston's talk is "Reservoir Mania 2".