

Five of these sub-populations are to the west of Greenland and three are to the east (see Fig. 1). Current research suggests that each of these eight sub-populations contain smaller local stocks (Outridge *et al.* 2003).

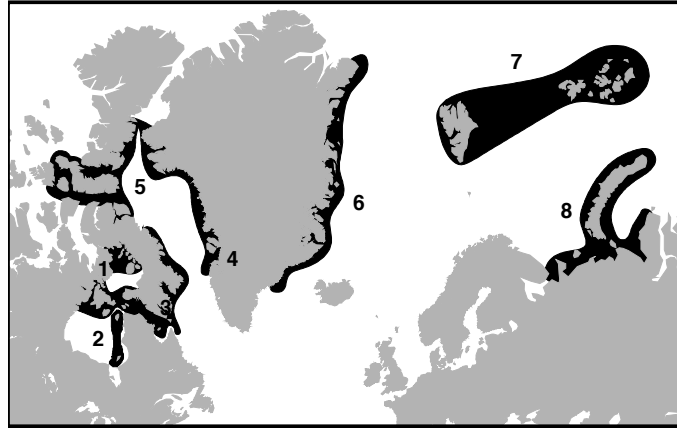


Fig. 1. Proposed (putative) walrus stocks in the North Atlantic. 1 – Foxe Basin; 2 – Southern and Eastern Hudson Bay; 3 – Northern Hudson Bay – Hudson Strait – Southeastern Baffin Island – Northern Labrador; 4 – Western Greenland; 5 – North Water (Baffin Bay – Eastern Canadian Arctic); 6 – Eastern Greenland; 7 – Svalbard – Franz Joseph Land; 8 – Kara Sea – Southern Barents Sea – Novaya Zemlya. Adapted from Born *et al.* (1995).

### Ecology

Walrus are primarily bottom feeders, foraging in sediments on the ocean floor for bivalve molluscs (clams) and other invertebrates (Outridge *et al.* 2003). The soft parts of clams, the feet and siphons, have been found to make up 95% of both numbers and weight of walrus food intake. Other invertebrates are eaten to varying extents, and fish may be rarely taken (Born *et al.* 1995). Walrus predation on seals is well documented, and seems to be largely carried out by older males. The animal in the cover photograph of this document is shown consuming a ringed seal.

Because of their benthic mode of feeding, walrus are generally confined to the continental shelf where water depths are not greater than 80 to 100 m. Walrus are powerful swimmers, and can break through fast ice up to 20 cm thick. Once the ice becomes thicker than this, they retreat to areas of drift ice. In winter, walrus are found in areas where there are numerous leads or polynyas (areas which stay ice-free all year round), and where the ice is thick enough to support their weight (Born *et al.* 1995). In summer, groups of walrus haul out onto land at traditional sites, called *uglit* in Inuktitut, which are often located close to their feeding grounds.

Apart from man, the main predators of walrus are killer whales (*Orcinus orca*) and polar bear (*Ursus maritimus*). Mainly calves and younger walrus are susceptible to such predation.

### Abundance and trends

The total population of Atlantic walrus prior to the European discovery of North America must have been at least in the hundreds of thousands. This is, of course, a very rough guess, and is based on recorded observations by early explorers and traders, plus known records from commercial walrus hunting. Commercial hunting of walrus began in the late 1800s,