Fig. ESM 1. Remains of three polar bears killed for food by large male polar bears in the eastern portion of the southern Beaufort Sea from January to April 2004. a) adult female killed at her maternal den on Pingok Island, Alaska, on 24 January. b) adult female just out of her den on Herschel Island, Northwest Territories, Canada, 7 April. c) yearling male killed on the sea ice near Herschel Island, 10 April.

Fig. ESM 2. a) skinned skull of adult female polar bear killed at her den in northern Alaska, 24 January 2005. b) cleaned skull of adult female polar bear killed on the sea ice near Herschel Island, Northwest Territories Canada, 7 April 2004. c) cleaned skull of yearling male polar bear killed by large male on sea ice north of Herschel Island, 10 April 2004. Note similarity of canine penetrations in females' skulls (a, b), and the crushed cranium of the yearling male (c).

Fig. ESM 3. Search path of large male polar bear that attacked a maternal den on Pingok Island along Alaska's north shore 24 January 2004. Included are the kill site (den), and the path along which the male dragged the female's carcass before feeding on it.

Fig. ESM 4. Newborn polar bear cubs recovered from collapsed den at site of intraspecific killing in northern Alaska, 24 January 2004.

Fig 1

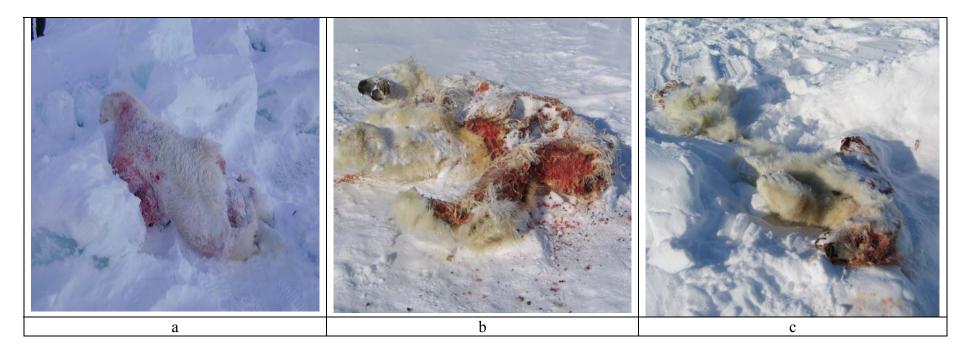


Fig ESM1

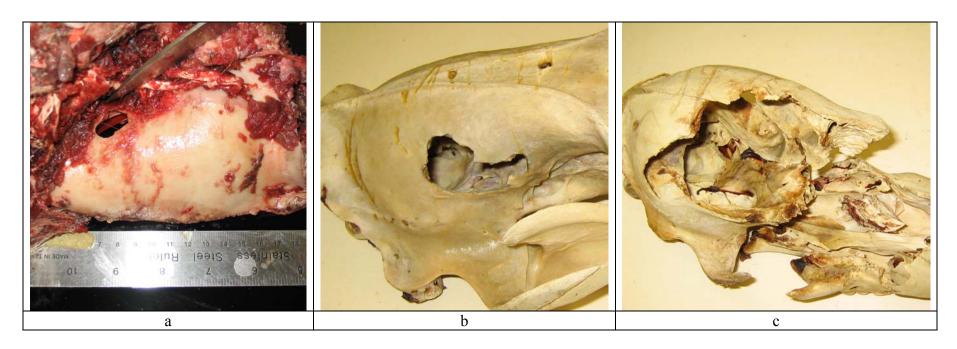


Fig. ESM2

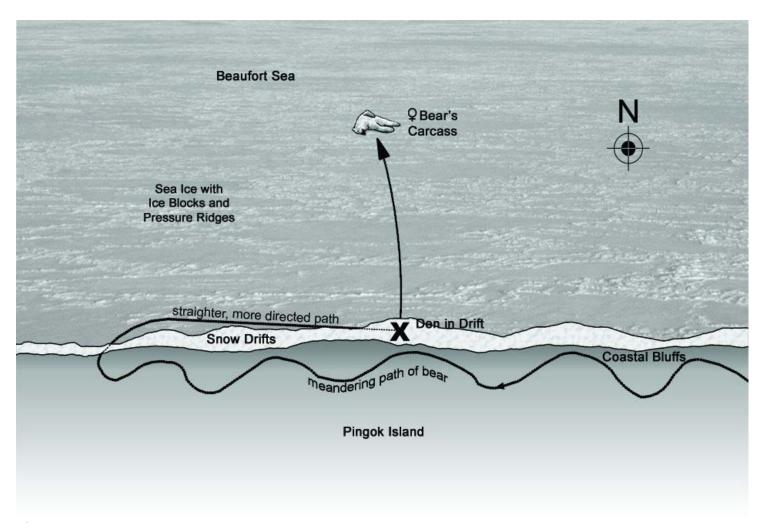


Fig. ESM 3



Fig. ESM 4