

Skull shape and morphometry of ~670-800 cal AD +/-25 year-old Alaskan polar bear skull: Evidence for a new polar bear subspecies ?

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Manning (1971) proposed that Alaska South polar bear (Table A) could be “a relict “ of *Ursus maritimus tyrannus* (Kurten 1964] or alternatively that pre-modern polar bears were larger in general. *U.m. tyrannus*, recently reclassified as *Ursus arctos* with some polar bear features was markedly larger than the living polar bear.

ID	CBL	Geography	Time period
B.M. o. 24361*	447*	Kew bridge, London England	Pleistocene age
US NM 83594	436	St.Paul island, AK	Historic (~1875)
No-id	424	Saint Lawrence island, AK	Historic (~1800)
The old one	410	Walakpa, AK	Subfossil (~670-800 calAD +/- 25 BMP)

CBL: condylobasal length

Geography	CBL (cm)
Alaska	
North (2)	392.0 +/- 3.11
South (1)	407.2 +/- 4.27
Greenland	
West (3)	384.0 +/- 1.60
East (5)	369.3 +/- 2.56
Spitzbergen	
(4)	376.2 +/- 2.73



The Walakpa specimen is among the largest subfossil adult polar skulls ever measured (Table B). Inuit TEK clearly reference so called “king” bears (SLI and Barrow, AK) and “weasel” polar bears (NWT, CA) that attain minimum length of 12 feet, and are in general rare. DNA work-up is planned to clarify subspecies question.

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