

## A Balto-Scandian Middle Cambrian fauna from Peary Land, North Greenland

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The first record of Middle Cambrian faunas of 'Atlantic' affinity from the Franklinian basin sequence of North Greenland was made by Poulsen (1969) who noted that previously described Greenland faunas were of 'Pacific' type. Field work by the Geological Survey of Greenland during the last decade has established that 'Atlantic' faunas are widespread in more outer shelf sequences along the northern coast of North Greenland while the 'Pacific' faunas occur within inner shelf sequences more to the south, near the margin of the Inland Ice. North Greenland preserves both faunas in close geographical juxtaposition in only slightly tectonised geological settings. Thus, a latest Middle Cambrian trilobite fauna described by Robison (in press) from the Holm Dal Formation in an area some 40 km south of the presently discussed locality (and more inner shelf) includes a mixture of polymeroids characteristic of the *Cedaria* Zone of North America and agnostoids characteristic of the *Lejopyge laevigata* Zone of the Swedish standard zonation.

Outer shelf sediments of the Kap Stanton Formation (Ineson & Peel, in press; unit 3 of Higgins & Soper, 1985) outcropping on a prominent cape (lat. 82° 38' 40"N, 41° 16'W) on the eastern side of J. P. Koch Fjord, north of the island Primus, Peary Land, have yielded a trilobite fauna containing species well known from the Andrarum Limestone (*Solenopleura brachymetopa* Zone) of Bornholm and Scania (see Berg-Madsen, 1985 for references). Fossils were collected by A. K. H. in 1984 and by J. S. P. in 1985. Large specimens of *Centropleura* cf. *loveni* are conspicuous but other faunal elements include *Solenopleura* cf. *bucculenta*, *Elyx laticeps* and *Anomocarina* aff. *excavata*. Among agnostoids, large shields of *Phalacroma* are common. General correlation with the Andrarum Limestone suggests an age intermediate between faunas described by Poulsen (1969) and Robison (1984; in press).

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