

Trilobites and gastropods from Silurian carbonate mounds in Valdemar Glückstadt Land, eastern North Greenland

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Silurian carbonate mounds were reported from Valdemar Glückstadt Land, eastern North Greenland (lat. 82°N, long. 22°W) by Peel (1980) following reconnaissance geological mapping in 1979. The localities were revisited during August 1980 when a complex of carbonate mounds and patch reefs rooted in bedded Silurian limestone and overlain by black graptoliferous shales of latest Early Silurian age, similar to those known elsewhere from eastern North Greenland (Christie & Peel, 1977; Lane & Thomas, 1979; Mabillard, 1980) was noted. Trilobites and gastropods are well represented in the mound faunas, together with stromatoporoids, favositid and rugose corals, pentamerid and other brachiopods, cephalopods and rare bivalves. Crinoid debris is abundant.

The trilobite genera recorded are typical of Silurian carbonate mounds in arctic North America and U.S.S.R. *Stenopareia*, illaenimorph scutelluids, cf. *Ekwanoscutellum* and *Meroperix* dominate, with *Hyroklybe*, *Platyllichas*, *Scotoharpes*(?) and a proetid also present. Many of these are known from elsewhere in northern Greenland (Lane, 1972, 1979; Lane & Thomas, 1979).

Apart from platyceratids, found everywhere in similar facies of this age, the gastropod fauna includes *Subulites*, *Gyronema*, *Liospira*, *Megalomphala* and less frequent trochiform pleurotomariaceans and onychochilaceans. Most of these genera and many of the species are similarly represented in collections from other parts of northern Greenland.

As is usual with such faunas, precise determination of age is not possible. However, the immediately overlying black shales have a fauna including *Monograptus spiralis*, *M.* cf. *M. parapriodon* and *Monoclimacis* aff. *M. geinitzi* indicating the *crenulata* Zone of latest Llandovery (late Early Silurian) age. It is considered unlikely that the age of the carbonate mounds differs significantly from this.

References

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