

## Taxonomy and history of arctic island reindeer with special reference to Svalbard reindeer - A preliminary report

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The study is based on the cranial measurements from 114 adult wild reindeer. A series of 21 measurements was carried out for each complete skull (see: *Aquilo Series Zoologica* 23:1-11. University of Oulu). The material is mainly concerned with the Svalbard reindeer (*Rangifer tarandus platyrhynchus* Vrolik) and the northernmost populations of the Eurasian tundra reindeer (*R. t. tarandus* L.). Remarks are also included on characteristics of skulls from Greenland and the Canadian High Arctic Islands. Sharp differences exist between Svalbard reindeer and the Novaya Zemlya form. The latter resembles more the tundra forms of Eurasian mainland as demonstrated by Banfield (Banfield 1961). On the other hand, Svalbard reindeer shows essential similarities to the specimens from Ellesmere and Axel Heiberg islands, and especially the extinct reindeer of East Greenland. These three populations represent in extreme form the morphology typical on arctic islands. From the taxonomic point of view this would confirm their close affinity and common high arctic origin with Svalbard reindeer. In the light of new geological evidence and radiocarbon dates, and of archeological finds of dwarfed caribou from Southeast and Southwest Greenland the Greenland origin of Svalbard reindeer seems probable. Ice-free pastures in northwestern Svalbard and northern or eastern Greenland

theoretically may have created possibilities for accidental immigration as early as 20 000 - 40 000 years ago.

### Reference

Banfield, A. W. F. 1961. A revision of the reindeer and caribou genus *Rangifer*. — *National Museum of Canada Bulletin* 177, *Biological Series No. 66*. 137 p.).