VEGETATION CHANGE AND HUMAN IMPACT, AS REFLECTED IN LITTORINA SEA LAGOONAL DEPOSITS NEAR THE PRIEDAINE ARCHAEOLOGICAL SITE AT THE HEAD OF THE GULF OF RIGA (PLANT MACROREMAINS, POLLEN AND WOODEN ARTIFACTS)

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The material for this study comes from an archaeological excavation at the edge of the Priedaine Neolithic settlement site, on the shore of a Littorina sea lagoon/lagoonal lake, and from a core about 20 m out from the former shoreline. Pollen and macroremain analysis of Core 20, taken near the settlement site, reflects the development of the Priedaine lagoon from the middle to the end of the Atlantic (AT2, AT3). The lagoon became a lake during the Sub-boreal, and infilling continued. A mire developed in the area of this former water body during the Sub-atlantic.

Ruderal and cultivated land herb pollen indicates human presence and activities in the area since the time when organic sediment began to accumulate. Accumulation was especially intensive during AT2 and AT3, subsequently decreasing. Macroremain complexes have been divided as follows: Ia – dominance of terrestrial plants (AT2 pollen zone); Ib – Ruppia maritima presence among aquatic plants (beginning and middle of AT3); Ic – aquatic plants Nymphaea alba, Zannichellia palustris, Najas marina, N. flexilis and increase of mire plant remains (end of AT3, SB); II – dominance of terrestrial plant remains (end of SB, SA). The finds from the excavation area, at the foot of a linear dune, relate to the uppermost peat layer and an underlying layer of fine sand, rich in plant matter. The archaeological material, dated to the middle/late Neolithic, includes large numbers of pine laths, in two cases bound with birch bark (probably waste from the making of fishing structures), as well as some unusual wooden implements. Among the plant macroremains are remains of food plants: Corylus avellana nuts, Trapa natans fruits, as well as seeds of Rubus idaeus and Fragaria vesca. The diversity and quantity of remains of other dryland plants (Pinus, Picea, Arctostaphylos uva-ursi), including ruderals (Chenopodium album, Urtica dioica, Polygonum lapathifolium), is much greater than in the core samples. Seeds of the aquatic plants Najas flexilis, N. marina and Nymphaea alba indicate a subaqueous depositional environment.

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