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**SOIL TYPES AND DEVELOPMENT OF AGRICULTURE IN THE PROVINCE OF SAVO**

*Abstract*

In biogeographical terms the expansion of agriculture to eastern Finland means crossing the boundary from Boreo-nemoral vegetation zone into Boreal coniferous forest region, characterized by acidic podsol with a thin humus layer. The establishment of permanent fields in this area was not easy and rotational swidden remained the prevalent cultivation technique.

The material consists of archaeological and pollen analytical data. All the archaeological evidence since the end of the Neolithic period was reviewed in typological, topographical and agrogeological contexts in order to achieve a chronological sequence for land use changes. For pollen analysis, we have compiled data of agricultural indices from eight precisely dated lake sediment sequences.

Based on the Early Metal Age and Iron Age findings of sporadic cultivation, the exploitation of the area seems regular but not intensive. The number of stray finds multiplies during the Viking Age and the first grave finds emerge. The same development is also indicated since ca. AD 700 by regular but discontinuous cereal occurrence in pollen diagrams. According to pollen analysis, a significant increase in cultivation area is evident first since AD 1200.

The possible ecological reasons for the long time lag between the earliest cultivation and the eventual establishment of agriculture are:

- 1) The scantiness of silt and clay soils suitable for field cultivation combined with the lack of effective swidden techniques.
- 2) The time required for the evolution of optimally productive grains for the particular climatic and edaphic conditions.

We also present two socio-economical hypotheses to explain the sporadic crop cultivation during the long time span:

- 1) The first crops were grown by fur merchants at trading stations to provide grain for ritual beer, which they served to their partners.
- 2) As above, but principally to create game fields and to enrich the ecological diversity of forests in the vicinity of the trading posts.

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