

THE ACCOUNTING OF PEAT RESOURCES IN SOUTHERN OSTROBOTHNIA,
WESTERN FINLAND – A DIGITAL MAP SERVICE PILOT

Harju, Asta

Geological Survey of Finland, Western Finland Office, P.O. Box 97 (Vaasantie 6)
FI-67101 Kokkola, Finland; Tel. +358-50-3489872; asta.harju@gtk.fi

SUMMARY

The Geological Survey of Finland (GTK) has been developing a concept for accounting of geological natural resources in Finland, including peat reserves, in order to support their sustainable use. As a part of this work, a digital map service of peat resources in pilot area of Southern Ostrobothnia has been generated and will be introduced on the internet during spring 2012. The idea of the digital map service is to offer impartial information about peat reserves and the land use on peatlands in general. The map service is not only a tool of data distribution but also a tool for coordination and planning the different and diverse types of use of peatlands. The digital map service of peat resources will be extended both geographically and informational in future years based on users' feedback and needs created by national and international decision-making and legislation.

KEY WORDS: accounting, peat resources, digital map service pilot, Southern Ostrobothnia,

Area description

The pilot area, the province of Southern Ostrobothnia located in Western Finland, is rich of peatlands, the total geological peatland area being over 300 000 hectares, and extensively investigated – all peat basins over 20 hectares have been investigated by the Geological Survey of Finland (GTK). The total investigated area is over 225 000 hectares (ca. 1800 individual basins) and the amount of peat over one milliard m³ [*in situ*]. All investigated mires have also been classified according to their natural state by applying the preliminary classification system introduced in National strategy for mires and peatlands.

(http://www.mmm.fi/attachments/ymparisto/suojaturvemaat/5xxrwGBpQ/Suostrategia_final_160211korjattu150411.pdf).

Peatland site information

The data of map service includes selected information from GTK's database. The ID-points of investigated mires contain information on the area, amount of peat, natural state and some peat quality information and the study points (coring points) indicate the extent of investigation. Other datasets i.a. basemaps, peatlands, peat production areas (data produced by the National

Land Survey of Finland), natural conservation areas and groundwater areas (data produced by Finnish Environment Institution) are then combined with data produced by GTK (Fig. 1).

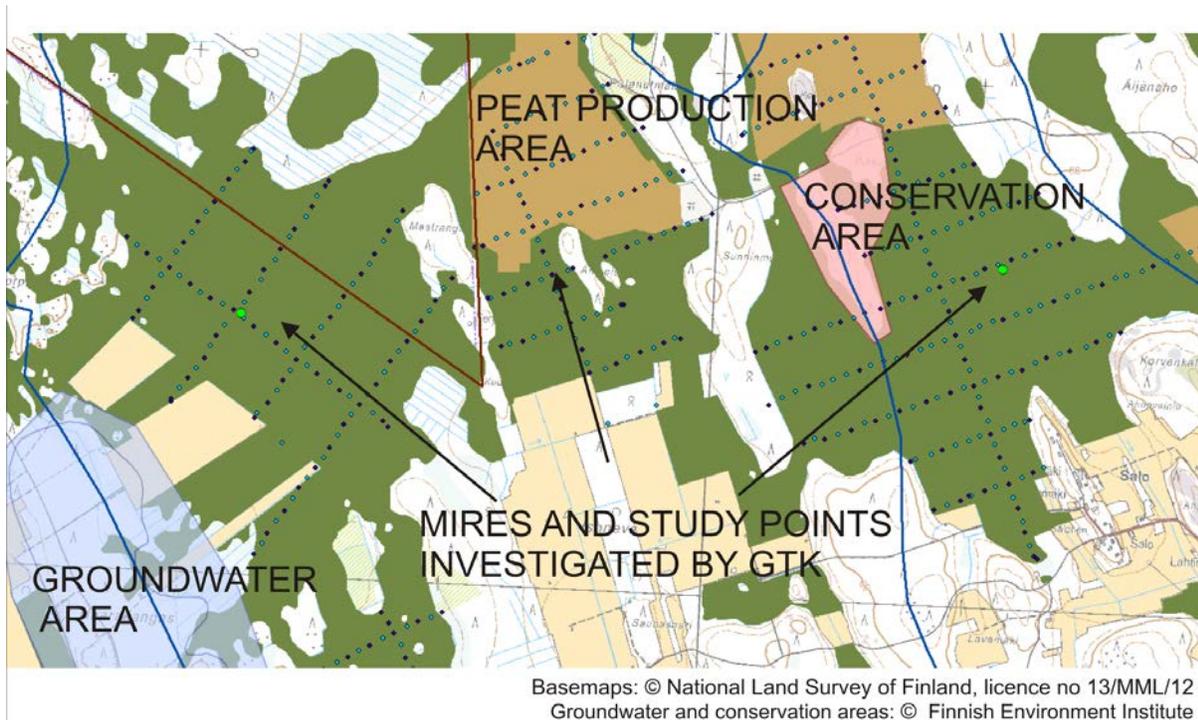


Fig. 1. The demonstration picture of map service pilot

The map service

The user is able to view land use of peatlands in relation to different areal limitations and the extent of the areas investigated by GTK is also easily available. The user is able to select or search information about single mire, a group of mires or mires in a specific area e.g. municipality or a catchment area. The areal compilations include the area and amount of investigated peat reserves, total peatland area, peat production areas and peatlands under conservation. On mires investigated by GTK also the area of investigation and amount of peat in areas over 1.5 meters thick peat layer are available with more specific information on individual mires (Fig. 2).

The digital map service of peat resources will be extended both geographically and informationally in future years based on users' feedback and needs created by national and international decision-making and legislation.

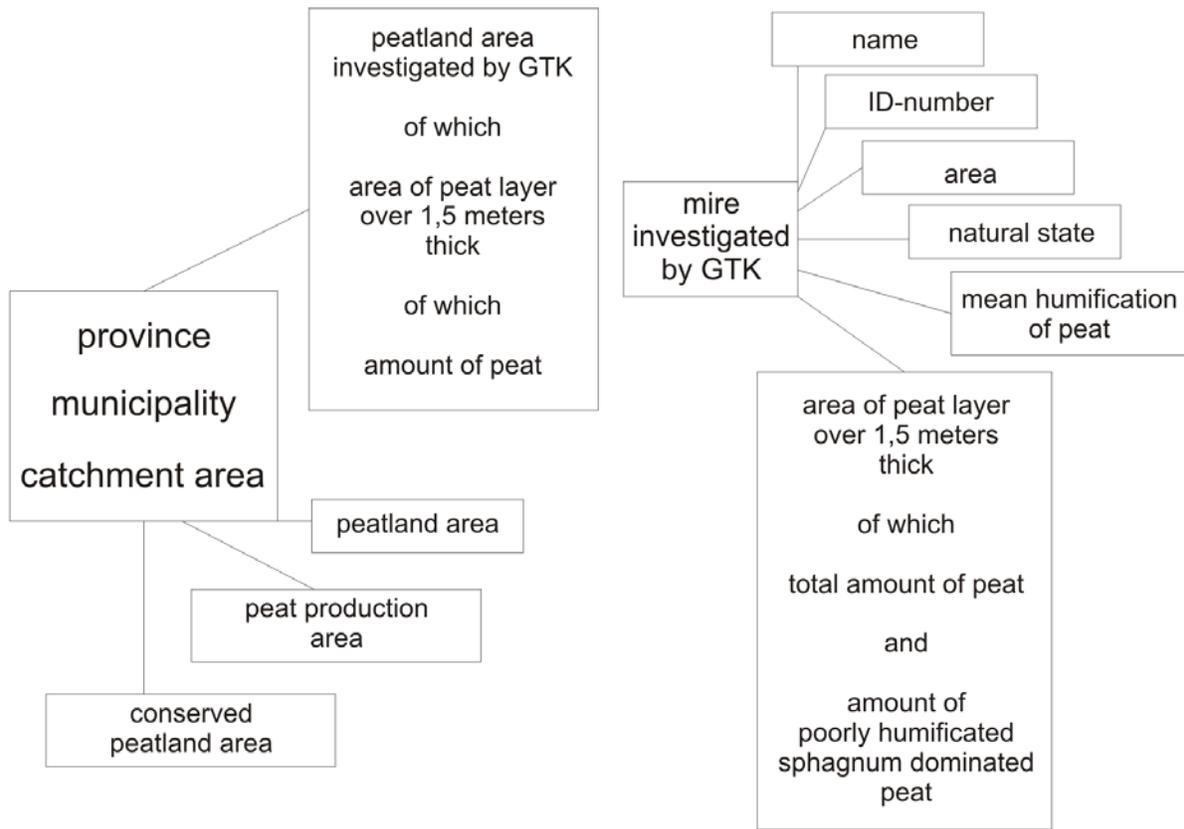


Fig. 2. The areal units and content of data compilations in accounting of peatland resources