

# What the geological map tells us

This geological map shows what kind of soil there is at a depth of one meter. Study of the map, however, reveals a lot of other information, as soil information together with altitude data gives an understanding of the terrain of the area. The information on the map can, for example, be used when planning a construction site or going trekking. The map also shows exposed rock, precipices, cobble deposits and additional geological information about such things as groundwater and geological formations.

## TRACES OF THE ICE AGE

The continental ice wore down and ground the rock surface. The rock material transported under the ice sheet scraped grooves and furrows, which indicate the direction of movement of the glacier. The surface of the rock ground down by the glacier and washed clean of soil is visible at such places as Korkalovaara. Examples of the furrows can be seen at Juhannuskallio on Ounasvaara Hill.



## OUNASJOIKI RIVER DELTA

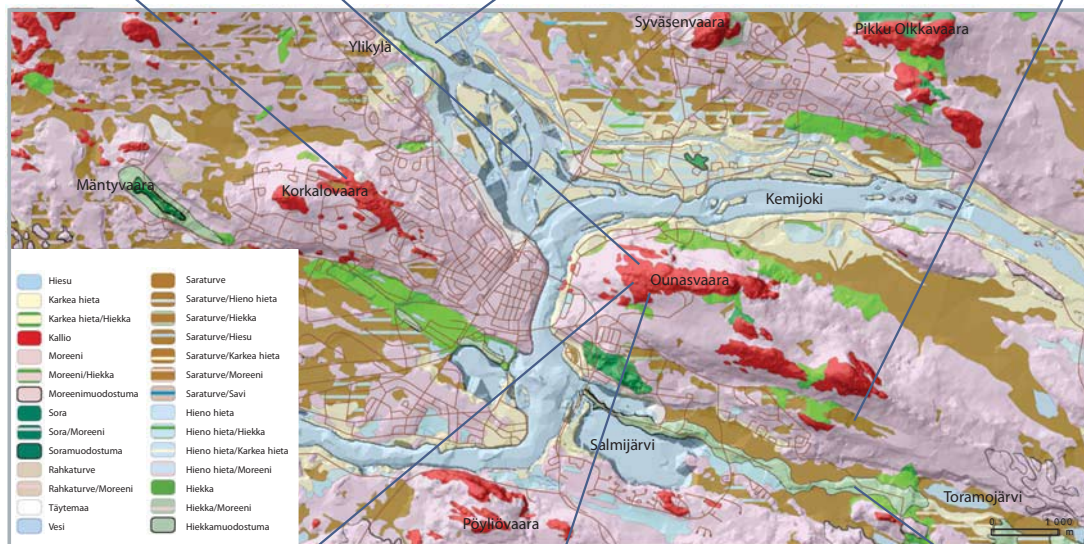
At the delta, the river forks and forms sub-channels. The flowing water carries the material that it has loosened downstream and deposits it in sandbanks, which it then moves on again during times of flood.

The islands in the Ounasjoki River delta are made of sand and silt. Some of these islands are completely covered with water when there are floods. The eutrophic material deposited by flooding makes the islands into lush places for vegetation.



## SWAMPS

The swamps in the area of Rovaniemi belong to the aapa-bog belt of Southern Lapland. It is an area of combined swamps, where the wet and treeless central area is bordered by



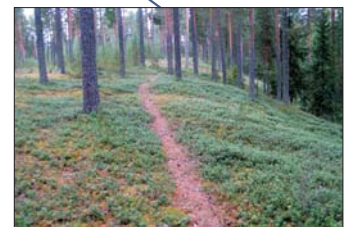
## ROCK PILES

Rock piles are formed as a result of congelifraction or frost-weathering on Ounasvaara Hill. As water entering a rock crevice alternately freezes and melts, the



## RAISED BEACHES

Rovaniemi's most impressive raised beaches are located on Ounasvaara Hill. The force of water on the raised beaches moved and rounded the stones, forming beach cobble deposits. Korkalovaara Hill also has beach cobble deposits washed clean and rounded by the force of the water on raised beaches.



## RIDGES

Kolpeneenharju Ridge is a long, occasionally fragmented ridge formation, which belongs to a ridge system going from Mellavaara to Mäntyvaara Hill. It joins with the ridge section coming from Muurola, at Jokkavaara's large ridge.