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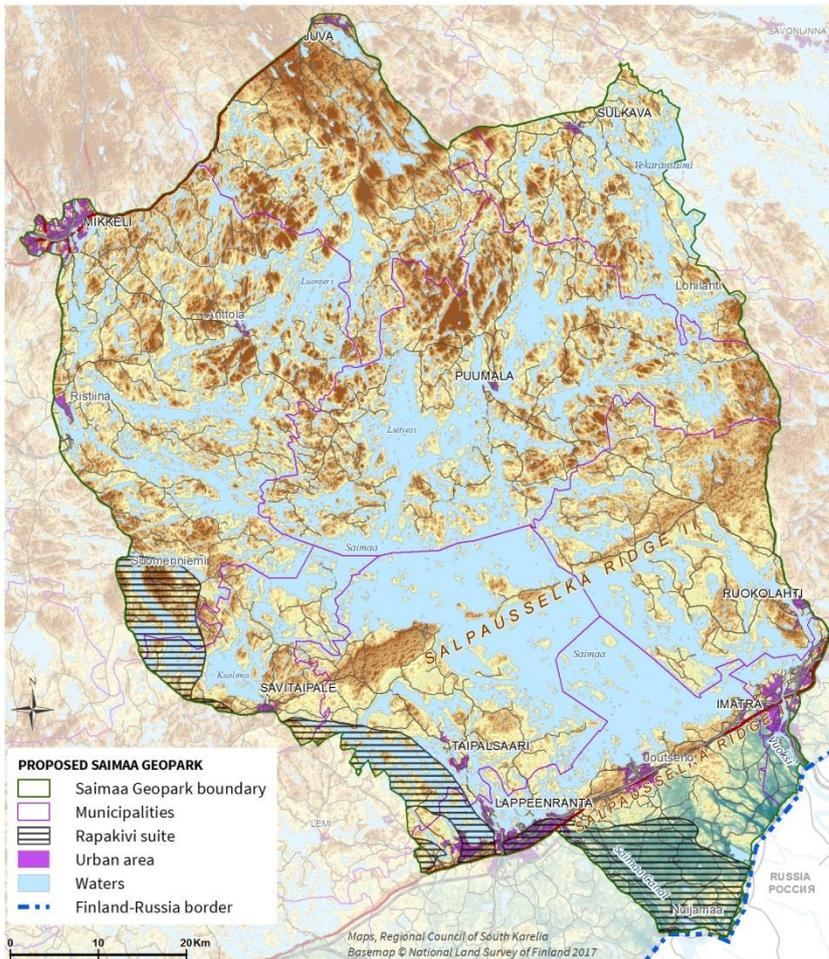


UNESCO
Global
Geoparks

Applicant UNESCO Global Geopark

Aspiring Saimaa Geopark, FINLAND

geographical and geological summary



1. Physical and human geography- 1500 characters

The proposed Saimaa Geopark is located in South-eastern Finland and covers southern part of the Vuoksi water system and the part of its outlet channel Vuoksi that lies within Finnish borders. The proposed area is located between the ETRS89-TM35FIN coordinates: X min= 508998, X max= 601148, Y min= 6758537 and Y max= 6864260.

The surface area of the proposed Saimaa Geopark is 6,063 km². Of this, 2,031 km² is water and 4,032 km² is land. There are thousands of islands, with a combined shoreline of 8,314 km. Saimaa is actually a route catchment consisting of an extensive and fragmented archipelago surrounded by open waters at the same surface level (76 msl).

From an administrative standpoint, the proposed Saimaa Geopark area is located in the provinces of South Karelia and South Savo. There are nine member municipalities: Imatra, Lappeenranta, Mikkeli, Ruokolahti, Savitaipale, Taipalsaari, Juva, Puumala and Sulkava. The proposed Saimaa Geopark is easily accessible from the capital, Helsinki, which is just over 200 km away.

In the deeply fractured bedrock areas in the northern part of the proposed geopark, Saimaa splinters into a labyrinthine network of watercourses. In southern Saimaa, where the Salpausselkäs and related feeder eskers occur, the lakeland scenery is characterised by low sandy shores that span kilometres, and chains of esker islands which break the wide open waters.

The highest point in the proposed Saimaa Geopark is Neitvuori hill at 184 msl, in the hilly north. The Kuurmanpohja valleys, close the national border, have an elevation of just 20 msl, making them one of the lowest points in the area. They are also home to Finland's oldest prehistoric dwelling sites from the period following the last glaciation.

2. Geological features and geology of international significance – 1500 characters

The development of Lake Saimaa is influenced by post-glacial rebound and tilting of the lake basin to the southeast causing shoreline displacement. Tilting caused changes in the direction of water flow and the locations of outlet channels. The most recent outlet channel, Vuoksi was formed in the southeastern part of Saimaa around 5,700 years ago when Lake Saimaa flooded through the First Salpausselkä ridge.

The geological development of Lake Saimaa can be seen in the natural environments as ancient shorelines at various altitudes, rock paintings, prehistoric dwelling sites, and particularly Vuoksi and Imatrankoski rapid potholes.

The area's deeply fractured bedrock is Paleoproterozoic. Mixed mica gneiss originated from ancient seabed, is the most common type of rock. The international bedrock feature is rapakivi granites which are part of the Vyborg rapakivi massif, globally considered to be the type area for this type of rock.

The area's soil was formed over the last 20,000 years as a result of ice sheet erosion and deposition processes. Shoreline displacement and river erosion followed melting of the ice sheet. The most visible remnants of the last glaciation are the massive Salpausselkä ice-marginal formations deposited during the Younger Dryas period around 12,300-11,600 years ago on the margin of the melting ice sheet.

In the aspiring Saimaa Geopark area it is possible to learn about all the key types of formations appearing on the Finnish Lake District ice lobe. The formations include ice-marginal deltas and end moraine ridges with feeder esker systems, and drumlins from Pieksämäki drumlin field which is Finland's largest and also holds international importance.