

## **Norsk Grotteblad nr 6, 1980**

### **Speleologisk arbeide i Nord Norge 1977 - 1980**

Speleological work in Northern Norway 1977-1980.

The research projects undertaken during the expedition in 1976 were continued in the years of 1977-80 as expeditions each summer lasting not less than 6 weeks. The different areas visited are listed in Table I, together with when they were visited and what kind of work was carried out (Biospeleology, Geospeleology, Chemistry). In Table II, the caves that have been surveyed are listed with their surveyed and estimated total lengths. A total of 6,6 km of cave have been surveyed in this period, most frequently to grade 5b. The areas in the Svartisen region are located in Fig. I. The most interesting results of this work so far is the stalagmite datings of Lauritzen and Gascoyne (1980) and some preliminary micro-erosion meter readings where local denudation rates on marble have been found to approx. 0,03-0,05 mm/year where the rock is exposed to rain only, above the tree-line. In the case of streambeds and active caves, rates of about 0,3 mm/year was found. When applying these results to local cases it indicates that Pikhågan was glaciated about 2 500-3 000 years ago, and that the underground outlet of the Glomdalsvatn lake is older than about 40 000 years. Present-day active canyons less than about 3-4 m deep may have developed during the period after the last glaciation (10 000 years). The chemical work proves that the dissolution of limestone below the tree-line is much more intense per unit of runoff water than in those areas above the tree-line.