## Norsk Grotteblad nr 7, 1981

## Hammernesgrottene sett i lys av begrepene grunnvannspeil og freatiske sløyfer

The Hammernesgrottene caves discussed towards the concepts of water-tables and phreatic loops.

The Hammernesgrottene caves, surveyed to a total length of more than 2,200 m still have a great potential. The caves were interpreted by Horn (1947) to have characteristics typical for a sub-glacial development. When constructing a level survey of the caves, they can be demonstrated to consist of large phreatic loops (Ford 1977), lying in a bedding plane of the marble. The entrances have been measured to a very similar altitude (210 - 221 m a.s.l.). The phreatic loops were developed below a water-table of at least this altitude. Further exploration and accurate surveying may define this watertable, if existing. A definite watertable, which can be related to the surface topography of the area, will be an argument for inter- or pre-glacial speleogenesis. The absence of a definite watertable possibly indicate large fluctuations (paraphreatic conditions), which is believed to reflect fluctuations in an englacial watertable (sub-glacial speleogenesis). It is hoped that this analysis will encourage the local cavers in solving these problems.