

# Norsk Grotteblad nr 51, Desember 2008

## Norges lengste, dypeste og høyeste grotter

Norway's longest and deepest caves

Lists of Norway's longest and deepest caves have been published earlier (e.g. St. Pierre in Chabert, 1977. Les grandes cavités mondiales. Spelunca (2) Supplement: 47-48; St. Pierre in Courbon & Chabert, 1986. Atlas des grandes cavités mondiales, UIS/FFS: 205-207; and St. Pierre in Courbon et al, 1989. Atlas of the Great Caves of the World. Cave Books, St Louis: 245-247). The most detailed are in Norsk Grotteblad, (2/3) 1977, and Cave Science, 12 (3) 1985. These include brief details of the caves, history of exploration and references. The most recent update was published in Norsk Grotteblad, (40) 2003. A number of extensions to caves and new discoveries have been made since that time by Norwegian, Swedish, French, Polish and British cavers.

Most of the limestone caves are situated in the county of Nordland which lies astride the Arctic Circle between latitudes 65 and 68 degrees north. The exceptions are Stordalsgrotta and Fjellelvsprekka which are to the north in the county of Troms.

The caves are generally formed in Cambro-Silurian marble which often occurs in steeply dipping narrow bands. Separate records are kept for caves in other rock types such as granite and gneiss.

Many cave entrances have been known to Norwegian farmers, hunters and travellers since the 17th century. There are three main periods of exploration from about 1870 to 1940 mainly by Norwegian geologists and naturalists, 1951 to 1965 mainly by individuals, British caving clubs, school and university groups, and from 1965 to the present time when foreign cavers including British, Swedish, French, Polish and Italian as well as an ever increasing number of Norwegian cavers have pursued explorations.

Published about the 1900's and based on earlier work were statistical topographical descriptions of each of the Norwegian counties in a series known as Norges Land og Folk. Two sections described "huler" (caves) and "elve som gaar underjorden" (underground rivers).

John Oxval published his survey of 1210 m of Grønligrotta in 1914 in Norges Geologiske Unders No. 69. The classic description of Norwegian marble caves however, is Gunnar Horn's "Karsthuler i Nordland" NGU No. 165, 1947. He distinguished between the vadose caves and those of which had developed largely under phreatic conditions of complete waterfilling. Now drained and often with glacially truncated entrances. In 1957 Professor Jean Corbel described many caves and karst areas in Norway and Svalbard in Les Karsts du Nord-Ouest de l'Europe and since about that time much of the important work has been recorded in the publications of the Cave Research Group of Great Britain, the British Cave Research Association and in Norsk Grotteblad.

The first issue of the national review Norsk Grotteblad was published in 1977 and Norsk Grotteforbund (The Norwegian Speleological Association) was founded in 1980. It now has about 200 members and two member clubs - Beiarn Grotteklubb and Bodø og Omegn Bre- Tinde- og Grottegruppe (BOBTOG). Norsk Grotteforbund holds regular annual cave exploration and surveying meets at Tjoarvekrajgge and Burfjell. Professor Stein-Erik Lauritzen and his students at the University of Bergen have been doing speleological work since the 1970's and Dr. Trevor L. Faulkner has been studying and surveying the caves of southern Nordland also since the 1970's.

Cave diving has become increasingly popular. There are several local groups in Norway, and many of their members have joined the Norsk Grottedykkerforbund (The Norwegian Cave Divers Association). There is particular activity at the Plura and Jordbekk (Rana), Storsteinhula (Tysfjord) and the Marmorbrua area (Røyrvik).

For conservation reasons in Rana Kommune it has been proposed that casual visits be restricted to a limited number of caves particularly Hammarnesgrotta, Setergrotta, Grønligrotta and Eiterågrotta ("Caving in Rana. A brief introduction for visitors." 11 pp. Rana Turistkontoret, 1983). Other areas warrant the same consideration.

Cave temperatures are generally low, ice-deposits frequent and river caves are subject to rapid changes in water level due to both rainfall and meltwater. Rescue callout is through the police. Since many caves are remote and communications difficult, self-help should be considered a necessity in the first instance. Norsk Grotteforbund should be advised of visits - Postboks 1301, N-8602 MO Norway. The voluntary Norsk Grotteredningstjeneste (Norwegian Cave Rescue Service) founded in around 1981, works from a base in Bodø.

The lists are compiled from recent correspondence and data abstracted from the compiler's Norwegian Cave Index and Bibliography which was started in 1963 with the aim of cataloguing as many Norwegian caves and as much related literature as possible. Copies of most of the publications listed in the references are held by the compiler. This time a new list has been incorporated for Norway's highest caves particularly those over 1000 m.a.s.l.

A number of bibliographies have also been compiled these include caves in Beiarn (Norsk Grotteblad (NGB) 1982 (9): 22-25); Glomdal (NGB 1983 (10): 8-16b); caves in Sør Trøndelag (NGB 1983 (10): 43-45); caves in the Glomfjell area (NGB 1983 (12): 12-16); Greftgrottene (NGB 1984 (14): 21-23); on Norwegian caves in French literature (Grottes et Gouffres 1985 (93): 15-21); Tysfjord caves - Råggejavre-raigi (NGB 1988 (20): 20-22); Torghatten Cave (NGB 1994 (29): 18-19); Grønligrotta & Setergrotta (NGB 2003 (40): 14-19); marble caves of southern Nordland (NGB 2005 (44): 3-12); caves, karst and cryokarst of Svalbard and Bjørnøya (NGB 2005 (45): 3-22); Nedløpet til Læigasvatn (NGB 2006 (47): 14-17); Marmorgrotten and Ømmertjerngrottene (NGB 2006 (47): 18-20); and Trollkyrkja, Møre og Romsdal (NGB 2007

(48): 33-38). Many of these bibliographies are annotated and illustrated.

Acknowledgements are due to the many individuals in Norway and elsewhere who have contributed information thus helping to keep the records complete and up to date. Hans Øivind Aarstad, Jan Arild Aaserud, Tore Brattli, Tom Ording Dahl, Torbjørn Doj, Torstein Finnesand, Svein Grundstrøm, Ulv Holbye, Tommy Johansen, Terje Solbakk, Tony Waltham, Anders Westlund and Rannveig Øvrevik have assisted with recent contributions and suggestions relating to this article. Any errors remain my own and I would be pleased to receive details of any mistakes and omissions so that future lists can be amended and updated. In addition I would also be grateful for details of any new discoveries, surveys and publications even those of a minor nature. I would also urge the surveyors of unpublished surveys to publish their work in a widely available publication.

David St Pierre, Norwegian Cave Index & Bibliography, Tennant House, High Bentham LA2 7AH UK. E-mail: david.stpierre@homecall.co.uk