MERCIAN NEWS

New geological survey of Nottingham completed

Andy Howard writes: March 1993 saw the completion by the British Geological Survey of a major resurvey of the geology of the Nottingham region. The project, supported by the Department of the Environment, commenced in April 1987 with a survey of Nottingham City and adjacent districts. The aim was to produce a synthesis of geological information relevant to planning and development. In addition to geological maps at 1:10 000 and 1:50 000 scales, thematic maps were prepared, each concentrating on specific aspects of geology relevant to land use. These were published in 1990, together with a descriptive report (BGS Technical Report WA/90/1).

In September 1991 further surveys began to cover rural areas east of Nottingham, as far as a line joining Newark and Bottesford. Most of the 1:10 000 maps and open-file reports covering this area are now available; the remainder will be published this summer. The new Nottingham Sheet 126 will be scaled down and generalised from the 1:10 000 component maps, with publication of the map and accompanying memoir expected in about two years.

The existing Nottingham Sheet 126, based on surveys carried out in 1903-5, depicts only broad lithological divisions of the Permo-Trias and Lower Jurassic strata, and shows very little faulting. Since that time, additional borehole data, mine plans and seismic reflection data have become available to BGS and have supplemented the results of field surveys. It has now proved possible to subdivide and map the Permo-Trias and Lower Jurassic in considerably greater detail. Faulting in these rocks is now known to be extensive, with patterns mimicking those of the Carboniferous at depth.

The new Nottingham maps represent a major advance in knowledge of the stratigraphy and structure of the region. Together with other recently completed surveys in the Coventry and Grantham regions, they now provide a firm base on which to build up a detailed understanding of the geological evolution of the East Midlands. This will be strengthened over the next few years as planned new surveys extend into the Loughborough, Leicester and Melton Mowbray areas.

Further details about publications and other information held by BGS on the geology of the East Midlands can be obtained from Dr. A Howard, British Geological Survey, Keyworth, Nottingham NG12 5GG. Tel: 0602 363100.

Find of two woolly rhinoceras skulls

Alan Dawn writes: In spring 1991 excavations in a gravel pit east of Peterborough exposed a series of Pleistocene silt and clay channels incised into the underlying Oxford Clay. These middle to late Devensian cold stage deposits yielded tusks and bones of *Mammuthus primigenius, Equus ferus, Rangifer tarandus, Bos, Bison* and, most notably, two skulls and a mandible of the woolly rhinoceras *Coelodonta antiquitatis*. One skull is quite well preserved with two upper molars in place. A nearby mandible, also with teeth in place, may belong to the same animal. The second skull is rather abraded and has lost part of the right side; it has no teeth. Several limb bones attributable to *Coelodonta* were also found close by. All the bones are now housed in Peterborough City Museum, Priestgate, Peterborough; the skulls and mandible bear the accession numbers M487, M488 and M496.

A ghasp from the BGS

The British Geological Survey has developed a **G**eo-**HA**zard **S**usceptibility **P**rogramme (**GHASP**) to provide geological information upon which to assess the risks of subsidence in different parts of the country. This is intended as an aid to insurers and their customers, allowing premiums to be directly related to risks based on the geological facts. Information from the Survey's mapping programme is fed into GHASP, which gives a display on PC of all the 9233 post code sectors. For each one it shows a map of the main types of subsidence or a table quantifying the insurance risk that they represent. It is intended that GHASP should be extended in the medium term to cover other hazards such as fluvial and coastal flooding, contaminated land, landfill and environmental problems, and the Survey is also working to make the GHASP databases available down to a site-specific level.

The Ecton Educational Centre was the venue on 27th September 1992 for a most interesting and comprehensive field excursion. It involved an introduction to the history of copper mining at Ecton, a trip underground along Salt's level, activities demonstrating mineral separation and a walk over Ecton hill to look at the surface geology. When combined with a splendid alfresco lunch, it made a most enjoyable experience.

The Centre is primarily concerned with providing one-day courses at weekends for 'A' level students studying Chemistry, Geology or Physics. All courses have a framework of standard activities, similar to the ones we experienced, with appropriate variations for the particular needs of each group. They also welcome College and University students and geological societies.

Further information can be obtained from Zoe D Haydon, 1 Vicar's Close, Oulton, Stone, Staffs ST15 8UQ. Tel/Fax: 0785 816862.

Sandstone Caves of Nottingham

Judith Rigby writes: Tony Waltham's article featured in the Mercian Geologist Volume 13 Part 1 September 1992 continues to be available in attractive booklet format as a result of a second printing. The Society is pleased to report that the first impression of 1000 copies was sold out in less than six months. It is on sale at many local outlets as well as from me at my home address priced £3.50 including post and packing; 223 Mansfield Road, Redhill, Nottingham NG5 8LS. Telephone: 0602 267699.