MERCIAN NEWS

News from Leicestershire Museums Service

Arthur Cruickshank and John Martin write: In spite of Mike Taylor's move to the National Museum of Scotland and the freezing of his post as Assistant Keeper in palaeontology, activity in the Earth Sciences at Leicester has not markedly diminished, although the remaining staff are noticeably older and greyer!

After Easter, all the main galleries at the New Walk Museum were closed for a major refurbishment. In geology, the 1982 vintage "Lost Worlds" and the 1985 Palaeontology displays were dismantled (including the mounted skeleton of *Cetiosaurus*) in preparation for a complete change, with an emphasis on showing visitors real specimens. We re-opened, in record time, by the end of June.

We have aimed to share the rich scientific heritage of the Leicestershire collections with as many people as possible. Highlights, in a double gallery of star items, include stunning minerals, the Barwell meteorite and the holotypes of *Charnia* and *Charniodiscus* (displayed in a cast of the quarry face from which they came). *Cetiosaurus* is back, of course, in a new mount, and is joined by casts of *Plateosaurus* in a radical quadrupedal pose, of an Isle of Wight "Allosaurus" (perhaps *Thecodontosaurus*), and of *Coelophysis*, originally from New Mexico. Bang up to date are the clutches of dinosaur eggs, some of possible sauropods from southern France, and two from the incredible set of South China specimens that contain segnosaur embryos. Also on show are the Barrow-upon-Soar pliosaur (the "Kipper") and the best of our icthyosaurs with preserved soft tissues.

Naturally, the galleries also reflect our current research. For example, Gill Weightman is working out the mineralogy and environments of the basal Triassic unconformity in Leicestershire, and examples of the vanadium, copper and other metallic minerals she is finding are on display. A full description of *Cetiosaurus* is being undertaken by John Martin with Paul Upchurch (Cambridge), and work is under way on the biomechanics of this group of dinosaurs in an attempt to explain their strange anatomy. Meanwhile, Arthur Cruickshank's plesiosauran studies are gradually unwinding after producing more than a dozen papers since 1991.

These are not easy times for local authority museums. Funding is being cut, posts lost, and visitor numbers are down nationwide. Leicestershire Museum Service is not immune (and has also faced the threat of dismemberment by Local Government review), but we're delighted that with our new displays we're still here, and doing what museums should do.

A New Pliosaur for Peterborough

Alan Dawn writes: Bones of Mesozoic reptiles are regularly found in the Peterborough Member of the Oxford Clay, exposed in brick pits in the Peterborough area. Peterborough City Museum has an increasing collection of these ancient crocodiles, plesiosaurs, pliosaurs and icthyosaurs.

The most recent find was made in April 1994, during a visit by the North Norfolk Geologists' Association. A piece of rib was spotted projecting from the clay in the side of a drainage channel, and a little excavation indicated that further material was to be found, but was unfortunately buried beneath several hundred tons of spoil. Over the next few days volunteers were summoned, and an appeal to the work's manager resulted in the loan of a bulldozer for a few hours. The spoil heap soon vanished. Hand digging over the next two weeks revealed about half of the skeleton, including the articulated neck and part of the skull, complete with upper and lower jaws with teeth.

The animal is now being cleaned and re-assembled in Peterborough Museum. Most of the axial skeleton is present, with thoracic and gastral ribs. Some of the limb girdle bones have been recovered, but no paddle bones. The skull is being examined at Leicester Museum. A specific indentification is yet to be made, but the animal belongs to the genus *Peloneustes*.

A RIGS at Ketton, near Stamford

Alan Dawn also writes: The working face at Castle Cement's quarry, near Ketton, is more than a mile long and is well known to geologists. It exposes strata spanning the Bajocian, Bathonian and lower Callovian stages of the middle Jurassic. To the south, nearer to Ketton village, are a number of old and overgrown quarries. One of these, last worked in the 1930s, exposes the oolitic Ketton Freestone and the overlying clays of the Stamford Member of the Rutland Formation. Above this is a complete exposure of the Blidworth Limestone.

Two years ago the Stamford Geological Society embarked on negotiations to clear and develop part of this site as a Regionally Important Geological Site. English Nature approved and the management at Ketton Quarry permitted the development, so in early 1994 work finally commenced. A considerable amount of clearing has now been done. Trees and scrub have been cut and burned, and steps are being cut to allow nose-end access to the higher rock beds. The quarry management are providing a car park and access road, and an explanatory notice board and leaflets are being prepared. Support and funding have been made available by English Nature, the Geologists' Association and the EMGS. Members of the Stamford Geological Society turn out regularly to acquire aching arms and a few blisters!

If all goes well the site will be at least partially operational by the summer of 1995. An invitation will be extended to EMGS members to visit the site, to see not only the geology but also the abundant and varied flora growing on the limestone screes.

Sandstone Caves of Nottingham

Andrew Rigby writes: At the present time Tony Waltham is revising and updating the Sandstone Caves of Nottingham.

Letter to the Editor

Dear Dick

Paul Coones' bibliography of Forest of Dean geology was very useful. However, as I know to my cost, no bibiolgraphy *ever* succeeds in being comprehensive! I attach a paragraph from J. B. Delair & W. A. S. Sarjeant 1985 ("History and Bibliography of the study of fossil vertebrate footprints in the British Isles: supplement 1973-1983". *Palaeogeogr., Palaeoclimat., Palaeoecol.*, vol. 49, pp. 123-160):

> *Gloucestershire*
> In his review of "Tracks, Trails and Surface-Markings" T. Rupert Jones (1862, p. 134) mentioned "footprints in the Coal-measures of . . . the Forest of Deane [*sic*]" but furnished no details of their morphology or exact provenance. They were noticed equally vaguely in a footnote by the editor of *The Geologist* to the letter by "T" on Magnesian Limestone footprints (1862, p. 432) where it was noted also that Murchison had referred to them in his classic work *Siluria* (second edition, p. 323). Frustratingly, we have located no published description of these footprints, whose present whereabouts also eludes us.

The relevant references are:

JONES, T. Rupert, 1862. Tracks, trails and surface-markings. *The Geologist*, vol. 5, pp. 128-139.

["T"] 1862. Footprints in Carboniferous rocks. *The Geologist*, vol. 5, p. 432, figs. 1-3.

Justin Delair and I would welcome further information on these tracks, should any *Mercian Geologist* reader know more about them!

Dr. W. A. S. Sarjeant
University of Saskatchewan

Rock legends . . .

A new display board at Brewhouse Yard, below Nottingham Castle, tells the fascinating story of the formation of Castle Rock, the East Midlands' most famous geological landmark. The display is designed to appeal to schoolchildren and stimulate their interest in Earth Science. It explains how the Rock was carved by meltwater at the end of the Anglian ice age, and then takes the reader on a journey back through millions of years of geological time to the Triassic Period, describing what the world was like when the sandstone of the Rock was deposited.

The display, produced by the British Geological Survey and supported by Nottingham City Council, is also available as a poster, illustrated below (Fig. 1), from the BGS at Keyworth, Nottingham. It is the first of a series of posters that will be produced for famous geological landmarks in British cities.

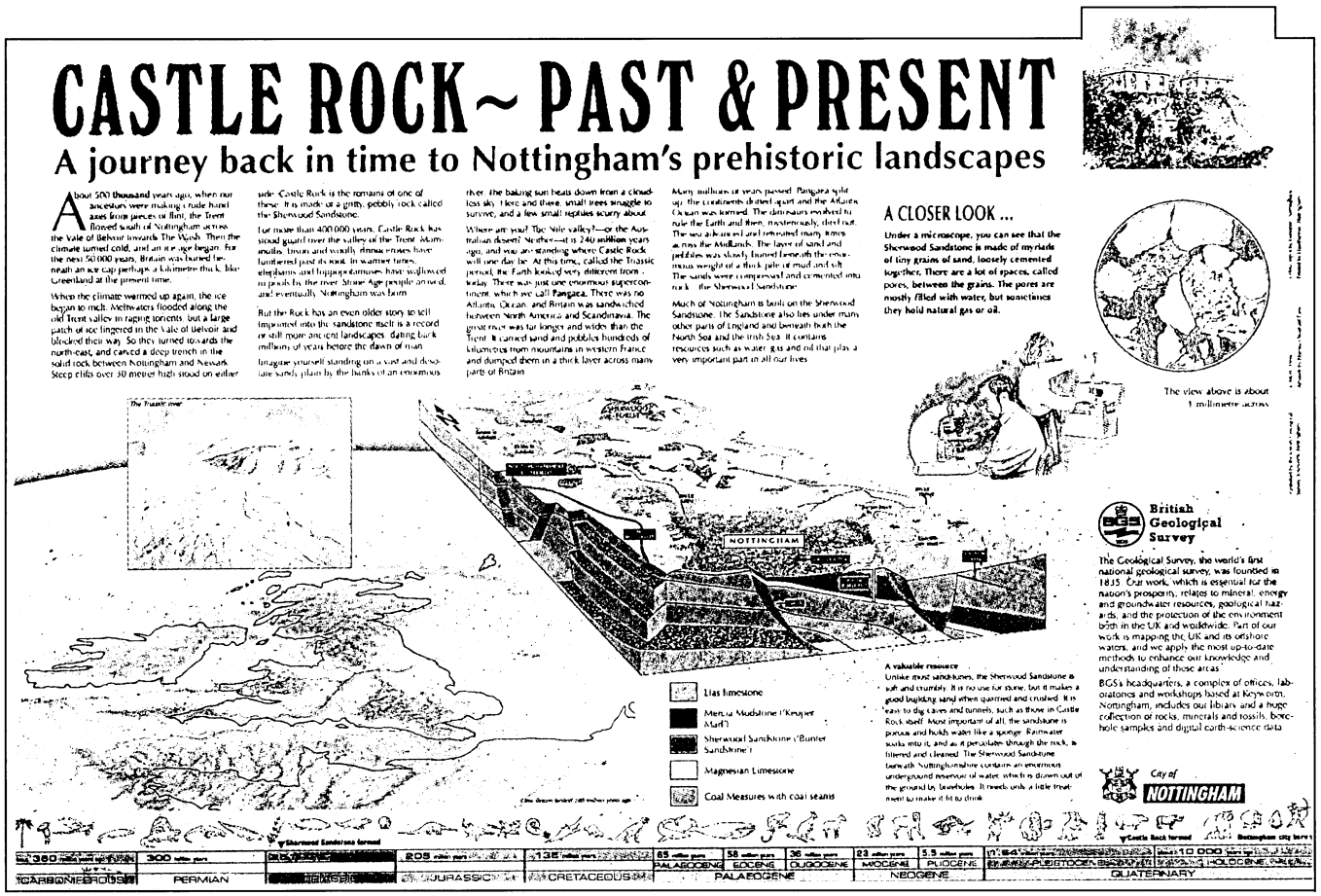

Fig. 1. Castle Rock display, available as a poster from the B.G.S.