

MERCIAN NEWS

A New Look

As regular readers will notice, this issue heralds a new format and style for the *Mercian Geologist*. Scientific papers still form the core of the journal, and the familiar reports of activities of the East Midlands Geological Society remain important. However, we are widening the scope of the reports section to include any items of potential interest to our membership, and we are also including a larger number and variety of book reviews. The opening pages of each issue will be devoted to news items of local or broader interest. The editors will welcome copy on any relevant topic, from a paragraph of news to a complete scientific article or review. We will also be pleased to receive correspondence, and will publish letters that we consider will be of interest to readers. Our aim is to maintain a diverse, vibrant publication that reflects the enthusiasm of the Society members — so, over to you!

On The Rocks

Bill Grange writes: An exciting display project portraying the geology of Derbyshire has recently opened at the Derby City Museum. It forms the first phase of the Derbyshire Nature Gallery, housed in the impressive 19th Century wing of the museum.

We know that geology is an incredibly exciting and absorbing subject, but it can be a big turn-off for the non-specialist museum visitor if it is not presented imaginatively. The new project at Derby is an ultra-modern and visually stunning exhibition which really brings the subject alive and explains what might otherwise be difficult concepts in an immediate and gripping manner. There are numerous specimens, but also plenty of pictures and models. Although most definitely a modern display, the whole has been subtly designed to blend perfectly with the architecture and colour scheme of the newly restored Victorian wing.

The story covers the history of pioneering geological studies in Derbyshire, general concepts about rocks, minerals and fossils, and the relationship between rock strata and the Derbyshire landscape. The centrepiece of the gallery is the "Time Tunnel". Here one walks through the geological ages in the shape of a series of dioramas. These vividly recreate the Derby landscape at various episodes in the past, beginning 700 million years ago in the Precambrian, and ending 9,000 years ago in post-glacial times. Portholes give views of, for example, a volcanic eruption; a Carboniferous sea with cephalopods and corals; a baking Triassic desert; a swampy Jurassic coast with dinosaurs; a frozen late Pleistocene landscape with hairy mammoth. Fossil specimens are displayed alongside each porthole, as the evidence for the modelled reconstructions. The emphasis throughout is very much on visitor involvement, with buttons to press and specimens to touch.

The second phase of the project, which is expected to take a further two years to complete, will deal with

the Derbyshire of today. Closely integrated with the "On the rocks" geology gallery, the backbone of this exhibition will be a series of accurately constructed dioramas designed to evoke a journey from the high moors of the northern Peak District to the City of Derby, roughly following the course of the River Derwent. As the journey proceeds, the seasons will advance, so that the countryside of this remarkable area will be shown in all its moods. Throughout, the influence of the underlying geology on the make-up of the different habitats will be stressed. The tremendous, often destructive, impact of human activities on wildlife will also be an important theme.

Brown End Quarry Geological Nature Reserve, Waterhouses

Judy Small writes: Brown End Quarry is a Site of Special Scientific Interest between Stoke-on-Trent and Hartington that has been purchased by the Staffordshire Wildlife Trust with the help of donations from several organisations including the EMGS. The reserve exposes fossiliferous Dinantian (Lower Carboniferous) limestones and is open to visitors at all times. The removal of plants and geological specimens is illegal. In conjunction with the North Staffordshire Group of the Geologists' Association, the Trust has now produced a guide which is available for 50p from Staffordshire Wildlife Trust, Coots House, Sandon, Stafford ST18 0DN and from other Trust outlets.

Activities at the New Walk Museum, Leicester

Arthur Cruickshank writes: Considerable excitement followed the publication last July of a note in *Nature* by Cruickshank, Small and Taylor on the results of CAT-scanning of the nose of the "Barrow Kipper". The "Kipper" is a pliosaur from the early Hettangian (Lias) of Barrow-on-Soar which has graced the displays in the Leicestershire Museums Service and its predecessors since 1851. Our initial report produced telephone calls from the *New York Times* and the *Loughborough Echo* on the same day! Phil Small and I have now continued the scan back through the frontal region and by the time you read this we hope to have completed scanning the braincase. One object of the analysis is to determine the relationship of the teeth to the bone of the snout. We also hope to be able to reconstruct the route of the nerve strands into the nose region, and perhaps to try a reconstruction of the brain itself.

Mike Taylor and I are also busy describing and interpreting several pliosaur and plesiosaur specimens. Mike and others have also been in the thick of staging the highly successful "Dawn of the Dinosaurs" exhibition which ran at the Museum from 29 February to 26 April. This covered the first dinosaurs and their discovery and was accompanied by a season of special dinosaur-related events. Looking into the future, we hope to host a Palaeontological Association Review Seminar on Extinct Marine Reptiles at Leicester in February 1993; all welcome — no charge, except for coffee!

The Derbyshire RIGS Project

Pauline Jones writes: The RIGS scheme is a nationwide enterprise to establish a network of Regionally Important Geological/geomorphological Sites to complement the existing system of national Sites of Special Scientific Interest (SSSIs). To qualify for RIGS status a site should be deemed worthy of protection for its educational, research, historical or aesthetic value.

The Derbyshire RIGS project, set up in September 1991, also includes the area covered by the Peak District National Park. The project is based at Derbyshire College of Higher Education, where all geological records for Derbyshire are temporarily housed. The success of the scheme depends, in large part, on help offered by those with an interest in geology. Assistance may be given in a number of ways: by suggesting geological sites, by helping with their assessment, or, in the future, by helping with the practical management and interpretation of sites. As the project is still in its infancy there is much work to be done to establish a comprehensive database. Anyone who can help out or who would like further information should contact Mrs. P. M. Jones at the Department of Geology, Derbyshire College of Higher Education, Kedleston Road, Derby DE3 1GB.

Messengers from Paradise

Simon Knell writes: A major new gallery at the Scunthorpe Museum was opened by David Bellamy on 21 April. "Messengers from Paradise" is about vanishing wildlife, and uses state of the art technology to display some of the finest fossils in Britain, superb birds, crawl-in-burrows, a computer game, live satellite pictures, underwater reconstructions, a special effect that transforms the bones of an extinct reptile into the animal in the flesh . . .

New Guides

Anyone enthused by the recent successful Society excursion to the Malvern Hills will be especially interested to learn of some new field guides to the Lower Palaeozoic rocks of the Welsh Borderland. In particular the Geologists' Association, in conjunction with English Nature, have produced a new-format guide to a "Geology Teaching Trail" in the Onny Valley, Shropshire. This excursion covers some of the classic exposures in the type area for the Caradoc Series of the Ordovician System, and is tailored for A-level students, undergraduates, adult education students and amateur geologists (which should accommodate a reasonable slice of our membership!) After an introduction to the Ordovician geology of Shropshire and to the stratigraphy and fossils (mainly brachiopods and trilobites) of the type Caradoc area, the guide details an 8-stop, 1.75km trail through the Caradoc succession. The trail runs along the south side of the Onny River, incorporating exposures along the old railway line, and access for responsible geologists has been allowed by Major S. W. Minton Beddoes. The excursion terminates with a view of the classic Ordovician/Silurian unconformity section in a river cliff on the North Bank of

the Onny. The guide is illustrated by an outline map of the geology of South Shropshire, a more detailed map and geological cross-section of the trail itself, and a set of sketches of characteristic macrofossils. A few additional localities in the area are mentioned, and there is a brief note on the parallel section on the north side of the Onny valley, exposed intermittently in the A489 road-cut.

The Onny Valley guide is available for £2.50, post free, from the GA Office, Burlington House, Piccadilly, London W1V 9AG. However, we can negotiate a discount if we buy copies in bulk so if you are interested, inform any member of EMGS Council and we will place an appropriate order.

In a similar vein, members might like to know of a revised guide to the Mortimer Forest Geology Trail at Ludlow, Shropshire. This guide, published by the Forestry Commission in 1991, also provides an excursion through the stratigraphy of an international type area, in this case the Ludlow Series of the Silurian System. Thirteen localities are detailed, and there is an emphasis on fossils. This guide is available from the Forestry Commission, Whitcliffe, Ludlow, Shropshire SY6 6RE (Telephone: 0584 874542).

Sandstone Caves of Nottingham

Judith Rigby writes: Tony Waltham's article featured in this issue will soon be available as an attractive book for sale at local outlets. Should you require an extra copy(ies) or wish to sell copies for the Society contact me at my home address; 233 Mansfield Road, Redhill, Nottingham NG5 8LS. Telephone: 0602 267699.