



The
Black
Country
Geological
Society

NEWSLETTER NO. 95 OCTOBER 1992

Lecture meetings are held at the Saracens Head, Stone Street, Dudley, 7.30pm for 8 o'clock start

The Society does not provide personal accident cover for members or visitors on field trips. You are strongly advised to take out your own personal accident insurance to the level you feel appropriate. Schools and other bodies should arrange their own insurance as a matter of course.

FUTURE PROGRAMME

MONDAY 12TH OCTOBER

Lecture: "Blue John fluorspar" by Dr. Trevor Ford.

Fluorspar (calcium fluoride) is found widely in the Carboniferous Limestone areas of the Peak District of Derbyshire in association with veins of lead, but around Castleton the special variety, known as "Blue John" or "Derbyshire Spar" is found and here it used to be mined.

It has a deep blue or purple colour, or can be banded purple-and-white, and it has been prized as a semi-precious ornamental stone, from which vases and ornaments have been seen in Chatsworth House and other places in Derbyshire - so Blue John combines art and history with geological interest.

Dr. Trevor Ford, of Leicester University, has made a special study of Blue John and will describe its occurrence and its history. He is well known for his geological lectures, and addressed the Society some years ago on another of his specialities - precambrian fossils.

SUNDAY 18TH OCTOBER

Field meeting to Walsall, Hayhead limestone mines and quarry, and Barr Beacon.

Leader: Peter Whitehead, Head of Earth Sciences, Bluecoat Comprehensive School, Walsall.

Meet: 10.30am at Hayhead Nature Trail car park, Longwood Lane, Walsall (grid ref: 042986). This is about 2 miles ENE of the centre of Walsall. Longwood Lane is off the A454 road from Walsall to Aldridge.

This area of Walsall has much geological interest, as it has inliers of Silurian limestone - the Barr Limestone - and shale, as well as extensive Triassic deposits. Limestone has been mined and quarried in the area for centuries, and the Hayhead trail has been designed to show some of the best exposures.

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Barr Beacon, which forms a prominent feature of the scenery north of Birmingham, is in the Triassic, Sherwood Sandstone group. It has a large quarry face giving an extensive view of the strata.

PETER WHITEHEAD has been associated with this Society since its formation in 1975. He is very active in the field of geology teaching, and also runs Rocky Rex Enterprises, which produces geological teaching material for schools.

MONDAY 16TH NOVEMBER

Lecture: "Silurian geology from the Pentlands to Pembroke" by Dr. Derek Siviter, University Museum, Oxford.

For this year's theme of celebrating 150 years of Dudley geology, we could not finish the year without giving the Silurian system an important position in our programme. Dudley and its limestone exposures at Castle Hill, Wren's Nest and elsewhere, with their characteristic trilobites and other fossils, played a key role in Sir Roderick Murchison's understanding of the Silurian, culminating in the publication of his classic work "The Silurian System" in 1839.

This lecture by Dr. Siviter will range over the whole scene of Silurian geology in Britain, describing Silurian strata which are such an important factor in many of the most scenic areas of Britain.

DR. DEREK SIVITER came originally from the Black Country and so knows the area well. He is at Oxford University, in the geological department of University Museum.

SATURDAY/SUNDAY 28-29TH NOVEMBER. ROCK AND FOSSIL FAIR.

Held in Dudley Town Hall to celebrate 150 years of the Dudley Museum geological collection.

Opening hours: 10am - 5pm (both days).

Admission: Adults £1, children free.

Licensed bar and cafeteria service providing light meals adjacent to the Main Hall.

The Fair will be held in Dudley Town Hall. Most exhibitors will be in the Main Hall (35 stands) with additional demonstration stands in the Banqueting Suite. There will be stands and displays on geological themes from many public bodies, private companies and local and national societies.

Subsidiary events

In conjunction with the Fair, Dudley Museum's geological gallery will be opened after major refurbishment. There will also be a range of other events such as talks, tours, demonstrations and film shows over the weekend.

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The society has been asked to help with the staffing arrangements by acting as attendants and receptionists, as well as manning our own stand. SEE THE "CALL FOR VOLUNTEERS" IN THIS NEWSLETTER.

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MONDAY 7TH DECEMBER.

Lecture: "Lessons from the fossil record" by Dr. Alan Thomas of Birmingham University.

This lecture will describe not so much fossils themselves, but what fossils tell us about conditions at the time, and about the history and development of life throughout geological time. It will cover fossil preservation, including the preservation of soft-bodied fossils which is generating so much interest at the present time, and will outline the patterns of extinction and evolution as revealed by the study of fossils.

Alan Thomas is in the School of Earth Sciences at Birmingham University. He has made a special study of fossil preservation, and has worked on the remarkable soft-bodied fossils from the Burgess Shale in British Columbia, which are revealing a great deal about the development of the first primitive forms of life at the end of the Pre-Cambrian.

MONDAY 18TH JANUARY 1993.

Lecture on Reclamation of Black Country sites.

MONDAY 22ND FEBRUARY 1993. AGM followed by a talk "The Falkland Islands" by Sheila Pitts.

EDITORIAL

As a change from the problems of the present I've been searching for geologists in literature and found very few. William Barnes, the Dorset poet, was a geologist. Penelope Liveley's next novel is to feature a geologist. But the most interesting use of geology in literature that I have come across is Charles Smithson in John Fowles' 'French Lieutenant's Woman'. Forget Jeremy Irons and Meryl Streep! The book has a Darwinian theme and geological ideas and images permeate the novel. Charles Smithson (son of Charles Darwin and William Smith?) is a dilettante collector of echinoids, especially Micraster. As the book opens he is about to become fossilised in a conventional marriage, totally ruled by his restrictive Victorian environment. Smithson believes in the vertical progress of evolution, seeing himself as 'naturally selected', 'the fittest', at the pinnacle of evolutionary progress, being given free will by God and being able to control his actions and feelings. He learns during his life to understand more completely the implications of Darwin's theory and how ill-fitted he is for the rapidly changing nineteenth century. Ultimately he escapes from the controls of society to existentialist freedom. Is he, like us, en route to successful adaptation or to extinction?

REPORTS

"The Past is the Key to the Future", 1st June 1992. Colin Reid

Colin Reid gave an account of the history of Dudley's geological collections and the evolution of the borough's geological service.

The natural resources that were Dudley's fortune are depleted but promoting the story behind the legacy is the keystone of the borough's tourism strategy.

150 years ago, Sir Roderick Murchison gave his inaugural speech to the first Dudley and Midland Geological Society. Colin paraphrased Murchison's speech as "look folks this area is special. It has a varied geology which chronicles important chapters in the history of our planet. The palaeontology is superb and the wealth of natural resources has been the basis of the local economy. Let's build a museum that is a true monument to Dudley's unique place in British Geology."

In conjunction with the British Association visit to Dudley in 1839 a number of sizeable collections of local fossils were put on display at Dudley Grammar School. The geological society was born out of a desire to keep these collections together.

Two honorary curators were John Gray and Charles Twamley and Colin Reid had done much detective work to identify their contributions to the society and collection. In its prime, during the mid-1840's, Dudley's geological collection was regarded as one of the finest in the country. The first society came to a sudden and inexplicable end.

With the formation of the second Society in 1862, the original collection was unearthed and rehoused in a new museum in Wolverhampton Street. Fossil collections displayed included that of Henry Johnson (the founder of Johnson, Poole and Bloomer). Colin outlined details of some of the members and what he had discovered about their collections, notably Eliot Hollier, the Society's first secretary who, with others, carried out the first systematic recording of species, as well as serving as the town's mayor, chemist and fossil dealer. Such was the accuracy of Hollier's description of the site on Castle Hill for the largest local trilobite *Trimerus delphinocaphalus* that the Society has been able to go back to the exact bed in recent weeks and find the first *Trimerus* specimens in the Dudley limestone since 1862.

The Dudley collections were mostly sold, some to the Natural History Museum, some to Oxford, Nottingham and Birmingham University - or even to Australia. Only one complete collection, that of L.P. Capewell, was sold to the Dudley Society.

With the demise of the second Society in 1901, the collection passed into the trusteeship of Dudley Town Council. A new geological Museum was opened in 1912 in the present Art Gallery and a temporary curator was appointed, but he had little information about the fossils' locality, stratigraphy or donor.

The collection having been moved during the war, it was returned to the Art Gallery in the early 1950's when it was catalogued by Birmingham University students. Much of it languished in appalling conditions in the basement. In 1977 Graham Hickman spent a year checklisting the collection with the 1912 catalogue. The collection was later pillaged by fossil thieves.

Colin Reid was appointed in 1987 and with limited capital had to do his best to preserve the collection within the constrictions of space, atmospheric conditions and accessibility. Bill Foxall, on an employment training scheme, has done much to repair and restore specimens. The collection now numbers about 15,000 specimens and is growing rapidly, preserving in Murchison's words "whatever is most interesting in the geology of the Midland counties." Recently computers have been acquired and Dudley's I.T. division will produce a computer programme for documenting the collection.

In 1988 Dudley became the Geological Recording Centre for the Black Country. The planners now send a weekly print-out of all planning permission applications. Dudley has Ordnance Survey mapping information in digitised form and its Geological Information System is a highly effective way of protecting the borough's conservation areas.

All the site documentation records produced originally by the BCGS have now been computerised on the new database produced by BGS in conjunction with the National Scheme and the Museum will shortly acquire this database.

Colin Reid's post as Keeper of Geology also involves promoting Dudley's geological heritage as part of Dudley's tourism strategy.

Colin began with a school's activity week devoted to dinosaurs (despite the fact that the Museum had not a single dinosaur bone). The first Rock 'N Fossil Roadshow was held. The Roadshow attracted 1,000 people, the exhibition of children's dinosaur art work 3,000.

Exhibitions are regularly mounted. "From Moon to Mars" in 1989 looked at manned space exploration in 1969, 1989 and 2009. The exhibitions travel to other venues. "Moon to Mars" will be seen by 100,000 people. An exhibition called "Trolls and Treasures" is tentatively planned for 1995 and it is hoped it will be a joint production to reduce costs.

While promoting science for the layman, Colin also aims to retain high academic standards in terms of curatorial documentation and research. In

1989 the Murchison Symposium was persuaded to pay an evening trip to Dudley. All the known Dudley material which figured in Murchison's "The Silurian System" was on view together with a display of over 300 species of fossil from the Dudley limestone.

Colin assisted in the development of the evolution exhibit at Dudley Zoo. It was to recreate palaeo-environments experienced locally and the modern equivalents using zoo animals. Only the tropical forest environment of the Geochrom is complete and wholly successful.

Colin assisted in writing the text for the A.V. slide show in the Dark Caverns.

A new geological handbook and Trail Guide was produced for the Wren's Nest in 1990 by Alan Cutler, Peter Oliver and Colin Reid.

A new Geological Museum and Interpretation Centre is needed and a site at Bluebell Park was deemed most suitable. Plans were later modified to keep the collection and display at the Art Gallery but continue with the interpretive centre at Bluebell Park. The interpretive centre is planned as a visually exciting and highly interactive study centre designed particularly for schools and colleges. However Colin is still pressing for the Bluebell Park site to encompass a Geological Museum capable of housing temporary exhibitions, storage and conservation facilities. Such a site could be further developed by opening to the public the spectacular caverns under the east side of Wren's Nest with a re-opened canal tunnel link to the Singing Caverns and Black Country World. (This was the project included in Dudley's unsuccessful City Challenge bid. KMA).

Meanwhile the existing geological gallery is being refurbished with dioramas showing past environments and demonstrating how those environments becomes rock. The dioramas are modelled by Ian Hughes of Dudley Zoo and Alan Clarke, a model maker from Buxton. The rock faces take the form of field exposures and are created by the Foxall brothers. The new gallery will be opened in conjunction with the Rock and Fossil Fair in November.

Colin concluded that the future for geology in Dudley now looks very promising indeed. Three major conferences are holding field visits to Dudley in the next 15 months. A great deal is happening, spurred on by dynamic and talented individuals who feel passionately about this area's wonderful geological heritage. But the first two geological societies ceased to exist. Did they rely too heavily of too few people? We need everyone to take an active role and must encourage more young blood into our organisation.

Summary by Kate Ashcroft from a transcript
of the lecture by Colin Reid.

ITEMS IN BRIEF

1. Call for Volunteers - Dudley Rock & Fossil Fair

Society members and friends are asked to help with running the Fair as:-

* attendants	* receptionists
* cashiers	* manning the BCGS stand

Volunteers are needed for a half-day (9.30am - 1.30pm OR 1.30pm - 5.30pm) or a whole day (9.30am - 5.30pm) on Saturday and Sunday. The duties would not be onerous and would chiefly involve receiving visitors and showing them the way to go and where everything is.

Volunteers should contact: Paul Shilston, 'phone 021 459 3603.

2. Stock is required for sale on the B.C.G.S. stall at the Rock + Fossil Fair. If you have surplus rock and fossil specimens and other items which could be sold - please contact members of the committee.
3. An exhibition entitled "Dinosaur Mania" will be staged at the Dudley Art Gallery from 21st Nov - 6th February. It will be a sideways look at Dinosaurs in popular culture featuring memorabilia, interactive displays and dinosaur material from Canada, the USA and Britain. At the same time the new geological gallery will be opened. It is entitled "Time Trail".
4. The Midlands Branch of the Gemmological Association will be holding its fifth annual training day on Sunday 1st November, 1992 from 10am - 5pm at Birmingham's Cobden Hotel. Instruction in the techniques for testing gemstones is given to small groups by expert gemmologists. The cost is £18 per person, including coffee, buffet lunch, tea and biscuits. Places are limited and allocated in order of receipt of application. Cheques should be made payable to Gemmological Association (Midlands Branch) and a self addressed envelope enclosed. Applications to Mr S.P. Alabaster, FGA, Alabaster and Wilson, Legge Lane, Birmingham B1 3LD.
5. A leaflet has been received on the Tenterfields Local Nature Reserve sited in the grounds of the Primary school in Halesowen. It includes a geological SSSI, a road cutting with the best available exposure of Basal Sandstone member of the Halesowen Formation demonstrating the start of the temporary reintroduction of coal swamp conditions during the early Westphalian D. For further information contact Phil Lucas, the Headteacher, on 021 550 1566.
6. ROCKWATCH. Rockwatch is a new club for all fans of fossils, rocks and dinosaurs. Sponsored by British Gas, it's run by Watch, the national environmental club for young people, and the Geologist's Association. Rockwatch members will receive three mailings each year, plus exciting project details, news and activities. It costs £5 to join for one year or £12 for 3 years. (Rates also available for families and adults.) If you are already a Watch member, deduct £2 from the prices. For a joining form write to Rockwatch, The Green, Witham Park, Waterside South, Lincoln LN5 7JR.

The first issue of the magazine includes a practical survey for graveyards, dinosaur story competition, a series of excursions, instructions for making magma and a geology time chart. It sounds great fun! If we encourage membership the third Dudley geological society will have a secure future!

7. The publishers John Wiley and Sons of Chichester have assembled an announcement specifically for professionals working in Geology. They publish a range of books of specialist interests as well as technical journals.

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