

CHARNIA



**The newsletter of the Geology Section
(C) of the Leicester Literary &
Philosophical Society**

www.charnia.org.uk

May 2007

Charnia Editorial May 2007

From a distance it appears that little changes in the Section over time, but quietly and surreptitiously, it does. This year is a case in point, and for those of you who weren't at the AGM on March 28th, we sanctioned several key personnel changes in the Section's administration. The process actually began last year, when, without fanfare as usual, we acquired a new Field Secretary in Helen Jones. And this year we have a new Chairman, new Secretary and new Publicity Officer, to go with that Field Secretary. Now comes the bit you possibly haven't noticed – all of these posts are now held by women. This entirely welcome development created an unprecedented demographic for the administration of our venerable society, as far as I'm aware we have never had such a high representation of ladies, particularly in the most senior positions. And that's not all, we already have a lady Treasurer in Eileen Johnson, and Margaret East serves on the committee! Of the newcomers, Dr Joanne Norris, who takes over the Chair, is well-known to all of us, having already worked most effectively for the Section in the roles of Treasurer, Secretary and Vice-Chairman, and her accession to the Chair is a fitting reward for her hard work. We welcome Fiona Barnaby to the Secretary's position, and can expect her obvious capabilities and assurance to keep us moving forward. Kay Hawkins has 'come up through the ranks' from her beginnings as Student Representative to later serve on the committee, and we can be assured that the Publicity Officer's role is in good hands. I'm looking forward to committee meetings possibly more than usual, the changes are a shot in the arm that can only benefit the Section.

One other change in the Section's administration sees me at the helm of Charnia instead of Graham Stocks, and I cannot begin my tenure as Editor without paying tribute to Graham, who edited our newsletter since the early 90's, and was the longest serving of our officers. Graham is a very busy man these days, and his skills are fully utilised in his chairmanship of the local CPRE, but we will not forget the erudite and perceptive editorials that illuminated the countless editions of Charnia that Graham oversaw. I hope that he will not be lost to us, and will be persuaded to contribute articles to Charnia in the future.

It may occur to some of you that the winter programme of lectures appears by some magical process, familiar only to the initiated. In truth, the choice (the easy bit) and securing (the hard bit) of speakers generally these days devolves to the Chairman with the assistance of the Secretary and to a lesser extent, the committee. However, finding good speakers is not an easy task, and we positively welcome recommendations from the membership. If you

know of, or more pertinately, have listened to someone in the geological field who speaks well and has something interesting to say, we would be pleased to hear from you. Or you may feel that your pet aspect of earth science is being overlooked in the programme, if so, let us know.



The female 'powerbase' of the new administration. Fiona Barnaby, Margaret East, Joanne Norris, Kay Hawkins & Helen Jones. Inset: Eileen Johnson

It is not my intention to make Charnia the geological equivalent of Hot Rod News, but there are a few innovations I will introduce which hopefully will increase the newsletter's appeal. For a start, the newsletter has a better quality look and feel, achieved by engaging new printers. Also, I will use illustrations wherever possible to brighten the pages, most will come from my own collection, but if you have any good shots of Section activities you'd like to see in print, let me know. Another new feature will be a letters page, column, or, paragraph, depending on how many of you have something to say. Please feel free to mail me, preferably via e-mail (however, there is still a letter box in my front door), on any topic pertinent to the Section or geology in general, but please keep your letters to the point and brief. Another is a series of articles on prominent members, and in this issue I could do no better than start with Dr Trevor Ford, without question

the doyen of the Section, and a geologist of considerable stature. Trevor's story is a fascinating one, I hope you enjoy it!

Andrew Swift

Field Excursion Programme 2007

- May 12th** Churches & their building stones in NE Leics & S Notts
Leader: Dr Albert Horton (Old Dalby, Melton Mowbray)
- June 9th** Building stones of Northamptonshire
Leader: Dr Diana Sutherland (Mears Ashby, Northampton)
- June 22nd – 24th** Weekend excursion to north Norfolk, based in Cromer
Leader: Martin Warren (Norfolk Museums Service)
- July 12th (evening)** Cloud Hill Quarry, Breedon
Leader: Dr Keith Ambrose (British Geological Survey)
- August 10th (Friday)** Cauldon Low Quarry, near Waterhouses, Derbys
Leader: TBC
- September 15th** Mancetter Qry, Nuneaton (joint trip with Warwickshire Geological Conservation Group)
Leader: Alan Cooke
- October 13th** British Geological Survey collections, also 3-D holographic study facility
Leader: Dr Mike Howe (British Geological Survey)

For details of meeting points, timings etc, please contact Field Secretary Helen Jones (0116 2392872, helenjonesx@hotmail.com). For information about the weekend excursion, please contact Andrew Swift (0116 2833127).

Subscriptions

A subscription renewal/membership details form is enclosed with this Charnia. Although subscriptions aren't due until 1st October 2007 it is always a great help to us if members can renew on time, therefore, please can I ask you to complete the enclosed form and send to me as soon as

rounded the year off with a very enjoyable cheese and wine evening at New Walk Museum.

After the Christmas break, we heard about recent work on Leicestershire's geological sites from Graham Walley of the County Council. This year's Member's Evening was well supported, with contributions from Trevor Ford, Andrew Swift, John Dickinson and Bruce Smith. Ian Smalley of the University's Geography Department told us of his latest observations on loess deposits in Serbia, and Mick Cooper of Nottingham Museums recounted the story of the restoration of the historic mineral collection of Chatsworth House. Finally David Unwin, a recent arrival at the University's Museum Studies Department, infected us with his passion for pterosaurs. The Winter Programme came to a close with the AGM, and the Chairman's Address, in which I went on a lightning tour of the palaeontology of our area.

This year's Parent Body Lecture was an outstanding event. We secured the services of Norman McLeod, Keeper of Palaeontology at the Natural History Museum, who put forward his theories on the significance of mass extinctions. We decided to mark the 50th anniversary of the discovery of *Charnia* (the fossil) by making it and the Precambrian biota of Charnwood Forest the subject of this year's Saturday Seminar in March. In partnership with the University's Department of Geology we obtained funding from the "Local Heroes" initiative run by the Geological Society and Geological Association. This helped to bring over some keynote speakers from overseas, and our local experts were also on hand to recount the tales of palaeontological discovery. The meeting was also sponsored by Aggregate Industries and the BGS, and the Museum hosted a civic reception after the seminar to round off the day in style. The final happening of the Section's year was the publication of the new edition of the "Building Stones of Leicester" by the East Midlands Geological Society, in association with ourselves. Members Albert Horton and Diana Sutherland have updated "Mac" Whitaker's original text, and details of how to obtain the booklet, at a discounted price, can be found in this edition of *Charnia*.

Finally I would like to thank all who have served on the Committee this year. Although too many to mention, I would like to single out two in particular. Once again Joanne Norris did an outstanding job as both Vice Chairman and temporary Secretary, and I'm sure she will continue in this manner as she takes over the Chairmanship. Graham Stocks stood down as 'Charnia' editor after many years. On behalf of the Section I would like to thank Graham for all his hard work over the years. His well-crafted

editorials were always entertaining and enlightening, and we hope that he will continue to be a regular contributor in the future.

**The Devonshire Mineral Collection of Chatsworth House, Derbyshire:
an 18th century survivor and its restoration (abstract of talk given on
Wednesday 28th February 2007)**

Michael P. Cooper (Nottingham Museums)

Assembled nearly 200 years ago, the mineral collection of one of English Society's most remarkable women has recently been reassembled and painstakingly restored to its original order. The collection, including additions made by her son, contains an impressive variety of classic 18th and 19th-century specimens, many of which carry fascinating stories now being revealed through historical research.

In 1992 the Russell Society celebrated its 20th anniversary. Since its creation from the mineralogical night classes of Bob King and Roger Harker, the society, named after that doyen of British mineral collectors Sir Arthur Russell (1878-1964), had risen to become the premier British society for the mineralogical amateur. The original Leicester-based society had spawned several semi-autonomous regional branches, each of which in turn would host the Annual General Meeting and Dinner weekend. On the 20th such occasion it was felt proper that the weekend be sponsored by the original Central Branch, and plans were made to keep the delegates happy. It is traditional for the host branch to arrange field trips to fruitful collecting sites but, these being few and far between in central England, and the majority of local members being well acquainted with those within easy distance, a novelty was sought that would stimulate wider interest. The weekend's theme being "Collecting Minerals," a visit to a local collection was in order, and visiting the mineral collection of the Duke of Devonshire at Chatsworth House was suggested by Franz Werner. No committee member had seen it, nor knew of its scope, but rumour had it that the collection was both extensive and historic. Past Dukes of Devonshire were well known as mine owners and supporters of the local mining and lapidary industries, and the present Duke was known to have purchased minerals at Sothebys auctions in the 1970's.

Overtures were made to Chatsworth House and a positive, though guarded, response was quick to return. The speaker and society members Philip Jackson and Roy Starkey were sent to reconnoitre the collection and discuss the logistics of a mass visit. Phil arrived first; when we joined him

he was holding a large prism of Russian aquamarine which he had just removed from a cardboard box of specimens, and he was looking, frankly, rather shell-shocked. We began opening a few more boxes. We were all astonished by what we found: first, another superb old-time Russian aquamarine crystal about 15 cm long, then a series of old Cornish specimens. A suite of superb Derbyshire galenas was to follow, along with many other local and foreign classics among a mass of rocks and ore samples. But our excitement was tempered with regret, as this was far from an organized collection. Specimens were stored in a basement cupboard in piles of cardboard boxes, others were jumbled in two late-18th-century glass-fronted cabinets on the floor above, and hundreds more filled a row of wall cases running the length of a nearby corridor (the "Cavendish Passage"). Decay and dilapidation were everywhere apparent. Dust and dirt and the ravages of pyrite disease had taken their toll; the bottoms of boxes were found (too late) to be home to loose number labels which could no longer be even tentatively assigned to the specimens from which they had fallen. Some pieces had labels held to them with perished rubber bands, notable mostly for their inaccuracy: one water-rolled galena pebble (probably from a Derbyshire cave deposit) was labelled "matlockite". Specimens crumbled between our fingers, and brittle labels fell away as specimens were lifted from their yellowed newspaper wrapping.

Here was a fascinating and historic collection on the verge of extinction. Among Chatsworth's wonderful heritage a few rocks, no matter how exciting to us, are small, and rather specialist, beer. One can hardly regard their lowly treatment as a failure of intent; it's a matter of priorities. And yet despite the collection's condition there was a feeling that it was somehow nearly all here, that little had actually been lost. Within the great house of Chatsworth little is thrown away unremarked, items may fade from view or pass from the memory of owners and staff, but somewhere they await eventual rediscovery. In a centuries-old house containing 175 rooms, 21 kitchens, 17 staircases and an infinity of nooks and crannies, there is plenty of space for a few rocks to hide.

The original catalogues of the collection, long unseen, had been rediscovered some years previously in an old box in the Estate Office and were produced for our inspection. The author's name sprang from the title pages of these two volumes and an accompanying manuscript book inscribed Catalogue of the External Characters of Fossils. By White Watson F.L.S. Bakewell, Derbyshire. 1798. Watson was a pioneer of local geology, and a gifted lapidary; he was one of the most interesting figures in late 18th century Derbyshire geology. We were quickly able to match numbered

specimens to entries in these 200-year-old handwritten volumes. Our excitement was palpable, and the receptive interest of Chatsworth staff in our enthusiasm was reassuring.

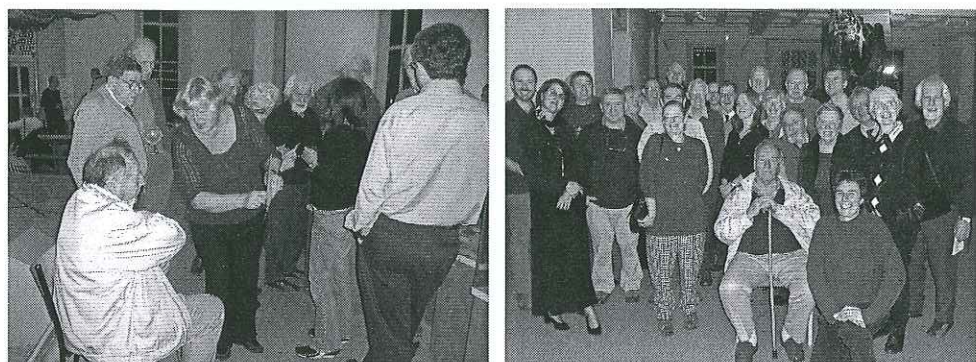


Mick Cooper addresses the Section C audience on February 28th

On subsequent visits, specimens were selected and cleaned for display to the membership. On the day of the "field trip" in April, a large table in a small basement library was covered with interesting and spectacular specimens: Derbyshire galena and fluorite, Watson's inlaid "tablets," French axinite and prehnite, Russian gem crystals and copper minerals. For the occasion the "Duke's Emerald" a huge Brazilian crystal, once the largest known, and two amazing silver specimens in small glass cases were produced from the strongroom. Eyes popped. These last priceless pieces were new to us all. The AGM weekend and visit to Chatsworth House was a great success. The table of specimens glittered temptingly and everyone found something to interest them; even luminaries such as Bob Symes of the British Museum (Natural History), French collector Eric Asselborn, and gemmologist Bob Howie were impressed. After the event, the specimens were left on the table for the Duke and Duchess to see, since no one in modern Chatsworth had seen these things cleaned and laid out like this.

It was with deep concern that we went home that day. Having seen what was to hand, having noted the precarious state of the labelling and the decay, and now having drawn the attention of fingers untutored in the handling of delicate minerals to such a range of historically important material, we were worried it would not last much longer without intervention. A need to ensure the preservation of the collection began to be generally felt. Over the next weeks a plan of action was drawn up and a proposal made to Chatsworth to inventory the collection, store it properly and restore it as far as possible to its original arrangement. Well, to cut the story short, the Chatsworth curatorial staff were supportive, the Duke and Duchess enthusiastic, and work began. At the time we had no idea that we would still be doing it 10 years later, or that the discovery of so many fascinating stories was in store for us.

Christmas Meeting, December 13th 2006



L) Margaret East requests enlightenment from the oracle. R) The partygoers: L to R: Mark Evans, Helen Jones, Dennis Gamble, Paul Monk, Margaret East, Albert Horton, Andrew Swift (rear), Robin Mackenzie (middle), Sylvia Gibson (front), Ron Johnson, Alan Dearden, John Dickinson, Kay Hawkins, Derek Sharpe, Eileen Johnson, Alex Stanford (rear), John Ingall (front), Dorothy Sowerby, Graham Cheesman, Dave Brackenbury, Ann Dickinson, Joe Sowerby, Trevor Ford (seated) and Joanne Norris (kneeling)

Our long-running Christmas meeting provided another excellent evening's fun and socialising in the midst of winter, and as ever was a most pleasant change from the routine of formal lectures. The venue of the Dinosaur Gallery at New Walk Museum couldn't be better, and this is the only occasion in our calendar when we meet in that fine geological environment. There are no restrictions or ceremony at our 'party' and the only regret is that more people don't attend it, especially as the venue is so attractive. For

a change this year we had a cheese and wine theme to the comestibles, and that was very popular, although of course a few other tasty treats found their way onto the table. I provided my by now annual review of the Section's year in photographs as a data presentation, and that demonstrated just what a vibrant society we are, and how proud we can be of our programmes, right up there amongst the best in the country.

It wasn't intended to inflict a quiz onto the guests this year, but somehow a single page containing a picture quiz was produced and provided some laughs as the whole group collaborated on the answers! Inevitable, as everyone had to cluster around the sole sheet. Trevor Ford proved that his knowledge isn't confined to the geological world, by airily dashing off the answers in no time and amazing everyone.

Come along to this year's Christmas Meeting – you don't know what you are missing!

Member's Evening January 31st 2007



Two photos from the Member's Evening, held in the excellent venue of the Lord Mayor's Room at New Walk Museum

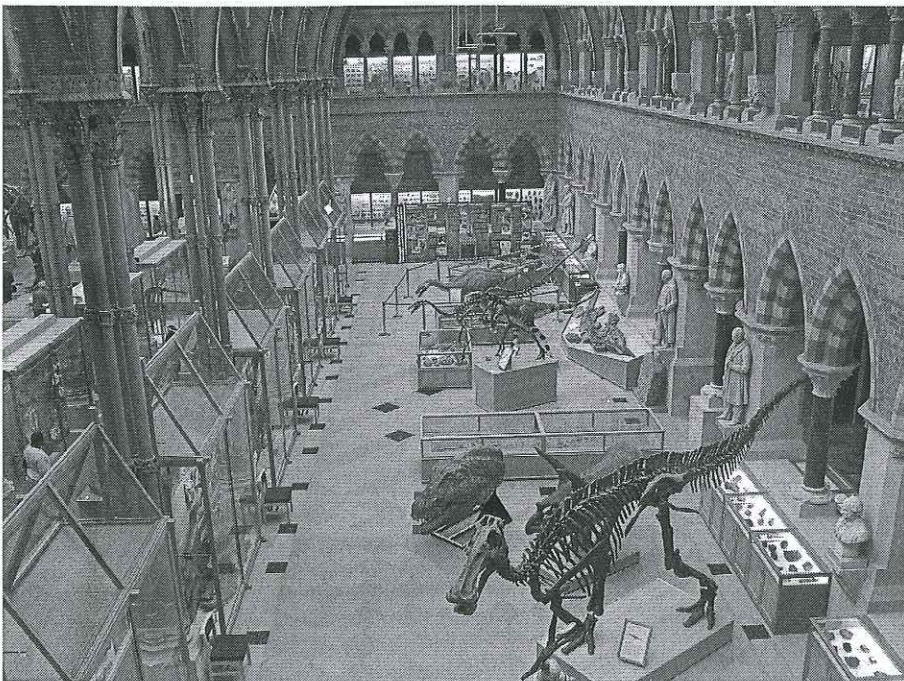
The Member's Evening has quietly but surely grown in popularity over the last few years until it now stands as one of the highlights of the winter programme. It is unique in our calendar in that it is the only meeting at which the members provide the themes and talks, backed up by displays of specimens. An old name for this type of Section meeting was 'Conversazione', an excellent title that I would like to announce a one-man campaign to restore (actually, not quite a one man show, several members have told me that they like the old name too). One of the main reasons for the popularity of the meeting is that we hold it in the New Walk Museum, and that allows us to enjoy the ambience of that fine building. Even better



The Leicester building stones party on June 7th 2006 pause to study the granite surround of the Town Hall Sqare fountain



Andrew Swift, Dennis Gamble, Mark Evans, Norman McLeod (speaker) and Dick Aldridge before the Parent Body lecture on January 29th 2007



One of the magnificent aisles at the OUMNH, visited on October 21st 2006



Professor McLeod fields questions from the audience

this year, we held it in the newly refurbished Lord Mayor's Room, a super venue.

The four mini talks from members were of high quality and were well received. First up was Trevor Ford, who never fails to give us a little something from his catalogue of interests on the occasion of the Member's Evening. His theme could probably be summed up as, 'where does all the water go around Brassington?'. I gave the audience an insight into some of the lesser known locations for studying the Penarth Group (Rhaetian) in this country, and John Dickinson followed to expound on his favourite preserved mine in Cornwall, the Levant. Finally we had a real treat when Bruce Smith showed us his very superior holiday snaps of what can only be called an expedition to Antarctica, backed up by an assured and illuminating commentary.

On display for the evening was a terrific display of fossils with a coral theme from Dennis Gamble and Paul Monk brought along a fine show of minerals for us to examine.

Meet the Membership

Number 1: Dr Trevor Ford OBE

I'm sure that few people will quibble if I begin this series of pen-portraits of prominent and long standing members with Trevor Ford, who has been a member since 1952, a mere 55 years. As far as I am aware, that is the longest stint of any of us, even our President Bob King. And not for Trevor a quiet non-contributory membership, he has served for countless years on the committee, holding both Chairman's and Secretary's roles, and presently is our Honorary Life Vice-President. He very rarely misses a committee meeting, or lecture, or indeed any other Section event, even at 82, although he will agree that the rigours of the field programme are now beyond him. Geology has been his life, and he has risen to become one of the doyens of our science, much respected throughout the geological world. A full resume of Trevor's career in academic and recreational geology is clearly beyond the scope of our little newsletter, so I'll confine myself to some highlights.

Trevor David Ford was born on April 19th 1925 at Westcliff-on-Sea, Essex, but stayed in that town for only six months. At that point his father's job as an advertising sales representative for various magazines took him to Sheffield, and it is that city, along with Leicester, that bears most association with Trevor. He did all his schooling there until the time came to choose a career. However, it must be remembered that during the critical years of

decision from age 14 to 20, there was the little matter of a war going on. From leaving school until his call-up in 1944 Trevor worked in a bank in Sheffield as a 'temporary, almost unpaid bank clerk', but always knew that his future didn't lie in the world of finance. He also served in his local Home Guard. But before he could consider moving on, he was called-up, initially to the Royal Air Force in Scarborough, then transferred to the Navy, but colour-blindness rapidly convinced the authorities that perhaps active service was inadvisable. However, there is always a place for everyone in the services, and Trevor eventually ended up in the catering stores. When the war ended he told his parents that he wasn't going to return to the bank, it was time to make a career in something that interested him. His mind turned back to around the time that war broke out when he used to cycle with a friend to Speedwell Cavern at Castleton. His friend's father was a partner in the Cavern and ran boating trips through the caverns, and somehow Trevor ended up as one of the guides. He attributes his stentorian voice to the need to bellow information at the tourists as they passed through this echoing underworld. And it was at that time that his first interest in geology was kindled, and also a lifelong love of caves and caving. So when the time came to choose his future – it would be a geologists life for Trevor.

He applied to Sheffield University to read Geology in 1946 when he was discharged from the forces, was interviewed by Fred Shotton and taken on. But before he could begin his degree (in a class of three Geology honours students!), he had to take the exam known as 'mature matriculation', because he never took his High School Certificate exams at school. But with that successfully negotiated Trevor began his geological career in October 1947, supported by an ex-serviceman's grant of £180 a year. It also helped that he was able to live at home during his degree. Fred Shotton was one of Trevor's lecturers until his move to Birmingham, but a more noteworthy meeting was with a young lecturer fresh out of the Royal Navy, one Peter Sylvester-Bradley. Later, they were to spend their academic lives together at Leicester. 'PS-B' taught him palaeontology, and Trevor admits that when in due course he began his lecturer's career at Leicester, he largely re-used his mentors notes verbatim!

Towards the end of his degree, Trevor began looking around for jobs and applied to join the Anglo-Iranian Oil Company, the forerunners of BP. But in the meantime he was offered a DSIR grant to continue at Sheffield to do a PhD, so never took up the position, which was just as well, because six months later, all British geologists were unceremoniously thrown out of Iran! When Professor Shotton left Sheffield at the end of Trevor's second year, his place was taken by Lesley Moore, who had strong interests in the

Coal Measures. Thus it was that in 1950 Trevor was steered towards doing his PhD in that research area, and the end result was 'The Upper Carboniferous Rocks of the Ingleton and Stainmore coalfields', completed in two and a half years. The latter stages were completed at Leicester after Trevor had taken up a position there in 1952. He was awarded his doctorate in summer 1953.



Trevor Ford pictured at home during the interview

Trevor's appointment in September 1952 signalled the first stirrings of the expansion in geology teaching at Leicester, which culminated in the establishment of an independent Geology Department in 1954. Prior to Trevor's appointment, 'Mac' Whittaker had been the sole lecturer in geology, but an increasing number of students requiring tuition in geology resulted in another position being sanctioned, and Trevor successfully applied. He tells me that at one point he and Mac literally spun a coin for who was to teach what when the very first honours geology student registered! The story of the growth of the Geology Department from these early days can be found in the Geology Department student magazine 'Petros' for 2003, told in Trevor's own inimitable style, and I refer interested readers to that source. However, a few highlights from Trevor's

long career at Leicester (he retired in 1987) should be recorded. First has to be the discovery of the Charnwood Precambrian fossils in 1957, an incredible breakthrough, and Trevor was the first person to report them in 1958. I have told the story of the discovery of Charnia, and Trevor's role in it, in the Autumn 2002 Charnia. He has maintained an interest through until today and naturally appeared on the programme of the Charnia Saturday Seminar on March 10th 2007. His interest in these fossils led to a trip to the US in 1965, following the University's decision in 1964 to introduce study leave for academics with at least six years service. For these trips, normal pay was maintained but the recipient had to find their own expenses. Dan Merriam from the University of Kansas, then a guest in the Leicester Department, arranged for Trevor to spend the summer term of 1965 in his home department. Trevor proposed to use Kansas's central position as a base to explore the then-known Precambrian fossil localities in North America. During that stay he got the chance to see the Grand Canyon and, during a visit a few months later, to investigate a locality with alleged Precambrian brachiopods, reported by Walcott in the 1880's, which turned out to be giant acritarchs. Trevor returned to Flagstaff in 1969, and supported the stay by teaching a summer course at Northern Arizona University. Surplus monies from that trip permitted Trevor and his family to enjoy 'the long route home' and visits to New Zealand, Hawaii, Fiji and also Australia, which allowed Trevor to visit the Ediacaran localities. His guide to those localities forever imprinted the experience on Trevor's memory by driving the biggest wreck in Adelaide, a car so far gone that Trevor had to change gear from the passenger seat! On the way back from the visit, Trevor persuaded his host she was tired, so that he could take over at the wheel, and by doing so probably made it possible for us to enjoy his company today. Trevor described her as 'the world's worst driver, in the world's worst car'.

Another strong memory goes back to the very early days of geology teaching at Leicester when there were only 6 students. It was 1953 and the very first field excursion, and not people to do things by halves, Mac and Trevor chose to visit the NW Highlands - in two very delapidated cars. They had reached John O'Groats, it was Sunday morning, and inevitably one of the cars developed a puncture. That was bad, but then another was discovered. Two punctures at the quietest time of the whole week in one of the quietest towns in Scotland - and nothing open. Despair was creeping in when the miracle occurred and around the corner from out of nowhere came an AA man! Their luck was certainly in that day.

One last story worth recounting, is that of the somewhat deranged woman who bombarded Trevor (and Mac) with screeds of automatic writing and

other general gobbledegook. She was the sister of a lady who attended adult education classes taken by Trevor, and this sister conveyed everything back to her disturbed sibling, who then cottoned on to Trevor and Mac and developed what can only be described as a fixation. From nowhere she got the notion that 'they' were trying to drive Mac and Trevor in different directions, and she began a campaign of letter writing to everyone from the vice-chancellor to the minister of education, saying (presumably in gobbledegook) how strongly she disapproved! This highly strange state of affairs was only terminated by the departure of said lady to the east coast, to huge sighs of relief from Trevor and Mac.

Trevor Ford has a body of published work that must be the envy of any working scientist. Unlike many other researchers, Trevor makes a point of publishing his findings, and that policy has to date realised 410 (Trevor's own figure) publications. That includes everything from books to papers, guides, edited works, bibliographies, reviews, popular articles, etc. His first publication, in 1950, was a short note in the Sheffield University Gazette about a caving discovery, the first significant work a synopsis of his thesis which came out in the QJGS in 1954. Picking out highlights is impossible but the body of work relating to his beloved Derbyshire and the book *The Geology of the East Midlands*, which came out in 1968, cannot be overlooked. Even today the latter stands as one of the main sources of reference for East Midlands geology. Trevor remembers his involvement as editor as coming from an unwise intercession during a staff meeting when he enquired who would continue editing the incomplete publication when its chief editor, Peter Sylvester-Bradley, went off on study leave. 'Well, here you are, you do it', came the reply! A fitting reward for a life dedicated to the dissemination of geology and cave science, both academically and popularly, came with Trevor's award of the OBE a few years ago.

Trevor spoke widely to me about many other things, about his admiration for the management of Section C and its renaissance of the last 10 years or so, his love of caves and the vast input he has made to publications relating to that subject, the posts he has occupied in various societies and groups, including President of the EMGS, his many editorial roles over the years including a long stint of 18 years or so editing the *Lit & Phil's* own *Transactions*, during which time he revived that ailing publication. You will be aware, then, that this article might very easily be much longer, but perhaps the best advice that I can give anyone who wants to know more, is to speak to the great man himself.

Andrew Swift

Leicester's fossil celebrity: *Charnia* and the evolution of early life

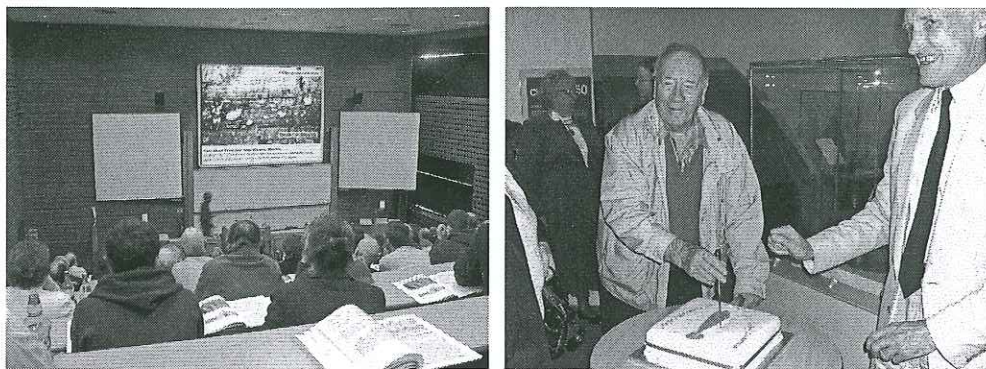
David Jones (Leicester)

Fifty years ago, the first Ediacarans to be identified as the macroscopic remains of Precambrian life were discovered in a quarry in Leicestershire. This year's Section C Saturday Seminar celebrated the anniversary of this historic discovery with a day of talks revolving around "Leicester's fossil celebrity: *Charnia* and the evolution of early life". Some one hundred and twenty people attended the symposium on March 10th in the Leicester Geology Department Building, and we were treated to presentations from a veritable who's who of Ediacaran workers from around the world.

Proceedings got underway with **Roger Mason** (China University of Earth Sciences), who related the tale of his schoolboy discovery of the first British Ediacaran fossil. **Trevor Ford** (University of Leicester) then picked up the story with his coining of the genus *Charnia* for this discovery. Trevor's recognition of the Leicestershire fossils as a Precambrian biota catalysed Australian workers to re-interpret their specimens, and Ediacaran science was born. **Helen Boynton** (Leicester) then reviewed Leicestershire's burgeoning number of Ediacaran localities and taxa: her gallery of recent discoveries around the county suggests there is great potential for further finds in the area. **John Carney** and **Steve Noble** (British Geological Survey) discussed the broader context of the Charnwood fossils in space and time. John argued that the marine surroundings of the volcanic island of Montserrat offered a good analogue for the Charnwood environment. Steve then outlined the latest dating evidence for the Charnwood specimens. **Dan Condon** (NERC Isotope Geoscience Laboratories) moved the focus outward to global correlation of the various Ediacaran biotas; an area in which considerable progress is currently being made. **Nick Butterfield** (University of Cambridge) contrasted Ediacaran ecosystems to those of the Phanerozoic and the remainder of the Precambrian, with the Ediacarans representing (in ecological, if not phylogenetic, terms) a precursor of later animal communities.

The afternoon session began with **James Gehling** (South Australian Museum) who showed us some of the spectacular recent finds of three-dimensionally preserved Ediacarans from the Flinders Range. James also espoused the virtues of geotourism, something to be embraced as a matter of urgency and necessity to preserve Ediacaran and other fossil sites from destruction (a danger only too well understood by those trying to protect the

Leicestershire fossils). Thousands more three-dimensional Ediacaran fossils, this time from Newfoundland, awaited us in **Guy Narbonne's** (Queen's University, Canada) talk; their high-resolution preservation has permitted robust conclusions to be drawn regarding Ediacaran ecology and ontogeny. **Dima Grahzdankin** (University College Dublin) unified the various Ediacaran biotas within one framework, suggesting that the Ediacarans formed ecosystems of cosmopolitan yet ecologically specialised organisms. The final talk of the day, co-presented by Professor **Martin Brasier** and **Jonathon Antcliffe** (University of Oxford), brought discussion back to the Charnwood fossils: their laser scanning of the fossils allows detailed examination of morphology under controlled conditions; a technique that doubles as a means of conservation.



Saturday Seminar 10.3.07. a) The large audience listening to a talk. b) Trevor Ford and Roger Mason prepare to cut the 'Charnia Cake' at New Walk Museum

There followed a lively open floor discussion, which demonstrated both the vibrancy of Ediacaran research and the value of the Saturday Seminar in the public communication of genuine scientific debate. Mark Purnell closed the symposium, justifiably thanking the speakers for a day of excellent talks. Finally, the action moved to New Walk Museum and Art Gallery, with a reception sponsored by the BGS to open the new "Charni@ 50" Exhibition, celebrating Leicestershire's iconic fossils. The symposium clearly demonstrated how far Ediacaran research has advanced and although this has been driven by spectacular new finds from Australia, Canada and Russia, the Leicestershire fossils continue to provide new insights, highlighting their international importance and their status as an invaluable part of Britain's, and Leicestershire's, geological heritage.

An account of the discovery of *Charnia*

Tina Negus (Grantham)

I was born and grew up in Grantham, Lincolnshire, on Liassic sandstones and clays. I developed an interest in fossils, arising from illicit play in an abandoned pit in Upper Liassic blue clays, where ammonites and belemnites were common. This interest was furthered by the building of houses on land adjacent to ours, with subsequent trenches for foundations, and later by the construction of a by-pass around the town, cutting through undisturbed layers and exposing many fossils. Holidays in the Peak District and Kent encouraged further exploration of sedimentary deposits.

During my teenage years, I came across a monograph on Charnwood Forest geology in my local library (I now presume this was the work of W.W.Watts). We had often visited Charnwood, and many of the places mentioned were familiar to me. I copied out most of the maps from the book, and badgered my long-suffering parents for a visit as soon as possible. Actually, my mother, who hailed from South Derbyshire, and had visited Charnwood herself many times, had a fondness for the area, and needed little persuasion: picking bilberries was the ostensible reason. It must have been in June or early July in 1956, for the bilberries were not yet ripe, but I selected a few places I wished to see for geological interest.

We parked at Pocket Gate Lane and found the way to the North Quarry. I knew from my reading that the deposits here were of bedded volcanic ash, laid down underwater – a new concept to me. At that time the quarry was little visited, the footpath not much more than a sheep-trod. I cannot now remember if climbers were at the rocks, but somehow I did know that they were used for climbing.

The beds were steeply inclined, too steep to attempt a climb without ropes, the layers of deposition clearly visible in steps and over-hangs. The rock was hard, slightly textured and dark grey, perhaps with a greenish or bluish tinge. At the base I stood fingering the surface, and discovered just about head height.....a fossil! I had no doubts at all that it was indeed a fossil, but was very puzzled for all the books I had seen, defined the Precambrian as the period before life began. I thought it was a fern, certainly some sort of frond, but did notice that the "leaflets" had no central rib, and that the cross-striped appearance of the "leaves" extended into the "stalk". I was aware of other smaller pieces of similar fossil higher on the slab, but did not notice the circular "holdfasts" which I now know are there, and which probably gave rise to the quarry-men's name of "Ring Quarry". It is inconceivable

that the fossil had been unnoticed till I saw it: perhaps it has been “found” many times in the past, but not reported at the time.

At school the following day, I approached my Geography teacher, for I thought Geography the closest to Geology I could get. I told her I had found a fossil in Precambrian rocks at Charnwood Forest. She replied, “**There are no fossils in Precambrian rocks!**” I said I knew this, but it was because of this “fact” that I was interested and perplexed. She did not pause in her stride, nor look at me, but said “**Then they are NOT Precambrian rocks**”. I assured her that they were, and she repeated the initial statement that Precambrian rocks contain no fossils – a truly circular argument, and a mind not open to anything new. I gave up, but asked my parents if we could go back there.

This time I went equipped with my father’s coal-hammer, which I now realise was a heinous crime! At the time, it seemed the logical thing to do. I had no idea that this “fern” was something new; I simply wanted a name and an explanation. I did have the sense to avoid hammering anywhere near the frond, and realized straight away that it was an impossible task – the hammer bounced leaving no impression on the rock. When I later saw the damage made by hammering, I was relieved that my memory was correct, and that it was not me that had done the damage noted later. My grandfather always carried a notebook and pencil, so I begged two sheets of his paper and made a rubbing of the frond (just as I now know Roger Mason did!). I thought that eventually I would find out what this strange thing was and why it was here.

I visited our local little museum, which was of course useless, except for ammonites and skeletons of ichthyosaur and plesiosaur, and continued to look at every geological book I could find. Nothing was any use: I put the rubbing away into my fossil drawer. The following year (the latter part of 1957), another trip to Charnwood was proposed together with a visit to “Tina’s fossil”. When we stood at the foot of the quarry, I was dismayed to find it was not there! My mother suggested we had come to the wrong “heap of rocks” or that I had forgotten its exact location. I knew that we were in the correct place and searching the slabs found drilling holes and evidence of removal of a large piece of rock! Somebody had taken my fossil! I presumed somebody had it now in their collection, but was aware that it must have been removed with professional knowledge and equipment.

Whilst I was in the sixth form, a new Geography teacher came into the school who had studied Geology at Durham. She was young and enthusiastic: I approached her with the idea of taking an O or A level in Geology, which she welcomed. However, a few days later she told me she

had asked the head, who had utterly vetoed the idea. I did not think to tell her about my fossil, possibly being too dispirited.

Later (1961) I read Zoology, Botany and Geography at Reading University, eventually specialising in Zoology and with two years post-graduate research into the ecology of freshwater mussels. A trip was organised to the Natural History Museum and the Geological Museum in London, and I thought that here I would find my answer. I worked my way backwards through the display cases of fossils Silurian, Ordovician, Cambrian.....Precambrian, to find NOTHING! Now I was utterly astounded. I wrote home for my rubbing, and at last had the idea of finding somebody in the Geology Department at the University to help me. Diffidently, I presented my evidence. I was given a funny look, but a paper was found for me describing the frond, which had “recently” been written. This was a copy of the paper by Dr Trevor Ford: they had only one copy so were not prepared to part with it. I learnt that the discoverer had been a Leicester schoolboy, in 1957 (around April 19th, I now know) and that the frond was named *Charnia masoni* after him. The fossil was in a museum in Leicester, and had been removed to prevent damage in September 1957. I had mixed feelings about this news: a sense of grievance that he had been believed while I had not, but also one of relief that I was correct, and that the fossil was in proper hands.

The rubbing was put inside a folder of geological sections, which had been drawn as part of my Geography course, but unfortunately disappeared when I lent the folder to a friend who was subsequently ill, and never returned it. The story lay dormant, revived when the Blue Peter children’s TV programme visited Bradgate Park and showed “my fossil”. This must have been in the late 1970’s. They showed the quarry, but called it Bradgate, perhaps to preserve the secrecy of the site. I found that other fossils had been found in Bradgate Park itself.

When I began writing poetry, I thought to set down this story in verse form, and completed “The Fossil” in June 1997. I felt it went some way to settling the events in my mind. I remember at some point hearing of further discoveries in Canada and in Australia, but nothing further happened until Alan Titchmarsh presented his “History of Britain” on BBC television in 2004. Suddenly the cameras were in Charnwood Forest, and I could hardly sit still when they zoomed into the well-remembered quarry, and I was pointing and shouting, “There! It was just there!” And at the foot of the rocks was Titch, with.....Roger Mason! Roger told the story of climbing here and finding the fossil. As soon as the programme ended, I looked up Roger on Google on my computer, found a site with his email address,

wrote to him and attached my poem. I rapidly received an answer, and I wrote again clarifying dates and my attempts to identify the specimen. Roger passed on my letters to Trevor Ford, including my poem, which was later published in the *Charnia* newsletter and on the internet at:

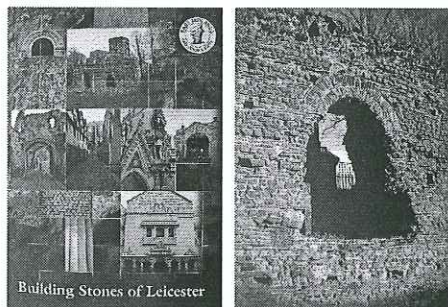
http://www.charnia.org.uk/newsletter/discovery_charnia_2005.htm

Unexpectedly, Trevor phoned me, and asked pertinent questions, especially relating to the hammering around the fossil, which he fortunately accepts was not my handiwork. Later still, Roger put me in contact with Dr Helen Boynton, and sent me a cast of the fossil, now a prized possession.

The whole sequence of events came to fruition on March 10th 2007, when I was invited to attend the Saturday Seminar celebrating the 50th anniversary of *Charnia*'s discovery by Roger, at Leicester University. Roger, Trevor and Helen were speaking, and experts worldwide would be gathered and presenting their findings – a truly memorable occasion, culminating in the cutting of a “Charnia cake” in the museum, by Trevor, Roger and me! During his talk, Prof Martin Brasier of Oxford described *Charnia* as the central form of the Ediacaran assemblage and “probably one of the most important fossils ever found”.

Building Stones of Leicester book

This glossy slim volume is an updated colour edition of the original written many years ago by Section C stalwart Dr J. H. McD. Whittaker. It is published by the East Midlands Geological Society and is a collaborative effort by many contributors, including Section C members Diana Sutherland and Albert Horton. Perhaps someone would like to review it for the next *Charnia* (let me know), but the purpose here is to notify members that it can be purchased from either myself or Chair Joanne Norris (contact details on back cover) at a special discounted price, only available to Section members, of £4.00.



Front and back of the Leicester Building Stones book

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