East Midlands Geological Society, 40 years on: memories of the early years

John Travis

The Society celebrated its 40th anniversary with a lecture and dinner meeting, after an introduction by Neil Aitkenhead, on February 7th, 2004. The current president, Ian Thomas, gave his presidential address, followed by a dinner at which a number of earlier presidents and officers were gathered, including Trevor Ford who gave a toast to the society, its future and forty years past. Frank Taylor, Dorothy Morrow, Ian Sutton, Neil Aitkenhead, Sue Miles, Richard Hamblin, and Tony Morris were past presidents also in attendance.

The Society that was founded 40 years ago has gone through interesting times, especially in the earlier days when new investigative techniques and their results gave explanations of long-standing observations and confirmation of what once were controversial geological theories. What follows are a few personal memories of some of the events, people and features during that period; many of them may be read about at greater length in the pages of the Mercian Geologist. This was not written as a detailed historical description of the early years, which was covered in an excellent article by Frank Taylor (1989).

Probably the last working quarry within Nottingham City, around 1966 and just before it ceased extraction of Mercia Mudstones at Mapperley brickyard. Today, the quarry floor is a housing estate, and the skyline has a car sales court fronting onto Woodborough Road, where the factory was.

Background

The East Midlands is an area with much geological diversity, and has a long history to its economy, which at times had considerable, even major, contributions made by extraction and working of the wide variety of rocks, minerals and ores that occur in the area.

There have been centuries of mineral extraction in the East Midlands, with a limited list ranging from building stones, brick clays, dredged and quarried fluviatile sands and gravels, to open-cast and deep-mined coal, gypsum and ironstones. Ores of lead and copper, and later zinc, have been mined. Other minerals, including fluorite, barite and calcite, that were originally waste products of lead mining, became important in their own right in the 20th century, while lead has become just a by-product of their production.

Also quarried and mined, are high-grade limestones for the chemical, glass and sugar industries, as well as for agriculture. Dolomites, both Carboniferous and Permian, have similarly been extracted as refractories, as well as a pioneering but short-lived attempt at magnesium metal extraction in Derbyshire. Much larger quantities of some hard limestones, along with various igneous and metamorphic rocks, have been quarried for aggregates, used as roadstone, in concrete and as railway ballast, besides input to the still important cement industry.

Various clays have been quarried and even mined underground to produce bricks, sanitary ware, pipes, pottery, refractories and other materials. Largely, but not exclusively within Nottingham's suburbs, very large quantities of Mercia Mudstones have been turned into bricks over the last 200 years; the quarries left huge scars that are now partially healed and largely full of houses and industrial buildings.

There has also been lesser extraction of other minerals for pigments, abrasives and semi-precious stones for jewelry and ornaments. Except for Derbyshire's Blue John fluorite, all have long since ceased. Oil extraction started relatively late, to make a small but valuable contribution during World War Two, and extraction in Nottinghamshire and Lincolnshire continues to this day, along with some methane from coal seams.

Development of an idea

With this diverse geology-based industrial heritage and local interest in geology (clearly seen in the popularity of geology evening classes in the late 1950s and 1960s, it was perhaps surprising that there was no local public society devoted to geology, such as existed in Manchester, Yorkshire and several other places. There were societies, and groups within them, that had members with geological interests, including the Peak District Mines Historical Society (formed in 1959), the Nottingham Field Club, various college and university clubs and societies and a variety of other more historical societies, such as the Leicester Literary and Philosophical, the Russell Society and others further afield .

When the late Prof. W.D. Evans, later Lord Energlyn (Elliott, 1986; Sarjeant, 1987), took his post as head of the geology department at Nottingham University in the late 1940s, he tried to form a local geological society, but was disappointed at the lack of response and failed to establish anything. He frequently remarked on this when he saw the success of the EMGS some years later.

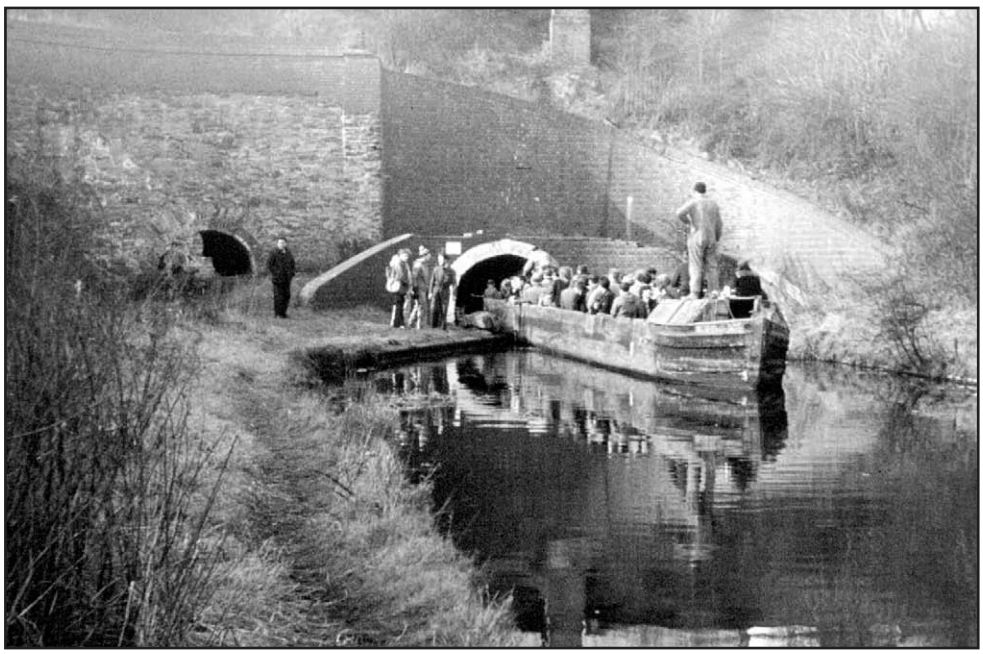
The popularity of the geology evening classes in the early 1960s was beginning to give rise to thoughts and informal discussions about the formation of a local society. There was apparently considerable enthusiasm and talk for several years, according to some members of the classes, but no one seemed to be taking any positive action. This interest was certainly present in evening classes run locally by Bill Sarjeant, Phillip Speed and Frank Taylor, and this was remarked on by Bill Sarjeant in his opening editorial in the first issue of Mercian Geologist. There was also increasing enthusiasm from the influx of younger staff members to the university geology department. However, it was Bill Sarjeant, with Frank Taylor and some of their colleagues from that department, who eventually took the necessary vital steps in the process of bringing enthusiastic people together.

Sometime in December 1963, after discussing this among their colleagues and evening class members and canvassing opinion from friends at Leicester and Sheffield Universities, they approached several people including the writer and his wife, whom they knew had interests in geology as members of Peak District Mines Historical Society, and asked us if we were interested in attending a small meeting to discuss the possibilities of forming a local Geological Society. So on Saturday January 4th, 1964, a group met in Bill Sarjeant's room at Nottingham University to discuss the proposal and decide what the next steps should be. By courtesy of Frank Taylor (who appears to have had some formal record of the event) those present were Bill Sarjeant, Frank Taylor, Peter Stevenson, Miss F.I. Brindley, Miss N.C. Stewart, Mr Cobb, Mrs E.M. Palmer, and John and Josie Travis.

Discussion quickly showed there were plenty of potential members for a proposed society, from evening class students, from colleagues in departments of geology, mining, civil engineering and geography at various colleges and universities, and from other bodies such as the Nottingham Field Club. Right from the beginning, it was stressed that the new society should be open to all, and not become just a society of professional geologists. Certainly as a publication platform, mainly but not exclusively for the professionals, Bill Sarjeant was very enthusiastic about producing a journal for papers of local and wider interest, even before we had a society.

It was decided that were clearly enough potential members to form a good nucleus of a society, so local press advertising for an inaugural meeting would probably bring in a good few more. The meeting ended with plans to book a venue and to advertise the meeting in the Nottingham Evening Post and by flyers to colleagues. Then the inaugural meeting to discuss the formation of an East Midlands Geological Society was then held at the University Adult Education Department on Shakespeare Street, Nottingham, on Saturday afternoon, February 1st 1964.

Society council meeting late in the 1960s. Left to right, Bob Morrell, Frank Taylor, John Travis (standing), Lynn Willies, Phillip Speed, Dick Elliott, Bill Sarjeant, Dorothy Morrow. The happy look on members' faces is due to the after-meeting activities - education in the fine art of whisky tasting, courtesy of Bob Morrow (not pictured) and Bill Sarjeant who were particularly learned in this art.



The Society's first field trip, May 1964, with one of two narrow-boats full of members about to enter one of the Dudley Canal tunnels at the Tipton portal.

Foundation

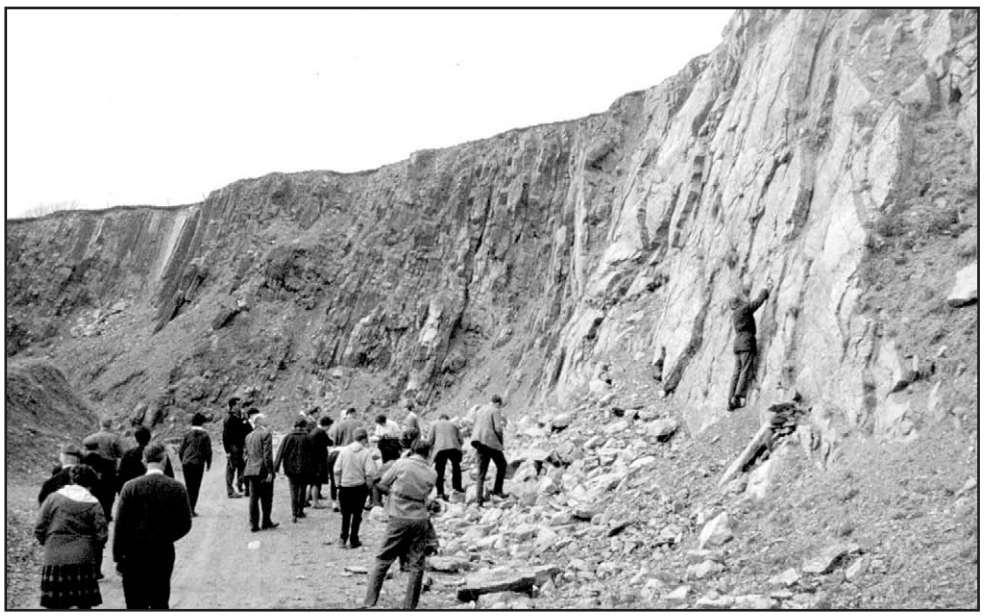
On the chosen day, a large crowd (variously remembered as 55 or over 100 people) turned up at the hall, where the proposal to form a local Geological Society was enthusiastically received. Alternatives names were offered, but the first name of "East Midlands Geological Society" was never really challenged. An interim council was formed to draught a constitution and to fix a date for the next meeting, where this would be presented for discussion, and be followed by a lecture. The meeting ended with a feeling of satisfaction that it was looking very promising for a much larger potential membership than had been originally envisaged.

The interim council met and a draught constitution was prepared. It was submitted to the next meeting of the society at the same venue on Saturday 7th March 1964. After the formal business, Dr Frank Taylor gave an illustrated lecture on the geology of Derbyshire. The hall was packed to capacity for the meeting, with probably about 150 people, not all of whom became members on that occasion, but enough to be very gratifying for a first meeting.

The very next day, Sunday 8th March 1964, the Society's first field trip was held, when around 80 people travelled mainly by coach to the Tipton portal of the Dudley Canal Tunnel in the West Midlands. This was partly out of geological interest, but was more in the nature of urgent support for a preservation group fighting a proposal by British Rail, to block one end of the system, in order to fill part of it and build an embankment above rather than erect a more expensive bridge. The meeting, urgently organised by Bill Sarjeant and the secretary Bob Morrell during the previous week, was a great success both in terms of turnout and its help to the preservation group (Sarjeant, 1964). It was a joint venture, and in addition to EMGS members, included some 30 others from the Peak District Mines Historical Society and from the Swinnerton Society at Nottingham University's Geology Department.

Our support was in the form of our presence, and in traversing the tunnels (nearly 3km long) in narrow boats to demonstrate that people were interested in keeping open the tunnels and canals of the area. This was just before the canal networks became popular for leisure cruising, and old industrial canals were not widely regarded as the assets that they are now. The excursion did leave the boats at some open-air basins to study Silurian limestone and shale exposures, and some excellent fossils were collected, mostly from loose debris in what was at that time a rather derelict industrial landscape. The Society's support was undoubtedly significant, and the canals and tunnels were subsequently kept open, and are still used today for canal cruising. The geological interest is still present, as the canal tunnels enter the old limestone mines that have now been turned into a tourist feature to compliment the adjacent Black Country Museum.

The Society's second indoor meeting, on Thursday 23rd April 1964, was held in the Nottingham and District Regional College of Technology (that later became Nottingham Trent University). This was a collectors' evening, where some 17 collections or exhibits of various types, ranging from synthetic diamonds and natural gemstones to collections of minerals, fossils and problematica, displayed by members of the Society. It was a great success, and allowed people to see what a diverse range of geologically related interests members had; it was also a great opportunity to socialise. This was the last meeting of the first indoor season, and the Society's first year continued with a series of five field trips by coach. These were mainly local, and were intended to give the members a broad overview of the geology and



Society visit to a quarry before the days when hard hats were required; in steeply dipping limestones, near Waterhouses, Staffordshire.

geomorphology of the East Midlands. Affectionately known as Cook's Tours, they were very popular but sometimes resembled the geological version of American tourists doing Europe in a week, with the leader and other contributors often giving nonstop microphone commentaries on the fly.

The Society membership did not then contain so many professional geologists, and the majority of lay members were not well versed in field techniques of extracting and trimming specimens from exposures. For several years, the sight of coaches disgorging anywhere from 30 to 80 people wielding a motley collection of domestic hammers and chisels, wearing no eye protection or hard hats, and vigorously attacking everything that was not moving in a quarry or exposure filled the writer with dread. Splinters of rock flew around like battlefield shrapnel, and some potentially good specimens were reduced to piles of useless rock chips simply through lack of demonstrations of good technique. Perhaps this was where the Society failed somewhat in its professed educational role, especially as there were some very able teachers among the professionals. Fortunately if there were any injuries they were relatively trivial.

Progress

The second season of indoor meetings began in November 1964, some of which set a pattern for the next few years by being held outside Nottingham; venues were in Loughborough, Derby, Matlock, Bakewell and Newark, often jointly with other societies. In council, Bill Sarjeant was already putting forward ideas for which he became a tireless advocate, sometimes in the face of opposition from the rest of the council. Some members thought that he was trying to get the society to run before it could walk, but he constantly put forward interesting and radical ideas that seeded lively and sometimes noisy discussions.

His enthusiastic plans for a journal, to be called the Mercian Geologist, came to fruition early, with the first issue published in December of that first year, and it has been a great success ever since. Like the society membership, it was always intended to be open to papers contributed by amateur geologists, and not be just a publication for the professionals.

A few other ideas from Bill Sarjeant were not opposed in principle, but one turned out to be too expensive at the time and has still not materialised. He proposed that a gold medal should be presented to selected people who had made outstanding contributions to geology; it would be known as the Founders Medal or the Shipman Medal to commemorate a local pioneering geologist (Morrell, 1966). It was not the cost of the gold that was prohibitive, but the cost of making the dies to mint the medals. An initial model was designed before reduction to press dies, as one of our members, Phillip Hanford, was an artist-sculptor who gave valuable advice to Bill Sarjeant when investigating the project.

Other projects were launched successfully, including local groups, some of which did very valuable work, mainly with input from the amateur component of the membership. They included the detailed examination of the Rhaetic and adjacent beds in a recently disused railway cutting at Barnstone by J.H. Sykes, J.S. Cargill, and H.G. Fryer (Sykes et al, 1970; Sykes 1971, 1974, 1977). Dick Elliot had a project on the local Keuper (Mercian Mudstone), and Peter Steveson was investigating a glacial channel at Sproxton, Leicestershire (Stevenson, 1967).

Frank Taylor also had an ongoing project collating geological information gathered from local temporary exposures, including pipe trenches, building sites and new road cuttings and sent in by members (or examined by Frank himself when notified of the location). Most impressive of these was the wonderful opportunity to see great lengths of virgin exposures

when the M1 motorway was built through the region, and this was also the subject of an excellent, and unrepeatable, Society field trip. Another local development that revealed extensive exposures, but in shorter sections that had to be collated into a whole, was the clearance and replacement of 19th century housing in the St Anns and lower Woodborough Road parts of Nottingham over several years in the 1960s.

A notable event in 1966 was the annual meeting of the British Association for the Advancement of Science that was held in Nottingham in early September. The Society and many of its members participated in the geology section of the activities, and gained some valuable publicity during the event. Dr Frank Taylor was local secretary for the Geology section of the meeting, and other members organised exhibits of the Society's work.

The Mercian Geologist

The production of the Mercian, with initially two issues per year, was a major event for the society, both in financial and social terms. Before the days of word processors and desk top publishing, production was a long hard job of gathering papers, peer-reviewing them, retyping them into a standard format, proof reading, correcting, printing, and finally the great social event that was the collating!

Frank Taylor leading one of the popular "Cook's Tours", this one to Shropshire area. The formal dark suit and tie were common among our leaders at the time. Bob Morrell and Dorothy Morrow are in the foreground.

Not long after the first couple of issues had been produced, Bill Sarjeant, as editor, had examined the costs of production at the University printing department. It was the largest job they undertook at that time, their normal output being small runs of exam papers, so they were not equipped to collate an entire Mercian Geolologist. They had to collate by hand, so wanted to raise the price, and this frightened the editor into looking at alternatives. He eventually decided that the Society could save significant costs if the journal was self-collated, so that just printing and binding were paid for. The scale of the task was probably not quite appreciated at this stage.

The first self-collation was Part 1 of Volume 2. The sight of nearly 40,000 sheets of printed pages was almost frightening, spread over numerous benches of the Geology Department rooms, waiting to be assembled in a single weekend into about 500 copies of the journal of 133 pages, plus reprints for authors. Collation was by a small army of volunteers, working by hand (and driven mainly by Frank Taylor, whip in hand) for periods of anything from an hour to the whole weekend, and every minute of voluntary labour was valuable and greatly appreciated. Included among the personnel on collating weekends was Wilfred, a rescued pigeon looked after for many years by Mrs Dorothy Morrow; Wilfred never collated anything, but he was a good talking point and a surprise to newcomers. After much soul-searching, the Mercian was changed to A4 paper, with the start of Volume 4. This reduced the collating workload as the larger page size meant dropping from over 100 pages per issue to about 80, saving some 5000 pages of collation.

A collating weekend was always a considerable social occasion, with the task in hand that was variously perceived as either relatively relaxing or totally mind-numbing. Each gave the opportunity for much conversation as members walked up and down along the piles of pages, collating them first into separate articles, then into the complete journal. Reprints were stapled, trimmed and bound by the collating team, but the main journal went outside to be trimmed and bound as the University printers could not then handle such a large publication. However, the system of hand collating worked well, and only ceased in the 1980s when reliable collating machines became available. This produced mixed feelings, as many saw it as the loss of a welcome social occasion twice a year.

In the early days, printing quality was not consistent, especially of photographs on the glossy paper, and an important but boring part of the collation was checking every page for defects, before every assembled journal was checked again before going to the binders. This epic of Society voluntary labour was still not the end of work on the Mercian. The membership list was held in a box of file cards, which were used for many years to hand address the envelopes, for both the Mercian and the newsletters.

When this had been done, many members picked up their copies at a meeting, but if they did not, many copies were hand-delivered by volunteers who each covered an area near their homes, once again saving considerable amounts of Society money on postage. It was only in the mid 1970s that Frank Taylor accessed the university mainframe computer to create a database for label printing. This was typed in by Susan and Marian, both of the Taylor family, and saved hours of work in subsequent years.

The finished Mercian Geologist has been largely uncontroversial but has occasionally produced critical comments to the Society. The issue that caused the loudest mutterings, particularly among some of the lay membership, was Volume 2 Part 2, which was in its entirety (112 pages) a bibliography of the geology of the Peak District up to 1965. A valuable piece of work to researchers, academics and amateurs with an interest in the region (supplements were published later), it was considered a waste of space by some of the lay members who felt they had been robbed of a normal issue of the Mercian. They were not even placated when it was pointed out that the bibliography had been published with a grant, at no cost to the Society, whose funds therefore grew that year. Grumblings resurfaced when a bibliography of the geology of Leicestershire was published as the whole of Volume 4 Part 4 (and has a supplement forming just a part of this issue). Bibliographies do not make light reading, but they are a valuable contribution to research that a local Society journal can make.

Characters

The Society's early membership was a very diverse collection, with an age spectrum significantly younger than it is today, and with a fewer professional geologists, as it was before the days of the British Geological Survey at Keyworth. There was however, a professional component that hardly now exists due to the decline in the coal industry, railways and other local industries that employed geologists, besides the geology teaching departments that closed in the late 1980s. Surprisingly, there was a time when it seemed that a significant part of the membership was either employed at, or retired from, Boots the Chemist, and some of the society social gatherings were more like Boots reunions. The company itself had little to do with geology other than using some talc, a few limestone products and pyrolusite in their manufacturing, but they seemed to have numerous staff with an interest in geology. Despite the title of the Society, the membership has always come from a wide area. Some notably dedicated members (including the Beaumont family from Huddersfield) consistently travelled 60 miles each way to most of the indoor and field meetings, while others regularly came from Peterborough, Stamford and distant parts of Leicestershire.

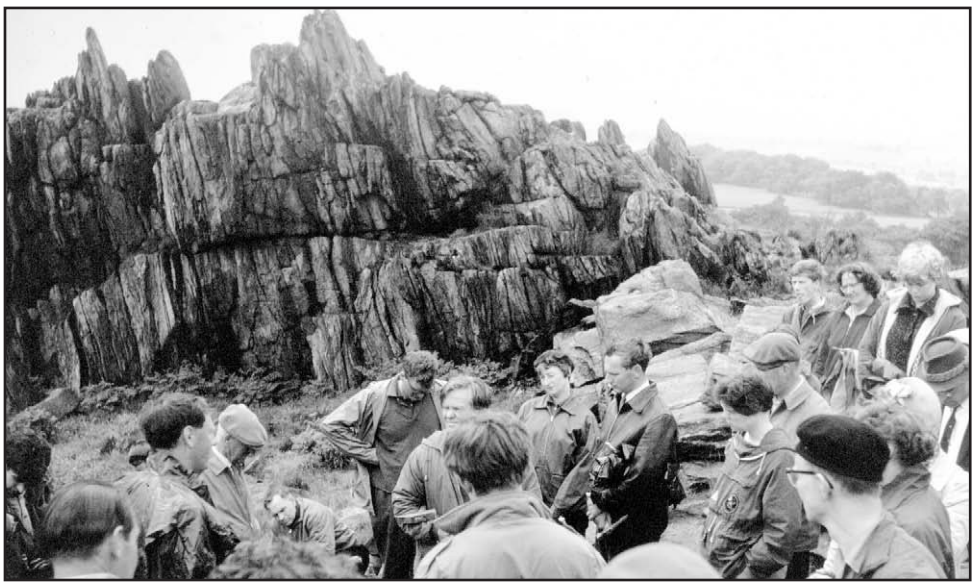
The Society's first treasurer, Edmund Taylor, was a notable character (Morrell, 1978). President of the Nottingham Cosmopolitan Debating Society, he could be very vociferous at council meetings on subjects that had nothing whatever to do with the geological matter being discussed, but he was always an interesting conversationalist. During the mid sixties, the writer attended a college geology course, when he was able to recruit many younger members. Some stayed with the Society for several years, one recruited mature student, H.R. Potter, eventually became president of the Society. Frank Taylor (1989) paid tribute to many more of the quiet but dedicated workers who ensured success in various fields through the early years of the Society.

In terms of membership recruitment and indoor meeting attendances, the greatest event for the Society was the relocation of most of the British Geological Survey to what had been the campus of the Mary Ward Teacher Training College at Keyworth. This move brought a large influx of professional geologists and academic excellence to the area, and it swelled the Society's membership and attendance at meetings at a time when original members were becoming fewer.

Anyone observing the current Annual General meetings, with elections of officers and council largely on the nod from the President, would scarcely believe the politicking that occasionally went on at times in the early years. Some of the elections were hotly contested, for reasons long since forgotten, but usually over something to do with one of Bill Sarjeant's radical proposals. Bill Sarjeant was a well-loved character, whose personal presence around the Society was greatly missed after took up a post in Canada, and left Nottingham in 1972. The Society was just one of his many achievements (Anon, 2002).

Ron Firman describing distant geomorphology on a weekend excursion to the Lake District in the late 1960s. Dorothy Morrow, Josie Travis, Emily Ramsell and Mina Beaumont are among others in the picture.

Field trip to Charnwood Forest, with Trevor Ford.



Landslides, disasters, frost and dinners

There were a few incidents that lightened the Society's early days, some of geological note, others more meteorological. The Society has usually had a programme of around six field trips through the summer field season, including half-days out, regular full-day trips, weekends, several full-week excursions, and more recently the very popular midweek evening trips during the longer light evenings around June.

The 1966 January indoor meeting was held jointly with PDMHS, at Matlock, on the 8th of the month. Additional to the advertised lecture, Trevor Ford spoke on the recent arrival of a fairly large stony meteorite which had broken up in the atmosphere and landed in the vicinity of Barwell in Leicestershire; he showed photographs, and also had a small fragment of the meteorite that showed to the audience, so fresh it was almost still warm. Later the same weekend, and following a period of heavy rain, there was a large landslip on Dale Road at Matlock (Taylor, 1966), which caused the demolition of two cottages beside the road that we had travelled from Nottingham to the meeting only 24 hours earlier.

During the autumn of 1967 a nationwide outbreak of Foot and Mouth Disease restricted access to large parts of the countryside, and eventually caused the relocation of the January 1968 lecture from Matlock to Nottingham. Starting in January 1966, it has been the custom to organise a dinner for members, usually to coincide with the December meeting or the Foundation Lecture in the February. Various venues were used, including the Nottingham University Staff Club, for these very pleasant social occasions. The 1968 event was thrown into chaos when, between going into the lecture and coming out 90 minutes later to go for the meal, freak weather had left everything glazed with clear smooth ice when a shower of rain was followed by a sharp freeze. To say it made the journey up the hill to the Staff Club difficult is a major understatement. Attempts to drive up were largely abandoned following various incidents that made the car park and road look like a pantomime on ice. Walking was little better until off the paved areas, and the evening featured scratched cars, bruised anatomies and a delayed start to the dinner.

Field trips were not without their own noteworthy incidents, usually related to getting there or back, the weather or falling rocks. An early and very popular trip (that needed two coaches for members) was to examine rocks and mineralisation at the base of the Triassic of Leicestershire and Derbyshire, with Trevor Ford and Bob King (King & Ford, 1969). Unfortunately travelling between two of the stops, one of the coaches had a breakdown somewhere on the M1. Before the days of mobile phones, there was no way that the leaders on the other coach could know what had happened. The driver realised his coach problem was terminal, but, by a rare coincidence, an empty coach from the same firm was spotted and flagged down, and members were able to hitch a ride and catch up with the rest of the party. The rest of the trip was excellent.

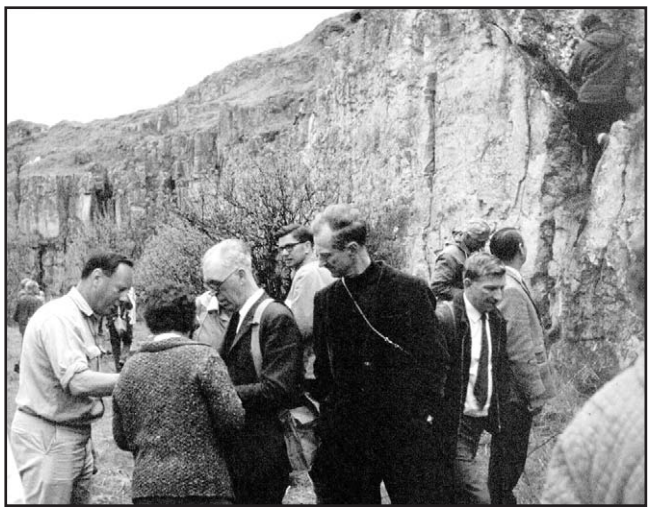
In a second incident, the Society's hired transport was near the top of the Winnats Pass at Castleton, and about to descend into the Hope Valley, when the driver stopped unannounced, peered under the coach for a few minutes, declared there was a problem with the brakes, and asked "Had anyone got any sticking plaster or insulation tape?" As a fix for a brake problem, this request was viewed with some alarm, but someone produced the requested item, something was done with it, and 15 minutes later a safe but nervous descent was completed to the valley floor. On a more positive note, tribute must be recorded to the drivers from the local coach companies, who have taken the Society up lanes far too narrow in order to reach a remote rock exposure; only occasionally did a new driver prove to be a "jobsworth" and leave members with rather more walking to a site.

In 1967, the University Geology Department moved to larger premises, which thanks to the late Prof W.D. Evans became what was later described by the then secretary, Dorothy Morrow, as the spiritual home of the Society for many years. It was also the venue for most winter lectures, until increasing attendances necessitated a move to a larger lecture theatre. This was in the Life Sciences Department, and the link with the Geology building was finally broken in the late 1990s, a decade after the Geology Department itself had ceased to exist. But while it was still extant, the Department's founder and the Society's first Honorary Member, Prof H.H. Swinnerton died in 1966, aged 91(Evans, 1967).

Reflections local

The 40 years of the Society's history have seen many good times and also some sad times. Geology-based industries, which contributed so much to the local economy in the early years of the Society, have declined dramatically. Who would have predicted at the Society's foundation in 1964 that two new coalfields would open, at Asfordby and Selby, and that one would close before it entered full production. Problems at Asfordby were unique to British coal mining, and were the subject of a lecture attended by many Society members at Loughborough University. Along with the closure of most collieries in Nottinghamshire, and all of the Derbyshire and Leicestershire coalfields, several of the Trent Valley coal-fired power stations that took their output have also closed down. Apart from short-lived opencast sites, Britain's coal industry has been decimated in the face of cheap imports and changes in coal usage.

The once-extensive iron ore mines in the East Midlands, some visited by the Society, which fed the steelworks at Holwell, Corby, Stanton and Scunthorpe, have long since closed, as have the steelworks at all except Scunthorpe. The orebodies were practically worked out, but the demise of local mining was largely due to changes in steel manufacture and to imports of cheaper and higher-grade ore, mainly from Brazil and Australia). In contrast, gypsum mining does continue in the East Midlands, albeit on a reduced scale.



Trevor Ford in demonstration mode in Manystones Quarry, in the Peak District.

In the early days of the Society, Derbyshire had been a producer of fluorite, mainly for the chemical and steel industries, for the larger part of a century, but this declined in the face of cheaper imports from the Far East. Cavendish Mill, where most of it was processed and upgraded, would have been closed but for a management buyout; had it closed, it may well have been the end of fluorite mining in Derbyshire. Barite extraction has had a chequered history, boosted briefly then dropped by failed expectations as an ingredient of radiation-shielding concrete in the nuclear industry, but then given another outlet in drilling mud for the North Sea oil industry. Most production was from numerous small-scale operations, sometimes one man working old mine dumps and opencast sites, feeding their output to various refiners for upgrading.

The only mineral extracted in undiminished quantities throughout the life of the Society is limestone, extracted largely for aggregate but also to supply the chemical and glass industries and agriculture. Quarry output was boosted in the early days of the Society to supply huge quantities of aggregates for construction of the M1 motorway through the region in the mid 1960s. An irony of the quarrying over the last 150 years is that many of the spaces left behind have become more valuable as landfill sites than the extraction that created them in the first place. The downside to this is the loss of valuable geological exposures, many of which were visited by the Society in the early years.

Reflections wider

On a more positive note, the science of geology made huge advances in the early years of the Society. Despite the local name of the Society, lectures on many of these advances have tended to be about geology on a worldwide scale. Around the time of the Society's formation, much of the scientific data and observations were maturing to confirm the once-controversial theory of continental drift and boost its evolution into plate tectonics. This revolutionary model of our dynamic Earth so neatly explained the many geological features that were previously the subject of wildly differing ideas, theories and arguments about their origin. Though these advances in our understanding of our Earth were about geology on a planetary scale, they explained features of East Midlands geology including the tropical environments of local Carboniferous coal deposits and the extensive volcanism in past eras. While such are now taken for granted, they were argued about and even scoffed at by some of the conservatives of the 1960s.

Geophysical exploration with Vibroseis on a country road near Radcliffe on Trent.

Significantly, a lecture in 1969 by Professor Runcorn on the subject of continental drift drew the largest attendance the Society had ever had up to that date, and the venue had to be changed to a larger lecture theatre before proceedings could start. There was a further lecture on the subject, this time under its newer title of plate tectonics, only a year later, by J.E. Prentice. Then in February 1977, Bill Cummins gave his first presidential lecture entitled "Is plate tectonics the only answer?". He delivered this to another packed audience, and concluded that the alternatives were not viable, and that the plate tectonics model was still the one that best fitted the observations and evidence.

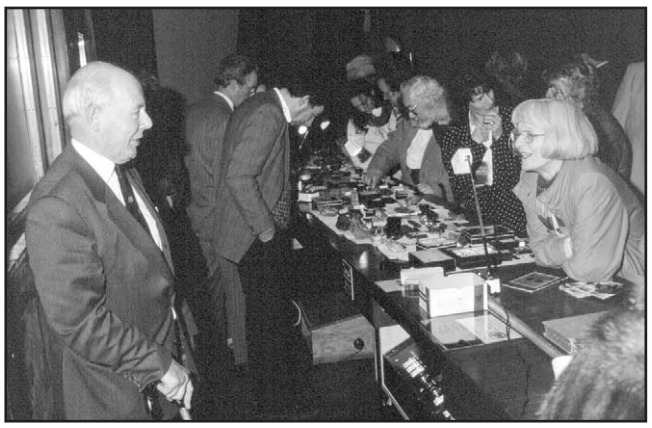
Geophysics also took giant leaps forward, largely from the increased capacity of computers that could analyse the mountains of collected data. Society members may recall from the late 1970s and early 1980s seeing strange vehicles vibrating large steel plates on the surfaces of the East Midlands highways. These were Vibroseis equipment that generated trains of ground vibrations, in place of shock waves from explosives, and picked up the subsurface reflections on lines of geophones that reached up to 5 km along the sides of the roads. Computer discrimination of the complex of received signals was then used to produce structural maps of the subsurface geology, largely in order to locate likely oil and gas traps. Seismic and gravity geophysics have also given proved useful in the prediction of imminent volcanic activity (in areas outside the East Midlands), sometimes enabling pre-eruption evacuations of endangered towns. The Society had lectures about most of these topics, but one of the speakers booked for a lecture tragically lost his life in a volcanic eruption in Columbia.

Other advances in geological science have been closer to home. A Society member, Dick Aldridge, solved the long-time puzzle of the origins of conodonts, the fossils so important to stratigraphy, and he has given no less than three lectures to the Society on the progress of this fascinating research. Earlier, Bill Sarjeant solved the geological puzzle of the Xanthidia (Sarjeant, 1967), when he brought together a mass of work dating back over a century, and made sense of long-standing debates about the relationships of yet another group of useful microfossils. Bill Sarjeant did some of his practical work, examining and drawing prepared microfossil specimens by using a powerful optical microscope, long before the scanning electron microscope made subsequent work so much easier.

Research on the orogenisis of the South Pennine orefields (Mostaghel & Ford, 1986) produced ideas that changed significantly through the early years of the Society. Since further refined, they bear little resemblance to ideas current at the time of the Society's formation.

These are but four examples of events that occurred in the early life of the Society since its foundation 40 years ago. However, the life of the Society has not all been just geological, but is about its enthusiastic members, without whom it would not exist. Sincere thanks must go to all those who have over the years given thousands of hours of their time to organise the Society lectures, run the field trips, produce the Mercian Geologist and the circulars, man the exhibition stand and work at countless other tasks.

Special mention must be made of the first officers and council who were finding their way with the new Society. Having discovered in the first few years some of the problems and inadequacies of the initial set-up, the routine organisation of the Society was quietly refined by Frank Taylor, at times with a little (but very significant help) from resources of the University Geology Department, to whom the Society is for ever grateful. His contribution does not in any way lessen what many others have done over the years, and he made reference to some of the key early members in his Roll of Honour and acknowledgements in his paper "EMGS: the first 25 years" (Taylor, 1989).



Prof Howie with his display of specimens being examined by Society members, after his lecture on gemstones at the 25th anniversary celebrations.

The Society celebrated it 25th anniversary in 1989 with an entertaining lecture on gemstones by the flamboyant Professor Howie, waving his sword-stick around to let members know that he was willing to defend his valuable collection of gems on display at the meeting! Now 40 years on, the Society continues to be entertained and informed by a succession of very welcome lecturers.

The East Midlands Geological Society has clearly fulfilled a local need, if the continuing large attendances at indoor meetings is anything to go by, and it retains a healthy and steady membership list. Geology-based local industries may have declined, but advances in the techniques of geological science have yielded a much clearer picture of Earth processes, both on the large scale and within the East Midlands. Society members have contributed to this by means of their research and publications, and that is part of the ongoing success story of the East Midlands Geological Society.

Queen for a night! Society President, Madge Wright, crowning herself with Prof Howie's replica of one of the crown jewels at the 25th Anniversary meeting. Judy Small appears to be Lady in Waitng.

Acknowledgements

Inspiration for this presentation came from a suggestion by Alan Filmer. I am grateful to Ian Sutton for critical comments, and to Michael Frost and especially Dorothy Morrow for their help editing the text. These are but a few personal observations and memories of some of the early days of the Society; they are not intended to be a detailed history, of which the first 25 years were well covered by Frank Taylor in 1989. A few memory joggers have come from a variety of Society sources, mainly the Mercian Geologist and council minutes. Apologies are due for any errors or omissions; memory of events 30 or 40 years ago are not always totally sharp.

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