

SECRETARY'S REPORT FOR 1992/1993

Since our last Annual General Meeting, 26 new members have joined the Society, plus one new institution, giving a total of 409 individual members and 95 institutions. As ever, we have regrettably lost some members due to illness, and of particular sadness to me personally as well as to the Society, was the death of Philip Speed in January. He was one of the founder members of the Society, a former Treasurer, and long serving Council member. His was the inspiration which led many amateur members to join the Society, having attended his Adult Education classes. He had the ability to imbue people not just with an interest in, but a love of, geology and he will be sadly missed as a good friend to many of us. Our sympathy is extended to his widow, Edith.

We have as ever enjoyed a full programme of activities during the year, including eight indoor meetings, three one-day excursions, two evening walks and a residential weekend based at Carnforth in Lancashire, looking at the Craven Basin area.

The year commenced with a most entertaining talk after last year's A.G.M. by Mr Bob Brown, one of our Council members, who is a geologist with British Coal, and who introduced us to the vagaries of coal mining in Iran, a far cry from the comparative safety in our own mines. The object of his visit to Iran had been to see if he could quadruple the output from the mines in the Elburz mountains, a task complicated by steep terrain, tortuous roads and a coal preparation plant 40 kilometres from the mine.

Only two weeks after the A.G.M. we travelled to Derby for a talk by Dr Lyn Willies on the fascinating topic of ancient mining. The talk combined both archaeology and geology and was made all the more interesting by Dr Willies' lively manner and clearly avid personal interest in his subject. Our hosts on this occasion were Derbyshire College of Higher Education (now Derby University), and it is hoped that we shall again be able to hold a meeting in Derby in the forthcoming Winter programme.

For early April we maintained a similar theme with Professor Ansel Dunham's title "Archaeological Mineralogy". Again, we clearly had a great enthusiast for his topic. We ranged from ancient university cities in Pakistan via the Great Wall of China to the Orkneys, Durham Cathedral and Kingston, Jamaica, learning of the ways in which petrological and geochemical analysis can lead to an accurate description and a more informed identification of basic materials. The sources of particular building stones could be deduced or, in the case of the Great Wall of China, we could learn that the local loess had been used in making the bricks of the upper part of the wall, an identification assisted by x-ray diffraction. As an aside we also learnt that virtually all clay pipes had been made from the ball clays of Dorset. It was a most fascinating evening.

Our first field meeting of the year was to the Malverns, led by Dr David Siveter of Leicester

University. Some 45 or so members attended on a day blessed with excellent weather and visited five sites including the Gullet Quarry where, as a preamble to the spectacular unconformity between the Silurian Llandovery Series and the Pre-Cambrian Malvernian rocks we witnessed some spectacular (not to say foolhardy) high-diving by a few hardy locals into the quarry pool. I am pleased to report that despite euphoria over the exciting geology, none of the members felt moved to follow suit.

In late May the Society again participated in Derby Environmental Week, our main input being an evening walk in Kedleston Park led by Ros Grum, Judy Rigby and John Marriott. Another evening walk in late May, led by Colin Bagshaw, took us up and over Bonsall Moor to view the mineralization that has made the area so important historically. It was most interesting to visit the old workings and speculate upon the factors which had controlled the mineralization. We ended with a superb view over the Derwent Valley at Matlock.

In mid-June the second Society evening excursion of the season was led by Drs Andy Howard and Simon Young of the B.G.S. to the Radcliffe on Trent area to examine the excellent sections of the Mercia Mudstone Group that are exposed there, and the evidence they contain of deposition on an arid coastal plain with ephemeral salt lakes.

The weekend excursion at the end of June was to the Craven Basin, the leader being our President, Dr Neil Aitkenhead. Most of the party were accommodated at the Tudor Borwick Hall near Carnforth, but they were joined by other members on both Saturday and Sunday, total numbers being 24 and 26 respectively for the two days. All voiced their thorough enjoyment of the weekend.

We then had our Summer break until September, when the Society participated in the Rock and Fossil Festival, organised by the Natural History Museum at Wollaton Hall. Some members and eight or so "professionals" from B.G.S. were kept busy throughout the day with questions and identifications, and several enquiries about membership were made. It was held to have been a very successful event, and the Society received a warm letter of thanks from Wollaton Hall.

Towards the end of September an extremely popular visit to the Ecton Hill Copper Mines was organized, the response for which was so high that we ran two trips, one on 27th September and another on 16th October. The Society subsidized the cost to members and also made a donation to the Ecton Educational Centre which had been under severe financial pressure and thus threat of closure. The visits were excellent, very professionally organized, and complemented by a superb home-made lunch.

Our indoor programme commenced with a very well attended lecture by Dr Simon Young on aspects of volcanology in the western U.S.A. The lecture concentrated on the variety of volcanic processes involved and the effects of some of the major eruptions in the exquisitely beautiful setting of the Cascade Mountains. Many members who were at the meeting

had themselves been to the area, so enhancing their enjoyment of the evening. And yes, Crater Lake really is that blue!

On 25th October, an extremely wet Sunday, 34 members were taken to the Nuneaton area by Dr. John Carney of B.G.S. to look at some excellently exposed sections in the Precambrian and Lower Cambrian rock sequences that underlie much of the East Midlands. The day was going swimmingly in both senses of the word until about 3.00 p.m. when Dr Carney was hit on the head by a falling rock from the quarry face and suffered a very bad cut, despite the fact that he was wearing a helmet. Had he not been, the injury would have been much worse and no-one who was on that trip will ever go into a quarry again without a helmet. Thankfully John recovered very quickly, and has subsequently himself become a member of the Society!

For our November meeting, we had the intriguing title of "Methane Dogs and Greenhouses" from Dr David Creedy of British Coal. The dogs were let down mine shafts in buckets in the 17th century to test for gas; we learnt that 800 litres of methane gas per second may be released during coal operations. The 'greenhouse' of the title related to the greenhouse effect, which is of course the result of an increase of methane and carbon dioxide in the atmosphere. The cause of that increase, it is now thought by some, may be increased sun spot activity rather than just the activity of man.

In December, we were honoured by a visit from the President of the Geologists' Association, Dr Eric Robinson, who entertained us with one of the topics for which he is famed, "Buildings and Building Stones". He emphasised the potential value of a study of local buildings for those teachers in city schools who were now required to teach an Earth Science component in their curriculum. The meeting proved extremely popular and was followed by an excellent social evening attended by some 60 members.

Again, attendance for the January lecture by Dr Andy Saunders of Leicester University was very high. He presented his topic of mantle plumes related to volcanism in the Indian Ocean in a most entertaining manner, comparing the joys of the deep sea drilling project over the Kerguelen Plateau to the delights of land exploration in Madagascar and specifically to the effects of the local "Three Horses" beer.

The year concluded in excellent style with the President relating his knowledge of two Derbyshire disasters: the Carsington Dam failure and the Loscoe landfill gas explosion. Some fascinating details were related and the moral certainly seemed to be that, had geological experts or documented geological information and literature been consulted at an earlier stage, both disasters might have been averted. One thing I and possibly many others learnt on that evening was that the Loscoe explosion was almost certainly related to a dramatic fall in barometric pressure which occurred at precisely the same time. Following Neil's talk some 38 members repaired to Nightingale Hall at the University where we enjoyed a wonderful buffet — a most congenial and appropriate way to mark the

end of another successful year in the annals of the Society.

Seven Council meetings have been held during the year, and six Circulars advertising the Society's programme of events have been produced. Mrs Joan Bush has again been responsible for the production of the Circular and I am sure the Society will join me in thanking her for all her efforts in this regard.

During the year three issues of the Journal have been produced, volumes 12(3) and 12(4) were published as a combined part in April, comprising a cumulative index for the whole of volumes 1 to 12 of the Journal which were produced between 1964, the inception of the Society, and 1991. Subsequently, the first part of volume 13 of the *Mercian Geologist* was published in September 1992, and Dr Richard Aldridge and the other members of the editorial board are to be congratulated on substantially improving the production quality of the Journal while maintaining the academic content, with an added thank you to Andrew Rigby for his technical and production assistance.

I would also particularly like to thank Jack Fryer and Ian Sutton, who take responsibility respectively for the organization of the indoor and field meetings, for the excellent quality of the programme which they have produced for us during the past year. I am happy to say that they will both be undertaking the same tasks for next year. Following on from this it will also be evident from my description of the various events that we have been handsomely supported by officers of the B.G.S. in terms of contributions to both field excursions and lectures, and we are very fortunate that so many of them take such an interest in our Society.

There are many other members too numerous to mention individually who must be thanked for their efforts throughout the year, particularly those who voluntarily deliver by hand quite a number of the Circulars and Journals. Thanks also to those of you who are regular attenders at our meetings for supporting the Society events and making the Society the success that it is.

Lastly, but certainly not least, I must thank my own secretary, Celia Morris, for all her help during the year; without her I would certainly not be able to carry out my job as your Secretary.

Susan M. Miles