

Society Proceedings, 2007

'The Yorkshire Geological Society' is a registered charity (No. 220014) whose objective is to promote and record the results of research in geology and its allied sciences, more especially in Yorkshire, by holding meetings for the reading of original papers and the delivery of public lectures and by field meetings.

The General Secretariat is at 19, Thorngate, Barnard Castle, DL12 8QB. The charity correspondent is at 10 Woodland Ravine, Scarborough, YO12 6TA. The Society's main agents are:

Bankers: Barclays Bank PLC, Sheffield City Office, S1 1NG
 Investments: Charities Official Investment Fund, 80 Cheapside, London, EC2V 6DZ
 Trustees: The serving members of Council
 Examiner of Accounts: S. Stone, Old Scalby Mills Inn, Scarborough, North Yorkshire

The Society's governing document is the '*Rules of the Society*', last emended on the 8th of October, 2005.

1. ANNUAL REPORT FOR 2007

(Adopted at the Annual General Meeting, York,
24th November, 2007)

1.1. General Secretary's Report

Annual General Meeting. The Annual General Meeting was held in York on Saturday, 25th November 2006.

As there were no postal nominations for Council, the new Officers and Council proposed by Council itself were elected to serve for 2007 as follows:

OFFICERS

President	Dr M. A. Whyte
Vice-Presidents	Professor P. F. Rawson Dr J. H. Powell
General Secretary	Dr T. Morse
General Treasurer	Mr W. A. Watts
Programme Secretary	Ms C. Nichol
Editor – Proceedings	Dr S. G. Molyneux
Web Site Editor	Professor P. J. Boylan

OTHER OFFICERS

(Appointed by Council)

Circular Editor	Mr K. Park
Membership Secretary	Ms C. Jennings-Poole

OTHER MEMBERS OF COUNCIL

Mr M. G. Allderidge	Mr S. Price
Mr J. Aram	Mr P. Robinson
Mr J. Ford	Dr H. J. Reeves
Ms T. Graham	Mrs S. Rogers
Mr J. Hudson	Prof. P. Wignall
Dr J. A. Knight	Dr N. E. Worley
Mr S. Ogilvy	

The President, Dr J. H. Powell, then presented the John Phillips Medal to Dr Mike Romano, of the Department of Geography, University of Sheffield. Throughout his distinguished career, Dr Romano has made a notable contribution to geological science through his work on the Ordovician geology of Ireland and Portugal, and in particular his work on trilobites and their related trace fossils. He has also played an important role in studying the dinosaur footprints found in the Jurassic sediments of the Yorkshire Coast. In his reply, Dr Romano thanked the Society for the honour.

The outgoing President then delivered the second of his two presidential addresses entitled 'The Jurassic of the Cleveland Basin: A Review. Part 2: The Mid and Late Jurassic Sea'.

The meeting was attended by 55 members and their guests.

The Annual General Meeting was followed by the Annual Dinner, which was held at King's Manor, Exhibition Square, York. The special guest, who replied on behalf of the guests, was Professor Peter Styles, recent past President of the Geological Society, London.

Membership. At the end of October 2007 the membership was made up as follows (2006 figures in brackets): 552 (563) Ordinary, Life and Honorary Members, 53 (67) Associate Members and Honorary Associate Institutes, 6 (8) Student Members and 64 (62) Institutional Members, making a total of 675 Members. This figure includes 25 new enrolments for 2007. The total membership for 2007 shows a decline in membership of 25 from the 2006 total of 700, reported at last year's Annual General Meeting. The Membership Committee, along with other committees (Science and External Affairs) of Council, is addressing this problem of declining membership as a matter of urgency, as part of the five-year 'Forward Plan'. I thank Christine Jennings-Poole for her work with our membership records.

It is with regret that the Society was informed of the deaths of the following members during 2007:

Dr Denys Smith (joined 1957), President (1985–1986), John Phillips (1974) and Sorby (1991) Medallist, Honorary Member of the Society.

Mr G. H. Rhys (joined 1963).

Ms Lou Donovan (joined 1964).

Dr Brian Cooper (joined 2006).

Other matters. As reported in the last two Annual Reports and with reference to the Five Year Forward Plan, Council Members have attended additional committee and sub-committee meetings throughout 2007.

Topics discussed by the External Affairs Committee include:

- The Society's response to consultation documents;
- Improved distribution of publicity and Society flyers;
- Widening Society contacts in the region, with respect to museums and visitor centres;
- Status of museums and their geological collections, with reports in the Society's Circular;
- Widening Society contacts in the region with respect to RIGS groups and Geological Trusts, through Natural England; and
- Continued support for the Yorkshire Geology Month (May).

Topics discussed by the Membership Committee include:

- Reduced fee / free membership for new members joining mid-year;
- Digital provision of out-of-copyright BGS memoirs of northern England via the Society's web-site.
- Recruitment and benefits to members;
- Continuous Professional Development;
- Charging non-members to attend General Meetings; and
- Evaluation of the 2007 Questionnaire.

The Programme Sub-Committee met on two occasions during 2007 to discuss and organize the Society's programme from late 2007 to the AGM of 2008, and to propose ideas for the 2009 session.

The Science Committee has reviewed:

- The composition of the Editorial Board;
- Additional Special and General Meetings;
- Field Guides and Special Publications; and
- The costs of publishing the *Proceedings*.

An Induction CD for new Council Members, which was produced in 2006 and reported in the 2006 Annual Report, has proved to be very successful and has required only minor amendments. Version 3 is to be produced in early 2008.

The 2007 Questionnaire has been evaluated, with thanks to Professor P. F. and Mrs S. Rawson. The results have been discussed by the Membership Committee, and individual aspects of the questionnaire have been and will be discussed at successive Council meetings. The Circular and Web-site were covered at the October Council Meeting. Further topics covered by the questionnaire (Annual Dinner, Programme of meetings, and the *Proceedings*) will be discussed at the first three Council Meetings of 2008.

Acknowledgements. On behalf of the Council, I would like to thank all those members of the Society and their guests who have supported the programme of meetings during 2007. The Council always welcomes comments on the programme and suggestions for future meetings.

The following are retiring from Council:

Mike Alderidge (16 years service, including 12 years as General Treasurer, 1 year as Vice-President and 3 years as a Council Member). Formal thanks were given at the 2004 AGM for his service as General Treasurer and reported in the *Proceedings* (2005), Volume 55, part 3.

Stuart Ogilvy (4 years service).

Peter Robinson (6 years service).

All have contributed greatly to the successful and efficient running of the Society and we are grateful for their support. Finally, we offer our thanks to all those who, over the last year, have worked hard to promote our Society and have supported and facilitated its smooth running, especially the local organizers, the speakers and leaders of field meetings, and all those helpers and providers of refreshments at General Meetings. Also, I would like to take this opportunity to thank Mr Stuart Ogilvy and Dr Anne Rutherford for organizing the Annual Dinner, which will be held at the King's Manor, York, following this AGM.

Trevor Morse

1.2. General Treasurer's Report

The independently examined accounts for the year ended 31st August 2007, summarized below, were presented to and adopted by the Annual General Meeting.

SUMMARY OF ACCOUNTS

Year Ended 31st August, 2007

INCOME		EXPENDITURE	
Subscriptions plus		<i>Proceedings</i>	£22,462.00
Gift Aid	£23,590.00		
Sale of publications	£3,426.00	Circulars	£4,973.90
Interest/Dividends	£1,676.98	Data Base	£1,200.00
Donations	£2,300.00	Meetings	£2,243.40
Annual Dinner		Publications	£4,302.10
Receipts	--	Miscellaneous	£4,054.85
			£39,236.25
		Cash Surplus/Deficit	-£8,243.27
	£30,992.98		£30,992.98

ASSETS		CASH ALLOCATION for 2007-2008	
Bank	£2,318.62	<i>Proceedings</i>	£23,520.00
COIF Deposit	£13,572.03	General Reserve	£5,006.23
Nat. Savings Bank Deposit	£12,635.58		
Total Cash	£28,526.23	Total Cash	£28,526.23
Investments (at Valuation)	£17,271.70		
TOTAL ASSETS	£45,797.93		

Will Watts

1.3. Programme Secretary's Report

Once again, 2007 was a successful year for the YGS programme. We have visited areas all over the region and considered a wide variety of topics. We have also participated in the bicentenary celebrations of the Geological Society of London through the Local Heroes Programme. We were fortunate to receive grant awards in support of some of our meetings throughout the year from the Geological Society of London, and this enabled us to attract some eminent speakers to our meetings.

At Leeds in January, we celebrated the work of Bill Ramsbottom. Our February meeting in Sheffield focussed on Henry Clifton Sorby, and the topic in March at Keyworth was 'Engineering Geology through the Centuries' with talks on William Smith and other pioneers of that discipline. In October, we considered the numerous pioneers of Quaternary geology in East Yorkshire, including P. F. Kendall and W. S. Bisat. We are grateful to the Geological Society for their support for our Local Heroes programme and hope that all who attended found these sessions enjoyable. The September indoor meeting saw a day of topical interest when we looked at geoconservation and geodiversity.

The field programme took members around the farthest reaches of the region, to the Whin Sill, evaporites in the Eden Valley and at Newark, to the Quaternary of Holderness Coast, and to the Jurassic rocks of the rolling Hambleton and Howardian hills of North Yorkshire. As part of Yorkshire Geology Month, we repeated our Urban Geology Day, and walks were led through Scunthorpe, York, Sheffield, Nottingham, Huddersfield and Sheriff Hutton.

The YGS would like to thank all the societies with which we have held joint meetings (Sorby Natural History Society, East Midlands Geological Society, Hull Geological Society and Leeds Geological Association), the contributors, the meeting organisers, and all those who came along to the 2007 programme. We look forward to seeing you all again in 2008.

1.4. Publication Committee Secretary's Report

Volume 56, part 3 of the *Proceedings*, comprising 64 pages, was published on schedule in May 2007, and contained three original scientific papers and the Annual Report for 2006. Volume 56, part 4, was published in November 2007. This was also a 64 page part, meaning that the number of pages published for the year was down on previous years. The reduction in page size is due to fluctuation in submitted papers. Volume 56, part 4, contained six original scientific papers, accompanied by an obituary for Professor John Neale. Other papers published in the *Proceedings* for 2007 highlighted the importance of sections in northern and eastern England for understanding Quaternary geology and reconstruction of the Late Devensian British-Irish Ice Sheet, as well as providing new data on Late Triassic palynology and Early Jurassic marine reptile faunas.

The impact factor of the *Proceedings* fell in 2006, compared to its level in previous years. Such fluctuations are to be expected, given the relatively small print run and lack of online presence. Over the past 12 months or more, Council has been looking at publishing arrangements for the *Proceedings* and are considering various proposals. Among other things, these include publishing the *Proceedings* online as well as in print.

Many people are involved in the editorial process for the *Proceedings* and I wish to record my thanks to all of them, particularly referees and members of the Editorial Board, who give so freely of their spare time. I would like to give special thanks to my co-Principal Editor, Doug Holliday, for all his help and sound advice over the year, and to Jessica Pollitt, our Production Editor at the Geological Society Publishing House.

The Circular Editor, Keith Park, has provided the following report.

"This year has been another successful year for the YGS circular. Not only has it been generally well received by the YGS membership, but we have also had kind comments from several other geological societies.

However the YGS Council and circular production team don't plan to rest on their laurels. We have listened to the constructive criticism we have received throughout the year and the comments made via the YGS questionnaire, and hope to bring you an improved YGS circular at the beginning of next session. We have tried to implement as many of your suggestions as possible. Look out for this; your comments, positive and negative, would be appreciated.

If you would like to see something in the circular that is not there, all members (and indeed non-members) are entitled to submit articles for publication. Extra articles for the circular are always of interest and in line with Council's objective of expanding the circular.

One major criticism, that all involved with the circular are working hard to resolve, is late delivery. Unfortunately it seems to be taking the Post Office longer to deliver the circular and we are trying hard to bring forward the postal date, while keeping the information fresh and up to date. This is a known issue – we will try harder.

The YGS have this year published a 2008 calendar; again we have listened to your comments on previous calendars. These changes are reflected in the sales figures. Around 100 have been sold to date to YGS members and other societies, with orders still being received. This has made the 2008 calendar the most successful published so far."

The Web Editor, Professor Patrick Boylan, reports as follows:

"2007 has seen major advances in the development of the Society's web services. For more than seven years our website had been hosted by the Earth Sciences Department of Leeds University, and we are most grateful to the department and particularly Clare Gordon for all their work and support. However, with major developments in our web provision in mind, Council agreed in June that we should rent, for little more than a nominal annual charge, a very substantial web server space of our own from UK2.net, the company that has provided and managed our web domain for some years.

The transfer took place in at the beginning of July, and we now have more than enough space to accommodate any foreseeable needs of the Society.

The expanded provision includes the full files of all YGS Circulars from 2003, and further back numbers are to be added over the coming months. Our YGS Information Service now has over 150 links, and a growing number of files, providing geological information of interest to our region.

We were also most grateful that Pinpoint Ltd., a leading document scanning and electronic filing company, generously agreed to scan and provide fully searchable PDF files of all three of the Society's printed indexes for the *Proceedings*, covering 1837 to 1995, and these also are now available on the website.

In a further major development that will be completed before the end of 2007, the British Geological Survey has provided the Society with fully searchable PDF copies of nine pre-1937 Geological Survey Memoirs for Yorkshire, a total of over 1,600 pages. This will be the first time that any historic Survey Memoirs have been made publicly available in this way, and is a reflection of the excellent relations between the Society and the BGS. We hope that further additions to this series will become available in due course, as other historic Memoirs are scanned and the copyright issues relating to more recent publications can be resolved.

Finally, but by no means least, the Council recognizes that there is a real demand already for online access to both the current issues of the *Proceedings* and the huge amount of unique information in the earlier volumes from 1837 onwards, and various possibilities for providing this are being actively considered."

Stewart Molyneux

2. MEDAL PRESENTATIONS

(York, 24th November, 2007)

2.1. Presentation of the Moore Medal by the President to

MR PETER ROBINSON

I should like to preface this presentation by saying a little bit about the Moore Medal.

A few years ago, when Council thought that it was appropriate to review the Moore Medal and the basis on which it was awarded, I was one of the group who successfully recommended to Council that this medal should in future be awarded for 'services to geology in the North of England', that it should be on a par with our Phillips and Sorby Medals and that it should enter into a flexible rotation with them. At that time, I was also asked to convey our recommendations back to Dr Roger Neves, who had been the original instigator of the Moore Medal and who had raised the subscription for it. This essentially reversed a role that I had played years before. At the time when he was seeking to establish the Medal, Roger Neves had asked me to relay his proposals to Council, on which I was at that time serving. I am pleased to say that Roger Neves saw the value of, and was happy to accept Council's decision for change, and I was able to point out to Roger Neves that in his original proposal he had sought to establish the medal in commemoration of the Moores and in appreciation of 'their services to geology'.

Because of these associations with the history of the Moore Medal, because I was a member of Leslie Moore's department in Sheffield, and because I knew and was fond of both Leslie and Peggy Moore, I feel privileged that today I happen to be the President who makes this inaugural presentation of the Medal in its new form.

By a happy coincidence our medallist also knew and worked for Leslie Moore. Peter Robinson started his work in geology as a technician, initially in the Department of Geology in Hull University and then subsequently in the Department of Geology in Sheffield. Peter and I did not overlap in either of these institutions, but it is clear, from what people have said and written to me, that Peter set standards of service to geology which were far beyond these normally

expected of a technician. Peter did not just support staff and students, but was an innovative worker who developed new thin sectioning and palynological techniques; even in those early days he was a fount of information about geological sites and willingly led field trips for the student geological society; he was generous in donating and lending specimens (some of which have not yet been returned); and he showed an ability to bridge the boundaries between geology and other disciplines (something to which I will return later).

As he is an enthusiastic educator, it was perhaps inevitable that Peter went on to train as a teacher. Initially, Peter taught in Sheffield, but a succession of posts ended with his moving south and working for many years in Devon. He was thus to a large extent lost to our region, though not, I am glad to say, to geology, for nearly two decades.

On his retirement, Peter returned to his native Scarborough and quickly re-established himself on the local scene and as someone whose helpfulness, selfless generosity and enthusiasm for geology are second to none and provide outstanding examples of service to the subject. Peter has taken a particular interest in the documentation and geoconservation of sites. In addition to recognizing many potential RIGS sites, Peter has acted as geology recorder for the Scarborough Field Naturalists Association (of which he has also been President), and was a founder member of the Ryedale and Scarborough RIGS Group and its successor the North East Yorkshire Geology Trust. Just yesterday Peter, who has been an active and long serving member of our own Council, attended a meeting on Regional Geodiversity on behalf of the Society.

Peter's knowledge of localities makes him an important link between the geology of the Cleveland coast and those who study it. He regularly reports new finds to academics and museums across the country. Mike Romano and I have, for instance, often benefited from his friendship and information about new footprint finds. These and his many donations to museums and collections are all accompanied by his characteristically meticulous field data. Examples of his field notebooks are soon, I understand, to be included in the displays of the Rotunda Museum.

Peter is a valued founder member of the Rotunda Geology Group and his contributions to the Dinosaur Coast Project have been described as legendary. Peter has established several geology trails in and around the Scarborough area including some that cater for the physically less able. Most recently, he has been developing one in Hackness based on William Smith's map and I hope that he will be demonstrating this to a Joint Meeting of this Society and the Geological Society's History of Geology Group next October. As many here will already know, Peter has an ability to lead a walk that covers not only the geology but also the flora, fauna, history and folklore of the area. For Peter is more than just a geologist. He also has an enthusiastic expertise across the breadth of natural science and has carried out significant work in botanical recording and surveying and in ecology and conservation. Among the bodies that he has done such work for are Natural England, Forest Enterprise, North York Moors National Park and the Council for the Protection of Rural England. Every year, students from Sheffield University visit Dalby Forest to study the vegetation and forest management and their relationship to the soils and to the underlying geology. These field courses have their origins in Peter's days in Hull and his willingness to go out in the field with biologists

and to demonstrate to them the geology and its importance. This long term outreach, this championing of geology to other scientists, to foresters, to farmers, to local councillors, to land owners, to students and school pupils, and indeed to anyone who needs to be convinced of the importance of geology is another, and an extremely important, facet of Peter's many services to geology in the North of England. He is an example to us all.

Peter, I started by talking about my feelings of privilege but the real privilege is to be standing here on behalf of the Society and presenting the Moore Medal to someone who so clearly and so richly deserves it.

Congratulations.

3. SOCIETY ACTIVITIES, 2007

3.1. Indoor Meetings

* Indicates a Geological Society of London Bicentennial Local Heroes Meeting

*January 20th: Leeds: Joint Meeting with the Leeds Geological Association**

The ups and downs of sea-level: a tribute to the work of W.H.C. Ramsbottom

B. U. HAQ. Can a meaningful Palaeozoic eustatic sea-level curve be constructed?

M. D. SIMMONS, P. R. SHARLAND, R. B. DAVIES, D. B. KEMP & O. E. SUTCLIFFE. Global, synchronous, high-amplitude, rapid sea-level change in the geological record: linkage to extreme climate change.

A. HALLAM. The problem of determining and understanding the cause of short-term eustasy in a greenhouse world.

P. B. WIGNALL. Mass extinctions and sea-level change.

*February 17th: Sheffield: Joint Meeting with the Sorby Natural History Society**

Development of scientific methods in Sheffield: Henry Clifton Sorby, FRS

N. WORLEY. Henry Clifton Sorby and Sheffield.

J. D. COLLINSON. Sorby and sedimentology.

D. A. SPEARS. Sorby's work on Ironstones.

G. TURNER. Meteorites – a hundred and forty years on from Sorby.

*March 18th: Keyworth: Joint Meeting with the Engineering Group of the Geological Society**

Engineering Geology through the centuries

H. REEVES & M. G. CULSHAW. Engineering Geology through the Centuries.

A. FORSTER. William Smith and the development of engineering geology in England.

D. NORBURY & R. WILLIAMS. Rudolph Glossop and the development of 'Geotechnology'.

E. P. F. ROSE. Fred Shotton (1906–1990): A 'hero' of military applications of geology during the Second World War.

G. REEVES. 'Bill the Second' – Mapping that changed the world of Geology. Professor William Dearman 1921 to Present: the first Professor of Engineering Geology at a British University.

J. CHARMAN. Peter Fookes 1933–present.

September 29th: Durham: General Meeting

Geoconservation

M. GRAY. Geodiversity and Geoconservation: the big picture?

J. LARWOOD. Natural England – the fourth generation.

C. WOODLEY-STEWART. Geodiversity action in the north Pennines.

C. V. BUREK. The role of volunteers in geoconservation past and present. Is it sustainable?

*October 27th: Hull: Joint Meeting with the Hull Geological Society**

Local heroes of East Yorkshire Quaternary Geology

J. CATT. Introduction to the meeting.

K. J. GREGORY. The proglacial lake model of P. F. Kendall: surviving after a century?

P. J. BOYLAN. W. S. Bisat and Quaternary Geology.

W. MITCHELL. Arthur Raistrick - dalesman and Quaternary pioneer.

M. HORNE. Local heroes – J. W. Stather, T. Sheppard and the East Riding Boulder Committee.

November 24th: York: Annual General Meeting

Annual General meeting and Presidential Address

M. A. WHYTE. Which came first, the dinosaur or the egg? Dinosaur eggs from a Chinese perspective.

3.2. Field Meetings

February 17th

Ecclesall Church Yard – Sorby's Grave

Leader: P. Kennett

April 1st

British Gypsum Opencast Mine, Newark

Leaders: H. Reeves & N. Worley

May 12–13th: Urban Geology Day

Sheffield. Leader: P. Kennett

York. Leader: S. Ogilvy

Nottingham. Leader: G. K. Lott

Huddersfield. Leader: A. Quarterman

May 22nd

Whin Sill.

Leader: T. Morse

June 16th

Jurassic 'gems' of the Hambleton and Howardian Hills.

Leaders: J. H. Powell, J. Ford & S. Price

July 21st

Upper Permian evaporites of the Eden Valley, Cumbria

Leader: N. Worley

October 28th

Dimlington cliff section on the Holderness coast.

Leader: J. Catt