

**GEOLOGY IN THE HISTORY OF  
PROVINCIAL SCIENTIFIC SOCIETIES**

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**MANCHESTER  
9th APRIL 2010**

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**PROGRAMME and  
ABSTRACTS**

## PROGRAMME

### 9.45 - 10.15 Coffee and registration

10.15 – 10.45 Short welcome from Alan Bowden followed by  
John POLLARD *The contributions of Edward Binney FRS FGS, the geologist, to  
the Manchester scientific scene and societies 1836-1881*

10.45 – 11.15 Geoff TRESISE *Liverpool: a tale of two societies 1860-1910*

### 11.15 – 11.30 Short break

11.30 – 12.00 Ronald AUSTIN *Geology in the history of scientific societies in Swansea, South  
Wales*

12.00 – 12.30 Noel WORLEY *The Yorkshire Geological Society: its history and contribution  
to geological science*

### 12.30 – 13.30 Lunch

13.30 – 14.00 Patrick BOYLAN *Geology and the Leicester Lit. & Phil., 1835-2010*

14.00 – 14.25 THE WOOLHOPE CLUB'S DVD *Picnic in Siluria*

14.25 - 15.00 Hugh TORRENS *A forgotten English museological initiative: the Midland counties  
natural history societies and museums of the 1830s*

### 15.00 – 15.30 Tea

15.30 – 16.00 Norman BUTCHER *The Devonshire Association - a unique organisation*

16.00 – 16.30 Simon NAYLOR *The Royal Geological Society of Cornwall and the mapping of  
Cornwall's geology*

16.30 - 17.00 Leucha VENEER *Newcastle: local geology and local mining, 1790-1840*

17.00 – 17.30 Stephen DONOVAN *Lawrence Chubb, Verners Zans and the Jamaica Group of  
the Geologists' Association (1955-1959)*

### 17.30 Close

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## The contributions of Edward Binney FRS FGS, the geologist, to the Manchester scientific scene and societies 1836 – 1881

John Pollard

School of Earth, Atmospheric and Environmental Sciences  
University of Manchester

Edward William Binney (1812 – 1881), a Manchester solicitor and eminent local geologist, was a founder member, first secretary and twice president of the Manchester Geological Society established in 1838. He was a strong supporter of free public access to the Society's museum, although he opposed the transfer of its collections to Owens College in 1870 to become the Manchester Museum. Binney published papers on local geology, Coal Measures stratigraphy, fossils and plants, Permo-Triassic rocks and drift deposits of north-west England, mainly in the *Transactions of the Manchester Geological Society* and the *Memoirs and Proceedings of the Manchester Literary and Philosophical Society*.

Through a partnership with James 'Parafin' Young in the exploitation of Lothian oil shales from 1850 – 1865, Binney became a rich man. Throughout his life, he was a supporter and benefactor of Lancashire artisan naturalists. From 1847, he devoted much of his time to the affairs of the Manchester Literary and Philosophical Society, was three times president, and is credited with playing a major role in preserving the status of science in the Society in the mid 19th century.

Overall, from 1840 and before the advent of either the academic geologists of Owens College in the 1870s or the work of the Geological Survey in the 1860s, E. W. Binney was a pioneer local geologist. His Palaeontographical Society monographs on Carboniferous plants contained some errors which have led to his contributions being partly eclipsed by later workers.

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## Liverpool: a tale of two societies

Geoff Tresise

National Museums Liverpool



The Liverpool Geological Society held its first meeting in January 1860. Set up by seven optimistic enthusiasts and constitutionally limited to a maximum of 18 members, the Society survived initial prophecies of doom and, in 2010, is celebrating its sesquicentenary.

Twenty years after its formation, proposals to introduce a student branch founded, partly for financial reasons, partly because of a reluctance to admit female members. Instead, a new body, the Liverpool Geological Association, was set up. For many years, this proved the more successful of the two in terms of numbers of members. Eventually, however, membership declined and, in 1910, the Association and Society were merged. Throughout the 30 years of its existence, the Association had been characterised by a willingness to experiment with new initiatives which, directly and indirectly, were to affect the nature and membership of the Liverpool Geological Society today.

## Geology in the history of scientific societies in Swansea, South Wales

Ronald Austin

West Cross, Swansea

Early in the 19th century, Swansea was a centre for the coal and copper industries. Prominent local industrialists took an interest in geology. By 1822, a Scientific Institution was formed in Swansea to study geology and mineralogy; by 1824, there was a Cambrian Society for the encouragement of pursuits in geology and natural history, and between 1821 and 1825, meetings of the Cambrian Geological Society were held in the town. The founding of the Swansea Philosophical and Literary Institution, in 1835, enabled members to attend lectures on geological topics, to use a library and to examine donated geological specimens. The Rev. W. D. Conybeare addressed the inaugural meeting. W. E. Logan was elected to the first committee becoming Honorary Secretary in 1836,



and Honorary Curator of the Geology Section in 1843. In 1838, the Institution became the Royal Institution of South Wales (RISW) and in May 1839, a formal link was established with the Museum of Economic Geology in London. Its own prestigious building was opened in 1842. There were regular lectures by De la Beche and Starling Benson, amongst others, on 'coal' and the 'local bone caves'. The BA visited Swansea in 1848. In 1877, the Swansea Geological Society was founded with links to the RISW.

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# The Yorkshire Geological Society: its history and contribution to geological science

Noel Worley

British Gypsum, Geological & Mining Services



The Yorkshire Geological Society is one of the oldest surviving geological societies having been founded in 1837, Queen Victoria's coronation year, originally as the West Riding Geological and Polytechnic Society. It was established by Gentlemen ostensibly in the spirit of scientific altruism but also, in true Yorkshire fashion, for the utility of geology to aid the commercial development of the Yorkshire Coalfield. Its membership was therefore essentially amateur, being drawn from the landed gentry who were owners of large mineral estates, those in managerial control of mines and factories, and the clergy. The

Society lobbied the government for the preparation and publication of geological maps of the coalfields which introduced an association with staff of the newly formed Geological Survey. Some became the Society's first professional members and this brought about a long and productive association with the Survey which provided the Society with 14 presidents.

Ambitious attempts to form a museum to house a collection of specimens failed, mainly due to shortage of resources, and therefore encouraged the Society to form its distinctive pattern of peripatetic indoor and outdoor meetings. The former were held initially in the growing industrial towns of the West Riding and subsequently over a wider geographical compass to include the whole of Yorkshire, parts of the North of England, and North Midlands. The indoor public meetings provide a means of educational outreach to the wider community and these were often held jointly with other groups.

During the 20th century, the pattern of membership reflected the development of the subject. The introduction of geological study into universities provided a source of fresh members and the ability to recruit students. After World War II, the growth in numbers in university education, the expansion of the Geological Survey, and importance in the development of hydrocarbon and other resources, increased interest in the Society and membership rose to over 1200. The very size of Yorkshire and its varied landscape provides many geological opportunities. It is therefore not surprising that the Society has produced and continues to attract amateur scientists, many of whom have become internationally distinguished. Their findings were usually presented in the Society's *Proceedings* that have been published without interruption since it was first established. Many groundbreaking discoveries of international importance have been published; for example, the first account of thin section petrography and the discovery of Precambrian fossils. The Society makes awards and presents medals for achievement which have been brought about by endowments from some of its more illustrious members; these are not only awarded for high achievement but also to encourage students and young people.

The purpose of geological societies is the promotion of geology through the organisation of meetings and to communicate through publication. Today, the Society faces fresh challenges to these doctrines caused by a long term decline in membership, low levels of interest in original research in British Isles geology, and the impact of the late 1980's UGC review of university geological education that removed geological science research from so many of the institutions in the North of England.

## Geology and the Leicester Lit. & Phil., 1835 – 2010

Patrick Boylan  
City University London



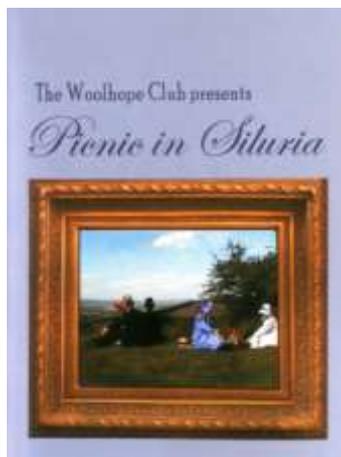
The Leicester Literary and Philosophical Society was one of the last of the considerable number of city and town literary and philosophical societies but survives as a very active society today, unlike the great majority of the 19th century Lit. & Phils. It was established in 1835 with the aim of reconciling two bitterly divided factions within Leicester at the time of the 1835 Municipal Reform Act, one traditionalist Tory and Church of England, and the other radical and predominantly Nonconformist; hence the original aim, quoted in the title of the new history of the Society by Patrick Boylan, ‘*Exchanging Ideas Dispassionately and without Animosity*’.

From its earliest times, geology was amongst the special interests of the Society, and the first two honorary members to be elected were Buckland and Sedgwick. Initially, the main geological efforts were in creating a museum and library, both with a strong geological element, and though the collections were passed to the Town Council in Trust to create the Leicester Museum in its present New Walk building in June 1849, the Society remained closely involved with the Museum on an official basis for a further century or more. Another original aim was to establish published *Transactions* as a learned journal though, for financial reasons, this was not achieved until 1886, after which the *Transactions* began to carry important original research, while a number of important scientific research books have also been published by or in association with the Society.

In 1849, the Society began to develop specialist Sections, modelling itself on the pattern of the British Association and, since that date, the Leicester Lit. and Phil. has always had a Section specialising wholly or in part with geology, organising specialist lectures, fieldwork and research, and the Geology Section is one of only two Sections that have survived to the present day. The Society has also played an important part in promoting the original formation and subsequent development of what is today the University of Leicester, including its geological teaching and research.

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### Picnic in Siluria a DVD produced by the Woolhope Club



Running time 25 minutes  
£12 (incl. p&p)

Available from  
Dr Paul Olver  
The Buttridge  
Wellington Lane  
Canon Pyon  
Hereford HR4 8NL

tel. 01432 761693  
e mail paulolver@hotmail.com



## **A forgotten English museological initiative: the Midland counties natural history societies and museums of the 1830s**

Hugh Torrens

University of Keele

The invention of English provincial Natural History Societies and their attendant, usually County, Museums in the decade 1830-1840 is described. This was initiated jointly by the foundation of the first for Worcestershire early in 1833 and the slightly later publication of a paper urging that this idea be adopted, particularly by doctors, nationally by the physician John Conolly. This forgotten initiative came between the Philosophical Movement, which had previously produced so many Literary and Philosophical, or soon, Scientific, Institutions and the later Field Clubs which arrived as soon as provincial railway systems developed here. The spread of this initiative in Midland counties, between Worcestershire and Shropshire in the west, and Derbyshire and Nottinghamshire in the east is described, but further research may reveal it was far more widespread in its adoption. The museological consequences, at least for the development of provincial English museums, were highly significant.



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## **The Devonshire Association – a unique organisation**

Norman Butcher

Edinburgh

Founded in 1862, The Devonshire Association for the Advancement of Science, Literature and the Arts (DA) is a unique organisation. Modelled on the British Association for the Advancement of Science (BA) which was founded in York in 1831, the DA, brain-child of William Pengelly FRS of Torquay, covers a much broader spectrum of subject matter than the BA.



Like the BA, the DA holds an annual conference in a different place in the county each year, under a different President each year. With its headquarters now based in the Bishop's Palace in Exeter, the DA is organised into several Branches and Sections in the county, and publishes an annual volume of *Reports and Transactions* with occasional volumes such as *Dartmoor Essays* (1964). Geology has been, and still is, an active Section with some notable geologists associated with the county.

# The Royal Geological Society of Cornwall and the mapping of Cornwall's geology

Simon Naylor  
Department of Geography  
University of Exeter



On 11th February 1814, a meeting was held at the Union Hotel, Penzance, at which Cornwall's first scientific society was established. As well as hoping to aid in the 'Discovery of New Facts to Enrich Science', this newly formed Cornwall Geological Society (later renamed the Royal Geological Society of Cornwall), set out to apply science to the advancement of the mining resources of the county. As part of both of the remits set out above, the Society encouraged its members to map the county's geology and they did so with alacrity. These were the first expressly scientific maps of the county of Cornwall and some of the

earliest geological maps of portions of Britain more generally. This paper begins by considering the place of geological maps in 19th century visual culture. It then discusses the social makeup of the Cornish Society and considers the significance of its maps in the promotion of industrial and agricultural improvement. It then examines a number of the Society's geological maps in turn. These examples are used to highlight the way maps are employed to express proprietorship and authority over both economic and intellectual territories; and the way in which they became the loci of tensions between provincial and metropolitan geologists, and between regional and national geology.

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## Newcastle: local geology and local mining, 1790-1840

Leucha Veneer  
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University of Manchester



Provincial philosophical societies are often solely associated with ornamental knowledge, polite science and cultural improvement; in early nineteenth-century Newcastle this does not tell the whole story. Like the Royal Geological Society of Cornwall, the Newcastle Literary and Philosophical Society (f. 1793), and the Natural History Society of Northumberland, Durham and Newcastle-upon-Tyne (f. 1829) were interested in scientific advancements in mining. Both societies established geological programmes for the benefit of the local mining industry, and were interested in scientific, technological and humanitarian improvements. In this paper I shall discuss these programmes, and show how members from a range of backgrounds contributed to their fulfilment, concluding with a reconsideration of the place of economic and utilitarian considerations in the history of geology in this period.

## **Lawrence Chubb, Verners Zans and the Jamaica Group of the Geologists' Association (1955-1959)**

**Stephen K. Donovan**

Nationaal Natuurhistorisch Museum

Leiden

The Netherlands

It was not until the 1950s that Jamaica had a resident geological intelligentsia, following the formation of the modern Geological Survey Department. The Director, V. A. Zans (1904-1961), was a Latvian geologist appointed from a camp for displaced persons. His staff included L. J. Chubb (1887-1971), at first on sabbatical leave from University College London.

Chubb popularized geology in Jamaica, giving numerous extra-mural lectures. Chubb and his colleagues devised a three-part plan for geological education in Jamaica: high schools were encouraged to introduce geology as an examination subject; introduction of geology as a part of the Natural Sciences curriculum at the University College of the West Indies was supported; and a local geological society for both amateurs and professionals was established.



The Jamaica Group of the Geologists' Association was established in 1955, the only such overseas group ever founded; Chubb was elected President. The first of many field trips was led by Zans and A. D. Foster in November 1955. The Group was reformed as the independent Geological Society of Jamaica (GSJ) from 1960, with Chubb as the first President. The GSJ remembers the name of its first President in the prestigious L. J. Chubb Award; there have been five recipients since 1980.