THE GEOLOGICAL SOCIETIES AND GEOLOGISTS OF MIDLAND ENGLAND

by

Robert W. Morrell and William A. S. Sarjeant

Summary

An account is given of the growth of geological societies in Midland England. Societies known to have had a geological interest are listed, together with brief summaries of their history, publications, and most notable members. The present condition of geological activity in the area is assessed.

Introduction

This article attempts to bring together all available information on the growth and development of geological societies, and societies having a geological interest, in Midland England. The Midlands are here defined as comprising the counties of Lincolnshire, Leicestershire, Rutland, Northamptonshire, Nottinghamshire, southernmost Yorkshire (the old county of Hallamshire), Derbyshire, Staffordshire, north Oxfordshire, Warwickshire, north Gloucestershire, Worcestershire, Herefordshire and Shropshire. It is recognised that this definition is quite arbitrary, but the Midlands are an ill-defined region and have no generally recognised limits.

Tracking the history of geological activity in this area has proved extremely difficult. It has necessitated extensive correspondence with Librarians and with Society secretaries: the majority of these replied courteously and fully, but a minority did not reply at all, which accounts for certain gaps in coverage. Published transactions and reports were consulted wherever available, and extensive studies have been made of general works on the geology of the area and of histories of major British geological organisations. None-theless, there are numerous gaps: the authors would welcome details of Societies with a geological interest, which have been omitted from this account; further details on societies incompletely covered; or corrections. School natural history or geological societies present a limitless field and have necessarily to be omitted from consideration: county Naturalist's Trusts are likewise omitted.

Beginnings

Perhaps the earliest work treating with the geology of the Midlands was "The Natural History of Staffordshire", published in 1686. This was compiled by Dr. Robert Plot, first Curator of the Ashmolean Museum, Oxford; it discusses the working of minerals and includes numerous figures of "formed stones" – minerals and fossils, the latter sufficiently accurately drawn to be readily named today.

At this time, the Royal Society, the first British scientific society, was only newly founded (c. 1645); science remained largely speculative, with experimentation, and even accurate observation, scarcely begun. Following the formation of the Royal Society, however, science soon came to be regarded as among the proper pursuits of gentlemen. Individuals started to gather together to discuss scientific topics; from such gatherings emerged bodies such as the Spalding Gentlemen's Society, of which Isaac Newton was a member and whose collections were ultimately sold to Leicester Museum.

Perhaps the most important of the early scientific societies in the Midlands was the Lunar Society of Birmingham. This was formed informally about 1765 but did not adopt a name until 1776. Its members included many scientific notables, among them Erasmus Darwin, James Watt, and Joseph Priestley. Perhaps most active in geology was Josiah Wedgwood, whose concern with the study of earths, clays and minerals for pottery led to a general interest in rocks and to much experimentation; a letter written by him in 1767 to a fellow member includes an accurate sketch section of strata along the Trent and Mersey Canal, then in process of cutting. The Lunar Society faded as its original members aged; it ultimately dissolved about 1800.

By this time, a number of other bodies interested in science were in existence in various parts of Britain. The Philosophical Society of Edinburgh was formed in 1739; the Royal Irish Academy in 1785; and the Linnaean Society in 1788. No society yet existed concerned exclusively with geology. However, in March 1796, a group of "young men desirous... to improve themselves mutually by philosophical exercises" formed in London the Askesian Society: and a group of its members formed, on 2nd April 1799, the British Mineralogical Society with a membership limited to 20. This was relatively short-lived and was re-incorporated into the Askesian Society on 18th December 1806. These two societies formed a nucleus from which, on 13th November 1807, the Geological Society of London was formed. The Geological Society was originally formed as a dining club, but commenced publishing "Transactions" in 1810 and received a Royal Charter in 1825. This provided a focus and a stimulus for geological work: all other geological societies may be said in some measure to stem from it.

Early Scientific Societies in the Midlands

The early societies of the Midlands were, like the Royal Society, very broad in outlook, with an umbrella of interest covering all branches of scientific study. These early groups tended to be chair-ridden, any field work being undertaken rather by individual members than by the Society as a whole. They generally termed themselves "Literary and Philosophical Societies", following the French model of that time. The first was formed at Manchester in 1781: a second at Newcastle followed, in 1793: and subsequently similar societies were formed in Birmingham, 1800, and Leeds, 1819.

1804 saw the foundation of a "Society for the promotion of useful Knowledge" in Sheffield. Among papers read was one reflecting the great geological controversy of that time, "Observations on the opinions of the Vulcanists and Neptunists relative to the formation of the globe". The society seems to have faded out rapidly in 1805; but some of its members were among the founders, on 12th December 1822 of the Sheffield Literary and Philosophical Society. The society assembled a library and, among others a geological collection: and an early paper was "The best method of commencing our Geological Researches and arranging a cabinet of minerals", read by Mr. E. Barker. The most eminent of its members was

Henry Clifton Sorby (1826 - 1908), who was to prove one of the great scientific pioneers. He was the first to seriously apply the microscope to study of rocks and metals, thus virtually establishing the sciences of petrography and metallurgy, and he was to become a leading marine biologist in his later years. His other geological studies included fundamental researches into the origin of slaty cleavage; the structure of meteorites; and the processes of sedimentation. He was President of the Geological Society (1879 - 80) and played a leading part in the establishment of the University of Sheffield, which now has a Sorby Chair of Geology.

Sorby was elected to the Sheffield Literary and Philosophical Society in 1846 and read the first of very many papers to it, on "The functions of valleys, river actions and alluvial deposits in this neighbourhood", in 1846. In 1848 he was elected to its Council and remained there for life, his national standing as a scientist being of great advantage in attracting notable visitors to its meetings. The Society published annual reports, and a centenary volume in 1822: its existence came to an end in 1932.

Other societies came and went in Sheffield during this period. A short-lived Field Naturalists' Society existed in 1864 – 5, and published a single "Annual Report": from its remains was formed an ephemeral Sheffield Naturalists' Society in 1865. In 1870, the Sheffield Naturalists' Club was formed, with Sorby as first President: by now, field work figured large among its activities and there was an active interest in geology. Two volumes of "Proceedings" were published in 1910 and 1914. In 1877, the Sheffield Microscopical Society was formed: its first President was George E. Vine, a specialist of international renown on fossil Bryozoa, whose collections are now largely in Sheffield Museum. The two societies amalgamated with a third, the Sheffield Junior Naturalists' Club, in 1918 to form the Sorby Scientific Society. A Geological Section was formed in 1921: the results of researches into Millstone Grit sedimentation formed the bulk of the Society's single volume of "Transactions", published in 1928. As a result of gradual elimination of other interests, the Society changed its title in 1932 to Sorby Natural History Society. The publication of a journal, the "Sorby Record", was begun in 1958 under the Editorship of one of the authors (W.A.S.S.): both Society and journal continue to flourish.

The earliest geological society, as such, to be formed in the Midlands was the Dudley Geological Society, which came into existence about 1840. It was addressed by Sir Roderick I. Murchison on 17th January 1842: members are known to have included Henry Beckett, S.H. Blackwell, William Matthews and James Yates. The Society collapsed before 1860: in 1862, however, the cumbrously titled Dudley and Midland Geological and Scientific Society and Field Club was formed, taking over a collection assembled by the earlier Society. This new Society formed a Museum, which was originally housed in the Mechanics Institution. The Society survived into the present century, but is now defunct: its geological collections passed into the charge of the Borough and are shortly to be housed in a new geological gallery.

In Nottingham, as in Sheffield, natural history societies have come and gone. In 1837 there was formed a short-lived but long-titled Nottingham and Nottinghamshire Society for the Study and Cultivation of Natural History. This had a Curator responsible for geology, Mr. A.F.A. Greeves: it published a single report, consisting largely of a list of members. Its subsequent history, if any, is uncertain; a report issued by another Nottingham society, the Nottingham Naturalists' Society (founded in 1851 or 1852 according to conflicting references) suggests amalgamation at an undisclosed date.

The Nottingham Naturalists' Society displayed a strong leaning towards geology. James Shipman, by profession Assistant Editor of the "Nottingham Daily Express", was an exhaustive worker on Nottingham geology and was always on hand at any temporary exposure. He wrote many papers on this topic for the Society's "Report and Transactions" and his observations were incorporated in the Geological Survey maps of the area. The first Professor of Geology at Nottingham University College, Professor Herbert H. Swinnerton, was President of the Society in 1911. The Society succumbed to the 1914 – 18 War, its last publication appearing in 1916.

Two other transient Nottingham Societies may be mentioned. The Nottingham Working Mens Natural History Society was active for a number of years in the late nineteenth century. In 1881 there was a serious split in its' ranks over the propriety of meeting in public houses. The breakaway teetotallers formed the Nottingham G.R.S. Natural History Society (the significance of the initials is unknown): this was never strong and subsequently amalgamated with the Nottingham Naturalist's Society in 1884.

Perhaps the first geological society to be formed in the East Midlands was the Nottingham Geological Rambling Club, founded in 1889, developing out of the Nottingham Saturday Afternoon Rambling Club: Shipman was, naturally, among its early members. The geologists soon found that a number of botanists kept joining its rambles; their presence was recognised officially in 1895, when the Club was reorganised into two sections under the title Nottingham Natural Science Rambling Club. During its earlier days, its membership included a number of keen amateur geologists; notable among these was George Abbott (1844 – 1925), who purchased a quarry in the Magnesian Limestone, near Sunderland, from which he furnished type series of concretions to many leading museums. Although later residing at Tunbridge Wells, he remained interested in Nottingham and bequeathed an estate to furnish funds for geological researches at the University: his name is perpetuated in the Abbott Memorial Lectures. In 1915, the Club assumed its present title, Nottingham and Nottinghamshire Field Club: their interest in geology has declined with the years and recently even the office of Recorder in Geology has been left unoccupied.

Thirteen years after the formation of the Sheffield Literary and Philosophical Society, a similar society was formed in Leicester. Originally the Society was an all-male preserve; only after three years and many heated words were women admitted, and even then this was initially only by male introduction. The Society, unlike so many others of its kind, continues to flourish: it is divided into a number of Sections which have a large measure of independence, membership of a Section not necessarily involving membership of the main Society. Adam Sedgwick was an early guest: geological interest has always been strong and a number of important papers on this topic have appeared in the Society's annual "Transactions". In 1841, the Society founded a Museum of Geology, Natural History and Antiquities: eight years later, this was handed over to become the nucleus of the borough museum.

A Scientific Association of Leicester existed in 1881: details of this are not known – it is certainly long defunct. A third Leicester Society also deserves mention, which, although having no direct connection with geology or any other branch of natural history, has played an important, albeit controversial, role in interesting the general public in these sciences. This is the Leicester Secular Society, which still exists; it did much to pioneer the use of Sundays for meetings and excursions and, through its lectures on evolution, did much to introduce geology to many who would not otherwise have taken an interest in the subject.

The story of developments in Sheffield, Dudley, Nottingham and Leicester typifies the picture over much of the Midlands, with geology either surviving simply as one facet of the activities of a more generalised society, or succumbing altogether. Societies elsewhere in the Midlands will be dealt with in a later section.

Unions and Associations

In view of the large number of natural history societies flourishing in the Midlands during the late nineteenth century, it was natural that attempts should be made to achieve some measure of unity between them. The earliest such attempt was the foundation in Birmingham, on 28th August 1877, of the Midland Union of Natural History Societies by representatives of seven local societies; within a year, 22 Societies were members. Its prime initial function was publication of a journal, "The Midland Naturalist"; one of its two Editors was a geologist, W. J. Harrison. The Union's annual general meetings were held as follows:-

<u>Year</u>	Number of Societies in Membership	Venue
1877	7	Birmingham
1878	22	Birmingham
1879	24	Leicester
1880	24	Northampton
1881	27	Cheltenham
1882	25	Nottingham
1883	22	Tamworth
1884	23	Peterborough

The Union established a Darwin Medal to be awarded for work on "some subject connected with the Natural History of the Midlands: the adjudicating Committee included such notable geologists as Jethro Teall and Charles Lapworth. Its first award was to a Nottingham geologist, E. Wilson, for his paper on "The Permian Formation in the North-East of England." Publication of "The Midland Naturalist" continued till 1884, despite a growing concern with finances; later issues were directly subsidised by the Birmingham Natural History and Microscopical Society. The Union does not seem to have outlived its journal.

A more successful association of societies was the Lincolnshire Naturalists' Union, established in 1893. Its geological activities are to be the subject of a separate article in Number 2 of "The Mercian Geologist".

In the first year of the present century, there appeared at Alfreton, Derbyshire, a small journal entitled "The Derbyshire Naturalists' Quarterly". This was edited by a London clergyman, the Rev. C. Hincliff: it appears originally to have been quite independent, but in 1901 proclaimed itself as the official organ of three local societies – - the Bakewell and District Field Club, the Blackwell and District Scientific and Literary Society, and the Matlock Field Club. A number of articles on geological topics were featured. Financial troubles soon hit the journal: in 1902, it became "The Nottinghamshire and Derbyshire Naturalists" Quarterly", but the broadening of scope did not save it and no later issues have been traced.

A nation-wide body, which has done a great deal to encourage co-operation between societies, is the British Association for the Advancement of Science. A full discussion of this body is beyond the scope of the present article, but it may be of interest to list the meetings held in the Midlands, since in all cases these have produced reports and handbooks treating in part with local geology.

Date	Venue	Date	Venue
1839	Birmingham	1907	Leicester
1849	Birmingham	1910	Sheffield
1856	Cheltenham	1913	Birmingham
1865	Birmingham	1933	Leicester
1866	Nottingham	1937	Nottingham
1879	Sheffield	1950	Birmingham
1886	Birmingham	1956	Sheffield
1893	Nottingham		

The British Association is to meet for the fourth time in Nottingham in 1966.

(List of Midland Societies Interested in Geology)

Since a full treatment of the histories of all Midland societies having an interest in geology is impossible in the space of an article, a list follows of all such societies known to the authors. Dates of foundation and dissolution are given where possible, together with details of publications: fullness of treatment more accurately reflects information available than degree of importance. Societies dealt with more fully in the text are indicated.

- ALFORD NATURAL HISTORY SOCIETY (Lincs.) Founded 1885; geological interest small. A component of the Lincolnshire Naturalists' Union (1893).
- BAKEWELL AND DISTRICT NATURALISTS' FIELD CLUB (Derbys.) Formed pre-1890: existed till after 1902.

 William Storrs Fox, who did much work on Derbyshire bone caves, is believed to have been a prominent member.
- BANBURYSHIRE NATURAL HISTORY & FIELD CLUB (Oxon). Formed 1872: long defunct. Showed a fair degree of geological interest.
- BIRMINGHAM AND MIDLAND INSTITUTE SCIENTIFIC SOCIETY (Warwicks.) Founded 1872: defunct.

 Membership drawn mainly from the Institute.
- BIRMINGHAM MICROSCOPISTS' AND NATURALISTS' SOCIETY (Warwicks.) Formed from the similarly named Union at an uncertain date: still extant. No details known regarding degree of geological interest.
- BIRMINGHAM MICROSCOPISTS' AND NATURALISTS' UNION (Warwicks.) Founded 1880; became
 Birmingham Microscopists' and Naturalists' Society subsequently.
- BIRMINGHAM NATURAL HISTORY ASSOCIATION (Warwicks.) Founded in 1858: name changed in 1864 to Birmingham Natural History and Microscopical Society.
- BIRMINGHAM NATURAL HISTORY AND MICROSCOPICAL SOCIETY (Warwicks.) Formed from the last-named society in 1864. Very active in geology, many fundamental researches into local stratigraphy being undertaken by members. Amalgamated with the Birmingham Philosophical Society c. 1895.
- BIRMINGHAM NATURAL HISTORY AND PHILOSOPHICAL SOCIETY (Warwicks.) Formed in 1895 from the amalgamation of the last-named Society with the Birmingham Philosophical Society; still in existence. Publishes "Proceedings". Notable members have included W. Jerome Harrison, who made important researches into Midland glaciology, and Charles Lapworth, first Professor of Geology at Birmingham University.
- BIRMINGHAM PHILOSOPHICAL SOCIETY (Warwicks.). Founded 1869; published "Proceedings", which contained a number of important geological papers, and maintained an investment fund for the endowment of original research. Amalgamated with the Birmingham Natural History and Microscopical Society in 1895.
- BLACKWELL AND DISTRICT SCIENTIFIC AND LITERARY SOCIETY (Derbys.) Founded pre-1901; believed to have been in existence until after 1930. The Society received a large measure of support from Mr. J.T. Dodd, General Manager of Blackwell Colliery: a geologist, W.J.P. Burton, was President in 1902.
- BURTON-ON-TRENT NATURAL HISTORY AND ABSTRACT SOCIETY (Staffs.) Believed extant and interested in geology; no details known.

- BURTON-ON-TRENT NATURAL HISTORY AND ARCHAEOLOGICAL SOCIETY (Staffs.) Founded 1876; still flourishing. Published "Annual Reports and Transactions" between 1876 and 1939; these have contained geological papers by a number of authors, including C.O. Sullivan, H.T. Brown and G. Selkirk Hollister. Geological interest currently slight.
- BUXTON ARCHAEOLOGICAL AND NATURAL HISTORY SOCIETY (Derbys.) Formed 1922: still extant.

 Geological interest subsidiary.
- BUXTON FIELD CLUB (Derbys.) Founded 1947; flourishing. Considerable interest in geology.
- CARADOC FIELD CLUB (Salop.) Formed pre-1877: amalgamated in 1893 with the Severn Valley Naturalists' Field Club. Had a high level of geological interest.
- CARADOC AND SEVERN VALLEY FIELD CLUB (Salop) Formed in 1893 by amalgamation of the Caradoc Field Club and Severn Valley Naturalists' Field Club; still flourishing. Publishes "Transactions" annually, which reflect the high measure of geological interest manifested by the club.
- CHELTENHAM AND DISTRICT NATURALISTS' SOCIETY (Glos.) Founded 1948: became the North Gloucestershire Naturalists' Society in 1956. Degree of geological interest small.
- CHELTENHAM NATURAL SCIENCE SOCIETY (Glos.) Founded 1878: faded out during the Second World War. Its first President was Dr. T. Wright, a renowned specialist on ammonites.
- CLEETHORPES AND DISTRICT NATURALISTS' FIELD CLUB (Lincs.) Extant. No details.
- CORBY NATURAL HISTORY AND ARCHAEOLOGICAL SOCIETY (Northants.) Extant: no details.
- COTTESWOLD NATURALISTS' FIELD CLUB (Glos.) Founded in July, 1846: still flourishing. Its "Proceedings" have contained many important geological papers, especially on the Jurassic, and reflect the Club's high level of interest in this subject.
- DERBY NATURAL HISTORY SOCIETY (Derbys.) Formed in 1956 by change of name of the London Midland Region Natural History Society; flourishing. Has a Geology Section, Mr. P. H. Speed being its present leader.
- DERBYSHIRE ARCHAEOLOGICAL AND NATURAL HISTORY SOCIETY. Formed c. 1885 by an expansion of interests of the Derbyshire Natural History Society: ultimately became interested in archaeology to the exclusion of all else, "Natural History" being dropped from its title in 1961. Its "Journal" has contained a number of papers of great geological interest by such noted amateurs as A.T. Metcalfe, A. Leslie Armstrong (of Creswell Cave fame), and H.H. Arnold-Bemrose.
- DERBYSHIRE NATURAL HISTORY SOCIETY. Formed pre-1878: temporarily faded out in 1882 but resuscitated in 1884, ultimately becoming the Derbyshire Archaeological and Natural History Society.
- DUDLEY AND MIDLAND GEOLOGICAL AND SCIENTIFIC SOCIETY AND FIELD CLUB (Worcs.)
 Founded in 1862; defunct. Discussed in text.
- DUDLEY GEOLOGICAL SOCIETY (Worcs.) Formed c. 1842; defunct before 1860. Discussed in text.
- EVESHAM FIELD NATURALISTS' CLUB (Worcs.) Founded 1873; believed defunct. Geological interest considerable; members included R.F. Tomes, a specialist on fossil corals, and T. J. Slatter.
- GEOLOGISTS' ASSOCIATION: MIDLANDS GROUP (Brimingham, Warwicks.) Founded 1937. A local group of members of the Association, holding regular meetings advertised in the Associations' Circulars.

- GEOLOGISTS' ASSOCIATION: NORTH STAFFORDSHIRE GROUP (Stoke-on-Trent and Keele, Staffs.) Formed 1949. A local group of members of the Association, holding regular meetings advertised in the Association's Circulars.
- GRIMSBY AND DISTRICT ANTIQUARIAN AND NATURALISTS' SOCIETY (Lincs.) Founded 1886; still in existence c. 1935 but believed since defunct. Degree of geological interest small.
- HULL GEOLOGICAL SOCIETY (Yorks.) Founded 1889; still flourishing. Although outside the area under consideration, this Society deserves mention in view of its long-standing interest and activity in North Lincolnshire. The Society has published "Transactions"; its more notable members included Thomas Sheppard, who built up a fine geological collection in the town's museum, unfortunately destroyed by bombing during the Second World War.
- KETTERING AND DISTRICT NATURALISTS' SOCIETY AND FIELD CLUB (Northants) Founded 1905; still flourishing. A Geolgoical, Archaeological and Anthropological Section was formed during its early days with "three active members" --- the geologist being Albert Wallis. There is still a Geological Section, but it has never been strong. In 1955, a history of the Society was published, "The first fifty years."
- LEICESTER LITERARY AND PHILOSOPHICAL SOCIETY (Leics.) Founded 1835; still flourishing.

 Discussed in text.
- LEICESTER SECULAR SOCIETY (Leics.) Founded late nineteenth century; still flourishing.

 Discussed in text.
- LEICESTER UNIVERSITY GEOLOGICAL SOCIETY (Leics.) Founded in 1958; extant. Primarily an undergraduate society, membership is restricted to members of the University. Publishes a journal, "Petros", twice a year.
- LINCOLNSHIRE NATURALISTS' UNION. Founded 1893; flourishing. Discussed in text.
- LONDON, MIDLAND AND SCOTTISH RAILWAYS NATURAL HISTORY SOCIETY, DERBY (Derbys.)

 Formed in 1921, by change of name of the Midland Railway Natural History Society, on railway grouping, changed again, on nationalisation, in 1948. Thomas Gibbs was its leading spirit. Some interest in geology.
- LONDON MIDLAND REGION (BRITISH RAILWAYS) NATURAL HISTORY SOCIETY, DERBY (Derbys.)

 Formed in 1948, by renaming of the L.M.S.R. Natural History Society; the railway
 connection was dropped in 1956 and the name changed to Derby Natural History Society.

 Some interest in geology.
- LOUGHBOROUGH LITERARY AND PHILOSOPHICAL SOCIETY (Leics.) Founded 1874, dissolved 1881. Had some interest in geology.
- LOUGHBOROUGH NATURALISTS' CLUB (Leics.) Founded 1960; extant. Owns a small geological collection and is affiliated to the East Midlands Geological Society.
- LOUTH NATURALISTS' ANTIQUARIAN AND LITERARY SOCIETY (Lincs.) Founded 1884; extant.

 Associated with the Lincolnshire Naturalists' Union.
- MALVERN FIELD CLUB. Existed 1882. No details known.
- MATLOCK FIELD CLUB (Derbys.) Existed 1901; no details known.
- MIDLAND RAILWAY NATURAL HISTORY SOCIETY, DERBY (Derbys.) Founded in 1906; name changed to L.M.S.R. Natural History Society, on railway grouping, in 1921. Originally formed under temporary official interest in stimulation of cultural activities; met at the Railway Institute. Degree of geological interest small.

- MIDLAND UNION OF NATURAL HISTORY SOCIETIES. Founded 1877; dissolved. c. 1885.

 Discussed in text.
- NORTHAMPTONSHIRE NATURAL HISTORY SOCIETY AND FIELD CLUB. Founded 1876; flourishing. Divided into nine section, including an active Geological Section formed before 1880. Publishes a "Journal", originally quarterly, now annually; this has contained much of geological interest, a notable contributor having been Beeby Thompson (whose papers and manuscripts are now housed in Northampton Public Library).
- NORTH EAST DERBYSHIRE FIELD CLUB. Extant. No details known
- NORTH GLOUCESTERSHIRE NATURALISTS' SOCIETY. Formed in 1948, by change of name of the Cheltenham & District Naturalists' Society; flourishing. Geological interest slight.
- NORTH STAFFORDSHIRE FIELD CLUB. Founded 1866; flourishing. Divided into a number of sections, included a Geological Section. The Society's "Transactions", now supported by Keele University, have contained a large number of important geological papers, notably by John Challiner on aspects of the history of the subject; its medal, the Garner Medal, has several times been awarded for geological work.
- NOTTINGHAM AND NOTTINGHAMSHIRE SOCIETY FOR THE STUDY AND CULTIVATION OF NATURAL HISTORY. Founded 1837; defunct c. 1850. Discussed in text.
- NOTTINGHAM AND NOTTINGHAMSHIRE FIELD CLUB. Title assumed 1915; extant. Discussed in text.
- NOTTINGHAM GEOLOGICAL RAMBLING CLUB (Notts.) Founded 1889; title changed, 1895.

 Discussed in text.
- NOTTINGHAM G.R.S. NATURAL HISTORY SOCIETY (Notts.) Founded 1881; amalgamated with Nottingham Naturalists' Society, 1884. Discussed in text.
- NOTTINGHAM LITERARY AND PHILOSOPHICAL SOCIETY (Notts.) Founded 1865; dissolved 1882.

 Had some interest in geology.
- NOTTINGHAM NATURALISTS' SOCIETY (Notts.) Founded 1851 2; dissolved 1916. Discussed in text.
- NOTTINGHAM NATURAL SCIENCE RAMBLING CLUB (Notts.) Formed in 1895 by change of title of Nottingham Geological Rambling Club; title again changed in 1915. Discussed in text.
- NOTTINGHAM TECHNICAL COLLEGE GEOLOGICAL SOCIETY (Notts.) Founded 1964; flourishing.

 Associated with the East Midlands Geological Society.
- NOTTINGHAM UNIVERSITY GEOLOGICAL SOCIETY (Notts.) Founded 1944 by a group of Agricultural students interested in promoting field studies in geology: David Attenborough, of television tame, was a founder member. Changed its title to Swinnerton Geological Society (in honour of its first President, Prof. H.H. Swinnerton) on 15th March 1955.
- OSWESTRY AND WELSHPOOL NATURALISTS' FIELD CLUB AND ARCHAEOLOGICAL SOCIETY (Salop).

 Formed pre-1877; believed defunct before 1900. Some geological interest.
- OXFORDSHIRE NATURAL HISTORY SOCIETY. Formed pre-1880; ? defunct. A geological member was E.B. Poulton.
- PEAK DISTRICT MINES HISTORICAL SOCIETY (Sheffield, Yorks.) Founded 25th April 1959; flourishing.

 Aim the preservation of records of, and conduction of research into, mineral working in the
 Peak District; one of the authors (W.A.S.S) was its first Chairman. Has published a

 "Bulletin" since 1959; also produces "Special Publications" both are uniformly of geological
 interest
- PETERBOROUGH NATURAL HISTORY, SCIENTIFIC AND ARCHAEOLOGICAL SOCIETY (Northants.)

 Founded 1871; changed title to Peterborough Museum Society c. 1930. Founded a geological collection. An early member was Dr. T. Wright, a specialist on Lias ammonites.

- PETERBOROUGH MUSEUM SOCIETY (Northants.) Formed c. 1930 from the last-named Society; extant. No active interest in geology at present.
- SCIENTIFIC ASSOCIATION OF LEICESTER (Leics.) Existed 1881; discussed in text.
- SCUNTHORPE MUSEUM SOCIETY (Lincs.) Founded 1958; extant. Has only a limited interest in geology.
- SEVERN VALLEY NATURALISTS' FIELD CLUB (Salop). Founded 1863; amalgamated with the Caradoc Field Club in 1893. Published "Transactions" which indicate a strong interest in geology.
- SHEFFIELD FIELD NATURALISTS' SOCIETY (Yorks.) Existed 1864-5; discussed in text.
- SHEFFIELD JUNIOR NATURALISTS' CLUB (Yorks.) Date of foundation uncertain; dissolved by amalgamation, 1918. Discussed in text.
- SHEFFIELD LITERARY AND PHILOSOPHICAL SOCIETY (Yorks.) Founded 1822; dissolved 1932.

 Discussed in text.
- SHEFFIELD MICROSCOPICAL SOCIETY (Yorks.) Founded 1877: dissolved by amalgamation, 1918.

 Discussed in text.
- SHEFFIELD MUSEUM SOCIETY (Yorks.) Founded c. 1955; extant. Geological interest slight.
- SHEFFIELD NATURALISTS' CLUB (Yorks.) Founded 1870; dissolved by amalgamation 1918.

 Discussed in text.
- SHEFFIELD NATURALISTS' SOCIETY (Yorks.) Existed 1866; discussed in text.
- SHEFFIELD UNIVERSITY GEOLOGICAL SOCIETY (Yorks.) Founded on 25th October 1946; flourishing.

 Primarily an undergraduate society, but open to graduates and academic staff. Former undergraduate members include Dr. Norman E. Butcher, a specialist on the Malverns, and Dr. Trevor D. Ford. Has published a "Journal" since 1951.
- SHROPSHIRE AND NORTH WALES NATURAL HISTORY AND ANTIQUARIAN SOCIETY. Founded 1835; amalgamated with the Shropshire Archaeological Society in 1877. Published "Annual Reports": also formed a Museum, geological curators being Thomas du Gard and John Wingfield.
- SHROPSHIRE ARCHAEOLOGICAL AND NATURAL HISTORY SOCIETY. Formed by the amalgamation of two existing Societies in 1877: flourishing. Publishes "Transactions" which have contained much of geological interest, despite a primary concern with history and archaeology. Maintained a museum, handed over to the Borough in 1884.
- SMALLHEATH LITERARY AND SCIENTIFIC SOCIETY (Warwicks.) Founded pre-1879: dissolved 1881. Interest in geology slight.
- SORBY NATURAL HISTORY SOCIETY, SHEFFIELD (Yorks.) Formed by change of title in 1932: flourishing. Discussed in text.
- SORBY SCIENTIFIC SOCIETY, SHEFFIELD (Yorks.) Formed by amalgamation in 1918: changed title, 1932. Discussed in text.
- STROUD NATURAL HISTORY AND PHILOSOPHICAL SOCIETY (Glos.) Founded pre-1878: believed defunct. Had a fair degree of geological interest.
- SWINNERTON GEOLOGICAL SOCIETY, UNIVERSITY OF NOTTINGHAM (Notts.) Formed in 1955 by retitling of the University Geological Society: flourishing. Primarily an undergraduate Society, though with graduate and staff members. Two issues of an ephemeral "Journal" appeared in 1958-9.

- TAMWORTH NATURAL HISTORY, GEOLOGICAL AND ANTIQUARIAN SOCIETY (Staffs.)

 Founded 1871: believed defunct pre-1900. Some interest in geology: maintained a

 Junior Section with a prize offered for the best collection of Coal Measure fossils.
- WARWICKSHIRE NATURAL HISTORY AND ARCHAEOLOGICAL FIELD CLUB. Founded 1854: ?defunct.

 Published annual "Proceedings". W. Andrews was an early geological member.
- WARWICKSHIRE NATURAL HISTORY AND ARCHAEOLOGICAL SOCIETY. Existed 1880:
- WOOLHOPE NATURALISTS' FIELD CLUB (Herefords.) Founded 1851; flourishing. Publishes biennial "Transactions" which have contained much of geological interest.
- WORCESTERSHIRE NATURAL HISTORY FIELD CLUB. Existed 1882: no details known.
- WORCESTERSHIRE NATURAL HISTORY SOCIETY. Existed 1882: apparently separate from the last-named Society. No details known.
- WORKSOP NATURAL HISTORY SOCIETY (Notts.) No details known.

Formation of the East Midlands Geological Society

The above sketch of Societies in the Midlands indicates a high degree of activity over a long period: nonetheless, by the beginning of 1964 there was no single society in the whole Midland region exclusively, or even dominantly, concerned with geology. Certainly, there were two local groups of the Geologists' Association: certainly also, a number of Geological Sections existed within larger Societies, but that was all. The existence of a widespread enthusiasm for geology was made clear by the success attending courses in the subject organised by the Worker's Education Association and by University Adult Education Departments: but amateur geologists, having completed such courses, found no focus for continuance of their interest in the subject. Nor was there any common meeting-point for amateur and professional geologists.

During late 1963, interest and enthusiasm from two such evening classes, respectively in Matlock and Nottingham, caused serious consideration to be given to the idea of forming a new society to stimulate and focus interest in geology in the East Midlands. A preliminary meeting was held on 4th January, 1964, in the Department of Geology, Nottingham University, to discuss the idea. Nine persons were present – Miss F. I. Brindley and Miss Stewart representing two Nottingham Adult Education groups: Miss Palmer and Mr. Cobb representing the Nottingham and Nottinghamshire Field Club: Mr. & Mrs. R. J. A. Travis, representing speleological interests, comprising the amateur component, and Mr. P. C. Stevenson, of Nottingham Technical College, and Dr. F. M. Taylor and one of the authors (W.A.S.S.), of Nottingham University, representing the professional side. Discussion revealed considerable enthusiasm for the project.

Accordingly, a public meeting was arranged for Saturday, 1st February 1964, and duly held in the Adult Education Centre, Nottingham: over 55 interested persons attended, and the East Midlands Geological Society was born. Mr. Stevenson was elected first President and one of the authors (R.W.M.) first Honorary Secretary: a Committee was charged with formulating a programme and it was agreed that a journal be produced, to appear twice a year. The active life of the Society commenced on Saturday, 7th March, when Dr. F.M. Taylor lectured on "The Geology of the Nottingham Region" to an audience of 100: the first field excursion, to Dudley, took place next day. A full programme and a growing membership portray the success of the Society.

Although the Society has hitherto met largely in Nottingham, it is hoped to extend its scope and activities to cover the whole East Midlands area, by establishment of local groups able to organise, not only participation in the activities of the main Society, but also independent meetings as desired.

Affiliation by natural history societies interested in geology is invited, with a view to the development of joint activities: the estimulation of interest in geology at all levels: thus, museum displays, discussion meetings and social gatherings are visualised. A number of research projects are being launched and it is hoped, in addition, to encourage individual research by members.

The Role of the Regional Geological Society

In many sciences at this time, the high degree of specialisation attained, and the necessity for costly apparatus, render active participation by the amateur virtually impossible. This does not apply in geology. G.S. Sweeting (1958) has commented: "In the last century, a high proportion of geological research, especially in the fields of post-Palaeozoic stratigraphy and palaeontology, was done by amateur workers. Today that is no longer true, but amateurs continue to be authorities in many fields...Several of them are international authorities in their own particular fields of geology". Many examples can be quoted - W.S. Bisat, one of the foremost authorities on goniatites: C.H. Calloman, perhaps Britain's leading specialist on ammonites: Arthur W.G. Kingsbury, who has an unrivalled knowledge of topographical mineralogy: Nellie Kirkham, with her profound knowledge of all aspects of Derbyshire lead mining, are just a few of the names that come to mind. Certainly it is necessary today to adopt some degree of specialisation if work is to be worth-while - this applies equally to amateur, as to professional geologists. The amateur can, however, well specialise in a region rather than in a topic: he is ideally situated for repeated study of exposures and for observation of temporary exposures; this is but one possible way in which a spare-time interest can produce results of real scientific worth.

Regional geological societies fulfill an important role by providing a meeting-place for amateurs and professionals - to their mutual benefit. Geology is lamentably little comprehended by the public at large. Builders and architects still construct structures in complete disregard of underlying stratal conditions - and the structures suffer accordingly. School curricula rarely include any mention of this, literally, fundamental subject. Journalists are still so little acquainted with the subject as to announce with surprise that the finding of a fossil "indicates that this part of the country was once under the sea!". It is greatly in the interests of geologists that their subject should emerge from the shadows and come to be recognised, not only as significant and important on practical grounds, but also as a major factor in the cultural heritage of mankind.

Acknowledgements

The authors would like to express their indebtedness to the following, for information and assistance:-

H. G. Allen, Esq., Secretary of the Northamptonshire Natural History Society & Field Club; A. Bell, Esq., Treasurer, Peterborough Museum Society; R. Bosomworth, Esq., Librarian and Curator, Loughborough Public Library; D. Bramwell, Esq., Secretary of the Peakland Archaeological Society; Dr. R. J. Firman, University of Nottingham; H. G. Fletcher, Esq., Librarian and Curator, Cheltenham Public Library; Dr. T. D. Ford, University of Leicester; D. H. Halliday, Esq., Chief Librarian, Northampton Public Library; J. L. Hobbs, Esq., Librarian and Curator, Shrewsbury Public Library; A. M. Honeyman, Esq., M. A., B. Sc., University of Nottingham; W. J. Mayes, Esq., Secretary of the Kettering and District Natural History Society; Dr. F. H. Moore, Secretary of the Geologists' Association; M. R. D. Seaward, Esq., B. Sc., Secretary of the Lincolnshire Naturalists' Union; D. A. E. Spalding, Esq., B. Sc., Secretary of the Sorby Natural History Society, Sheffield; D. A. South, Esq., B. A., County Librarian for Derbyshire.

Dr. F.M. Taylor, University of Nottingham; H.J. Wain, Secretary of the Burton-on-Trent Natural History and Archaeological Society; S.J. Weston, Esq., Secretary of the Derby Natural History Society; W.H. Wilcockson, Esq., M.A., Secretary of the Derbyshire Naturalists' Trust; D.T. Wilks, Esq., Secretary of the Buxton Field Club; A. Wilson, Esq., Borough Librarian and Curator, Dudley; and the Librarians of Birmingham Reference Library and Nottingham Public Library.

Robert W. Morrell, 443, Meadow Lane, Nottingham

William Antony S. Sarjeant, Department of Geology, The University, Nottingham

References

The following books and papers have been consulted:-

GOULD, W.	1900. The history of Leicester Secular Society. Leicester: The Society.
HAWORTH, O.J.R.	1922. The British Association for the Advancement of Science; a retrospect. London: British Association. 318 pp., 16 pls.
HIGHAM, N.	1963. A very scientific gentleman; the major achievements of Henry Clifton Sorby. Oxford; Pergamon Press. 160 pp., 3 pls.
LAPWORTH, C.	1907. A sketch of the geology of the Birmingham district. Cornish. 104 pp., 3 pls.
MARSHALL, C.E.	1947. The significance of geological science for the modern world. Abbott Memorial Lecture. Nottingham; The University, 19 pp.
(MAYES, W.J.)	1955. The first fifty years; a history of the Kettering and District Naturalists' Society and Field Club. Kettering; the Society. 134 pp.
PLOT, R.	1686. The natural history of Staffordshire. Oxford; The Theater. 458 pp.
PORTER, W.S.	1922. Sheffield Literary and Philosophical Society; a centenary retrospect. Sheffield; Northend. 98 pp., 9 pls.
SCHOFIELD, R.E.	1963. The Lunar Society of Birmingham. Oxford; Clarendon Press. 491 pp., 12 pls.
SWEETING, G.S.	1958. The Geologists' Association, 1858–1958. London; Benham. 165 pp., 8 pls.

SWINNERTON, H.H., and LOWE, D.N.,

1937. Scientists of Nottingham and District. Rep. Brit. Assoc.,

Nottingham Meeting. Appendix, pp. 102-11.

WARD, A.B. 1958. The history of the Sorby Society. Sorby Record, no. 1, pp. 1-20.

WOODWARD, H.B. 1907. The history of the Geological Society of London: The Society.

336 pp., 25 pls.

In addition, a large number of journals and transactions of local and national societies have been extensively consulted; these are mentioned in the text, where appropriate. Of especial value as sources were the "Midland Naturalist"; the "Reports of the British Association"; and the "British Union Catalogue of Periodicals".