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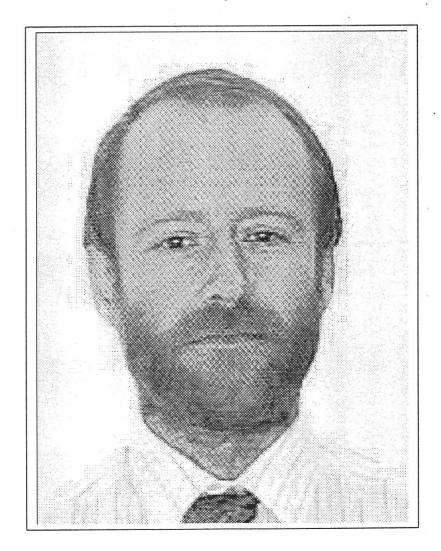
HISTORY
OF
GEOLOGY
GROUP
NEWSLETTER

No.10

July 1999

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John Christopher Thackray (17 April 1948 - 6 May 1999).

How can one adequately pay tribute to a man whom we all took too much 'for granted' (and the Geological Society of London particularly so) for years, not realising how important he was to all of us, until it was suddenly much too late?

John was born in London and he was educated at Highgate School. Here he discovered early interests in both history and geology. I first came across him in 1968 or 1969 when he was still studying geology at University College, London when he wrote me a (sadly undated) first letter (which I hope will soon keep the archivists he so inspired busy trying to catalogue!). It asked if he might become my research student. I had just written on how neglected the stratigraphy of the Ampthill Clay was and he thought this might be his chosen topic. In the event funds were not forthcoming and he was saved from any such fate.

He went to work instead at the London Geological Museum (then part of the Institute of Geological Sciences) as exhibition officer. Here he started work on, and on writing up, a number of major exhibitions including "British Fossils" 1984 and "Geology serves the Nation". His resulting booklets like "The Story of the Earth" 1972 and particularly "The Age of the Earth" of 1980 came in very useful in helping me to teach non-geologist students what a amazing story geology had to tell. He also devotedly started to catalogue the archives of the Geological Survey as they emerged from his excavations. In 1973 John gained his M.Sc. in the history of science at Imperial College.

The 1980's were soon highly political years and John's Institute disappeared with the move of the Geological Survey to Keyworth. In 1985 he joined the Natural History Museum staff, without a murmur of complaint that I was ever aware of. He was also appointed honorary archivist to the Geological Society of London in 1981. His work at the latter, unaided, was an inspiration and an enormous aid to all us provincials as he patiently and expertly retrieved and catalogued materials to help us with our myriad studies. This work was so well regarded, outside the Society at least, that he was appointed archivist to the Natural History Museum in 1989 with ground breaking results. His cataloguing here once more gave us access to materials that had simply been buried before.

We were both fascinated by books and much mutual fun was had hunting out each others requirements at prices we could each afford. Again I was the gainer in this as he proved a better bookhound than me! He gave devoted duty both to the Society for the Bibliography of Natural History from 1973 to 1999, being appointed its president three weeks before his death, and to HOGG from its inception in 1993. He was also the hard working secretary of INHIGEO's Lyell Centenary Symposium in 1975; a meeting which perhaps more than any other started to give the impression that the study of the history of geology might one day be seriously treated in this country.

His published output was perhaps not that prolific but it was always characterised by his very careful research. In any case the number of unpublished finding aids and calendars of MSS he compiled more than made up. I recall in particular, (and still often use) his major studies, on Richard Owen (1992), on the tortured history of the Geological's Society Museum (1991), his pioneering study of separately published prints of fossils (1985) and a score of bio-bibliographic studies on the likes of Roderick Murchison, James Parkinson & Victor and Joan Eyles. His full bibliography is to appear in **Archives of Natural History**.

In October 1998 John was hit by mystery symptoms diagnosed as a blocked bile duct. The cause was cancer of the stomach and then followed a spirited fight involving chemotherapy, to no avail. After seven months, he passed away at home wonderfully nursed and surrounded to the end by his fine family.

He had been busy in his last years working on an annotated catalogue of all references to discussions and decisions made at Geological Society's meetings from their beginnings in 1807 to about 1870. He was busy finalising this when his illness first became apparent and he was saddened to be told by the Geological Society's Publishing House, when he approached them to get it published that this sort of material was not thought to lie within the Society's publications remit. John thought this research was a central aspect of the Society's long and distinguished history, which it should have supported. He was immensely disappointed, soon after this, to read in the Society's **Annual Review** for 1998 (the last he ever saw) that the Society was now hoping "the volumes on Hutton and Lyell [which it had just published] will be the first of many biography style publications produced by the Society". History **was** after all, in fashion. We were at least able to get the message to him just before he died that the British Society for the History of Science had agreed to publish his research in its Monograph Series.

Those of us who knew only a little of John's musical activities and skills as organist, pianist and choirmaster, can now distort the final lines which Elgar (on today's new £20 notes) wrote on completing Gerontius in1900. For John was indeed the "best of us... & he if anyone is worth our memory". In fact these words were originally John Ruskin (1819-1900)'s (in **Collected Works**, vol. 18, p. 61) and were first published in 1865. Here Ruskin - no mean geologist - also gave a fascinating diatribe about the problems the spendthrift British nation and Museum had just had in acquiring the famous Haeberlein Collection of Solenhofen fossils in 1861 (pp .87-8), to remind us of John.

In the same volume of these **Collected Works** is Ruskin's sadly forgotten, but more geological, volume; **The Ethics of the Dust... lectures to little housewives on the Elements of Crystallization**. This reminds me of John's wife (no little housewife but who instead knows all about crystallization) and I should end this tribute with thanks for her courage, fortitude and support of John. We shall all miss him and I shall long continue to wonder if he can ever be replaced.

H.S. Torrens

The Next HOGG Meeting...

"The Geological Survey: its people, its methods, its collections"

The next HOGG meeting will be on Wednesday 1 September 1999, at the British Geological Survey, Keyworth, Nottinghamshire

This meeting will examine some of the contributions the British Geological Survey has made to geology and the resources available to make the study of Survey history possible. Part of the day will be spent looking at the superb archival, photographic and geological collections available to geologists and historians.

Programme:

- 10.30 Coffee and registration
- 11.00 Welcome
- 11.10 Beris Cox: 'Rev. J.F. Blake (1839-1906)'
- 11.30 Steve Tunnicliffe: 'Historical development of the Survey's palaeontological collections'
- 11.50 Simon Knell: 'The Survey's changing fossil collecting strategies'
- 12:10 Tom Sharpe: 'The De la Beche archive at the National Museum of Wales'
- [12:30 Paul McCartney: 'Henry De la Beche'.] *
- 12:50 Questions and discussion followed by pub lunch.
- 14:00 Vicky Hards: 'The rock and mineral collections at the Survey'
- 14:15 Chris Wheatley: 'A national collection of boring material'.
- 14:30 Tea
- 14:50 Tours to view archival materials, including photographs, historical and modern collections, the core collection, changing methods of mapmaking and so on.
- 17:00 Minibus departs for Nottingham Station.

If coming by car, the BGS is relatively easy to locate and there is parking on site. Those coming by train can be picked up from the station in Nottingham by BGS minibus. The journey takes

^{*} to be confirmed

about 20 minutes so you should aim to arrive in Nottingham by 10:40am. Please let Steve Tunnicliffe at the BGS know if you will be coming by train and require a lift (tel.: 0115 9363100).

...and the previous meeting

This meeting, on the theme of "A history of Mineral Collecting and Mineral Collectors", was held at the Geological Society, Burlington House, London. Following coffee and registration, and an introduction by Richard Wilding, acting Chairman of HOGG, the first session for the c.30 attendees started with a talk by Bob Symes, OBE, formerly Keeper of Mineralogy at the Natural History Museum, on the collection of Sir Arthur Russell – a sum of its parts. Sir Arthur Russell died in 1964, and by the terms of his will bequeathed his mineral collection to the then BM(NH) (now the NHM). His interest had started with the collection of his other Lady Constance, and the collection of about 14,000 specimens (including duplicates) would become the greatest ever assembled of British minerals. He made his first trip underground at the age of 8 at Wheal Providence, Cornwall, but refused to go underground at Botallack 3 years later, saying it was too dangerous (the mine passes out under the Atlantic ocean, and had been subject to several disastrous floodings before that time). Eventually he would collect at almost every mine in the Uk, with the exception of those on the Isle of Man.

Russell was educated at Eton, and stated adult life with a post in the SW Railway, whose chairman was his father. Later a railway Engine would be called "Swallowfield Park" after the family residence. During WW1 he was seconded to look at mineral sites, and visited Talnotry mine, Scotland where there were strategic reserves of nickel, but Russell said they were not economically viable. He did though show that there were economic amounts of barium minerals (chiefly witherite) in the coalfields of the north east.

Russell also added to his collection by acquiring a number of old collections which were being dispersed at that time. Among those were that of John Hawkins (?1761-1819), part of whose collection Russell purchased in 1905 (the rest was purchased by the firm of Krantz in Germany, and distributed around Europe). Hawkins, in 1786, had attended as pupil no. 283, the Freiburg Academy as he found that mining technology and knowledge was better in continental Europe than in Britain. One result was that he helped initiate the Royal School of Mines in Cornwall.

Another important part collection acquired by Russell was that of Philip Rashleigh. The collection had already been dispersed from its long standing home at Menabilly, Cornwall, but Russell managed to trace a significant part to the home of Jonathon Rashleigh, of Malvern, Worcestershire. Most of the remainder is in the Royal Institution of Cornwall Museum at Truro.

Russell also acquired the collection of the Baroness Burdett-Coutts. She had inherited her grandfather's fortune in 1837 and became the greatest philanthropist of Victorian England. She was unmarried until the age of 61, then married a man 30 years her junior. She owned houses in central London and in Highgate. Her collectyion included important material from Edward Lavin of Penzance and of James Tennant of the Strand, London.

Others from whom Russell obtained specimens were Edmund Pearce, a surgeon of Tavistock, Devon, whose collection was mainly one of minerals from mines in the Tamar valley area, and the Reverend Cousins a Taunton congregational minister, much of whose material came from John Graves in Cumberland (now Cumbria).

Next it was Prof. Andy Rankin on "Mountains through the Microscope: the pioneering work of H.C.Sorby and fliud inclusions" - Fluid inclusions are portions of fluids trapped and preserved and are important palaeoenvironment and petrogenetic indicators, as well as being valuable tools (fingerprints) of provenance in petroleum exploration, gem testing and assessment of nuclear waste disposal. They are also objects of natural beauty. Although it was Sorby who really first made use of them, they were known long before. Al-Biruni (973-1050), described them as 'juices of the Earth'. Much later, Steno (1638-1686) looked at them systematically and assumed that crystals grew from inside to out and thus continued the Aristotelian idea of them being fossil ice. Boyle (1627-1691) also looked at them, and deduced that gemstones originated from liquids, and

later Dolomieu in 1792 noted examples of liquid petroleum. In 1819, Hayden described "neocronite" which had a vile smell because of large amounts of H₂S, while in 1823, Brewtser described "brewsterite" consisting of 2 liquids and a bubble which we now know to be CO₂. In 1851 Bunsen described methane in salt from the huge mines at Weilicza, Poland. Henry Clifton Sorby was borne at Woodbourne, near Sheffield, Yorkshire, the son of an edge tool maker and a colliery owner. He attended school at Harrogate with Huddleston, who, later would become President of the Geological Society. At 15 Sorby decided upon a scientific career, and published his first paper when aged just 20. A year later his father died, and young Sorby became fiercely independent, and in 1829 while on a journey to Scarborough, he met a man called Williamson who worked with lapidarists and had had good results in making sections of fossil teeth & bones. Sorby was awarded a fellowship of the Royal Society in 1853 for his description of slaty cleavage in rocks, and a year later read his first paper - on the microscopical structure of rocks - at the Royal Society. His audience generally didn't believe it, but Phillips did offer support. In 1858 he published a paper in QJGS on growing salt crystals. He found that grown at room temperature they were free of bubbles, but at 60-70 C there were bubbles which he put down to a contraction of liquids. His work stirred others and Zirkel took it up in 1863, along with Phillips in 1875 who made a heating stage for the microscope. Right up to 1953, there was still great opposition to fluid inclusions, but once the idea finally took hold, a huge literature evolved, with 10,000 papers published between 1978-1987! Today we recognise multiple generations of inclusions - which Sorby failed to understand- and can look at inclusions of only a few microns in size. Fluid inclusions are now mentioned almost all geoscience publications.

Next it was Mick Cooper speaking on the Devonshire Mineral Collection

Georgiana, Duchess of Devonshire, (1757-1806) began collecting minerals in the closing years of the eighteenth century, when illness and infirmity had restricted her more social activities. Many of her specimens seem to have been accumulated with more regard for their place within some mineralogical scheme than for their aesthetic qualities. These are rather dull and unattractive; typical rather than exceptional. This seems unexpected in a woman whose early life was so involved with fashion and frivolity; whose homes were filled with the marvels of art and who was married to one of the richest men in the country, well able to afford the premium that rarity and beauty acquire. We may assume, therefore, that Georgiana took her collecting seriously. Although we currently have little knowledge of her involvement in the science it is interesting to note that Robert Townson dedicated his Philosophy of Mineralogy (1798) to the Duchess. But her collection is not devoid of interest to the modern collector or mineralogist: there are fine suites of minerals from lead mines in Derbyshire and Leicestershire and the first euhedral crystals of enargite known from the British Isles were found by us among her specimens, 200 years after they were first collected.

Georgiana's collections were originally stored at two sites, Chiswick and Chatsworth, and were arranged and catalogued there in 1799 and 1804 respectively by the mineral dealer and pioneer of Derbyshire geology, White Watson (1760 - 1835). Watson's original hand-written catalogues survive at Chatsworth. Many of the specimens were supplied by him, but it is obvious from certain numbered catalogue entries and omissions that several collections were already in existence when he began his cataloguing work. However, no trace has been found of any earlier catalogues.

After Georgiana's death the collections passed to her son William Spencer Cavendish (1790-1858), later the sixth Duke. He was a great collector of art and antiquities, but his activities as a mineral collector are little known. Although he does not seem to have added many specimens to the collection, the majority of those he did acquire were of higher quality than his mother's and some, notably those acquired from the sale of the collection of Sir Alexander Crichton in 1827 and a small suite bought from Henry Heuland in 1820, remain important mineralogically, historically and aesthetically. His taste may have been influenced by the fashionable sculptor

Francis Chantrey (1781-1841), for sculpture was a passion with the Duke, and Chantrey was not only a visitor to Chatsworth but the owner of one of the finest private collections of minerals in the country.

The best of the Duke's additions were Russian specimens, mostly acquired via Crichton who was Court Physician to the Czar of Russia - an echo here perhaps of the Duke's close friendship with the Emperor Nicholas of Russia and a remembrance of his time in Moscow as British ambassador. He appears to have continued to add to the collections for at least 40 years; he was buying specimens from Henry Heuland up to at least 1834 and there is a specimen in the collection bearing a label of James Tennant (1808-1881) of the Strand, London, who began trading in 1840. Unfortunately, by this time the rest of the collections seem to have been long neglected. As early as 1844 the Duke comments in his Handbook: "All these minerals [i.e. his mother's and his own] are in a disgraceful state of neglect and want of classification. Those collected by my Mother ought to be replaced in their former order, as they were in the days of White Watson of Bakewell, who in vain endeavoured to hammer mineralogy into our youthful heads." Tennant was hired to work on the collections in the later 1840s, though just what he did is yet to be discovered, and in 1851 he displayed specimens belonging to the Duke at the Crystal Palace Exhibition. After the 6th Duke's death interest in minerals seems to have waned until the present Duke began buying specimens from auction in the 1970s. Several of these large specimens can be seen on public display around the house. Georgiana's minerals, however, have remained out of sight for many decades.

The Russell Society became involved with the Devonshire Mineral Collection in 1991 when a request was made to allow members to visit the collection during the society's 1992 AGM. Up to this time few modern collectors had seen the collection and knowledge of it was scant. A small group of members visited Chatsworth hopeful of selecting a few choice pieces for a display to AGM delegates and found some of the collection in a sagging stack of cardboard boxes in the basement, another part crammed into Georgiana's original show cases, and most of the rest in a series of wall cases in the Cavendish Passage. There were very few original labels, though a great many specimens still bore old numbers. Luckily White Watson's original catalogues had survived and we were soon to realise that many of these old numbers matched his entries. The collection was obviously in a very fragile state. Specimens were decaying, 200-year-old labels were reaching the end of their lives. Russian aquamarine crystals over 10cm long nestled with diseased pyrite; superb Derbyshire galena crystals lay under piles of fossil wood protected only by a few sheets of yellowing newspaper. Despite the unsuitable storage many specimens were still in good condition, and a quick count suggested that most of the original collection could still be in there somewhere.

Action was called for! A volunteer cataloguing project was proposed and accepted and work began soon after. The specimens were first sorted by style of label (if they had one) and checked against the Watson and other catalogues. Over the next few years more specimens came to light, and, even better, so did further fragments of catalogue: lists by the 6th Duke (1827), by Henry Heuland (1820), by Alan Bannister - Keeper of Minerals at the BMNH - (1836), and by Brian Lloyd, then Sotheby's resident mineralogist (1980). These documents all helped us identify the origin of specimens. Better yet was a copy of a catalogue of Crichton's collection, made in 1818, obtained from Wendell Wilson of the Mineralogical Record. It contained descriptions and lifesize engravings of several of the jewels of Crichton's collection. So accurate were these engravings that we able instantly to recognise several Chatsworth pieces among them. Two of these pieces were unmarked and label-less, their history unknown until revealed by these illustrations. It was an extremely satisfying moment. In other cases the tiniest fragment of label served to match a specimen to an entry in the Crichton sale catalogue.

It took hundreds of hours of keen and careful detective work to inventory the collection, to sort it finally into its original order, and to print and apply new labels. To date we have processed some 2,600 specimens and have computerized all the known catalogues and specimen series

using Microsoft Access. Of Georgiana's original 2135 specimens. White Watson found only 1895, and of these we have 1301 (68%), including a few that Watson missed! Most of the inventoried collection is now stored in Watson's original order in two fine mahogany cabinets bought for the project from the Hunterian Museum in Glasgow. Each specimen is trayed and we are gradually adding new labels and marks to the collection. Some are on semi-public display in Georgiana's original cabinets in the new Stable Block Conference Centre.

Will our efforts last longer than those of earlier workers like Tennant and Bannister? We hope so! The Chatsworth curatorial staff and the Duke and Duchess have been very supportive and appreciative of what we have done. With the new cabinets, the computer catalogue and archive-quality labelling we hope the collection will survive the next 200 years in better condition than it survived the last. But that it survived at all is thanks to careful cataloguing and labelling, especially by Watson. It remains one of the few collections of its period still more or less intact; it is a wonderful mixture of the mundane and the marvellous, of history and mystery.

The Chatsworth project has been quiet for some time now, mainly because of pressure of work, and is due a kick start. Much remains to be done, including a catalogue of the remaining unnumbered specimens, some of which are very fine. Anyone interested in volunteering should contact Mick Cooper by phone (office: 0115 915 3671) or e-mail minerals@mpcooper.demon.co.uk). On site we usually work on Sundays with lunch at a local pub. Restricted space means only a few people can work at the House at any one time, but there are other things to do, such as library research in London if anyone is up for that.

Following lunch and the HOGG AGM, it was ex-BM(NH) palaeontologist Ron Cleevely on Philip Rashleigh: His Collection, Life and Times. The study of Private collections is essential to understanding the development of Mineralogy as a science, but in most instances there is little information about the activities of the collector involved. However, correspondence between Philip Rashleigh (1729-1811) and other collectors or dealers has been preserved in a number of archives and these letters reveal his motivation and that there were probably three phases in making his important collection of minerals. Family archives also provide more personal information about his other activities, responsibilities and lengthy service as an MP for Fowey.

Inevitably, as a Cornish landowner, he became involved in mining activities, especially those of the tinners, some of whom leased setts on his land. As the mining of tin and copper expanded during his lifetime he was able to acquire significant specimens through his contacts and friends. Unusually for the period, Rashleigh kept a catalogue of the material he acquired and this together with his own publications provide a reliable degree of provenance for his minerals. Other archive material gives information on prices and the demand for mineral specimens throughout the period.

Through his association with John Hawkins of Trewithen (1761-1841) and the Rev'd William Gregor at Creed (1761-1817), Rashleigh became involved in exchanging and supplying specimens to continental mineralogists and chemists. Hawkins, had studied under Werner at Freiberg and after meeting the German chemist Martin Klaproth (1743-1817) endeavoured to his analytical work on minerals. Gregor, preferred to spend his leisure on similar tasks rather than amass a collection of minerals and rocks. As a result of their co-operation with Klaproth a number of Cornish Tin and Copper ores were described in the series of essays that he published in Berlin between 1787 and 1795.

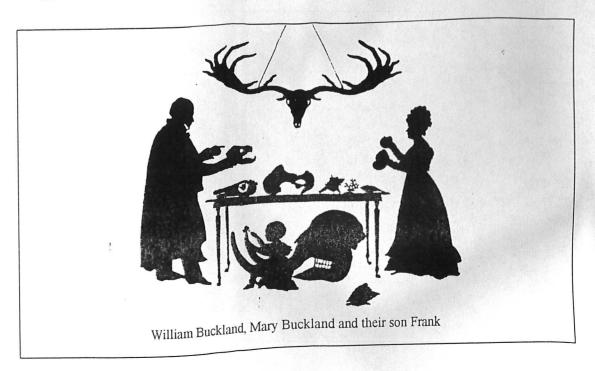
The unique collection of historic Cornish minerals that he made has always been accepted as Rashleigh's major contribution to mineralogy. In his lifetime it was examined by numerous scientific visitors, and various specimens were featured in James Sowerby's <u>British Mineralogy</u>, in addition to being illustrated in Rashleigh's own publications. However, through his involvement in the concerns of his friend Hawkins, he participated in the development of the science in other ways. It is a role he has never been given much credit for. All three friends became Fellows of the newly formed Geological Society within the first twelve months of its existence.

Julian Jocelyn then spoke on Dr Hunter's mineral collection showing many examples of this important collection [Ed. Note: no further information available]

Following this, Norman Butcher spoke on the Mineralogical Books of Sir Arthur Russell. The Russell family acquired Swallowfield Park, near Reading, in 1820 when they bought the estate, and made a number of major alterations. Lady Constance Russell was a Lennox whose elder brother was a geologist who worked with Murchison, but died at the age of 34. Lady Constance married the 4th Baronet. Sir Arthur Rusell was the 6th Baronet, and in 1966, two years after his death, Lady Russell sold the library. Among works disposed of was a copy of Mrs Varley's "Rudimentary Mineralogy" of 1848 which was a good practical description of the rocks of Cornwall & Devon, and was given to Sir Arthur when he was aged 15; it had a big influence on his future. The oldest book in the library was "Fodinae Regalis or the History of the Mining Laws and Places of the Chief Mines & Mineral Works in England, Wales and the English Pale in Ireland", by Sir John Pettus and dated 1670. Other important works were "Philosophy of Mineralogy" by Robert Thomson, c.1797, with a final chapter being a catalogue of mineral works county by county, and descriptions of Derbyshire by J.M Heddinger which was dedicated to the Duchess of Devonshire. Other ex-Sir Arthur works acquired were "Deposition of Lead Ore in Veins", by William Wallace, 1861, and "General View of the Agriculture and Minerals of Derbyshire" by John Farey. [from notes by the editor].

Following a short tea break, when there was some time to look at a poster presentation on Henry Sowerby's popular mineralogy, by acting Chairman Richard Wilding, Monica Price, curator at Oxford Univerity Museum spoke on The Adventures of the Mary Morland Mineral Collection. This talk attempted to chart the somewhat incomplete history of Mary Morland's collection of about 700 small hand specimens, mainly 'classic' minerals from Britain and Europe so typical of 19th century collections. Mary Morland (1797-1857) was the wife of Dr William Buckland (Reader in Mineralogy and Geology at Oxford and subsequently Dean of Westminster) and a competent scientist in her own right.

The association with Morland is made in two accompanying books. The first, John Kidd's 'Outline of Mineralogy' 1809 has the bookplate of Sir Christopher Pegge, the Regius Professor of Medicine at Oxford from 1801 to 1822 who was himself a mineral collector. Morland had spent much of her childhood living in the Pegge household. An inscription by her eldest son, Frank Buckland, states that the volumes had accompanied mineral cabinets in the family home, and says they now belonged to 'John Jones'. This is perhaps John Jones FGS of the Gloucester Literary and Scientific Institution, who like Morland, had a more particular interest in invertebrate palaeontology.



The second book, a catalogue of the collection made by the London dealer James Tennant in 1871 also states that the collection had belonged to Mary Morland. As Tennant was inclined to replace finer specimens with inferior material the integrity of Morland's original collection is unlikely to have survived his attentions unscathed.

Nothing further is known about the collection from 1872 until the Second World War, when it was acquired by a Lowestoft antique dealer and subsequently became the property of his nephew. Housed in a cabinet in the shop basement, only the topmost drawers of specimens escaped submergence when Lowestoft was flooded by the sea in 1953. Those specimens which survived the rigours of a brief submarine existence were later given or sold for a nominal sum to a local GP, Dr Berwyn Eastwood. In 1997 the collection returned to Oxford once more, kindly presented to the Museum by Dr Eastwood's sons Drs John and Robert Eastwood.

The adventures of the Mary Morland collection have resulted in a substantial curatorial challenge. The flooding resulted in the loss of most specimen numbers, and while many samples have been correlated with Tennant's catalogue, others are clearly missing, and to confuse matters further a small number appear to be later additions. Both the curation of the collection and the research into its history continue.

It was then the turn of Peter Tandy, mineral curator at the NHM, London, to speak on Frederick Noel Ashcroft and his collection of Swiss minerals. Friedrich Noel Ashcroft Fleischmann was born in 1879, the son of a wealthy Bavarian merchant and his Liverpudlian wife. In 1893 his parents sent the young boy to Rugby School, where he found a liking for natural history, especially geology. In 1897 he graduated to Magdalen College, Oxford, and as a pupil of Sir Henry Miers began to collect mineral specimens. In 1901 he gained a first in chemistry and went to Tubingen for further education. There probably he met Constance Muriel im Thurm whom he married. He returned to England, and from at least 1907, with the amateur naturalist Robert Bell, began to collect zeolites from the basalts of Northern Ireland. With the dark days of war looming he felt the anti Germanic feeling and changed his name by deed poll, dropping the Germanic Fleischmann part. After the War, he, Bell and R.J.Welch again visited the Irish zeolite provinces, with Welch this time making a photographic record of sites. Ashcroft realised the problems in conveying to others the exact spot from which a specimen originated if accurate maps were not available, and if the spot was not photographed. Ashcroft was enchanted with the Alpine region following a visit made as an undergraduate with Sir Harold Hartey, and with Europe once again stabilised, he returned with his family in 1921. He saw that while Swiss minerals were revered, they rarely had exact locality details, and with the help of L.J.Spencer of the (then) BM (NH), he set about changing that.

He visited Switzerland every year until 1936 (except for a single year when he went to South Africa for a geological congress), and each time met the local collectors and mountain guides (strahlers), to obtain specimens. He bought the best available and paid good prices, and soon became their favourite visitor. Each year he would study the specimens at home before passing them to the BM (NH). His condition for purchasing specimens was that he must be able to see every locality and to record it in photographic detail. As a result, his extensive catalogue is an example to all. In all, Ashcroft collected about 7,000 Swiss specimens, as well as about 2,000 zeolites, which are housed in the Natural History Museum, along with his sumptuous catalogue.

Finally, Stuart Baldwin gave a talk on Bishop Wilkins and an early mineral classification [Ed.note: no details available]

The conclusion of Stuart's talk ended a fine meeting, and was followed by wine and savouries in the Library.

An Initiative to create a European Journal for the History of Geology:

INTRODUCTION

The European Union, whose vitality has been demonstrated by its recent creation of a new currency, possesses a unique character in being an economic and political entity formed by an association of countries each of which have their own history, culture and language. This is why it now appears opportune to create a truly European, multilingual, journal soon, designed for historical articles devoted to geological researches carried out on our continent which, as is well known, has been the cradle of this science, as well as of work carried out abroad by European geologists. National Committees for Geology already exist in several such countries: in France, the U.K., Germany, Spain & Hungary. The first two each contain a significant number of members (more than 100 each). Such groups however are still too small to support the financial costs which publication of a printed journal would entail. None the less the French 'Comite' annually issues a volume of "Travaux" reflecting the activities of the three public meetings they organise each year. British History of Geology "Newsletters" are, in the same way, issued by the British Committee and the Spanish Commision publishes its "Boletin".

SOME PROPOSALS

1) Should it be an independant journal or the publication of a European Society?

The first, and fundamental, choice concerns the status of any future journal:

EITHER - This journal could emanate from an aggregate of the national European committees, which would each be represented on the Editorial Board. This is very probably the best solution, since national committees are in the best positions to serve the cultural interests of the countries they represent.

OR - This journal could equally be totally independant, its editor being, in such a case, under the control of an Editorial Board made up of co-opted members, who would be directly concerned both with editorial

work and responsible for the scientific and historical quality of the articles it would publish. A THIRD possibility would be to make any such journal the organ of a new "European Society for the History of Geology". The major inconvenience of this solution would be to add the load of management, to that of the editorial work, with an extra secretariat entrusted to administer this new Society. An advantage of this solution would be, on the other hand, that the Chief Editor and the Editorial Board could be elected by the members and be responsible to them. Each National Committee could pass on a right to be represented on the Council of any such new Society.

2) The Constitution of any provisional Committee.

To assure a harmonious start to this project, and before taking any decision which would affect its future, it seems vital to consult those members of INHIGEO who represent countries which make up the European Union (or who have already been put forward as candidates), as well as Swiss members of INHIGEO. National Committees ought equally to be consulted, each of them having the chance, if they wish, to be represented on the provisional committee charged with deciding major options. To give the project the best chances of success, it is desirable that the most reputed European historians of geology, make up this provisional committee, possibly with representatives of other continents. In addition a priviledged position should be negotiated with HESS (USA) which published "Earth Sciences History".

3) Timetable proposals.

Taking account of the importance of the problems we still have to resolve, it seems reasonable not to expect the effective launch of any new journal (the appearance of the first volume) before 2001. For this, it is preferable that its future status be chosen before the summer of 1999. We must therefore rapidly consult the European members of INHIGEO and national European committees. If such first consultations prove positive, we must then equally rapidly organise (at the latest by the beginning of 2000) a second consultation to appoint members of the first Editorial Board to administer the journal (or a new European Society). The announcement of a printer would also become urgent by then.

EPILOGUE

The preceeding lines only give a selection of the proposals which need to be discussed and improved. I hope to receive your ideas and suggestions as quickly as possible to allow diffusion of our initial conclusions this coming Spring.

A Preliminary Questionnaire

- 1) Are you in favour of the creation of a "European Journal for the History of Geology"?
- 2) Are you likely to subscribe (on the basis of an annual subscription of about 400 to 500 FF = 60 to 76 Euros)?
- 3) Do you think this journal should emanate
 - a) from national European committees
 - b) be totally independent (& managed by an Editorial Board)
 - c) be the publication of a "European Society for the History of Geology" still to be formed?
- 4) In the second case (= 3b) do you think that members from the National Committees for the history of Geology should be statutory members of the journal's Editorial Board?
- 5) Do you think it will be possible to come to some conclusions on this initiative during the INGHIEO meeting in Freiberg, Germany, over 20-22 September 1999?

Jean Gaudant

GSA Annual Meeting, Denver, October 25-28, 1999

Plan to take part in the historical activities organized at the GSA Annual Meeting in Denver! Two historical events are planned for Sunday, October 24: Léo Laporte will lead a walking tour of the Denver neighbourhood where George Gaylord Simpson grew up; and a "Geo-Wake" to celebrate the life and work of Francis Pettijohn will take place in the later part of the afternoon, before the Icebreaker.

The Division sponsors a Topical Session focussing on interdisciplinarity: "Crossing Disciplinary Boundaries in the Geosciences: Historical Perspectives." Share your historical interests and research by offering a paper! If your topic fits this theme of interdisciplinarity -- and a remarkably large proportion of geology's past does -- offer it for the Topical Session. If it doesn't, no problem; there will be a session for historical papers on a variety of topics.

History of Geology Events at the GSA Annual Meeting

For more information on the Annual Meeting see the April issue of GSA Today; or see the GSA website: www.geosociety.org.

Walking Tour of Paleontologist G. G. Simpson's Boyhood Neighborhood. This Division-sponsored event will take place during the early afternoon, Sunday, October 24. Led by Léo F. Laporte. Cost \$10.

Remembering Francis Pettijohn

Francis Pettijohn, who died this spring at 95, had a major impact on the development of sedimentary geology during the last half of this century. His textbook Sedimentary Rocks was an inspiration to young aspiring sedimentologists around the world. His students became leaders throughout North America.

At the Annual Meeting of GSA, our Division is sponsoring a Program "Remembering Francis Pettijohn" on Sunday afternoon, 3-5 p.m. Associates, former students and friends will gather to remember this unrepentent field geologist as teacher, mentor, colleague and role model. Chaired by Robert Ginsurg and Lawrence Hardie

<u>Topical Session: "Crossing Disciplinary Boundaries in the Geosciences:</u> Historical Perspectives"

The Topical Session matches the overall Annual Meeting theme: "Crossing Divides." Coconvenors are Ken Taylor and Michele Aldrich. A combination of invited and volunteered papers. A request has been made for scheduling on Monday or Tuesday, October 25 or 26.

The cross-disciplinary nature of geological science is illuminated by its historical development. This session will explore boundary-crossing as a central theme in the dynamics of change in the earth sciences. Scientists and historians will address this theme through cases of imaginative integrations of perceptions and methods from diverse sciences. Volunteered papers are encouraged which address historical cases of boundary-crossing, or episodes in which cross-disciplinarity came significantly into play. In addition to historical analyses, "recollection" presentations are encouraged by scientists who have participated in noteworthy boundary-crossing research -- thus narrating and reflecting on their insiders' view of cross-disciplinarity in their own scientific work.

The concluding half-hour of the session will feature several of the presenters in a panel discussion with the other participants and the audience. If you wonder whether work you have been doing in history of geology fits within this theme, chances are good that it can be organized to do so. Anticipated papers include work that is oriented around biography, conceptual and technical innovations, individual and group rivalries, regional or local investigations, institutional settings, interpretive and theoretical disputes, and many other organizational approaches. Please feel free to contact the co-convenors to discuss your ideas. (Please note that Taylor will be out of email contact between June 26 and August 6.)

Please note that abstracts must be submitted by July 12, midnight Mountain Standard Time. Submit either electronically (see the GSA website -- http://www.geosociety.org) or on paper, but not both ways. Paper abstract forms are available from Nancy Carlson, Abstracts Coordinator, (303) 447-2020, ext. 161; or ncarlson@geosociety.org.

History of Geology Technical Session

As always, papers addressing any topic in the history of geological science are strongly encouraged. The organizers will request scheduling in proximity to the Topical Session. The same abstract deadline applies: July 12.

As always, time slots for contributed papers at GSA meetings are 15 minutes. That includes whatever time may be used for Q and A.

Archive display for the GS President's Evening, 1999

A display of material from the Geological Society's Archive & Rare Book Collection was mounted by Wendy Cawthorne on the theme of Sir Roderick Murchison's book *The Silurian System* which was published in 1839. It complemented the poster presentation by Dr John Fuller *Five Future Legends 1839-1879: inventing the Lower Palaeozoic* and the demonstration of the project to scan and digitise the Murchison correspondence, and to issue it on CD-ROM.

The Silurian System book, plates and map were exhibited and attention was drawn to the definitive article by John Thackray (the Society's Honorable Archivist) on the publication of Murchison's major work (1).

A portrait of Murchison was displayed together with a caricature that appeared in Vanity Fair. Alongside was a selection of sketches by both Sir Roderick Murchison ⁽²⁾ and his wife Charlotte ⁽³⁾, which were used to illustrate his book.

To highlight the importance of Murchison's association with the Rev'd T.Lewis of Amestry, Murchison's field notebook, used during his 1831 visit to the Welsh Borders, was opened at the page showing his 'First section with Lewis at Amestry' (4). Murchison's account of this period was written in volume 7 of his autobiographical Journal (5). The page selected for display had been annotated by Archibald Giekie, who wrote Murchison's biography, to point out the ongoing disagreement between Murchison and Sedgwick concerning the Silurian-Cambrian boundary.

Three letters were displayed from the collection of 18 written by Rev'd T.Lewis to Murchison. Lewis provided much information including fossils, to assist Murchison in his research for *The Silurian System*. The letters were dated 27 December 1831 (Lewis letter no.1), 7 February 1832 (no. 4), and Christmas Eve 1838 (no.15), in which Lewis looks forward to receiving a presentation copy of *The Silurian System* ⁽⁶⁾.

⁽¹⁾ Thackray, J.C. (1978), R.I.Murchison's Silurian System (1839). *Journal of the Society for the Bibliography of Natural History*, 9(1),pp.61-73

⁽²⁾ Archive reference GDGSL 859

⁽³⁾ Archive reference LDGSL 857

⁽⁴⁾ Archive reference LDGSL 838 - notebook 58

⁽⁵⁾ Archive reference LDGSL 839

⁽⁶⁾ Archive reference LDGSL 838(L7)

...for your diaries?

On the History and Philosophy of Geophysics and Related Disciplines, 2000 A half-day session devoted to the discussion of problems in the history and philosophy of geophysics and related disciplines (geology, astronomy, meteorology) will be held as part of the conference of the German Geophysical Society at Munich in March, 2000. Oral presentation of fifteen minutes and posters are invited. For details, contact Dr Wilfried Schröder, Geophysical Institute, Hechelstrasse 8, D-28777 Bremen, Germany.

...for your bookshelf?

"Capabilities of the Alchemical Mind", by Eric Ratcliffe, pub. by Four Quarters Press, 1999, price: £4. ISBN 0 9535113 0 8.

Capabilities of the Alchemical Mind

ERIC RATCLIFFE



This is a small story of the essence of alchemy and its history, written in *terza rima* verse, by an octagenarian poet, amplified by introductory matter, end notes and appendixes. The main part is called the *Opus Alchymicum*, and it then passes on to the interests of Isaac Newton in the transmutation of metals. It is illustrated with many woodcuts of an alchemical nature taken from *Alchemy* by Johannes Fabricius. It is published in a limited edition, mostly as a labour of love, and on a no profit basis, with purchasers given leave to split the cost between publisher and a named charity.

William Smith Millennium Meeting: CELEBRATING THE AGE OF THE EARTH

June 28/29, 2000

Geological Society of London, Burlington House, Piccadilly, London W1V 0JU Co-sponsored by the Geological Society of America

At the close of one Millennium and the dawn of another the History of Geology Group is holding a two-day interdisciplinary symposium on geological time, under the auspices of the Geological Society's William Smith Lecture meeting.

The objective of the meeting is to re-create in modern times the atmosphere of interdisciplinary discussion that prevailed at the end of the 19th century when geologists, biologists, physicists,

chemists and astronomers came together to hotly debate the Age of the Earth. Accordingly, we have invited geologists, geochemists, historians of science, a biologist and an astrophysicist to contribute to this very special occasion.

Wednesday 28th June

The first day will address the historical perspective of geological time up to the end of the nineteenth century. It will be opened with a Keynote Address from Professor Aubrey Manning, presenter of the excellent television series 'Earth Story'. As biologists 'take their time from geology', Professor Manning will present a biological view of geological time. He will be followed by a number of highly distinguished historians of science and geology from Britain, the US and Europe who will cover the concept and development of geological time. The presentations will culminate with the William Smith Lecture given in the evening, before dinner, by Professor Hugh Torrens on William Smith himself.

Thursday 29th June

The second day addresses the twentieth century from the discovery of radioactivity to modern-day applications of geochronology. The speakers will include some of our most eminent isotope geochemists, again from Britain, the US and Europe, presenting their reminiscences of the 'early days' of geochronology, the controversy over the oldest rocks on Earth, and bringing us right up to the minute with how we date the age of the Earth today. The meeting will close with a presentation from Sir Martin Rees the Astronomer Royal, who will place the age of the Earth within the context of the age of the Universe.

Field Trip

Professor Hugh Torrens will lead a time-related field trip to the Wealden on Friday 30th June. The additional charge for this will be small. Please indicate your interest in attending when you send your registration fee.

Celebration Dinner

Tickets for the Celebration Dinner/Buffet to be held at Burlington House on the evening of the 28th June will be available for purchase at an extra cost. Please indicate your interest in attending when you send your registration fee.

Registration

For those wishing to gain the benefits of early registration, please send your cheque made payable to HOGG to the convenor, Dr. Cherry Lewis, Wells Cottage, 21 Fowler Street, Macclesfield, Cheshire, SK10 2AN. Registration fees are as follows:

Members of the Geological Societies of London and America	£30
Student members of the above Geological Societies	£15
Non-members	£50

The William Smith Lecture is free of charge to all members of The Geological Society.

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Co-sponsored by the Geological Society of America

Speaker	Title of Talk
Professor Aubrey Manning Emeritus Professor of Biology, Edinburgh University Presenter of television series: Earth Story	Time, Life and the Earth: A Biologist's View
Dr. John Fuller Historian of geology and theology Retired Regional Exploration Manager, Amoco	Before the Hills in Order Stood: The Beginning of the Geology of Time in England
Dr. Ezio Vaccari Leading historian of European geology, Genova University	The time of Genesis and the time of the rocks: The European view (17/18 centuries)
Professor Ken Taylor Professor of the History of Science, Oklahoma University	Nature's own chronology: Geology and time in the 18th century
Professor Martin Rudwick Professor Emeritus, University of California San Diego Affiliated research scholar, Cambridge University	Time, geology and fossils in the age of Cuvier and Lyell
Mr. Jack Morrell Retired reader at University of Bradford Historian of Oxford Science and the BAAS	Title to be announced: The time of John Phillips
Dr. Joe Burchfield Associate Professor in the History of Science, Northern Illinois University	Title to be announced: The invention of geological time
Professor Hugh Torrens Professor of History of Science and Technology, Keele University	William Smith Lecture:- Timeless Order: William Smith and the search for raw materials
Professor Stephen Brush Distinguished University Professor of the History of Science, University of Maryland	Is the Earth Too Old? When the Earth was older than the Universe
Dr. Cherry Lewis Honorary Research Fellow, Keele University Biographer of Arthur Holmes	The Dating Game: Visions of building a geological time-scale
Professor Gerry Wasserburg Professor of Geology and Geophysics, California Institute of Technology	Stones and the Voices of Time: A Participant's History
Professor Stephen Moorbath, FRS Emeritus Professor of Isotope Geology, Oxford University	The Oldest Rocks on Earth: Time Constraints and Geological Controversies
Professor Al Hofmann Professor of Geochemistry, Max-Planck-Institute for Chemistry	Title to be announced: Evolution of the Earth and its age today
Sir Professor Martin Rees Astronomer Royal, Professor of Astrophysics, Cambridge University	Title to be announced: The age of the Universe