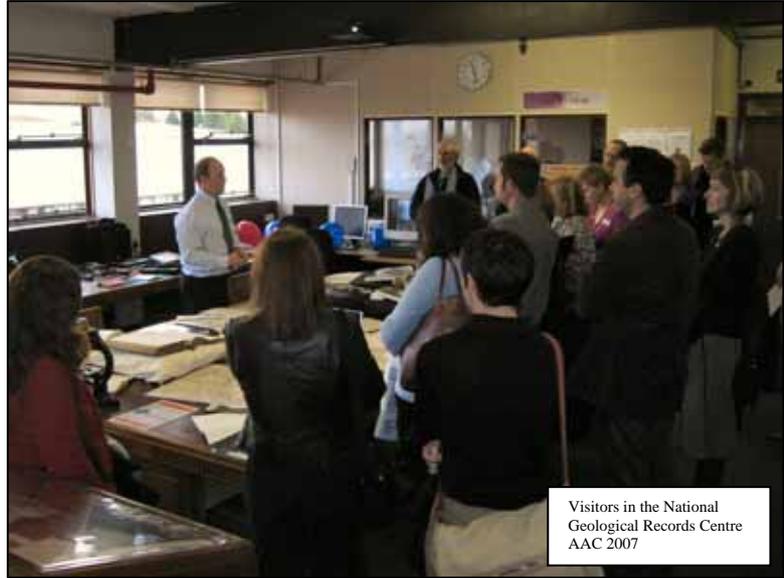


Freedom and Equality – Women in Geology

From discovering dinosaurs to creating digital maps, women have played a significant role in the development of geology. As the British Geological Survey (BGS), founded in 1835, is the oldest Geological Survey in the world it might be expected that women would have played a part in its history. However, until recently only a few determined women managed to work and prosper in the era before equality and all of them struggled for recognition. As part of the national Archives Awareness Campaign on the 1st December 2007 the BGS held an open day and exhibition on women geologists related to the Survey.



Visitors in the National Geological Records Centre AAC 2007

The exhibition included free guided tours of the BGS Records Centre, Materials Collections, Library, Enquiry and Archive services, and the 3D Visualisation Suite. There were 10 tours and each took up to two hours. Over 200 people, including the BGS Director (incognito), toured the site and finished by buying Christmas presents in the BGS shop. The BGS also offered 40 external professional users a preview of the public day and a similar tour highlighted the value of the extensive BGS data holdings to researchers looking at land use, both current and historical, and the wide variety of information available to geoscientists, engineers, planners, librarians, academics, consultants and other professional users.

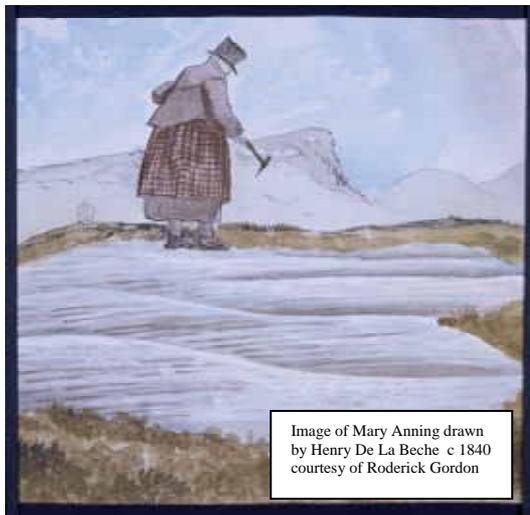
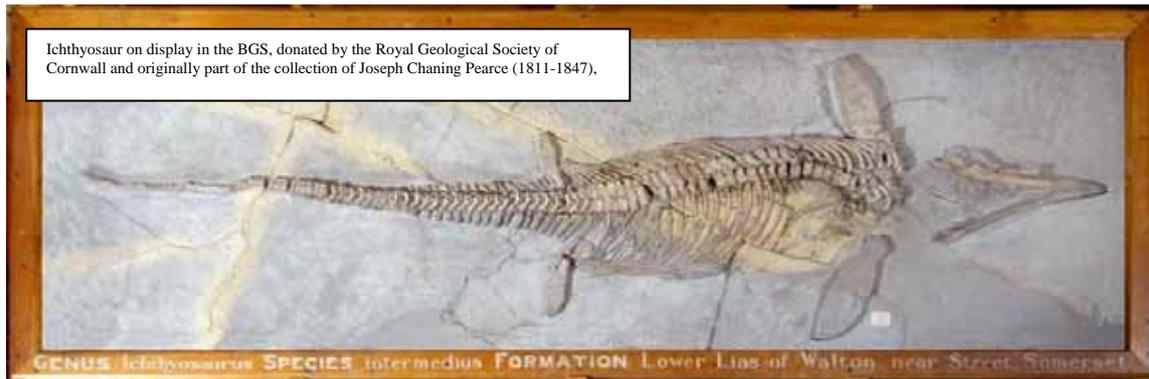


Image of Mary Anning drawn by Henry De La Beche c 1840 courtesy of Roderick Gordon

The tours followed a timeline showing the evolution of women's role in geology from 1800 to the present day. A timeline poster produced to accompany the theme was very well received. Each area had displays related to a period on the timeline and had examples of individual archives related to significant women, their work and their

publications. The displays included scientific records photographs, archives and materials collected by the featured women. There were also artefacts of general interest to set these in context. Over 20 different colour-printed handouts were produced either for individual women or particular time periods.



All the women featured had worked in BGS or had some direct connection with the Survey. **Mary Anning** (1799–1847) was a fossil hunter and palaeontologist who has been described as ‘the greatest fossilist the world ever knew’. The tongue twister ‘she sells sea shells by the sea shore’ is attributed to how, from the age of 11, she sold fossils to make a living for her family. She found the first complete fossil ichthyosaur skeleton at Lyme Regis in 1811 (when aged 12). Henry De la Beche, the founder of the Geological Survey, kept a yacht in Lyme Regis and was often observed with Mary engaged in hunting for fossils.

In 1930 **Miss Eileen Hendriks** (1888–1978), attempted to become the first female Survey geologist. Unsuccessful though she was, she did much work for the Survey and continued her geological research well into the 1970s. An expert on the geology of Cornwall and Devon, she carried out a variety of research and discovered fossil Devonian ferns that were ultimately named after her. A testimonial stated ‘She has had a very good training and is extremely enthusiastic, but has received very little encouragement in her work, and has, in fact, suffered from a good deal of discouragement from some.’ Unusually Miss Hendricks’s entire personal archive was deposited with the Survey.



Miss Eileen Guppy (c.1904–1980), an accomplished petrologist and analytical chemist, was promoted to assistant geologist in 1943 and became the first female geology graduate to be appointed to the scientific staff of the Survey. However, despite her abilities Miss Guppy was summarily demoted after the Second World War. It is not clear if this was related to completion of ‘war duties’ or to Department of Scientific and Industrial Research regulations! However, she continued as a personal scientific assistant to the Survey Director. Latterly she worked with inspectors from the Public Record Office evaluating the older records from the Geological Survey and Museum. When she retired in 1966 she was awarded the MBE for her loyal service. It is noteworthy that the archives reveal that Miss Hendriks and Miss Guppy (both were unmarried as, officially, female Survey officers had to resign on marriage up until 1975) made significant contributions to Survey publications, but their authorship was not credited on the majority of the published volumes.

In 1995 **Professor Jane Plant CBE** became the first woman to hold the position of Deputy Director of the British Geological Survey and in 2000 she was appointed as the Survey's Chief Scientist. Retiring from the BGS in 2005 she is now Professor of Geochemistry at Imperial College London and a recognised authority and author in the field of human health and the environment.

Other female geologists featured included **Margaret Chorley Crosfield**, palaeontologist and the first woman to be elected a Fellow of the Geological Society in 1919; **Marie Charlotte Stopes**, geologist and botanist, more widely known for her ardent feminist views and book on sex education and birth control; **Lilian Gertrude Elles**, palaeontologist; **Sue Arnold**, who became the first woman from BGS to go to sea in an otherwise all male Research Vessel in 1967. **Beris Cox**, first female palaeontologist in BGS in 1969; **Edna Waine**, geochemist and first female group manager; and **Audrey Jackson**, first female field geologist in BGS in 1971. Also included, among others were the women who joined the Water Department during WW2 to gather information on this essential resource and the first women cartographers, who joined the Drawing Office and also acted as ARP spotters from the roof of the Geological Museum in London.



There are now women in every area and at all levels within the BGS working alongside their male counterparts. Many women are at the forefront of expanding new technologies and pursuing developments within the geoscientific field. For example, the tours finished in the 3D visualisation suite where **Marieta Garcia-Bajo**, a 3D modeller, showed the way computing technology is used to interpret the sub surface.

This also offered an insight into the archives of the future and the challenges to come for archivists and records managers!

Staging this event around a timeline rather than on a 'departmental' basis had unexpected benefits in not only improving BGS knowledge of its own the collections but also raising awareness within BGS and externally. It also fostered increased collaboration between the different areas involved. Overall it was a great success and the hard work of all the staff members involved was amply rewarded by the compliments and praise received from the public and fellow professionals.

For further information about the British Geological Survey see www.bgs.ac.uk

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