

DISTANT THUNDER

Turning the tide

Geologist and science writer Nina Morgan charts the rocky road to gender equality

The British Geological Survey (BGS) was founded in 1835, and for the first 108 years of its existence, its professional ranks remained an exclusively male preserve. It wasn't until the Second World War that female geology graduates were allowed to join its scientific staff. The first, Eileen Guppy [c. 1904-1980], who joined BGS as a technical assistant (petrology), was promoted to the rank of assistant geologist in 1943—but then demoted to the grade of Senior Experimental Officer in 1945. During the war, BGS also employed a number of women graduates, nicknamed 'Water Babies', who travelled mainly on bicycles carrying out an inventory of water bores and wells to help ensure vital water supplies. It wasn't until 1957 that Diane Knill became the first woman to directly enter the Survey as a Geologist. And it took until 1978 before Edna Waine was put in charge of the Analytical and Ceramics Unit and became the first female head of a BGS unit.

Women power was clearly too good to waste, and as time went on more and more pioneering female geologists broke into the BGS's scientific ranks. In 1967, Sue Arnold joined the crew on the Moray Firth IV and became the first woman employed by BGS to carry out research at sea. Then, in 1972, Audrey Jackson, a graduate of Trinity College Dublin with previous field experience, became the first female geologist employed by BGS to spend extended periods in the field as a geological mapper. In 1995, the geochemist Jane Plant [1945-2016] became the first woman to hold the position of Deputy Director of BGS. She went on to serve as the Survey's chief scientist from 2000 until 2005, before leaving BGS to become Professor of Geochemistry at Imperial College, London. Today, 39%



of the BGS geological staff are women, and although BGS employment statistics suggest there is still a significant pay gap between men and women, working towards gender equality is now definitely on the BGS agenda.

Your marriage or your job

Nevertheless, there is no denying that it has been a long journey. No women at all were recruited into the BGS until the 1920s, when an advertisement for technical staff specified that women candidates "must be unmarried or widows and will be required to resign their appointment upon marriage". In fairness, the BGS was far from alone in restricting married women from employment. It was not until the Sex Discrimination and Equal Pay Acts of 1975 came into force that employers were prevented from forcing women to resign when they married.

Women were not the only ones to suffer from this draconian restriction in order to keep their geological jobs. The geologist Adam Sedgwick [1785-1873] was also forbidden to marry under the terms of his employment as Woodwardian Professor of Geology at Cambridge University.

Fortunately, these days the tide is turning. Although there is still some way to go before true gender equality in employment and pay for female geologists is achieved, thanks to changing social

mores when it comes to marriage, women now have many more choices. For all sorts of reasons, many women are choosing to raise families together with a partner outside of marriage, so remain 'technically' unmarried. Back in the old days, co-habiting was thought of as 'living in sin'—certainly not something the ordained Reverend Sedgwick would have ever considered. But, looking at it logically, it might have served as a clever way of outsmarting the marriage ban.

End notes: Sources this vignette include: Freedom and Equality by Rod Bowie [[bgs.ac.uk/education/archive_awareness](https://www.bgs.ac.uk/education/archive_awareness); <https://www.bgs.ac.uk/downloads/start.cfm?id=904>]; The historic role of women scientists at BGS by Catherine Pennington [<http://britgeopeople.blogspot.com/2015/02/the-historic-role-of-women-scientists.html>]; Down to Earth One hundred and fifty years of the British Geological Survey by H.E. Wilson, ISBN 707304733; gender employment statistics were provided by BGS [a 2017 report is available here: <https://www.bgs.ac.uk/contacts/people/BGSGenderPayGapReportvFinal@5April2017.pdf>].

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