
Some significant women in the early years of The Natural History Society of Glasgow

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The early constitution of The Natural History Society of Glasgow (NHSG) did not explicitly exclude women members (e.g. NHSG, 1873), however there were no women named in membership lists until 1886. In 1887 amendments to the constitution, which were adopted in 1888 (NHSG, 1888), included waiving the entry fee for women, though they were still asked to pay the annual subscription. However, prior to this, the Proceedings note the admission of two women in October 1882: Miss Adelaide Broadhurst and Miss Josephine McKean (NHSG, 1882). This is not to say that during the early years women played no role in Natural History in general, nor in NHSG in particular. There are several earlier references in the Proceedings to Elizabeth Gray and to Hannah Robertson – though invariably as ‘Mrs Robert Gray’ and ‘Mrs David Robertson’ respectively. This note attempts to shine a little light on these women, particularly the latter two, and to put them in the context of contemporary events. Both Elizabeth Gray and Hannah Robertson were made honorary members of the Society in 1901. It seems particularly appropriate to publish this account in 2010, the centenary of the death of Hannah Robertson.

Elizabeth Gray

Elizabeth Gray (née Anderson, 1831–1924) was the wife of Robert Gray, one of the founder members of NHSG; her interest was fossils. The Proceedings on several occasions mention specimens which she had provided for display at meetings of the Society; these included a graptolite which she had found and which, it was proposed, should be named *Cyrtograpsus grayianus* in her honour (NHSG, 1872). The same entry mentions her specimen cabinet from which ‘several groups of fossils have already been brought before the society’. These are reported in the Proceedings as having been brought to meetings by Robert Gray or by Prof. Lapworth. The species *Cyrtograpsus grayae* Lapworth is listed in the Handbook produced for the 1901 meeting of The British Association for the Advancement of Science in Glasgow (Peach, 1901) as having been found near Girvan; this is presumably the species displayed in 1872. The extensive list of fossils from the Girvan area included in the Handbook is partly derived from ‘Mrs Gray’s list of fossils published in The Silurian Rocks of Scotland’ and, among the species (of diverse taxonomic groups)

listed, there are a further dozen with the specific names *grayi*, *grayae*, or *grayana*. Most of her collection is now in the Natural History Museum London, though there are specimens in the Hunterian Museum in Glasgow (Neil Clark, pers. comm.) and in other locations. Elizabeth and Robert moved to Edinburgh in 1874, some 8 years before women were first admitted to GNHS as members. However, when Professor Young instituted a class in geology for women at Glasgow University, he presented a ticket to Mrs Gray - her only formal geological education. It appears that she acquired her initial knowledge through fossil-collecting expeditions with her father (McCance, 2002). The Oxford Dictionary of National Biography (ODNB, 2009) notes that ‘In 1900 Elizabeth Gray was made an honorary member of the Geological Society of Glasgow for the contribution her collections had made to geological literature. The Murchison geological fund was awarded to her in 1903 in recognition of her skilful services to geological science. A woman of considerable character, determination, and resourcefulness, with a phenomenally retentive memory, she was renowned for her extensive collecting in the Girvan district, which she carried on until the autumn of 1923’. In 1901 she was made an Honorary Member of the Natural History Society of Glasgow.

Hannah Robertson

Hannah Robertson (née Alston c.1826-1910) was the second wife of David Robertson, the eminent marine biologist of Cumbrae, who joined NHSG in 1852, a year after it was founded, and about 9 years after marrying Hannah. David Robertson’s obituary (NHSG, 1897) describes how Hannah, as a teenager living on the Isle of Man, had collected sea-shells ‘for the benefit of a great conchological signboard’ Robertson was making. When they eventually met (in Glasgow) they apparently took to each other immediately and married just over a year later; she was about 20 years his junior. When David retired in 1860, the Robertsons moved to Cumbrae, where Hannah ‘assisted her husband in his favourite departments of research’ and ‘turned her attention to the study of the recent Foraminifera of which she has formed a large and valuable collection’ (NHSG, 1897). She accompanied him on many of his dredging excursions (mainly in the Firth of Clyde), and together they visited the east of Scotland, Orkney and Norway to collect marine fossils. After her husband’s death (in 1897) Hannah compiled an impressive list of Foraminifera for the 1901 Handbook (Robertson, 1901). The list of marine algae in the same volume refers to many records from the Robertsons’ collection, and in the introduction to that list, Batters asserts that ‘... it is to the efforts of the indefatigable Mrs Robertson that we owe most of our knowledge of the marine algae of the Firth of Clyde.’ Hannah also continued to contribute specimens for display at NHSG meetings; the Transactions in question do not specify whether she sent them or whether she herself was present at the meeting. One such specimen was a marine alga

new to Britain: *Phaeosaccion collinsii* found on Cumbræ, and previously only known from North America and Greenland (NSHG, 1899). After Hannah's death in 1910, her collection of marine algae and microzoa went to Glasgow Museums; the Glasgow Museums and Art Galleries Report for the Year 1914 describes this as 'the most important addition to the Natural History Department during the past year'. The collection of marine algae numbered some 1,000 specimens; and then referring to the Foraminifera, the Report describes how she 'built up a valuable collection of these minute but beautiful forms'; the collection also included Ostracods from the Clyde valley. She was apparently never a member of GNHS in her own right until she was made an Honorary Member in 1901, though she was a founder member of the Marine Biological Association of the West of Scotland (MBAWS, 1910).

Adelaide Broadhurst and Josephine McKean

As mentioned above, these two women were admitted to the Society in October 1882 (NHSG, 1882). It was Adelaide Broadhurst's name which appeared in the 1886 membership list (NHSG, 1887), but neither she nor Josephine McKean is listed in the membership list published in 1883 which probably represents the membership list up to the date of the 1882 Annual General Meeting, which would have taken place prior to October (NHSG, 1883). Both were junior teachers at the Park School for Girls when it opened in Lynedoch Street (Sept 1st 1880), and their address is given as such in the Proceedings. Adelaide Broadhurst taught science at an annual salary of £100 (the headmistress was paid £400 p.a.). She had formerly taught at Liverpool Ladies' College, and up until the time she left The Park School, about 8 years later, 'the demands on the chemistry department were constantly increasing, as was its success' (Lightwood, 1990). It seems likely that she is the Mary Adelaide Broadhurst recorded as a teacher in the 1881 census, and resident (with her parents, siblings, and a servant) in Chorlton-on-Medlock, then on the southern edge of Manchester, and now largely occupied by more recent developments including the University of Manchester.

Josephine McKean taught mathematics (at The Park School), and was also paid £100 p.a. She appears to have left the Society within a year or two of joining, as there is no further mention of her in the Proceedings and Transactions after October 1882. The History of the Park School (Lightwood, 1990) does not mention her again either, though this may imply that she continued after Adelaide Broadhurst had left, as the latter is mentioned as one of the first to move on.

HISTORICAL CONTEXT

The two young teachers may be exemplars of political concerns at that time over the number of 'superfluous', unmarried women in the population; young women often aspired to become teachers or governesses rather than to

marry, and were actively encouraged to emigrate, as witnessed by the existence of the Female Middle Class Emigration Society

(www.archiveshub.ac.uk/news/0806fmces.html (2009)). It seems possible that both teachers emigrated, as I have been unable to find any subsequent public record of either of them (Census, Marriage or Death). More immediately, their membership of the Society may have owed something to Prof. John Young, who was a founder member of the (Glasgow) Association for the Higher Education of Women, a Director of The Park School for Girls, and a member of the Council of NHSG, as well as being Professor of Natural History in the University of Glasgow. Unfortunately the minutes of the Society do not record details of any discussions on this topic. And, as noted above, Prof. Young had previously enrolled Elizabeth Gray into the Geology class at the University. The recently published book by Finnegan (Finnegan, 2009), gives interesting comparisons with natural history societies elsewhere in Scotland and other useful contextual information. Among the themes he explores are a wish to project an image of natural history as a 'manly' pursuit, requiring strength and stamina, and the role of women (in some other natural history societies) in organising fund-raising bazaars. I commend the interested reader to that book (reviewed elsewhere in this issue) for details. Finnegan also gives a table comparing the dates of admission of women members and the rate at which women took advantage of this in some of the Scottish societies, though he appears to have missed the Misses Broadhurst and McKean, and therefore gives a later date for NHSG. Nevertheless, NHSG and the Andersonian Naturalists' Society (also of Glasgow) appear to have been the last two of the 10 larger Scottish societies to enrol women as members. Creese supplies further context, spreading a rather wider comparative net including information about nineteenth century women scientists in Ireland, Scandinavia and other parts of Europe, though unfortunately she cites no Scottish examples (Creese, 2004). Incidentally, the original constitution (1885) of the Andersonian Naturalists, like that of NHSG, did not explicitly specify 'gentlemen', nevertheless, the wording was changed in 1886 (ANS, 1886) to 'Ladies or Gentlemen', and 'ladies shall be admitted free'. By 1889-90, 14 women were listed as Ordinary Members (of NHSG) and 4 as Associate Members, one of whom was the wife of an Ordinary Member. This had dropped to 6 and 3 respectively by 1893, all but one of whom had joined before 1890. There is no record in the Proceedings of any of them organising a bazaar! But it was not apparently until the 20th century that a woman member read a paper to the Society or personally exhibited specimens at a meeting. In 1902, Mrs Ewing (wife of the then President, Peter Ewing) read a paper to the Society "Arctic Plants from the Dovrefeld, Norway" and exhibited the plants mentioned (NHSG, 1902); and in 1903 Wanda Zamorska exhibited botanical specimens from Ruchill and Glen Clova (NHSG, 1903) – she had joined the Society, with her two sisters, in 1894.

By January 2010, there were 117 men and 118 women members of GNHS.

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