## Benjamin Neeve Peach (1842-1926)

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Much has been written about Benjamin Peach, who worked for the Geological Survey in Scotland between 1862 and 1905. In concert with John Horne, Peach was instrumental in the mapping and deciphering of the Moine Thrust Belt in the NW Highlands and in the reinterpretation of the Southern Uplands. In his scientific obituaries, written by John Horne Edward Bailey, and the appreciation by Edward Greenly (1928), little mention is made of his personal life, yet he was married twice and the father of eight children, three of whom died young. His family were mentioned in passing in his obituary in the Scotsman, in Who Was Who (1916-1928), and by Oldroyd (2004). In this



B.N. Peach. Photograph taken c. 1912.(A.G. Stenhouse). BGS Photo P613158.

account we attempt to paint a broad picture of Peach's talents, foibles and failings, and document some of the trials and tribulations he experienced in both his professional and private life. Peach's antecedents and descendants, from parents to grandchildren, are illustrated in a family tree at the end of this article.

Peach's obituarists commented on his imposing leonine or aquiline appearance and penetrating gaze, backed up by a strong personality and considerable natural strength, particularly when young. In 1868 during a trip to Germany James Geikie recorded that he swam across the Rhine at Königswinter (south of Bonn) in 12 minutes before breakfast – no mean feat! Peach appears to have revelled in the outdoors, his natural athleticism allowing him to efficiently traverse Scottish mountains, countryside, and coastal areas in all seasons. He continued to do extensive field work until retirement, despite the onset of sciatica in 1883 and its subsequent recurrence that resulted in periods of disability. Peach was an excellent observer and an intuitive thinker, rapidly assessing geological problems in the field and proposing solutions. He is credited with a genial, patient, but enquiring nature that certainly extended from people to animals. His love of nature was fostered by his upbringing at coastguard stations and his father's natural history studies. He was also a keen fisherman. On the negative side his intuitive and rapid geological deductions could be poorly thought through, and his consequent actions a little hasty. His wide geological interests encompassed both bedrock and superficial rocks, with a focus on palaeontology and glaciation patterns. He was deeply involved in the unravelling the overall stratigraphy and structure of the Highlands and Southern Uplands, but with hindsight his approach to these major problems now seems somewhat blinkered. It was largely his colleagues and other geologists, e.g. Charles Lapworth, who considered the implications of wider studies, embraced new ideas and techniques, and promulgated their adoption to help resolve the problems of interpretation

posed by Scottish geology. There is no doubting Peach's ability to work hard and deal with professional and personal matters. However, Anderson (1980) reported that he did have spells of frenzied activity, sometimes followed by periods of indolence. Despite lacking organisation and application at times, he nevertheless managed to cope with taxing and varied professional duties, onerous administrative tasks, and his complex family life.

Benjamin Neeve Peach was born at Gorran Haven in Cornwall on 6<sup>th</sup> September, 1842, the youngest of 8 children to Charles William Peach (1800-1886) and Jemima Mary Mabson (1802/3-1882). His was named after a relative on his mother's side. Charles Peach was a respected naturalist and geologist, notable for his studies of marine invertebrates and discoveries of fossil fish and plants, mainly in Cornwall. He was employed as a mounted Revenue Coast Guard officer, based first in Norfolk, then in Dorset, Devon and Cornwall, before being appointed Customs Officer based at Fowey. In 1849 he was transferred to Peterhead and later to Wick, from where he was responsible for the north coast of Scotland.

From Wick, he linked with Robert Dick of Thurso, a notable collector of Devonian fossil fish. Ben Peach attended both Peterhead and Wick academies. Charles Peach was forced into retirement in 1861, and moved to Edinburgh in 1865. In all, he published 71 papers, about half on geological subjects. His work on marine fauna, and the discovery of fossil fish in the Devonian quartzites around Gorran Haven and fossils in the Durness Limestone Formation (in 1854), attracted the attention of other naturalists and geologists, including Sir Roderick Murchison. By 1858 J.W. Salter had determined that the Durness fossils (cephalopods, gastropods, and subsidiary brachiopods and corals) were 'Early Silurian' in age and of North American affinity. Partly in gratitude for such 'finds' Murchison paid for the 17 year-old Ben Peach to attend the School of Mines (later Imperial College), where he attended lectures given by A.C. Ramsay, T.H. Huxley and A.W. Hofmann. Peach obtained his diploma with considerable merit and on Murchison's recommendation he was appointed to the Geological Survey as an Assistant Geologist in January 1862.

Initially, Peach was trained in practical palaeontology by Salter in London, but was soon required to travel north to map the drift geology of East Lothian and the Edinburgh area. Archibald Geikie noted that for 'fresh recruits' this was 'not an easy task, it is apt to be thought monotonous, until its special interests are discovered by patient work'. The appraisal of the superficial deposits was soon achieved, and in the later 1860s and 1870s the survey moved on to



A young Ben Peach. The image probably dates from 1862 when he first joined the Geological Survey, aged 19. BGS photo P575813.

map the bedrock and superficial deposits of the central and southern parts of Scotland on a six-inch scale, focussing on the coalfield areas. Relatively rapid progress was made, facilitated by the influx of new staff, lengthy field seasons, and the increasing experience of the geologists involved. Peach was one of the founding members of the Scottish Office of the Survey, formally created in 1867 with Archibald Geikie as Director, and in 1868 he was promoted to Geologist. He went on to map large areas of Southern and Central Scotland, namely: from Lesmahagow SSW to Douglas, New Cumnock, Sanquhar, and Loch Doon; from Lauder southwards to Selkirk, Hawick and Langholm; and from Doune and Dollar to Stirling, Cumbernauld and Slamannan. He also mapped smaller areas around Barrhill (east of Ballantrae) and around Glenfarg. The resultant one-inch hand-coloured manuscript maps were made available promptly, but to satisfy demand for greater geological coverage detailed descriptions of the geology of some districts were delayed, many not being available for several years.

Peach's six-inch field maps from the late 1860s and early 1870s show that he was a good accurate mapper with the map face generally neatly annotated, and units clearly delineated and coloured. In contrast, on the obverse blank side, random illustrations, diagrams, trial cross-sections, stratigraphical logs or keys, even the odd calculations can be found. A good number of his field maps show drawings (mainly pencil) or even paintings, whose subjects range from scenic views to animals and people. In the 1880s and 1890s Peach used his field notebooks as sketch pads with many of the resultant images showing considerable artistic merit. However, the order, way-up, and content of such notebooks have a distinctly random, even chaotic element. They were used for the accounting of expenses, crude structural line sketches, basic geological models, etc., but geological notes and information *sensu stricto* are

somewhat sparse. Peach's more attractive sketches, done in pencil, black ink, and in watercolour, clearly show his understanding and appreciation of the form of his subjects, which ranged from scenic views to farm animals, deer, other fauna and flora, and the local inhabitants. They vary from rough representations, executed rapidly, to detailed images, with many emphasising the nature, character and lighting of the subject, and showing excellent perspective. His views match well with the actual scenery, and it seems likely that his animals and people are also realistic portrayals. In one landscape drawing (black ink), looking south in the Loch Eriboll area, he seems to emphasise the geological features. As the area was soon to be mapped, Peach may have drawn the view as part of a provisional geological appraisal of the ground. His intuitive ability to portray



Detail from a sketch of a small flock of sheep in one of Peach's field notebooks. Pencil with colour wash.

elements of the geology with '3D vision' not only made him a rapid and accurate mapper in hilly terrain, but also resulted in the abundant cross-sections to be found in the Southern Uplands and Northwest Highlands memoirs and other publications.

Sadly, Peach's artistic abilities were not matched by his literary talents. Bailey's obituary states that 'He could scarcely bring himself to write or read.' - clearly too harsh a judgement! However, Peach's written contributions to memoirs of mapped areas in the south of Scotland were cursory. For the Southern Uplands Memoir (Peach and Horne, 1899) he drew most of the numerous diagrams and maps, but made virtually no written contribution, except for the lengthy list of fossils in the Appendix. Even his literary contributions to the Northwest Highlands Memoir (Peach et al., 1907) were somewhat limited. The specification for this latter memoir was laid out in 1898 with its completion planned for 1901-2. Geikie, in explaining the delays in producing the final manuscript (in summer 1906), noted in the preface - 'Some geologists find literary labour more irksome and arduous than field-work, and would rather survey many square miles of complicated ground than write a few pages descriptive of them.' Presumably, it was Peach's ideas, influence, and 'management' of such mapping, together with his seniority, that justified his first authorship of such memoirs. Geikie certainly valued Peach's abilities in the field, as stated in his autobiography (Geikie, 1924). He selected him as companion when as Director/Director-General he wished to investigate areas with particular geological problems, e.g. on trips to Orkney, Shetland, North and South Wales, and Northern Ireland. Note that both Geikie and Peach owed their geological careers to Roderick Murchison, whom they held in high regard. Peach held definite opinions on both local and wider geological problems, but although he enjoyed discussions with colleagues on these and other subjects, he rarely gave public lectures.

A headquarters office had been set up in Edinburgh in 1867, but accommodation was very limited. As the geologists spent the bulk of their time in the field, they were normally resident there for long periods. In fact, many geologists specified their field address as their main residence, e.g. C.T. Clough at Dunoon. For others this peripatetic existence was unsettling and did create some problems for their families, e.g. James Geikie, John Horne. When in Edinburgh single officers stayed with their parents where practicable, e.g. Archibald Geikie, Ben Peach. For Peach this situation changed in 1871 when he married Jeanie Bannatyne (born 1846 - from Springhill Farm, Douglas). Note that Peach had mapped the geology of the Douglas area in 1868. Subsequently, Jeanie gave birth to Charles William (1872-1949), Jeanie (1874-1975), Jemima Mary (1876-1887) and Christina Mowbray (1879-1883), all at Hassendean Cottage, Bakers Road, Gattonside, by Melrose. Residence at Gattonside coincided with the time Peach was mapping in the Berwickshire, Roxburgh, Selkirk and Dumfriesshire areas. By the late 1870s Peach was the only field geologist still working in the south of Scotland. Their rural existence changed around 1879-80 when he and his family moved to 8 Annandale Street in Edinburgh, close to his now-aged parents and sister Jemima at 30 Haddington Place.

Coincident with the mapping of the Midland Valley and Southern Uplands in the 1860s and 1870s was the collection of fossils, both as stratigraphical markers and for populating a reference collection in Edinburgh. Arthur Macconochie (1850-1922) was employed as a fossil collector in 1869, both to collect specimens and arrange for their curation and documentation. He was assisted by James Bennie (1820-1901). Initially, fossils were transported south to London where they were identified by Robert Etheridge, the survey

Palaeontologist. This was an onerous task: for example, in 1869 and 1870 Etheridge (assisted by George Sharman) identified and named 5,757 and 7,187 fossils respectively. In Edinburgh, identification and storage of specimens had proved difficult in the limited survey accommodation in the Museum of Science and Art. The move to premises in India Buildings in 1869 at first exacerbated this situation, necessitating temporary storage of rock specimens and delaying fossil identification. To resolve such problems, Geikie requested that an Acting Palaeontologist be appointed for Scotland, and in 1871 Robert Etheridge junior was employed in this role. To facilitate fossil identification in Edinburgh some 2000 Silurian and Carboniferous reference specimens were sent up from London. In the years 1870-1882 the numbers of fossils collected in Scotland as listed in the Annual Summaries of Progress were 3,201, 2,860, 5,693 (4,532), 6,758 (4,455), 6,563 (2,680), 2,752, 4,281 (726), 4,150 (2,653), 4,203, 2,409, 3,775, 3,229 (1,393), 2,786 (1,661), respectively. Numbers in brackets refer those fossils identified and named in that year. Robert Etheridge junior contributed substantially to several memoirs and arranged for fossil displays at the museum, but in 1878 he resigned and moved to the Natural History Museum in London. Fortunately, by this time Peach was considerably more experienced in palaeontological matters, and in 1879 he was appointed Acting Palaeontologist.

Life changed significantly for Peach and his family in the 1880s both at work and at home. He started mapping in Highland Border area around Callander and Aberfoyle, and also spent considerable time on palaeontological identification, including specific studies of crustacean, 'scorpion', and fish material from Eskdale and Liddesdale. In 1883, consequent on James Geikie's departure for the University of Edinburgh, Peach was promoted to District Surveyor, a post with considerably greater responsibility but attracting higher pay. With the departure of Archibald Geikie for London in January 1882 and the delay in arrival of Henry H. Howell until 1884, Peach effectively became Acting Director for the Scottish survey for nearly 2 years. Meanwhile, at home in Annandale Street Thomas Bannatyne (1880-1881) and Elizabeth Sarah (1882-1967) were born, but Thomas died when not 4 months old (at Springhill Farm, Douglas). In the following years Peach's mother Jemima died (15<sup>th</sup> February, 1882), followed by his daughter Christina in 1883, and then, sadly, by his wife, Jeanie, on 4<sup>th</sup> February, 1884. Jeanie's cause of death is stated as haemoptysis, a common symptom of tuberculosis. Peach's father was also now ailing and his sister Jemima was recorded in 1882 to be 'in delicate health'. Amidst these domestic troubles Peach was charged with leading the new work in the NW Highlands that started in Sutherland in 1883. The survey commenced detailed mapping here consequent on the availability of 6 inch to the mile topographical maps. This work soon benefited from Lapworth's recognition of a major ductile and brittle shear zone at Loch Eriboll, now recognised as part of the Moine Thrust Belt, across which Lewisian, Torridonian, Moine and Cambro-Ordovician rocks had been translated westwards for several tens of kilometres. Lapworth's mapping and related studies resolved the longstanding argument between Murchison and James Nicol (the 'Highlands Controversy') regarding the structure and stratigraphy of the N W Highlands (see Oldroyd, 1990). In 1883 Peach was joined at Durness by Horne and the newly appointed L.W. Hinxman (1855-1936), the nucleus of a team that soon expanded to include C.T. Clough, H.M. Cadell, and W. Gunn. Peach had little experience of structural mapping or higher grade

metamorphic rocks, except for his Southern Uplands work where the poorly exposed strata had been interpreted as a complex folded anticlinorium. However, by 1884 the team had embraced Lapworth's 'model' of ductile and brittle 'slide planes', resulting in the stacking and duplication of the succession within a wide thrust zone. Lapworth had linked such structures primarily to recumbent folding, but the survey's continued mapping of the Moine Thrust Belt south from Loch Eriboll, and particularly in Assynt, illustrated that the thrust belt geometry here did not relate specifically to folding. Indeed, imbricate structures, ramps and flats, and even lateral ramps and out-of-sequence structures, were all recognised and mapped, their full significance only being recognised and defined much later in the 1960s and 1970s. The first 5 years of survey work were admirably summarised in Peach et al. (1888), which provided details of the lithological units and structural cross-sections from many parts of the thrust belt between Loch Eriboll and Loch Broom. Peach and Geikie had prioritised the production of the one-inch maps in this geologically complex area of Scotland. As a result, in

1886, following summer work in Assynt, Peach, Horne and Cadell continued to work on lower ground in the Tongue district (Sheet 114, published 1889) from September through December. The survey's Annual **Summaries** Progress for the 1880's record the problems caused by the bad weather, the high ground, and the complex geology, with the result that several geologists suffered from ill health. Numerous rock specimens were also collected for thin sectioning, but the survey lacked suitable staff and skills for their interpretation. This situation was partly remedied when Jethro J.H. Teall (1849-1924) joined the survey in 1888, resulting in a better understanding of the metamorphic and ductile deformation processes involved.



Members of the Geological Survey in Scotland c. 1884. Standing (L- R): H. Miller, B.N. Peach, W. Gunn, L.W. Hinxman, H.H. Howell. Seated: J.S. Grant Wilson. At India Buildings, Edinburgh. BGS photo P008688.

In February 1886 Peach's father died at 30 Haddington Place leaving the house and estate (£571) entirely to his daughter Jemima. The following January Peach's daughter Jemima died, aged 10, at 6 Annandale Street. However, later that year on 2<sup>nd</sup> November, 1887, Ben Peach married Margaret Anne McEwen (1868-1921) at Kirkton in Assynt, where her father was the schoolmaster. Margaret ('Maggie') subsequently gave birth to Angus McEwen (1888-1909) and Benjamin Neeve (1891-1950), both at 13 Dalrymple Crescent, situated on the leafier south side of Edinburgh.

Peach's promotion to District Surveyor in 1883 had involved considerable managerial duties, made more onerous with the influx of new staff in the early 1880's. He appears to have been a geologically inspirational role-model in the field, particularly for the new recruits, but was more disorganised and at times tardy in attending to his administrative responsibilities. Several official letters written by Clough between 1884 and 1891 document his attempts to get Peach to provide work instructions, details of when and where to meet in the field, facilitate the supply of topographical maps, and return one-inch maps for checking. Patently, Peach was involved in many of the geological decisions regarding the mapping programme, in staff deployment and field checking, and in compiling statistics for the quarterly returns and Annual Summaries of Progress. He spent time editing and approving maps, and contributing to and overseeing papers, whilst also carrying on with his palaeontological work, albeit assisted at times by Robert Kidston (plants) and Ramsay Traquair (fishes). From May 1884 the day-to-day administrative running of the survey in Scotland benefited from Howell's efforts, but overall direction remained with Geikie, based in London.

In the later 1880s and the 1890s Peach continued to map significant parts of the Moine Thrust Belt. In addition he mapped folded, cleaved and metamorphosed Moine and Lewisianoid rocks in the Northern Highlands, notably in Ross and Cromarty, but also in eastern Sutherland and Caithness. The field mapping was in addition to his ongoing responsibilities as District Surveyor and Acting Palaeontologist. His association with the Moine Thrust Belt terminated in 1894, when, together with Horne, he mapped the complex structural and stratigraphical relationships between the Moine succession and Lewisianoid inliers in the Kyle of Lochalsh and Glenelg area. In Southern Scotland, problems had arisen with several Southern Uplands maps (Sheets 8, 10 and 16), marked as awaiting engraving in 1884, but delayed as they required extra geological work. The problems were resolved and the sheets finally published, but a full revision of the Southern Uplands was now deemed necessary, taking cognisance of Lapworth's graptolite zoning and revised stratigraphy. This field work started in 1888 and occupied Peach and Horne for some 8 years. The revision mainly involved tracing out the revised stratigraphical boundaries in the autumn, winter and early spring, thus leaving the late spring and summer months free for Highland work. Note that some 500 miles of boundary were traced in 1895-6. In order to complete the diagrams and maps for the resulting memoir Peach was effectively confined to the office in 1897. The work culminated in the revision of many of the Southern Upland maps and the publication of the comprehensive memoir on the Silurian rocks of Scotland (Peach and Horne, 1899).

Early in 1891 Peach and his family moved to 86 Findhorn Place. As he still spent a great deal of time in the field in the 1890s, his young wife was left to run the household in Edinburgh,

albeit with domestic assistance. She was also required to look after her two growing sons, and the extended family that included her stepson Charles William, and stepdaughters, Jeanie and Elizabeth Sarah ('Lizzie'). Peach's ailing sister Jemima also probably needed care; she died in 1899, whilst resident at Findhorn Place. Peach's eldest son, Charles William, graduated from Edinburgh University in Medicine in 1895.

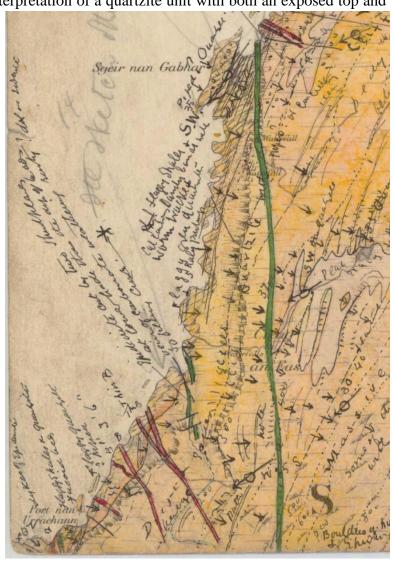
In 1899 Howell retired and Horne was appointed Acting Director (Scotland) with Peach still as District Surveyor. During the 1890s criticism of the Geological Survey from public, private and academic quarters had been mounting, together with internal dissatisfaction voiced by both serving and recently retired staff. Parliamentary questions had drawn attention to the state of geological survey in some coalfield areas and numerous complaints were logged, pointing out errors in the existing but progressively outdated geological maps. The focus of the survey's activities on the North-west Highlands and Southern Uplands, directed by Geikie, had garnered praise in some quarters, but together with the reduction in staff numbers and overall funding limits, geological support for the economically more important areas of the country was certainly lacking. Events came to a head in 1899, when the government commissioned an enquiry into the survey's affairs, resulting in the formation of the Wharton Committee. This body met in May-July 1900 to take evidence on the survey's activities, administration, and staff conditions over the previous 20 years. Staff numbers and pay and conditions had seriously deteriorated under Geikie's leadership (see Oldroyd, 2000), with salaries essentially static between 1870 and 1900 (but note the very low rates of inflation; +10% overall). The conclusions of the Wharton Enquiry (1900) resulted in a stepchange in the organisation and affairs of the Survey, particularly with regard to its mapping programme, funding, and conditions of employment. In 1901 the Survey was reorganised under J.J.H. Teall following Geikie's retirement in March (aged 65). The career structure, salaries and working conditions of staff were brought in line with other parts of the Civil Service and the post of Assistant Geologist abolished. In Scotland, Horne was promoted to Assistant Director, with W. Gunn appointed District Geologist alongside Peach. Gunn retired the following year, to be replaced by Charles Clough. Peach continued as District Geologist until his retirement in 1905, when he was replaced by Lionel Hinxman. Note that Peach had been a loyal supporter and true friend to Geikie throughout his tenure and wrote a heartfelt letter expressing his gratitude immediately prior to his retirement. In practical terms Peach had benefited from being promoted to Geologist (for 15 years) and District Surveyor (for 18 years), whereas for many of his colleagues there had been no sensible career structure or promotion. For example, Clough had been an Assistant Geologist for 21 years (1875-1896) and Hinxman for 17 years (1883-1900), the latter without pension provision.

Peach appears to have had amicable relationships with most of his survey colleagues, but in the 1890s he clashed with George Barrow (1853-1932) over both geological ideas and the publication policy, which stated that official work required sanction and thus agreement by senior officers. Barrow was an accurate and proficient field geologist who worked mainly in the southeast part of the Grampian Highlands, but he has been described as cock-sure, opinionated and brash. He was not shy about postulating new ideas and theories for the geological history of the Highlands; some have been shown to be correct, others certainly in

error. Such ideas were often at variance with those of Peach (and other colleagues), and the two men seem to have had conflicting personalities. Bailey (1952) recounts that to resolve a dispute as to the nature of the margins of the 'Perthshire Quartzite', Horne arranged for a field visit to a locality selected by E.H. Cunningham Craig. Peach's interpretation of a single quartzite boundary repeated by folding seemed to fit the evidence best, but ironically later work has shown that Barrow's interpretation of a quartzite unit with both an exposed top and

base was indeed be correct, albeit not well-seen at that particular locality. However, as a result, in 1903 Barrow was transferred to map in the Scilly Isles and parts of Cornwall. Although there is little written evidence that Barrow was particularly upset at the time, considerably later (c. 1932) he wrote a critical diatribe referring to his Highland disputes and castigated Peach's role.

In the late 1890s and early 1900s Peach mapped numerous small areas scattered across the western part of the Grampian Highlands, both to maintain his geological expertise and to train and supervise new recruits. For example, in the Ben Nevis district (Sheet 53) he mapped in upper Glen Gour and in the lower parts of Glen Coe. In Argyllshire he mapped areas around Kilmelford, and on Scarba, Jura, and the Tayvallich Peninsula, this last area in 1902,



Extract from 6"/mile field map (Argyll 137NW) of the NW part of Scarba, showing Peach's detailed mapping.

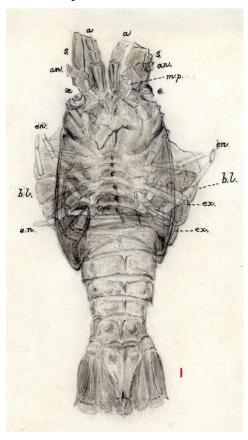
linked to the field training of E.B. Bailey. Peach's field maps for these areas are still eminently readable but are somewhat scruffier than his earlier efforts. Whereas his early maps have notes written at various angles up to the vertical, on these later maps, some of his geological notes are truly inverted.

In 1900 Peach and his family moved the short distance from 86 Findhorn Place to 30 Mayfield Road, by which time his son Charles William had emigrated to New Zealand to practice medicine. In 1901 Jeanie married her cousin William Peach Hay (son of Peach's sister Sarah) and moved to Peterborough, where William was a GP. In 1905 the family

moved again, to 72 Grange Loan, and in July that year 'Lizzie' married her cousin William Bannatyne, an actuary, and moved to Renfrewshire. Peach retired in 1905, giving him both time and opportunity to finish his input to the North-west Highlands Memoir (Peach et al., 1907) and his monograph on the higher crustacea of the Carboniferous rocks of Scotland (Peach, 1908). At home, Peach's son Angus McEwen attended George Watson's College and Edinburgh University, graduating in Natural Sciences in 1909. He joined the Scottish Arctic

Expedition that summer as geologist, and in October accepted a post with the African Prospecting Syndicate to search for oil by the Red Sea in Egypt. Unfortunately, he contracted dysentery on 12th December and died at Suez on 28<sup>th</sup> December. Peach's youngest son, Benjamin Neeve, also attended George Watson's College and Edinburgh University, graduating with a B.Sc. in Civil Engineering. He then served in the First World War as a captain and major in the 101<sup>st</sup> brigade of the Royal Field Artillery, attached to the 22<sup>nd</sup> Division on the Macedonian Front.

In retirement Peach was a regular visitor to the Scottish office of the survey in 33 George Square for many years, where he continued to check maps, supply data text for memoirs, and carry out some palaeontological work. The publication of the Northwest Highlands Memoir and the construction of 3D plaster-cast models illustrating the geology of the Assynt area (from 1904 onwards) had generated considerable interest both nationally internationally. Hence, the British Association field meeting to Assynt in September 1912, led by Peach and Horne, was attended by a cross-section of the geological establishment of both Great Britain and Europe. Peach had assisted with classes at the University of Edinburgh during the latter part of his



*Tealliocaris woodwardi*, an early Carboniferous crustacean (see Clark, 2013 for details). Pencil + ink drawing from B.N. Peach notebook. BGS photo P613019.

survey career and this continued in retirement. He was awarded an honorary LL.D. in 1903. He served on the council of the Royal Society of Edinburgh between 1905-8 and 1911-12, and acted as Vice President between 1912 and 1917. In1899 the Geological Society of London had awarded Peach and Horne the Murchison Medal jointly, and in 1921 they were also awarded the Wollaston Medal.

Peach alluded to his wife in a letter to W.B. Wright dated May 30<sup>th</sup>, 1913, but when Maggie died from breast cancer on 20<sup>th</sup> October, 1921, she was resident in Kingussie and her death was registered by her son, Ben. In 1918 towards the end of his war service Ben had married Elizabeth Mackenzie Duff, who later gave birth to Peter Angus (1920-1989) and Anne Mackenzie (1924-2013), both at Orwell (Milnathort), Kinross. Ben worked for the consulting

engineers Melk and Halcrow and was a resident engineer during the construction of the Lochaber Hydro-electric Scheme, which supplied water to the power station above Fort William for the aluminium smelter. He later joined the British Aluminium Company, settled in Lochaber, and was awarded an O.B.E.

Thus, in the 1920s Peach found himself alone in Edinburgh with his family scattered across the UK and in New Zealand. Together with Horne he wrote the obituary for A. Geikie (1925), but their main project was writing the text and preparing diagrams for a volume describing the Geology of Scotland. The work remained unfinished at their deaths, but the existing material covering the Highland areas was collated by Murray Macgregor and published posthumously in 1930, entitled 'Chapters on the Geology of Scotland'. Note that the book was dedicated to Charles Lapworth.

Peach died on 29<sup>th</sup> January 1926, the cause of death being listed as cerebral thrombosis and gout. He had been ill for some time and was resident with his niece Elizabeth Hay and her husband William Marshall, at 33 Comiston Drive. He left £5,115 12s 3d in his will. The funeral service at the graveside in Morningside cemetery on February 1<sup>st</sup> was attended by his son Ben and his two daughters Jeanie and Lizzie, several grandsons, members of the Bannatyne family, and by numerous representatives from the survey and local geological community. The cemetery, which dates from 1878, was privately owned for many years, but was purchased by Edinburgh Council in 1992. Its administration, records and upkeep had become problematical, with housing built on some parts. At its western extremity, where Peach's grave is situated, a small part of the cemetery remains private, now fenced, gated, and rather overgrown. The concise description on Peach's rough granite gravestone has lost much of its lead lettering. His wives and children are buried elsewhere.



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