#### MRS ALLARDYCE AND THE TRILOBITE

## by

### Phil Stone

Governors' wives are rarely celebrated in 'official' histories of the Falkland Islands. So, in the recently published 'Dictionary of Falklands Biography', whereas every governor received an individual entry, none of their wives was deemed to merit such attention. One for whom a compelling case could be made is Constance Angel Allardyce, who was married to William Lamond Allardyce, governor from 1904 to 1915. Quite apart from her other accomplishments she is without doubt the only governor's wife to have a fossil trilobite named after her. Sadly that achievement was obscured by confused contemporary accounts so it seems only proper that the record should now be straightened. What's a trilobite? An extinct variety of marine arthropod distantly related to crabs and lobsters; they were hard-shelled and segmented with oval, flattened bodies divided into three longitudinal 'lobes' – hence tri-lobite.

Mrs Allardyce was born Constance Angel Green in Victoria, Australia, on 23 December 1861. She married William Allardyce, an Indian-born British diplomat in 1895, whilst he was serving as a government official in Fiji. The Allardyces were instrumental in establishing the Fijian national museum, and brought the same philosophy to the Falklands when William was appointed governor (Figure 1). One of his initiatives was the construction of a new Town Hall and Mrs Allardyce is credited with ensuring that the building contained facilities for a library and a museum.

To provide exhibits for her museum, Mrs Allardyce encouraged a search for curios across the islands and one happy outcome of this was the discovery of a remarkable fossil bed on Pebble Island, just off the north coast of West Falkland. Fossils had first been found on the Falklands, at Port Louis in East Falkland by Charles Darwin during the visit of HMS Beagle in 1833. Since then, despite collections being made from additional fossil-bearing localities by various explorers, most notably those working with Swedish Expeditions, nothing of substance had been added to the known range of species until the Pebble Island discovery. The locality was found during the 1908-1909 austral summer, probably by Donald (Dan) McAskill and his twin daughters Edith and Harriet (Figure 2). Though the date is well constrained there is no definitive proof of the discoverers' identity. The McAskill family was resident on Pebble Island at the right time, and comments made by Governor Allardyce in his speech at the museum's opening - referring to two young ladies who persuaded their father to join them in fossil hunting – would seem to support their claim. Their rivals (apart from the twins' elder sisters) would be fellow residents of Pebble Island, John Betts and his daughters Ellen and Emily. At the time of the discovery the McAskill twins would have been about 15 years old; but the Betts girls would have been 20 and 18 respectively and perhaps less likely to be out hunting for fossils.

The Pebble Island fossils were of the same age as the fossils that had been previously found elsewhere in the Falklands (Devonian, about 400 million years old) and like them came from rocks assigned to the Fox Bay Formation, but there was one crucial difference. Most Falklands fossils are impressions and moulds of shells preserved in

sandstone, with the original shell material entirely dissolved away by water percolating through the rock over millions of years. In contrast, the Pebble Island fossils are found in hard, carbonate-rich nodules that have protected the original shells and all of their fine detail. For an example, see Falkland Island Journal for 2003 where, on page 8, an illustration shows a Pebble Island trilobite preserved in such exquisite detail that the individual lenses on the animal's compound eye can still be seen.

By a happy coincidence, the discovery of the fossils at Pebble Island was soon followed by the arrival at Government House of a rather unusual enquiry. John Clarke, an eminent American palaeontologist based at the New York State Museum, Albany NY, wrote asking for fossil specimens from the Falkland Islands. Clarke had been working on collections of Devonian fossils from Brazil and was anxious to continue his research into other parts of the South American region where, from the work of Charles Darwin and the Swedish Expeditions, Devonian strata was known to occur. Mrs Allardyce promptly parcelled-up a selection of the newly found fossils, made plaster casts of others, and sent a fine collection off to Albany. When the fossils arrived it is certain the Clarke would have been unable to believe his good fortune; he had struck palaeontological gold.

Working through Mrs Allardyce's fossils, Clarke was able to recognise a host of species that had not been previously recorded in the Falkland Islands, and several that were entirely new to science. He corresponded with Mrs Allardyce, describing his finds and appealing for more material, and the tone of his letters demonstrates his scientific excitement and admiration for her contribution – particularly her accurate identification of some of the fossils by comparison with published illustrations from South Africa. One letter (dated 8 January 1910) was reproduced in the Falkland Islands Magazine and Church Paper for May, 1910. In it Clarke describes and names a previously unknown trilobite: "One of the most complete and instructive of all the trilobites ... is named Cryphaeus allardyceae." He goes on: "There is another, not a trilobite this time, but an interesting shell from Pebble I. which ... rejoices in the baptismal name of Tropidocyclus allardycei. You will notice the distinction in the genitive cases!" The last sentence is important. The trilobite's name has the feminine ending ae; it is Mrs Allardyce's trilobite (Figure 3). The "interesting shell" - in fact a type of snail – has the masculine ending *i*; it is Mr Allardyce's snail. Clarke's letter ends: "I salute you, Mrs Allardyce, as the most successful of Falkland Islands geologists, not excepting Charles Darwin himself." High praise indeed.

But confusion over whose was which fossil had already set in. The new museum was formally opened on November 9<sup>th</sup> 1909, temporarily housed in the old infant schoolroom. Governor Allardyce spoke at the event and his address was reported in the *Falkland Islands Magazine and Church Paper* for December, 1909. At one point he referred to "... a fossilized shell new to science which has caused something like a sensation in the scientific world and which is known by the euphonious but somewhat unpronounceable name of *Diaphorostonia allardycea*". The report notes that at this point there was laughter. Clearly, in an earlier letter to that cited in the previous paragraph John Clarke must have provided an alternative name, the transcription of the governor's speech then probably reworking the Latin ending of either *allardycei* or *allardyceae* to *allardycea*. Subsequently, Clarke clarified things in his definitive scientific publication (for which he also examined the Swedish collections) and

identified two different species of snail: *Diaphorostoma* (not *-stonia*) *allardycei* and *Tropidocyclus antarcticus*. But the damage had been done, from then on Mrs Allardyce's trilobite was forgotten and instead her name became associated, erroneously, with her husband's snail.

In 1915 the Allardyces left the Falklands for a new posting in the Bahamas. William was knighted in 1916 and so for a short while, until her untimely death in 1919, Constance became Lady Allardyce. But the snail stuck with her even then. Her obituary in the Nassau Guardian (Nov 26, 1919; reprinted in FI Magazine and Church Paper for March 1920 and partially in The Dictionary of Falklands Biography, 2008) records "...an unique land shell, named in her honour *Diaphorostoma allardycea* ...". Presumably there was an assumption on the part of the obituary writer that all snails were terrestrial, whereas in fact all of the fauna from the Falkland Islands Devonian strata, snails included, was wholly marine.

In a remarkable demonstration of respect, another obituary, written by her scientific collaborator John Clarke (by then Director of the New York State Museum), appeared in the prestigious international scientific journal *Science* on December 26, 1919. It reads, in part, as follows:

"The name of Constance Allardyce, wife of Sir William Allardyce ... will not go unrecorded in the annals of science.... The writer gratefully recalls her enthusiastic aid in assembling the fossils of the rich and remarkable Devonian fauna of the (Falkland) islands when there was no one else to help and where there was no notion of what was wanted. Responding to an appeal for aid made to the governor, she took up the search ... aroused the curiosity and interest of the people of the nearer and farther islands ... and so brought together scientific material of great worth.... It may well be said that the collections gathered by Mrs Allardyce are the basis of pretty much all that we know today of the ancient life of those islands and her name and services have been permanently interwoven in the geological story of the Falkland Islands."

Unfortunately, Clarke did not mention Mrs Allardyce's trilobite, though the sentiments expressed are very much in keeping with the acknowledgement of her assistance included in his major scientific work on the Devonian fossils of South America. This was published by the Brazilian Geological Survey and dated 1913, although Clarke also published the fossil illustrations (without descriptions) in the New York State Museum Bulletin for 1913, citing "... delays attendant on publication in Brazil." The acknowledgements in the Brazilian report conclude:

"To Governor Allardyce I owe a hearty and substantial response to my enquiries; to Mrs Constance A. Allardyce, an appreciative and active cooperation in the acquisition of material, especially from the interesting locality of Pebble Island, West Falkland. The contributions made by Mrs Allardyce have been of moment and are specimens in a preservation vastly superior to the predominating condition of the fossils in those islands. I take an especial pleasure in giving this public testimony to the worth of the assistance I have received from Mrs Allardyce."

In the main body of Clarke's Brazilian report, the description of the trilobite *Cryphaeus allardyceae* concludes unequivocally ... "Named in appreciation of the aid rendered to these studies by Mrs Constance A. Allardyce of Port Stanley."

In his original assessment of Mrs Allardyce's Falklands fossil collection Clarke believed that he had only a single specimen of *C. allardyceae*. But the quality of the material encouraged further work, and a subsequent reassessment by Gregory Edgecombe (published in the New York State Museum Bulletin for 1994) recognised two more specimens, one from Fox Bay and another from the Chartres River near Mount Robinson. Edgecombe also revised the generic nomenclature so that in modern terminology Mrs Allardyce's trilobite is known as *Metacryphaeus allardyceae*. More recently, in 2000, additional material was collected in the Falkland Islands by palaeontologists from another New York institution, the American Museum of Natural History. They discovered other trilobites of the *Metacryphaeus* genera, but did not find any more examples of the species *allardyceae*. So, the known examples of Mrs Allardyce's trilobite remain those that she handled herself.

From 1910 onwards, examples of the splendid Pebble Island fossils began to find their way into the collection of The Natural History Museum in London. They were provided by a variety of donors, though strangely none originated from Mrs Allardyce (and none are *Metacryphaeus allardyceae*). But the London museum was not entirely neglected. In 1893, Arthur Felton had discovered the famous "buried forest" on West Point Island (Felton's daughter, Alice, is seen in Figure 1) and Mrs Allardyce is known to have acquired a couple of large logs for the Stanley museum collection. In 1909 a specimen of the wood was sent to the Natural History Museum, London, and incorporated into its collection (Figure 4). Although the donation is credited to Governor Allardyce, it seems much more likely that Constance was the true benefactor. The fossil wood from West Point Island is now thought to be as much as 7 million years old – but is not to be confused with the very much older fossil wood that can be found in parts of Lafonia.

Mrs Allardyce did not see her museum finally installed in the new Town Hall, which was not completed until 1917 (Figure 5). There was probably a fine array of fossils on display, but we shall never know whether or not *Metacryphaeus allardyceae* was represented because the entire collection was tragically lost when the building burnt down in 1944. Fortunately we do know that today, examples of Mrs Allardyce's trilobite are safe in New York, and hopefully the ghost of her husband's snail has been finally laid to rest.

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British Geological Survey Murchison House West Mains Road Edinburgh EH9 3LA

Figure captions

Fig. 1. Governor and Mrs Allardyce in the Government House conservatory, Stanley, c. 1913, with Lewis Harold Boileau (Governor Allardyce's Private Secretary) and Miss Alice Felton. Photograph from the Falkland Islands Government Archives, Stanley.

Fig. 2. The McAskill family in about 1899. From left to right: Kate, Nellie with Donald, the twins Edith and Harriet, Dan, Sybella. Photograph kindly provided by Mrs Joan Spruce, Harriet's grand-daughter.

Fig. 3. The trilobite *Metacryphaeus allardyceae*, as illustrated by John Clarke in his 1913 publications. The length of the specimen as laid out is about 8 cm.

Figure 4. The specimen of wood from the West Point Island "buried forest" presented by Governor Allardyce to The Natural History Museum, London. Photograph courtesy of The Natural History Museum. Scale bar in mm.

Figure 5. The town hall, Stanley, viewed from the north in the mid-1930s; the museum collection was housed in the "north-east corner", i.e. the left side of this view. The building was completed in 1917 and destroyed by fire in 1944, together with the museum collection. Photograph from the Falkland Islands Government Archives, Stanley.







#### FOSSIL WOOD

from WEST POINT ISLAND, FALKLAND ISLANDS, supposed to indicate the former presence of forests in that now treeless land.

[V. 11489] Presented by His Excellency W. L. Allardyce, C.M.G., 1909.

