## A Sweet Collection: Georgina Sweet and the Tiegs Museum

The University of Melbourne

**Museums and Collections** 

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This research report was completed by Karla Way, Masters in Art Curatorship student at the University of Melbourne as part of the Museums and Collections Projects Program. It was supervised and co-authored by Dr David Young, Director Tiegs Zoology Museum, School of BioSciences, The University of Melbourne.

#### INTRODUCTION

The Tiegs Museum in the School of BioSciences at the University of Melbourne is home to a teaching collection of examples of animal species from Australia and overseas. It was established by Sir Walter Baldwin Spencer soon after his arrival in Melbourne in 1887. The study of science at Melbourne University was burgeoning then and Spencer was appointed to the new Chair of Biology. In 1888 the first three-year Bachelor degree in Science was introduced. 1

Georgina Sweet (1875-1946) enrolled as an undergraduate Biology student at Melbourne University in 1892 and so studied under Baldwin Spencer. Georgina's interest in science had been encouraged by her father, George. George Sweet managed the Brunswick Brick and Tile Works and was an amateur geologist. Georgina and her sister were introduced to scientific methods and practices while young, accompanying their father on field trips in rural Victoria to help him with his palaeontological work.<sup>2</sup>



Photograph of Science students and staff, University of Melbourne, 1894. Those present include Georgina Sweet (seated, front left) and Baldwin Spencer (standing, second from left).

From University of Melbourne Photographs Collection, University of Melbourne Archives, reference 2017.0071.00668.

As a dedicated science student at the University, Georgina was awarded her Bachelor of Science degree in 1896 and went on to postgraduate studies. She obtained her master's

<sup>&</sup>lt;sup>1</sup> Coultas, 2009, 2010

<sup>&</sup>lt;sup>2</sup> Burek and Higgs, 2007: p 167

degree in 1898 and a doctorate in 1904, and late in 1908 she was appointed as lecturer and demonstrator in Biology at the University of Melbourne.<sup>3</sup>

Throughout her career, Georgina travelled extensively, conducting research and establishing international working relationships for her scientific and other interests. She returned from these trips with many benefits, including some zoological specimens that eventually made their way into the Tiegs Museum. These specimens track her own life of study, travels and work, each marking a milestone in her adventurous and enquiring career.

Georgina would have been familiar with the Tiegs Museum during her years as an undergraduate student as it was used for teaching. In fact, a catalogue of the collection was started at that time, entitled *Register of Specimens in the Museum of the Biological School, University of Melbourne*. The first few entries are dated 1893 and relate to overseas donations. It is in this Register that Georgina's donations are recorded as well as some earlier donations from her father. Unfortunately, at the time of writing this report not all of the documented items could be located within the Tiegs collection and their current locations are unknown.

Outlined below is a listing and summary of specimens and objects within the Tiegs Museum that relate directly to Georgina Sweet. (It is usual for the labels on Tiegs' specimens to bear their Register number preceded by the initials MUZD = Melbourne University Zoology Department)

<sup>&</sup>lt;sup>3</sup> MacCallum, 1990

### **GEORGE and FUNAFUTI**

MUZD 166 and MUZD 167 Carcharodon megalodon, MUZD 168 Plesiosaurus sp. Cast of 3 vertebrae, MUZD 169 and MUZD 170 Cosmolepides sweeti, MUZD 734 Typhlops polygrammicus, MUZD 1066 Millepora, MUZD 1067 Heliopora coerulea, 1909 Millepora, 1911 Heliopora coerulea

Some of the earlier registered specimens in the museum were collected by Georgina's father. With assistance of his two daughters, George built up an impressive personal collection of geological and fossil specimens. Between the years of 1888-95 he collected for the Director of the Museum of Natural and Applied Sciences, Sir Frederick McCoy, in the Mansfield area of Victoria.<sup>4</sup> Some items from his private collection found their way into the Tiegs Museum (*Register of Specimens* catalogue numbers 166, 167, 168, 169, 170, 734).

Most of these early items seem to have disappeared but the first one (166) remains on display in the Tiegs Museum. It is an impressively large tooth of an extinct fossil shark, *Carcharodon megalodon (megalodon means "big tooth")*. The *Register of Specimens* entry notes that it is a "Cast by Mr Sweet from original in his possession".

George Sweet was well known as an active member of the broader geological community, being a fellow of the Victorian Royal Society and of the Geological Society of London. In 1897 he was recruited as second in charge to Sir Edgeworth David on an expedition to the atoll of Funafuti in the Polynesian island nation of Tuvalu (then known as the Ellice Islands). The main purpose of the expedition was to test Darwin's theories on the formation of coral reefs and atolls.

From this expedition, George returned home with a few specimens of two coral species that were abundant on Funafuti and these eventually made their way into the Tiegs museum. Specimen 1066 is a *Millepora*, an abundant and hard species found in the atolls and Specimen 1067 is an ancient coral species, *Heliopora coerulea* or Blue Coral. These are fragments housed in glass-windowed cardboard boxes in storage and evidently used for teaching. Two stunning specimens are mounted and on display in the Tiegs: 1909 *Millepora* and 1911 *Heliopora coerulea*. It is clear from the *Register of Specimens* that these two were collected from Funafuti in 1897, but were donated by Georgina Sweet years later, so possibly they had been in the family's private possession in the interval.

<sup>5</sup> Lewis and Knell, 2009: p 364

<sup>&</sup>lt;sup>4</sup> Fendley, 1974

<sup>&</sup>lt;sup>6</sup> Harvey, 2012: p 301

<sup>&</sup>lt;sup>7</sup> Zann and Bolton, 1985



A specimen of the blue coral, *Heliopora coerulea*, which was collected by George Sweet on Funafuti atoll, Tuvalu, in 1897. This specimen (MUZD 1911) was donated to the Tiegs Museum years later by Georgina Sweet.

Photography by Christopher Freelance, BioSciences, University of Melbourne.

### **NATIVE SPECIMENS**

MUZD 1236 Macropus ruficollis, MUZD 1419 Petauroides volans, MUZD 1420 Phascogale swainsoni, MUZD 1968 Echidna aculeata (now Tachyglossus aculeatus)

Baldwin Spencer, who oversaw Georgina Sweet's undergraduate studies, was also Georgina's principal supervisor throughout her master's and doctorate studies. He was interested in evolutionary biology and was a great advocate of research on the native fauna of Australia.<sup>8</sup>

Perhaps partly influenced by her supervisor's interest in anatomical structure and evolutionary likenesses, the subject of her Master's was the Australian earthworm. Presumably it was Spencer who arranged for her findings to be presented at a meeting of the Linnean Society of London in 1900. Since her name is not included in the list of visitors at that meeting, Georgina was evidently not present herself, even though she apparently made an overseas trip in 1900 (see quotation in section on PARASITOLOGY below). Nevertheless, her paper 'On the Structure of the Spermiducal Glands and Associated Parts in Australian Earthworms' was published in the Linnean Society's *Journal* later that year.

In May, 1904, Spencer also communicated her research on the 'Marsupial Mole' to the Royal Society of Victoria, and the Society published her paper 'Contributions to our Knowledge of the Anatomy of Notoryctes typhlops, Stirling. Parts I & II' in their *Proceedings* later that year. <sup>11</sup>

A few native Australian specimens are recorded in the Tiegs museum *Register of Specimens* as being collected and donated by Dr Sweet. Of these, a male greater glider (*Petauroides volans*) preserved in formalin, what was then called a 'marsupial mouse' in an alcohol solution (*Phascogale swainsoni*) and the upper jaw of a wallaby (*Macropus ruficollis*), could not be located. However, Specimen 1968, a stuffed echidna (*Echidna aculeata*, now named *Tachyglossus aculeatus*), is on display in the Museum.

It seems Georgina would have collected these specimens while studying under Spencer, as marsupials were used for comparative studies in her paper on the anatomy of *Notoryctes typhlops*. <sup>12</sup> Specimen no. 1236 was donated to the Tiegs Museum in 1903, specimens nos 1419 and 1420 in 1911, and specimen no.1968 some years later.

### PARASITOLOGY MUZD 2005 Onchocerca gibsoni

During her undergraduate and postgraduate studies of native Australian species, Georgina came across numerous parasites in the animals she was studying. These parasites soon became her primary research interest and so she became a pioneer in the scientific research area of parasitology in Australia.<sup>13</sup>

<sup>&</sup>lt;sup>8</sup> Creese and Creese, 2010, p 66

<sup>&</sup>lt;sup>9</sup> Handman, 2014, p 7

<sup>&</sup>lt;sup>10</sup> Linnaean Society of London, 1900

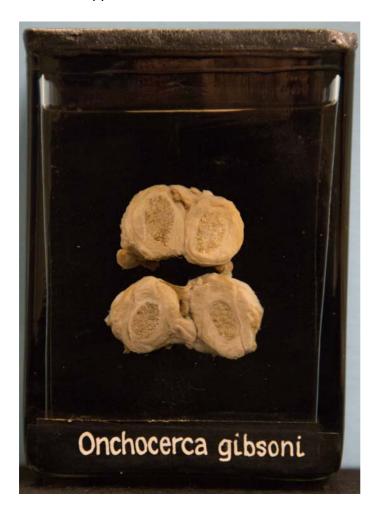
<sup>&</sup>lt;sup>11</sup> Sweet, 1904

<sup>&</sup>lt;sup>12</sup> Sweet, 1904, p 82

<sup>&</sup>lt;sup>13</sup> Handman, 2014

Georgina's first paper on parasites, 'The Endoparasites of Australian Stock and Native Fauna', in two parts, was read to the Royal Society of Victoria in December 1908 and published in their *Proceedings* in 1909. The paper's introduction explains her twofold objective: to identify and create a comprehensive list of the types of parasites infesting native and stock animals in Australia, and to establish some sort of methodology by which to manage these scientific and economic "pests". <sup>14</sup> It was the first systematic enquiry and documentation of its type.

For this work, Georgina was named the 6th annual and first female recipient of the prestigious David Syme Research Prize in 1911. The prize rewarded original research in the sciences, with a preference for projects of value to the industrial and commercial interests of the country. Georgina's research on parasites infesting livestock and native fauna was of great value in addressing the problems these caused for Australian cattle stocks, which were a most valuable resource at the time. As a recipient of this prize, Georgina received both financial support and a medallion inscribed with her name (see section on MEDALS below).



Four nodules of the parasitic nematode, *Onchocerca gibsoni*, preserved in fluid. This specimen (MUZD 2005) was donated by Georgina Sweet, who had collected the specimens in Queensland. Photography by Christopher Freelance, BioSciences, University of Melbourne.

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<sup>&</sup>lt;sup>14</sup> Sweet, 1909a

<sup>&</sup>lt;sup>15</sup> MacCallum, 1990

This esteemed award meant that she became recognized as an expert in her field. For this pioneering work she was already liaising with Ministers and officers in the Department of Agriculture in Victoria and other states, which began a long relationship with government departments. Georgina would eventually receive funding from these government departments, and her reports and reviews would be distributed as official documents and reference literature in the field.<sup>16</sup>

These funding opportunities first allowed Georgina to become focussed on the occurrence of a Long Roundworm (nematode), *Onchocerca gibsoni*, that was afflicting livestock around the country. *Onchocerca gibsoni* forms nodules within the brisket and thighs of cattle, which rendered the beef unsaleable. Again, this relationship between scientific research and Australia's industry was considered worthy as it was of benefit for the greater community. Specimen no.2005 is four nodules of *Onchocerca gibsoni* preserved in a jar and was collected by Georgina in Queensland. This specimen was likely part of her personal collection before being donated to the Tiegs Museum some years after her retirement.

Her research in this area led to her being engaged by the Government to investigate the parasitic problems of cattle in other countries. <sup>17</sup> In applying to the University for leave, she explained: "I want to see the latest methods of teaching and research in parasitology. A subject which as such was not in existence at the time of my previous trip in 1900" <sup>18</sup>. During 1913-14 she visited Indonesia, Malaysia, Sri Lanka, India, Egypt, Europe, Great Britain, the United States of America including Hawaii and Canada. The outcome was a 53 page pamphlet, *Investigations into the occurrence of onchocerciasis in cattle & associated animals in countries other than Australia*, published by the Government late in 1914. On her trip she visited chief veterinary officers, medical officers and veterinary schools for any findings on such nodules. When unable to visit, she sent letters and questionnaires to acquire her research findings and often received a positive response. <sup>19</sup>

# IGUANODON AND MEGALOSAURUS MUZD 1508 Megalosaurus, MUZD 1509 Iguanodon.

Specimens no. 1508 *Megalosaurus* and no. 1509 *Iguanodon* are two curious black statuettes of strange beasts on display in the Museum in cabinet 13 amongst the usual exhibits of a zoology collection. They are small scale replicas of two of the first life-size models of dinosaurs ever to be made. British artist, Benjamin Waterhouse Hawkins, was commissioned to produce these life-size models for the Crystal Palace Park in London under the direction of biologist and palaeontologist, Sir Richard Owen. The form and proportions of the fleshed-out creatures were determined by Owen, by comparison to 'the nearest allied living animals.' By 1854, the large-scale sculptures populated a man-made island in a lake in the Crystal Palace parkland.

<sup>&</sup>lt;sup>16</sup> Creese & Creese, 2010, p 66

<sup>&</sup>lt;sup>17</sup> O'Callaghan, 2013, p 11

<sup>&</sup>lt;sup>18</sup> Letter from G. Sweet 'Leave of Absence – Georgina Sweet' File 1913/398, Uni Melb Archives

<sup>&</sup>lt;sup>19</sup> Sweet, 1914, p 6

<sup>&</sup>lt;sup>20</sup> Owen and Waterhouse Hawkins, 1854, pp. 5-6

Hawkins also provided James Tennant, a geologist and fellow contributor to the Crystal Palace Park, with small-scale replicas for production and sale to the general public. <sup>21</sup> Tennant produced a pamphlet in 1860 that advertised the 1/12th scale dinosaurs 'modelled in strict accordance with the criticism and sanction of the highest scientific authorities.' <sup>22</sup> The provenance of the two dinosaur models in the Tiegs Museum today recently has been investigated by Rohan Long and his subsequent article in *Collections* (Issue 18, June 2016) includes photographs of these two specimens. It is certain that these are examples of Hawkins' original small models and not licensed copies that were made in America. <sup>23</sup>

The entry in the Tiegs' *Register of Specimens* indicates that these two models were donated by Georgina Sweet but does not give a date. Based on nearby dated entries in the Register, it is likely the donation occurred around 1920. It is probable that Sweet brought them home with her after 1913-14 trip to Europe and America or possibly from her undocumented trip in 1900 (see quotation in section on PARASITOLOGY). She most likely kept these models in her private collection before donating them to the Tiegs Museum around 1920.

On New Year's Eve 1853, a now famous dinner was held at the Crystal Palace inside the mould of the life-size model of *Iguanodon*.<sup>24</sup> Several leading scientists and Crystal Palace officials, including Sir Richard Owen, were invited by Waterhouse Hawkins, who recalled the event years later with his own drawing. A small, authorised copy of this drawing is on display in the Tiegs Museum, and so is a copy of the remarkable menu for this seven-course dinner.

### **AFRICA**

MUZD 1562 and MUZD 563 Felis leo, MUZD 1810 Phacochoerus africanus, MUZD 1999 Goliathus goliatus, MUZD 2395 Termite Queen.

In 1922, Georgina set off on her next overseas trip, for which she had a letter of support from the Chancellor. He stated that "Dr Georgina Sweet, Associate Professor in our zoology dep't and lecturer in our veterinary school, has received 12 months leave of absence" and requested assistance for her when "visiting other universities and scientific institutions." <sup>25</sup>

Georgina travelled with Jessie Webb, lecturer in British and Ancient History at University of Melbourne and heavily involved in many of the same women's organisations as Georgina. The pair were the first women to travel the overland Cape to Cairo route through Africa. They went from Melbourne to Cape Town on a month-long journey by boat, then worked their way north through South Africa and on to Southern and Northern Rhodesia, the

<sup>24</sup> Bramwell and Peck, 2008, Cain, 2013

<sup>&</sup>lt;sup>21</sup> Bramwell and Peck, 2008, p 26

<sup>&</sup>lt;sup>22</sup> Rudwick, 1992, p 260 - 261

<sup>&</sup>lt;sup>23</sup> Long, 2016

<sup>&</sup>lt;sup>25</sup> Melb Uni Archives Assoc Prof Sweet – Leave of Absence and arrangements File 1922/414

<sup>&</sup>lt;sup>26</sup> O'Callaghan, 2013: p 4

Belgian Congo, Tanganyika, Zanzibar, Kenya, Uganda, the Sudan to Egypt over the course of seven months travelling by train, steamboat and motor vehicles.<sup>27</sup>

While Georgina appears to have instigated the trip, this was not primarily a research trip. At the age of nine she had written to her father George, declaring that she must travel to Africa before she died, so this journey seemed to be fulfilling a childhood dream. <sup>28</sup> During these travels, she visited universities, agricultural colleges and veterinary departments to meet with academics and scientists and established further personal and work-related relationships<sup>29</sup>. She did take particular interest in some research matters like 'entomological problems such as tsetse fly influencing farming activities'. <sup>30</sup>



The skull of a common warthog, *Phacochoerus africanus*, an impressive specimen (MUZD 1810) on display in the Tiegs Museum. It was brought back from South Africa by Georgina Sweet and donated to the Tiegs Museum. Photography by Christopher Freelance, BioSciences, University of Melbourne.

After this journey, African specimens nos. 1562 and 1563 Felis leo, no.1810 Phacochoerus africanus, no.1999 Goliathus goliatus and no.2395 Termite Queen, all appear in the Tiegs Museum Register of Specimens. These entries are not dated but the donations must have been spread over several years judging by their widely separated specimen numbers. Two sets of lion skull and jaws (Felis leo, now named Panthera leo) from Tabora in South Africa are entered but only one set remains in the Tiegs Museum. However, we cannot be certain if it is her specimen since it was not numbered. The warthog skull and jaws (Phacochoerus

<sup>29</sup> O'Callaghan, 2013: p 35

<sup>&</sup>lt;sup>27</sup> O'Callaghan, 2013: p 16

<sup>&</sup>lt;sup>28</sup> O'Callaghan, 2013

<sup>&</sup>lt;sup>30</sup> O'Callaghan, 2013: p 35

*africanus*) is numbered and on display. So far it has not been possible to determine more details regarding their provenance and no reference has been found in the archival resources of Georgina picking up skulls, or anything else for that matter, along the way. One wonders how she managed to carry them back into Australia and their new home in the Tiegs Museum.

On a smaller scale, the goliath beetle (*Goliathus goliatus*) from South Africa is impressively large for an insect. It is dry-mounted in a wooden display box with a glass top. *The Register of Specimens* entry has an added note questioning the validity of the species name *goliatus* but this point does not appear to hold up. Finally, the tiny termite queen, with her enormous abdomen, came from the Congo and is preserved in fluid in a small glass jar with a carefully handwritten label. No scientific name is supplied. This is the last specimen entered in the *Register of Specimens* as having been donated by Dr G. Sweet. On her return home from Africa, Georgina's research focus shifted and this eventually led to extensive travels throughout Asia. However, no further donations to the Tiegs Museum are recorded in her name.



A male goliath beetle. *Goliathus goliatus*, mounted in a display box. This specimen (MUZD 1999) was obtained by Georgina Sweet in South Africa and later donated to the Tiegs Museum. Photography by Christopher Freelance, BioSciences, University of Melbourne.

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<sup>31</sup> MacCallum, 1990.

### **LECTERN AND BOOKCASE**

Georgina decided to retire from her position in Zoology late in 1924.<sup>32</sup> A newspaper article at the time records that staff and students wished to make '...a presentation to commemorate the excellent work done during her term of office.' Two pieces of furniture were decided upon: 'a handsome lectern and book case, in Australian blackwood'.<sup>33</sup> Each had a brass plaque with an inscription, both in capital letters, and the lectern's inscription is dated August 1924.

Both of these items were originally placed in the Biology lecture theatre, where Georgina had spent much of her teaching time, and were intended to remain there. However, when the Zoology Department, as it was then known, moved to a new building in 1989, it was not clear where these historic objects should be displayed in the new location. The bookcase now stands just outside the entrance to the Tiegs Museum and offers a glimpse of the variety of specimens housed inside. The lectern occupies a more passive place in storage inside the museum but is brought out on special occasions.



The brass plaque attached to the lectern, which was specially made to commemorate Georgina Sweet's excellent contribution, when she retired from her position in Zoology in 1924.

Photography by Christopher Freelance, BioSciences, University of Melbourne.

### **MEDALS**

Georgina Sweet was not only an academic and scientific luminary; she was a dedicated activist for women's rights within the University and the broader community, both locally

<sup>32</sup> MacCallum, 1990

<sup>&</sup>lt;sup>33</sup> The Register, Adelaide, 1924

and internationally. This aspect of her work did not go unnoticed and in 1935 she was awarded an Order of the British Empire for her work for women's movements.<sup>34</sup> She received a medal for this with a command from His Majesty the King that it be worn on their majesties' silver jubilee, 6th May 1935. Another medal followed in 1937. As noted above (section on PARASITOLOGY), Georgina had received a medallion with her award of the David Syme Research Prize in 1911.

By a quirk of history, these medals ended up in the Zoology Department. The head of department in 1988, Associate Professor Angus Martin, noted this down in his Chairman's Report to the 1988 Departmental meeting:

'Mention of Georgina Sweet reminds me of a little coup just accomplished that I'm very proud of.... One of our graduates of many years ago happened to notice that Georgina Sweet's medals and awards had come on the market (from where I do not know) and tipped me off; there followed some fast action by me and June [Hooke] which resulted in our securing the whole collection for the Department. It will be suitably displayed in the new building.' .35



The medallion received by Georgina Sweet with her award of the David Syme Research prize in 1911. Photography by Christopher Freelance, BioSciences, University of Melbourne.

As it happens, these have yet to go on display in the Tiegs Museum or elsewhere in the new Zoology building. However, they have been securely stored and are awaiting a suitable permanent display.

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<sup>34</sup> It's an Honour

<sup>&</sup>lt;sup>35</sup> Assoc. Prof. Angus Martin, email to Assoc. Prof. David Young, 8/9/2015

### LIST OF SPECIMENS IN THE TIEGS MUSEUM DONATED/COLLECTED BY GEORGINA SWEET

MUZD 166	Carcharodon megalodon
MUZD 167	п
MUZD 168	Plesiosaurus sp.
	Cast of 3 vertebrae
MUZD 169	Cosmolepides sweeti
MUZD 170	Cosmolepides sweeti
MUZD 734	Typhlops polygrammicus
MUZD 1066	Millepora
MUZD 1067	Heliopora coerulea
MUZD 1236	Macropus ruficollis
MUZD 1277	Ichthyosaurus Eye
MUZD 1401	Domestic Cat
MUZD 1419	Petauroides volans
MUZD 1420	Phasogale swanisoni
MUZD 1508	Megalosaurus
MUZD 1509	Iguanadon
MUZD 1562	Felis leo
MUZD 1563	II
MUZD 1810	Phacohoerus africanus
MUZD 1909	Millepora
MUZD 1911	Heliopora coerulea
MUZD 1968	Echidna aculeata
MUZD 1999	Goliathus goliatus
MUZD 2005	Onchocerca gibsoni
MUZD 2395	Termite Queen

### **Georgina SWEET TIMELINE**

### YEAR EVENT

- 1875 Born
- 1884 Correspondence with father George Sweet: Letter she had written to her father when she was nine years old in which '... she declared that she must see Africa before she died'. <sup>36</sup>
- 1888-95 Mansfield Fossils <sup>37</sup> George Sweet investigated fossils in the Mansfield district for (Sir) Frederick McCoy.
- 1892 Commenced studies at Melbourne University under Baldwin Spencer, 'a strong advocate for the study and preservation of native Australian fauna, in which she was soon to specialise.' 38
- 1896-1907 Teaching: taught in several of Melbourne's leading secondary schools and served on the council of the Association of Secondary Teachers (1905-12). <sup>39</sup>
- 1896 Awarded Bachelor of Science<sup>40</sup>
- 1897 Funafuti : George Sweet was second-in-command to (Sir) Edgeworth David on the Funafuti expedition. 41

SPECIMEN 1066 *Millepora*, Funafuti, Collected by George Sweet in 1897. Identified and donated by George Sweet. 42

SPECIMEN 1067 *Heliopora coerulea*, Funafuti, Collected by George Sweet in 1897. Identified and donated by donated by George Sweet.

SPECIMEN 1909 *Millepora*, Funafuti. Collected by George Sweet in 1897. Donated by Dr Georgina Sweet much later. Loc: Cab 1 Shelf 8.

SPECIMEN 1911 *Helipora coerulea*, Funafuti. Collected by George Sweet in 1897. Donated by Dr Georgina Sweet much later. Loc: Cab 1 Shelf 12.

- 1898 Awarded Master of Science<sup>43</sup>
- 1898 Awarded McBain Research Scholarship. UNiMelb. 44
- 1898 University teaching career commenced demonstrating in biology to medical and science students. 45
- Letter to the chancellor of the Council of the university, requesting a seat on the senate for women graduates who have obtained an academic standing. (penned by another with 20 womens signatures) another letter written in 1901 requesting the same!!

<sup>37</sup> MacCallum, 1990.

<sup>36</sup> O'Callaghan, 2013

<sup>&</sup>lt;sup>38</sup> Creese & Creese, 2010: p

<sup>&</sup>lt;sup>39</sup> MacCallum, 1990.

<sup>40</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>41</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>42</sup> Tiegs Museum *Register of Specimens* 

<sup>&</sup>lt;sup>43</sup> MacCallum, 1990.

<sup>44</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>45</sup> MacCallum, 1990.

- 1900 Published Georgina's paper on Australian earthworms was read before the Linnean Society of London on 21st June 1900. <sup>46</sup> However, she was not present at the meeting. <sup>47</sup> Her paper was published in the *Journal of the Linnean Society of London* in 1900. (details in Bibliography).
- Lecturer in Biology at Queens College<sup>48</sup> until December 1908 when she was appointed lecturer and demonstrator in Biology at the University of Melbourne.
- 1903 SPECIMEN 1236 *Macropus ruficollis* (Wallaby). Collected at Werribee Sewage Farm by Georgina Sweet on 11.6.03. <sup>49</sup> Current location not known.
- 1904 Awarded Doctor of Science. 50

Published - Parts I & II of Georgina's research on the Anatomy of *Notoryctes typhlops* (Marsupial Mole) was communicated to the Royal Society of Victoria by Professor W. Baldwin Spencer on 12th May 1904. This paper was published in the Society's *Proceedings* later in 1904 (details in Bibliography).

In the Introduction to this paper, she notes that an abstract of Part III of her research on the Anatomy of *Notoryctes typhlops*, on the eye, was read at the Dunedin meeting of the Australasian Association for the Advancement of Science in January 1904. <sup>51</sup>

- 1905 George becomes President of the Royal Society of Victoria<sup>52</sup>.
- 1906 Published Part III of Georgina's research on the Anatomy of *Notoryctes typhlops*, the eye, was published in the *Quarterly Journal of Microscopical Science* (details in Bibliography).
- 1908 Appointed lecturer and demonstrator in Biology at University of Melbourne. 53

Published – Georgina Sweet's paper on 'The endoparasites of Australian stock and native fauna', Parts 1. & 2 were read at the Royal Society of Victoria on 10 th December 1908.

1909 Published - Parts I & II of Georgina's paper on 'The Endoparasites of Australian Stock and Native Fauna' were published in the *Proceedings of the Royal Society of Victoria*, in March 1909, (details in Bibliography).

Georgina Sweet was appointed lecturer in Parasitology at the new Veterinary School in 1909, in addition to her position in Biology. <sup>54</sup>, <sup>55</sup>

Awarded David Syme research prize<sup>56</sup> for work on parasites infesting native fauna and Australian stock that caused nodules in beef cattle, spoiling the meat for export.<sup>57</sup> The medallion is currently stored in BioSciences 4 (formerly Zoology Department) at the University of Melbourne.

Linnean Society of London

<sup>52</sup> O'Callaghan, 2013:

<sup>&</sup>lt;sup>46</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>48</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>49</sup> Tiegs Museum *Register of Specimens* 

<sup>&</sup>lt;sup>50</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>51</sup> Sweet, 1904

<sup>53</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>54</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>55</sup> Handman, 2014, p 1

<sup>&</sup>lt;sup>56</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>57</sup> Graduate Women Victoria Org

Published - Gilruth, J. A. and Georgina Sweet. Pamphlet on *Onchocerca gibsoni: the cause of worm nodules in Australian cattle*, published by the Commonwealth of Australia, Sydney, 1911 (details in Bibliography).

December 4th. Letter from Baldwin Spencer to the chancellor appointing Georgina Sweet to carry on work in his department while on leave. Appointed to Biology II, 58

SPECIMEN 1419. *Petauroides volans* (Greater Glider), Ferntree Gulley, Collected by Dr G Sweet 10.7.11, male in formaline. Not located.

SPECIMEN 1420 *Phascogale swainsoni* (Wambenger), Ferntree Gulley. Collected by Dr G Sweet 13.7.11, male in alcohol. <sup>59</sup> Not located.

Published - J. A. Gilruth, Georgina Sweet and Sydney Dodd (1911). 'Observations on the occurence in the blood of various animals (chiefly monotremes and marsupials) of bodies apparently identical with with *Anaplasma marginale*, Thiele, 1910.' Published in the journal *Parasitology* (details in Bibliography).

Correspondence between Dr G Sweet and Mr Kershaw at Melbourne Museum regarding parasite specimens from Copperhead and Tiger snakes to be sent to an English parasitologist.<sup>60</sup>

- 1912 Published 'Further observations on *Onchocerca gibsoni*, the cause of worm-nodules in cattle' by Georgina and John Gilruth, presented at the Royal Society of Victoria on March 14th, and published in the Society's *Proceedings* later in 1912 (details in Bibliography).
- 1913 July 4th. Letter to the chancellor and members of the council of the university. Georgina requested leave to travel to Europe and America and the east to visit universities and other institutions connected with research and teaching, in order to familiarise herself with the most recent methods and results of research in Parasitology.<sup>61</sup>
- July 27th. Letter has 'proposals for carrying out my work in my absence'. Suggests Prof Spencer has the assistance of Ms Raff, Mr Seddon, Prof Woodruff.

'I should perhaps state that I am undertaking this trip entirely in the interest of my work, as I want to see the latest methods of teaching and research in parasitology. A subject which as such was not in existence at the time of *my previous trip in 1900*, and one which is progressing by leaps and bounds every month'<sup>62</sup>

1913-14 Overseas leave - Indonesia, Malaysia, Sri Lanka, India, Egypt, Europe, Great Britain, the United States of America including Hawaii and Canada <sup>63</sup>

In a letter to the University's Chancellor on July 4th, Georgina outlined her plans to visit Europe, America and the east, investigating worm-nodules in cattle for the Federal government.<sup>64</sup>

<sup>&</sup>lt;sup>58</sup> Melb uni archives Professor Spencer's leave File 1911/249 Tracking No 2015/4830

<sup>&</sup>lt;sup>59</sup> Tiegs Museum *Register of Specimens* 

<sup>&</sup>lt;sup>60</sup> Melbourne Museum Archives, Sweet ingoing

<sup>&</sup>lt;sup>61</sup> Letter from G Sweet. 'Leave of Absence – Georgina Sweet' File 1913/398, Tracking No 2015/4832, Uni Melb Archives <sup>62</sup> Letter from G Sweet to the members of the ?? Committee. 'Leave of Absence – Georgina Sweet' File 1913/398, Tracking

No 2015/4832, Uni Melb Archives <sup>63</sup> Sweet, 1914: introduction

<sup>&</sup>lt;sup>64</sup> Creese & Creese, 2010: p 66

Published – Georgina Sweet. *Investigations into the occurrence of onchocerciasis in cattle & associated animals in countries other than Australia*. Commonwealth of Australia, Melbourne, 1914.

- 1915 Became second-in-command of the Biology school. 65
- 1920 Became the University's first woman Associate-Professor. 66

### 1920 (or later)

SPECIMEN 1508 *Megalosaurus*. Donated by Assoc Prof Sweet. Cast- Scale 1 inch to the foot. Location: Tiegs ab 13 Shelf 122.

SPECIMEN 1509 *Iguanadon*, Donated by Assoc Prof Sweet. Cast- Scale 1 inch to the foot. Location: Tiegs Cab 13 Shelf 122.<sup>67</sup>

1921 June 15th Applied for sick leave. <sup>68</sup>

'Acting on the instructions of my medical advisors, I hereby beg to apply for sick leave for the last 6 weeks of this term as of July 1st. <sup>69</sup>

- 1921 Sept 19th. Letter from G Sweet to the chancellor requesting leave of absence for the next academic year, Feb 27 to Dec 16 1922 as advised by her medical advisors.<sup>70</sup>
- 1922 Feb 27th. Memo/letter from the Chancellor

'Dr Georgina Sweet, Associate Professor in our zoology dep't and lecturer in parasitology in our veterinary school, has received 12 months leave of absence. During her travels she will be visiting other universities and scientific institutions, and this university will feel deeply obliged if she is afforded facilities to acquire information with regard to the subjects in which she is interested and which she has already done such good work. Chancellor'<sup>71</sup>

1922 Africa<sup>72</sup> from the Cape to Cairo with Jesse Webb<sup>73</sup>

'We were and on the strength of it, Georgie is to get a large ant that lays eggs, some tsetse flies and a dead scorpion.' - Jesse Webb

- 1922 March 18th Left Melbourne on SS Ulysses Durban Capetown
- 1922 April 16th Arrive in Capetown
- 1922 April 24th Visiting Scientists/Academics in Stellebosch (Valley)

'Breakfast at 7am. Arrival at Agricultural College at 10am. Departure from Agricultural College at 10.45am. Arrived at Stellenbosch at 11.30am. Professor Goddard and Professor Blommaert'

<sup>66</sup> MacCallum, 1990.

<sup>69</sup> Melb Uni Archives Assoc Prof Sweet- Leave of Absence and arrangements File 1922/414, Tracking No 4833

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<sup>65</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>67</sup> Tiegs Museum Register of Specimens

<sup>&</sup>lt;sup>68</sup> MacCallum, 1990.

Melb Uni Archives Assoc Prof Sweet- Leave of Absence and arrangements File 1922/414, Tracking No 4833

<sup>&</sup>lt;sup>71</sup> Melb Uni Archives Assoc Prof Sweet- Leave of Absence and arrangements File 1922/414, Tracking No 4833

<sup>&</sup>lt;sup>72</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>73</sup> O'Callaghan, 2013.

1922 April 26th - Leave Capetown for:

Bloemfontein

**Johannesburg** 

Moddefontein

Pretoria

Mafeking

Bechuanaland

**Palapye** 

Serule

Southern Rhodesia - Bulawayo

Georgina visits Onderstepoort, the great Vet. Lab. 93 near Pretoria ICT Lab. Presumably the same one as what is currently known as the Agricultural Research Council-Onderstepoort Veterinary Institute which was founded in 1908.

1922 Nov 16th Arrive in Cairo

### 1922 (or later)

SPECIMEN 1562 *Felis leo*, Lion. Tabora, South Africa. Donated by Assoc Prof Sweet. Skull and Jaws. Location: Tiegs, Cab 8 Shelf 95.

SPECIMEN 1563 Felis leo, Lion. Tabora, South Africa. Donated by Assoc Prof Sweet. Skull and Jaws. Not located.

SPECIMEN 1810 *Phacochoerus africanus*, Common Warthog. South Africa. Donated by Dr Sweet. Location: Tiegs, Cab 8 Shelf 98.

SPECIMEN 1999 *Goliathus goliatus*, South Africa, Donated by Dr Sweet, I'd by Dr Clarke Nat.Mus. Location: Cab 4 Shelf 48.

SPECIMEN 2395 Termite Queen, Congo, Africa, Donated by Dr G Sweet in 1928.<sup>74</sup> Location: Tiegs, Cab 4 Shelf 46.

- 1924 Acting dean of the Veterinary Faculty. 75
- 1924 Retired from Zoology, <sup>76</sup> remaining part-time lecturer in the Veterinary School.
- Lectern and Bookcase presented by staff and students from Zoology to commemorate the services rendered by Georgina Sweet. <sup>77</sup> Currently in / just outside Tiegs Museum.

October Letter from Sweet to Kershaw at Melbourne Museum about the collection of biting flies from around Australia

1925 Correspondence between Sweet and Melbourne Museum regarding the identification and donation of fly collections. <sup>78</sup>

Asia<sup>79</sup> research on the buffalo fly for the Council for Scientific and Industrial Research.

Away for 20 months, travelled primarily as a holiday but it also 'had a working side' Bali, Java Sumatra, north Borneo, Philippines, Thailand, China, 'there are interests to be found in every country in the world, particularly Africa and the far east, for the parasitologist'<sup>80</sup>

<sup>76</sup> MacCallum, 1990.

<sup>77</sup> The Register, Adelaide, 1924.

<sup>&</sup>lt;sup>74</sup>.Tiegs Museum Register of Specimens

<sup>&</sup>lt;sup>75</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>78</sup> Melbourne Museum Archives, Georgina Sweet Incoming

<sup>&</sup>lt;sup>79</sup> MacCallum, 1990.

Retired completely <sup>81</sup> as an honorary lecturer, still did some teaching. 1926

May - Correspondence between Sweet and Melbourne Museum regarding the identification and donation of fly collections.82

- 1926 Asia
- 1927 Asia
- Australian president of the Young Women's Christian Association. 83 1927-34
- 1929 'Australian Delegate to the Pacific Relations Institute Conference, Kyoto, Japan, who left by the Changte last week.'84
- Became first president of the Pan-Pacific Women's Association. 85 1930

Letter to J Kershaw at Melbourne Museum states she is travelling on a 'strictly work trip' to Europe and Honolulu.86

- Became vice-president of the world Young Women's Christian Association. 87 1934
- Appointed OBE<sup>88</sup> for service to women's organisations.<sup>89</sup> 1935
- Elected as the first woman member of the university council. 90 1936
- 1946 RIP

<sup>80</sup> The Week, 1927

<sup>81</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>82</sup> Melbourne Museum Archives, Georgina Sweet Incoming

<sup>83</sup> MacCallum, 1990.

<sup>84</sup> Sunday Times, 1929 85 MacCallum, 1990.

<sup>&</sup>lt;sup>86</sup> Melbourne Museum Archives, Sweet ingoing

<sup>&</sup>lt;sup>87</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>88</sup> MacCallum, 1990.

<sup>&</sup>lt;sup>89</sup> Graduate Women Victoria Org

<sup>90</sup> MacCallum, 1990.

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