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A 'POTTED' HISTORY OF THE MUSEUM OF ZOOLOGY AND COMPARATIVE ANATOMY, UNIVERSITY COLLEGE LONDON.

Given to the 1985 AGM of the BCG.

In June 1827 Robert Edmund Grant was appointed, as one of the 23 founding Professors, to the Chair of Comparative Anatomy in the new University of London then one month old.

It was the first Chair in the subject in England, Kings College London did not follow until 1836 and Cambridge in 1866. It was an unendowed Chair and an unprotected subject, Grant's only fees coming from the medical students he taught. £5 each was paid by "gentlemen desirous of obtaining a superior as opposed to a statutory medical education". In the 1830s he averaged £117 per annum, half of what was earned over £100 having to be paid back to the University, a penalty of teaching in a "joint-stock" institution.

It was not until 1852 when he received a stipend of £100 over and above his fees and inherited some money from his brother that poverty ceased to be a problem.

On his appointment Grant found no teaching material, Museum or Library and set about building up the teaching collections and dissections which formed the basis of the Museum. He eventually persuaded the College to finance a 'boy' to assist in the 'Zootomical' Museum at the princely sum of £13.13 per annum. Grant was an Edinburgh graduate, whose M.D. thesis was on foetal circulation. He had spent much time studying the fauna of the Scottish sea coast accompanied amongst others by Charles Darwin. He carried out some fundamental research on the structure and function of sponges by which their animal nature was first properly understood. He coined the word Pornifera and the sponge Grantia was named for him by John Flemming in 1828.

The third term of his initial lectures were devoted to palaeontology and in 1833 he introduced a fossil zoology course described in an 1835 Lancet as "almost the only comprehensive and accessible source of information in this subject in the English language". He was elected to the Councils of the Linnean, Geological and Zoological Societies in quick succession and made a Fellow of the Royal Society in 1836. He delivered one of the first major lecture series to the Fellows of the Zoological Society on the "Classification and Structure of Animals" in 1833, and in 1834 ten lectures on Fossil Zoology.

Unfortunately his Lamarkism and generally liberal views fell foul of Richard Owen who managed to persuade the Society to oust Grant at the 1835 elections. His ability to research and publish effectively was dealt a tremendous blow by this move because he lost access to valuable dissection material. However he was obviously held in high regard by the College as the inscription on the Beck microscope presented to him in 1853 by his friends and former pupils reads "As a testimony of their sense of his eminent services in the cause of science".

In spite of his problems Grant remained Professor for 45 years and on his death bed bequeathed his extensive book collection to the College.

He was succeeded by Sir William Henry Allchin from 1874 to 1875. Allchin was later to become a distinguished physician and medical administrator who played a large part in the discussions which led to the University of London Acts of 1898 and 1905.

Allchin was followed by Sir Edwin Ray Lankester in February 1875 who after graduating from Oxford was one of Huxley's three assistants in a Government financed short summer school in practical laboratory biology for school masters.

In 1879 the collections were partly moved from the lecture room which had been shared with Medicine and Physiology to a room the Fine Arts department had vacated. The move was not finally completed until three years later because of the delay in fitting cases.

At the time of the move E. Ray requested the sum of £150 for the purchase of specimens to fill in important gaps in the collections. He felt that after this further growth could safely be left to donations of friends and students.

The introduction of practical and research work courses, the first in England, necessitated the appointment of an assistant Curator, A.G. Bourne, who later became Professor of Biology in the Presiding College, Madras and H. Jessop the first Laboratory Technician who held the post for half a century.

In 1883 preparations of dissected Nautilus were put into the Museum, one of which was a male purchased from Hamburg Museum in 1877, only three or four males having previously been known.

By 1886 the Cephalopod collection was one of the best in Britain "containing several cuttle fish, which did not exist in any other collection in the Country". (E. Ray could have been biased of course!)

The move to new premises was not without its problems, in 1884 several specimens were destroyed when a large portion of the ceiling fell in. By 1889 space was again a problem and the two new cases necessitated the rearrangement of the collections which by now included some of the first Challenger material. In 1890 the microscope slide collection was begun and E. Ray complained bitterly to the College Council that the ceiling had fallen in again caused by flooding from the Physiology department - six times in two years. The printed label catalogue started in 1886 was finally finished. It contained what he hoped eventually to have not what was necessarily there.

E. Ray moved to Oxford taking with him many specimens which belonged to the Museum and 370 of the most valuable diagrams from the teaching collection.

During his time the department was considered the most active school in Britain and he trained and influenced many Zoologists who later became famous at home and abroad - among them Willey, Weiss, Michin, Fowler and Weldon. His assistant at UCL and Oxford Goodrich (a former Slade Art School student) eventually held the Chair at Oxford and ultimately taught Medawar and Michael Abercrombie who subsequently became Jodrell Professors of Zoology at UCL. Lankester's mode of running a Zoology department became the model for departments in all the British Universities until well into the 20th century. Lankester's work ranged wide from Protozoa through to Dipnoi and Holocephali. He was the first to recognise the relationship of Limmulus to the Arachnida - his Limmulus specimens are still in the collection.

His 1877 "contribution notes on Embryology and Classification" resulted in a major reclassification of the entire animal kingdom. Lankester was responsible for founding the Marine Biological Laboratory at Plymouth and from Oxford went on to be Director of the BM(NH) for ten years.

He was a larger than life character and apart from Darwin and possibly T.H. Huxley was probably the greatest British Zoologist of the 19th century.

Under Walter Weldon who followed E. Ray the collection continued to grow and now included the fourth specimen of Lepidosiren paradoxa ever seen by Zoologists and the extremely rare, newly discovered Notorhyctes. The Museum was revised and rearranged, with Fowler as the Assistant Curator.

In 1893 a request for a "small truck, as at the British Museum, with india rubber tyres for conveyance on the flat and a hoist from Museum to laboratory level to reduce wear and tear on the specimens"and presumably staff, since some of the specimens weighed as much as half a hundredweight "from being carried up and downstairs", was put to the College Council. The request was repeated in the reports of the next two years. There is no record of when, if ever, these were obtained! 1897 saw a new departure - the illustration of lectures by lantern slides taking up much of the Assistant Curator's and laboratory attendants' time in photography.

Weldon, together with Francis Galton and Karl Pearson, founded the science of Biometry and followed E. Ray to Oxford in 1899. He was succeeded by Edward Alfred Minchin who worked on Protozoa and the lower Metazoa. During his time these collections, and the slide collection expanded and BM(NH) duplicates were added to the Arachnids and Reptiles.

A card catalogue was introduced in 1901. Minchin was followed in 1906 by J.P. Hill who was distinguished for his work on mammalian embryology especially of Marsupials and Monotremes. He quickly remedied the collections' deficiencies in embryological material from his own valuable collection. The, by now obsolete, system of classification rendered rearrangement necessary once again, as usual hampered by lack of space. In 1909 parts were rehoused in new cases but the following year the state of congestion was worsened by the receipt on permanent loan from the South Kensington University of seventy nine skulls and skeletons mostly disarticulated of which the Rhinoceros, Bear, Seal and Zebra skeletons were mounted at a total cost of £14. The donation of three Marsupial skeletons and three spirit mounted specimens from J.P. Hill and seven Primate skeletons from Professor Elliot Smith could not have helped the situation.

1911 saw the donation of the Finzi collection of British Lepidoptera housed in two large cabinets. The war interfered with plans for a collection illustrating the marine fauna of the Scilly Isles - Mr Swithinbank and his yacht being in the service of the Admiralty. Zeppelin raids caused the removal of the spirit specimens to the damp basement and a room at the Slade which had a concrete roof. They had to be transported back and forth for teaching which resulted in a certain amount of damage. During this time G.E. Bullen, Honorary Assistant Curator presented valuable collections of Fish and Molluscs including those of Dr L.G.Higgins of Harpenden.

J.P. Hill was appointed Professor of Embryology in 1921 and was succeeded by D.M.S. Watson the famous Palaeontologist distinguished for his work on fossil Fish, Amphibia and Mammal-like Reptiles. The space problem was alleviated for a while by moving into rooms vacated by the Anatomy Department.

In 1923 the Zoological Society deposited on permanent loan a very large series of bird skeletons which had formed part of the foundation of many important works on Avian taxonomy.

1929 saw the addition of many Corals from the Great Barrier Reef expedition in which two members of staff, T.A. Stephenson and E.A. Frazer "affectionately known as Auntie" took part. "Auntie" also contributed to the Embryology collections.

The space problems were not really solved until the department's move to the present building in 1933 when the collections were housed in a proper Museum.

Upheaval again took place when a large part of the collection was evacuated with most of the department to Bangor during the second world war.

J.P. Hills vision of 1921 for "a trained Zoologist who is also a good technician" as Curator was finally realised in 1948 when D.M.S. Watson relinquished the Curatorship and appointed Reg Harris.

Reg needs no introduction to members of the group. His pioneering work on preservation and freeze drying is well known. He was followed by Roy Mahoney whose book on Zoology techniques is every Zoology Museums curator's and technician's bible. Between them they probably had as much influence on the course of Zoology Museum work as E. Ray Lankester had made on teaching methods. The teaching collections continued to grow but unfortunately D.M.S. Watson's Palaeontology collections went to Cambridge for reasons I won't go into here (we now have some them back on loan).

D.M.S. Watson was followed as Professor by Sir Peter Medawar who received the Nobel Prize for his work on transplantation immunology, Michael Abercrombie formerly UCL Professor of Embryology who was also a Cell Biologist and finally in 1971 by Avrion Mitchison an Immunologist and nephew of J.B.S. Haldane, the Geneticist who was a member of the department for many years.

The growing importance of Cell Biology, the Curator's responsibility for the new electron microscope unit and the departure of

the deputy Curator to bcome Curator at Imperial College in 1964 led to a decline in the Museum's fortunes. It declined further with the arrival of Professor Mitchison who subscribed to the erroneous theory that Classical Zoology was dead and the Museum was taking up valuable research space.

The threat to its existance mercifully retreated but the building of a new animal house caused the ceiling to be lowered and pressure of departmental space meant that the seminar room took about a third of its original space.

When I arrived in 1971 the roof was off and the collection once again in store and having to be moved from the basement of the D.M.S. Watson library for classwork demonstrations. The reduction of space and replacement of the vertebrate half of the 1851 cases has meant that it has become a storage museum although it is still growing as the needs of teaching change and new courses are devised. One good thing came out of the upheaval, there was no longer case room for both the skeletons labelled Zebra. Before one of them was disarticulated and boxed it was decided to ask the BM(NH) to identify the specimen that was rumoured to be Quagga. Alan Gentry verified that it was indeed one of the only five known skeletons unfortunately minus one leg and that the other 'Zebra' was in fact Donkey.

The MDA system of recording has been introduced with the view of eventual computerisation.

The next phase of the Museum's life will be an attempt to redisplay much of the material, which is used to an increasing extent by other departments, colleges, artists, televison and film companies. Not a great deal has changed in the last 158 years. We are still short of money and icreasingly short of space, the collections have spread out of the Museum and store into the surrounding labs. Weldon's complaint of 1895 that "owing to the large amount of work entailed by heavy classes in the laboratory it has not been found possible to do quite as much in the Museum as was achieved in the earlier years" still applies. The majority of the collections need reclassifying and recataloguing and we are flooded fairly regularly from above by the Animal House although the ceiling has not fallen in yet!

A full history of the Museum will be published, hopefully within the next decade, if the Curator ever has the time to do the necessary research!

Rosina Down.