In the footsteps of Augustine Henry and his Chinese plant collectors

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This book is essentially a biography of Augustine Henry, who as a young medical doctor joined the Chinese Imperial Maritime Customs Service in 1881 and subsequently became one of the world's most renowned plant collectors. After a period of training in Shanghai, his first field posting was to the remote town of Yichang in Hubei Province, Central China. This was an important customs post because at 1,770 kilometres inland from Shanghai, it stood at the limit of steam navigation on the Yangtze River. The central theme of the book gives considerable detail of Henry's extensive travels and plant collection activities in China. These were initially confined to Hubei Province but later extended to the south west of the country in the provinces of Sichuan and Yunnan, with shorter interludes on the tropical island of Hainan and in Taiwan. An idea of the remoteness of some of these postings can be gleaned from the vivid descriptions given and from the accounts of the journey of Henry's entourage to his final postings at Mengzi and Simoa in Yunnan Province.

At Yichang life was quiet and Henry's job monotonous. However, he found the landscape around the town interesting and enjoyed the spectacular scenery, especially in the Three Gorges region where the great new reservoir on the Yangtze now stands. These factors combined with his love of the countryside probably account for the development of his interest in the Chinese flora. Whatever the stimulus, he began to collect plants from the countryside around Yichang and in 1885, he dispatched over 1,000 preserved specimens to the Royal Botanic Gardens at Kew. In return he asked Sir Joseph Hooker (Director of Kew), for a list of determinations so that he could match botanical and colloquial names. At this stage of his career Henry knew little botany and lacked worthwhile texts. The collection which he sent to Kew attracted much attention as it contained many species which had never before been encountered. This continued to be the case with each batch of specimens which he sent from different regions of China. A detailed account, using botanical nomenclature, of the range of herbs, ferns, shrubs and trees which he found, is given throughout the book. Extensive lists of plants associated with Henry are presented in the appendices. The botanical nomenclature used throughout the book may leave many readers floundering, but gardening enthusiasts will recognise a large number as a high proportion have now become common garden plants. But this is not a textbook. What leavens it are the details of Henry's and the author's travels and travails which allow a genuine sense of the former's personality to emerge.

By the mid 1880's, Henry was keen to extend the range of his explorations and upon the intervention of Sir Thisleton-Dyer (then Director of Kew), he was granted six months leave. His plant collecting activities extended further inland to the mid

Yangtze region around the town of Badong. In the lowlands of this region he found the indigenous vegetation greatly disturbed, but in the mountainous areas the virgin forests contained a rich flora. It was in this region that he first found the living "fossil trees", *Ginkgo biloba* and *Metasequoia glyptostroboides*. At other locations too, he collected material from primeval forests, notably in the mountainous region of Hainan, in Southern Taiwan and in the lowland tropical forests of Yunnan. Other areas of Yunnan he found to be dreadfully barren and totally deforested. So rapid was the rate of forest exploitation in parts of China at this time, that, in his opinion, much of the native flora would be extinct within 50 years.

In writing this book the author has drawn copiously upon archival material; upon Henry's correspondence, notes, scientific writing and plant collections. An unusual feature is the on-the-ground research of the author, who over 100 years after Henry had left China, led a number of excursions to retrace Henry's Odyssey. This was not just to revisit the places which he had traversed, but also, to locate at these sites some of the species which Henry was first to collect. An account of the forays of the author's parties is interwoven with Henry's experiences to bring the picture, more or less, up to date. In some respects this second coming may have been quite fortunate because, in places, Henry's predictions concerning the fate of the native flora have come to pass. The author and his party found that in areas near Yichang, the native flora had been totally stripped. In other areas the clarity of the landscape has been diluted by smog. Much of the landscape around the Three Gorges has now changed forever as the massive new dam on the Yangtze reached its' maximum level in 2009, inundating much of the surrounding area. The author's team will be the last group to collect specimens of the flora over much of the area which Henry, in his initial years, traversed. As against all of this, the book emphasises that there are now more than 100 botanic gardens in China, all of which are involved in the preservation and conservation of the nation's rich flora. In addition there are very extensive reserves embracing forest and non-forest ecosystems.

Besides all of the geographical, landscape and floristic detail, this book sheds much light upon Henry's character and particularly upon the personal features which made him such an adventurous and successful plant collector. Initially, at least, the answer lay in his love of outdoor activity, his enormous energy and his generosity. His botanical expertise was poor at first and did not improve significantly until he had spent some time at Kew. His travels and access to the remote countryside were advanced by his fluency in Chinese. He was generous with his time, knowledge and expertise. As a result, other explorers such as Antwerp Pratt and Ernest Wilson sought him out. To the former he gave use of the native plant collectors whom he had trained and to the latter he gave directions as to where to find the Handkerchief tree (Davidia involucrata) (Figure 1) in Sichuan Province. The extent of his generosity is apparent from the fact that in the later stages of his stay in China he was collecting multiple specimens of each plant (sometimes up to 10) for dispatch to curators in China, England, Ireland, the United States and other European countries. In return he neither sought nor received any remuneration except for occasional expenses with which to pay collectors, porters and guides. This book also records the low point in Henry's life which occurred upon his return to China after the death, in 1894, of his wife Caroline.



Figure 1: A view from under the branches of a handkerchief tree (in full bloom in June 2012) at the National Botanic Gardens in Glasnevin, Co. Dublin. One of the first trees of its species to be planted in Europe as a result of Augustine Henry's botanical discoveries.

When he finally departed from China in 1900 he had collected 158,050 herbarium specimens, of which 1,726 were newly discovered species.

As is apparent from this book Henry was a prolific letter writer. He developed correspondence with a great number of influential people; academics (Professor Charles Sargent, Harvard University), directors of botanic institutions (Sir Frederick Moore, National Botanic Gardens, Glasnevin), wealthy land owners (Sir Henry John Elwes) and nursery owners (Sir Harry Veitch). It is emphasised that Veitch was the only one of this heterogenous group of friends to benefit financially from his work and Elwes was the only one to provide him with relatively generous expenses when he was involved in field research for their book. It is striking that many of the people with whom he corresponded became staunch, lifelong friends. This ability to form lasting friendships is also apparent in the details of his return to London and eventually Dublin. His new friends in Dublin included academics, politicians and artists. The last chapter in this book is entitled "Henry the Forester". It gives some detail of his developing interest in forestry but is surprisingly subdued about his experiences at École Nationale Forestière de Nancy. There is however, a hint that he was lured away from his studies by Elwes in order to undertake the fieldwork for their magnum opus, "The Trees of Great Britain and Ireland", which was published between 1906 and 1913. It seems that it was while in America on this mission that Henry became convinced that Western American tree species would be more suitable for afforestation in Ireland than European ones. He appears to have concluded also, that European methods of silviculture were sub-optimal for Irish conditions. These views he made known in Dublin. In 1913 he returned to Ireland having been offered the Chair of Forestry at the Royal College of Science (now University College Dublin).

Henry is widely acclaimed and honoured for his work on the flora of China and for his contributions to forestry in Ireland. In relation to the former he is probably better known abroad than in Ireland. This book is another accolade to him and the author's input in retracing his Chinese itinerary lends additional authority to the narrative while bringing to light facts of Henry's personality which, heretofore were little known. The book is exceptionally well illustrated with maps, diagrams, sketches and photographs (old and new). Most foresters will enjoy reading about the adventures of one of the founding fathers of Irish forestry, but may not consider this book a prerequisite for their own library shelves.

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