



NatSCA

Natural Sciences Collections Association

<http://www.natsca.org>

Biology Curators Group Newsletter

Title: Botany Section

Author(s): Hackney, P.

Source: Hackney, P. (1981). Botany Section. *Biology Curators Group Newsletter, Vol 3 No 1*, 9 - 12.

URL: <http://www.natsca.org/article/1852>

NatSCA supports open access publication as part of its mission is to promote and support natural science collections. NatSCA uses the Creative Commons Attribution License (CCAL) <http://creativecommons.org/licenses/by/2.5/> for all works we publish. Under CCAL authors retain ownership of the copyright for their article, but authors allow anyone to download, reuse, reprint, modify, distribute, and/or copy articles in NatSCA publications, so long as the original authors and source are cited.

BOTANY SECTION

The Herbarium

The present herbarium of the Ulster Museum is an amalgamation of the municipal collections (which since 1910 included the herbaria of the Belfast Natural History and Philosophical Society, the Belfast Naturalists' Field Club and the private herbarium of Samuel Alexander Stewart) and the collections of the Botany Department, Queen's University, Belfast. The amalgamation took place in 1968 and the correct code for the unified herbarium is BEL. (BFT is an obsolete code for the former Queen's University herbarium.)

The unified herbarium is housed in the Ulster Museum and is physically organised into separate sections as follows:-

1. Flowering plants - Ireland
2. Flowering plants - Gt. Britain
3. Flowering plants - rest of the world (mostly European)
4. Pteridophytes
5. Bryophytes - British Isles
6. Bryophytes - rest of the world (as yet not sorted)
7. Myxomycetes (mostly British or Irish)
8. Lichens
9. Algae
10. Fungi (collection very small)

So far as current work by the department is concerned the most important parts of the collections are the Irish flowering plants and pteridophytes, the Irish bryophytes and the Irish marine algae, and it is these sections that are expanding as a result of field work, mainly carried out by the Museum's two botanists with help from a small number of other field botanists. There are also important collections of Irish lichens and myxomycetes, but these sections are stagnant at present because of the absence of staff or local botanists expert in them.

The herbarium staff concentrate mainly on floristic work within N. Ireland which consists of six biological counties with a small portion of a seventh. Two Floras covering the whole area between them are currently in preparation by two working groups, one centred on the Museum and the other centred elsewhere.

Early Collections

The earliest botanical records from what is now N. Ireland are probably those of William Sherard who visited Ireland in 1691, but the first local resident to systematically compile observations and collections seems to have been the Belfast naturalist JOHN TEMPLETON (1766-1825, most botanical work done 1793-1820). A portfolio of Irish mosses, some 340 ferns and about 150 algae have survived as part of the Ulster Museum herbarium. Perhaps more important are his manuscripts - a Journal 1806-1825, and part of an uncompleted Hibernian Flora - both now housed in the Ulster Museum, but with a small portion of the latter in the library of the Botany Department, British Museum (Nat.Hist.) and a MS Catalogue of the Native Plants of Ireland in the library of the Royal Irish Academy, Dublin.

In 1827 a Botanic Gardens was established in Belfast (the Ulster

Museum is situated in its grounds). Its first curator was a Scot, THOMAS DRUMMOND who had been one of the naturalists on Sir John Franklin's second expedition to British N. America and who has left us a bound herbarium of bryophytes collected on that expedition, mainly from the Rocky Mountains, dated 1828. There is also a bound herbarium of mostly Scottish and Irish mosses prepared by him for the Belfast Natural History Society in c.1830.

The BELFAST NATURAL HISTORY SOCIETY (later known as the BELFAST NATURAL HISTORY & PHILOSOPHICAL SOCIETY or BNHPS) was founded in 1821. They formed an herbarium which contains many flowering plant specimens by one of their founder members, the able Belfast naturalist, WILLIAM THOMPSON (1805-1852).

Later 19th Century Collections

Field botany in the north of Ireland went through a period of expansion and decline within the years c.1820-1840. A new generation of field botanists in Belfast arose in and after the 1860's and most of the Ulster Museum's important Irish collections date from this revival or later. Three important events occurred in the years 1863 and 1864. Firstly a small group of active field workers developed around RALPH TATE, sent to Belfast by the Science and Art Department, South Kensington, to deliver science lectures in Belfast. Tate's protégés formed a BELFAST NATURALISTS' FIELD CLUB (BNFC) in 1863 and in the same year Tate's Flora Belfastiensis was published - the first published handbook devoted to any part of the Ulster flora. A few of Tate's specimens survive. In 1864 Prof. GEORGE DICKIE working independently produced his Flora of Ulster. Dickie and Tate left Belfast in the 1860's but the work they had begun was carried on enthusiastically by local members of the BNFC. Two members who prepared large herbaria are HUGH ROBINSON whose specimens mostly date from the 1860's, and SAMUEL ALEXANDER STEWART (1826-1910) who commenced collecting and recording in the 1860's and who became over the succeeding twenty or thirty years the accepted authority on the flora of the north of Ireland. Stewart was a trunkmaker in Belfast, but in later years he was appointed full-time curator of the Belfast Museum, founded by the BNHPS. As curator he was responsible for the museum's two herbaria, that of the BNHPS and that of the BNFC. Between about 1865 and 1910 these herbaria were considerably enlarged by specimens collected by Stewart and other members of the two societies. He also had his own private herbarium and all three collections were handed over to the City of Belfast after Stewart's death in 1910.

Other notable local botanists who have left substantial collections, mostly of Irish material, either in the two society herbaria mentioned or as separate personal collections were THOMAS HUGHES CORRY (1860-1883), ROBERT LLOYD PRAEGER (1865-1953), Rev. HENRY WILLIAM LETT (1838-1920), Rev. SAMUEL ARTHUR BRENAN (1837-1908), Rev. COSLETT HERBERT WADDELL (1858-1919). All these collected vascular plants, but Lett, Waddell and Stewart also collected substantial numbers of bryophytes; Waddell was in fact the instigator of the Moss Exchange Club (now the British Bryological Society). He also collected large numbers of lichen specimens. Brenan collected, and acquired from other collectors, a large number of algal specimens.

In about 1878 T.H. Corry seems to have proposed the idea of producing a Flora of the North-East of Ireland and commenced work on it, producing a manuscript which is now in the Ulster Museum. S.A. Stewart collaborated with him on this, but Corry, one of the few professional botanists who collected in the north of Ireland, was drowned in 1883, and Stewart had to carry on alone. Stewart and Corry's Flora eventually appeared in 1888 published by the BNFC. It covers counties Londonderry,

Antrim and Down, and most of the vouchers are housed in the Ulster Museum, with the bulk of the remainder in the herbarium of the National Botanic Gardens, Dublin (DBN).

Twentieth Century Collections

The BNFC produced the first Supplement to the Flora of the North-East in 1895, prepared by Stewart and Praeger. After Stewart's death a Second Supplement was prepared, the bulk of the work falling on the shoulders of SYLVANUS WEAR (1858-1920), an English amateur botanist who had retired to live in Belfast in 1903. His botanical work on Ireland covers only the years 1904-1920 but he has left behind a substantial collection of vascular plants and marine algae, mostly from the north of Ireland.

Wear's Second Supplement drew heavily on the field work of his friend WILLIAM JAMES COLEMAN TOMLINSON (1863-1921) an employee of the Midland Railway. Tomlinson's large herbarium was acquired by Queen's University Department of Plant Pathology, Belfast, who donated it to the Ulster Museum in 1979.

R.L. PRAEGER took on the task of preparing the second edition of the Flora of the North-East which appeared in 1938. The bryophyte section was revised by Rev. WILLIAM RUTLEDGE MEGAW (1855-1953). Another important bryophyte collection, acquired by the Museum in 1944 is that of DAVID BIGHAM BRADSHAW (1869-1944), a founder member of the Moss Exchange Club and a life-long employee of the Provincial Bank of Ireland. His collection includes British and Irish specimens by himself and many notable British bryologists and a substantial number of European specimens.

Other collectors active in the inter-war years include NATHANIEL CARROTHERS (1852-1930) - a specialist in alien plants, STEPHEN ALLEN BENNETT (1868-1934) a schoolmaster at a Belfast public school, CORRIE DENEW CHASE (1878-1965) a friend and teaching colleague of Bennett and who collected mainly on holidays abroad, Rev. FRANCIS HUGH WOODHAMS KERR (1885-1958) who with a small group of co-workers prepared an unpublished Flora of Co. Tyrone and ARTHUR WILSON STELFOX (1883-1972) whose vascular plant work in the north of Ireland mainly falls in the period 1900-1920. These collections are all of vascular plants.

MARGARITA DAWSON STELFOX (Née MITCHELL, 1866-1971), wife of A.W. Stelfox, together with Miss MARGARET WILLIAMSON REA (1875- ?) were active students and collectors of myxomycetes in the years 1914-47; M.W. Rea also collected lichens. The Ulster Museum has a large and important collection of Irish and British myxomycetes put together by these workers.

After the second world war the most significant collectors in the north of Ireland were EDWARD NORMAN CARROTHERS (1898-1977) son of Nathaniel Carrothers, R. DESMOND MEIKLE, now at Kew Gardens, who worked the Flora of Co. Fermanagh extensively, J. McK. MOON (1901-1960), a Belfast schoolteacher, and Miss MARY PATRICIA H. KERTLAND (1901-) who has produced a Supplement to the vascular plant section of the Flora of the North-East of Ireland, 2nd edition. M.P.H. Kertland was curator of the Queen's University herbarium, formed in the 1920's under Prof. JAMES SMALL (1889-1955) who assembled a small herbarium of Scottish plants. On her retirement in 1968 this herbarium was donated to the Ulster Museum and amalgamated with those herbaria already in the museum - i.e. the BNFC, BNHPS, S.A. Stewart and D.B. Bradshaw collections.

The Queen's University Herbarium includes most of the collectors mentioned so far, together with bryophyte collections by R.D. & J.W. Fitzgerald including vouchers for their Bryophyte Flora of Co. Tyrone, 1960 (Trans. Brit. Bryol. Soc. 3:653-687).

Paul Hackney

ALGAE

The algal herbarium has recently been subject to complete reorganisation, the many separate collections being amalgamated together so that the specimens, filed under the name of the species may be readily accessible. Each collection is preserved as a separate entity by means of a collection number allocated to it. The size of the herbarium has recently grown considerably for not only have newly collected specimens been added to it but others have been received in exchange, donation and purchase.

As far as is known the oldest algal specimen is one dated "April 1798" and, with others of the 18th and early 19th centuries it was collected by John Templeton of Belfast (1766-1825). The Templeton specimens along with those of a few others such as James Lawson Drummond (1783-1853) are together referred to as Collection 1.

During the 19th century the number of phycologists increased and more and more collections were made. Many collectors worked on the shores of Ireland and it seems that they freely exchanged specimens. Indeed, we have some specimens which have been cut in two, the two parts ending up in separate collections. Among these collectors two of the more important are George Crawford Hyndman (1796-1867) and William Thompson (1805-1852), both Belfast men. The latter is represented by five large albums of algae, one of which is of foreign specimens, as well as many individual as yet unaccessioned specimens. Other collectors include William Strong Hore (1807-1882) an Englishman whose specimens have been found in at least three separate collections; William McCalla (c.1814-1849); S.A. Stewart (1826-1910) and S.A. Brennan (1837-1908), all Irishmen, although Stewart was born in Philadelphia he came to Belfast when he was 10 years old.

However more important than these collections are those of William Henry Harvey (1811-1866) who was born in Limerick. He travelled the World making collections, describing new species and encouraging others to collect. It was he who brought all the information together and wrote reference books still of use today. He collected not only in Ireland but also in South Africa (1835-1842), Eastern America (1849-1850), Ceylon, W. Australia, Tasmania and the Friendly Islands (1853-1856). One of the five William Thompson albums, mentioned above, has many Harvey specimens from the Cape of Good Hope and sets of exsiccatae totalling about 700 specimens, from Ceylon, Australia, Tasmania, New Zealand and the Friendly Islands are also in the herbarium. It was on collections such as these that Harvey based his books. For the British Isles he wrote: A Manual of the British Algae (1841) followed by: Phycologia Britannica (1846-1851). For America he wrote: Nereis Boreali-Americana (1852-1858); for the Southern Seas: Nereis Australia (1847) and Phycologia Australica (1858-1863) for Australia, New Zealand and Tasmania.