



Notes from the Natural History Museum, London (BM):

the bryophyte collections past, present and future

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The bryophyte collections at the Natural History Museum, London (BM) are continually developing and expanding, building upon a bedrock of historical collections accumulated from all parts of the world and spanning over two centuries (Fig. 1). The earliest collections date from near the dawn of our culture's bryological activity and include the herbaria of pioneers such as James Dickson (1738–1833), Dawson Turner (1775–1858) (including the Irish collections by Ellen Hutchins), and the first Keeper of Botany in BM, Robert Brown (1773–1858). The bulk of the historical material was received from bryologists active in the 19th and 20th centuries, again with global reach. These include internationally significant herbaria of the likes of William J. Hooker (1785–1865) and his son Joseph D. Hooker (1817–1911), William Wilson

△ Figure 1. The bryophyte herbarium at the Natural History Museum, London (BM). *J. Wilbraham*

(1799–1871), Robert Braithwaite (1824–1917), William H. Pearson (1849–1923), Symers Macvicar (1857–1932), Hugh Neville Dixon (1861–1944), the German bryologists Philipp Bruch (1781–1847), Wilhelm Schimper (1808–1880) and Georg E. Hampe (1795–1880), as well as the great French bryologist Émile Bescherelle (1828–1903). Over the last half century, the BM bryophyte collections have been enhanced to the benefit of bryological research through material exchanges with other herbaria, the generous gift of specimens by bryologists around the world and by past and present staff at the museum.

In the 1960s and 1970s it was not uncommon for Museum staff to undertake very lengthy fieldwork expeditions which could last some

months – an enviable opportunity as viewed now in retrospect! Alan H. Norkett collected in Nepal, India and the Seychelles in the late 1960s and early 1970s (associated publications: Ellis, 1989a, 1989b, 2016). Alan Eddy made copious collections from various parts of Malesia, most extensively from New Guinea and associated islands but also Sulawesi and Java (Eddy, 1988, 1990, 1996). Highlighting significant collecting activity during the 1980s and 1990s, Alan Harrington, Pat Wolseley and Len Ellis bryologised in Malaysia, and Malaysian and Indonesian Borneo (Wolseley *et al.*, 1998, 2001, 2007). Angela Newton undertook a range of fieldwork activities while based at the Museum in the 1990s and 2000s, including to New Caledonia with PhD student at the time Neil Bell. More recently, significant collections were made by Jo Wilbraham and Len Ellis in La Réunion in the Indian Ocean (Ah-Peng *et al.*, 2010; Ellis & Wilbraham, 2008; Wilbraham



△ Figure 2. Jo Wilbraham collecting bryophytes for herbaria as part of an expedition to the Talamanca mountain range, Costa Rica, in 2012; a remote region where the bryophyte diversity was poorly known. *Alex Monro*

& Ellis, 2010) and by Jo Wilbraham in Costa Rica (Fig. 2). Silvia Pressel has collected with

▽ Figure 3. *Anthoceros cristatus*, Ascension Island. *Silvia Pressel*





△ Figure 4. *Sphagnum skyense* specimen collected during the BBS field trip to Eigg in 2015, a species not previously represented in the BM herbarium. J. Wilbraham

Jeff Duckett in Iceland (Mitchell *et al.*, 2023), Peninsular Malaysia, Northern India and New Zealand (Pressel *et al.*, 2013), and, most notably, Ascension Island (Pressel *et al.*, 2014, 2017; Villarreal *et al.*, 2017). These various field trips have considerably enhanced the BM collections of hornworts (Fig. 3) and complex thalloid liverworts from around the world, as these groups have been a particular focus of Silvia and Jeff's research.

Contemporary material, which may be of interest to members of the British Bryological Society, continues to be acquired (Fig. 4).

Keeping the herbarium representative of the British and Irish flora and up to date with the often changing taxonomy and new discoveries can be a challenge! Numbers of specimens being incorporated into the collection can fluctuate quite considerably from year to year, but our records from the last twenty years suggest an average 2000 specimens per year. Acquisitions have a global range, but in recent years some large and significant new acquisitions have been received which have greatly enhanced our British and Irish collections.

Recent donors, all long-serving members of the BBS, include the late Rod Stern and Brian O'Shea, who both collected widely around the world and amassed large herbaria of more than 7000 and 4000 specimens respectively, including significant British material. The late Malcolm McFarlane, who had collected extensively in West Africa, bequeathed his herbarium of *c.* 1500 specimens that complements earlier collecting work in this region by Alan J. Harrington. These collections are now incorporated into the BM herbarium and databased label transcription data are available. We are currently processing the bequest of Howard Wallis, formerly the BBS Regional recorder for Surrey, a herbarium of *c.* 1500 specimens. Earlier this year the bryophyte herbarium of the late Michael Proctor arrived at the Museum, comprising an estimated 3000 specimens. Plans are underway for the incorporation of these specimens into the herbarium and their data to be made available digitally.

We have been working in the herbarium with two of our current Scientific Associates, Fred Rumsey and Jeff Duckett, to process and incorporate their herbaria so these specimens and their data are also available for research. Fred Rumsey's collections, which pre-date his time employed at the Museum and include collections

made as part of specific project work during later years, contribute *c.* 3000 specimens from the British Isles and wider Europe. More than 2000 British and Irish collections made by Jeff Duckett dating from the 1960s to the present day have also now been incorporated and databased.

There are many discoveries yet to be made in our collections and we would like to encourage BBS members to come and visit. Please contact us for further information about how the collections could support your projects.

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