



<http://www.natsca.org>

Journal of Natural Science Collections

Title: Where are they now? The records and collections of James Needham (1849 - 1913), amateur mycologist and bryologist of Hebden Bridge, Yorkshire. Locating his legacy and resources for further study.

Author(s): Baker, R. A.

Source: Baker, R. A. (2016). Where are they now? The records and collections of James Needham (1849 - 1913), amateur mycologist and bryologist of Hebden Bridge, Yorkshire. Locating his legacy and resources for further study.. *Journal of Natural Science Collections*, Volume 4, 34 - 39.

URL: <http://www.natsca.org/article/2330>

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.

Where are they now? The records and collections of James Needham (1849 - 1913), amateur mycologist and bryologist of Hebden Bridge, Yorkshire. Locating his legacy and resources for further study



Richard A. Baker

Received: 19/07/2016

Accepted: 19/12/2016

School of Biology, University of Leeds, Leeds, LS2 9JT, UK

email: R.A.Baker@leeds.ac.uk

Citation: Baker, R.A., 2016. Where are they now? The records and collections of James Needham (1849 - 1913), amateur mycologist and bryologist of Hebden Bridge, Yorkshire. Locating his legacy and resources for further study. *Journal of Natural Science Collections*, 4, pp.34-39.

Abstract

An account of James Needham (1849 - 1913) of Hebden Bridge, his records and herbarium collections in British museums, botanical gardens, and archives. Biographical details are given of Needham and his associates.

Keywords: James Needham, fungi, mosses, Calderdale, collections, biography

Introduction

On 17 December 1957, a letter was sent from the Royal Botanic Gardens, Kew, to Hebden Bridge Literary and Scientific Society (HBLSS), to say that Kew would be glad to accept their offer to donate part of James Needham's herbarium. Three months later, on 19 March 1958, the Honorary Librarian of HBLSS, Mr. E. W. Watson, wrote to Dr. G. Taylor, then Director at Kew, to inform him that Needham's herbarium was on its way. It was sent in 'one large parcel by registered post, and a larger carton by rail to Kew Bridge Station' (Clark, 2016a). This was around the time that the Natural History Section of HBLSS was ceasing operations. The collection, comprising specimens of fungi, was discovered in the HBLSS archive by Roy Watling in 1956.

Kew, however, is not the only institution to house material collected by James Needham. There are important records and specimens at the Leeds Discovery Centre (part of Leeds City Museum), and several other places also. This paper is an attempt to document the collections and records of James Needham.

Needham was one of many amateur botanists from Lancashire and Yorkshire, many of whom were concentrated in southwest Yorkshire in the late 19th and early 20th centuries. Although there have been several short articles about him (British Bryological Society, 2017) and his herbarium at Kew (including Palmer 1957, Watling 1958), and obituaries (e.g. Crossland, 1913), his collections have not been documented together. Needham demonstrates what can be achieved by hard work and application, and he has proved to be an interesting and important bryologist and mycologist within the artisan group, and a distinguished collector.

Brief summary of Needham's life and work in natural history

James (also called 'Jimmy' or 'Jimmie') Needham was born in Hebden Bridge, Yorkshire, on 19 March 1849. He was the eldest of 10 children of Thomas (1829 - 1885) and Mary (nee Greenwood). In 1871, he married Mary Ann Parker (1851 - 1889), and in 1899 married again, this time to Amelia Jones (1851/2 - 1905). He was a modest and unassuming



© by the author, 2016. Published by the Natural Sciences Collections Association.

This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit: <http://creativecommons.org/licenses/by/4.0/>.

man, and an excellent collector and lister, who would work at his hobby in all the available hours, day and night.

Like his father, he was an iron-moulder by trade, apprenticed to the Hartley and Crabtree foundry in Halifax, and it was only in his spare time that he was able to study botany. Needham took up these studies in his mid-thirties as a result of a botanical ramble in Hardcastle Crags with members of the local co-operative movement. His special collecting areas became those around Hebden Bridge, Pecket Well, and Hardcastle Crags, although many of his specimens indicate that he collected more widely. He knew 'every corner of Hebden Bridge' (Blockeel, 1981). His early interests were in mosses, and later in fungi.

In the late 1880s he was introduced to fungi by Charles Crossland, a prosperous Halifax butcher, who became a collaborator and close friend. Needham proved to be "an excellent and most helpful guide" (Crossland, 1913) as well an avid collector. He had a "keen eye, an alert mind and a retentive memory", and expressed himself with "an amusing frankness in his native dialect" (Crossland, 1913). From this period, he became an enthusiastic mycologist. Crossland and Needham published together (Crossland & Needham, 1904), and Crossland helped Needham in his hobby by providing him with books, a microscope, and introduced him to other mycologists. Needham also became a close friend of Henry T. Soppitt, and they worked together on rust fungi. Needham died on 14 July 1913 and was buried at Birchcliffe Baptist Chapel (now the Birchcliffe Centre). Obituaries included a lengthy local one in the Hebden Bridge Times, dated July 18, 1913. There are also references to him in *The Naturalist* (1957 pp. 89 - 92, and 1961 pp. 56 - 57).

Writing about his mycological work, Blackwell (1961) noted that Needham had "a flair for collecting", and after a hard day's work of 10 or 12 hours he would "fettle hisself up a bit" and would go to the woods and moors, observing and collecting mosses and fungi. He acted as leader of numerous parties and for well-known bryologists and mycologists. Blackwell quotes an obituary in the local newspaper of July 1913, "a somewhat diminutive but withal wiry figure with an intelligent and rather careworn face, bright eyes, high forehead and dark hair turned almost white in places". Watling (1982) describes his abilities as a collector, and notes that "his opinions were always valued" and that it was "people like Needham on whom professionals like Masee and Cooke (Mordecai Cubbitt Cooke 1825 - 1914)

depended". He describes how a group of men made up a "Yorkshire mycological trio: the professional (Masee), the middle-class naturalist (Crossland) and the amateur working class field naturalist (James Needham)" (Ibid.). Watling (1966) gives a useful historical account of the fungus and lichen flora of the Halifax area, which refers briefly to Needham.

Needham was a member of the Yorkshire Naturalist Union (YNU) Mycological Section, a founder member of the British Mycological Society, and an honorary member of both the Hebden Bridge Literary and Scientific Society (1907) and the Halifax Scientific Society (1911). In the latter society, his citation included the words 'in recognition of his services in investigating the 'Fungus Flora' of the district' (Halifax Scientific Society, 1911).

The Hebden Bridge Literary and Scientific Society (HBLSS) was formed in 1905, and in 1906 created a Natural History Section. It has been described as a 'locus classicus' for British mycology (Ainsworth, 1996). Needham was recorder for 'fungi and hepatics' between 1907 and 1911, although latterly he shared responsibilities for this work with William Nowell. Regarded as one of the founders of the main society and the founder of the Natural History Section of the HBLSS, Nowell became a specialist in tropical mycology (Baker, 2016). Society members at Hebden Bridge thought so highly of him that, following his death, the secretary was asked to write to the Yorkshire Naturalist Union suggesting that there might be a memorial to him: "a suitable form of memorial would be a scholarship at Leeds University in some Natural History Subject" (Hebden Bridge Literary and Scientific Society, 1913).

Authors interested in Needham's bryological work have not considered his collections in any detail. According to Blockeel (1981), "most of the new bryophyte records for the Flora of the Parish of Halifax were contributed by...James Needham", but he did not produce many scientific papers. Much of his work is recorded in local newspapers (Crossland, 1913) or as a co-author (Crossland and Needham, 1904). He also contributed fungal records to Crump and Crossland (1904), and found several species new to the British flora. *Gnomonia needhamii* Masee & Crossl. (now a synonym for *Klasterskya acuum* (Mouton) Petr.) was named after him, and was new to science (Yorkshire Naturalist Union, 1904). According to Blockeel (1981), his most important discovery in bryology was *Jubula hutchinsiae* (Hook.) Dumort (see also Slater, 1897). This rare bryophyte is named after the gifted Irish botanist Ellen Hutchins (1785 - 1815), who discovered it in western Ireland.

It is commonly called Hutchins' Hollywort. Needham first found it on 15 December 1896, in the Hebden Valley (first Yorkshire record. See Slater, 1897).

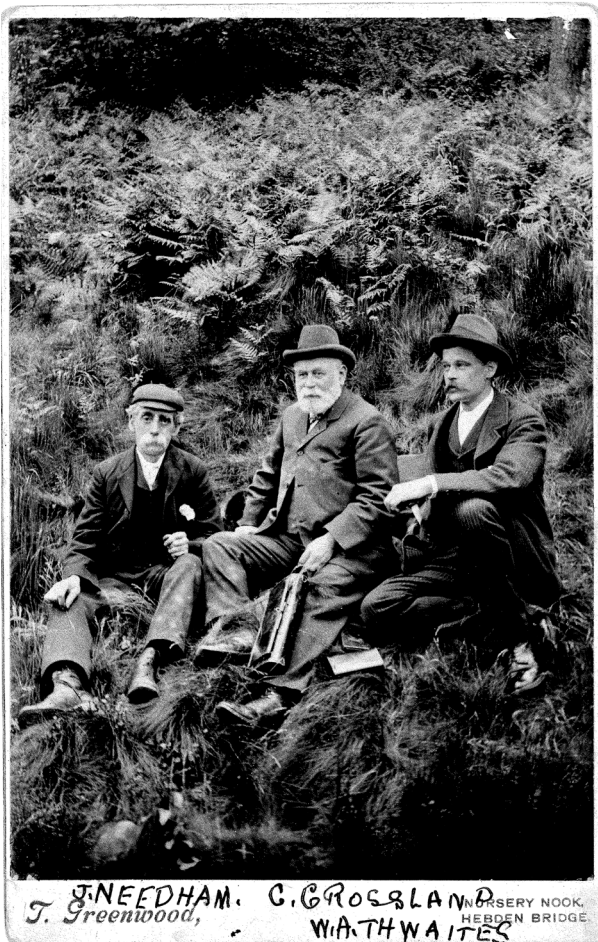


Figure 1. Group photograph in the field of (left to right) J. Needham, C. Crossland and W. A. Thwaites. The original is with the Needham papers at the Discovery Centre, Leeds. Permission to use and copyright ©Leeds Museums and Galleries. Acknowledgement to Rebecca Machin for help.

The collections

Needham's main collections are at Royal Botanic Gardens, Kew and Leeds Museums and Galleries. These, with others, are documented below. There may still be material in other towns and cities yet undiscovered and unrecorded.

Most herbarium collections are currently being electronically databased, but the work is not complete and lists therefore do not necessarily include all the specimens held by an institution. There are also revisions and changes in nomenclature, as well as some misidentifications, that have to be taken into account when detailed consideration is given to these collections. Palmer (1957), for example, working on Needham's collection of Gasteromycetes, wrote in

his introductory general statement that, "The true identities of old records are often doubtful and we usually have to accept these names in good faith, although we may have secret doubts". Of the 23 Gasteromycetes in the collection, seven were correctly identified and 14 mis-determined, and some with heavy insect damage were discarded.

Further complications arise when the collections of one person are handed over to another person, institution, or collection, and may then be included under the new person's name. This is the case with Needham also. Needham's specimens can thus be found in the collections of C. Crossland and H. T. Soppitt at Huddesfield. One example of how complicated it can become is the herbarium of Rev. George Sowden, Vicar of Hebden Bridge and a keen ornithologist and botanist. This collection went to the Mechanics Institute, then to the Secondary Education Committee in Hebden Bridge, and for a time was in the hands of Needham, who rearranged, remounted, and classified it (700 specimens in 11 volumes). During this work, many rare specimens were found (Anon., 1910).

Needham's documentation was mainly in the form of lists and notes with no supplementary material, such as drawings and descriptions, and when specimens were examined by later workers, many were found to be infested by insect pests or damaged in other ways. Watling (1958) expressed disappointment that "Needham did not preserve all his boletoid material, as many rare species are listed in his notes".

1. Leeds Discovery Centre at Leeds Museums and Galleries (LES)

Needham's specimens and documents were transferred from Bankfield Museum, Halifax, to Leeds in 1990 (Norris, 1997). They are now at the Discovery Centre in Leeds.

The documents include an exercise book in which he wrote the account of 'A ramble over the Hills'; a brown packet containing lists of species collected; several 'Collection Research data coding forms (C)' (presumably the Bankfield Museum proforma) which list, on separate sheets, the ferns, flowering plants, mosses and hepatics in the collections, with names of associated collectors; typed lists of same from the Hebden Bridge Literary and Scientific Society; and a typed list entitled 'Needham Herbarium – Phanerogamia'. (see LEEDM.C.1990.1 - letters, notebooks etc.)

The herbarium sheets consist of:

30 sheets of ferns (mainly West Yorkshire), 1874 - 1913.

25 sheets of flowering plants (mainly West Yorkshire), 1874 - 1913.

145 sheets of Hepatics (England, Scotland, Ireland), some ex-herbarium of John Nowell, 1892 – 1913. These include nine associated peoples' names.

825 sheets of mosses (England and other countries including Ireland, France, and Italy), mainly 1884 – 1913, but a small number date back to 1847. These include 21 associated peoples' names, and "many members of The Moss Exchange Club".

There is also bryological material collected by Needham, which was in the University of Leeds Herbarium and is now at the Discovery Centre, Leeds.

See also: Hartley et al. (1987) and Norris (1997).

2. *Hebden Bridge Literary and Scientific Society (HEB)*

a. Scrapbook/Album (for details see Henderson, 1992).

This album was "Presented to Mr. Will Ashworth in token of respect by his friend James Needham, Ward End, Hebden Bridge", and dated October 1912 (Anon., n.d.).

Ashworth was a printer and publisher in Hebden Bridge in partnership with a Mr. Kershaw (Kershaw and Ashworth Ltd), and the premises were also the offices of the Hebden Bridge Times.

The scrapbook contains over 180 mosses, 20 liverworts, and 30 vascular plants (Henderson, 1992). It also includes around 30 pages of newspaper cuttings from The Halifax Courier, Hebden Bridge Times, etc., about Needham, as well as reports from the Hebden Bridge Times of rambles around Hebden Bridge, plus some obituaries of Needham. A copy of Crossland's obituary of Needham (1913) is included.

b. Four boxes containing small, transparent plastic envelopes with records and specimens of lichens, liverworts, mosses, and fungi presumed to be associated with Needham. The collection was sorted and re-packed into the transparent envelopes.

c. Note on James Needham by M. W. Sykes (Sykes,

n.d.), entitled 'James Needham of Hebden Bridge 1849-1913', brief biographical note on Needham, and transcription of 'A ramble over the Hills' by James Needham, which is a description of a walk undertaken in the 1890s. A copy of this exists in Leeds Discovery Centre.

d. Natural History Catalogue (in the Hebden Bridge Local History Society Archive).

NHS2: Manuscript lists of mosses, manuscript list of records dated 1893, generic list of Musci and index, printed list of Phanerogamia.

NHS26: Letter dated 27 February 2004 that gives details of Needham collection, plus a copy of Henderson (1992).

3. *Huddersfield - Tolson Memorial Museum Huddersfield (HDD)*

There are 50 specimens at the museum collected solely by James Needham, or by him in collaboration with H. Pickles. 10 of these are fungi, six are mosses, and the remainder are vascular plants (Yeates, 2016). The fungi are part of the H. T. Soppitt collection, and the vascular plants are part of the C. Crossland botanical collection.

4. *Royal Botanic Gardens (K)*

A manuscript catalogue (11 pages) of James Needham's herbarium, entitled 'Catalogue of Fungi in Needham's Herbarium, Secondary School, Hebden Bridge, December 1910' (Clarke, 2016b), is held in the archives at Kew but lacks the detail of when and where the specimens were collected. See Anon. (1960), Palmer (1957), and Watling (1958, 1982).

115 Needham specimens are listed on the Mycology database at Kew ('Herbtrack'), some of which are ex-herbarium of C. Crossland. This might not represent all the material belonging to Needham to be found in this collection, as the digitisation is incomplete at present. All the specimens were collected between 1894 and 1912, and determined by Needham and others including C. Crossland., C. H. Andrews, J. Nannfield, and E. M. Wakefield. The collection includes some types: *Calonectria vermisporea* Masee & Crossl., and *Peniophora crosslandii* Masee. The database gives little information on location and habitat.

The Kew mycological collection, discovered at Hebden Bridge in the HBLSS archives by Roy Watling in 1956 and handed over to Kew, is referred to by Watling (1982).

5. *Amgueddfa Cymru - National Museum Wales (ACNMW)*

There are six specimens listed in the database of ACNMW, all bryophytes (five mosses and one liverwort), which were collected from southwest Yorkshire (Hebden Bridge, Hardcastle Crag) by Needham between 1896 and 1904. Two have Crossland listed as first collector and Needham as the second, and four were purchased by the museum. They are listed as follows:

Sphagnum fallax (H. Klinggr.) H. Klinggr.
S. subnitens Russow & Warnstorf
Plagiobryum zieri (Hedw.) Lindb.
Racomitrium aciculare (Hedw.) Brid.
Philonotis fontana (Hedw.) Brid.
Jubula hutchinsiae (Hook.) Dumort).

Harrison (1985) lists 23 bryophytes in his catalogue.

6. *Natural History Museum, London (BM)*

There are 19 records of Bryophytes collected by Needham around the 1900 period at the Natural History Museum (NHM), from either midwest or southwest Yorkshire. However, since only around 10% of specimens at this institution are databased, it is likely that many more of Needham's lichens, mosses, and liverworts will be recorded in due course. There is one lichenicolous fungus on the database so far (*Tichothecium gemmiferum* (Taylor) Körb.), collected by Needham in Calderdale in 1903. This parasite has not been revised in recent years, and both the name of the host and the parasite may change when this has been carried out.

7. *Bolton Museum (BON)*

Bolton museum holds a total of 145 mosses and fungi specimens attributed to Needham, but has no correspondence (Stenhouse, 2016).

8. *West Yorkshire Archives, Calderdale (based at Halifax Library)*

There are a number of letters from James Needham to William Bunting Crump relating to botanical matters, written in the 1890s, within the West Yorkshire Archives (WYC:1830/7/1 (1895-1908) and WYC:1830/7/2 (1909-1912)).

Conclusion

James Needham was an important amateur botanist, and a prolific collector. This article has brought together information on his specimens and associated archival material for the first time. It demonstrates the diversity of his collections, and

how they have been dispersed among different institutions. Judging by the amount and variety of material listed, including letters, lists, and note books, Needham and his collections deserve a more comprehensive study and evaluation than has yet been carried out.

Acknowledgements

West Yorkshire Archives Services, Calderdale (at Halifax), Hebden Bridge Local History Society, Leeds Discovery Centre, and the following individuals: Begoña Aguirre-Hudson, Louise Clarke, Steve Gill, Albert Henderson, Mark Lawley, Rebecca Machin, Diana Monahan, Katherine Slade, Don Stenhouse, Holger Thues, and Chris Yeates.

References

- Ainsworth, G.C., 1996. *Brief biographies of British mycologists*. Stourbridge: British Mycological Society.
- Anon., 1910. *A valuable herbarium. Hebden Bridge Times, 4 February 1910*. [manuscript] Newspaper Cuttings. NC3. Hebden Bridge: Hebden Bridge Local History Society Archive.
- Anon., 1960. Review of the work of the Royal Botanic Gardens, Kew, during 1958. *Kew Bulletin*, 14(1), pp.1-28.
- Anon., n.d. An album on James Needham. [manuscript] Special Collections. SPC 32/L. Hebden Bridge: Hebden Bridge Local History Society Archive.
- Baker, R.A., 2016. The formation and early years of organized natural history in Hebden Bridge, Yorkshire and the influence of William Nowell (1880-1968). *The Naturalist*, 141, pp.137-144..
- Blackwell, E.M., 1961. Links with past Yorkshire mycologists. *The Naturalist*, 86, pp.53-66.
- Blockeel, T.L., 1981. The early bryologists of southwest Yorkshire. *Bulletin of the British Bryological Society*, 38, pp.38-48.
- British Bryological Society, 2017. *Bryohistory* [online] Available at: <<http://rbg-web2.rbge.org.uk/bbs/learning/bryohistory/bryohistory.htm>> [Accessed 4 January 2017]
- Clark, L. 2016a. Personal communication, file reference QG 28 (20 May 2016).
- Clark, L., 2016b. Personal Communication (24 May 2016).
- Crossland, C., 1913. In Memoriam James Needham (1849-1913). *The Naturalist*, 38, pp.294-298.
- Crossland, C. and Needham, J., 1904. The plants of Pecket Wood. *The Naturalist*, 29, pp.165-175.
- Crump, W.B. and Crossland, C., 1904. *The Flora of Halifax*. Halifax: Halifax Scientific Society.
- Halifax Scientific Society, 1911. *Minutes 1906-*

- 1912, *Halifax Scientific Society Committee meeting March 1, 1911*. [manuscript] Halifax Scientific Society, Records. WYC: 1830/1/1/9. Calderdale: West Yorkshire Archive Service.
- Harrison, S.G., 1985. *Index of collectors in the Welsh National Herbarium*. Cardiff: The National Museum of Wales.
- Hartley, M.M., Norris, A., Pettitt, C.W., Riley, T.H., and Stier, M.A., 1987. *Register of Natural Science collections in Yorkshire and Humberside*. Leeds: Area Museum and Art Gallery service for Yorkshire and Humberside.
- Hebden Bridge Literary and Scientific Society, 1913. Minutes of General Committee, October 13 1913. In: *General Society Minute Book 13th Oct 1905 to 23rd Nov 1931* [manuscript] Hebden Bridge Literary and Scientific Society. HBLSS 1/2. Hebden Bridge: Hebden Bridge Local History Society Archive.
- Henderson, A., 1992. Hebden Bridge Literary and Scientific Society. (1) James Needham (1849-1913). *Bulletin of the Yorkshire Naturalists' Union*, 18, pp.25-28.
- Massee, G. and Crossland, C., 1905. The fungus flora of Yorkshire. *Botanical Transactions of the YNU*, 4, pp.1-396.
- Norris, A., 1997. The Leeds City Museum its Natural History Collections. Part 3 The Botanical Collections. *The Biology Curator*, 9, pp.5-8.
- Palmer, J.T., 1957. The Gasteromycetes in James Needham's Herbarium. *The Naturalist*, 82, pp.89-92.
- Slater, M.B., 1897. *Jubula hutchinsiae*, a rare hepatic, new to Yorkshire. *The Naturalist*, 22, p.128.
- Stenhouse, D., 2016. Personal communications (24 May 2016).
- Sykes, M.W., n.d. *James Needham of Hebden Bridge 1849 - 1913*. [manuscript] Miscellaneous. MISC 54a/S. Hebden Bridge: Hebden Bridge Local History Society Archive.
- Thiers, B., 2017. *Index Herbariorum: A global directory of public herbaria and associated staff*. *New York Botanical Garden's Virtual Herbarium*. [online] Available at: <<http://sweetgum.nybg.org/science/ih/>> [Accessed 19 December 2016]
- Watling, R., 1958. Boleti and Chanterelles in James Needham's Herbarium. *The Naturalist*, 83, pp.129-134.
- Watling, R., 1966. *The fungus and lichen flora of the Halifax Parish 1775- 1965*. Halifax: Halifax Scientific Society.
- Watling, R., 1982. The British Mycological Society: The Yorkshire connection. *The Naturalist*, 107, pp.121-129.
- Yeates, C., 2016. Personal communications (18 May 2016).
- Yorkshire Naturalist Union, 1904. New fungi. *The Naturalist*, 564, pp.1-8.