William Borrer of Henfield, botanist and horticulturalist, 1781-1862¹

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ABSTRACT

A short account is provided of the life of William Borrer and of his botanical and horticultural activities.

The first half of the 19th century was a truly great period in English botany. In 1814 Sir J. E. Smith completed his monumental *English Botany* (usually credited to Sowerby by reason of the plates). H. C. Watson approached the subject from a topographical basis and produced his Geographical Distribution of British Plants in 1832. C. C. Babington's Manual of British Botany came out in 1843 and G. Bentham's Handbook of the British Flora, the forerunner of our old friend 'Bentham and Hooker', in 1858. In all these and many other works of the period we find frequent acknowledgments to the records and information provided by William Borrer of Henfield. Borrer was indeed not only the greatest Sussex botanist but also undoubtedly one of the leading botanists of his day. New discoveries were constantly referred to him, often only to find that he had already recorded the plant himself some years before, and his advice was frequently sought on the identification and arrangement of critical species. Nevertheless his name is little known outside botanical circles. and even there it is by no means as familiar as it should be. His retiring character has probably contributed as much as anything to his undeserved obscurity. He wrote no books of his own but was a frequent contributor to the botanical journals and regularly corresponded with such men as Sir Joseph Banks, Dawson Turner, Sir William Jackson Hooker, Sir Joseph Dalton Hooker and Charles Cardale Babington, all of whom esteemed him for his wide knowledge and reliable observation.

William Borrer was born at Henfield in Sussex on the 13th June 1781. His father, also William, soon afterwards moved to Pakyns Manor, Hurstpierpoint, where in 1801–2 he served as High Sheriff for Sussex and raised a troop of horse against the possibility of a French invasion. Young William Borrer was a studious boy by nature and after a short period of private schooling he left to study French, Latin, Greek and Theology under private tutors. His father wanted him to take up his own calling of agriculture but he himself at first wanted to become a doctor, and it is notable that at least two of his forebears had been surgeons at Rusper, near Horsham, in the early part of the previous century.

¹ A short note based on this paper has already been published in the Sussex Trust for Nature Conservation News Letter, 41, December 1972, by J. F. Sutcliffe.

At this time William Borrer senior was engaged in supplying forage for the troops stationed in the county during the Napoleonic War, being assisted by his son who made frequent journeys on horseback through Sussex to visit the various camps. On these excursions young Borrer's interest was aroused by the birds, plants and animals he observed and many of his more notable Sussex records were made during this early period of his career. To the *Botanist's Guide through England and Wales* by D. Turner and L. W. Dillwyn, published in 1805, he contributed a comprehensive list for Sussex of flowering plants, ferns, fungi, lichens and algae, together with critical notes, as well as records for Kent, Surrey and Hampshire, all made before he was twenty-five.

Borrer's ability as a botanist was quickly recognised. In 1805 he was elected a Fellow of the Linnean Society and the following year he was one of the sponsors of his friend W. J. Hooker to the same Society. He also became a Member of the Royal Society and of the Wernerian Society of Natural History of Edinburgh.

In 1810 he married Mary Hall, the daughter of Nathaniel Hall, a banker of Brighton, and moved to Henfield where his father had a house built for him at Barrow Hill, standing on a crest of the fertile Greensand Ridge and surrounded by several acres of parkland. Here, with ample leisure and an adequate income, he was able to devote himself entirely to his botanical interests. He became acquainted with D. Turner, the Yarmouth banker and leading authority on the cryptogams, who introduced him to Joseph Woods (after whom the fern *Woodsia* R.Br. was named and the author of *The Tourist's Flora* (1850)), who collected extensively around Lewes, and Edward Forster, who gave his name to Forster's Woodrush, *Luzula forsteri* (Sm.) DC.

Another famous and somewhat controversial botanist of those days, Hewett Cottrell Watson, a pioneer on the subject of plant distribution and begetter of the 'vice-county' system of distribution still in use today, payed (Watson 1872) a just tribute to Borrer's abilities as a botanist, though his opportunities for travel he otherwise rather envied: 'William Borrer... was a skilled botanist. an exact and cautious observer, a truthful describer and faithful recorder of what he saw. He would travel long distances expressly to see plants in their actual places; especially so, in order to see with his own eyes the reported localities of newly discovered or rare plants; to judge for himself at first-hand as to the true nativity of the plants seen in their places of growth'. Watson went on to deplore, as we all must, the fact that Borrer left no book of his own and that this wealth of recording should be so scattered and difficult of access. It is in fact only through the acknowledgments of other writers such as Watson and Babington that Borrer's true stature as a botanist emerges. To him the truth of a fact was of infinitely more importance than any personal credit he might gain from its discovery, and it is therefore all the more gratifying to read the generous tributes to him by men whose names were to become far better known in the botanical world.

In his search for new or rare species Borrer spared no pains to check his records. When travelling by train he would, on observing a new plant by the side of the track, get out at the next station regardless of his destination and walk back to confirm his discovery. He thus found *Barbarea stricta* by the side of the line between Sheffield and Halifax. On learning of an alleged new site for *Cypripedium calceolus* in Westmorland he visited the site in three successive years during the flowering season but failed to find it. Apparently it

was a false report put about by a local guide, who for a time did quite well by offering to take visiting botanists to the supposed site and then expressing the utmost disappointment at not finding the plant.

Though he travelled extensively throughout Britain, Borrer seems to have made only one trip abroad, to Normandy, of which he left no record. In 1810 he accompanied his friend W. J. Hooker on a fruitful and adventurous journey through the Scottish Highlands. Borrer must have been one of the few noteworthy Victorians who did not keep a Journal, and it is from Hooker's letters to Turner (Allan 1967) that we learn that among other misadventures they were taken by the local inhabitants for French spies. Memories lingered long in the Highlands and strangers were still regarded with suspicion by the natives, who could not understand why anyone should take to the heather for pleasure.

Apparently Borrer first met C. C. Babington at Bath in 1834. Borrer had asked to be shown the site of a species of *Euphorbia* and in return gave Babington a number of specimens from Wales. They dined together and, according to Babington (1897), 'had a great deal of most interesting botanical conversation'. Thereafter they went on many long excursions together, into Essex and East Anglia, Devon, Cornwall, Wales and elsewhere, while Babington was a frequent visitor to Henfield and was taken by Borrer and his family on botanical excursions through Sussex. Babington had a high opinion of Borrer, whom he described as 'a very great authority', and named Borrer's Salt Marsh Grass, *Glyceria borreri* (Bab.) Bab. (now *Puccinellia fasciculata* (Torr.) Bicknell), first detected by Borrer, 'as a slight acknowledgment of the many favours received from him'. Borrer was able to return the compliment with the Wild Leek, *Allium babingtonii* Borrer. It is a pity that the *International Code of Botanical Nomenclature* has since deprived Borrer of his *Glyceria borreri* as well as some of the others mentioned below.

Many of Borrer's more notable discoveries were made nearer home. These include *Isnardia palustris* at Buxted in 1827 and *Leersia oryzoides* at Henfield Levels in 1844, a first British record. In W. A. Clarke's *First Records of British Flowering Plants* (1897) Borrer is credited with 21 records, and it should be emphasised that these are literally the first published records of the plants in Britain. The localities range from Sussex to Cornwall and Caithness, the dates of the discoveries extend over a period of 44 years, and the plants cover almost the whole range of the British flora. Such a record from one man in a country as well botanised as Britain in the 19th century is a truly remarkable achievement and gives a very fair picture of the range and scale of his work.

Borrer has only one book to his credit, the modestly titled Attempt at a History of the British Lichens, written in collaboration with his friend D. Turner in 1813, but owing to the death of the intending publisher it was not published until 1839 and then had only a private circulation. To the works of other botanists he was a frequent and welcome contributor, always happy to tackle the more critical groups. He described the lichens as well as the genera Salix, Rosa and Rubus for Smith's English Botany (1790–1814), and Myosotis, Rosa and Rubus for W. J. Hooker's British Flora (1830). His elucidation and arrangement of Salix was adopted by W. J. Hooker for the British Flora, and by J. C. Loudon in his Arboretum et Fruticetum Britannicum (1838), for whom he also provided information on Quercus. Loudon, in his 2nd edition, 1844, listed 81 named species of Salix as growing in Borrer's garden at Henfield.

His interest was not confined to the flowering plants but he was equally at home among the ferns, lichens and algae. He made valuable contributions to E. Newman's *A History of British Ferns* (1840) and has several discoveries of rare seaweeds to his credit. The fern *Dryopteris borreri* Newm., the seaweed *Callithamnion borreri*, the desmid *Didymoprium borreri* (Ralfs) Ralfs, the rose *Rosa borreri* Woods, and the hybrid woodrush *Luzula* × *borreri* Bromf. ex Bab. are some of the plants named after him.

Further evidence of the esteem in which Borrer was held by his contemporaries, and the extensive range of his knowledge, is shown in the dedication to him by John Ralfs of his classic work, *The British Desmideae* (1848), in which he writes: 'As I have been mainly indebted to your assistance and encouragement for the successful completion of the present Monograph, I feel it a grateful duty to dedicate to you the collected fruits of my investigations, and, sincerely thanking you for the kind permission to associate them with a name so honourably distinguished in Botanical Science'. From these and other references Borrer emerges as a man of wide attainments, a great enthusiast and stimulating companion.

In addition to his main interest in the native flora of this country, Borrer was also an enthusiastic gardener, and as soon as he was installed at Barrow Hill he began to build up a remarkable collection of foreign plants, to plant exotic trees, and to cultivate orchids, grape-vines, nectarines and peaches in heated greenhouses. His gardener, Charles Green, whom he trained to become a first-class botanist, made a list of over 6000 species growing at Barrow Hill in 1860. It is possible that some of the rarer plants now to be found in the Henfield area, such as some of the large-flowered species of *Geranium*, may have been introduced by Borrer or be escapes from his garden. For example he planted *Pinguicula vulgaris* on Henfield Common, though it has since disappeared; but other interesting plants, such as *Pulicaria vulgaris, Potentilla palustris, Dactylorhiza praetermissa* and the two large-flowered fumitories, *Fumaria capreolata* and *F. muralis* subsp. *boraei*, are almost certainly native to that area.

Borrer took little part in public affairs, though he was appointed a J.P. and was a generous benefactor to the town and people of Henfield. He was keenly interested in education and helped to establish the National Schools there. He also built a school on his own land for girls and infants and personally undertook the education of three or four boys in his own home and afterwards found them suitable employment. He enlarged the church and in 1837, in collaboration with another local landowner, Mrs Lucretia Wood of Chestham, he contributed £2000 to augment the Vicar's stipend in order to improve the church services, which, under a succession of absentee Vicars, had become neglected. In the same year the Rev. Charles Dunlop, an energetic and popular young clergyman, was appointed Curate at Henfield and did much to revive the spiritual life of the town. In the following year he married Borrer's daughter Fanny. Borrer gave them the house and estate of Red Oaks situated south of the Church. The property was originally known as Hooks, from an ancient field name, but was renamed by Borrer after the American Red Oaks he planted there. Charles Dunlop became Vicar in 1849 but died two years later at the early age of thirty-eight. The property remained in the occupation of descendants of the family until 1946, when the name reverted to Hooks. In 1969 it was acquired by the Gardeners' Royal Benevolent Society as a home for retired gardeners, and it is intended to lay out the garden as it was originally planned by Borrer and the Dunlops, appropriately reviving the name of Red Oaks. The home was officially opened by the Duchess of Gloucester on 9th May 1973.

In 1851 Borrer's health began to fail and his excursions with his friend Babington came to an end, but he retained his scientific interests and kept in close touch with his botanical friends until his death on the 10th January 1862. His house and grounds remained in the possession of his family for the next two generations but by 1938 the house was empty and the garden abandoned. The house had been altered and enlarged in later years but the study with its wire-enclosed bookshelves where Borrer kept his botanical library was still as he had planned it. During the 1939-45 War the property was occupied by the Army and suffered considerable damage. As late as 1956 the garden still contained many of the original plants growing in wild profusion, a most beautiful sight being a long path lined with many species of Geranium, among them pink, white and mauve-flowered plants of G. sylvaticum, not known wild in Sussex, the blue G. pratense, G. nodosum, G. phaeum, and the pink G. endressii and its hybrid with G. versicolor. Other rare and interesting plants still growing there were Tellima grandiflora, Trachystemon orientalis, Allium paradoxum and A. roseum, Lamium maculatum in great profusion, a green-flowered variant of Heuchera brizoides, and a vigorous, pale mauve hybrid Symphytum. Several of these species have since established themselves outside and have now become an integral part of our local flora.

Among the exotic trees introduced by Borrer were Sequoiadendron giganteum, Araucaria araucana, Ailanthus altissima, Carya sp., and Zelkova carpinifolia, with its curious short trunk dividing into a dozen or more separate stems a foot or two from the ground. About 1960 the land was developed as a building estate but fortunately a number of the trees, including the Zelkova, have been preserved and incorporated into the lay-out of the estate.

Several other members of Borrer's family shared his love of nature. His eldest son, William Borrer III, frequently accompanied his father on his botanical excursions but is better known as an ornithologist and author of *Sussex Birds*, published in 1891, a valuable account of the birds of this county during the previous century, even though all too many of the earlier records of rarities are merely of the dates when shot. Another son, Dawson Borrer, was responsible for the Cedars of Lebanon growing in a plot of ground at the eastern end of King James's Lane; they were brought back by him as seeds from the Lebanon in 1843. Another member of the family, the late Mr Clifford Borrer, who died in 1962, was well-known in Norfolk as an ornithologist and writer on natural history subjects. He was directly descended from Nathaniel Borrer, a younger son of the botanist.

Although William Borrer's career as a botanist may not have been so wideranging as that of the Hookers, there is in fact ample material for the fulllength biography that he undoubtedly deserves. His herbarium is at Kew, together with his considerable correspondence with his friend W. J. Hooker and numerous other notes and letters, besides his own contributions to *The Phytologist* and Babington's numerous references to him in his *Memoirs*, *Journal and Botanical Correspondence* (1897), all of which place him high among the leading botanists of his generation.

Mention has been made of other members of the family who were notable in many branches of natural history, and a recent history of the Borrers by a

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friend of the family was in fact on the point of completion but was unfortunately brought to a halt by the death of the author. For the moment we cannot do better than to close with that very happy description of William Borrer by H. C. Watson (1872) which every botanist should take to heart: 'an exact and cautious observer, a truthful describer and faithful recorder of what he saw'.

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