The Cambridge British Flora (1914–1920)

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ABSTRACT

The reasons for the failure of *The Cambridge British Flora* after the publication in 1914 and 1920 of the first two volumes have been investigated. The financial constraints imposed on Cambridge University Press by the First World War were important, but the personal, social and financial problems of the author, Charles Edward Moss, were crucial, since they led to his emigration to South Africa in 1917 and his subsequent loss of interest in a project that belonged to his life in England.

KEYWORDS: biography, bibliography, history, Charles Edward Moss, Edward Walter Hunnybun.

INTRODUCTION

At the British Association for the Advancement of Science meeting in Sheffield in 1910, Professor J. W. H. Trail, Regius Professor of Botany at the University of Aberdeen, gave the Presidential Address to the Botanical Section. In surveying the Floras of Britain then in use, he argued that there was a pressing need for a new definitive work (Trail 1910). In his view, both teaching and research would be stimulated by the production of an up-to-date, encyclopaedic work in which the nomenclature was clarified. He suggested that such a Flora would probably be in the form of monographs by specialists presented in a uniform style.

The need for a new Flora was already widely felt. In 1898, Rev. E. F. Linton's intention to produce just such a work was announced (Anonymous 1898), although nothing came of that particular proposal. *The Cambridge British Flora*, under the editorship of C. E. Moss, was planned as a ten-volume encyclopaedic survey of the flora of Britain, with accounts of critical genera contributed by specialists. The two published volumes are of a very high standard, and it is therefore of considerable interest to discover why the project was abandoned.

In considering the fate of *The Cambridge British Flora*, we have consulted a number of primary sources, including documents in the archives of the University Library, Cambridge, the Department of Botany, Natural History Museum, London, and the departments of plant sciences in the universities of Cambridge, Oxford and Witwatersrand (South Africa). The relevant minute-books of the meetings of both the Syndics and the Business Sub-Syndicate of Cambridge University Press (hereafter 'the Press') were studied. These primary sources were used, together with contemporary journal articles, to investigate the preparation and publication of each volume of the Flora, the reaction of the botanical community, and the eventual abandonment of the project.

CHARLES EDWARD MOSS (1870–1930)

Moss, the youngest son of a nonconformist minister, was born in Hyde, Cheshire on 7 February 1870 (Crump 1931; Desmond 1994). His interest in botany was stimulated in 1893 when, convalescing from a pulmonary abscess, he was ordered to spend a large amount of time out-of-doors. He occupied himself with long walks over the Halifax moors, alone or in the company of members of the Botanical Section of the Halifax Scientific Society, which he had joined in 1892, and within which he soon became a prominent figure.

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In 1895, he entered Yorkshire College, Leeds (then part of the Victoria University) as a Queen's Scholar, and during this period was an editor of the *Halifax naturalist*, in which he published several botanical papers. In 1898 he began work at Fairweather Green School, but kept up his association with the college where he worked with W. G. Smith, mapping the vegetation associations of the West Riding using techniques pioneered by Smith's brother Robert in the Pentland Hills.

He became an assistant master at Sexey's School, Bruton, Somerset in 1901, and began to study the vegetation distribution of the area. At the end of 1902, he was appointed lecturer in biology at Manchester Municipal Training College. This post was less well paid, but he could continue to work for a higher degree, despite teaching every week day and several evenings.

The Central Committee for the Survey and Study of British Vegetation was set up by Tansley and Smith in 1904 (Sheail 1987), and Moss became a prominent member. His contribution to the committee and *Types of British vegetation* (Tansley 1911) was invaluable (Tansley 1931).

In 1907, Moss was awarded a doctorate by the University of Manchester for his work in Somerset (Moss 1907), and the Back Bequest by the Royal Geographical Society for his work on the vegetation of the Pennines (Moss 1904, 1913) which he had largely carried out at weekends and during the vacations. At the end of the year he was offered the post of Curator of the Herbarium at the University of Cambridge, which he took up in January 1908.

It is only at this point that his research interests turned to taxonomy. Whilst in Cambridge Moss lectured and led field expeditions, and had a marked effect on many of his students (e.g. Levyns 1977). His lectures were described as "not brilliant . . . but full of sense and philosophy" (Ramsbottom 1931). Soon after his arrival he proposed that he should write a new 'student's Flora' of the British Isles.

EDWARD WALTER HUNNYBUN (1848–1918)

Edward Walter Hunnybun, a Huntingdon solicitor, encouraged by the praise of his many botanical correspondents, conceived the idea of turning his hobby of making lifelike pen-and-ink sketches of plants into a 'lifework'. He decided to attempt to draw all the species in the British flora, and set about this task with single-minded determination and attention to detail. As his correspondence with numerous collectors and field botanists testifies, he never became skilled in taxonomy, but his network of supporters and advisors on different genera (e.g. Ley on *Rosa*) helped to ensure that he drew representative, correctly identified specimens of each species and subspecies. It was important that each specimen be representative, since he did not make an idealised drawing, but drew the individual specimen before him; he was fond of saying "I only draw what I see" (Wilmott 1920). His great enthusiasm for this task is shown in his daily dawn bicycle rides during the collecting season in search of specimens. Over the years, boxes of his exquisite drawings, drawn life-size in a brownish ink over a preliminary pencil sketch, travelled around the country, to be admired and commented on by his many correspondents.

As early as February 1901, F. J. Hanbury wrote to Hunnybun about "the possibility of publishing the drawings as a separate volume, reproduced by photographic means".¹ On 4 June 1903, this possibility became more likely, when a selection of 100 of his drawings was displayed at the Linnean Society (Anonymous 1903). If sufficient support was forthcoming, the intention was to issue fascicles of the drawings (Anonymous 1904). Although the pictures were much admired for their artistic merit, G. C. Druce questioned the advisability of publishing them for scientific purposes, since he considered the drawings to be scientifically inadequate, being "defective in detail" (Druce 1931).

Hunnybun considered bequeathing them to a private museum, but it is clear that he really desired publication of at least a selection (e.g. Anonymous 1904), and in February 1908 J. Groves wrote that "my brother and I have talked over the idea you mentioned of offering your splendid... drawings

... to the Hon. Walter Rothschild for his museum *if he would agree to publish them*² (our italics). Sometime during the period 1908–1909 the drawings were donated to the Cambridge University Botany School (now the Department of Plant Sciences). The actual date is unclear, but by 1909 they were certainly in Moss' hands, for during that year he discussed with J. Ramsbottom (a botanical friend from his Halifax days) whether they should produce a Flora based on the drawings (Ramsbottom 1931). Nothing seems to have come of this particular discussion, but Moss, unlike Druce, obviously considered Hunnybun's work worthy of publication.

PLANNING THE CAMBRIDGE BRITISH FLORA

When Hunnybun's drawings arrived in the Botany School, Moss conceived an altogether bolder plan than a 'student's Flora', deciding to write a complete and definitive account of the British flora classified according to Engler (1898). Hunnybun's drawings would be used to illustrate this work. As noted above, Moss initially considered preparing the work jointly with Ramsbottom (1931) or with G. C. Druce, his 'opposite number' at Oxford University's Fielding Herbarium (Druce 1931).

On 20 January 1911, Moss' proposal for a Flora, to be entitled *The Cambridge British Flora*, was favourably considered by the Syndics of the Press.³ He had at this point apparently changed his plans, making it more of a solo project³, with expert contributors writing the accounts of critical genera. Moss' decision can partly be explained by his deep belief in and commitment to the project, and his desire to see it completed to his own high standards. His conviction that his own views were correct, and that those who disagreed with him were, at best, ill-informed, a characteristic even his close friends attributed to him (e.g. Ramsbottom 1931), would have made any joint undertaking fraught with difficulty, especially if it involved the forthright and idiosyncratic Druce. Sole control and editorial power over the submitted manuscript would, therefore, have had great appeal to Moss. Druce (1931) suggested that Moss made the move to sole authorship because he felt that such a project might help him become a Fellow of one of the Cambridge colleges. Given his hardworking and ambitious nature this is a possibility, but it should be noted that Druce made this statement after they had quarrelled in 1915 (see below).

The contract with the Press was finally signed on 19 January 1912.⁴ An advance notice (Anonymous 1911) makes much of Moss' achievements and publications, and concludes "no better choice could have been made".

On 7 March 1912, a meeting of potential contributors was held in the British Museum (Natural History). Here Moss' habitual authoritarianism did not go down well. Moss wrote to Rendle⁵ (Keeper of Botany, British Museum (Natural History)), who had chaired the meeting, expressing his thanks for the "perfect impartiality with which you conducted what at times threatened to become a rather warm meeting!". Apparently this was a common feature of meetings involving Moss, at which he often "caused an uncomfortable liveliness" (Ramsbottom 1931). During the meeting (Anonymous 1912) there was much discussion about the citation of synonyms, etc., and Moss "undertook to consider" the points raised. Druce "entered a formal protest" (and in doing so appears to have spoken for the 'establishment') against "Germanising our flora" by adopting the Englerian system (Anonymous 1912). However, the meeting generated enthusiasm for, and interest in, the project and showed Moss firmly in charge. E. S. Marshall⁶ describes himself as "much impressed by Moss' business aptitude . . . his clearness of view and botanical ability".

In October 1912, Moss compiled and sent out a list of 84 "Instructions to Contributors", which read more like an examination rubric than guidelines to acknowledged experts. Moss' arrogance in correcting the contributions that were eventually offered and even, on occasion, rejecting them as inadequate, did nothing to win him friends. His editorial style was extremely high-handed. For example, Druce⁷ suggested that Linton withdrew his account of *Salix*, intended for volume ii, "choked off" and found Moss "most difficult to work with". However, a letter from Moss to Linton⁸ was unambiguously a rejection, couched in schoolmasterly terms, describing the account as not sufficiently up-to-date in nomenclature. Many of the older British botanists were unwilling to accept such treatment and therefore "the editor was left with additional preparation and additional criticism" (Ramsbottom 1931).

The Cambridge British Flora was never intended to be anything other than a specialist book. The Press only intended to print 1250 copies before destroying the type.⁹ This initial number was revised downwards to 1000.¹⁰

Moss had grandiose ideas about the format of the work, initially planning to include descriptions, maps and numerous photographs, as well as the expensive and complex plates of Hunnybun's drawings. This led to conflict with the Press. In the spring of 1913, a debate about whether to bind the plates with the text (as Moss desired) or in separate volumes (as the Press proposed) escalated to

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the point where Moss threatened to take the book elsewhere. The lively correspondence between A. C. Seward (Professor of Botany at Cambridge as well as a Syndic at the Press), attempting to defend Moss, and the Press' representative A. R. Waller, shows that it was indeed a major problem.¹¹ Throughout this period Seward supported Moss, speaking for him to the Press and excusing his abruptness and occasional outright rudeness. Moss eventually accepted the Press's preferred scheme, possibly under pressure from Seward.

THE ILLUSTRATIONS

In the summer of 1913, Hunnybun retired owing to increasing ill-health; he was a severe asthmatic and until his death in 1918 moved frequently to different parts of the country trying to find a climate that suited him. Now he could concentrate on completing and refining his drawings, replacing some with others drawn from better or more representative specimens. This habit of redrawing was to lead to problems with the Press.

The preliminary sketches, drawings and the copy of the *London catalogue of British plants* used by Hunnybun as a checklist are full of notes stating "Moss says" and "Moss thinks", generally referring to the identification or the representativeness of a particular specimen, and showing clearly that Moss was firmly in control of what was to be drawn as well as of what was to be written. Hunnybun, a mild and easygoing man, knew himself to be far less expert than Moss in matters taxonomic, and so proved to be more amenable than the contributing authors.

THE 'FIRST' VOLUME AND ITS RECEPTION

In 1914, after several delays, volume ii was published. In a lengthy, controversial introduction Moss expounded his ideas on nomenclature and classification, explaining how he wished to use the Englerian system to bring British Floras more into line with the continental Floras, but without using all the subspecific divisions favoured by many European taxonomists. Moss intended to use only species, varieties and formae (e.g. in the *Prospectus* for the *Flora*). However, this approach generated sufficient intraspecific subdivision to annoy many botanists (e.g. Anonymous 1914). Throughout the introduction, Moss reveals a remarkable grasp of the literature, especially considering that he had only turned to this field of botany six years earlier, and that a significant part was written in German.

The completeness and detail of the text's treatment of genera meant that no reviewer was inclined to attempt a critical analysis of the entire volume. Instead most looked at the overall schemes of nomenclature used (always a thorny subject). Moss' use of lower case initial letters for the specific epithet in all cases (e.g. *Hieracium leyi*, not *Hieracium Leyi*) was in direct contravention of a recommendation of the International Botanical Congress of Vienna (held in 1905). Moss introduced this in an attempt to simplify a confusing variety of conventions, but it was seen as unnecessary by one reviewer (Anonymous 1914), who wrote of "Dr Moss, who like the rest of us, likes to have his own way and is perhaps more fortunate because more insistent in getting it".

Moss also insisted that a species subdivided into varieties should be fully so divided, rather than selecting one 'type variety', which had only a binomial. Britten (1915), editor of *Journal of botany*, considered that the logical consequence of Moss' proposal was the "objectionable . . . American innovation" of a trinomial system of nomenclature. He held that, for example, *Populus tremula* var. *glabra* was essentially no different from *Populus tremula glabra*, and that Moss was breaking "unwritten rules". However, it is clear that Moss was strongly opposed to trinomials (e.g. Moss 1915), and he accused Britten of having sunk to "a Drucian level . . . of misrepresentation".¹⁴

The reaction of reviewers to the text was, on the whole, positive. However, the drawings were widely criticised. Something of the delicacy of Hunnybun's drawings was lost in the reproduction. Moreover, the extremely generous page size $(36 \times 26 \text{ cm})$ was not fully utilised by Hunnybun, whose obsession with precise scale reproduction of the specimen in front of him seemed to blind him to the space wasted in drawing small plants (e.g. *Sagina boydii*, Plate 27, volume ii, where less than 10% of the page was used). He also often drew twigs or sprays overlapping unnecessarily, obscuring important features (e.g. *Salix*, volume ii). In a letter to Waller at the Press¹², Hunnybun,

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encouraged by his many friends, hoped for a better reaction to his drawings for the next volume, which he felt were "better and more interesting than those already published".

BETWEEN VOLUMES

In 1915, Moss and Druce had a serious disagreement occasioned by the internal politics of the Botanical Exchange Club, of which Druce was then honorary secretary-treasurer. There was widespread discontent among the members, and Moss became spokesman for the disaffected faction. In the end he was forced to issue a formal apology to Druce, which no doubt both annoyed and embarrassed Moss (Allen 1986).

By 1916 Moss was a bitterly frustrated man. The Press, financially stressed by the war, was delaying the publication of further volumes of the *Flora* (originally supposed to be issued annually). The minutes of a Business Sub-Syndicate meeting held on 12 January 1915 record that "it was agreed to proceed slowly with the *Cambridge British Flora*".

Moss' own finances were also strained. He had had problems with the Press over his share of the cost of having new plates made for volume ii, to replace those he had decided were inadequate.¹⁵ Delay in payment had culminated in a threat of legal action if he did not pay by the end of 1914.¹⁶ By 1916, all teaching staff in the Botany School had suffered a 10% pay cut in an attempt to keep the department solvent in the face of drastically falling student numbers.¹³ Departmental salaries were partly made up of payments for courses taught, at a rate of so much per lecture or demonstration, and this element also decreased, since fewer students meant fewer classes. Moss' pay fell by about £40, a loss of 20% relative to his pre-war pay. Moss described himself as "almost on half pay" by November 1915.¹⁴

At this time Moss had a great desire to be involved in the War effort, but his hopes were frustrated by his age (mid-40s). He managed to be assigned to training recruits in the O.T.C., and later transferred to a munitions factory.

Moss seems to have found the writing of the *Flora* time-consuming, and manuscripts were frequently late in arriving at the Press.¹⁷ A new contract was drawn up in January 1915, under which Moss was only to be paid the final part of the monies due to him when he delivered the relevant manuscript.¹⁸ Prospects of promotion or of obtaining a college fellowship must have seemed remote as problems with the *Flora* mounted and student numbers fell.

In 1916 his personal problems reached their height when his marriage broke down irretrievably, and by October 1916 divorce proceedings were under way. The severity of the scandal can scarcely be appreciated from a late twentieth century viewpoint, but in the close, formal society of post-Edwardian Cambridge divorce was extremely shocking. Moss appears to have been the innocent party¹⁹; Mrs Wedgwood (a collector and friend of Druce (Sandwith 1954)) wrote "it is difficult for us to put ourselves into his [Moss'] position – Mrs Moss entirely deceived me, she had no marks of the seductress about her".²⁰

Embittered, overworked and stressed, Moss decided to cut his losses. In November 1916 he applied for a professorship at the School of Mining in Witwatersrand (later the University of Witwatersrand).²¹ The School wanted him to take up the post as soon as possible, and on 3 February 1917, a week after he had given evidence in the divorce proceedings,²² he and his school-age daughter Beatrice set sail on the *Balmoral Castle*.²³

A letter from Mrs Wedgwood, who seems to have delighted in transmitting gossip, suggested that Moss was considering abandoning the *Flora*; "he [Moss] would have 'chucked' the *Flora* had I not been so shocked".²⁴ He did not do so; instead he appointed a former student, A. J. Wilmott, then working at the British Museum (Natural History), to see volume iii through the press.²⁵ He was obviously still committed to the project; in a letter to Hunnybun²⁵ he proposed that if Wilmott did well, then by volume iv or v he would be cited as co-author. In typical style Moss wrote that "it would have been a mistake to take Wilmott as joint author to begin with. He is young, and he must have something to grow up to".²⁵ Letters from the period provide evidence that Moss was as authoritarian as ever, but also that Hunnybun and Wilmott dealt independently with some problems that arose.

By April 1917 Moss appears to have been feeling more relaxed. He encouraged Wilmott to "use your own discretion in amending or altering my manuscript",²⁶ and was dismissive of Wilmott's and

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Hunnybun's fears of libel over passages in the introduction to volume iii (see below), but agreed to changes; "with 7000 miles between us, act on your own judgement".²⁷ Moss appears to have been dissociating himself from the project and relaxing his previous rigid control over it.

By 1918, however, the letters suggest that Moss was less happy with life in South Africa, and that he wished to return to England before his three-year contract was completed, ostensibly to oversee the *Flora*. A letter from Seward exists, expressing a disinclination to have him back.²⁸ Although Moss obviously still had allies who would support his return to Cambridge, Seward appears to have had no desire to employ a man who had broken a contract.

VOLUME III

In 1920, after Wilmott had found that he had taken on a much larger task than he had envisaged and after many problems with the manuscript, the Press published volume iii. Moss' role was unclear. As late as April 1919, Wilmott had to write a firm letter to Waller, saying "there will be no need to wait for proof from Prof. Moss as he finished with this volume before he left the country. He left me to finish seeing it through the press".²⁹ Volume iii was issued at a markedly increased cost of £6 15s 0d (volume ii had cost £2 5s 0d), and the sum allocated to expenses for each volume had almost quadrupled.

The introduction to volume iii proved more controversial than that of volume ii, since it included Moss' final shot in the argument over nomenclature that waged between him and Britten (see above). He wrote the introduction in January 1917, just before his departure for South Africa. Hunnybun believed that the draft "was written when [Moss] was rightly very irritated with Mr Britten's conduct and when he was utterly worried by the domestic troubles which have driven him from the country. You [Wilmott] and I feel profound regret at all the trouble that has come upon him and we realise that in his happier days he would have worded the paragraph very differently".³⁰ Hunnybun then proposed rewording the passage. The original draft introduction made by Moss is extant, and is even more vituperative than the printed version. However, the section attacking Britten was left exactly as Moss had worded it. Hunnybun wrote that "Moss would never forgive me if I asked you to modify it" and adds wistfully "why botanical differences should occasion such bitter strife is what I have never been able to comprehend".³⁰

The introduction contained several direct attacks on individuals which were frowned upon by reviewers such as Rendle (1920), who regretted the fact that "to perpetuate the differences of opinion which have arisen in matters of very secondary importance detracts from the dignity which such a work should possess" and suggests that the Syndics were remiss in not exerting "fatherly censorship" over parts of the introduction.

As with volume ii, the text itself was favourably received, but the drawings were criticised, even though Hunnybun had believed them to be far superior.

The fate of the project: 1920 onwards

The Press delayed further volumes until financial restraints eased, and as early as 1918 Seward was beginning to express doubts about the future of the series.³¹ In 1921 Moss married a co-worker at the University of Witwatersrand and became head of his department, increasing his commitment to his new life.

By 1923, no further volumes had been published. The Press decided to have the viability of the project assessed by a committee of botanists chaired by Professor Seward, who was also a Syndic.³² In July of that year the Press decided that the work "should not proceed under the current contract".³³

Moss initially expressed indignation, suggesting that the Syndics were under contractual obligation to the subscribers to complete the series. This was investigated by the Press,³³ but apparently no such obligation existed, since later meetings ignore the issue. The Press eventually decided either to proceed under tighter rules (to prevent the delays in obtaining manuscripts from Moss and the continual changing of plates) or to abandon the project. After consultations with their solicitor³⁴ about Moss' legal rights they decided to persuade Moss either to improve or take a lump

sum payment in lieu of their contractual obligations.³⁵ On 27 July 1923, "it was agreed to recommend that Dr Moss be offered a payment in respect of work done on unpublished volumes . . . the amount under this head not to exceed £75 in respect of any one volume; Dr Moss to be also offered the sum of £100 (to be increased to £150, if necessary) as a solatium for the non-publication of later volumes. It was further agreed to recommend that in the event of the offer not being accepted . . . the Syndics proceed with the publication under the terms of the original agreement, provided that complete copy for volume iv be delivered one year after the date of acceptance of the offer, complete copy for subsequent volumes to be similarly delivered at annual intervals".³⁵ Moss seems to have accepted the financial offer with little protest, although he managed to extract the maximum sum the Press were prepared to offer; "£150, plus a further sum of £80 in respect of out-of-pocket expenses, in full discharge of any claim against the Syndics in respect of the agreement for the publication of *The Cambridge British Flora*".³⁶

THE TEXT OF THE PUBLISHED VOLUMES

In the introduction to volume ii of *The Cambridge British Flora*, Moss listed three aims: to register the present state of knowledge with respect to British plants, including classification, nomenclature, characteristics and distribution; to attempt to relate British plants to allied forms in foreign countries; and to stimulate further research, particularly in the areas of variation and distribution. Hunnybun³⁷ wrote that Moss felt that "we shall make some howlers. *The Cambridge British Flora* is merely a step forward".

Many botanists consider that *The Cambridge British Flora*, with its ambitious scope and attention to detail, is one of the best taxonomic studies of the British flora. However, it has been suggested that the volumes suffered from "elephantiasis of the format" (A. O. Chater, personal communication). Despite being incomplete, it is still invaluable for the genera treated, although modern taxonomic ideas and conventions in nomenclature, especially the increased emphasis on the type concept, together with Moss' personalised methods of citing the author-attribution in the case of hybrids, make it out-of-date for the purposes of nomenclature. Moss' interest in, and observation of, variation within species meant that his subdivisions often corresponded better to the situation seen in the field than those of previous workers. For example, in *Salix* he subdivided *S. caprea* L. into var. *genuina* Syme (lowland; now *S. caprea* var. *caprea*) and var. *sphacelata* (J. E. Sm.) Wahlenberg (Scottish Highlands).

The analytical, formal style in which critical taxonomy was treated in *The Cambridge British Flora* is even now unusual. Pioneering work on distribution mapping had been carried out on the continent, and its use in a British Flora was also a significant step forward. Moss' interests in distribution mapping date back to his earliest work in the West Riding. In *The Cambridge British Flora*, he simply recorded location, according to a scheme based on geographical counties rather than the presently-preferred vice-comital system, without considering the ecology of the plant in any detail.

The contributing authors, kept firmly in line by Moss, produced contributions of a consistently high standard. A good example is H. W. Pugsley's treatment of *Fumaria*. The account can scarcely be bettered today.

Moss' second aim of comparing British and continental botany was achieved in part by his use of the Englerian classification system that was becoming commonplace in mainland Europe. Many British botanists were parochial in outlook, but Moss was strongly influenced by several Europeanminded workers such as H. Gilbert-Carter and his friend and colleague A. G. Tansley. Throughout *The Cambridge British Flora*, frequent references show Moss' familiarity with both British and continental taxonomic writings.

THE ILLUSTRATIONS

Hunnybun's drawings, later to be made into plates in *The Cambridge British Flora*, were well received as works of art when they were exhibited at the Linnean Society in 1903 and Hunnybun's extensive correspondence shows that this opinion was widespread. However, Blunt (1950)

considers that the drawings "well demonstrate how lifeless a figure can become when sensitivity is lacking". Although faithful to the appearance of the living plant, they are inadequate for scientific purposes, where more diagrammatic representation of key features is required. They often lack fine detail and Hunnybun's uniformly fine line and the absence of shading give no sense of texture. Hunnybun's emphasis on drawing living material often seems to have led to him drawing 'weaker' looking specimens.

As Hunnybun's health deteriorated, he became increasingly reliant on plants sent to him by his many correspondents, rather than collecting his own. The annual lists of desiderata which he sent to these collectors include detailed instructions on the packing of specimens for posting, and suggest that specimens sometimes arrived in a damaged or unusable condition. Perhaps this meant that some of his drawings were based on less than perfect material.

Botanical illustration must always be a compromise. By accentuation of key characteristics, illustrations should convey the essence of a species rather than an image of an individual. An appreciation of this important principle is lacking in Hunnybun's work. Indeed, he complained that Pugsley wished him to produce "mental concepts of what the forms of each species should be"³⁸ and enlargements which were "absolutely diagrammatic".³⁹ Hunnybun felt that his enlargements, being based on living specimens, would be of more use to the student than a diagram. However, it appears that even Moss thought little of Hunnybun's enlargements, and instructed Wilmott, who was selecting illustrations for volume iii, to "rule out any enlargements you choose; but do not, in Heavens name, consult E.W.H. [Hunnybun] about this! It is like asking a parent which of his children shall be cut in half!"³⁹

THE FAILURE OF THE CAMBRIDGE BRITISH FLORA

Tansley, in his foreword to the first edition of the *Flora of the British Isles* (Clapham, Tutin & Warburg 1952), wrote that "a new British Flora has been a desideratum for the past half century and urgently needed during the last thirty years . . . several attempts have been made to fill the gap but none have been carried through to success". Although Tansley does not mention *The Cambridge British Flora* by name, he is likely to be commenting on the work of his friend and former colleague when he notes that earlier attempts "were all too ambitious, aiming at a completeness and exhaustiveness unattainable except through years of laborious effort *and the collaboration of a large body of specialists*" (our italics).

In our view Tansley was pointing to the major weakness in *The Cambridge British Flora* project. To judge by the two volumes that were issued, there was no scientific reason why the project should have failed, although Hunnybun's drawings might have made the *Flora* less attractive to a potential buyer. However, the long-term viability of the project was doubtful, as there is abundant evidence that many of the taxonomic specialists of the day found it difficult or impossible to work with Moss, who "when satisfied that he had reached a sound conclusion was immovable" (Crump 1931). He was also prone to dismiss other people's views with "sweeping contempt" (Tansley 1931), although he could be a firm friend to those who "accepted his frank expressions in the same northern spirit in which they were given" (F.E.W. 1931). Obsessed by the *Flora* at its outset, Moss was unable to sustain his interest in the project after his emigration to South Africa. Wilmott performed the task of seeing volume iii through the press, but with his penchant for complex schemes and subtleties (Stearn 1981) he was unsuited to the task of rallying support for continuing the project. Indeed in the early 1920s he was involved in many projects of his own, such as editing the tenth edition of the *Manual of British botany* (Babington 1922).

Thus the project died. A modern, encyclopaedic, critical Flora of Britain has yet to be written, although an attempt was made between December 1973 and January 1985 (Stace 1991).

ACKNOWLEDGMENTS

We would like to thank C. E. Scarles of the Cambridge University Press and E. S. Leedham-Green of the University Library, Cambridge, for access to archive material. Thanks are due to Dr D. E. Allen for information from the Druce archives and other helpful comments, and to P. D. Sell, R. D.

Meikle and Dr S. M. Walters for information on the scientific aspects of the Flora. Dr D. E. Allen, Dr J. R. Akeroyd, D. H. Kent, Dr S. M. Walters and an anonymous reviewer commented on an earlier version of this manuscript, for which we are grateful.

NOTES

- 1 F. J. Hanbury to E. W. Hunnybun, 12 September 1901, Hunnybun Letters (HL), Department of Plant Sciences, Cambridge University (DPS UC).
- 2 J. Groves to E. W. Hunnybun, 7 February 1908. HL, DPS UC.
- 3 Syndicate Committee Meeting Minutes, 20 January 1911. Cambridge University Press (CUP).
- 4 Syndicate Committee Meeting Minutes, 19 January 1912. CUP.
- 5 C. E. Moss to A. B. Rendle, 11 March 1912. Rendle Correspondence in Carruthers Correspondence Box 4, BM-G, British Museum (Natural History) (BM-NH).
- 6 E. S. Marshall to G. C. Druce, 22 February 1911. Druce papers (DP) Box 19, Department of Plant Sciences, Oxford University (DPS OU) (D. E. Allen, personal communication).
- 7 G. C. Druce, draft of Druce 1931. DP Box 5, DPS OU.
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- 9 Syndicate Committee Meeting Minutes, 14 February 1913, CUP,
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(Accepted May 1994)