

# The struggle to produce a Flora of the British Isles (1933–1952)

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## ABSTRACT

The reasons for the failure of the ‘New Students’ British Flora project (1933–1945) have been investigated. This project, edited by Sir A. G. Tansley (Chairman), J. S. L. Gilmour and A. J. Wilmott, is interesting not only for historical reasons, but also because it highlights many of the key issues faced by taxonomists writing Floras. We have also examined the relationship between the abandoned Flora and the successful publication in 1952 of the *Flora of the British Isles* by A. R. Clapham, T. G. Tutin and E. F. Warburg.

KEYWORDS: New Students’ British Flora, writing Floras, Flora of the British Isles, history, Sir A. G. Tansley, A. J. Wilmott, J. S. L. Gilmour.

## INTRODUCTION

In the foreword to Clapham, Tutin and Warburg (1952) *Flora of the British Isles* (hereafter CTW), Tansley writes: ‘A new British Flora has been a desideratum for the past half century and urgently needed during the last thirty years....The absence of such a Flora has seriously hampered the teaching and learning of field botany. Time and again I have been asked by visiting foreign botanists to recommend a good modern British Flora and have been ashamed to confess that no such thing existed. In this whole sphere the lack of an adequate handbook has indeed been something of a national scandal. Several attempts have been made to fill the gap but none has been carried through to success, largely because they were all too ambitious, aiming at a completeness and exhaustiveness unattainable except through many years of laborious effort and the collaboration of a large body of specialists.’

Tansley was clearly referring, in part, to *The Cambridge British Flora* (incomplete) of C. E. Moss and others [Vol. i was not published; Vol. ii, 1914; Vol. iii, 1920]. The complex reasons for the abandonment of this encyclopaedic Flora have been investigated by Bunting, Briggs & Block (1995). What Tansley does not report, but is certainly alluding to is that he, as Chairman, with J. S. L. Gilmour (Assistant Director of the Royal Botanic Gardens at Kew - 1931–1946) and A. J. Wilmott (Deputy Keeper, - 1931–1950 - Department of Botany, British Museum (Natural History); hereafter the Natural History Museum) were involved in another unsuccessful attempt to write a New Students’ Flora in the 1930s.

In investigating this ‘Flora’, we have studied a large number of papers and letters in the Gilmour archive (Cambridge University Botanic Garden) and the correspondence of Wilmott and others (held in the Natural History Museum, London).

## AIMS

The New Students’ British Flora project (hereafter NSBF), despite its eventual abandonment, raises a number of interesting historical questions. How was the project begun, and what were its aims and objectives? How did the writing progress, and how did the editorial committee tackle problems as they arose? What happened to the NSBF, and what was its relationship to the *Flora of the British Isles* produced by CTW in 1952?

The NSBF is interesting not only for historical reasons but also because it highlights many of the key issues faced in writing any Flora, namely determining the purpose(s) for which a particular Flora is being planned and written; choosing the most appropriate form, content, and classification to use, and facing all the practical questions involved. Furthermore, it is interesting how the NSBF aimed to deal with critical groups, such groups being found in genera evolving through polyploidy and/or hybridisation, and/or reproducing by apomixis or persistent selfing.

## THE INITIAL PHASE (1933)

The project was an initiative of the Clarendon Press, Oxford prompted by MacGregor Skene. Thus, on 10 February 1933, K. Sisam wrote to Sir Arthur Hill, Director of Kew -1922–1941: ‘Professor Skene of Bristol has more than once told us that the time is coming when there ought to be a new critical flora to replace Babington’s book. Do you think there is a real need, or do the existing books do well enough for the majority of readers?’<sup>1</sup>. Sisam was referring to the *Manual of British Botany* by Professor C. C. Babington, University of Cambridge, which, in 1922, was in its 10th edition. This work was edited by A. J. Wilmott, one of the three editors of the NSBF Project.

Hill replied on 14 February 1933: ‘We are interested in Professor Skene’s suggestion as to the need of a new critical Flora to replace Professor Babington’s old book. I called together two or three of my staff who are keenly interested in the British Flora’<sup>2</sup>. An account of the meeting survives, and is signed by W. B. Turrill<sup>3</sup>. Hill continues: ‘Their unanimous view is (1) that a new British Flora is very desirable, (2) that, if it is produced, it should approximate to the size and species standard of Schinz & Keller, *Flora der Schweiz*, ed. 4 (1923), and (3) that if the Clarendon Press would be prepared to undertake its publication it would be an opportunity that should not be missed’<sup>2</sup>. The letter continues: ‘We feel that in the preparation of a Flora of this sort there should be cordial co-operation between Kew and the Department of Botany of the British Museum (Natural History), and that specialist contributors should be called in to deal with certain families or groups of families. We also feel that it would be desirable to form a small “editorial committee”, which might consist of one representative from Kew, one from the British Museum and an outside Chairman. The Chairman is an important person and we suggest that Professor Tansley should be asked to serve in that capacity. On the Kew side, my Assistant Director, Mr Gilmour, would be a very useful representative, and the British Museum representative should be Mr. Wilmott. I think before anything is said to the authorities at the British Museum about the proposal, Prof. Tansley - should he agree to act as Chairman - should be asked to meet two or three of us here to discuss several points...’<sup>2</sup>.

Sisam discovered that the Flora proposed as a model, Schinz & Keller (1914, 1923), was not in the Bodleian Library in Oxford<sup>4</sup>, and Hill offered to send the copy from Kew on loan, noting that it is in two volumes, ‘the first running to 792 pages and the second, which is of a more critical character, to 528 pages’<sup>5</sup>. Hill gives his personal view, running counter to the memorandum from Turrill, that ‘personally, I think a single volume sufficient for the proposed British Flora, which would then be a fairly convenient size’<sup>5</sup>.

Sisam replied to Hill on 23 February: ‘I have heard from Tansley who agrees that the *Flora* would be a good thing, but owing to the number of his editorial commitments, he is a little doubtful whether he could undertake much work. I have told him I thought you probably did not envisage him undertaking the routine, but rather giving his advice and help in planning or any special difficulties’<sup>6</sup>. The letter notes that Tansley had arranged to meet Gilmour and ‘agrees with you that the Natural History Museum should not be consulted until something definite can be put forward’<sup>6</sup>.

A letter from Tansley to Hill on 28 February reports that he had had a ‘very satisfactory talk with Gilmour. We see eye to eye on most relevant points and I am sure I could work with him happily’. Tansley had clearly decided to take the position of Chairman of the project, for he continues: ‘I am accordingly sending you a more or less official letter and, simultaneously, an identical one to Ramsbottom’ [Keeper of Botany at the Natural History Museum - 1930–1951]<sup>7</sup>. In the official letter he writes: ‘the Clarendon Press have asked me if I would act as Chairman...and after careful consideration I have decided that I would be willing to do so, provided that the authorities at the British Museum and Kew welcomed the scheme’<sup>8</sup>. Tansley clearly recognised the sensitivity in the dealings between Kew and the Natural History Museum, for in his private letter he writes: ‘When you receive this you will note that it is not perfectly ingenuous, since I take credit to myself, directly or by implication, for proposals which really originated from Kew! But, that I expect you will agree, it is a wise course under the circumstances’<sup>7</sup>. Given the sometimes acrimonious relations between the Natural History Museum and the Royal Botanic Garden (Stearn 1981), Hill approved of Tansley’s action and in a letter saying how pleased he was that Tansley was accepting the Chairmanship, he adds the comment: ‘I fully approve of your assuming the responsibility ...as it might have led to difficulties had the suggestion appeared to emanate from

Kew<sup>9</sup>. The reaction from the Natural History Museum is reported in a letter from Tansley to Gilmour: 'I have been in correspondence with Ramsbottom about the proposed flora and he is in general agreement with the scheme suggested, and has obtained the sanction of his Trustees, and agrees that Wilmott should represent the Museum'<sup>10</sup>.

It is interesting that the Committee did not devise their own scheme for the writing of the Flora, for the next step was to send out a circular letter to canvas opinions about its form and content<sup>11</sup>. In preparation for the first Flora Editorial Committee the three editors exchanged opinions on crucial issues. Wilmott writing to Tansley on 6 May 1933 provides very important insights, particularly about his own potential contribution. 'Having had the production of a Flora in my mind for many years, I have accumulated considerable knowledge and material of many of these genera, and after a winter's work I should be able to judge what I could hope to do'<sup>12</sup>. Earlier in the same letter he writes: 'I have had a talk with Gilmour in order to get his point of view concerning farming out work. My view is that except insofar as time is the limiting factor it is preferable to restrict farming out to experts with whose methods we could agree, i.e. who would send in MS which we could print more or less as it stood. ....This may be ideal, but on the other hand the work must be got through, and the choice would seem to be between 1) farming out uncritical families and doing as much as possible of awkward genera myself; 2) farming out awkward genera and doing as much as possible of the mass of the flora ourselves.... I would prefer to defer farming out the "critical groups with undoubted experts" till April 1934 in order to see during next winter how far I could be responsible for them....'<sup>12</sup>.

At the first Committee meeting, held at the Natural History Museum on 26 May<sup>13</sup>, the editors considered the question of the allocation of the detailed work, the remuneration of contributors and committee, and general questions about the taxonomic system to be adopted. The results of the meeting were set out in an extremely brief list<sup>14</sup>.

Genera to be divided into 5 categories:

- a) 30 groups were to be offered immediately to specialists.
- b) Following Wilmott's suggestion, 39 groups were assigned to him, with eight of the group in this category to be left for a year and then farmed out if necessary.
- c) For six groups there was no obvious specialist.
- d) Non-critical groups which Wilmott and Gilmour will divide between them (majority to be done by Gilmour (i.e. c. half the flora).
- e) Then followed a list of groups to be farmed out *en bloc* if necessary.

Regarding payment, it was decided to pay contributors c. 5/- [=25p] per page plus bonus for difficult genera. The editors would have a small c. £50 lump sum on completion of the Flora and subsequently some percentage of the profits. Also, it was agreed that the Flora should contain c. 2000 species, in 800–1000 pages, at a price not exceeding 15/- [=75p]. It was decided to use a hybrid classification between Engler (1924) and Bentham & Hooker (1862–1883).

By 31 May, Gilmour wrote to Tansley to report that he and Wilmott had tentatively approached the majority of people mentioned in the list a)<sup>14</sup>. However, in a letter on the 1 June, Tansley wrote to Gilmour expressing his concern about opening discussions with potential contributors too early before the next meeting of the Committee. 'I have particularly in mind the desirability of laying down the treatment of species, sub-species and varieties...it is important that these specialists should realise the general plan so that they do not send in manuscripts with a large number of small forms designated as species'<sup>15</sup>.

By 2 June the replies to the questionnaire were available, together with a detailed tabulated summary<sup>16</sup>. Majority support was revealed for:

- 1) using italics to indicate key features in diagnoses;
- 2) providing synopses to families, but keys to species; and
- 3) giving only the most important synonyms, indicating life-form, and providing information in distribution, habitat, and relevant literature, but with genetical information only in special cases.

- 4) The inclusion of cytological information was not supported by a majority.
- 5) A small minority supported the provision of a glossary; information on flowering time, pollination, dispersal, altitudinal range, viability of seed, shape, number of seeds, fruits; references to exsiccatae; etymology of names etc.
- 6) A majority a) did not wish the critical groups to be treated in full; and b) supported the inclusion of only well-established aliens and escapes, the provision of details of extinct plants; and the inclusion of the plants of the Channel Islands.
- 7) It is interesting to examine some of the minority opinions e.g. Pugsley, an acknowledged expert on critical groups, considered that '*Hieracium* and *Rubus* should be dealt with in detail'<sup>17</sup>.

On 4 July, Tansley again discussed with Sisam the vexed question of finance<sup>18</sup>. The Clarendon Press proposed the payment of royalties as 'editorial expenses', which would not be subject to income tax. It was also proposed that: 'If any payments to indispensable contributors should eventually be found necessary or desirable these could be made at the Committee's discretion out of the sum received for editorial expenses'<sup>18</sup>.

At the second meeting of the Editorial Committee on 5 July<sup>19</sup>, there was further discussion of financial arrangements. Minutes of the meeting<sup>20</sup> reveal that the method of payment of expenses was provisionally approved. It was agreed to send official invitations to specialists without referring to remuneration, and to include a preface containing a statement about the origin of the work, its relation to previous floras etc. The introduction would include a full glossary of terms; diagrams, list of abbreviations, symbols etc. It was decided to ask that manuscripts should be submitted without abbreviations. A conspectus of the classification would be provided in the sequence Pteridophyta, Gymnospermae, Angiospermae (Dicotyledons, Moncotyledons). Consideration of the form and content of the descriptions was deferred until the next meeting fixed for 19 July.

In a note to Hill on 12 July, Sisam indicates that the Editorial Committee may be focusing too much on royalties etc. for he writes, prophetically as it turned out: 'I am glad to hear from Tansley that negotiations about the Flora are proceeding. I hope too many fine points of conscience, difficulties of remunerating contributors evenly etc. will not be raised at the outset, because they are probably insoluble by any plan, and in practice they may never arise'<sup>21</sup>.

By 17 July, Gilmour had prepared a first incomplete draft of a lay-out of *Medicago*. He also enclosed a list of 'Kew opinions' on some points e.g. the Flora should include: extinct plants; plants of the Channel Islands; only provide English names in common use; and include only well-established aliens. Descriptions were to be in one paragraph with synonyms in use in existing British Floras. Also to be included were Raunkiaer's life-forms; information on important economic properties e.g. forage plants; and details of hybrids should be included within the accounts, not at the end of the genus<sup>22</sup>.

#### THE ONSET OF DIFFICULTIES (LATE 1933–1935)

Just as the arrangements for the Flora were to be set in place, there was a setback. At the beginning of July, Tansley had most of his teeth removed<sup>23</sup>. He was unable to attend the next third meeting of the Committee and had a prolonged period of ill health<sup>24 & 25</sup>.

From this time forward little progress was made. Indeed, there is a two year gap in the correspondence in Gilmour's Archive from mid-1933 to mid-1935, and scant material in the Wilmott Archive. It is significant that this was the period when Tansley was working on his magnum opus: *The British Islands and their Vegetation* (1939).

#### THE RECOMMENCEMENT OF THE PROJECT (1935–1939)

On 4 July 1935, Gilmour wrote to Wilmott: 'To put things frankly, we have undoubtedly let the whole question of the flora drag on much longer than we ought. This is partly due to the fact that

we are all very busy - that Tansley was ill for some time - & partly, I think that there has been no "urgency" to keep us up to the mark! I think personally (& I think you will agree) that we cannot hope for much "directive" power from Tansley - he is so occupied with other things and has not really been enough on the project to make the constant effort necessary to keep things going<sup>26</sup>.

Tansley too was considering the project, for, on 15 July 1935, he wrote to Gilmour in exasperation: 'I think some definite steps must be taken about the proposed Flora; it looks to me as if it would never get done if Wilmott continues to be as dilatory as he has been the last year'<sup>27</sup>. He did not confront Wilmott himself, but urged Gilmour to do so. 'Perhaps you had better write to him first rather urgently and see what he says. Unless he is prepared to subordinate other work to getting on with the Flora it is useless for me to have anything to do with the scheme. This need not necessarily be said to him at the moment, but the issue must be forced soon. I do not however want to write to Hill and Ramsbottom until the situation is clarified'<sup>27</sup>.

In the Gilmour archive there are two letters<sup>28 & 29</sup> from Wilmott, both of which make it clear that Wilmott was still finding difficulty in committing time to the Flora. In the first letter dated 13 August he writes: 'As regards the Flora I don't seem to get any time to settle down to it, and I really don't see how I am likely to get much more for a year or two. You will remember that I said at one of our meetings that I was not quite ready for it!'<sup>28</sup>.

In a letter to Tansley on 3 September, Gilmour reports that he and Wilmott have met and propose a major change to the arrangements for the Flora: 'We have reluctantly come to the conclusion that we neither of us have the necessary spare time to give to the undertaking if it is to be produced within a reasonable period. We perhaps ought to have realised this at the out-set, but it is difficult to judge these things beforehand. We have therefore been discussing possible means of continuing the work....I would suggest that two more botanists, who have the time, knowledge and inclination to produce such a Flora, should be co-opted onto the committee; and that *they should be responsible for the actual work of preparing the typescript, both by their own work and by obtaining contributions from other botanists*' (our italics)<sup>30</sup>. Gilmour and Wilmott were reluctant to withdraw completely from the project for the letter continues: 'The question of authorship on the title page could be settled after discussion, but it might appear as by "Brown and Smith, in co-operation with Tansley, Wilmott and Gilmour", or some such phrase as that. As to the two further botanists, possible names will probably occur to you. The two I have thought of are R. W. Butcher and J. E. Lousley....I do not of course, know whether either would be willing to participate in such a scheme, but they both have the time, knowledge and, I believe, the inclination to write a Flora of Britain...We feel sorry that at this rather late hour we have been forced to this conclusion, but I feel it is best to face the fact and to try to make some arrangement that will ensure that the Flora is produced in a reasonable time'<sup>30</sup>. It is ironic that Butcher (who had a full-time research post) and Lousley (with an onerous position at Barclays Bank) were regarded as having more time than Gilmour and Wilmott (David Allen, pers. comm.).

The suggestion for a larger committee made by Gilmour and Wilmott was rejected out of hand by Tansley. In letters to Hill and Ramsbottom on 26 September Tansley writes: 'I feel that the suggestion now made is open to rather serious objections. A committee of 5 is much less easy to work than a committee of 3, and it would be much harder to obtain practical working unanimity on questions of principle and of general treatment. Nor do I think that the position of Gilmour and Wilmott on such a committee "in a general advisory capacity and as a link with the British Museum and Kew" would be satisfactory. I think they should have more direct responsibility. My present feeling is one of reluctance to take part in such a scheme, though I have made no final decision'<sup>31 & 32</sup>. Earlier in the letter he expresses his dismay: 'When the arrangements were first made, now nearly 2½ years ago, I assumed, rightly or wrongly, that Gilmour and Wilmott would be able to devote some of their official time to this work; since both Kew and the British Museum were, at least semi-officially, behind their participation. I think it is clear that they could not possibly complete the undertaking, within any reasonable term of years, in their "spare" time'<sup>31 & 32</sup>. Tansley also wrote to Gilmour on the same day stating: 'I do not like the new suggestion'<sup>33</sup>. Tansley then arranged a meeting with Hill and Ramsbottom to discuss the issues involved.

Ramsbottom writing on 3 October to Tansley clarified a crucial question: 'So far as Wilmott is concerned it is not a matter of being prevented from devoting official time to the work'<sup>34</sup>. Ramsbottom discussed the position with Wilmott and in a further letter to Tansley<sup>35</sup> a way forward was agreed: 'Wilmott should not attempt the working out of a larger number of critical families

and genera... He should restrict himself to those he has already more or less worked through. The families or genera should be farmed out in pretty liberal way..... After the talk with you and Hill it seemed clear to me that Wilmott was failing in that he had in mind an old scheme for a flora to be produced in a certain way'.

Tansley writing to Gilmour concludes that: 'We must now push on with the scheme and hope for the best'<sup>36</sup>. In the same letter, dated 18 October, he urges, as a priority, the drawing up of a specimen diagnosis. Wilmott suggests to Gilmour that both should prepare accounts of *Medicago*<sup>37</sup>. By 3 December, Tansley is again stressing the urgency of the situation. 'It is clear that no rapid progress will be made until the "farming out" has been done, so I think it is important we should take the preliminary steps as soon as possible'<sup>38</sup>.

During the next few months a four page set of 'Rules and Suggestions for Contributors' was printed, together with specimen accounts. The copy in Wilmott's papers is dated August 1936<sup>39</sup>. However, Turrill, a potential contributor, in a letter to Tansley<sup>40</sup> indicates that he received his invitation to contribute on 2 July 1936. In the early correspondence the Flora is referred to informally by various names e.g. the 'British Flora', 'New British Flora' etc. The printed document for Contributors makes it clear that the Flora was to be given the somewhat ambiguous title the 'New Students' British Flora'.

It is clear from the Rules and Suggestions<sup>39</sup> that the NSBF had become a very ambitious project. First, the editors revealed that, yet again, they had changed their minds on the classification to be used and had chosen to use *Families of Flowering Plants* (1926, 1934) by J. Hutchinson (Keeper of the Kew Museums, 1936–1948) (Stafleu & Cowan 1979). His phylogenetic system, which divided the dicotyledons into woody and herbaceous lines, was controversial (Stace 1989). For example it separated by a very long way the *Apiaceae* from the *Araliaceae*, the *Lamiaceae* from the *Verbenaceae*. A description and key to families was also to be prepared by Hutchinson. Synopses of the genera in each family would be prepared partly by Hutchinson and partly by contributors. The document stated that the form and scope of these synopses 'can be settled by consultation between Dr Hutchinson, the contributors and the editors'. It is important to note that no glossary of approved terms was prepared and there were no arrangements set out in the Rules and Suggestions for ensuring that strictly comparable descriptions would be prepared for families, for genera within families and species within genera. Also, the geographical range to which the descriptions should apply was not defined. For example, was the *Verbenaceae* to be a family of herbs (as in Britain), or herbs, shrubs, trees and woody climbers (as in the world)?

The account of each genus would include Latin names, etymology and popular name; generic description with best diagnostic characters underlined; information on biology, genetics, cytology & ecology, number of species and World distribution; reference should be made to a recent monograph; and a key to species should be provided.

For each species the following information was required: name, reference to figures, synonyms in common use, popular names & Raunkiaer's life-forms; the description should open with a succinct "word portrait" to include times of flowering, fruiting and germination and intraspecific units; next, facts relating to pollination, insect visits, flowering and germination should be given, together with important genetical and cytological information, including the chromosome number; the status (native, alien etc.) should be noted, together with an indication of the distribution, followed by the part played in important plant communities or successions, and the British distribution and altitudinal range. Hybrids were to be included in the Flora, with brief descriptions and distributional information. With regard to aliens, every species which can be found growing at all commonly without being intentionally planted by man should be mentioned. The treatment of large critical genera was to be discussed between editors and authors. Distributional details were to be given without abbreviations, editorial condensation according to a fixed scheme would follow later.

In the letter of invitation three interesting points emerge<sup>39</sup>. First, the Committee asked for first drafts to be submitted by 28 February 1938, with the hope of bringing the material to a finished form by early 1939. Secondly, remuneration would ordinarily be confined to a free copy or copies of the book, but claims for special remuneration would be considered individually. Finally, contributors were asked to revise herbarium collections. 'To ensure adequate treatment and to make available for consultation material named in accordance with the Flora, authors are asked to consult and revise the collections in the National Herbaria of the British Isles, or at least the British

TABLE 1. CONTRIBUTORS TO THE NSBF LISTED IN THE *JOURNAL OF BOTANY* 1938

Airy-Shaw\*, H. K.; Alston\*, A. H. G.; Anthony, J.; Ash, G. M.  
 Baker, E. G.; Ballard, F.; Britton, C. E.; Bullock, A. A.; Burt\*, B. L.; Butcher, R. W.  
 Clark, W. A.  
 Dandy\*, J. E.  
 Exell, A. W.  
 Gilmour\*, J. S. L.  
 Hall, P. M.; Howarth, W. O.; Hubbard\*, C. E.; Hyde, H. A.  
 Jackson, A. B.; Jackson, A. K.  
 Lousley, J. E.  
 Marsden-Jones, E. M.; Melville\*, R.; Milne-Redhead, E.  
 Nelmes\*, E.; Norman, C.  
 Philipson, W. R.; Pugsley\*, H. W.  
 Rendle, A. B; Richards\*, P. W.  
 Sealy, J. R.; Sledge\*, W. A.; Stearn\*, W. T.; Still, A. L.  
 Taylor\*, G.; Turrill, W. B.; Tutin, T. G.  
 Valentine\*, D. H.  
 Warburg, E. F.; Wade\*, A. E.; Watson, W.; Weiss, F. E.; Wilmott\*, A. J.; Wolley-Dod, A. H.

(Anon. 1938a & b). Those who are also acknowledged in CTW (1952, p. xvii) as providing accounts or 'help with special problems' are marked\*.

Herbarium of the British Museum'. The suggestion for revising herbarium collections came from Wilmott, for in a letter to Tansley<sup>41</sup> he notes: 'Our collections are so large that if they are put in order nothing very serious can be omitted, and the doing of this should ensure that the treatment is adequate'.

The contributors to the NSBF were also invited to join the Panel of Referees of the Botanical Society and Exchange Club of the British Isles, and a formal list of names and addresses, and families that they had undertaken to write, were set out in a Supplement to the Report for 1936 (Anon. 1936). Lists of contributors and groups were also published in the *Journal of Botany* (Anon. 1938a) with a list of corrections and additions (Anon. 1938b) (Table 1). It is interesting that while botanists working in England, Scotland and Wales were associated with the project, no botanists based in Ireland were invited to contribute.

With regard to the new proposal to use Hutchinson's scheme, Gilmour, writing to Tansley, predicted that there would be difficulties ahead: 'I think the position was that you and Wilmott were very much against using either Bentham and Hooker or Engler and, after some discussion, we decided to promulgate a new system of our own - rather against my judgement. When, therefore Wilmott himself proposed using Hutchinson's system I thought that it was preferable to using one manufactured by Wilmott. I expect we shall have quite a storm over choosing Hutchinson's system, but, if we are not going to use either Bentham and Hooker or Engler, personally I do not think we could do better.'<sup>42</sup>

The storm that Gilmour predicted was not long in arriving, as a letter from Tansley to Gilmour dated 14 July 1936 reveals<sup>43</sup>. 'There is a regular revolt in the Kew Herbarium against using Hutchinson's system; and it looks to me as if we shall be forced to reconsider this matter if we are to enlist the help of Sprague, Turrill, Sandwith etc.'. Tansley began to have second thoughts: 'I am inclined to favour reversion to the Bentham & Hooker sequence'. (Tansley to Gilmour 21 July<sup>44</sup>). In the face of this difficulty Gilmour took a more robust view; (Gilmour to Tansley 22 July<sup>45</sup>). 'As regards the vexed question of the system to be adopted for the Flora, I am in entire agreement with the idea that the primary consideration should be one of convenience of consultation. On these grounds, personally I would advocate an alphabetical arrangement, treating the Flora as a collection of monographs of families. Failing that, I think Bentham and Hooker, or Engler, have both strong arguments in their favour - provided we put in the Preface that we do not consider either system gives an adequate phylogenetic picture and that it is not our aim in employing it. On the other hand, we definitely took the view, as a committee, that we should try and inculcate

phylogenetic ideas in the Flora, and given that, I think Hutchinson's system is as good a one to use as any. Having decided that, and having asked Hutchinson to prepare descriptions of families, and having circulated our decision to contributors, personally I feel it will require a rather bigger storm than has been raised to alter our decision'<sup>45</sup>.

There was at least one adverse reaction to the proposed arrangements for editing the manuscript etc. In a letter to Tansley dated 2 July 1936, Turrill wrote that, in response to the circular letter received this morning: 'I shall be pleased to undertake... the Caryophyllaceae and the Illecebraceae...under the following reasonable conditions. ...That I am allowed a perfectly free hand, within the form and scope set out in the papers received, in the synopses of the families and the genera, and keys to the latter.... It seems illogical that an author who has worked through the species should not be allowed to prepare (entirely and not merely partly) the generic and family synopses....That any alterations made in my manuscript should be submitted to me before being sent to the printers, and that in any botanical matters my acceptance or rejection of such alterations should be final...That I be allowed to make my own condensation of distribution, or alternatively be allowed to check and, if necessary, alter that made by the editors before the manuscript is printed'. With regard to revising material Turrill continued: 'I shall be pleased to consult but owing to the time involved I cannot promise to revise the collections in the British Museum unless these are sent on loan to Kew and permission to dissect be given by the authorities. I am, however, willing to prepare a standard set of the species of the two families in the Herbarium at Kew....I may add that in common with some of my colleagues, I am doubtful as to the advisability of following in the sequence of families a new and untested scheme, to which many strong objections have been raised'<sup>40</sup>.

Taking up the points raised by Turrill, Gilmour wrote to Tansley stating that he did not foresee any particular difficulty in meeting Turrill's wishes<sup>42</sup>. He noted that the wording of the paragraph about family descriptions and synopses was purposely left vague so that contributors wishing to do their own could do so. He also imagined that the other points could be satisfied by showing the contributors the proofs. Although how the proofs would be circulated to such a large number of contributors is not confronted.

The editors encountered other difficulties. They were not efficient in keeping in touch with the many contributors, especially those working on critical groups. For example, Wolley-Dod wrote to Gilmour that he was having difficulties with *Rosa*. 'I think *Rosa* the most complicated and unstable genus I have ever had to deal with, which does not lend itself to a similar treatment to that of other genera'. He proposed to produce a series of keys to varieties of each species and reported having 'a very disjointed correspondence over the last twelve months with Wilmott concerning the treatment of the genus'<sup>46</sup>. The arrangements for *Rubus* were also unsatisfactory. Riddelsdell was originally asked to work on the genus with Barton. However, in a letter to Gilmour in December 1937, Riddelsdell revealed that: 'Barton and I both received a request some time ago to "do" *Rubus* for the new Students' Flora; we did not answer it in our uncertainty. Barton said he does not know *Rubus* well enough, for the job; and that is true. For myself, I do not think I am competent for it'<sup>47</sup>. The editors apparently only discovered the problem in December 1937, shortly before the date of submission of the first drafts from contributors. Very late in the day, the editors approached another botanist, W. Watson, to ask him to prepare an account of *Rubus*. This mistake put in jeopardy the proposed date for the publication of the Flora. There was also much concern when Watson wrote: 'In answer to your invitation I am quite ready to prepare a condensed account of the British Rubi for the new British Flora. There would be rather over three hundred forms to be dealt with, and I estimate that these could be adequately described in about 36 to 40 pages of print as in Hooker's Students' Flora, but making the fullest use of contractions....I would like to have until Oct. 1939 to complete the manuscript'<sup>48</sup>. Gilmour questioned whether it was really worthwhile to delay the Flora<sup>49</sup>, and the editors asked Watson for a shorter account of the genus: 'with which the general student can start to obtain a knowledge of the genus'<sup>50</sup>.

The treatment of critical groups was clearly a major issue. With hindsight this is not surprising as the Rules and Suggestions for Contributors did not offer guidance. How to treat large and critical groups was included on the agenda for the Committee meeting held on 10 December 1936. Unfortunately, the minutes have not survived and therefore the only evidence available is in the letters between the editors and contributors. Some of the exchanges were not very informative. For example, Wilmott sent a letter to Wolley-Dod, who was responsible for *Rosa*. 'As regards the



scope of the Flora, it is in general desired to give a fairly full account of the groups, but it is evident that in *Rubus*, *Rosa* and *Hieracium* it is impossible to deal with everything since if we did, the work would be quite overloaded and quite unfit for use as a manual, which is what was intended<sup>51</sup>. By February 1939, as far as we can judge by the surviving papers, few had submitted their first drafts. In August 1939, the editors circulated a note to contributors enquiring when draft accounts would be available<sup>52</sup>.

#### THE FLORA PROJECT DURING WORLD WAR II (1939–1945)

Early in 1939, a rival to the NSBF was mooted by the publishers Macmillan. They contacted Hill at Kew<sup>53</sup>, in March 1939, to propose that Hooker's *Student's Flora of the British Islands* be completely revised and were seeking a team of two to four taxonomists to carry out the work. However, when they heard about the NSBF project, they apparently abandoned the suggestion<sup>54</sup>.

There is very little evidence concerning the later stages of the project in the Gilmour papers, however, the Wilmott archives contains a number of important documents. First, there are notes for a meeting of editors on 3 May 1939<sup>55</sup>. A number of matters were discussed, including the Macmillan proposal; the question of whether to use metric measurements; and the problems of including flowering times in the Flora [e.g. in the south of England Primrose could be found flowering in every month of the year, while cliff plants at say 2500 ft in Scotland and Wales might be in flower only from June–July]. The Committee also discussed the proposal to circulate to authors a) a list of standard abbreviations of periodicals; and b) a complete listing of all general British Floras in chronological sequence, so that contributors could follow through the history of species and genera.

Towards the end of the year, as World War II became imminent, the Editorial Committee considered how they should react. Tansley was clear that: 'some of the contributors will be able to go on working at their stuff and would naturally do so, others will be prevented, and there will undoubtedly be delay. But I do not see that there need or should be any idea of *abandoning* the work'<sup>56</sup> [Tansley's emphasis]. Finally, in November 1939, the editors decided to send round a circular which stated that 'it would be undesirable to suspend the work altogether because of the abnormal conditions now existing...The Committee will, therefore, be grateful, if you will inform Mr. Gilmour as soon as possible the position in regard to your own contribution, and, if you are able to continue, the approximate date of completion'<sup>57</sup>.

#### AFTER WORLD WAR II

Early in 1945 yet another flora project emerged, namely the proposal that led to the writing of *Flora of the British Isles*, by Clapham, Tutin and Warburg, published in 1952. Interestingly, Tansley played a key role in the setting up of the project. While a letter from Tutin to Wilmott<sup>58</sup> claimed that in no way was it duplicating 'the big flora', nevertheless, especially with hindsight, it was indeed a rival project. The circumstances of Tansley's involvement and the correspondence between Tutin and Wilmott are both very illuminating, especially Tutin's attempts to mollify Wilmott, and the information given about how CTW planned their Flora.

Evidence concerning Tansley's role in the 'rival' project is given in a *Memorial Volume* (1975) prepared to celebrate Humphrey Gilbert-Carter, former Director of the University Botanic Garden, Cambridge (1921–1950). Amongst the Memorials and Reminiscences is a piece by Professor T. G. Tutin. He recalls the circumstances and outcome of a meeting with Tansley, engineered by Gilbert-Carter. Although the meeting apparently happened by chance, perhaps it was not entirely accidental. 'On a winter afternoon shortly after (sic) the war we walked together through Trumpington to Grantchester and, as we were about to come back across Grantchester Meadows, he suggested that we might see if Tansley was in. He was, and on his own, so he asked us to stay for tea. Over tea Tansley asked me to write a British Flora. I had never thought of such an undertaking, but before we left plans had been drawn up and were speedily put into action'.

A letter from Tutin to Wilmott dated 15 March 1945 makes it plain that the walk to Grantchester had taken place recently (indeed before the war had ended), and gives the following details<sup>58</sup>.

'A short while ago Tansley urged Clapham and me to write a flora for the use of students and after considering the matter, together with Warburg, we have decided to attempt it. Our intention is not to produce a work for the expert ...but to produce as rapidly as possible a book suitable for students in Universities to enable them to identify the plants they meet on excursions with reasonable ease and accuracy. This will of necessity be to a considerable extent a work of compilation and is obviously full of difficulties. We cannot hope for perfection but with the knowledge now available it is obviously possible to improve considerably on Hooker....With the large critical genera we have decided to try to describe aggregate species corresponding to sections, for instance, in *Rosa*, and to give references to detailed accounts. In other genera we may have to lump even further, since the object is to provide a usable tool for the ordinary student.' He then confronts the possible clash with the project: 'You will see from this that we are in no way duplicating the big flora, but are trying to provide speedily a makeshift to fill the gap that we have all felt so keenly in our teaching.' Wilmott's reply is generous, but foresees problems with the critical groups. 'I am glad to know of your project. It should fill a gap, as you say, and you and Clapham should make a good job of it. At the moment I am not in a position to help much with anything, as books and so many specimens are away and it is very difficult to work'. Wilmott was referring to the removal of specimens to safe storage during the war. His letter continues: 'Also we are very tired in London. But I wish you good luck. You will, of course, have a job with *Rosa*, *Rubus*, *Hieracium* and the like'<sup>59</sup>.

About the same time that Wilmott received Tutin's letter, the Committee reviewed the state-of-play with their own project. A summary of how far the work on the Flora had progressed, by March 1945, has survived in Wilmott's papers<sup>60</sup>. Six groups had been completed and sent in [*Polygonum* and *Melampyrum* (Britton); *Illecebraceae* (Turrill); *Lemnaceae* (Tutin); *Anagallis* (Weiss & Marden-Jones) and *Rosa* (Wolley-Dod)], and preparation was thought to be well advanced of 14 groups being worked on by contributors not involved in war work. The position of another 74 groups by contributors not involved in war work was not precisely known. A further 32 groups were being prepared by contributors on war work, and five uncompleted groups had been assigned to Britton and Hall, who had both died during the war.

The Editorial Committee concluded that a large part of the Flora was not near to publication. They then made the radical decision to publish the Flora in parts, starting with the material already submitted. In this way, the Committee judged that interest would be aroused in contributors and purchasers, and it would benefit from a greater number of sales, as more purchases would be made if it was sold "piecemeal". It was envisaged that it would take another five to ten years for all the parts of the Flora to reach publication. Moreover, the decision to publish in parts presented further difficulties. How were the pages to be numbered, so that the whole Flora might eventually be bound into a complete book by assembling the parts? Even more problematic was how to ensure that the published parts followed a satisfactory scheme of classification. The mode of publication was still being debated in September 1945, for Tansley wrote to Gilmour: '....I am inclined to think it may be best to arrange for the publication of the parts, i.e. each family or group of families, as they are ready, *quite separately as independent works*'<sup>61</sup>.

No correspondence has been found dated later than 17 September 1945 and nothing in the archives reveals how and when the project was finally abandoned. No material was published under the editorship of Gilmour, Tansley or Wilmott. Perhaps the project was finally abandoned with the premature death of Wilmott in 1950 (Ramsbottom 1950; Williams 1950).

What is interesting, however, is that one set of accounts in preparation for the NSBF was included in the text of CTW when it was published in 1952. The three authors are credited with writing all except one of the family accounts in the Flora (see CTW page 1507–8). Paul Richards, who was writing Juncaceae for the NSBF, was responsible for this family in CTW. The extent to which other material was used in CTW is revealed in a letter from Tutin to David Allen, dated 11 September 1980. 'Of course all Floras draw to some extent on their predecessors, but we certainly never saw any MSS of the earlier Flora (if there were any) apart from our own'<sup>62</sup>. It is, however, possible that some of the preparation made for the earlier Flora might have had some influence on CTW, as many of those working on the NSBF are acknowledged 'for help with special problems' (see CTW page xvii; and Table 1).

## DISCUSSION AND CONCLUSIONS

The NSBF project failed for a number of reasons, some of which are problems faced by all editors of floras, others were peculiar to this attempt. Undoubtedly, the Second World War (1939–1945) interrupted the work, but several other major problems have been identified.

It is possible that Tansley was a reluctant Chairman. Also, he was not a taxonomist. In the early years of the project, Tansley was very active in many fields. He retired from the Sherardian Chair in Oxford in 1937 (Godwin 1958, 1977), and, therefore, potentially, he had more time to devote to the completion of the Flora. However, by 1945 Tansley had reached 74 years of age and was impatient to see the project come to fruition. Tansley, with his long experience as an editor of *New Phytologist* and *Journal of Ecology* was clearly very interested, probably over-interested, in uniformity of treatment and in the exercise of editorial authority. Thus, in a memorandum to contributors<sup>63</sup>, he acknowledged the problems of bringing a multi-author work to fruition, and the distinct possibility of antagonising the contributors. 'It is clear that the scheme of publishing a flora.... written by a large number of contributors is not free from the danger of friction arising from honest differences of opinion'. If such differences arose, it was proposed to deal with some of them by means of footnotes, a plan which caused resentment. Tansley was driven to conclude that: 'Serious misapprehension seems to have arisen as to the nature and purpose of the proposal to add footnotes to authors' accounts of particular groups under certain circumstances. There is not and never has been the slightest intention of criticising authors' accounts in detail by means of footnotes. The proposal was made to meet the possible eventuality of an author's account failing to recognise a possible view of the taxonomic facts which might seem to the editorial committee of such scientific importance that it ought not to be neglected altogether. It is hoped and believed that in the great majority of such cases as may arise, perhaps in all, an author would be willing to modify his account...but it considered possible that an author might occasionally prefer merely to set out his own point of view, and leave it to the editors, if they thought it important, to make the briefest reference to the existence of another standpoint'<sup>63</sup>. It seems with hindsight that it would have been politic to have waited until all the manuscript had been delivered and an actual problem detected, rather than contemplating such a solution to what might have been a purely hypothetical possibility.

At a personal level too there were difficulties. The kindhearted, courteous, master-diplomatist Gilmour (Walters 1987; Winsor 2000), who was only 27 at the start of the project, was on friendly terms with both Tansley and Wilmott. Tansley, however, had difficulty dealing with Wilmott and Hutchinson. Indeed, Tansley was candid in comments to Gilmour, for he wrote: 'It is indeed unfortunate that the Flora Scheme should have been linked with two personalities that seem so unpopular as Hutchinson and Wilmott'<sup>64</sup>. With regard to his dealings with others, Allen (1986) concludes that Wilmott 'was volcanic, unpredictable'; a man who could be ferocious with his peers. He was also a perfectionist, and his fine logical intellect, and his outstanding knowledge of the European flora could make him a severe critic of the work of other taxonomists (Campbell 1951; Stearn 1981). The fact that he had once planned to write his 'own' critical flora is also important, as this probably contributed to a conflict of interests and to the lack of clear purpose, when he had to act in a group. It is not surprising that a taxonomist of his stature should have been contemplating writing his 'own' Flora. When he edited the 10th edition of Babington's *Manual*, he was 'strictly bound by Mrs Babington's instructions' (Alston 1951), and was only able to bring the names up to date and provide a short appendix to include the most important additions 'to our knowledge of the British Flora' (Wilmott 1922, p. ix). Furthermore, in his work with Moss on Volume iii of the abortive *Cambridge British Flora*, many problems were encountered (Bunting, Briggs & Block 1995), and Wilmott withdrew from the project in April 1923<sup>65</sup>, before it was finally abandoned in September of the same year. No doubt the critical reviews of the two published volumes influenced his decision. For example, commenting on Volume iii published in 1920, W. H. Pearsall wrote: 'A study of this recently-issued volume of the Cambridge British Flora deepens the sense of disappointment created by its predecessor, and strengthens the opinion that the flora is largely an artificial erection founded upon a set of over-rated drawings' (Pearsall 1920).

Another problem faced by the project was the lack of communication of a common vision from the editors to the contributors. Apparently, no meetings were held to inform and encourage those

preparing the accounts for the NSBF. This was in contrast to the planning that proceeded the writing of the *Cambridge British Flora*. A meeting of potential contributors was held on 7 March 1912 at the Natural History Museum, which despite being heated, generated enthusiasm and interest in the project (Bunting, Briggs & Block 1995).

The Rules and Suggestions for Contributors<sup>39</sup> make it clear that the Flora Project aimed to secure very comprehensive accounts from the acknowledged experts of the day. With hindsight the project was too ambitious, especially in asking the contributors to revise material in the National Herbaria. There is also evidence from the archives of acute problems in organisation and delays in achieving key objectives. Thus, little progress was made in the early years and the specimen accounts and instructions to authors were not available at the start of the project. When the Rules and Suggestions for Contributors were sent out in 1936, no glossary was produced, (although a list of agreed abbreviations and symbols was belatedly circulated to contributors in September 1938<sup>66</sup>). Without an agreed glossary, it is not clear how the Committee would have ensured the use of the same terminology and definitions throughout the Flora. Also, working with such large numbers of people was unwieldy. Moreover, Professor W. T. Stearn confirms that contributors were not chivvied for their accounts. Furthermore, two major issues were never successfully clarified. The Editorial Committee did not devise satisfactory means of dealing with the critical genera; and the committee kept changing its mind as to which classification to use. The choice of Hutchinson's system antagonised many professional botanists.

Our conclusions about the fate of the NSBF were deduced from archival and published sources. Through the kindness of David Allen it has been possible to test these ideas. While researching the history of the Botanical Society of the British Isles (Allen 1986), he received a letter from Tutin on 11 September 1980 about the NSBF and other matters. Tutin wrote: 'Warburg and I were both involved in the abortive Flora, but I don't think Clapham was. I think it never really got going, like most things that Wilmott was involved in; John Gilmour, a very dear and long-standing friend of mine, has never been very good at pushing people and Tansley was heavily involved with his magnum opus at that time. This seems to me to explain fully the failure of the attempt. I wrote the very small portion that was allotted to me, sent it in and heard no more. I think it is rather doubtful if Warburg got his part polished to the state that satisfied him. Anyhow, by the time the war was over that Flora was dead and pretty completely forgotten about. The war made a break in our lives much greater than would be expected from the time it lasted. However, once again it was Tansley who took the initiative. This is the only, somewhat tenuous link between the two Floras' [CTW and NSBF]<sup>62</sup>.

While detailed archival study of the writing of CTW has yet to be carried out, comparisons with the NSBF reveal that CTW was, in a number of ways, a much less ambitious project. Firstly, CTW was written by three enthusiasts, and avoided the problems of seeking a large number of accounts from acknowledged experts, many of whom were prima donnas. However, it is clear that they took advice from many taxonomists. For example, Wilmott was consulted by Tutin in the preparation of the account of *Salicornia*<sup>67 & 68</sup>.

Secondly, as Tutin's letter to Wilmott<sup>58</sup> makes it plain, the *Flora of the British Isles* was seen as a compilation - a record of the taxonomic state-of-play. Tribute must be paid to Tansley and Humphrey Gilbert-Carter not only for providing the initial inspiration for the writing of this Flora, but also, most probably, for giving valuable advice on how to avoid the problems encountered with the *Cambridge British Flora* and the NSBF project. Thus, the three authors did not stop to resolve taxonomic difficulties as they emerged, by carrying out research. They reported the information then available, and commented on the problem areas requiring further study. It is of great interest also to consider how *Flora Europaea* was planned and written, for Tutin was one of the editors. While *Flora Europaea* was starkly different from CTW, for example in bringing together the work of a great number of specialists, in one very important respect the approach was similar to CTW. In the Preface (p. xii Volume 1, 1964) the basic philosophy is clearly set out. 'It should be emphasised that it has been, and remains, the intention of the Editorial Committee to produce a concise and complete Flora in the shortest possible time. Consequently, the principle has been adopted that publication of the Flora cannot be delayed for an indefinite period to allow the lengthy and detailed research required for a complete solution of all the problems that arise during its preparation. The committee believe that it is more valuable to have a complete Flora, representing a synthesis of available information, than a series of detailed monographs where

completion could not be foreseen'. The failure of the NSBF and the successful completion of CTW and *Flora Europaea* provide a cautionary tale to writers of other multi-author Floras, who are tempted, in the words of Tansley (p. ix in CTW) by the notion of achieving 'completeness and exhaustiveness'.

A third point of general interest concerns the publishing of a Flora in parts. As we have seen above, and despite some of the obvious problems, such a possibility was being contemplated by the editors of the NSBF in the post-war period. David Allen has drawn our attention to an interesting example that illustrates some of the difficulties. In the 1930s, The Royal Botanical Society of the Netherlands revived a plan for a national Flora to be published in parts. Only one part had been completed before the Second World War intervened and although work was resumed and further parts appeared, by the mid-1980s not only was commitment flagging, but publication was questionably still affordable. Finally, the funds set aside for that project were used instead to support the Society's Journal. Here is a salutary warning against publishing in parts over too long a period (Allen 1999).

Finally, reflecting on the demise of the NSBF project, it was clearly a missed opportunity to provide a much needed new National Flora. Of the books used in the 1930s, Babington's *Manual* was construed as 'a field-book or travelling companion for botanists' (Babington, 1922). Therefore, at this time, 'in the absence of any solid competitor, an inadequately modernised edition of Bentham's 1858 *Handbook* continued to dominate the market - and thereby persisted in foisting on the unwitting its misleadingly broad treatments of many of the species' (Allen 1986). Many of the acknowledged experts of the day were involved in the NSBF project, and, with the right organisation and financing, a definitive taxonomic work could have been produced, and would have provided a major stimulus to studies of British plants.

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NHM - Archives of the Natural History Museum.

CUP - Archives of papers of Cambridge University Press in the University Library, University of Cambridge.

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- 2 Hill to Sisam, 14 February 1933. (GA).
- 3 Report signed by W. B. Turrill, 14 February 1933. (GA).
- 4 Sisam to Hill, 15 February 1933. (GA).
- 5 Hill to Sisam, 17 February 1933. (GA).
- 6 Sisam to Hill, 23 February 1933. (GA).
- 7 Professor A. G. Tansley to Hill, 28 February 1933. (GA).
- 8 Tansley to Hill, 28 February 1933. (GA).
- 9 Hill to Tansley, 2 March 1933. (GA).
- 10 Tansley to J. S. L. Gilmour, 25 April 1933. (GA).
- 11 Tansley to Gilmour: draft circular from Gilmour, Tansley and A. J. Wilmott, dated 12 May 1933. (GA).
- 12 Wilmott to Tansley, 6 May 1933. (NHM).
- 13 Agenda for First British Flora Editorial Committee Meeting, 26 May 1933. (GA).
- 14 Gilmour to Tansley, with account of the editorial meeting and lists of groups, 31 May 1933. (GA).
- 15 Tansley to Gilmour, 1 June 1933. (GA).
- 16 Joan Salzman to Gilmour with summary of questionnaires, 2 June 1933. (GA).
- 17 H. W. Pugsley to Tansley, 26 May 1933. (NHM).
- 18 Memorandum of Tansley's interview with Sisam, 4 July 1933. (GA).
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- 20 Minutes of meeting held on 5 July 1933. (GA).

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- 22 Gilmour to Tansley, 17 July 1933. (GA).
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- 24 Tansley to Wilmott, 15 August 1933. (NHM).
- 25 Tansley to Wilmott, 13 July 1934. (NHM).
- 26 Gilmour to Wilmott, 4 July 1935. (NHM).
- 27 Tansley to Gilmour 15 July 1935. (GA).
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- 33 Tansley to Gilmour, 26 September 1935. (GA).
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- 35 Ramsbottom to Tansley, 17 October 1935. (NHM).
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- 37 Wilmott to Gilmour, 29 October 1935. (GA).
- 38 Tansley to Gilmour, 3 December 1935. (GA).
- 39 New Students' British Flora letter to contributors, with Rules and Suggestions for Contributors and specimen descriptions, August 1936. (NHM).
- 40 Turrill to Tansley, 2 July 1936. (GA).
- 41 Wilmott to Tansley, 6 February 1936. (NHM).
- 42 Gilmour to Tansley, 6 July 1936. (GA).
- 43 Tansley to Gilmour, 14 July 1936. (GA).
- 44 Tansley to Gilmour, 21 July 1936. (GA).
- 45 Gilmour to Tansley, 22 July 1936. (GA).
- 46 Lt. Col. A. H. Wolley-Dod to Gilmour, 6 November 1937. (GA).
- 47 Rev. H. J. Riddelsdell to Gilmour, 5 December 1937. (GA).
- 48 W. Watson to Wilmott, 2 February 1938. (NHM).
- 49 Gilmour to Wilmott, 9 February 1938. (GA).
- 50 Wilmott to W. Watson, 17 March 1938. (GA).
- 51 Wilmott to Wolley-Dod, 5 November 1937. (GA).
- 52 Circular letter from the three editors to the contributors, August 1939. (GA).
- 53 L. J. F. Brimble to Hill, 6 March 1939. (NHM).
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- 55 British Flora: Notes for meeting, 3 May 1939. (NHM).
- 56 Tansley to Gilmour, 11 October 1939. (NHM).
- 57 Circular letter signed by Gilmour, Tansley & Wilmott, November 1939. (NHM).
- 58 T. G. Tutin to Wilmott, 15 March 1945. (NHM).
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- 60 British Flora, position in March 1945. (NHM).
- 61 Tansley to Gilmour, 14 September 1945. (NHM).
- 62 Tutin to David E. Allen, 11 September 1980. (GA).
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