

Reports

REPORT OF THE COUNCIL FOR 1969

(This report and the audited accounts relate to the calendar year 1969. Figures in parentheses are the 1968 ones, for comparison. It is a reprint of the report circulated to members in April 1970)

A number of important events have occurred in the Society's history in the year 1969. The last numbers of *Proceedings* and *Watsonia* appeared before their amalgamation as the 'new *Watsonia*'; the Treasurer has launched the Covenant scheme; and a professional agent has been appointed to handle the sales of publications.

The membership figures have held at a reasonably steady level during the year with 119 (128) members joining the Society, and a loss in membership of 136 (89) by reason of death, resignation or the operation of Rule 28; thus the year ended with a membership total of 1716 (1733) representing a net loss of 17 (net gain 39). These results are not as discouraging as it might at first seem, considering the effect of the increase in the subscription rate, a factor which has inevitably accounted for some of the loss in numbers. It is with great regret that we record the deaths of Rev. W. Keble Martin and Mr G. C. Brown who had been a member of the Society since 1911.

The accounts of the Society are appended on pages 328 to 329. Despite the increase in the rate of subscription for Ordinary members by 10s. to £2, expenditure for the year exceeds income, and there is a deficit on General Income and Expenditure Account of £22. Although they have received several reminders, about 125 members have still not paid the additional 10s. due for 1969; if these dues had been received, the deficit would have been covered.

Whilst expenditure generally continues to rise in accordance with forecast, certain exceptional items were incurred during the past year. In particular, the charge for journals covers approximately four parts of either *Watsonia* or *Proceedings*, whereas in future the annual charge will relate to two parts only of the new *Watsonia* plus one issue of the supplement *Abstracts from Literature*. Other exceptional items are shown in the accounts but also general expenses have been unusually high because of the heavy stationery and postage costs (at higher rates than heretofore) incurred in reminding members of the increased rate of subscription.

In November, the Hon. Treasurer wrote to all Ordinary members inviting them to enter into Covenants in respect of their annual subscriptions to the Society. The response has been gratifying; by the end of the year well over 200 members had signed Covenants. Thus we can expect to recover more than £300 p.a. in future in respect of income tax. It is hoped that any member who is in a position to do so, and who has not already done so, will sign and send to the Treasurer a covenant form. (Further copies can be obtained from the Treasurer if required.)

Proceeds from sales of journals exceeded the figures of the previous year, this being a reflection of the increased number of parts published. Sales proceeds, royalties received and expenditure relating to other publications sponsored by the Society are set out in the account of the Publications Fund. Sales of *British Sedges* have continued at a satisfactory rate and justified the printing of a further 500 copies before the type was broken up; stocks at the end of the year amounted to just over 500 copies and it seems likely that these will be exhausted within the next year or two.

With effect from 1st January 1970, the Society has appointed E. W. Classey Limited (Natural History Publishers, Booksellers and Literary Agents) of 353 Hanworth Road, Hampton, Middlesex, to act as their agents for the sale of their journals and publications (other than those handled by other publishers). This change has been made partly

to relieve the over-burdened voluntary officers who have undertaken this work in the past and partly because it is hoped that, in time, the organisation and publicity of a professional organisation will help to increase sales. In the early years, however, the net receipts by the Society will decrease by reason of the charges which E. W. Classey Limited must necessarily make for their services. The thanks of the Society are due to D. H. Kent for handling all orders for our publications during the year and in many previous years.

Mention must be made of the working parties set up from Council. That set up to report on a 'List of recommended English names of wild plants' has prepared a very full draft which it is hoped will be published in the near future. The party investigating proposed collaboration with European botanical societies is continuing its discussions.

THE MEETINGS COMMITTEE arranged as the Society's main event of the year, a very successful conference in September on 'The Flora of a Changing Britain'. This was attended by some 150 delegates and held in Imperial College by kind permission of Professor C. P. Whittingham. The Society is much indebted to Dr D. H. Dalby for his help in organising this conference which consisted of two days of lectures and discussion and concluded with an enjoyable excursion on the Sunday to the Forestry Commission's lands at Alice Holt, Hants and the Surrey Naturalists' Trust's Reserve at Thursley Common.

The Annual General Meeting was held in conjunction with a meeting of the North-west Region at Merlewood Research Station, Grange-over-Sands by kind permission of the director, Mr J. N. A. Jeffers. Thirty-six members were present to hear a series of lectures relating to the flora of the North-west Region and in the evening Mr S. Jeeves of the Council for the Protection of Rural England gave an excellent illustrated lecture. A field excursion to Roanhead Dunes and Roudsea Wood National Nature Reserve was held on the Sunday.

In addition to the two above-mentioned field excursions the Committee arranged six field meetings all of which were well supported, none having less than 20 members present and the average attendance being 35. These meetings were at Guernsey, Midhurst in Sussex (with the Sussex Naturalists' Trust), Flatford Mill, Leicestershire, East Norfolk (with the Norfolk and Norwich Naturalists' Society) and London (with the London Natural History Society). The Midland Region meeting at which a representative was elected to fill the vacancy on Council was held in conjunction with the Leicestershire field meeting.

A successful one-day conference entitled 'Hedges and Local History' arranged by the Society and the Standing Conference for Local History was held in June at Monks Wood Experimental Station by kind permission of the director, Dr K. Mellanby. Our Patron wrote expressing her interest in the conference and extending greetings to the Society.

The Committee also organised the Annual Exhibition Meeting in November, held as usual in the Department of Botany, British Museum (Natural History) by kind permission of the Keeper of Botany, Mr R. Ross. Thirty-five exhibits of a very varied nature were staged and there was a good attendance of members and guests. Sixty-eight stayed for the Reception afterwards; an encouraging number considering the very inclement weather, a heavy and unusually early snowstorm.

THE JUNIOR ACTIVITIES SUB-COMMITTEE arranged six field meetings in Britain in 1969, four of which were cancelled due to lack of support, these being those at Edinburgh, Perthshire, Kidderminster and Oxford; the other two (S. Essex and Northumberland) had a total of nine participants. This very poor response has resulted in the number of Junior day field meetings planned for the coming year being greatly reduced. Steps are being taken to arrange in future years more joint meetings with other bodies organising field activities for juniors, and residential meetings at home and abroad.

THE DEVELOPMENT AND RULES COMMITTEE had been in some doubt about its continued usefulness and on a recommendation from Council the Committee met during the year and discussed its function and future. It was finally decided with great regret that the present Committee should be disbanded and a Co-ordinating Committee set up of the officers of the Society (excluding the editors), the secretaries of the permanent working committees and a member of Council to act as Secretary. The new committee is to prepare business for Council, consider policy on general matters and make recommendations to Council for consideration. J. F. M. Cannon has agreed to act as secretary of the Co-ordinating Committee.

THE PUBLICATIONS COMMITTEE has given considerable thought to the future of the Society's periodical publications and has reported that it can see no justification for continuing to have two periodicals. The needs of today could be served more effectively by one journal, an amalgamation of the present two. This new journal will appear twice a year and will contain all that has in the past been included in the two publications with the exception of *Abstracts from Literature* which will be published annually as a supplement. The year saw preparations for this amalgamation in the appearance of the last part of *Proceedings* and three parts of *Watsonia*.

Plans for the Society to publish companion volumes to *British Sedges* on other difficult groups have been under discussion and R. D. Meikle has agreed to write one on Willows.

Agreement has been reached between the Society and the Academic Press to publish jointly a book relating to British hybrids under the editorship of Dr C. A. Stace.

Arrangements have been made for a Membership list to be published separately from *Watsonia*.

THE CONSERVATION COMMITTEE had a very busy year, once again acting as a useful 'watchdog' on threats to and conservation of the British flora. The Society is now recognised as the national botanical society concerned with advising on conservation and it is represented on the Society for the Promotion of Nature Reserves Conservation Liaison Committee by the President, Dr S. R. J. Woodell and P. J. Wanstall. The Society has co-operated with local conservation trusts and natural history societies. It has functioned in bringing together the various bodies concerned to consider the threat to the Lady's Slipper Orchid in Yorkshire; it has made representations concerning the Monkey Orchid in Kent; the removal of limestone in Westmorland; the threat to Braunton Burrows in Devon and Pembrey in Carmarthen, to mention but some of its activities.

As part of its contribution to 'The Countryside in 1970' the Committee has prepared a 'Code of Conduct' to serve as a guide for members of the Society. It has advised upon and given its approval to a booklet being prepared by D. McClintock on 'Wild flowers you may pick' designed for schools.

The sponsor of the Wild Plant Protection Bill, which the representatives of the Society played a leading part in framing, failed to obtain an early place in the House of Commons' ballot. The Working Party are having the Bill re-drafted by a professional parliamentary draftsman, the cost of which, up to a maximum of £500, is generously being met by a grant from the World Wildlife Fund (B.N.A.). It is hoped to introduce the Bill in the House of Lords in 1970.

Mrs A. Quinn (née Folan) from the National Institute for Physical Planning and Construction Research and a member of the Irish Regional Committee has been actively concerned with conservation problems in Ireland and has agreed to join the Committee.

The President represented the Society at a banquet given by the Lord Mayor of London at Guildhall to inaugurate European Conservation Year 1970.

THE RECORDS COMMITTEE has continued with its long-term task of improving the Society's whole system of record-collection by supplying to further Recorders who requested them, sets of index drawers and cards. The Carnegie United Kingdom Trust has made a generous contribution towards the cost of these index drawers. The Society has provided voucher labels to recorders to attach to herbarium specimens which support published records and, in an effort to promote better understanding among recorders and museum curators of herbarium management, a 'Guide to Herbarium Practice' by J. W. Franks has been sent to each vice-county recorder. A new format for 'Plant Records' has been designed for use in the merged *Watsonia* and *Proceedings*.

'Network research' has continued to flourish with a big demand still this spring for cards for the *Symphytum* survey. Holly and Mistletoe surveys have now been launched and further projects are being planned.

The Committee has continued to keep under close review the progress of the many local Floras known to be in preparation and has provided specialist advice. The production of a "Guide for Sussex Flora Writers", an expanded version of the "Blue Book", prepared by P. C. Hall has been undertaken as it is felt that this would be useful to many other local Flora writers despite being primarily intended for Sussex.

Mention may be made that the report of the Local Flora Writers' Conference at Aberystwyth (1968) has come out during the year and has been circulated to vice-county recorders. A Recorders' Conference is to take place in Edinburgh in September of this year (1970).

The Society was represented at the Conference of National Biological Societies where the setting up of regional recording centres, a code of conduct and joint recording meetings were considered.

Of the three Regional Committees—

THE COMMITTEE FOR THE STUDY OF THE SCOTTISH FLORA included eighteen field meetings in its customary very full programme. Three meetings, including two junior ones, had to be cancelled (see under Junior Activities) through lack of support. The fifteen which took place were at St. Abb's Head, Pease Dean (Berwickshire), Ardnamurchan, Girvan, the rivers Tummel and Tay, Glen Prosen, Isle of Raasay, Braes of Balquhiddier, Shetland, Handa and Durness, Northumberland, Skinflats (Stirlingshire), Dalmahoy Hill, Penicuik Woods and Lawers. In addition the Annual Exhibition Meeting was held jointly with the Botanical Society of Edinburgh at the Royal Botanic Garden, Edinburgh, by kind permission of the Regius Keeper, Dr H. R. Fletcher.

THE WELSH REGIONAL COMMITTEE arranged four field meetings which were generally well attended and attracted a number of members from England. These were in Pembrokeshire, Montgomeryshire, Carmarthenshire and Brianne, Rhandirmwyn. The Region staged a comprehensive exhibit at the Council for the Protection of Rural Wales Conference at Aberystwyth in March.

The Annual General Meeting was held in Bangor, where Dr W. S. Lacey and Dr Ball gave talks on the calcicole-calcifuge concept and R. H. Roberts on problems in fern species. A field excursion in Anglesey next day excellently illustrated these talks which will appear in the *Welsh Regional Bulletin* in 1970.

THE IRISH REGIONAL COMMITTEE arranged an extended field meeting based at Fermoy in Co. Cork and a one day meeting at Lough Ross in Co. Armagh. The newsletter did not appear during 1969 but it is hoped an issue will appear during 1970. The Annual General Meeting and Exhibition took place in October at the School of Botany, Trinity College, Dublin, by kind permission of Professor W. A. Watts.

WARBURG MEMORIAL FUND. Donations to the Warburg Memorial Fund now amount to £563. The sum of £516 has been invested in 300 units of the Equities Investment Fund for Charities. The Rules of the Fund, as agreed between the British Bryological Society and the B.S.B.I. are set out in an appendix to this Report. It is hoped to make the first award from the Fund in 1970.

The Council thanks the many friends of the Society who have helped during the year to further its progress and also all those members who have taken an active part in organising its affairs, on committees, as representatives on other bodies, and in other ways. In particular, thanks must be expressed to the authorities of University College, London, the Nature Conservancy and the Linnean Society of London for allowing the regular use of their premises for Council or committee meetings; to Imperial College of Science and Technology, London, for allowing the Conference to be held there; and to the Trustees of the British Museum (Natural History) for the use of their Lecture Hall and Conversazione Room in connection with the Annual Exhibition Meeting. Finally, we thank our Honorary Auditors, Messrs Price Waterhouse & Co., for their continuing services.

E. MILNE-REDHEAD, *President*

I. K. FERGUSON, *Hon. General Secretary*

17th March, 1970

BALANCE SHEET AS AT 31ST DECEMBER, 1969

1968	General Fund: Balance 1st January 1969 .. £3,482 12 0 Add: Premium on conversion of Defence Bonds .. 60 0 0 <hr/> 3,542 12 0 Less: Excess of expenditure over income for year .. 21 18 5 <hr/> £3,483 4,446 Publications Fund 4,784 17 11 40 Benevolent Fund 39 11 0 2,405 Creditors for Printing and General Expenses 1,641 18 6 171 Subscriptions Received in Advance 180 0 0 <hr/> £10,545	1968	Investments: 4½% Defence Bonds .. £500 0 0 5% National Development Bonds .. 1,000 0 0 5½% National Development Bonds .. 500 0 0 6% British Savings Bonds .. 1,000 0 0 10% Local Authority Bonds .. 1,000 0 0 The Equities Investment Fund for Charities—1,500 units (Market value—£2,737) 2,789 1 3 <hr/> £7,430 Cash at bank: Deposit Account 3,000 0 0 Current Account 377 19 9 <hr/> 3,115 <hr/> £10,545
	£3,520 13 7		£6,789 1 3
	£10,167 1 0		£3,377 19 9
	<u>£10,545</u>		<u>£10,167 1 0</u>

J. C. GARDINER,
Hon. Treasurer

In our opinion the above Balance Sheet and annexed General Income and Expenditure Account and summary of Publications Fund transactions give a true and fair view of the state of the Society's affairs at 31st December 1969, and of its income and expenditure for the year ended on that date

27th February 1970

PRICE WATERHOUSE & CO.,
Chartered Accountants,
Hon. Auditors

GENERAL INCOME AND EXPENDITURE ACCOUNT

FOR THE YEAR ENDED 31ST DECEMBER, 1969

1968	Cost of Printing and Distributing: <i>Proceedings</i> , Vol VII, Part 3 (balance) and Part 4 £1,314 10 6 <i>Watsonia</i> , Vol VII, Parts 2 and 3 and part provision for Vol VIII, Part 1 1,985 8 6 Storage and distribution of back numbers .. 72 8 2 <hr/> £3,309	1968	£2,484 Subscriptions received £3,197 5 0 597 Dividends and interest received .. 621 6 5 Proceeds from Sales: <i>Proceedings</i> .. £184 12 10 <i>Watsonia</i> .. 456 1 5 <hr/> 467 .. 640 14 3 785 Excess of expenditure over income charged to General Fund .. 21 18 5
	£3,372 7 2		£4,315
297	Printing and Distributing Annual Report and Notices of Field and Indoor Meetings 311 13 3		
67	Expenses of Council and Committee Meetings 72 2 0		
101	Travelling Expenses of Officers, Secretaries and Members attending Meetings 113 2 0		
299	General printing, stationery, postages, telephone and petty expenses 348 3 8		
71	Expenses of Regional Organisation, including Card Indexes for Recorders, less grant .. 33 13 8		
119	Network Research printing and postages 136 11 6		
52	Field and Indoor Meetings, expenses less fees received .. 8 5 5		
—	Expenses re Covenants 65 4 9		
—	Donation to Linnean Society Appeal 20 0 0		
	<u>£4,481 4 1</u>		<u>£4,481 4 1</u>
	<u>£4,315</u>		<u>£4,315</u>

PUBLICATIONS FUND

TRANSACTIONS IN 1969

1968			1968		
£1,253	<i>British Sedges</i> – Royalties and printing additional copies ..	£240 6 10	£3,437	Balance from 1968	£4,446 1 2
60	Storage and distribution, printing price lists and sundry expenses	53 17 6		Sales:	
	Balance to 1970:		1,621	<i>British Sedges</i> ..	£329 11 0
	General	£2,305 7 11	60	Conference Reports ..	30 1 9
	<i>Atlas</i> Royalties less out-goings	2,479 10 0	48	Other publications ..	13 6 8
4,446		4,784 17 11			372 19 5
				Royalties received:	
			142	<i>Atlas of the British Flora</i> ..	105 10 6
			417	<i>Critical Supplement to the Atlas</i> ..	96 6 0
			7	Conference Report No 9 ..	44 11 0
			27	<i>Index to Botanical Monographs</i> ..	13 14 2
					260 1 8
<u>£5,759</u>		<u>£5,079 2 3</u>	<u>£5,759</u>		<u>£5,079 2 3</u>

TEESDALE DEFENCE COMMITTEE REPORT

After further delays, the Charity Commissioners ultimately decided to register the Fund as a charity. It was expected that this satisfactory outcome of the considerable efforts made, and legal expenditure incurred, in order to persuade the Commissioners to reach this conclusion, would result in the Inland Revenue withdrawing the provisional tax assessments made on the Fund. The Committee would then have been able to discharge outstanding liabilities and hand over the balance of the Fund to the Northumberland and Durham Naturalists' Trust, in accordance with their undertaking. Regrettably, the Inland Revenue informed the Committee that they were not satisfied that the registration of the Fund as a charity necessarily precluded them from continuing to treat the Fund as taxable. Further delays thus arose, but within the last few weeks the Inland Revenue have decided not to pursue their claim and it has, therefore, now been possible to hand over to the Northumberland and Durham Naturalists' Trust the remaining balance on the Fund, amounting to £1,903 17s. 3d.

J. C. GARDINER, *Hon. Treasurer*

March, 1970

ANNUAL GENERAL MEETING, MAY 9TH, 1970

The Annual General Meeting of the Society was held in the Lecture Theatre at the Jodrell Laboratory, Royal Botanic Gardens, Kew, Richmond, Surrey, on Saturday, 9th May, 1970 at 12 noon.

Mr E. Milne-Redhead (President) was in the Chair and 58 members were present.

The Minutes of the last Annual General Meeting, as printed in *Watsonia*, Vol. 8, Part 1, pages 81–82, were adopted on the motion of Mr D. McClintock, seconded by Mrs B. H. S. Russell after the sentence at the foot of page 81 commencing 'Mrs M. Briggs was proposed by the Chairman for re-election as Honorary Membership Secretary' had been altered to read 'Meetings Secretary'.

REPORT OF COUNCIL

The Report together with the Accounts for the year 1969 had been circulated to all members. There being no queries, the Report was adopted on the motion of Mr M. H. Mannering, seconded by Mr P. J. Wanstall.

ELECTION OF OFFICERS

The Council had nominated Professor D. H. Valentine for re-election as a Vice-President and this was carried unanimously. Dr I. K. Ferguson had been nominated for re-election as Honorary General Secretary and he was re-elected unanimously. The President thanked the Honorary General Secretary for his work throughout the previous year.

Mr J. C. Gardiner had been nominated for re-election as Honorary Treasurer. The President spoke of the invaluable work Mr Gardiner had done for the Society and he said that this was the last year in which Mr Gardiner was prepared to be nominated to serve as Treasurer. The Society was confronted with the great difficulty during the coming year of finding a new Treasurer. Mr Gardiner's re-election was carried unanimously.

Mr E. F. Greenwood, Dr G. Halliday, Dr M. C. F. Proctor and Dr N.K.B. Robson were unanimously re-elected as Honorary Editors. The President voiced the Society's thanks to the hard-working Editors.

Mrs M. Briggs was proposed by the President for re-election as Honorary Meetings Secretary following Council's nomination and the meeting unanimously carried the proposal. The President thanked Mrs Briggs for her wonderful work in organising meetings for the Society.

Council had nominated Mrs J. G. Dony for re-election as Honorary Membership Secretary and the President in proposing her re-election said that the name of Dony had long been associated with the Society and he congratulated Mrs Dony on the recently published membership list. The proposal was carried unanimously.

ELECTION OF NEW MEMBERS TO COUNCIL

In accordance with Rule 10, Mr R. S. R. Fitter, Dr S. M. Walters and Professor V. H. Heywood retired. Three nominations had been received: Dr D. M. Moore, Mrs S. C. Holland and Dr D. J. Ockendon and these were elected, their seniority for purposes of Rule 10 being decided (in the order shown above) by lots drawn by the President.

ELECTION OF HONORARY MEMBERS

Council had nominated Professor J. L. van Soest and Mr E. C. Wallace as Honorary Members. Mr Milne-Redhead said that Professor van Soest was an expert on the genus *Taraxacum* and had done much to further our knowledge of British Dandelions. Professor van Soest's election was carried unanimously. In proposing that the Meeting approve Mr Wallace's nomination the President said Mr Wallace had given invaluable service to the Society over many years in compiling Plant Records and he had an immense knowledge of the British flora. The election was carried unanimously and greeted with loud applause.

AMENDMENTS TO THE SOCIETY'S RULES

The President said, that as explained in the Annual Report, the Development and Rules Committee had now been replaced by a Co-ordinating Committee and it was necessary to amend the Society's Rules.

The following amendments were approved.

Rule 4: alter '(a)' to read 'Co-ordinating Committee'

Schedule II (a): alter to read 'Co-ordinating Committee' and add 'Prepare business for Council; consider policy on general matters and make recommendations to Council for consideration'.

ELECTION OF HONORARY AUDITORS

Council recommended the re-election of Messrs Price, Waterhouse & Co., who had kindly agreed to continue this work on an honorary basis. Their election was duly

carried, and the President in expressing the Society's gratitude for their services said how fortunate the BSBI were in having such a distinguished firm as its auditors. Mr P. C. Hall proposed a special vote of thanks to Messrs Price, Waterhouse & Co., seconded by Mr D. McClintock.

There being no further business, the Meeting closed at 12.35 p.m.

I. K. FERGUSON

SOUTH-EAST REGION MEETING, 1970

A meeting of members resident in the South-East Region was held in the Kew Lecture Theatre at the Jodrell Laboratory, Royal Botanic Gardens, Kew, on Saturday, 9th May, 1970, following the Annual General Meeting of the Society.

The President was asked to take the Chair. The main business was to elect a Regional Representative to serve on the Council of the Society in place of Mr P. J. O. Trist who retired in accordance with Rule 9. The President thanked the retiring Representative for his four years service on the Society's Council.

The only nomination for Regional Representative received had been Mr D. E. Allen. Mr Allen's election was proposed by Mr R. M. Burton, seconded by Mr P. J. Wanstall. There being no other business the meeting closed.

I. K. FERGUSON

COMMITTEE FOR THE STUDY OF THE SCOTTISH FLORA

FIFTEENTH ANNUAL REPORT TO 31ST DECEMBER 1969

The Committee met twice in Perth and arranged an Exhibition Meeting at the Royal Botanic Garden, Edinburgh (by kind permission of the Regius Keeper). Eighteen field meetings were included in the Scottish programme for the year.

The Exhibition Meeting was held on Saturday 1st November, 1969 and about seventy people were present. The following exhibits were shown: new Scottish vice-county records, *Hypericum montanum* for v.c. 85 (G. H. Ballantyne), *Crassula aquatica* for v.c. 96 and also new to Scotland (A. Souter) and *Zannichellia palustris* for v.c. 72 (Mrs O. Stewart); *Epilobium* species and hybrids (*hirsutum* × *montanum* (Roxburgh), *montanum* × *roseum*, *montanum* × *obscurum*, *adenocaulon* × *montanum*, *adenocaulon* × *roseum* and *adenocaulon* × *obscurum* (Fife)) and *Salix* hybrids (*alba* × *fragilis*, *alba* × *stipularis*, *caprea* × *viminialis*, *cinerea* × *viminialis* and *aurita* × *cinerea*) (G. H. Ballantyne); Bryophyte mapping at Roslin (Dr D. Chamberlain); *Rubi*, *Taraxaca* and *Scirpus cespitosus* forms (Miss U. K. Duncan); a survey of Scottish *Rubi* (E. S. Eedes and Miss C. W. Muirhead); lichens from Iceland (Miss F. Kupicha); herbarium specimens from and map of Inverness-shire, 'the Cinderella of the Scottish Counties' (A. A. P. Slack); specimens from Stubai, Austria in the Hilda Wilson Herbarium, University of Aberdeen (Mrs A. H. Sommerville); water colours of flowers of southern Scotland (Mrs O. M. Stewart); 'introduction to the sections of the genus *Hieracium*' (A. McG. Stirling); living specimens of wool adventives (Miss M. McC. Webster).

After tea Mr D. M. Henderson gave a talk on his travels in Scandinavia. Following a buffet supper in the University of Edinburgh Staff Club colour transparencies were shown by B. S. Brookes, Miss E. R. T. Conacher, B. W. Ribbons, G. Rodway, A. McG. Stirling and Miss M. McC. Webster on C.S.S.F. field meetings, J. Anthony on Sutherland plants, Miss E. Bullard on Orkney plants, J. Grant Roger and Mrs A. H. Sommerville on plants of the Austrian Tirol, Mrs B. Burbridge on plants of the Dolomites and Canary Islands, B. Burbridge on botanical illustrations and Mrs H. Salzen on Ontario woodlands.

Of the eighteen field meetings in the programme, three were cancelled (one to Border S.S.S.I.s and two junior meetings to Craiglockhart Dell and Birks of Aberfeldy); one, to Glen Prosen, was arranged by the Alpine Botanical Secretary of the Botanical Society of Edinburgh and three, to Dalmahoy Hill, Penicuik Woods and Ben Lawers, by the Cryptogamic Society of Scotland (for reports of these see *Trans. bot. Soc. Edinb.*, **41**, part 1); the other meetings were held at St Abbs (7 June) led by Dr E. Conway (40); at Pease Dean, Berwickshire (8 June) led by J. Cousens (12); at Ardnamurchan (14–16 June) led by Miss A. Burns (5); at Byne Hill, Girvan, Ayrshire (15 June) led by H. A. McAllister (19); on shingle beds of the Tummel and Tay (21–22 June) led by A. W. Robson (4); on the Isle of Raasay (28 June–5 July) led by Mrs C. Murray (8); at the Braes of Balquhider (12 July) led by A. McG. Stirling (13); in Shetland (1–9 August) led by W. Scott and R. C. Palmer (6); on Handa Island (2 August) and at Durness, Sutherland (3 August) led by B. S. Brookes (5); to Holy Island, Northumberland (30 August) led by Dr J. Richards (5) and at Skinflats (3 August) led by Miss E. P. Beattie (12). The attendance figures are given in brackets. Reports of these meetings appeared in *Watsonia*, **8** (2): 189–194.

Miss E. P. Beattie resigned from the Committee in April and hence ceased to be B.S.B.I. Scottish Regional Representative. With the agreement of the Council of the Botanical Society of the British Isles the Committee appointed its Chairman to be Regional Representative and Mr A. A. P. Slack to fill the vacancy in the B.S.B.I. Membership of the Committee. The eight elected members appointed Miss E. P. Beattie and Mr A. W. Robson to serve for the calendar year 1970. Mr R. Mackechnie was appointed Chairman, Mr B. W. Ribbons, Acting Honorary Secretary, Mrs A. H. Sommerville, Honorary Treasurer, Miss E. P. Beattie, Honorary Field Secretary and Mr R. Mackechnie, member of B.S.B.I. Records Committee for 1970. The Committee was represented at B.S.B.I. Council by Miss Beattie on 11 March and by Mr Ribbons on 29 October (it was unrepresented on 21 May) and at B.S.B.I. Records Committee by Miss Beattie on 3 March and by Mr Ribbons on 20 October (it was unrepresented on 3 June).

The list of Recorders for Scottish vice-counties was reviewed and recommendations were made to the B.S.B.I. A Sub-committee was appointed in March to plan a programme of exploration of the flora of Inverness-shire.

The accounts showed a deficit of £17.13.9 and this amount has been refunded in equal sums by the two sponsoring societies.

The Committee wishes to express thanks to Miss Beattie for her work as Honorary Secretary since 1966, to Dr Pritchard for his work as Honorary Treasurer since 1966, to the officers of the sponsoring societies, to the leaders of the field meetings and to other members and friends who helped the Committee during the year.

B. W. RIBBONS

EXHIBITION MEETING, 1969

An Exhibition Meeting was held at the Department of Botany, British Museum (Natural History), London, S.W.7, on Saturday 29th November 1969 from 12 noon to 5.30 p.m.

SALIX AND *EPILOBIUM* SPECIES AND HYBRIDS FROM LOWLAND FIFE (v.c. 85)

During 1967 some *Salix* material was gathered in lowland south Fife and sent to R. D. Meikle for identification. This confirmed the presence of the following taxa: *S. alba*, *S. alba* × *fragilis*, *S. fragilis* (including vars. *decipiens* and *russelliana*), *S. purpurea*, *S. daphnoides*, *S. viminalis*, *S.* × *stipularis*, *S. calodendron*, *S. caprea* ssp. *caprea*, *S. caprea* × *viminalis*, *S. cinerea* ssp. *atrocinerea*, *S. cinerea* × *viminalis*, *S. aurita*, *S. aurita* × *cinerea*, and *S. repens* ssp. *repens*. Specimens of most of these taxa were exhibited.

Previous records of *Epilobium* in v.c. 85 indicate that *E. roseum* and *E. obscurum* have increased during the last few decades. *E. adenocaulon*, first noted in 1959, has spread rapidly during the past ten years and may soon become as widespread as *E. angustifolium*. Specimens of these species were exhibited along with material collected in 1968, which had been sent to T. D. Pennington for identification. From this the following hybrids were determined: *E. montanum* × *roseum*, *E. montanum* × *obscurum*, *E. adenocaulon* × *montanum*, *E. adenocaulon* × *roseum*, and *E. adenocaulon* × ? *obscurum*. In addition, *E. hirsutum* × *montanum* was shown from v.c. 80 (Roxburgh).

G. H. BALLANTYNE

SOME OFTEN CONFUSED PLANTS

The plants most often confused are not necessarily the most closely allied species but those with an overall superficial similarity. This similarity itself leads to misidentifications but the confusion is often amplified by careless collecting, labelling, and use of keys and descriptions and casual comparison with authentically named material.

Herbarium specimens and notes demonstrated some of these points and indicated some characters not used often enough:

Lepidium campestre (L.) R.Br. and *L. heterophyllum* Benth.; anthers yellow or purple respectively.

Arenaria serpyllifolia L. and *A. leptoclados* (Reichb.) Guss.; need careful examination of several small differences.

Lysimachia vulgaris L. and *L. punctata* L.; calyx-margins reddish or green respectively.

Veronica montana L. and *V. chamaedrys* L.; stems evenly pubescent or strongly bifarious respectively.

Veronica polita Fr. and *V. agrestis* L.; sepals ovate, acute or oblong, obtuse respectively.

Galium palustre L. and *G. uliginosum* L.; leaves blunt or mucronate respectively.

Scirpus setaceus L. and *S. cernuus* Vahl; fruits longitudinally ribbed or smooth respectively.

E. B. BANGERTER & L. F. FERGUSON

NARDURUS, VULPIA OR FESTUCA

Nardurus and *Vulpia* are genera which have been segregated from *Festuca*, but which have very uncertain circumscriptions. The exhibit consisted of herbarium sheets of the three main species of *Nardurus* and of six representative species of *Vulpia*. They were chosen to demonstrate the range of variation of *Vulpia* and *Nardurus* and the fallibility of all characters which have been used to separate these genera from each other and from *Festuca*. *Nardurus maritimus*, for instance, appears to be more similar to certain species of *Vulpia* than to *N. salzmannii*; and one or two species of *Vulpia* (e.g. *V. setacea*) possess the perennial habit of *Festuca* rather than the annual habit of *Vulpia*.

B. BATTS, H. JONES & C. A. STACE

STEREOSCAN STUDIES ON SEED MORPHOLOGY

In an attempt to distinguish between fossil seeds of *Arenaria ciliata* and *A. norvegica*, the seed surface characters have been examined by means of the scanning electron microscope. For each species, seeds from localities throughout their ranges were examined and in addition a 40,000 year old seed of *A. ciliata* from East Anglia, from a last glaciation fossil flora.

At a magnification of 800 ×, the details of surface sculpture can be seen to vary from one population of a species to another. A possible distinction between the two species may be found in the ornament on the cells. The fossil seed closely resembled recent seeds of *A. ciliata* from Ireland.

Micrographs were exhibited of seed surface of *Stellaria pallida*, *S. media* and *S. neglecta* at various magnifications. In these seeds magnification up to 6000× shows interesting differences in the finer ornament between the species.

F. G. BELL

A STUDY OF THE AERODYNAMICS OF WINGED SEEDS

This exhibit, by M. Stone and R. Dudzinski of Harrow County Grammar School, showed the results of experiments carried out on the rate of fall of various samaras. Specimens of seeds, leaves of trees and graphs on which results were tabulated were shown.

CHILDREN'S CENTRE CLUB, BRITISH MUSEUM (NATURAL HISTORY)

YET MORE ABOUT MULL

The exhibit represented an interim progress report on the first three years of the British Museum Mull Survey Project. The number of species of vascular plants now known is almost twice that recorded by George Ross in his detailed list of 1877. The total number of records amassed up to the end of 1968 was approximately 32,000, a number that bears comparison with the 117,000 records used by Dr J. G. Dony for his *Flora of Hertfordshire*, an area nearly twice as large as Mull. Specimens were exhibited to illustrate new vice-county records, records new to the Mull part of v.c. 103 and important confirmations of old records localised only as 'Mull'. A fern hybrid new to science, *Dryopteris* × *pseudoabbreviata* Jermy (*D. aemula* × *abbreviata*), was discovered during one of the survey visits to the island. Important contributions to the survey have been made by many people outside the museum and members of the B.S.B.I. have been prominent among those who have offered help.

DEPARTMENT OF BOTANY, BRITISH MUSEUM (NATURAL HISTORY)

WATERCOLOUR DRAWINGS OF BRITISH PLANTS BY THE LATE MRS WINIFRED BUSSEY

Mrs Bussey had been a flower lover and a painter all her life, but at the advanced age of 71 she began painting wild flowers and trees as a record of the English countryside and of the plants that had sprung up in London as a result of the wartime bombing. In all, she collected and painted 440 specimens. Her work has been widely exhibited in libraries around the London area and at the shows of the Royal Horticultural Society.

G. BUSSEY

TEN SPECIES OF *TARAXACUM* FROM SCOTLAND

The following species, all determined by Dr A. J. Richards, were exhibited: *Taraxacum brachyglossum* (v.c. 90), *T. cyanolepis* (v.c. 106), *T. drucei* (v.c. 90), *T. faeroense* (v.c. 106), *T. fulvum* (v.c. 90), *T. gotlandicum* (v.c. 90), *T. lacistophyllum* (v.c. 106), *T. platyglossum* (v.c. 90), *T. spectabile* (v.c. 90), *T. unguilobum* (v.c. 88).

U. K. DUNCAN

SOME INTERESTING CO. WATERFORD PLANTS

Large areas of Ireland remain relatively unbotanised in comparison with much of England and Wales and there is a need for considerably more recording not only of critical groups but also of well-known species. Co. Waterford (v.c. H6) in south-eastern Ireland is an area which has been remarkably neglected by botanists; in fact, apart from two or three well-known areas it has been almost ignored.

The exhibit showed some herbarium specimens, together with dot maps showing the distribution of each species in the British Isles, of new, confirmed pre-1930, and other interesting records that have recently been made in Co. Waterford.

REFERENCES

- FERGUSON, I. K. (1968). Notes on the flora of Co. Waterford. *Ir. Nat. J.*, **16**: 94-97.
 FERGUSON, I. K. & SCANNELL, M. J. P. (1969). *Zostera* in Co. Waterford. *Ir. Nat. J.*, **16**: 176-177.

I. K. FERGUSON

MORECAMBE BAY - NORTHERN AND SOUTHERN ELEMENTS
 IN THE FLORA

Within Morecambe Bay a number of maritime species are found close to the northern or southern limits of their range in the British Isles. The reasons for the geographical limitations of these species are not known but may vary from species to species. As they near the limit of their range they exhibit strong niche preferences, being less generally distributed throughout the maritime zone than they are further north or south, and show a particular susceptibility to biotic and disturbance factors such as grazing.

Notes on the ecology and distribution maps were presented of seven species with southern distributions (*Halimione portulacoides*, *Agropyron pungens*, *Parapholis strigosa*, *Limonium humile*, *L. binervosum*, *Adiantum capillus-veneris* and the non-coastal *Spiranthes spiralis*) and three with northern distributions (*Eleocharis quinqueflora*, *Blysmus rufus* and *Mertensia maritima*).

A. J. GRAY

THE GUERNSEY FLORA IN 1969

The rich flora of Guernsey has been surprisingly neglected and unexplored during the present century. 1969 gave fantastic proof of this, for something like 20 plants were found new to the island. The precise number depends on assessments, some still to be made, of status, permanence, identification, etc. Most of these finds were made on the visit by the Society in April, despite a season backward by 4-6 weeks, a report on which has already appeared (*Watsonia*, **8**: 185-186 (1970)). Species not recorded then, or seen since, include - *Lunaria annua*, *Salicornia europaea*, *Epilobium nerterioides* and *Ipheion uniflorum*.

In addition, second stations were seen for other plants, e.g. *Adiantum* and *Equisetum telmateia*; new places found for plants almost as rare in the island, e.g. *Trachelium caeruleum*, *Veronica catenata* and *Myriophyllum alterniflorum*; or not seen for many years, such as *Galeopsis tetrahit*; or confirmed identifications made, such as *Salix calodendron*.

Some vouchers of the year were exhibited. Not available was the remarkable new large *Romulea rosea* var. *australis*, specimens of which were on their way back from determination in South Africa.

D. McCLINTOCK

CHENOPODIUM PUMILIO - A KENTISH OBITUARY ?

Chenopodium pumilio R.Br. is one of three similar small-leaved, usually prostrate, Australian species of Goosefoot, all of which have occurred in Kent. The other two are *C. carinatum* R.Br. and *C. cristatum* (F.v.M.) F.v.M.

It differs from the other two by lacking any keel or wing on the sepals. *C. carinatum*

has a well marked wing-like keel, hence its Latin trivial; *C. cristatum* has a crest of fringed processes on its keel, hence *cristatum*. In addition there is the hybrid between the last two, *C. × bonteii* Aellen. All these have been found in shoddy.

Not only is *C. pumilio* the commonest, it seems to be the only one capable of naturalising itself. This it has done in plenty at Borthwick Bank south of Edinburgh; did (still does?) at Frensham, Surrey; and has done its best to do likewise at Borough Green and Wrotham Station, W. Kent, since at least about 1960. It has been there every year, in varying quantity, in the sidings, chiefly between the rails nearest to the east end of the down platform. This was despite regular clearing – the station often received an award for the best-kept station. It was a remarkable case of persistence in an alien country, undeterred by relentless discouragement.

There it still was in 1969; and a voucher specimen (now at Maidstone) was shown. But earlier in the year much of its area was submerged beneath asphalt for a new car park, and the rest of the siding is to be altered. It remains to be seen whether the seeds it must have so liberally shed enable it to survive. It deserves to.

D. McCLINTOCK

SOME SCOTTISH HAWKWEEDS

The exhibit comprised twenty-three herbarium sheets of *Hieracium* species collected during the past four years, mainly in west and north Scotland, and all determined by P. D. Sell and Dr C. West.

Most of the Sections of the genus were represented, and the species shown ranged from *H. shoobredii* E. S. Marshall and *H. pictorum* E. F. Linton, both widespread and common in the area, to the rare local endemics *H. dovrense* Fries and *H. pollinarioides* Pugsl. Recently described species were represented by *H. nigrisquamum* P. D. Sell & C. West and *H. solum* P. D. Sell & C. West. An as yet undescribed species of the Section Alpina was also shown as representative of the considerable number of such undetermined taxa which have been shown to occur throughout the area.

A. MCG. STIRLING

SPECIES OF *LOLIUM* AND THEIR HYBRIDS IN BRITAIN

The exhibit consisted of: (1) species occurring in Britain: *Lolium perenne* L. (indigenous), *L. multiflorum* Lam., *L. rigidum* Gaud. (*L. strictum* Presl), *L. temulentum* L., *L. remotum* Schrank (*L. linicolum* A.Br.), *L. loliaceum* (Bory & Chaub.) Hand.-Mazz. (*L. subulatum* Vis.) and *L. persicum* Boiss. & Hohen. (all introduced, the last three being rare casuals), accompanied by a key to species; (2) interspecific hybrids of *Lolium* found in Britain, including *L. multiflorum × rigidum*, recently discovered in N. Hants. (v.c. 12), (see Short Notes p. 299); (3) intergeneric hybrids, involving *Lolium* and *Festuca*, recorded from Britain; (4) diagrams showing natural interspecific and intergeneric (*Festuca × Lolium*) hybrids reported in the European botanical literature; and (5) a selection of interspecific and intergeneric hybrids of *Lolium* synthesized by T. J. Jenkin and his collaborators at the Welsh Plant Breeding Station, Aberystwyth.

A. MELDERIS

COMPUTER-GENERATED KEYS

A FORTRAN program has been written which prepares printed ready-to-use keys. The taxa for which a key is required are described by a rectangular array of characters and their values, some of which may be missing. Either bracketed or indented keys are obtainable, with an optional limit on the number of characters used per lead. The key is optimised for efficiency, and is made to be dichotomous wherever possible. Several

computer-produced keys were demonstrated. In particular, the key in *Flora Europaea* Vol. 2 for 134 genera of the Umbelliferae has been regenerated by computer, and a key for 86 potato cultivars was also shown. No previous key for the potatoes had been available on account of the labour involved in compiling it by hand. The program and a user manual are available on request.

R. J. PANKHURST

POLLINATION PHOTOGRAPHS

Photographs were exhibited showing visits of pollinating insects to a number of flowers, mostly zygomorphic, including the following (name of pollinator in parentheses): *Lamiastrum galeobdolon* (*Bombus agrorum*), *Stachys sylvatica* (*Bombus agrorum*), *Salvia glutinosa* (*Bombus agrorum*), *Iris pseudacorus* (*Bombus hortorum*, *Rhingia campestris*), *Lonicera periclymenum* (*Plusia gamma*), *Listera ovata* (*Athous haemorrhoidalis*), *Anacamptis pyramidalis* (*Zygaena* sp., *Melitaea cinxia*).

M. C. F. PROCTOR

TARAXACUM IN UPPER TEESDALE

A study has been made of the occurrence and distribution of *Taraxacum* species in Upper Teesdale. *T. proximum* Dahlst. and *T. brachyglossum* Dahlst. are Erythrosperma species found locally in dry places on the limestone. *Vulgaria* species are found on roadsides below 1300 ft, but are not of particular interest. In addition, there are eight Spectabilia species. These range from common Scandinavian species (*T. maculigerum*, *T. spectabile*, *T. praestans*) and common or local northern Atlantic species (*T. faeroense*, *T. unguilobum*, *T. landmarkii*) to endemics, not found outside Upper Teesdale (*T. pseudonordstedtii*, *T. pseudolarssonii*). In a small area of the dale, where the Sand Syke meets the Langdon Beck, all eight species occur. A study, both phytosociological and environmental, was made to determine in what way these species differ in habitat requirements. The following tentative conclusions can be made at this stage of the study:

- T. pseudonordstedtii* Occurs in base-rich flushes, usually with a northerly aspect.
- T. landmarkii* Occurs in base-rich and very open localities.
- T. faeroense* Occurs in closed and species-rich base-rich communities.
- T. maculigerum* Occurs in basic and very well-drained localities.
- T. pseudolarssonii* Occurs in shaded localities above the influence of flood water, associated with woodland species.
- T. praestans* Differs from the former chiefly in occurring in less shaded sites.

It is hoped that the continuation of this study after the flooding of the Cow Green Reservoir will yield information on the biological effect in stream-side communities near Widdybank Fell of changes in water regime resulting from the flooding.

A. J. RICHARDS

AN EXPERIMENT IN FLOWER MOUNTING

Two hundred specimens were suspended by plastic tape from a portable wooden stand (6' high, 3' wide, 1' 6" at base, weight ½lb) and mounted on good quality card by slightly adhesive transparent sealing cover (COVERLON by Fablon).

The exhibit effectively displayed specimen protection, retention of colour and shape for short and long-term preservation, and safe and easy transport.

Specimens included: *Geum rivale* (collected 1947), *Primula farinosa* (c. 1952), six species collected a week earlier and mounted the same day, *Carduus*, *Ilex*, *Eryngium*, ripe fruit of *Viburnum opulus* and leaves and inflorescence of *Heracleum mantegazzianum*.

Whether specimens are dried and pressed, or mounted and sealed in the field, effective preservation necessitates periodical inspection to ensure freedom (for any lengthy period) from excessive temperature, dampness, direct sunlight or tight packing of specimen cards.

H. E. W. SELBY

HYBRIDS IN *JUNCUS* SECTION GENUINI

Five species of this section occur in Britain: *J. effusus*, *J. inflexus*, *J. balticus*, *J. filiformis* and *J. conglomeratus*. The first three of these form hybrids (recognised by their high or complete sterility and their intermediacy in a wide range of morphological and anatomical characters) in all combinations: *J. effusus* × *J. inflexus* is quite widespread though seldom common, and was first recognised in Britain in 1843; *J. effusus* × *J. balticus* was represented by one colony, now lost through building, on the Lancashire coast; and *J. inflexus* × *J. balticus* occurs as three distinct colonies on the Lancashire coast. Neither of the latter two hybrids has ever been discovered elsewhere in the world.

J. filiformis hybridises extensively with *J. balticus* in Scandinavia, but the two species do not grow together in Britain.

J. conglomeratus has often been reported as forming hybrids with *J. effusus* and *J. inflexus*, but none has ever been satisfactorily substantiated.

The two non-British species of this section found in Europe (*J. jacquini* and *J. arcticus*) appear never to hybridise.

C. A. STACE

The following also exhibited.

- E. J. CLEMENT & T. B. RYVES B.S.B.I. Alien Hunt, October 1969 (see Field Meetings 1969, *Watsonia*, 8: 188-189 (1970))
- I. K. & L. F. FERGUSON *Naufraga* rediscovered (see Short Notes p. 294-295)
- A. N. GIBBY Botany on stamps
- M. GRIERSON British Wild Flower Calendar
Illustrations of specimens grown at Kew
- M. HICKEY Analytical flower drawings from life
- R. B. IVIMEY-COOK & M. C. F. PROCTOR A proposed new Flora of Devon
- D. MARRIS & A. H. F. WEBBE Some British plants and others from the High-Arctic
- R. MARRIS 'Temperate' *Potamogeton* species new to the High-Arctic
- A. MELDERIS *Bromus pumpellianus* Scribn.; an introduced species in Britain (see Short Notes p. 300)
- Y. L. MOSCATI Postage stamps of botanical interest
- F. H. PERRING & G. H. PETERKEN Network Research 1970
- W. T. STEARN Stereoscan photographs of pollen
- S. M. WALTERS & S. WEGMÜLLER A diploid subspecies of *Lamiastrum galeobdolon* (see p. 277-288)
- J. T. WISELY Various British wild plants, mostly from the B.S.B.I. Shetland meeting

From 4.30 p.m. the following members gave short lectures and showed colour slides in the Lecture Hall.

- H. J. B. BIRKS Plants of the Grossglockner, Austria
- J. E. LOUSLEY Flowers of the Algarve
- D. MARRIS Some High-Arctic plants
- M. C. F. PROCTOR Some plants and habitats of S.W. England
- G. TUCK Swiss Alpine plants
- T. WHITE Some rarities of the Isles of Wight