

Reports

REPORT OF THE COUNCIL FOR 1968

This report and the audited accounts relate to the calendar year 1968. Figures in brackets are the 1967 ones, for comparison.

The year 1968 was a notable one for the Society in four ways in particular: a long-term programme of 'network research' was launched; *British Sedges*, the first volume of what the Society hopes may be a series, met with a tremendously successful reception; the Society entered into discussions with botanical societies of three other nations to consider a proposal for some form of European federal structure; and the annual subscription was raised. If it was a year in which steadily rising costs at length forced the Society to face the inevitable and take essential corrective measures, it was a year which also saw promising developments in several new directions.

It was a year, too, of sharp recovery in the recruitment of new members, after the unusually poor results in this respect in 1967. The 128 who joined constituted, in fact, a 19% increase over the year before. As usual, the South of England accounted for almost two-thirds of this figure. One in every six, it is encouraging to note, was a Junior Member. This rise, moreover, was not accompanied by any parallel rise in membership erosion: 89 (90) were lost by reason of death, resignation or the operation of Rule 28. The year ended with a membership total of 1,733 (1,694), representing a net gain of 39 (18). The result was sufficient to halt the steady decline in the annual rate of growth that had been in evidence over the last four years.

This rise in membership, nevertheless, was not nearly sizeable enough to enable the Society to postpone for any longer the raising of the annual subscription—which has been held at the same level for no less than eleven years. Like most other bodies of its type, the B.S.B.I. has no means of sidestepping the general inflation of costs, the effect of which has been particularly marked on two of its indispensable staples: postage and printing. On the recommendation of Council, accordingly, it was agreed at a Special General Meeting on November 23 that the annual subscription for Ordinary and Subscriber Members be raised by ten shillings, to £2, with effect from 1st January 1969. While a breathing-space has now been gained, therefore, it is clear that economies must be pursued and even greater efforts made to increase membership, if the Society is to avoid a continuing depletion of its reserves.

As will be seen from the accounts which are appended, during the past year the Society's expenditure substantially exceeded its total income from subscriptions, from dividends and interest, and from the sales of journals. The charge for the year for the printing and distributing of our journals includes rather more than a normal year's charge at current prices for *Proceedings* but less than a full year's costs for *Watsonia*. For the first time the accounts show separately the expenditure incurred on storing and distributing the back numbers of our journals, a share of these costs having been allocated to the Publications Fund. Other expenditure contains little of an abnormal kind and includes about £200 for the services of the Institute of Biology for various secretarial purposes. A new item is the cost of printing and postage for the 'network research' programme launched in 1968. Dividends and interest received show a satisfactory increase, but this source of income cannot be maintained if our reserves are depleted by expenditure in excess of annual income.

The Publication Fund shows that proceeds from the sales of *British Sedges* exceed the expenditure incurred, after deducting the grant received from the Royal Society. Altogether about 2,500 copies had been sold by the end of the year and as a steady demand continues for this excellent handbook, it was decided to print off an additional

500 copies before the type was broken up; there will then be nearly 1,000 copies available for the future. Other satisfactory items in the Publications Fund are the receipt of £417 7s 0d. in respect of royalties from the *Critical Supplement to the Atlas of the British Flora*, further royalties from the *Atlas* itself and from Conference Report No. 9, as well as initial royalties from D. H. Kent's *Index of Botanical Monographs*.

THE MEETINGS COMMITTEE, after an exceptionally heavy year in 1967, in 1968 enjoyed something of a respite. There were just two non-routine events to organise: a wine-and-cheese party, in the evening following the Annual General Meeting, to celebrate the publication of the *Critical Supplement to the Atlas of the British Flora*; and a further Local Flora Writers' Conference, this time at Aberystwyth, at which some 50 or so members engaged in a stimulating exchange of views on the kinds of items that ought to be included in any local Flora worthy of the name. The Society is much indebted to Dr J. P. Savidge for his help in organising this useful and enjoyable weekend.

It was London's turn this year for the Annual General Meeting, which duly took place in the rooms of The Linnean Society in May. Fifty-eight members were present to hear, as the prelude to this, the first Presidential Address, 'The B.S.B.I. in a Changing Britain'. The afternoon of the same day was given over to a series of talks introducing the new programme of 'network research', and this was followed by an excursion to Virginia Water, in Berkshire, on the Sunday.

The Committee also organised the customary Annual Exhibition Meeting in November, held as usual in the Department of Botany, British Museum (Natural History), by kind permission of the Keeper. Forty-three exhibits were staged, maintaining the high total newly achieved in the previous year. There was the normal large attendance of members and guests, of whom 65 stayed on for the now traditional evening Reception.

In addition to a visit to the South London Botanical Institute during the winter, four field meetings were arranged—a return from the bare minimum to which the English total was temporarily cut down as an experiment in 1967. These were at Bury St. Edmunds, in Hampshire (for orchids), at Taunton, and in Co. Durham (for roses). The meeting at Taunton doubled up as the South West Regional Meeting, at which this Region duly elected its Representative for the vacancy on Council.

THE JUNIOR ACTIVITIES SUB-COMMITTEE arranged two field meetings in Britain in 1968—in Cornwall and Perthshire—and another of its very popular meetings overseas, this time in the Alps once again. Applications for this last proved unexpectedly numerous and many, regrettably, had to be turned down because of the limited accommodation available. In compensation, a further meeting on the Continent is being planned with the least possible delay.

THE DEVELOPMENT AND RULES COMMITTEE had a very quiet year—so quiet, in fact, that it has begun to have doubts about its continued usefulness. The major items considered have been the present operation of the regional system in England and various matters pertaining to publicity. The latter have led to the setting up of a small, specialist working party to explore this whole aspect in fuller detail.

THE PUBLICATIONS COMMITTEE was one of two standing committees to have a change of secretary during the year, Mr Wanstall finally retiring after a record-breaking fourteen years in office. It has been responsible for the production of two parts of *Proceedings* and two parts of *Watsonia* (for which a new cover has also been designed). Plans for the Society to publish further, companion volumes to *British Sedges*, dealing with other difficult groups have been among other matters discussed.

Early in the year the viability of the Society's much-appreciated abstracts service, at any rate in its present form, was considered a sufficient matter for concern to warrant the setting up of a joint working party with the *Flora Europaea* organisation to review its character and position within a wider context. This body has so far carried out a wide-ranging survey of the existing network of abstracting and indexing services in plant

taxonomy as a whole and is devoting study, more particularly, to the possibilities of mechanised retrieval in this field. Should this prove feasible, the way may be opened to integrating the Society's service with others that run more or less in parallel, streamlining its operation and—to some extent at least—safeguarding its continuity.

Mention should also be made here of the publication by Academic Press on the joint behalf of the B.S.B.I. and the Linnean Society of the Report of the very successful 1967 Conference at the University of Liverpool. The thanks of the Society are due to Professor Heywood for undertaking the very considerable task of editing this.

THE CONSERVATION COMMITTEE was the other standing committee to have a change of secretary during the year. The Society is indebted to Mr Streeter for all his work on its behalf in the past—and, in a sense, henceforward as well; for he will be continuing to serve the Committee's cause at one remove, in his capacity as chairman of the new liaison committee of the Society for the Promotion of Nature Reserves. Three permanent representatives of the B.S.B.I. Committee were also invited to sit on this useful new body, which in future will act as a 'clearing-house' for the conservation concerns of a whole range of societies such as ours and represent them in regular discussions with the Nature Conservancy. Through this new machinery the Committee has already been consulted on a proposed code governing introductions into reserves and of the possibility of producing for schools a list of plants that can be collected with the minimum risk of harm. The Committee similarly contributed representatives, by special invitation, to the County Trusts' Conference at Canterbury and to a reception at St. James's Palace held in connection with 'The Countryside in 1970' Conference. It also gave advice on the botanical implications to the new Inland Waterways Amenity Advisory Council. All the while, throughout the year, the progress of the Wild Plant Protection Bill, in the framing of which representatives of the Society have played a leading part from the very first, was watched with understandable anxiety. In this connection it was, perhaps, ironic that two of this year's more worrying 'threats' were the digging up of Lady's Slipper Orchids in Yorkshire and the commercial exploitation of primroses in Devon.

THE RECORDS COMMITTEE was enlarged this year to include representatives of each of the three Regional Committees. It has continued with its long-term task of improving the Society's whole system of record-collection, to this end supplying to further Recorders who requested them sets of index drawers and cards. It has continued, too, to keep the progress of the many local Floras known to be in preparation under close review and provided specialist advice in this connection in one or two further instances. An important new departure was the inauguration, at the end of the year, of a newsletter to Recorders. This work in improving communications was furthered by the holding of another Local Flora Writers' Conference and by meetings that the Secretary was fortunately able to have during the year with Recorders in both Scotland and Ireland. A meeting of the Committee to debate the future basis for the Society's recording concluded with a recommendation to adhere to the Watsonian vice-county system, for a variety of reasons, despite its acknowledged imperfections. In addition, it was agreed that in future grid-references should accompany records published by the Society (though, obviously, this will be done with discretion) and that efforts should be made to press ahead with a census catalogue, so that a pocket register of up-to-date vice-county distributions can be made generally available.

This Committee also took over responsibility during the year for the new programme of 'network research'. The initial responses to both of the first two enquiries have been encouraging, well over 300 completed records card for the *Symphytum* survey having been received by the end of October. Both enquiries will be continuing in 1969 and a third, a Mistletoe survey, is planned for the coming winter season.

Of the three Regional Committees—

THE COMMITTEE FOR THE STUDY OF THE SCOTTISH FLORA arranged ten field meetings, of

which one had to be cancelled through lack of support. The nine which took place were in Lanarkshire, Argyllshire, Upper Nithsdale, Lammermuir Deans, the Isle of Tiree, the Isle of Mull, East Lothian and (two) Midlothian. In addition, the Annual Exhibition Meeting was held jointly with the Andersonian Naturalists of Glasgow in the Department of Botany, University of Glasgow, by kind permission of Professor P. W. Brian.

THE WELSH REGIONAL COMMITTEE also arranged its customary full programme of field meetings. Those in 1968 were in the counties of Caernarvon, Pembroke, Denbigh, Glamorgan, Montgomery and Brecon. The Annual General Meeting was at Gregynog Hall, Montgomery, in September, and a number of exhibits were shown at this. The Region also staged an exhibition at the annual conference of the Council for the Protection of Rural Wales in Aberystwyth, which aroused considerable interest. The *Welsh Regional Bulletin* did not appear during 1968, but an issue is to be circulated early in 1969. Two editors have now been appointed and each will be responsible for a January and August issue respectively.

THE IRISH REGIONAL COMMITTEE has now instituted a newsletter. Two extended field meetings were held in under-worked counties (Co. Cavan and North Tipperary) and a day meeting in the Boyne Valley. The Annual General Meeting and Exhibition took place in late October at University College, Dublin.

WARBURG MEMORIAL FUND. By the end of the year, donations received in response to the joint appeal with the British Bryological Society for the *Warburg Memorial Fund* amounted to £474. This sum is considerably less than the target which it is hoped to achieve. Members have recently been reminded of the appeal and it is hoped that those who have not already made a donation to the fund will now send one to the Hon. Treasurer. It will be remembered that the intention is to make an award out of the Fund, annually or less frequently, to a young botanist for travel, preferably in the period between leaving school and going to university. A joint committee with the British Bryological Society is being established to formulate the rules for making awards out of the Fund.

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, the Linnean Society of London and the City of Perth Museum and Art Gallery, for allowing the regular use of their premises for Council or committee meetings; to the University College of Wales, Aberystwyth, for allowing the Local Flora Writers' 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.

J. G. DONY, *President.*

D. E. ALLEN, *Hon. General Secretary.*

11th March 1969.

BALANCE SHEET AS AT 31st DECEMBER, 1968

1967					1967				
	General Fund:					Investments:			
	Balance 1st					4½% Defence			
	January 1968 ...	£4,238	3	10		Bonds ...	£500	0	0
	Add: Premium on					5% Defence			
	conversion of					Bonds ...	2,000	0	0
	Defence Bonds...	30	0	0		5% National			
		4,268	3	10		Development			
	Less: Excess of					Bonds ...	1,000	0	0
	expenditure over					5½% National			
	Income for year	785	11	10		Development			
		£3,482	12	0		Bonds ...	500	0	0
£4,238	Publications Fund ...					6% British			
3,437	40 Benevolent Fund ...	4,446	1	2		Savings Bonds ...	1,000	0	0
2,409	Creditors for Printing and General	39	11	0		8½% Local			
	Expenses ...	2,404	19	11		Authority			
108	Subscriptions Received in Advance	171	5	0		Bonds ...	1,000	0	0
						The Equities			
						Investment			
						Fund for			
						Charities—			
						750 units			
						(Market Value—			
						£1,602) ...	1,429	13	9
						£5,000			
						Cash at Bank:			
						Deposit Account ...	2,500	0	0
						Current Account ...	614	15	4
						5,232			
							3,114	15	4
£10,232		£10,544	9	1	£10,232		£10,544	9	1

J. C. GARDINER,
Hon. Treasurer.

GENERAL INCOME AND EXPENDITURE ACCOUNT

for the year ended 31st December, 1968

1967					1967				
	Cost of Printing and Distributing:					Subscriptions received ...	£2,483	19	1
	<i>Proceedings</i> ,				426	Dividends and interest received ...	578	17	3
	Vol. VII, Part 2					Proceeds from sales:			
	(balance) and provi-					<i>Proceedings</i> ...	£156	9	7
	sion for Part 3 ...	£2,310	15	10		<i>Watsonia</i> ...	280	0	4
	<i>Watsonia</i> ,					Old B.E.C. Reports	30	3	10
	Vol. VI, Part 6								
	(balance) and provi-					466	13	9	
	sion for Vol. VII,					Excess of expenditure over income			
	Part I ...	904	4	10		Charged to General Fund	785	11	10
	Storage and distri-								
	bution of back								
	numbers (less provi-								
	sion) ...	94	8	2					
		£3,309	8	10					
£2,112	275 Printing and Distributing Annual								
	Report and Notices of Field								
	and Indoor Meetings ...	297	0	2					
35	Expenses of Council and Com-								
	mittee Meetings ...	66	16	0					
100	Travelling Expenses of Officers,								
	Secretaries and Members at-								
	tending Meetings ...	100	13	0					
443	General printing, stationery, post-								
	ages, telephone and petty ex-								
	penses ...	299	2	9					
137	Expenses of Regional Organisation,								
	including Card Indexes for								
	Recorders ...	70	11	5					
—	Network Research printing and								
	postages ...	119	5	4					
29	Field and Indoor Meetings, ex-								
	penses less fees received. ...	52	4	5					
20	Contribution to Wild Plant Pro-								
	tection Working Party ...	—							
155	Excess of income over expenditure								
	credited to General Fund ...	—							
£3,306		£4,315	1	11	£3,306		£4,315	1	11

Transactions in 1968

TEESDALE DEFENCE COMMITTEE REPORT

J. C. GARDINER, *Hon. Treasurer.*

11th March, 1969.

ANNUAL GENERAL MEETING, MAY 3rd, 1969

The Annual General Meeting of the Society was held at Merlewood Research Station, Grange-over-Sands, Lancashire, on Saturday, 3rd May, 1969, at 12 noon.

Dr J. G. Dony (President) was in the Chair and 36 members were present.

The Minutes of the last Annual General Meeting were read and were adopted on the motion of Mrs B. H. S. Russell, seconded by Mr E. F. Greenwood.

REPORT OF COUNCIL

The Report together with the Accounts for the year 1968 had been circulated to all members. There being no queries, the Report was adopted on the motion of Miss C. M. Rob, seconded by Mrs B. H. S. Russell.

ELECTION OF PRESIDENT

Mr E. Milne-Redhead had been nominated by Council. The Chairman said that Mr Milne-Redhead had been a member of the Society for 35 years during which time he had held many offices. It was Mr Milne-Redhead who had in fact introduced Dr Dony himself to the Society. Unfortunately Mr Milne-Redhead was not able to be present because the meeting coincided with Open Day at the Royal Botanic Gardens, Kew. The Chairman proposed that Mr Milne-Redhead be elected and the proposal was carried unanimously. Dr Dony continued in the Chair for the remainder of the Meeting.

ELECTION OF OFFICERS

Following Mr Milne-Redhead's election to the Presidency and Miss U. K. Duncan's wish not to be re-elected a Vice-President, Council had nominated Mr J. E. Lousley and Dr F. H. Perring for election as Vice-Presidents, thus ensuring continuity of their valuable work, and this, together with the re-election of Professor J. G. Hawkes, was carried unanimously. Dr Dony said that Mr D. E. Allen, Honorary General Secretary, wished to resign his office and his resignation had been received with much regret. The Chairman spoke with praise of Mr Allen's two very useful years of work as General Secretary, during which time the Society had embarked on the Network Research Programme and on a scheme to collaborate with other European botanical societies. Mrs B. H. S. Russell proposed the Meeting's warmest thanks to Mr Allen for all his work, seconded by Miss C. M. Rob and followed by loud applause.

Dr I. K. Ferguson had been nominated to succeed Mr Allen. Dr Dony said that Dr Ferguson's work with *Flora Europaea* at the Department of Botany of the British Museum and now his membership of the Kew staff were a fitting background for the office. His election was proposed from the chair and carried unanimously.

Mr J. C. Gardiner had been nominated by Council for re-election as Honorary Treasurer and he was re-elected unanimously.

Mr E. F. Greenwood, Dr M. C. F. Proctor and Dr N. K. B. Robson were unanimously re-elected as Honorary Editors. Dr G. Halliday had been nominated by Council as a fourth Honorary Editor to take the place of Dr C. D. K. Cook who was no longer working in this country. Dr Halliday's election was carried. The Chairman voiced the Society's thanks to the hard-working Editors.

Mrs M. Briggs was proposed by the Chairman for re-election as Honorary Membership Secretary following Council's nomination and the meeting unanimously carried the proposal.

AMENDMENTS TO THE SOCIETY'S RULES AND ELECTION OF AN HONORARY MEMBERSHIP SECRETARY

The proposal to elect an Honorary Membership Secretary was discussed in conjunction with the proposal to amend the Society's rules. The following amendments were approved.

Rule 6: add "Honorary Membership Secretary"

Rule 7: add "(F) The Honorary Membership Secretary shall be responsible for the Register of Members, and shall undertake such related work as may be necessary"

Following Council's nomination, Mrs J. G. Dony was elected and she will therefore continue with the valuable work she has already done for many years.

The following amendment to Rule 11 was approved by the Meeting: "Notice of a Regional Meeting shall be given at least two months in advance" (instead of three months as at present) and "In the event of a nomination not being received four weeks before the date of the meeting Council shall have the power to make a nomination" (instead of eight weeks as at present).

ELECTION OF NEW MEMBERS TO COUNCIL

In accordance with Rule 10 Mr J. E. Lousley, Dr F. H. Perring and Mr P. J. Wanstall retired. Three nominations had been received: Mr D. McClintock, Mr R. M. Burton and Mr. H. G. Messenger and these were elected, their seniority for purposes of Rule 10 being decided (in the order shown above) by lots drawn by the Chairman.

ELECTION OF HONORARY MEMBERS

The election of Mrs C. M. R. Schwerdt and Sir Edward Salisbury as Honorary Members was proposed by Council. Dr Dony in proposing that the Meeting approve these nominations said Mrs Schwerdt was President of the Wild Flower Society and had done much to promote interest in the British Flora. He went on to say Sir Edward Salisbury, the "Grand old man" of British Botany, had been a member of the Society since 1914. The election of both as Honorary Members was unanimously carried.

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 expressed the Society's gratitude for their services.

ANY OTHER BUSINESS

The position of Field Secretary was discussed, and it was decided to wait until such time that Council thought it fit to revive the office.

Miss C. M. Rob voiced the feelings of all members of the Society when she thanked Dr Dony, not only for all that he had done for the B.S.B.I. during twenty years in office, culminating in his two years as President, but also for his great help to British Botany and to Weeds, and the thanks were carried in loud acclamation.

There being no further business, the Meeting closed at 12.50 p.m.

I.K.F.
E.Y.

NORTH-WEST REGION MEETING, 1969

A meeting of members resident in the North-west Region was held in the Library, Merlewood Research Station, Grange-over-Sands, on Saturday, 3rd May, 1969 following the Annual General Meeting of the Society.

The Secretary of the Society opened the meeting and E. F. Greenwood was elected to the Chair. The main business was to elect a Regional Representative to serve on the Society's Council in place of the retiring Representative, Dr C. D. K. Cook.

The only nomination had been A. Newton, proposed by E. F. Greenwood and seconded by Miss V. Gordon. Mr Newton was declared elected.

After D. E. Allen and the Chairman had made a few comments on the purpose of Regionalisation, the meeting was closed.

E. F. GREENWOOD.

COMMITTEE FOR THE STUDY OF THE SCOTTISH FLORA

FOURTEENTH ANNUAL REPORT TO 31ST DECEMBER 1968

The Committee met twice, each time in Perth, and an Exhibition meeting was held jointly with the Andersonian Naturalists of Glasgow on Saturday, 9th November, at the Department of Botany, University of Glasgow, by kind permission of Professor P. W. Brian.

Of the nine field meetings scheduled to take place during the 1968 season, one had to be cancelled (River Mouse (Cranley Estate), Lanarkshire. Leader: Mr W. A. Scott) because of lack of support. The others were to The Avon and Cander Valleys, Stonehouse, Lanarkshire, June 15th, led by Mr S. A. Birnage; Argyllshire, 22 and 23rd June, led by Mr A. G. Kenneth; Upper Nithsdale, 29th and 30th June, led by Dr H. Milne-Redhead; Lammermuir Deans, 29th and 30th June, led by Miss E. P. Beattie; Isle of Tiree, 3rd–11th July, led by Miss U. K. Duncan; Isle of Mull, 13th–20th July, led by Mr A. A. Slack; Gosford Bay, East Lothian, 20th July, led by Dr J. Milne; Crichton, 27th July, led by Miss E. P. Beattie and Cobbinshaw Reservoir, Midlothian, 3rd August, led by Dr P. Myerscough.

The Exhibition meeting was attended by about 100 people of whom about 50 were present for the evening session. A short meeting was held at 2 p.m. of B.S.B.I. members normally resident in Scotland in order to elect the Regional Representative and three other members to serve on the Committee for the next four years.

The following exhibits were shown:

B.S.B.I. *Symphytum* Survey.

Biological Records Centre's Recording Schemes currently in operation.

Vice county Boundaries of Scotland.

Herbarium sheets of various plant groups including *Potamogeton* and *Zostera*.

Miss U. K. DUNCAN

Map and photographs of Inchcailloch, Loch Lomond National Nature Reserve.

E. T. IDLE

Elatine hydropiper L.—new to Scotland. Found near the mouth of the R. Endrick, on the east side of Loch Lomond, on sand and mud exposed by the 1968 summer drought.

E. T. IDLE, J. MITCHELL & A. MCG. STIRLING

28 herbarium sheets of Scottish plants.

R. MACKECHNIE

Specimens illustrating the distribution of tetraploid ($2n = 68$) and hexaploid ($2n = 102$)

Campanula rotundifolia in the British Isles.

H. A. MCALLISTER

Mull 1961- Map showing areas visited by the C.S.S.F. party and specimens of the interesting plants found.

A. SLACK

Interesting plants found on the Isle of Mull C.S.S.F. Field Meeting 1961.

D. A. RATCLIFFE, B. W. RIBBONS & A. MCG. STIRLING

The Filmy Ferns—*Hymenophyllum tunbrigense* and *H. wilsonii*. Fresh material was exhibited from near Tarbert, Loch Fyne, where both species occur in some abundance.

A. MCG. STIRLING

Herbarium specimens: (a) *Pilosella officinarum*, *P. aurantiaca* and *P. × rubrum*.

(b) Wool adventives and grain aliens.

Miss M. MCCALLUM WEBSTER

Messrs E. B. Bangerter and J. F. M. Cannon gave a most interesting and stimulating illustrated account of the immense amount of botanical work being done by the staff of the British Museum and their many helpers, both professional and amateur, in collecting data for the Museum's Flora of the Isle of Mull.

After the most enjoyable Buffet Supper, slides were shown by a number of people of the flora of Britain, the Faeroes, the Pyrenees, etc.

A full programme of field meetings has been arranged for 1969, some of which are in conjunction with other Societies. There will also be a few Junior meetings organised by Miss Ailsa Burns, the B.S.B.I. Junior Meetings Secretary.

It is a pleasure to express thanks to the officers of the B.S.B.I. and B.S.E. and to all those who have generously given of their free time to help the Committee to carry out its activities.

E. P. BEATTIE. *

EXHIBITION MEETING, 1968

An Exhibition Meeting was held at the Department of Botany, British Museum (Natural History), London, S.W.7, on Saturday 23rd November 1968 from 12 noon to 5.30 p.m. About 220 members and guests attended.

FUNGI OF NORTHAMPTONSHIRE WOODLANDS

Twenty Ferraniacolor slides were exhibited, being part of a series being produced of Northamptonshire fungi. The following species, all of which are common, were illustrated:

Acidium compositarum (×5), *Amanita phalloides*, *Auricularia auricula*, *Clavaria cristata*, *Collybia distorta*, *C. fusipes*, *C. peronata*, *Empusa* sp. (×5), *Hygrophoropsis aurantiaca*, *Hypholoma fasciculare*, *Inocybe griseo-lilacina*, *Laccaria amethystina*, *Lactarius quietus*, *Lycoperdon perlatum*, *Marasmius ramealis*, *Mucor* sp. (×3), *Scleroderma aurantium*, *Sparassis crispa*, *Stereum rugosum*, *Trametes abietina*.

A Praktina camera fitted with an 8in. lens on home-made bellows is used for all normal work. This gives a much greater working distance, depth of field and better perspective than the normal 2in. lens. All the slides were taken using electronic flash.

T. B. BARRATT.

Festuca altissima IN MERIONETH

The *Atlas* shows a single record for North Wales of *Festuca altissima* All., a 19th century one of Thomas Ruddy's from Llandderfel, Merioneth. Another from the same period (Llanymawddwy, Merioneth, Miss May Roberts) was traced after the *Atlas* was published. Both of these localities were lost.

Over the last few years, however, *F. altissima* has been found by P. M. Benoit, Miss A. Burns, Miss V. Gordon and Mrs K. M. Stevens to be widespread in the Dolgellau district of west Merioneth, in the less accessible parts of the glens with basic (mostly dolerite) rocks. The following 10 stations in four 10 km squares are currently known to exist in the county. These include the old station at Llanymawddwy, which was rediscovered in 1968. Ruddy's original locality has not yet been traced but is also likely still to exist.

23/61. Panteinion glen, 1967, PMB & KMS. Bron Meirion waterfalls, 1966, PMB. Arthog waterfalls, 1966, PMB. Abergwynant glen, 1957, VG; 1966, PMB. Ty'n y Ceunant, 1967, PMB & KMS.

23/71. Ty Mawr, near Dolgellau, 1968, PMB. Torrent Walk, 1966, PMB & AB.

23/71 & 23/72. Nant Helygog, 1966, PMB & KMS.

23/82. Afon Eiddon, 1967, PMB & KMS. Llanymawddwy, 19th century, Miss May Roberts; 1968, PMB & KMS.

(23/93. Llandderfel, 19th century, Thomas Ruddy.)

A specimen and distribution map were exhibited.

P. M. BENOIT.

CHROMOSOMES OF *Spartina pectinata* LINK IN IRELAND

The exhibit indicated the number and meiotic appearance of chromosomes in Irish *Spartina pectinata* Link (Boyle 1968a, b).

Photographs of pollen mother cells at first meiotic metaphases and anaphases showed $2n = 41$. 20 bivalents and a univalent were present at metaphase. Anaphase showed two groups of 20 chromosomes with the univalent lagging between them; in one case the univalent was the same as at metaphase; in another the univalent appeared to have divided into two parts which were very close to each other.

Chromosomes of Irish *S. pectinata* are similar to those described by Marchant (1968) for *S. pectinata* recently introduced to Kew from Canada. Marchant interprets the univalent as a B-chromosome.

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 MARCHANT, C. E. (1968). Evolution in *Spartina* (Gramineae), 3. *J. Linn. Soc. (Bot.)*, **60**: 411-417.

PATRICIA J. BOYLE

YELLOW-BERRIED *Crataegus monogyna*

Living and dried material was shown of *Crataegus monogyna* Jacq. bearing fruit varying from yellow to scarlet from asolitary bush discovered during November 1960 by J. H. Chandler growing beneath conifers by the roadside at Essendine in Rutland. A herbarium specimen with similarly coloured berries found by Miss I. M. Hayward near Galashiels, Selkirk, in 1911 was also shown. A herbarium specimen collected by J. P. M. Brenan of the true yellow-berried *C. monogyna* which was discovered by the Cam Brook near Midford, N. Somerset, by Miss F. M. Barton during 1946 was exhibited for comparison.

REFERENCES

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 J. H. CHANDLER & J. L. GILBERT.

INTROGRESSIVE HYBRIDISATION BETWEEN BRITISH ANNUAL *Senecio* SPECIES

The evidence for introgression from *Senecio squalidus* into *S. vulgaris* was given. This is believed to result in variants of the latter species including var. *hibernicus* Syme. Possible mechanisms for this introgression were discussed, and one of these was illustrated, using the progeny from the triploid *S. × londinensis* (*S. viscosus* × *S. squalidus*) as an example. The implications of the investigation are discussed in a short Note (p. 47).

P. CRISP & B. M. G. JONES.

MORPHOLOGICAL DEVELOPMENT OF *Spartina* 'X'

The exhibit comprised four herbarium sheets of fertile *Spartina* 'x' C. E. Hubbard from Sandy Haven Pill, Pembrokeshire. These demonstrated the seedling stage, the appearance of the first rhizomes, the production of the first inflorescence, and finally a flowering and a seeding head, including husked seeds, from a mature plant.

Few fertile seeds per head have been found but seedlings occur in great abundance. It is by seed that *S. 'x'* is dispersed so widely where it has become established; the spread, slow in a newly colonised locality, becomes increasingly rapid as more and more patches develop.

T. A. W. DAVIS

B.S.B.I. MEMBERSHIP

Five maps and charts were exhibited giving the following facts and figures:-

1. Rise and fall in membership, 1942 (343 members) to 1968 (1796+).
2. World map showing distribution of 164 Overseas members.
3. Proportion of men to women at 1st November 1968:

Men	1063 (59.2%)
Women	539 (30.0%)
Subscribers ..	194 (10.8%)
4. List of 79 present-day members who joined before 1939 when the Society was known as the Botanical Exchange Club. Our most senior member is Mr G. C. Brown, Colchester, who joined in 1911.

5. Regional representation:

		% of total membership	members per 100,000 of population
South-east	701 members	38.9	4.30
South-west	240 "	13.4	4.92
Midlands	171 "	9.6	1.99
North-east	130 "	7.2	1.82
North-west	136 "	7.8	1.94
Scotland	120 "	6.7	2.38
Wales	94 "	5.2	3.53
Ireland	40 "	2.2	0.95
Overseas	164 "	9.0	

Mrs J. G. DONY.

Cardamine raphanifolia IN EAST GLOUCESTERSHIRE

Herbarium sheets of *Cardamine raphanifolia* Pourret (*C. latifolia* Vahl) were exhibited from a site at Lower Slaughter in East Gloucestershire, reported by Mr R. C. L. Howitt in June 1968. This species, which was not officially added to the British List until about 1949, is a native of the mountains of southern Europe. In Great Britain *C. raphanifolia* has been recorded from several localities in the Ambleside and Windermere area, also from Dundee, Scalby and Goathland in north-east Yorkshire, and Tonbridge in West Kent. It has been known from near Ambleside since 1932. At Lower Slaughter it is well-established for half a mile along the banks of the River Eye, a tributary of the River Windrush, in an area of downwash limestone gravels deposited on lower lias clay at an altitude of 425 ft on an easterly dip-slope of the north Cotswold escarpment. A few fruiting capsules were found in June 1968, but seeds were not then fully developed.

Mrs R. DUDLEY-SMITH.

Lathyrus maritimus BIGEL. SUBSP. *acutifolius* (BAB.) PEDERSEN
IN EASTERN SCOTLAND

The specimens came from two large colonies on fixed dunes in Angus (Forfar). Unfortunately the slightly fleshy character of the leaves was lost when dried. It should be stressed that, although the plant was checked by an expert, it has not yet been seen by Dr Pedersen and it would seem desirable that fresh material should be sent to him.

Miss U. K. DUNCAN.

Senecio × *ostenfeldii* DRUCE IN SCOTLAND

Two specimens from Angus, one from East Ross-shire and one from East Sutherland were selected from a range of herbarium specimens to illustrate the variation in the hybrid swarm which may occur where *S. jacobaea* and *S. aquaticus* are found together. The variation in the size and number of the flower-heads and the shape of the leaves is paralleled by the variation in the degree of hairiness of the achenes.

Miss U. K. DUNCAN.

Cardamine POLLEN

See Plant Notes (p. 45).

R. P. ELLIS & B. M. G. JONES.

Carex aquatilis IN THE CENTRAL AND EASTERN HIGHLANDS

Sheets of the small upland and tall lowland forms of *Carex aquatilis* were exhibited. The upland form is only known to occur on the plateau around Clova and Caenlochan, except for one isolated record from Ben More, Mid-Perth. Evidence was presented that these forms represent parts of a continuous series, in which the size of several organs decreases with increasing altitude.

Upland plants of *C. aquatilis* grow together with the closely related species *C. nigra* and *C. bigelowii* in the bogs on the Clova plateau. An isometric scatter diagram has been devised to assist the analysis of populations, which may include hybrids between the three species. Its application to this *Carex* population was described. The scatter diagram suggests that there may be hybridization between all three pairs of species, particularly *C. aquatilis* and *C. nigra*, but little or no double hybridization. The technique may be useful as a basis upon which to simplify the population into species pairs, by eliminating all the plants showing characteristics of one species. Pairs of species can then be treated with a more sensitive bipolar hybrid-index technique, preferably one involving standardization of continuous variables. J. S. FAULKNER.

STEREOPHOTOGRAPHS OF BRITISH GENTIANACEAE AND OF
Minuartia recurva

J. H. FREMLIN.

SOME NEW BOTANICAL POSTAGE STAMPS

Mrs A. N. GIBBY.

Scabiosa columbaria SHOWING "BIRD'S NEST" PROLIFERATION

A herbarium specimen was shown of *Scabiosa columbaria* L. exhibiting "bird's nest" proliferation which was discovered by T. E. Patston and J. L. Gilbert at Barnack, Lincolnshire, during 1957. Each plant first bore a single lateral stem carrying one capitulum about 3.5 cm in diameter surrounded by leafy bracts longer than the corolla. Later the stem branched apically into two similar branches each bearing

similar inflorescences. On the later-formed central or main stem of each plant a collection of leaves formed a "bird's nest", instead of a capitulum, from the base of which there were up to 20 stems bearing smaller, normal capitula 1.5 cm in diameter. As all the original plants were affected I suspected that the character had been inherited and have since proved that this mutant always comes true to seed.

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 GILBERT, J. L. (1967). Odd Scabious. *Gdnrs' Chron.*, 161 : 15.

J. L. GILBERT.

SOME FLORAL ABERRATIONS IN *Oxalis acetosella* L. IN EPPING FOREST

The exhibit featured a series of annotated drawings of consecutive transverse sections through an abnormal chasmogamous flower (floral formula $K5 C(5+1) A(5+1+5) G(6)$). A pictorial representation of the vascular skeleton was constructed and a number of conclusions regarding the nature of the aberration were drawn.

1. Hexamery was based upon a structural pentamery.
2. Additional floral parts were arranged such as to produce a superimposed zygomorphy. This and other structural peculiarities require further study.
3. Preliminary studies of somatic chromosomes failed to demonstrate convincingly that the aberration was correlated with an abnormal karyotype. The genetical basis could not be inferred in the absence of population statistics, though this feature characterised both chasmogamous and cleistogamous flowers in the whole local population (clone?).

R. J. GILES.

A STUDY OF SOME WESTERN EURASIAN GLADIOLI

The Eurasian gladioli are a natural group of approximately a dozen species that are centred on the Mediterranean Sea. They are separated from the majority of the genus (a further 230 species) in Africa by the Sahara Desert. The western Eurasian gladioli are four species which show considerable variation in many characters. They fall naturally into two groups: 1) The cornfield weed *Gladiolus italicus* Mill. (*G. segetum* Ker-Gawl.), the seeds of which are unwinged; 2) Three species with winged seeds, *G. byzantinus* Mill., *G. illyricus* Koch and *G. communis* L.

The exhibit was devoted to the second group and distribution maps and colour photographs of each taxon were shown. It included a hypothetical scheme for the evolution of this group based on morphology, leaf chromatography and cytology. It was suggested that the tetraploid *G. illyricus*, which shows a range of tepal shapes from obovate to oblanceolate, may have given rise to three evolutionary lines: 1) to hexaploid *G. illyricus* in Britain, with obovate tepals, 2) to tetraploid and octoploid *G. communis* with rhomboidal tepals, and 3) to hexaploid and octoploid *G. byzantinus*.

A. P. HAMILTON.

A TREE SURVEY IN THE LONDON BOROUGH OF HARROW

The purpose of this exhibit was to bring to the attention of members of the Society the survey being carried out in Harrow. The aim of this survey is to map the trees in and around Harrow. This includes not only common roadside trees but some of the rarer trees, such as *Liriodendron* and *Taxodium*, found in parks and gardens. The Council has recently been planting such unusual trees as *Ginkgo* and *Metasequoia*. The distributions of certain trees was demonstrated on a large-scale map of Harrow using coloured pins. Also shown was a collection of miniature trees in pots which included *Viburnum* sp. and *Taxus*.

HARROW COUNTY SCHOOL FOR BOYS.

BRITISH SPECIES FROM SPITSBERGEN

B. M. G. JONES.

STILL MORE ABOUT MULL

The exhibit illustrated some aspects of the progress made during 1968 in the survey of Mull and its adjacent small islands by the Department of Botany, British Museum (Natural History).

The highlight of the season's fieldwork was a series of visits to the Treshnish Isles, using a helicopter placed at the disposal of the department through the courtesy of the Royal Navy. Apart from a very few isolated records, the only previous information on this group of islands was a B.S.B.I. Maps Scheme card for Lunga, the largest of the islets. For the eleven islands from which lists are now available, a total of 204 species of flowering-plants and ferns has been recorded. This may be compared with the total of c. 850 species for the area as a whole. Some provisional attempts were made to correlate the size and constitution of the floras of the individual islands with their relative positions, size and ecological diversity. Maps, photographs of the islands and a tabulation of all known records were exhibited.

The second section of the exhibit was concerned with the Pteridophytes of Mull. A map showing some distribution patterns was exhibited together with specimens of two subspecies of *Asplenium trichomanes* (subsp. *trichomanes* and subsp. *quadrivalens* D. E. Meyer emend. Lovis) and sheets of the *Dryopteris filix-mas* aggregate as represented on the island.

The third section was concerned with the species-pair *Juncus bulbosus*/*J. kochii*, one of the critical problems that received special attention during 1968. *J. kochii* appears to be very common and widespread on Mull, while *J. bulbosus* is apparently much more restricted both in range and ecology. Subsequent examination of material in the British Museum herbarium suggests that the latter species (as delimited in Clapham, Tutin & Warburg, ed. 2) is apparently a rare plant with an arctic-alpine type of distribution. The characters used to delimit these taxa are as listed by Benoit and Allen (*Proc. bot. Soc. Br. Isl.*, 7: 504 (1968)), except that in our experience the stamen number for *J. kochii* is sometimes three and less value has been placed on the pigmentation of the floral parts. As however there is a considerable divergence between the distribution patterns as indicated above and that suggested by Benoit and Allen, it is clear that much more study is necessary and the exhibit was offered in the hope that it will stimulate further interest in these taxa. Living material of *J. bulbosus* would be welcomed by Mr A. Eddy.

DEPARTMENT OF BOTANY, BRITISH MUSEUM (NATURAL HISTORY).

THE FLORA OF GUERNSEY

The exhibit comprised: (1) specimens of four of the notable discoveries in 1968, (2) specimens of seven of the island's specialities which should be seen on the expedition in April 1969, and for which it was hoped to find fresh localities, (3) the current check-list of Guernsey plants, (4) copies of articles on the flora of Guernsey in the *Gardeners' Chronicle* (March 29, April 5, April 12, (1968)), (5) a copy of an article on *Asplenophyllitis microdon* (*Br. Fern Gaz.*, 10: 1-8 (1968)), (6) a copy of *The Natural History of Guernsey* by Mr N. Jee.

The four discoveries were:

(a) *Exaculum pusillum*. Seen in a second hollow in a new area, towards the east end of L'Ancrese Common by Dr H. J. M. Bowen.

(b) *Eryngium campestre*, of which Dr Bowen found a very small colony on the coast of L'Ancrese.

(c) *Geranium cf. submolle* Steud. Found by Dr Bowen at La Garenne. This species is discussed in Plant Notes (p. 47).

(d) *Geranium cf. robertianum* L. A tall octoploid form of *G. robertianum* was discovered by Mr P. Girard well naturalised in a waste area on the southern outskirts of St. Peter Port.

The seven special plants were \times *Asplenophyllitis microdon* (two more plants discovered in 1968), *Anogramma leptophylla*, *Ophioglossum lusitanicum*, *Isoetes histrix*, *Trifolium occidentale*, *Poa infirma* and *Milium scabrum*.

D. McCLINTOCK.

Senecio vernalis WALDST. & KIT. IN LEICESTERSHIRE (V.C.55)

This European species was found at two sites near Market Harborough in 1968. In both cases a roadside verge had been newly seeded with imported grass, some of which came from Holland and Denmark. At one site there was some evidence of hybridisation with local *S. vulgaris*, but this requires a further study. Material of the species and of the putative hybrid was exhibited, together with material from a similar roadside locality in north Devon collected in 1961.

K. G. MESSENGER.

Hypericum canadense L. IN THE BRITISH ISLES

This plant was first recorded for the British Isles by Prof D. A. Webb, who found it in 1954 on wet, acid ground by the side of Lough Mask, Co. Galway. It has now appeared in a second locality, more than a hundred miles away from the first, in a wet sloping meadow close to the car-park of the Eccles Hotel, Glengariff, Co. Cork. It was found here, on 6th August, 1968, by Mr & Mrs K. L. Butcher.

Hypericum canadense, a native of eastern North America, has also been found in the Netherlands and in the Vosges. Like *Juncus tenuis* and *Sisyrinchium bermudiana*, it is most probably a recent arrival in Europe, actively extending its distribution, and not a relict like *Eriocaulon septangulare*.

R. D. MEKLE.

THE NATIONAL WOODLAND SURVEY

The preservation of examples of the climax vegetation over much of Britain, namely woodlands, constitutes an important part of our national conservation policy. The acquisition and management of woodland nature reserves, therefore, features prominently in the work of both the Nature Conservancy and County Trusts. Although censuses have been made by the Forestry Commission and others, these do not give sufficient information on which to base a woodland conservation policy.

To obtain this information the Nature Conservancy, in conjunction with the County Naturalists' Trusts, have organised a woodland survey, the purpose of which is to obtain a record of the present day extent, location and characteristics of native-type woodlands. Details are noted on specially designed cards under three broad headings: site description, trees and shrubs, and ground vegetation. This information is stored and processed at the Biological Records Centre.

Amateur naturalists are encouraged to participate in the survey and Nature Conservancy staff will attend meetings to explain the techniques. Lists, cards and instruction sheets will be sent on request.

There are over 20,000 broad-leaved woodlands (over 10 acres) in Britain and in one season records of 2,000 of these have been made.

NATURE CONSERVANCY, MONKS WOOD EXPERIMENTAL STATION.

MONKS WOOD NATIONAL NATURE RESERVE

Twelve coloured slides of vascular plants from the Monks Wood collection were exhibited. These show that whilst Monks Wood is mainly a woodland National Nature Reserve, many other habitats are represented within the boundaries of the area. There are extensive rides and a series of ponds, some open fields which have been cultivated in the recent past as well as the grassland which surrounds the Nature Conservancy's

Experimental Station. This leads to a richness in vascular plant species. About 330 are recorded from the Reserve including the following rare or local species:-

<i>Platanthera chlorantha</i>	<i>Carex pallescens</i>
<i>Colchicum autumnale</i>	<i>Dipsacus pilosus</i>
<i>Centaureum pulchellum</i>	<i>Rumex palustris</i>
<i>Peplis portula</i>	<i>Neottia nidus-avis</i>
<i>Melampyrum cristatum</i>	<i>Sorbus torminalis</i>

Members were reminded that those who wish to visit the Wood must obtain permits in advance. They should write to the Regional Officer of the Nature Conservancy, 60, Bracondale, Norwich, NOR 58B, and not to Monks Wood Experimental Station.

NATURE CONSERVANCY, MONKS WOOD EXPERIMENTAL STATION.

THE B.S.B.I. *Symphytum* SURVEY

The *Symphytum* Survey began early in 1968 as one of the new Network Research projects. By the end of October over 400 completed cards had been returned. The exhibit was based on these and personal observations.

The initial results show that *S. asperum* Lepech. is extremely rare, whilst *S. × uplandicum* Nyman is widespread and occurs throughout the British Isles. The two forms of *S. officinale* L., the cream, var. *ochroleucum* DC., and the reddish-purple, var. *purpureum* Pers., have different distribution patterns, the former mainly occurring in eastern England whilst the latter occurs in the South and West. Introgression takes place between the two, and mixed colour populations are extremely abundant in the area of overlap, particularly in Berkshire, Hampshire and Dorset. Many of the populations measured are intermediate between *S. × uplandicum* and the various colour forms of *S. officinale*.

The scheme will continue in 1969 and 1970 and those who wish to take part were invited to write for further record cards to the Biological Records Centre, Monks Wood, Huntingdon.

F. H. PERRING.

VASCULAR PLANTS NEW TO IRELAND

Two species which have been discovered for the first time in Ireland this year were exhibited:

- (i) *Juncus compressus* Jacq. Discovered by D. M. Synott by the south bank of the River Boyne at Rosnaree, Co. Meath, on 5th August. The plant was seen again during a Field Meeting of the Irish Regional Branch of the B.S.B.I. at Slane, Co. Meath, on 17th August.

It seems very likely that this is a species native to Ireland which has previously been overlooked. Its occurrence in eastern Ireland is what would be expected on phytogeographical grounds as elsewhere in the British Isles it is mainly confined to southern and eastern England.

A full account of the discovery appears in the *Irish Naturalists' Journal* (16: 92-93 (1968)).

- (ii) *Carex flava* L. This was discovered by F. H. Perring when collecting with D. A. Webb and R. Goodwillie on 15th July 1968 in a calcareous marsh by the River Corrib, near Menlough in North-East Galway.

The area is on limestone over which the river periodically floods, giving rise to a rich fen vegetation in which the plants are often standing in water. *Carex flava* is locally abundant reaching a height of 65 cm (2 ft). *C. lepidocarpa* Tausch also occurs and it seems likely that hybridisation is taking place between the two. Specimens which are intermediate in fruit size have been collected.

F. H. PERRING.

LOCAL FLORAS CURRENTLY AVAILABLE FOR SALE

A list of 42 Local Floras which can be bought new from various addresses was on display as well as many examples of them from the Botanical Library at the Natural History Museum. The list was published in *Proc. bot. Soc. Br. Isl.*, 7: 615-617, (1969).

F. H. PERRING.

VARIATION IN THE *Vicia sativa* AGGREGATE

Work on this aggregate was reported by means of text, histograms, karyotype ideograms and herbarium specimens.

Vicia sativa s.l. is well differentiated from its closest relatives in this country (*V. lutea* and *V. lathyroides*) but recognition of taxa within it is extremely difficult, even though the range of variation is very large. Previous attempts show wide divergences in the ranges attributed to each taxon. This is hardly surprising because the variation of most of the characters is such as to produce a unimodal curve, the peak usually coming close to the artificial limits placed on the infraspecific taxa.

Preliminary results suggest that if one wishes to recognise infra-specific taxa the whole aggregate can be divided into two ('*angustifolia*' and '*sativa*') or three ('*bobartii*', '*segetalis*' and '*sativa*') subspecies or varieties. Further work is progressing on the vegetative and reproductive morphology, the karyotype, and on breeding experiments.

E. PICKERING & C. A. STACE.

THE UPPER TEESDALE FLORA IN JUNE

Twenty colour slides, taken with a Praktica IV and a Meritar 2.9 lens, were selected to show representative plants of various habitats.

Flowering plants of damp or marshy lowland pastures included *Trollius europaeus*, *Orchis mascula*, *Dactylorhiza incarnata*, and *Primula farinosa* on drumlins.

Viola lutea and *Coeloglossum viride* were from drier, grazed pastures while *Polygonum viviparum*, *Pedicularis palustris* and *Mimulus guttatus* were photographed by the sides of becks.

Representative of the riverside flora were *Bartsia alpina*, *Potentilla fruticosa*, on shingle, *Antennaria dioica*, on whin-sill pavement, and *Geranium sylvaticum* in hayfields.

The upland vegetation was represented by *Thalictrum alpinum*, on gravel flushes, and *Dryas octopetala* on sugar limestone.

Miss H. M. PROCTOR.

"IS YOUR PLATE CAMERA REALLY NECESSARY?"

A number of whole-plate ($6\frac{1}{2} \times 8\frac{1}{2}$ in) and 15×12 in enlargements were exhibited, to demonstrate that 35 mm negatives will, as a matter of routine, produce photographs of plants and vegetation of acceptable quality for most normal purposes, including publication. Up to whole-plate size, 35 mm negatives on slow and medium-speed films are capable of giving prints virtually indistinguishable from those yielded by negatives of any larger size. The large camera will always have an advantage in producing large exhibition prints of the highest quality, but the advantage is completely lost in half-tone reproductions. On the other hand, 35 mm equipment has great advantages in portability and ease of use, important in getting the photograph when conditions are right, and in minimising damage to the habitat.

M. C. F. PROCTOR.

SLIDES OF ALPINE PLANTS AT BOURG ST. PIERRE ALPINE FLORA

M. C. F. PROCTOR.

Taraxacum SECTION ERYTHROSPERMA IN THE BRITISH ISLES

Herbarium specimens, maps and comments were exhibited for each of the 26 species in this section that are known to occur in the British Isles. These are as follows:-

<i>T. acutum</i> Richards in sched.	<i>T. argutum</i> Dahlst.	* <i>T. austriacum</i> v.S. (introduced)
* <i>T. brachyglossum</i> Dahlst.	<i>T. canulum</i> Hagl.	<i>T. commixtum</i> Hagl.
<i>T. degelii</i> Hagl.	<i>T. disseminatum</i> Hagl.	* <i>T. dunense</i> v.S.
<i>T. fulviforme</i> Dahlst.	<i>T. fulvum</i> Raunk.	<i>T. glauciniforme</i> Dahlst.
* <i>T. gotlandicum</i> Dahlst.	* <i>T. hispanicum</i> Lind. f.	<i>T. lacistophyllum</i> Dahlst.
<i>T. laetiforme</i> Dahlst.	<i>T. laetum</i> Dahlst.	<i>T. oxoniense</i> Dahlst.
<i>T. placidum</i> Richards in sched.	* <i>T. proximiforme</i> v.S.	<i>T. proximum</i> Dahlst.
<i>T. pseudolacistophyllum</i> v.S.	* <i>T. retzii</i> v.S.	<i>T. rubicundum</i> Dahlst.
<i>T. silesiacum</i> Dahlst.	<i>T. simile</i> Raunk.	

The asterisked species are new to the British Isles. *T. acutum* and *T. placidum* are new species; *T. acutum* and *T. argutum* are thought to be endemic. The commonest species are *T. oxoniense*, *T. brachyglossum*, *T. rubicundum* and *T. lacistophyllum*, probably in this order. Several of the main phytogeographical elements in the British flora, including the Lusitanian, are represented in this section.

A. J. RICHARDS.

RECORDING IN PERTHSHIRE

The exhibit demonstrated the 5 km square system, currently in use by the Botanical Section of the Perthshire Society of Natural Science under the author's leadership, for recording plants and bryophytes in the county. Species record sheets which include a map (c. 280 squares) are filled in with habitat and distribution data derived from field cards used on all excursions. Seven species were chosen to illustrate this, as well as for their own intrinsic interest. They are all alien to Britain and have different spreading potential but all occur well established in competition with native species in natural or semi-natural habitats. Herbarium specimens were displayed in conjunction with the record sheets of *Geum macrophyllum*, *Tolmiea menziesii*, *Salvia glutinosa*, *Petasites albus*, *P. japonicus*, *Aster longifolius* and *Juncus tenuis*.

A. W. ROBSON.

COLOURED DRAWINGS OF PLANTS OF THE WESTERN DESERT AND TUNISIA

Mrs B. H. S. RUSSELL.

TWO SPECIES NEW TO CAMBRIDGESHIRE

Cystopteris fragilis (L.) Bernh.

This fern is common in upland limestone areas in Britain but very rare over much of lowland England where it is largely confined to artificial habitats. Like several other British ferns, it shows a partiality for railway platforms, which often supply a very special moist and calcareous microhabitat.

The specimen shown was from a small but vigorous population under the overhang of a concrete platform on the abandoned Old North Road Station on the former Cambridge—Bedford railway. It is curious that this platform was the sole Cambridgeshire locality for *Adiantum capillis-veneris*, which grew there between 1920 and 1953.

Ceratophyllum submersum L.

This rare aquatic was found completely filling Horseshoe Pond in Madingley Park. Two variants were found: those with spinulose projections on the fruit (var. *haynaldianum* (Borbás) G. Beck) and those without (var. *submersum*). There was no definite evidence that they occurred on the same individual.

P. D. SELL & S. M. WALTERS.

SOME ALIEN EUPHORBIAS IN THE BRITISH ISLES

The following species and hybrids were exhibited:

E. esula L. subsp. *esula*

E. esula L. subsp. *tommasiniana* (Bertol.) Nyman (*E. virgata* Waldst. & Kit., *E. uralensis* Fischer ex Link) \times subsp. *esula* (= *E. \times pseudovirgata* (Schur) Soó). This hybrid has often been misidentified in the British Isles as *E. uralensis*.

E. corallioides L. The 'Slinfold Spurge'.

E. ceratocarpa Tenore

E. oblongata Griseb. A rare casual.

A. R. SMITH.

A PROPOSED LIST OF BRITISH HYBRIDS

Sample pages were exhibited of a proposed work to list and provide outline information for all British interspecific hybrids. The proposal stems from a symposium held in September 1968 on 'The Teaching of Experimental Taxonomy in Universities'. Its aim would be to provide a single source of information on hybrids, and to focus attention on gaps in our knowledge. The exhibit was illustrated by specimens of *Primula veris* \times *vulgaris* and *Juncus balticus* \times *cf. inflexus*.

C. A. STACE.

THE DISTRIBUTION OF *Juniperus communis* IN SOUTHERN ENGLAND

The exhibit showed the results of a survey in progress on the distribution of juniper in southern England. The survey included details about the topography of each site and the juniper colony, particularly the age structure and numbers of bushes. A map gave the present-day distribution of juniper colonies on a 1 km square basis with the approximate numbers of bushes where known. This showed the restriction of juniper to calcareous soils, and the low numbers in certain areas such as the Cotswolds and the North Downs. Another map gave sites recorded in the literature since 1750, and a third showed sites with regeneration. Although incomplete in parts, these three maps illustrated the general decrease in sites, their concentration in particular areas, and the poor future outlook for juniper. The exhibit indicated the need for active conservation measures.

LENA K. WARD.

SLIDES OF ORCHIDS FROM RAVENSTHORPE, WESTERN AUSTRALIA

All the orchids are terrestrial, the two principal genera represented in the district being *Pterostylis* (Greenhoods) and *Caladenia*.

Greenhoods are predominantly green and grow in shade. They vary in height from 3 in to 18 in and have a gnome-like appearance due to the large 'head', long 'ears' and upright growth. Pollination is by gnats.

Caladenia is a varied genus which includes The White Spiders (with beautiful fragile flowers with long 'antennae'), The Dragons (variously coloured and with 'antennae' of varying length), and The Fairies (lacking 'antennae', with slender spikes or large single flowers). The Pink Fairy is a lovely orchid of wet ground; in contrast The Blue Fairy flowers best after fire has destroyed the Bush. The only yellow-flowered species is the Cowslip.

Mrs. L. E. WHITEHEAD.

PHOTOMICROGRAPHS OF A SECTION OF *Orchis simia* ROOT

A series of photomicrographs of a section of root of *Orchis simia* were exhibited, the magnification being from $350\times$ to $2200\times$. The large number of crystals (calcium carbonate?) in the cells made the material unsuitable for electron microscopy. The septate hyphae of the mycorrhizal fungus were clearly seen within each cell; several hyphae were branched. With the assistance of Mr P. E. Smith, attempts were made to culture the fungus but without success so identification proved impossible.

H. M. WILKS.

From 4.30 p.m. the following members showed colour slides in the Lecture Hall.

Flora of the Camargue	..	..	..	..	..	Miss L. KENDRICK
Conservation—a Postscript and a Prelude	..	..	..	..	..	J. E. LOUSLEY
B.S.B.I. Junior Field Meeting—Switzerland 1968	..	..	..	..	..	C. T. PRIME
Alderney plants	..	..	..	..	..	M. C. F. PROCTOR
Some Alpine flowers	..	..	..	..	..	Mrs B. H. S. RUSSELL

