B.S.B.I. NEWS

Edited by J. E. ELSLEY

VOLUME 2, No. 2

May 1973

CONTENTS

President's Introduction	23
Editor's Note	24
Notes from Secretary	24
Notes from Membership Secretary	25
New Administrative Office	26
Conservation Committee Notes	27
Meetings Committee Notes	27
Records Committee Notes	28
Recording in Wales	29
Book Notes	29
Profile	30
Tree Planting Year	31
Black Poplar Survey	32
Chromosome Counts of British Plants	33
Short Notes	34
Members' Desiderata	35
Bumble Bee Distribution Maps Scheme	35
Department of Botany, British Museum (Natural History)	36
Letters	36
Forthcoming Events	39
New Members	40

IMPORTANT NOTICE TO ALL MEMBERS

NEW MEMBERSHIP ADMINISTRATIVE OFFICE

As from 1st MAY, 1973 the work at present done by the Honorary Membership Treasurer and the Honorary Membership Secretary will be undertaken for us at the office of the Society for General Microbiology at Reading. This office will deal with ALL MEMBERSHIP BUSINESS and members are asked to send subscription payments, notification of change of address, applications for membership, and all correspondence regarding membership matters to:—

Botanical Society of the British Isles, Administrative Office, Harvest House, 62 London Road, READING, Berkshire, RG1 5AS.

Cheques and postal orders should be made out to the B.S.B.I. as before.

For all purposes other than membership matters our official address remains as before:-c/o Department of Botany, British Museum (Natural History), Cromwell Road, London, SW7 5BD.

Mrs. M. Briggs, Honorary General Secretary, White Cottage, Slinfold, Horsham, Sussex, RH13 7RG.

PRESIDENT'S INTRODUCTION

The important news, News-letter-wise, this time is that we are shortly to lose our Editor. To his credit, but to Wisley's and our loss, he is due to join the brain-drain to America. Before long he will be under Dr. Peter Raven at the St. Louis Botanic Garden in Missouri. He has done well to be offered an attractive position there. We wish him well in this important change, and thank him warmly for his conscientious and pioneering work in starting this venture of our Society. It seems to have been welcomed, and induced some members not to resign.

Who to succeed him? The Society is fortunate in the wealth of ability among its members, and who better to ask than Dr. Cecil Prime? I am delighted he has accepted, for the next issue, despite all else he has to do. He is the author of several excellent books, has long known the Society intimately and is now retired from being Senior Biology Master at the Whitgift School. His address is The Chestnuts, Farleigh Common, Warlingham, Surrey, CR3 9PE, where all material for future issues should be sent — and do send it. Personalia are still what we lack most.

The Annual Report gave the final figures for the record increase in our membership last year. This was 50% higher than in any previous year, and came after three successive years of net losses. This is all the more satisfactory in having happened in a year when subscriptions had been increased by no less than half as much again. I have heard it said that raising subs loses on 15% of one's membership; but instead we have gained 10% net. Even so, we are still smaller than we should be. But I do want to thank everyone for the loyalty to the Society this result shows, and the implied appreciation. We have had a very good year for other reasons too. But I am sure the Society can have even better days ahead.

There are two ways in particular where I have thought for some time it could widen its scope. One is by more co-operation, joint meetings, conferences etc., with other interests of many sorts. Our 1975 conference, in October, is to be with the Alpine Garden Society, and there should be more with other such societies on trees, heathers, orchids and so on. But I hope there may be others dealing with birds, mammals, insects (following Michael Proctor and Peter Yeo's masterly new book), archaeology, history, chemistry, meteorology and plenty more. Each of us can open the eyes of others and help solve their problems.

The second, and not dissimilar thought is that we might have more contact with Continental societies, and they with us, in meetings, excursions and other ways — why not joint network research? Plants blessedly take no notice of political boundaries. The Biological Council too has been considering ways in which greater co-operation with European biologists might be achieved.

If such ideas are not just day-dreams, we could wish for no one better to lead the Society into such wider vistas than our President-elect, as I write, Dr. S. M. Walters. Max has been one of the Editors of Flora Europaea since its inception, and is respected all over Europe, and outside. We shall be proud to have so able an international figure at our head. As a Cambridge man myself, I can say that he has the advantage of having been a Cambridge man ever since his undergraduate days. He has been for many years a wise and much appreciated University Lecturer and Curator of the Herbarium, and is now to be

Director of the University Botanic Garden in illustrious succession to Humphrey Gilbert-Carter and John Gilmour. Many will know his writings, such as his collaboration in the New Naturalist books on Wild Flowers (with John Gilmour) and Mountain Flowers (with John Raven); and more recently in Plant Variation and Evolution (with David Briggs). Many too will know his expertise in *Montia, Alchemilla, Aphanes, Eleocharis* and much else. I wish him and the Society very well indeed.

David McClintock

EDITOR'S NOTES

My sincere thanks are once again extended to all the contributors who have submitted material for inclusion in this issue, especially some of the Officers who received rather short notice to prepare their material. I hope these contributions, combined with the material received from our other members, will provide you with pleasurable and instructive reading.

As this is likely to be my last issue as Editor, I should finally like to thank the many individuals who have supported this new venture and continued to encourage my efforts—in this context I must mention Mr. David McClintock, whose enthusiasm must be seen to be believed! We are indeed fortunate that Dr. Cecil Prime has offered to undertake the task of Editorship, a factor that will ensure that the News-letter will go from strength to strength.

John E. Elsley

NOTES FROM SECRETARY

Looking through some past Annual Reports of the Society I came across the following written by the late W. H. Pearsall in the Botanical Society and Exchange Club of the British Isles Report for 1932 (Vol. X, part 1).

"The predominant impression produced upon my mind by the year's working has been the volume, variety, and value of its correspondence. I have been frankly astonished at its extent, and greatly encouraged by its character."

I think that the same words could be echoed by the Secretary today, although I suspect that the letters which came to Pearsall were mainly from botanists, while today the queries which fall on the Secretary's doormat include a large number of general enquiries from organisations and individuals on a wide range of topics often not directly concerned with plants. These queries range through every sphere of education from requests for help with projects for cub scouts, brownies, all age groups of school children and students, and numerous project enquiries from individual children, to research workers at home and abroad seeking advice or reprints of Papers. In recent weeks enquiries have included requests for information on herbal medicine, learned societies in the nineteenth century and even a hopeful youngster asking about otters (the Botteranical Society?).

On page 22 you will find instructions on procedure with business following the transfer of the Society's membership records to the Society of General Microbiology at Reading, and on page 26 an explanation of the reasons for this transfer. I should like to take this opportunity of again very warmly thanking Mrs. Dony for the meticulous care with which she has ably carried out the onerous duties of Membership Secretary for 10 years and to Mr. and Mrs. Stevens for their work with membership subscriptions in the past 2 years, and in particular of thanking Mrs. Dony and Mrs. Stevens for their efficient planning and organisation of the present transfer to ensure the minimum disturbance to members and to the general running of the Society's affairs.

Those members who attended the Conference on "Modern Methods in Plant Taxonomy" at the University of Liverpool in 1967 will remember Drs. Ena and Josef Kloz of the Institute of Experimental Botany, Czecho-Slovak Academy of Sciences, Prague. They recently sent greetings, saying that they continue their work on the taxonomic and genetic value of bean proteins, and that they hope to carry out similar work on Alliums. One of the highlights of their visit to this country was their first sight of the edge of the sea. They had previously only seen the sea from the air, and we remember their delight when Mrs. Russell introduced them to the sea during the conference excursion to Ainsdale dunes. We wish them well in their research projects.

From time to time I receive requests for the loan of prints and for slides showing botanists in action for various conservation exhibits. If any members have suitable spare slides or prints which they would be willing to donate, it would be useful to build up a small collection for this purpose.

MARY BRIGGS

NOTES FROM MEMBERSHIP SECRETARY

Members will have seen the 1972 membership figures in the Annual Report: a net gain of 186 (9.9% of the membership) is the highest net gain in any one year in the history of the society. Our previous most successful year was in 1963 — the year, incidentally, that we published the Atlas of the British Flora — when we had a net gain of 127 (8% of the membership). From 1963 to 1969 the figures showed relatively small gains averaging about 38 per year but the raising of the subscription in 1969 and again so soon as 1972 resulted in losses of 17, 1 and 13 for three consecutive years. It is encouraging to see the membership figures increasing once again after these lean years.

It is difficult to analyse the reasons for this welcome increase, which has come in spite of the higher subscription rate, but we did enjoy a considerable amount of sustained publicity during 1972. In March, Dr. F. H. Perring sent out 500 copies of the prospectus in response to botanical enquiries received at Monks Wood after his television appearance in "Tomorrow's World". In April our Honorary Treasurer arranged for a copy of the prospectus to be included in a mailing to members of the Leicestershire Trust with no postage cost to ourselves as a pilot scheme to see if this was a profitable exercise — unfortunately results were disappointing. Later that month Dr. Bruce Campbell wrote an article on the activities of the society in The Countryman and in June 200 copies of the prospectus were distributed at the United Nations Conference on the Environment at Stockholm. An advertisement in the journal of the Royal Horticultural Society in the summer and considerable publicity at our joint conference with the R.H.S. in September brought in a very welcome number of members from that society.

Since our Code of Conduct was produced 20,000 copies have been distributed to many different organisations all over the British Isles and must have been seen by many hundreds of people. This could well have been the main source of the many enquiries we received during the year.

It is only by making every effort to continue to increase our membership that we can combat rising costs of administration and hope to maintain the services and activities members at present enjoy. I would be pleased to send copies of the prospectus to any member, please write to me at 9 Stanton Road, Luton, Beds.

For the completion of our records and despatch of journals we are anxious to trace the following members still "good" on our books:—

A. C. Brown, c/o Glaxo Laboratories (India) Private Ltd., P.O. Box 202, Bombay 1, India. C. Parker, Gable End, Freeland, Oxford.

Mrs. L. Wilson, 1 Old Bridge Road, Southsea, Hants.

Communications addressed as above are all returned — if any member knows their present addresses I would be glad if you would kindly inform me.

CHRISTINA M. DONY

NEW ADMINISTRATIVE OFFICE

A scientific society such as ours is like any business enterprise; it has to expand or stagnate and in the case of the latter is overtaken by more virile associations. Our society has grown steadily without departing in any way from the aims and objects so singularly our own. Growth inevitably entails a greater amount of work; a great deal of it demanding specific skills such as editing, organising meetings and conferences, keeping accounts in good order and dealing with other than routine correspondence. There is, however, a larger amount of purely clerical work which calls for no special skills related to a knowledge of the British flora. The society has been extremely fortunate in having had for so long the unpaid services of a long succession of voluntary officers carrying out these routine and somewhat mechanical duties. We have, however, in recent years reached a point where, because of the sheer volume of the work, this can no longer continue.

There are a number of ways in which the problem we face could be solved. We could pay a salary to an overworked officer but it would be difficult to fix a rate for the job and even more difficult to sack an officer who gave inefficient service! We could employ an administrator ourselves but would have no means of knowing how many hours a week we would need his or her services — it could well be 40 hours a week in busy spells and only an hour or so in slack periods. After giving the matter much careful thought your Council came to the conclusion that we should take the course of coming under the wing of a larger society — The Society for General Microbiology — who have solved the problem we have faced by itself setting up an organisation at Reading and employing a full-time clerical staff under an office manager. This society which will provide an administrative service is already servicing other kindred societies, including the British Ecological Society, in the same way. We have moved into this new arrangement by stages and you will find full details of the new office and how it will deal with our membership business elsewhere in this News-letter.

Briefly the S.G.M. will take over the routine and purely clerical work hitherto done by the Honorary Membership Treasurer and the Honorary Membership Secretary. This will entail all work connected with membership enquiries: enrolment of new members who will receive all the literature previously sent out by the Membership Secretary: receipt of subscriptions (and in this respect we are grateful to those many members who pay by bankers' orders) and sending out reminders to members whose subscriptions are overdue. Membership records will be kept in order and here again we are grateful to members who send their changes of address promptly but would add a plea that precise details should always be sent—the old address is very useful as signatures are often difficult to read and women members marry and assume new names. Our addressograph is already in use at Reading and will remain our main link with members through the

despatch of journals, news-letters and notices. The very specialised and complicated work of our covenants scheme will, however, remain entirely in the hands of our Honorary Covenanting Secretary Miss E. Young and all correspondence relating to covenants should continue to be sent to her at 19 Elm Park Lane, London, SW3 6DD.

These new arrangements will relieve the present voluntary officers of a lot of the drudgery attached to their work. They will continue to hold office to deal with the many problems which can only be dealt with on a personal basis and it is hoped that this personal contact between officers and members will in no way be impaired.

CHRISTINA M. DONY

CONSERVATION COMMITTEE NOTES

After serving most efficiently as secretary of the Conservation Committee for several years, Dr. John Richards unfortunately has had to resign the post, which I inherited in January, 1973. As I am also a member of the Kew Conservation Sub-Committee a period of close co-operation between Kew and the B.S.B.I. in the field of plant conservation may be expected.

The Committee has continued to strive to protect threatened plants and habitats in various parts of the country, including *Dactylorhiza purpurella* in Hampshire, *Orobanche purpurea* in Lincolnshire, Hatchet pond, Beaulieu and many others.

Conservation publicity is another field in which the Committee is very active. Two posters are being designed, having differing levels of appeal, and it is hoped that these can eventually be distributed in quantity. The widely circulated Code of Conduct has been revised and combined with a List of Rare Species which should not be picked or collected by members. This combined document is now being distributed.

County Recorders frequently receive requests from members and other persons for information on the sites of rare or threatened species, and usually bear the onus of deciding whether or not to disclose the information. In order to relieve this problem the Conservation Committee has set up a panel consisting of Dr. F. H. Perring, myself and several other B.S.B.I. members who are on the Kew staff to whom the County Recorders can refer if they wish.

It is the object of the Conservation Committee to act as the mouthpiece of the B.S.B.I. in all aspects of plant conservation, but it cannot do so if it is unaware of the problems when they arise, so if any member requires help or advice in this field please let us know.

P. E. Brandham

MEETINGS COMMITTEE NOTES

The programme for 1974 is already under way, though several dates are still at the provisional stage. All will be confirmed later.

At Easter it is hoped to hold another foreign meeting this time in Spain probably based on Algeciras in Andalusia, so watch for dates which will follow soon.

The Annual General Meeting and Presidential Address is to be in London on April 27th and will be followed by talks by the organisers of the Network Research projects who will describe the results to date of the recording carried out by members of the Society. This should make those who have filled in enquiry cards feel they have been making a real contribution to our knowledge. In the evening it is hoped there will be a showing of slides, possibly of recent field meetings.

A Conference on European Recording is planned for June 28th-30th based on Cambridge.

The biennial Recorders' Conference will be held from August — September at Swanwick Conference Centre in Derbyshire, and November 30th will see the Annual Exhibition Meeting once again.

1973 Field Meeting bookings are progressing slowly, for as usual everyone seems to be leaving decisions to the last minute which causes despair to the organisers who worry for months that no one will come to their meetings, then finally have headaches because of the crowds! The week-end meeting at Ludham in the Norfolk Broads is very much under-booked and may have to be cancelled. It seems sad if the Society cannot muster even a party of twenty to explore this amazingly rich area. Should any members think they have left it too late but would like to come, I will defer the final decision for ten days after this appears in print so they will still have time to book. Please come, you won't regret it.

The request for comments on Field Meetings evoked absolutely no response whatever. That could be taken as a sign of complete disinterest, but I shall put my head firmly in the sand and believe you are all quite satisfied.

GILLIAN TUCK

RECORDS COMMITTEE NOTES

Floras

A new 40 page Supplement to the Flora of the North-East of Ireland has been compiled by Miss M. P. H. Kertland with the assistance of Miss D. S. Lambert. It can be purchased for £1.50 from Science Library, Queen's University, Belfast, BTT9 5EQ.

Recorders

The following were recently appointed as Vice-County Recorders.

10 Isle of Wight: B. Shepard, 87, Elm Grove, Newport. 50 Denbigh: I. Bonner, Fforddlas, Llanbedr, Ruthin.

108 W. Sutherland: Dr. J. Rogers, Hill Farming Research Organisation,

29, Lauder Road, Edinburgh, EH9 2JQ.

H.39 Co. Antrim: Dr. D. J. Hopton, 4, Rathmoyle Park West, Carrickfergus, Co. Antrim, N. Ireland.

H.40 Co. Londonderry: G. Bond, Magilligan Field Centre, 375, Sea Coast Road, Magilligan, Limavady.

Referees and Specialists

The following have recently been appointed:

Oxalis:
R. P. Libbey, 143, Gaywood Road, King's Lynn, Norfolk
Epipactis:
Dr. J. T. H. Knight, Rivermead House, 20, Egham Avenue,
Exeter, Devon, EX2 4RQ.

An up-to-date list of referees and specialists for the larger groups is now being prepared and will be sent to members shortly. A list for less important groups will be available from Dr. F. H. Perring, Biological Records Centre, Monks Wood, Huntingdon, on receipt of a stamped addressed envelope.

Network Recording

E. Milne-Redhead reports good progress with the Black Poplar survey but would welcome further records. Extra cards available from Dr. Perring at B.R.C. as above.

This is the last season of the Mistletoe survey — records are still required especially from N. Worcestershire and south-east Shropshire. All records to B.R.C. please.

F. H. PERRING

RECORDING IN WALES

The Working Group for Biological Recording in Wales, formed following a Biological Recording Conference held in the National Museum of Wales in May, 1971, is sponsoring field meetings to encourage more vigorous efforts in recording the flora and fauna of the less well covered areas of Wales. So far two week-end meetings have been held, in Radnorshire and Denbighshire, in which were recorded vascular plants, fungi, lichens and bryophytes, as well as vertebrates and invertebrates. A future meeting in June 1973 in Montgomeryshire is planned. It is hoped that these meetings will be supported by Natural History Societies, Naturalists' Trusts, and National Societies. Members of the B.S.B.I. are invited to attend these meetings, and it is emphasised that enthusiastic amateurs are welcome.

The Departments of Botany and Zoology at the National Museum of Wales are compiling an index of biological recorders in Wales. It is hoped to include not only the official recorders of the various specialist societies but also anyone actively engaged or interested in recording who would be willing to help the recorders, assist visiting botanists, suggest localities for field meetings, etc. Anyone able and willing to have their name included in this index, or who requires further information about the field meetings, is requested to contact the Keeper of Botany, National Museum of Wales, Cardiff, CF1 3NP

S. G. HARRISON

BOOK NOTES

As well as the books mentioned in the last issue of B.S.B.I. News, the following will be reviewed in **Watsonia**, Vol. 9 (4):—

Arctic Adaptations in Plants, by D. B. O. Savile.

The Concise Flowers of Europe, by Oleg Polunin, assisted by Robin S. Wright.

Morphologie et anatomie des végétaux vasculaires, ed. 2, by H. Camefort.

Conifers in the British Isles, by A. F. Mitchell.

The Naturalist in the Isle of Man, by Larch S. Garrad.

Atlas de la Flore Belge et Luxemburgoise, Ptéridophytes et Spermatophytes, by E. van Rompaey and L. Delvosalle.

Three-dimensional Structure of Wood, by B. A. Meylan and B. G. Butterfield.

Probing Plant Structure, by J. Troughton and L. A. Donaldson.

These publications cover a variety of topics, some that are bound to be of interest to many B.S.B.I. Members, such as British conifers and the plants of the Isle of Man. Now that many of us extend our botanical activities to continental Europe (or even farther

afield), a handy pocket illustrated guide to some of the European species will no doubt prove very useful, especially as it has a novel key of the Gaston Bonnier type. The Atlas of the Belgian flora, although far from pocket-sized is a welcome complement to our own British Isles atlas. Finally, the more academically orientated books on ecological, morphological and anatomical subjects all have something of interest to those whose concern with plants extends beyond "new records" — and that must surely include all of us!

Mr. R. C. L. Howitt has written to say that Erik Hultén's "Atlas over vaxternas utbredning i Norden (Atlas of the distribution of vascular plants in north-western Europe)" has been available again since 1971. It had been out of print for a long time. The publishers are Generalstabens Litographiska Anstalts Forlag, Stockholm, and the price in Britain about £13.00. The text is in Swedish, but there is a summary and glossary in English. I should be grateful to be informed about bibliographical matters, such as this, which would be of interest to readers of Watsonia.

NORMAN K. B. ROBSON

PROFILE

MISS GILLIAN TUCK (Field Meetings Secretary)

It is often held against Norfolk people that they do not gladly welcome new-comers and, for a long trial period, they are looked upon as "furriners". Like a fresh wind, Gillian Tuck soon dispersed the mist of prejudice and now that she has been with us for twenty-five years we look upon her as "one of us". A native of Kent she is Deputy Head of a large Primary School at Wells-next-the-Sea and lives in the village of Stanhoe where the Rev. Kirby Trimmer once had the living and where he wrote the first Flora of Norfolk.

We Norfolk people have a saying that "Wen yow weigh people up you wanter watch not only wot they do, but also wot they dornt do". We have watched Gillian Tuck progress over the years and have not hesitated to make full use of her generously given help in things botanical. It was due to John Panishurst that she was first introduced to botany in a series of winter lectures given some fifteen years ago. The seed was sown, quickly grew and flourished and, reaching maturity, has become one of the most highly evolved species exhibiting variation, both developmental and environmental. The writer introduced her to the B.S.B.I. and she has now taken on the somewhat arduous job of Field Meetings Secretary which gives her scope for her organising ability.

One of the conditions laid down by Mr. John Jarrold when he accepted the new Flora of Norfolk for publication was that it must be lavishly illustrated with coloured plates. Here again we appealed to Gillian and this work contains no fewer than twenty examples of her skill in plant photography thereby addiing to the sales and making up for deficiencies in the text! Lately some of her work has appeared in "Britain's Green Mantle" alongside that of Drs. M. C. F. Proctor and J. K. St.-Joseph.

For the preparatory work of recording plants for our Flora she took on a large area of north-west Norfolk and her records were accepted without question. During the past nine years she has been "square-bashing" for the Breckland Plant project, a somewhat tedious task calling for the recording of every species in a number of kilometre squares. I have only known her roused once and that was when her allotted squares for one year included the R.A.F. married quarters of a well known and very active airfield!

She shuns a parochial attitude and has travelled with her camera to Switzerland, Jugoslavia and Italy; at some of the B.S.B.I. Exhibition Meetings she has shown her skill in this work.

Her reputation locally has been acknowledged by her becoming the first woman President of the Heacham and West Norfolk Naturalists' Society.

For the past two years she has been compelled to "renounce delights and live laborious days" whilst studying for a B.A. (Honours) degree in geography. It is somewhat exceptional and no small measure of her merit to obtain this externally.

We hope she will not join the "Brain Drain" from this county and that she will be with us to help and brighten the scene for many years to come.

E. L. SWANN

TREE-PLANTING YEAR

"Plant a Tree in Seventy-three" states the Government's official slogan, and of course "plant some more in seventy-four"! Tens of thousands of trees will no doubt be planted both in urban and rural areas. Unless the newly planted trees are watered and cared for during the first year after planting, I predict there will be considerable losses and waste of money. The importance of maintenance in the early years cannot be overestimated.

Exotic species and cultivars are admirably suited for planting in towns, in suburbs, in parks and in some villages, but in the countryside it is felt by the Society's Conservation Committee that only native species of trees characteristic of the particular district and suitable for the local soil should be planted.

It is here that members of the B.S.B.I. who are interested in trees could be helpful. Most local authorities welcome members of the public taking a constructive interest in their activities, and I feel sure that suggestions coming from knowledgeable people would be much appreciated. Members should also be prepared to help their local amenity society, who may well have a tree-planting scheme and be in need of advice.

Trees which might well be more widely planted in the countryside are Field Maple (Acer campestre), small leaved Lime (Tilia cordata), large leaved Lime (Tilia platyphyllos) Hornbeam (Carpinus betulus), Service Tree (Sorbus torminalis), Gean (Prunus avium) and Aspen (Populus tremula). In the West Country around Plymouth the native Wild Pear (Pyrus cordata), now on the verge of extinction, could well be extensively planted. Last but not least, our native Black Poplar (Populus nigra), a tree which has become rare in natural habitats in Britain, is well suited for planting in the flood-plains of rivers in southern England and eastern Wales.

Members would also be doing a useful service if they were to discourage the planting of exotic species in the countryside. A recently planted long avenue of Horse Chestnuts along a secondary road in the northern Cotswolds, which I came across last year, looks horribly out of place. How much better it would have been if Beech and Ash had been used! Sycamore, also an alien in Britain, should seldom be planted in the countryside, although there is some justification for using it as a windbreak for isolated upland farms in the north. In general the planting of conifers should be discouraged, apart from Scots Pine in sandy heathy districts and Yew on chalky soils. It should be remembered that few exotic trees support a wide range of invertebrate fauna, and in consequence fail to assist the conservation of these creatures.

Planting trees is not the only way of increasing the tree population. If landowners and farmers who still have hedges would modify their mechanical cutting to allow selected shoots to develop, hedgerow trees would once more become a feature of the countryside. Here again guidance from members could serve a most useful purpose.

E. MILNE-REDHEAD

THE BLACK POPLAR SURVEY

Of all our British native trees, the Black Poplar (*Populus nigra* L.) is certainly one of the rarest, and one that might justly be described as endangered in the wild state. It is a tree of the flood-plains of rivers and streams in southern, eastern and central England and in eastern Wales. In the middle ages it must have been the only Black Poplar to occur, although the Lombardy Poplar, probably a fastigiate sport of an asiatic form of *P. nigra*, has been planted in Europe, including Britain, for hundreds of years.

At the time of the enclosures in the eighteenth century, the local Black Poplar, together with the Alder and White Willow, would have been the obvious trees to plant along the resulting ditches and hedgerows in the river valleys, whilst others were no doubt left to flourish on the actual bank of rivers and their tributaries. Some of these trees, or their direct descendants, are still to be seen here and there, mostly by now past their prime, whilst others are becoming dilapidated with few years left to survive. In their place, landowners and local authorities have now planted the man-made hybrids, largely because they grow much more quickly. More recently, plantations of one or more of these hybrids have been established as an investment of relatively quick return, for they are used both as pulp-wood for paper making and as wood for the manufacture of matches.

It is strange that so few field botanists in Britain have got to know the native Black Poplar. When the B.S.B.I. was collecting records for the Atlas, the native tree was not adequately distinguished from the hybrids, so the resulting distribution map failed to show the distribution of *Populus nigra*, an omission which the present scheme is designed to rectify.

I first became acquainted with this magnificent tree when a student at Cambridge, where its characteristics were demonstrated to me by my late friend, Humphrey Gilbert-Carter. He was particularly fond of it as a tree, and his interest in it has been passed on to generations of students passing through the Botany School. Alas, only one tree remains today of the group at Madingley, near Cambridge, which Humphrey knew so well.

Druce (Comital Flora of the British Isles, 1932), places *P. nigra* as septal, probably alien, but well naturalised and frequently planted, two assertions which, in my opinion, are of very doubtful credibility! Hyde and Wade (Welsh Flowering Plants, 1934), do not mention *P. nigra* as a native of Wales, and it is still omitted in their second edition (1957), although there are some splendid trees in the flood-plain of the River Usk in Breconshire, and I know it not far from the River Severn in Montgomery. Hyde (Welsh Timber Trees, 1931), mentions and illustrates the fine 102-foot planted tree at Gwernyffed Park, Brecon, but does not mention any growing in a natural flood-plain habitat.

The tree is treated as alien in Keble Martin and Fraser (Flora of Devon, 1939), although the authors state "sometimes well established by the sides of streams and in wet places", which in fact is the habitat one would expect to find the native tree today! My only record, so far, from Devon is from vice-county 3, district IV, not recorded in the Flora. Murray (Flora of Somerset, 1896), places it as an excluded species, often

planted, yet it occurs not infrequently in natural habitats on the Somerset levels today, and could well have been more frequent in Murray's day. One of the few county Floras that treat *P. nigra* adequately is Riddelsdell, Hedley and Price (Flora of Gloucestershire, 1948), where it is recognised as native in the county and is not confused with the planted hybrids. These examples will suffice to show how unsatisfactory is the treatment in published works, and emphasise the need for the present survey.

The results so far received support my view that *P. nigra* is on the way out. Most trees are males, probably because man has looked upon the female tree, which produces an abundance of fluff, as a nuisance, and has selected male trees for propagation. As the two sexes seldom, if ever, now meet in the native habitats, there is next to no regeneration of the tree from seed. At Eriswell in West Suffolk there were as many as sixteen trees in the early nineteen-thirties, but now there are only two. This gives some indication of the rate of decline. Unless *P. nigra* is planted back into the river valleys of our countryside, there will be very few indeed surviving in another decade or two. I am therefore urging local authorities, landowners and river authorities to plant this noble native tree in suitable flood-plain localities. I am hoping that a stock of young trees of both sexes of native origin will be available in a couple of years, so that in the twenty-first century this striking tree will continue to grace the river valleys of England and Wales.

E. MILNE-REDHEAD

CHROMOSOME COUNTS OF BRITISH PLANTS

To anyone interested in the taxonomy of British plants the availability of chromosome counts based on material of a documented, wild origin is extremely valuable. Despite the numerous publications of lists of such data there is unfortunately a very large number of unpublished chromosome counts, which are therefore not available to the majority of workers. Probably many of these counts are not published because the authors consider that they do not in themselves constitute a worth-while paper or note, and others remain hidden in these which, despite good intentions, never appear in print.

The editors would be very glad to publish lists of chromosome counts, based on British material, in Watsonia under Short Notes, and I urge anyone who has unpublished data to forward them to me. Even a single chromosome count would be very acceptable, provided the source of material is stated. If a voucher herbarium specimen exists this should also be noted. The notes should conform to the style generally adopted for Short Notes in Watsonia. Alternatively I shall be glad to prepare for publication any lists which are sent to me, providing they are typed and include the data indicated.

Many readers will know that a punched-card record of chromosome counts of plants of known wild British origin is kept at Manchester University by Professor D. H. Valentine and Mr. D. M. Cranston; these cards, in many cases, give the precise geographical location of the plant counted and also habitat and other data. Many workers have kindly forwarded unpublished lists for inclusion in this index, and the compilers would like to stress that these data are available to all for consultation. If you have sent a list which you would like published in Watsonia, please inform Professor Valentine, Mr. Cranston or Dr. Stace, who will extract the data for publication. Any lists sent for publication will automatically be incorporated in the punched-card record.

C. A. STACE

Department of Botany, University of Manchester.

SHORT NOTES

PROCRASTINATION?

About the year 1930 I observed, from the train between Culloden Moor and Carrbridge, a pale yellow "neep" extending in great quantity along the railway embankment.

In subsequent years when passing the same route I kept repeating to myself that I must one day have a closer look at the plant.

At last, in June, 1971, I visited and collected some specimens of my "neep", which proved to be *Rhynchosinapis chieranthos* (Vill.) Dandy, new to vice counties 95 and 96, and the second record for Scotland.

Obviously introduced, it seems very well established. Specimens were sent to the following herbaria: Edinburgh, Aberdeen, British Museum, Cambridge and Kew.

M. McCallum Webster

DICENTRA FORMOSA

In a deep wooded valley below Clydey church, Pembrokeshire, on April 22nd, 1972 I found a colony of twelve plants quite new to me. They were growing subject to flooding beside a stream, associated with typical species of the field layer in damp woodland: Ranunculus repens, R. ficaria, Silene dioica, Chrysoplenium oppositifolium, Veronica montana and Adoxa moschatellina. The site is half a mile downstream from a small hamlet, Star, whence it is probable they originated since the valley is a ravine up to that point. The colony was well established: the three largest plants were in flower, the others showed no sign of developing flowering stems, which suggests that regeneration from seed had occurred since the pioneers arrived.

Mr. S. G. Harrison determined a specimen I sent to the National Museum of Wales, Cardiff, as *Dicentra formosa*.

T. A. W. DAVIS

MNEMONICS FOR PLANTS

The only way I can remember which is the earlier of the soft-grasses is that l comes before m, so *Holcus lanatus* flowers before H. mollis. I also remember which is which in that "Molly has hairy knees" — with apologies to Molly!

I suspect that not only I would welcome similar mnemonics for many other groups of plants, such as the two Hornworts. Who can help?

DAVID McCLINTOCK

"BANG" IN NEW ZEALAND

Mr. E. B. Bangerter sends greetings and good wishes to all his friends in the Society. "Bang" became, temporarily, an overseas member in April 1972 when, on his retirement from the British Museum (Natural History), he went on a prolonged visit to his sons' in New Zealand.

He writes that Christmas Day was too chilly to have the planned dinner on the beach but otherwise Auckland's climate and flora are well up to his expectations and he is finding the volume of the "Flora of New Zealand" given him by the Society invaluable.

His colleagues in Britain made sure Bang's presence in Auckland was not overlooked by N.Z. botanists and Bang is paying weekly visits to Auckland Museum to check identifications of their herbarium specimens of British introductions. He has also been asked to produce a key to New Zealand Geraniums.

Wisely the New Zealanders are not allowing Bang to vegetate, let alone go to seed!

LORNA F. FERGUSON

ATLAS FLORAE EUROPAEAE

(Volume 1. Pteridophyta)

Dr. F. H. Perring exhibited a copy of this publication at last year's Exhibition Meeting and he received numerous enquiries asking from where it could be obtained.

This up-to-date work on the distribution in Europe of all the species and subspecies of Vascular Plants will, it is intended, extend to five volumes. The ranges have been mapped with the aid of a grid of 50 Km. squares — the squares totalling ca. 4,400 for the whole of Europe. In addition, there are comments on taxonomy, nomenclature and total range, taking into account the newest literature available. Vol. 1 (Pteridophyta) may be ordered from The Academic Bookstore, Keskuskatu 1, SF-00100 Helsinki 10, Finland (cost \$10.00 U.S.).

MEMBERS' DESIDERATA

Mr. D. E. Allen of Lesney Cottage, Middle Road, Winchester, Hants, is collecting information about plants (vascular or otherwise) suspected of being associated with ancient settlement sites or barrows. Introductions attributed — reasonably credibly — to monastic, Anglo-Saxon or Roman influences are equally of interest. He would be most grateful for details of any instances other than such well-known ones as *Sambucus ebulus*.

BUMBLE BEE DISTRIBUTION MAPS SCHEME

The methods used for compiling the "Atlas of the British Flora" are now being applied to mapping the distribution of bumble bees in Britain and Ireland. The Bumble Bee Distribution Maps Scheme is being run by the Bee Research Association as part of the Insect Distribution Maps Scheme of the Biological Records Centre. One map will be prepared for each of the 25 indigenous species of bumble bee.

Records of all species of bumble bees are required from all parts of Britain, the Channel Islands, and the whole of Ireland. The completeness and value of the distribution maps will depend to a great extent upon the help that is obtained, and we hope that some botanists interested in bees might be able to provide information.

Observers who can reliably identify some or all species of bumble bee act as recorders. Identifying bees by reference to colour charts or colour pictures is however, impractical for the purpose of B.D.M.S., since such determinations are frequently erroneous. The help of those who cannot identify the different species can however, be just as valuable, if they are willing to act as collectors. The small number of bees collected for B.D.M.S. will have no adverse effect on future populations of the species.

For more information, together with a copy of the Report for 1970 and 1971 with the first maps published, write to the Bee Research Association, Hill House, Chalfont St. Peter, Gerrards Cross, Bucks., SL9 0NR.

THE DEPARTMENT OF BOTANY, BRITISH MUSEUM (NATURAL HISTORY)

The Department of Botany is still open on Saturdays for inquiries and to permit the use of the library and herbarium facilities by bona fide botanists, both amateur and professional. While it is not always easy to arrange for this manning, and difficult security problems are involved, we are anxious that these facilities should be provided for as long as a demand continues. As only a skeleton staff is on duty on Saturdays, a comprehensive coverage of the department cannot be maintained. In order to ensure that your needs are promptly and fully met, please wherever possible give advance notice by telephone or letter of any intended Saturday visit, giving at the same time some indication of the nature of the inquiry. In this way it should be possible to give the kind of service that we hope to offer, with the minimum delay and inconvenience to the visitor. Prior notice would also be appreciated for visits on weekdays when large numbers of specimens or special problems are involved.

J. F. M. CANNON Deputy Keeper

LETTERS

24, Pool House, Penfold Street, London, NW8 8DP.

Dear Editor,

Although I have been a long time in putting pen to paper, I was greatly encouraged and cheered by the suggestion of Mr. Croucher (1973, B.S.B.I. News, 2, 13).

For years, mine was the only voice crying in the wilderness for some form of recognition among B.S.B.I. members themselves and for wardens, gamekeepers, conservationists and all those one encounters in field work. Suspicion turns invariably to friendly assistance once a basis of mutual interest has been established.

My only sorrow is that Mr. Croucher would confine such badge of recognition to tie-wearing members. Would it not be possible to have a small enamelled pin or brooch, which could be worn by male and female members of the Society?

Furthermore, if the Society wished to honour a distinguished member, he could be presented with the emblem of the Society — once established — in the form of a wooden plaque or a pin (or brooch) mounted in silver or gold.

J. Kinsella (Mrs.)

(Mrs. Kinsella kindly enclosed five designs for a possible motif. These will be shown at the Exhibition Meeting on the 24th November. It is hoped that any other members who would like to suggest suitable designs will also show them — Editor).

261, Bradford Road, Batley, Yorkshire, WF17 6JQ.

Dear Mr. Elsley,

In response to your question "what motif?", may I suggest a plain tie on the lines of the "County" ties — with a small natural coloured representation of *Linnaea borealis*. While I am not a keen tie-wearer, if it would help to advertise the Society and interest new members, I'd gladly wear an official emblem.

With reference to Mr. Fitter's letter, he has my deep sympathy. I am a botanical photographer, but practise our "Code" in every respect. I would suggest a further large printing of the "Code", for distribution by members of the Society. Many of them must lecture to audiences large or small — and this is the ideal time to distribute these leaflets. Between my friends and myself of the Mirfields Nats. we have distributed almost 300 copies, and they have been well received.

Our local enemy is the "arty-crafty" flower presser and dried flower arranger. On field meetings we have on occasions had to be quite offensive to these people.

Hoping to see the B.S.B.I. News grow during the coming year.

E. W. LITTLETON

7, Braybrooke Terrace, Hastings, Sussex.

Dear Sir,

With reference to the recent correspondence in the B.S.B.I. News concerning a Society tie and the possible motif thereof, may I point out that a large proportion of the members are ladies (I happen, by coincidence, to be one of these) and therefore, presumably, do not wear ties. I would recommend a badge, as the National Trust has, as being more useful to the majority of members. This could also be worn on field visits, thus exposing our motif to more members of the public (as another of our aims is "popularisation").

N. PELLING

The Old Forge,
Duton Hill,
Dunmow,
Essex.

Dear Mr. Elsley,

I don't know whether this would be of interest for the News-letter — but as a "follow-up" to the Manchester Conference in 1971 I have kept in touch with Professor Critopoulos of the National Hellenic Research Foundation, who was very welcoming when I was in Greece last spring.

Having sent him the prospectus and various details and reports of the work of the B.S.B.I. I heard from him recently that a similar Society is in the process of formation in Greece, based on our organisation, with local modifications.

JOCELYN RUSSELL. (Mrs.)

Corner House,
Scarborough Road,
Driffield,
Yorkshire,
YO25 7EH.

Dear Editor,

Endymion hispanicus (Mill) Chouard.

I would like to draw readers' attention to the possible rapid increase of the Spanish Bluebell, *Endymion hispanicus*, including its hybrids with the Common Bluebell, *E. nonscriptus* (L) Garke. This opinion is somewhat subjective derived from my local observations (V.C. 61 E. Yorks.)

Dr. Perring has kindly sent me a distribution map from the B.R.C. showing the plant in sixty-nine ten-kilometre squares, of which nine are pre-1930 only, eight squares are in the Edinburgh area, twelve in or near Berkshire, four in my own area and the rest very scattered.

It would appear that the plant is under-recorded and that there is observer bias. It might well be a good time for readers to make a check in their own areas.

The differences from the Common Bluebell are stated clearly in the Flora of Clapham, Tutin and Warburg, but in practice it is quite easy to spot the horizontal, more open perianth of the Spanish Bluebell at a distance, especially as the plant also seems to be found mainly on roadside verges. A closer check for blue anthers is then sufficient to determine the plant (excluding hybrids).

I trust V.C. Recorders would be pleased to receive observations, as I would myself, especially those from Yorkshire.

ERIC CHICKEN

Forestry Commission, Briar House, Fulford Read, York.

Dear Mr. Elsley,

I have just been shown a note by you in the News-letter on the subject of *Potentilla rupestris*, which you saw growing on one of its sites. You wondered whether the seed collected would germinate. I can assure you that it will.

Some time before 1960 a friend of mine collected seed from a plant on the Breidden Hill site, Montgomeryshire, which I believe has since been overtaken by quarrying. He raised some plants and gave me some seed, which I sowed in my garden, and ever since have had a tremendous annual flowering and seed production. In fact, it seeds so freely that it would crowd everything else out of my garden unless ruthlessly controlled!

I have supplied seed to the Royal Botanic Gardens, Edinburgh, and to Nature Conservancy in North Wales. If you would like some more, do let me know.

I hear that it has been found somewhere in Ross-shire.

G. E. GOODWIN

FORTHCOMING EVENTS

Association of School Natural History Societies

The above Association, in conjunction with Temple Moor High School Biology Club, Leeds, invite Member Schools to a Week-end of Natural History and Scenery in England's largest county, Yorkshire. The course runs from Friday, July 6th to Sunday, July 8th, 1973, and will be centred at Devonshire Hall, Cumberland Road, Leeds. The programme includes lectures, excursions and displays by Local Naturalist Societies and Conservation Organisations. Cost to member schools is only £4.50, fully inclusive of all activities. Bookings to the Week-end Secretary, John Gilleghan, B.Sc., M.I., Biol., 383, Selby Road, Leeds, LS15 7BT.

Porcelain Sculpture Exhibition

Mr. D. Patrick O'Hara, of Brookside Studio, Longdon, nr. Tewkesbury, Gloucestershire, and a member of the B.S.B.I., is holding an exhibition of his porcelain sculptures at the Moorland Gallery, Cork Street, London, from 2nd — 19th October this year. Mr. O'Hara specialises in the production of accurate models of wild flowers and butterflies and he intends that several of the sculptures exhibited at this exhibition will depict some rare and endangered plant species. A percentage of the sale price of the sculptures will be donated to the particular trust or society that is responsible for the protection of particular endangered species.

NEW MEMBERS

(November 1972 - March 1973)

Ordinary Members (British Isles)

Mrs. I. G. Allan, Thornhill, Drummond Castle, Crieff, Perthshire, PH7 4HZ.

Mrs. M.M. Allan, Parkhouse, Biggar, Lanarkshire.

Mrs. C. E. Badley, 21, Church Road, Leatherhead, Surrey.

Mrs. N. Ballantyne, 7, Burlington Road, Thornton Heath, Surrey.

Mrs. L. S. Barnes, 56, Grieth Road, Marlow, Bucks., SL7 2QU.

P. G. Barnes, Inshriach Nursery, Aviemore, Inverness-shire.

Mrs. N. E. Barrett, The Old Bakery, 2, Church End, Drayton Parslow, Bletchley, Bucks.

Miss S. R. Bingham, 25, Victoria Road, Salisbury, Wiltshire.

R. W. Bird, 228, Devonshire Road, London, SE23.

G. Birtles, 64, Sherry Lane, Arrowe Park, Birkenhead, Cheshire.

Dr. P. E. Brandham, 69, The Woodlands, Esher, Surrey.

Miss C. A. Brighton, Jodrell Laboratory, Royal Botanic Gardens, Kew, Richmond, Surrey.

A. E. Brown, 38, Westmoor Road, Enfield, Middlesex, EN3 7LF.

C. V. Brown, Sutton Cottage, Kington-Magna, Gillingham, Dorset.

Mrs. J. I. Byatt, 29, Highfield Road, Sutton, Surrey.

Mrs. A. E. Chalmers, Thorntree, Kippen, Stirlingshire, FK8 3EY.

Professor W. G. Chaloner, Botany Dept., Birkbeck College, Malet Street, Lordon, WC1E 7HX.

Miss K. L. Cosway, Selwood, 44, Victoria Road, Worthing, Sussex, BN11 1XE.

K. V. Cramp, 130, Hinton Way, Great Shelford, Cambridge.

R. A. Creber, 17, St. Georges Avenue, Hornchurch, Essex, RM11 3PD.

Dr. N. Crook, 8, Minster Yard, Lincoln.

R. S. Cropper, 140, Ralph Road, Shirley, Solihull, Warwickshire, B90 3IZ.

T. S. Crosby, Dept., of Plant Sciences, Botany Section, The University, Leeds, LS2 9JT.

R. W. J. Davies, "Dunedin, Eglwysbach, Colwyn Bay, North Wales, LL28 5RG.

M. J. Deacon, 16, Kestrel Road, Bedford.

Mrs. E. M. L. Dickson, Stow House, Westerfield, Ispwich, Suffolk.

G. J. Doyle, Botany Dept., University College Dublin, Belfield, Stillorgan Road, Dublin 4, Irish Republic.

Miss P. Dudfield, Cornerways, 62, Grassmoor Road, Kings Norton, Birmingham, B38 8BU.

Mrs. V. E. Emmett, Prior's Loft, Tidenham, Chepstow, Mon., NP6 7JD.

Miss J. E. O. Ennis, 23, Regent Terrace, Edinburgh.

D. G. Everny, 4, Browning Avenue, Hanwell, London, W7.

Mrs. M. W. Findlay, Springkell House Hotel, Hindhead, Surrey.

Dr. Mary E. Gillham, The Cottage, Gwaelod-y-Garth, Cardiff.

Miss C. M. M. Greene, c/o Miss S. Greene, Flat 3, "Vinicombe", Spring Gardens, Ventnor, Isle of Wight.

Miss F. L. Greenock, Penguin Education, Horton Road, West Drayton, Middlesex.

P. Hackney, 105D Fitzroy Avenue, Belfast, BT7 1HU.

G. A. F. Hendry, 12, Castle Street, Thornbury, Gloucestershire.

Mrs. M. E. Howells, Botany Department, University College of Wales, Penglais, Aberystwyth, Cards.

- D. Hughes, 30, Bickerton Road, Headington, Oxford, OX3 7LS.
- M. B. Humphries, 40, Fairway Road, Oldbury, Warley, Worcs., B68 8BE.
- R. N. Humphries, 1, New North Road, Exeter, Devon, EX4 4HH.
- R. M. W. Jackson, 24, Bradbourne Vale Road, Sevenoaks, Kent.
- Mrs. M. B. Jennings, 12, Old Eaton Road, Rugeley, Staffordshire.
- V. Johnstone, Flat 32, 15, Penywern Road, Earls Court, London, SW5.
- Miss M. R. Jones, 25, Red Lion Street, London, WC1.
- G. S. Joyce, 5, Springfield Avenue, Swanley, Kent, BR8 8AX.
- Miss A. C. Kaighin, The Headlands, Peel, Isle of Man.
- C. J. Kavanagh, 20, Valley Drive, Leeds, LS15 7ES.
- R. F. King, Lodge No. 7, Eastwood Park, Giffnock, Renfrewshire, G46 7JS.
- Mrs. S. Kurzen, Little Moorlands, Moorlands Road, Merriott, Somerset.
- D. S. Ledsham, 12a, Marine Parade, Whitehead, Co. Antrim, Northern Ireland.
- R. G. Lowden, The Bryn, Llandegla, Wrexham, Denbighshire.
- R. McBeath, Inshriach Nursery, Aviemore, Inverness-shire.
- H. K. C. Mair, Dalrymple Cottage, Dalrymple Street, Stranraer, Wigtownshire.
- Miss A. M. Marsland, 30, Stannington Avenue, Heaton, Newcastle-upon-Tyne, Yorks.
- R. P. Moore, 15, Parkgate Avenue, Hadley Wood, Barnet, Herts., EN4 0NN.
- J. W. Nash, 24, Grange Road, Bishop's Stortford, Herts.
- B. T. Nicholls, 155, Marlpool Lane, Franche, Kidderminster, Worcestershire.
- D. P. O Hara, Brookside Studio, Longdon, nr. Tewkesbury, GL20 6AX.
- Mrs. R. N. Ohlenschlager, Goodworth Cottage, Goodworth Clatford, Andover, Hants.
- Miss J. A. Olsen, c/o Botany Dept., The University, Oxford Road, Manchester, M13 9PL.
- Miss P. M. Oswin, 19, Queenswood Road, Bridgwater, Somerset.
- Mrs. H. E. Padmore, Lippetts, Great Witley, Worcester.
- C. J. Peach, 28, Onslow Gardens, Grange Park, London, N21 1DX.
- Miss K. J. Pearce, Dept. of Botany, The University, P.O. Box 363, Birmingham, B15 2TT.
- Miss C. E. Phillimore, 37A, Rosary Gardens, London, SW7.
- R. J. Phillips, "Elmsett", Brent Road, Burnham-on-Sea, Somerset.
- Mrs. D. M. Piggott, "Elkstone", The Avenue, Gunthorpe, Nottingham, NG14 7ET.
- Mrs. E. H. Pole, 3, Jubilee Terrace, Nantwich, Cheshire.
- Mrs. L. Prestwich, Barton Oaks, Calcot Park, Reading, Berkshire.
- G. K. Price, 3, Fairfield Avenue, Normoss, Blackpool, Lancs.
- B. G. Purser, 5, Curlew Gardens, Worle, Weston-super-Mare, Somerset.
- E. J. Redshaw, 7, Fennell Road, Pinchbeck, Spalding, Lincs., PE11 3RP.
- D. L. Seed, Nooklands, Gubberford Lane, Cabus, Garstang, Preston, Lancs., PR3 1PS.
- Mrs. J. Shelley, Mays Cottage, Ramsdell, Basingstoke, Hants.
- G. P. Smith, Hill House, Central Road, Strood, Rochester, Kent, ME2 3HF.
- M. E. Smith, 28, Trafalgar Road, Cambridge.
- R. Smith, Beech House, Spanker Lane, Nether Heage, Derby.
- D. A. Southerden, 55, Burman Road, Liverpool, L19 6PW.
- Dr. G. S. Steele-Perkins, Robin Hill, Deepdene Park, Exeter, Devon.
- C. R. Stevenson, 9, Lancaster Cottages, Lancaster Park, Richmond, Surrey,
- Mrs. F. Sutherland, Dalton, Gore End, Ball Hill, Newbury, Berks.

D. J. Tennant, Woodlea, Sefton Drive, Worsley, Lancs.

Mrs. E. M. Thorpe, Heather Bank, Smedley Street West, Matlock, Derby, DE4 3LF.

Miss S. C. Tribble, Scottish Plant Breeding Station, Pentlandfield, Roslin, Midlothian.

Dr. N. B. Turnbull, 6, Exeter Close, Bourne, Lincolnshire.

A. J. Wake, 27, Wesley Avenue, Colchester, Essex.

T. J. Wellsted, Rainbird Publishing Group Ltd., Marble Arch House, 44, Edgware Road, London W2.

Mrs. R. G. M. White, "Ash Keys", White Post Lane, Culverstone, Gravesend, Kent, DA13 0TJ-

J. A. Wild, Dun Bhuirg, 16, Harewood Avenue, Burnley, BB12 7JE.

Dr. D. P. Winstanley, Woodlands, Toot Hill Road, Greensted, Ongar, Essex, CM5 9LH.

Miss R. A. Yeomans, 11, Westhall Road, Warlingham, Surrey, CR3 9BJ.

Junior Members

K. J. Allnatt, 62, Beverley Gardens, Wembley, Middlesex.

Miss M. A. Baines, Meadowside, 401, Wrotham Road, Istead Rise, Gravesend, Kent, DA13 9EF.

P. H. Carvill, Thornberry, Kilgobbin, Sandyford, Co. Dublin, Irish Republic.

T. G. F. Curtis, "St. Michaels", Meath Road, Bray, Co. Wicklow, Irish Republic.

D. I. F. Elliott, Colsham, Little Chart, Forstal, Ashford, Kent.

Miss K. Forwood, Bryn-Awelon, Abersoch, Caernarvonshire.

Miss S. Grose, 7, Woodyett Road, Busby, Glasgow, G76 8SA.

J. R. Hincks, 40, Mill Lane, Barrow-on-Soar, Loughborough, Leics.

R. J. Loader, 31, Knowle Road, Knowle, Bristol 4.

Miss C. C. Maw, 782, Pershore Road, Selly Park, Birmingham 29.

W. J. H. Peace, 63, Station Road, March, Cambs.

J. N. Razzak, Bas Sejour, Ruette des Fries, Cobo, Guernsey, C.I.

P. G. Rowland, 73, Queens Drive, Surbiton, Surrey.

D. A. Spiers, 81A, Colinton Road, Edinburgh, EH70 5DF.

K. Storey, 62, Coniston Road, Ferryhill, Co. Durham, DL17 8HL.

R. M. Williamson, 6, Hunger Hills Avenue, Horsforth, Leeds, LS18 5JT.

Family Members

Miss N. C. T. Conacher, An Fharaid, Lawmarnock Road, Bridge of Weir, Renfrewshire, PA11 3AP.

P. A. Kingsbury, 6, Castle Hill, Berkhamsted, Herts.

D. Merrett, 58, Bridgefield, Farnham, Surrey, GU9 8AW.

Mrs. N. B. Turnbull, 6, Exeter Close, Bourne, Lincolnshire.

R. G. M. White, "Ash Keys", White Post Lane, Culverstone, Gravesend, Kent, DA13 0TJ.

Subscriber Member

Trebannws Primary School (Mr. D. S. Jenkins), Trebanos, Pontardawe, Swansea, Glam.

Overseas (Ordinary Members)

Dr. Jane H. Bock, Biology Dept. — Ramaley, University of Colorado, Boulder, Colorado 80302, U.S.A.

Mrs. M. E. Jaunsen, Ulsetasen 24, 5095 Ulset i Asane, Norway.

CHRISTINA M. DONY