

B.S.B.I. NEWS

Edited by KENNETH A. BECKETT

Domus, Brick End, Broxted, Dunmow, Essex, CM6 2BJ

No. 10

SEPTEMBER 1975

CONTENTS

President's Introduction	2
Editor's Notes	4
Secretary's Notes	4
Subscriptions	6
Profile	6
Critical Flora	8
C.S.S.F. Exhibition Meeting	9
Book Notes	11
Historical Collections	11
Adventive News No. 3	12
Adventives at Gloucester Docks	15
<i>Carex montana</i>	17
<i>Consolida</i> in Britain	17
<i>Arbutus unedo</i> and <i>Geranium pratense</i>	18
Books from Oundle Lodge	19
Easternness Records	19
Leicester Museums	20
Certificate in Field Biology	20
Churchill Memorial Grants	21
Orkney Field Centre	21
The Fight for the Flash	22
Letters to the Editor	23
Books Wanted	25
A Botanical Quiz	26
New Members	26

PRESIDENT'S INTRODUCTION

It was during the luncheon break of the field excursion at Holme-next-the-Sea, West Norfolk, following the very successful Cambridge Conference on Floristic Studies in Europe, that our very hard-working Secretary took me on one side and asked if I would allow my name to go forward for possible election as President. It came as such a great surprise that I was quite at a loss for words. I realise it is a considerable honour for a mere amateur but little known beyond the wilds of West Norfolk. It will be very difficult to follow in the wake of such a distinguished botanist as Dr. Max Walters. At the Dumfries meeting I likened it to being thrown in at the deep end and told to "learn to swim quickly for you have a cross-Channel swimmer to follow". "Cross-Channel" is a fitting simile for Max has an international reputation; he is one of the Editors of *Flora Europaea*, Director of the Cambridge Botanic Garden, and well-known for his many writings. For the past two years he has guided the Society along devoting many ill-spared hours to its advancement. I find the prospect of attempting to follow him somewhat frightening but I can only promise I will do my best. Fortunately we have an excellent Secretary in Mary Briggs upon whose experience I shall be able to draw.

As a member of thirty-six years' standing I have seen the Society increase five-fold; our publications have shown an enormous growth in technical skill, an elaboration of professional competence, and today we have attained international status as was clearly shown at the Cambridge Conference when more than twenty visitors and speakers came from Continental Europe.

We welcome Dr. C. T. Prime as a new Vice-President to replace Professor J. Heslop-Harrison who is not eligible for re-election. In these days of recurring financial difficulties the lot of our Treasurer is not an enviable one. With our coffers being rapidly depleted Michael Walpole is obliged to find ways and means to arrest the outflow. It is hoped that with the unavoidable increase in the subscription rate and other measures we shall be able to maintain our present services to members. Following his appointment as Assistant Director of Merseyside County Museums Mr. Eric Greenwood relinquished his office as an Editor which he has held for nine years. We offer him our congratulations and thank him for his long services. In the hands of our remaining Editors, Dr. G. Halliday, Dr. N. K. B. Robson and Dr. C. A. Stace, all professional botanists, there is little doubt that our reputation will continue to advance, both at home and abroad.

Here I would put in a plea for the large body of amateurs by referring to a recent questionnaire organised by the British Ecological Society on Readable Writing for Scientific Papers. The answers showed conclusively that members wanted papers that were written clearly and simply; they had little use for those that managed to combine unduly obvious reasoning with unnecessarily obscure jargon. As a correspondent rightly observed, "Intelligibility and good science are not mutually exclusive. Good business depends on good communications". We cannot but be grateful to Kenneth A. Beckett, the able Editor of *B.S.B.I. News*, for the last number was a very good example of both intelligibility and good science. We look forward to future issues with confidence for they will help to mitigate the sad passing of *Proceedings*.

For her ten years' work as Membership Secretary the Society accorded Mrs. John G. Dony the only honour available, namely, making her an Honorary Member. In doing

this the Society has made history for it is the first time that a botanist and his wife are both Hon. Members. May they long continue in "double harness".

Although I have had some experience in conservation and preservation in Norfolk I find there are considerable differences of opinion in the application of remedial measures. To my way of thinking it is wrong to place any form of fencing round a rare plant for that immediately creates an artificial habitat. I consider, too, that far too much blame has been placed on collectors. With the rapid development that is taking place resulting in vast areas of disturbed land the widespread use of any form of mechanical diggers can, in the course of a *single day*, destroy many hundreds of uncommon species.

As much as we deplore the diminishing numbers of rare plants there must surely be some compensation by way of new arrivals. As I wrote in the *Flora of Norfolk* (1968), "The hunting of aliens, like fox hunting, arouses very mixed feelings. There are some who dismiss it with contempt and condemn it as dung-hill botanising, whilst others consider casuals as potential newcomers to the flora". The last fifty years have shown a considerable influx of aliens and several have become integrated into our flora attaining the status of either naturalised or established aliens whether introduced by way of rubbish tips or from the rapid increase of traffic and commerce with neighbouring countries. In Norfolk alone, casuals of every class have increased from 381 to 485; "The old order changeth, yielding place to new".

The present exorbitant costs of petrol and rail fares will perforce restrain those who travel long distances in search of rarities. Such plants will benefit from the absence of the few collectors that remain and from the "gardening" of photographers. My fifty years of botanising have taught me to have respect for persistence of our rare plants; within the past eight years three or four species, thought to be extinct, have been refound and our truly native plants have increased from 982 to 990.

A more intensive study of hybrids, revived and enriched by new techniques developed by our professionals, has revealed a surprisingly large increase in their numbers. This is undoubtedly due to the vast increase in disturbed land thereby creating just those conditions favouring hybridization between species. Edgar Anderson, the well-known American botanist, in his fascinating book *Introgressive Hybridization* has shown that "The environment exerts a powerful control over the results of natural hybridization. . . . When he digs ditches, lumbers woodland, builds roads, creates pastures, etc., man unconsciously brings about new combinations of light, moisture and soil conditions . . . and it is significant that many of the careful studies of hybridization in the field have been made in such areas". By the time this Introduction appears we shall have the 640-page book by Dr. C. A. Stace and his team of contributors on *Hybridization and the British Flora* before us; with such an authoritative source of information we shall not lack the stimulus for more exciting and rewarding field-work.

Lastly, there appears to be good grounds for a reappraisal of infraspecific taxa. It is appreciated that without cultural experiments it is not always possible to distinguish modifications induced by the environment from genetically-fixed variations but it is these smaller taxonomic units that merit closer attention than that given in the majority of reference books. It was Norfolk's most famous botanist, Sir James Edward Smith, who wrote that

"The slightest piece of information which may tend to the advancement of the science, we should thankfully receive. However trifling in itself, yet combined with

other facts it may become important. Whatever relates to the determination of species, even in the lowest and seemingly least important of Nature's works, ought never to be neglected. He who determines with certainty a single species of moss, adds so far to the general stock of human knowledge".

E. L. SWANN

EDITOR'S NOTES

This largest *News* to date might well be described as a bumper issue and surely contains something to please everyone. The larger number of pages, however, will not be a permanent feature, but on this occasion it enables all the outstanding contributions to be aired. Please do not think that there is a surfeit of articles, notes and comments. These are always needed and very much appreciated.

Although a front cover line drawing will not be a regular feature, it would be nice to have at least each other *News* so illustrated. Good line drawings are difficult to come by. On the other hand there must be plenty of artistic talent among B.S.B.I. members and if anyone would like to contribute to the Society in this way I shall be pleased to hear from them. Ideally, illustrations should be of critical plants or little-known adventives (aliens) and be accompanied by at least a descriptive note. Alternatively, a liaison could perhaps be arranged between an artist and a botanist. For example, if drawings of the *Ajaxis* (*Delphinium*) species described in this issue could have been obtained they would have spotlighted the differences at a glance.

On more than one occasion I have received some very curious glances when talking about going on an alien hunt to non-botanically oriented companions. Indeed, the word alien now has such strong racist connotations that I prefer not to use it and insisted on adventive for a title when Eric Clement started his series in *News*. It might be interesting to have other members' thoughts on this matter.

KENNETH A. BECKETT

SECRETARY'S NOTES

Under its new title of "Conservation of Wild Creatures and Wild Plants" our Bill was granted Royal Assent on July 31st, having finally passed through both Houses of Parliament on July 11th. The new Act of Parliament is now the law of the land, and for the first time wild plants in Britain are protected by specific legislation. The project, launched in 1963 at the Society's Conference in Durham on "Conservation of the British Flora", at which there was a resolution for legislation for wild plants, has come to fruition in 1975. It is now illegal to uproot any wild plants without the owner's permission. There are certain exemptions: for genuine errors of identification, farmers and foresters have some specific exemptions, and garden weeds are exempt when destroyed by the owner or the owner's agent — as in normal gardening. In addition there are 21 endangered plants on the protected schedule (listed below) and it is illegal for these to be picked, uprooted or destroyed. There are certain conditions under which licenses for some collection may be granted by the Nature Conservancy Council.

It is hoped that the Bill will have an important educational role, and with this in mind we are preparing a new "Rare Plant Poster", which will show the 21 plants on

the schedule. We are indebted to the *Illustrated London News* for their co-operation, members may have seen the delightful colour paintings of rare plants as the centre-spread of their May issue illustrating an article on conservation of wild plants by Lord Beaumont of Whitley. The paintings are by Mary Grierson and we are delighted to have the opportunity of using her very high quality botanical illustrations for this poster. They will be available from mid-September, 35p each post paid from B.S.B.I., Oundle Lodge, Oundle, Peterborough, PE8 5TN, and it is hoped that each member will buy one or more posters for their local library, museum or community notice boards to help with the publicising of the Act. At the same time the Department of the Environment has undertaken to circulate copies to local authorities with their official leaflet on the new Act and it is possible that the B.S.B.I. will receive requests for lecturers to give short talks to schools on legislation for, and conservation of, our wild plants. Would any member willing to volunteer to give some talks in their own area please send name and address to Mrs. Mary Briggs, White Cottage, Slinfold, Horsham, Sussex, so that a list of possible lecturers can be drawn up.

We are aware that enforcement of conservation Acts is not easy, but we hope that through the passing of this Act attitudes towards wild plants will change, in the same way that general attitudes to wild birds has changed since the passing of the Protection of Birds Act. For the very rare plants on the protected schedule it could well be that the new Act is a factor deciding their survival as the highlights of our native flora. But equally important, this Society considers, is the attention now being given to the need to protect wild plants from wanton destruction. We hope this will result in an increasing awareness of the vulnerability of plants in the countryside so that our native flora is conserved as part of our heritage for the delight and enjoyment of future generations.

Finally, we should like to thank the Lodgekeepers at Oundle Lodge for their invaluable service in once again offering to distribute for the Society the new poster, an onerous task for which we send heartfelt gratitude.

PROTECTED PLANTS AS SPECIFIED IN SCHEDULE 2 OF THE ACT

Alpine Gentian	<i>Gentiana nivalis</i>
Alpine Sow-thistle	<i>Cicerbita alpina</i>
Alpine Woodsia	<i>Woodsia alpina</i>
Blue Heath	<i>Phyllodoce caerulea</i>
Cheddar Pink	<i>Dianthus gratianopolitanus</i>
Diapensia	<i>Diapensia lapponica</i>
Drooping Saxifrage	<i>Saxifraga cernua</i>
Ghost Orchid	<i>Epipogium aphyllum</i>
Killarney Fern	<i>Trichomanes speciosum</i>
Lady's-slipper	<i>Cypripedium calceolus</i>
Mezereon	<i>Daphne mezereum</i>
Military Orchid	<i>Orchis militaris</i>
Monkey Orchid	<i>Orchis simia</i>
Oblong Woodsia	<i>Woodsia ilvensis</i>
Red Helleborine	<i>Cephalanthera rubra</i>
Snowdon Lily	<i>Lloydia serotina</i>
Spiked Speedwell	<i>Veronica spicata</i>

Spring Gentian	<i>Gentiana verna</i>
Teesdale Sandwort	<i>Minuartia stricta</i>
Tufted Saxifrage	<i>Saxifraga cespitosa</i>
Wild Gladiolus	<i>Gladiolus illyricus</i>

Sixty-five members attended, with enjoyment, the A.G.M. weekend at Dumfries. Accounts of the meetings will appear in *Watsonia* but we should meanwhile like to express appreciation to the C.S.S.F. for the excellent programme arrangements, especially to Miss E. R. T. Conacher (Meetings Secretary) and to Mr. and Mrs. J. D. S. Martin of Dumfries, also local helpers who contributed greatly to the success of the meeting: in particular our thanks to Mr. J. Lamont-Brown, who, as Director of Education for Dumfries-shire, gave permission for the use of the Lochmaben Primary School for our meeting, also to Mr. Banks, the Deputy Rector, for local help, and Mr. Truckle, President of the Dumfries and Galloway Natural History and Antiquarian Society for his welcome and special Exhibition at the Museum. Finally, we should like to thank all the Speakers, and Mrs. O. Stewart and Dr. A. J. Richards the leaders of the very enjoyable field meeting.

SUBSCRIPTIONS

It is unfortunate that my first contribution to the *Newsletter* is to convey the news of increased subscriptions. As you will be aware from the last Annual Report a resolution was put and approved by the members attending the Annual General Meeting in Dumfries to increase the subscriptions to the following rates:

Ordinary Members	..	..	..	£5 p.a.
Junior Members	..	..	..	£2 p.a.
Family Members	..	..	..	75p p.a.
Subscriber Members	..	..	..	£5 p.a.

These rates will come into effect as from 1st January, 1976.

I am sure you will appreciate that inflation affects the Society just as it affects all individual members thus necessitating periodic increases in the subscription rates. Council is well aware that these rises are never welcome but is confident that you will consider the work of the B.S.B.I. worthy of your continued support.

Enclosed with this newsletter is a banker's order form. It is a great help to our membership office if subscriptions are paid by Banker's Order and it would be much appreciated if you would complete the enclosed form AS SOON AS POSSIBLE and return to: B.S.B.I. Administrative Office, Harvest House, 62 London Road, Reading, Berks., RG1 5AS.

Any previous orders in favour of the Society which are in force on your account will then be automatically cancelled.

M. WALPOLE
Hon. Treasurer

ERIC SWANN

Norfolk is a county famous for its naturalists, and it was here that Eric Swann grew up and spent his working life. Early in his career his duties for Barclays Bank

took him to Swaffham, on the edge of the Norfolk Breckland, then one of the largest stretches of semi-natural vegetation in southern England. Later he worked at Wells, on the North Norfolk coast, but was touched only lightly, if at all, by the ornithology which is the prevailing religion of those parts. So when, before the last war, his attention turned to botany, it is not surprising that his enthusiasm was fired by the wealth of opportunity that lay at his door. Even fishing became of secondary importance in his life. If one asks him what first attracted him to the native flora, he will tell you that his interest was aroused when his wife, Marjorie, asked him the name of a wild flower which he did not know, so he bought a book and found out. But the influences must surely have been more subtle than that. Two of the families that particularly interest him, the Cyperaceae and the Gramineae, fascinating as they are to many of us, are not those that would appeal to the casual admirer of flowers. Their attraction is intellectual rather than aesthetic.

From all this it will be clear that Eric is in the old tradition of British naturalists, and indeed of the B.S.B.I. — the gifted amateur. His enthusiasm for plants was never dulled by formal botanical training. It carried him on to the study of critical groups, such as *Salix*, which most of us find formidable, but on which he published a paper in our *Proceedings* in 1957. This was based on extensive collecting, and correspondence with authorities of international repute. More recently he turned his attention to *Euphrasia*, on which a paper appeared in 1973.

Some field botanists find the winter days a little slow, so it was characteristic that in 1955 Eric's enthusiasm spread to the study of bryophytes, which have the advantage of being available when higher plants are not. Before long he became adept at naming mosses and liverworts, and added many new records to the county flora.

All Norfolk men feel a strong attachment to their native county, and Eric is no exception. This endearing characteristic is not, of course, unique. During the last war I had occasion to call on a U.S. Army officer in Cairo, and noticed that the clock on his desk had three hands. When our business was finished I could restrain my curiosity no longer, and asked him what the third hand was for. A light came into his eyes. "Boy," he said, "that's Texas time — where I come from". The same light can be seen in Eric's eyes when a discussion on a foreign Flora happens to turn to one of our Norfolk plants. Indeed, one sometimes feels that other floras exist only to provide interesting adventures for Norfolk.

Such devotion has its hazards. In one of our joint publications Eric included as members of the Norfolk Flora species that had never been recorded in the county, meeting my protests with the logical reply, "No, but they ought to be and soon will be". We compromised by putting brackets round the entry. Likewise he felt that I had let the county down when I listed species that had not been seen for fifty years as extinctions. When one of these, *Lycopodium clavatum*, turned up in quantity some years later, in keeping with its increase in south-eastern England, I had perforce to agree. The rediscovery of *Equisetum hyemale* and now *Colchicum autumnale*, have completed my discomfiture.

Our Society owes Eric a debt of gratitude for his work as Treasurer from just after the last war until 1958. He did this single-handed, without office staff to assist him, while the Society grew to over a thousand members. The load became far too large for a private individual, but Eric never failed to handle our finances promptly and

competently. Here was professional efficiency, and there can be no doubt that he will fill the office of President with the same devotion and the same sense of responsibility.

C. P. PETCH

A CRITICAL FLORA OF THE BRITISH ISLES

The impulse to launch a Critical Flora of the British Isles came from a growing feeling that much information, both old and new, about our flora was inaccessible and not fully utilised. Obviously, a concise Flora, such as Clapham, Tutin and Warburg, could never contain it all, nor does it aim to do so; but the new Flora would indeed try to do just this, and present to the reader, professional and amateur, as much relevant information as possible about all the species, subspecies and varieties that are to be found in Britain at the present time.

The term "Critical" has already been criticised and its use has given rise to some misunderstanding. The only alternatives seem to be "Comprehensive" or "Complete", and neither of these gives the flavour which the projectors of the Flora have always had in mind. This is, to present the information not just as a compilation, but as a series of accounts which are the result of a critical study of both specimens and literature, and in which all the available information is evaluated and presented in a systematic form. Obviously, to present *all* the information about the British Flora would be much too cumbersome, even if it were possible. Critical judgment must be exercised; and the taxa chosen and described must be critically analysed and defined.

Before describing the scope and contents of the Flora, a word should be said about the current organisation. There is now a standing committee of the B.S.B.I. to look after the affairs of the Flora on which the Secretary and the Treasurer of the Society serve, together with myself, as Chairman, Mr. Cannon and Mr. Pankhurst of the British Museum (Natural History), Dr. Walters and Mr. Sell from Cambridge, and Dr. Stace and Mr. Chater from Leicester. These are the people who have had the idea of writing the Flora, and they are also the people who hope actually to edit, and to write it, although obviously collaboration from members of the Society and other interested botanists will be sought.

The Committee is preparing an application to the Science Research Council for financial support, to supply both secretarial and research help. The rapid progress of the Flora will depend greatly on the success of this application, and this will not be known for some little time.

Perhaps the scope and contents of the flora are the topics which have given rise to most discussion and are still to some extent under discussion. The proposed contents can be summarised as follows:—

1. Full taxonomic treatment of infraspecific variation.
2. Detailed descriptions of all taxa of vascular plants (including ferns).
3. Full provision of nomenclatural typification and synonymy.
4. Inclusion of relevant data from the fields of anatomy, phytochemistry, genetics, cytology, ecology and phytogeography.
5. Inclusion of all naturalised aliens, amounting to 800–1,000 species.
6. Inclusion of all apomictic taxa (c. 900 in number).
7. References to relevant literature, both British and foreign.

There is not space to comment here in detail on all these points, but some are particularly important. Naturalised aliens are becoming an increasingly significant

component of our flora, and we feel that it is essential to include them, and to give full and accurate descriptions. Whether we like it or not, they are going to form part of the flora of the future. As regards the apomictic taxa, we are now in a position to attempt to describe and key these plants, for the first time in a British Flora, (though monographs of some of them already exist). Botanists and students of evolution now realise that many apomictic taxa, though often difficult to recognise and identify, have an important role in ecology and phytogeography, and cannot be brushed aside as curiosities.

As regards the data from other disciplines, these are increasing daily in volume. Biosystematic studies, involving cytology, genetics and more recently phytochemistry, have now been made in many genera; and their results need to be systematised and fed back into the mainstream of taxonomy. At the same time, the existence of widespread infraspecific variation, often recognised by the older botanists who were not afraid to describe varieties and forms, has been undeservedly neglected in recent years, though it is now seen to be often of considerable ecological and evolutionary interest. It will be one of the aims of the new Flora to evaluate and, where necessary, to rehabilitate these infraspecific taxa, and to describe varieties and forms wherever they are of significance.

The Committee has obtained the full co-operation of the Biological Records Centre, Monks Wood, so that there are very good prospects of incorporating into the new Critical Flora a great body of distributional information, including the revised maps of Perring and Walters' *Atlas of the British Flora*. The Committee is also in touch with Professor C. D. Pigott and his colleagues, who are undertaking a National Vegetation Survey, and it is hoping to be able to co-operate with him and apply the results of his survey to the Critical Flora. It will, of course, not be the aim of the authors to include full bibliographies for each species; but the more important references to literature will be given, including continental publications where these are relevant.

As regards space and time, it is proposed to produce the Flora in six volumes, and it is estimated that it will take ten years. The project is an ambitious one; and nothing quite like it has ever been attempted. We believe that the attempt is well worth making, and that not only botanists in the British Isles, but also those in neighbouring countries will find the project original, stimulating and rewarding.

D. H. VALENTINE
August 4th, 1975

C.S.S.F. EXHIBITION MEETING, GLASGOW

2nd November, 1974

When at an advanced stage in the preparations for the C.S.S.F./A.N.G. Exhibition Meeting, an industrial dispute suddenly made the Boyd Orr Building unavailable for the occasion, Professor Wilkins came to the rescue and offered the facilities of the Botany Department. Thanks to him the programme was completed without a hitch; for most of us it was pleasant to be back in the familiar atmosphere of the older building and interesting to note the structural changes which had taken place in the laboratories on the top floor since last we met there.

The chosen day, Saturday, 2nd November, was wet, and found Glasgow without any kind of municipal transport. Nevertheless the meeting was well-attended, and as usual many of the exhibitors had made considerable journeys. Mr. Braithwaite (Hawick) mounted a most professional exhibit illustrating the Survey of the Eildon Hills organised by the Tweed Valley branch of the Scottish Wildlife Trust, Miss Duncan (Arbroath) displayed new East Ross records and Mrs. Clark (Fort William) showed *Ruppia cirrhosa* from the Hebrides. Mrs. Stewart (Edinburgh) again had a series of very beautiful flower paintings, as well as records from Kirkcudbright; Mr. Stirling (Glasgow) exhibited specimens of *Polypodium australe* showing frond variation. Miss Rutherford (Helensburgh) brought a Wardian case with the contents in beautiful condition; from the comments it was clear that this was a novelty to many viewers. There were three exhibitors from England: Mr. Wallace, whose "Hebridean and Icelandic Plants" gave evidence of more travel this year; Mr. Copping, of whom the same can be said with his "Sedges and Grasses of Ireland"; and Miss Farrell, a new exhibitor, who had brought from Monks Wood information on the 1974 *Myosurus*, *Groenlandia*, *Orchis morio*, and *Littorella lacustris* recording scheme. There was evidence of much activity in Inverness-shire; Dr. Corner had an exhibit on his Glen Affric field meeting this summer; Mr. Kingston had one showing the areas mapped and the records collected during this summer's Glen Strathfarrar field meeting and also all the new quadrant dots for Easternness — over 3,000 so far. Mr. Ribbons's exhibit covered the five years of the Inverness-shire Survey and included the map showing the area covered and the number of records made per quadrant, each edition of the Inverness-shire Newsletter and advertisements for all the field meetings which had taken place and Miss Conacher mounted a set of prints showing the diversity of habitat covered and some of the many B.S.B.I. members and others who have helped in the Survey. It is always a pleasure to have exhibits from old friends but those from new exhibitors are particularly welcome and on this occasion we were fortunate enough to have both. We were very pleased also to have the three exhibits sent north by Mr. McClintock.

The Chairman announced tea promptly at a quarter to four and then three-quarters of an hour later Mr. Stirling, President of the A.N.G. introduced Dr. Walters, President of the B.S.B.I. Dr. Walters spoke on "Priorities in Botanical Conservation" to an audience of eighty-five in the lecture room; the talk had the close attention of the audience and gave rise to many questions afterwards. The exhibits were dismantled before adjourning to the University Refectory for the remainder of the programme. Following an excellent buffet supper and the exchange of much news among friends, new and old, the tables were pulled to the side and sixty-five settled down to the traditional hour's slide show illustrating the 1973 Lapland field meeting, by Miss Conacher, Mr. Mackechnie and Mr. Ribbons, and the 1974 Scottish field meetings by Miss Conacher, Dr. Corner, Mr. Kingston, Mr. Martin, Mrs. Sommerville and Dr. Thomas.

At the conclusion of the show of slides Mr. Mackechnie, Chairman of the C.S.S.F., called on Dr. Dickson, Vice-President of the A.N.G., who invited members of the audience to accord a vote of thanks to all who had helped to organise the day; there was a warm response.

E. R. T. CONACHER

BOOK NOTES

The following books will be reviewed in *Watsonia*, Vol. 41 (1):—

The Wild Flowers of Guernsey, by D. McClintock.

Kormofyternes Taxonomi, by K. Larsen.

Bibliographia Botanica Cechoslovaka, 1952–1957, by V. Skalicky & V. Holubová-Jechová.

How to Know Western Australian Wildflowers, Parts I–III, by W. E. Blackall & B. J. Grieve.

Flora of Iraq, Vol. 3, Leguminales, by C. C. Townsend & E. Guest.

The Rural Tradition, by W. J. Keith.

Photographing Nature — Trees, by Heather Angel.

Flowering Plants; Evolution above the Species Level, by G. L. Stebbins.

The Physical Biology of Plant Cell Walls, by R. D. Preston.

Précis de botanique, I, by R. Gorenflot.

Author and Classified Catalogue of the R.B.G. Library, Kew.

In addition, the following books have been received; those that will *not* be reviewed in *Watsonia* are marked by an asterisk:—

Grassland Ecology and Wildlife Management, by E. Duffey *et al.*

The Pollution Handbook, by R. Mabey.

The Vanishing Lichens, by D. H. S. Richardson.

* *Flora of Gloucestershire* (reprint) by H. J. R. Riddelsdell *et al.*, The Chatford House Press Ltd., 43 Triangle West, Bristol B58 1ES; £11.50. This valuable work is available again, provided with a new set of 40 photographs (b. & w.) of plants and places, but lacking three of the original maps.

* *The Shoot Apex and Leaf Growth*, by R. F. Williams. Cambridge University Press, £6.50.

New Botanist, Vol. 1 (1–2). Today and Tomorrow's Printers and Publishers, New Delhi – 110005, India; Rs. 60 per annum. The first (double) part of this new Indian botanical quarterly has contributions dealing with morphology, anatomy, cytology, taxonomy and evolution.

Wild Flowers of the Channel Islands, by J. Bichard and D. McClintock. Chatto & Windus; £2.50.

Water Plants of the World, by C. D. K. Cook.

The History of the British Flora (2nd edition), by Sir H. Godwin. Cambridge University Press; £30.00.

* *Laboratory Manual of Cell Biology*, edited by D. Hall & S. Hawkins. E.U.P.; £6.50 (boards), £3.95 (paper).

N. K. B. ROBSON

HISTORICAL COLLECTIONS AT THE NATURAL HISTORY MUSEUM

Members of the B.S.B.I., particularly vice-county recorders and local flora writers, may like to know that lists have been made of some of the historic collections of British plants in the British herbarium at the British Museum (Natural History). Miss M. B. Gerrans has prepared lists of species by collector, and copies of these lists are available for consultation at the following:—

Department of Botany, British Museum (Natural History), London;
 Royal Botanic Gardens, Edinburgh;
 Department of Botany, National Museum of Wales, Cardiff;
 Biological Records Centre, Monkswood, Abbots Ripton, Hunts.
 The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey.

Some further details are given in the table, which indicates, where appropriate, areas particularly well represented in the collections. There is little or no material from Ireland. Please note that there are other historic collections at the British Museum that are in the *hortus siccus* form i.e. bound volumes, and these are not included in the present lists.

<i>Collector's Name</i>	<i>Dates</i>	<i>Approx. No. of Specimens</i>	<i>Locations</i>
Sir Joseph Banks	1743-1820	540	
J. Blackstone	1712-1753	360	probably VC's 21 & 23
Robert Brown	1773-1858	220	
S. Dale (Company of Apothecaries)	1659-1739	170	VC 18, 19
Rev. H. Davies	?1739-1821	690	Wales
J. Dickson	1738-1822	220	
G. Don	1764-1814	260	Scotland
Dr. J. Forbes-Young	1796-1860	670	
E. Forster	1765-1849	1400	VC's 18, 19, 21
John Hill	1716-1775	70	
R. Pocock	1760-1830	240	VC's 15, 16
R. Pulteney	1730-1801	340	
Isaac Rand	-1743	50	VC 21
E. Rudge	1763-1846	240	
J. Sowerby	1757-1822	1180	

R. J. PANKHURST

ADVENTIVE NEWS No. 3

Tan-Bark Aliens in Cornwall

During 1973-75 L. J. Margetts collected seventeen adventive species from two Cornish gardens which had used tan-bark as mulching material in shrub beds. "The tan-bark comes from an ancient tannery at Grampound, east of Truro, one of the only tanneries left still to use plant material for tanning leather. This material, including oak-bark, is imported from Turkey and Africa. After use it is sold locally as a peat substitute". The species, mostly legumes presumably with hard seed-coats standing up to the tannery treatment, found at the tannery and in gardens at Devoran and Helford Passage were as follows (Hb. LJM, det. EJC):

* *Amaranthus* cf. *albus* L.

Chenopodium vulvaria L.

Coronilla scorpioides (L.) Koch

Herniaria hirsuta L. (incl. *H. cinerea* DC.)

Lathyrus aphaca L.

L. inconspicuus L.

* *Medicago* cf. *truncatula* Gaertner

Trifolium affine C. Presl

T. angustifolium L.

T. glomeratum L.

T. speciosum Willd.

T. suffocatum L.

Malva nicaeensis All.
Medicago minima (L.) Bartal.
Medicago polymorpha L.
 (*M. nigra* (L.) Krocker)

T. tomentosum L.
Vicia sativa L. ssp. *nigra* (L.) Ehrh.
 (*V. angustifolia* L.)

*Specimen too young to be determined with complete confidence.

Some Rare *Amaranthus* Species

Mr. J. P. M. Brenan has kindly determined many of my wool-alien sheets from Blackmoor (N. Hants). Among the more interesting species collected by EJC *et al.* were the following:

A. crassipes Schlecht. 13.10.73. Specimen ex Hb. R. M. Burton.
A. macrocarpus Benth. 16.11.69 and 21.10.73.
A. mitchellii Benth. 3.11.69. Also present other years but not re-collected.
A. polygonoides L. 31.10.71. Duplicate in Hb. T. B. Ryves.
A. quitensis Kunth 14.10.73. Perhaps often overlooked?

A. scleropoides Uline & Bray 12.9.71. "This species, unknown from Britain previously, though recorded very rarely in Europe, is apparently endemic to Texas and (at least at Kew) there is very little material. The indurate inflorescence axes are very characteristic, although shared by another similar though more widespread species in tropical America, *A. crassipes* Schlecht. *A. scleropoides* differs from *A. crassipes* in having a circumscissile fruit, normally three styles and (not mentioned in the books but nevertheless very useful) much narrower leaves". This species reappeared the next two years and was also grown from seed by C. G. Hanson and hence voucher specimens are in Hb. BM, KEW.

A. viridis L. (*A. gracilis* Desf.) 13.10.73.

Two other exciting finds also in Hb. EJC and det. JPMB are: *A. bouchonii* Thell. A fine patch was seen on the London Natural History Society excursion to Guildford (Surrey) refuse-tip, led by Mrs. J. Leslie and A. C. Leslie, on 23.10.71, when it was passed over by EJC *et al.* as being an odd form of *A. hybridus* L.

A. muricatus (Moq.) Gillies ex Hicken. Collected on Bricket Wood refuse-tip (Herts.) by Dr. J. G. Dony, October 1969.

Mixed Bag

Bupleurum lancifolium Hornem. Garden casual, probably originating from "Swoop", Rickhill (Co. Armagh). July 1974. L. Nesbitt. Comm. Miss N. Dawson. As most readers will already know this is the common bird-seed alien which is still being mis-named as *B. rotundifolium* L. They can be separated as follows:

Rays usu. 5-10; fr. smooth; lvs perfoliate and elliptical (i.e. with widest part of lf at its middle) *B. rotundifolium*

Rays usu. 2-3; fr. granulate; lvs perfoliate and ovate (i.e. with widest part of lf below its middle) *B. lancifolium*

I follow here *Flora Europaea* 2 and not the later account in *Flora of Turkey* 4:399 (1970) where *B. lancifolium* is divided into two segregates apparently differing only in size — the separation is scarcely feasible on our normally immature specimens.

Crepis tectorum L. Bank of River Colne, Rickmansworth (Herts.). October 1973. J. N. Le Rossignol. Comm. Dr. J. G. Dony. Hb. EJC. Conf. J. B. Marshall (B.S.B.I.)

referee for *Crepis*). One plant, only, growing close to newly-planted land alongside the new by-pass road; it reappeared (seedling?) in 1974. JBM informs me that this is surprisingly only the second correct record of this species in the British Isles. It persisted for a few years on a roadside near Kelso (Roxburgh) — voucher specimens in Hb. BM — after its discovery by A. Brotherston in 1872 when it was originally mis-named by Prof. Babington as only a form of the “polymorphous *C. virens* [*C. capillaris* (L.) Wallr.]”. In 1836 Borrer wrote, “All that I have seen of British growth is *C. virens*. The true *C. tectorum* L. is decisively distinguished by the rough and beaked fruits. I have gathered it in Normandy”. Is it possible that this plant is still occasionally being overlooked in Britain?

Geranium reflexum L. Roadside verge at Hurst Green (E. Sussex). May 1975. P. Roper. Hb. EJC. A garden escape expanding vegetatively, the Council cutting it down every year before it can set seed. The plant was sent to me as “*G. eriostemon*” after matching it with a specimen apparently so-named in Chelsea Physic Garden, and was also named by Mrs. J. Hall as “the pale form of *G. phaeum* L. [var. *lividum* (L’Hér.) DC]”. *G. reflexum* is indeed very similar to this variety, differing mainly in its narrower petals, oblong in shape (not obovate-orbicular), which are strongly reflexed (not patent or slightly reflexed). The stamens are not glabrous as stated in the *RHS Dictionary of Gardening* but the filaments are less conspicuously ciliate than in the lower half of typical var. *lividum* (or var. *phaeum*). Like the various colour forms of *G. phaeum* it seems to set good seed readily if given the chance — does anyone know other sites where this plant is or could become naturalised? I cannot separate these two species on the carpels alone (contrary to some literature!). Incidentally, the “*G. punctatum*” of gardeners’ catalogues has not been validly published (the epithet already belongs, in fact, to an unrelated plant) and is no more than a form of *G. phaeum* with leaves blotched with dark brown in their sinuses (which disappears as the leaves age!). It does, of course, escape but is not worthy of a place in our list of British aliens.

Ionopsidium acaule (Desf.) Reichenb. Growing in peat bought from “Fisons” and put out to soak before use in Cedar Drive, Keyworth (Notts.). 18.2.75. Not known to be growing in gardens locally. J. M. Mullin. Hb. BM. Det. EJC. This crucifer is endemic to Portugal but it readily seeds itself in English gardens and is rarely reported outside them.

Lolium rigidum Gaudin. Roadside verge, Ashley Green (Bucks.). 2.6.73. J. Bevan. Hb. JB. Det. Dr. A. Melderis. This plant is quite frequent as a bird-seed alien but is undoubtedly overlooked from this (and other?) sources — it much resembles *Lolium perenne* L. but differs in being an annual with leaf-blades rolled when young (not folded about the midrib as in *L. perenne*). This plant is variable; I did not personally find these specimens very convincing.

Silene pusilla Waldst. & Kit. Lower slopes of Ben Lawers (Perth). 7.8.74. Mrs. M. A. Goodall. Perhaps deliberately sown (*Dianthus deltoides* L. is in the same area). See *Country-side* (Journal of the British Naturalists’ Association) 22 (new series), 10:499 (1975) for details.

Spiraea canescens D. Don. Lady Anne Brewis sent me a fresh specimen on 1.7.75 from Hayling Island golf-course (S. Hants.) where it was first reported some years ago. J. R. Palmer also found this species naturalised at Goodwick (Pembs.) on 14.7.70. Hb. EJC. Det. D. McClintock, 1974.

Corrigenda and Finale

Prof. D. A. Webb wrote querying whether *Gunnera manicata* is ever truly naturalised in the British Isles: since no reliable evidence was available it was omitted by Dr. C. D. K. Cook from *Flora Europaea* 2. I would welcome any records and/or specimens — there are none in Hb. BM, EJC, *et al.*

I am again greatly indebted to J. E. Dandy who kindly checked and corrected the nomenclature of my notes.

Please continue to send in your records, problems and criticisms to me.

ERIC J. CLEMENT,
13 Shelford, Burritt Road,
Kingston, Surrey, KT1 3HR

REMARKABLE COLLECTION OF ADVENTIVES AT GLOUCESTER DOCKS, 1974

During May and June a most remarkable collection of adventives appeared on two small heaps of granite chippings and sand and the small surrounding area, the whole comprising only a few square yards, on the dock-side at Gloucester, V-c 33, SO 81J. Almost all the plants were typical species of sandy soils, the probable origin being the Iberian Peninsula.

My attention was first drawn to the spot by two beautiful plants of *Fumitory*, with large pink flowers, growing on top of one of the heaps. These turned out eventually to be *Fumaria muralis* subsp. *boraiei*, which is a rare plant in Gloucestershire. On closer investigation, which required crawling about almost literally on hands and knees, the heaps revealed their treasures, many of which were very tiny.

Quite a number were plants which are very rare as natives in the British Isles, and many which are quite absent or appear only as extremely uncommon vagrants in Gloucestershire. Among these were *Silene gallica* in good quantity, with small pale pink or white flowers; *Polycarpon tetraphyllum*; *Corrigiola litoralis* two tiny plants; a single plant of *Geranium purpureum*; *Erodium moschatum*; several plants each of *Medicago polymorpha* and *M. arabica* with their peculiar coiled, spiny fruits and tiny yellow flowers; many plants of *Trifolium glomeratum* which has tiny pink flowers in dense, sessile, globular heads; three plants of *T. subterraneum*, which has the strange habit when ripe of developing rigid, recurved fruiting calyces which bury themselves in the soil; about three plants of the less rare *T. scabrum*; several plants of *Ornithopus pinnatus*, a native in the British Isles only in the Isles of Scilly and the Channel Islands; one plant of *Misopates orontium* now an uncommon plant of arable fields; two plants of *Stachys arvensis*; one plant of *Hordeum marinum*; a few plants of *Digitaria sanguinalis*; and a number of fine specimens of *Anthoxanthum puelli*, which unlike the common species has the culms branched and the flowering-spike much looser and spreading.

There were a number of plants which are fairly common in the British Isles but which at the Docks had obviously been introduced with the rest, and all were typical of sandy soils. These comprised several plants of *Coronopus didymus*, *Trifolium dubium* and *Aphanes microcarpa*; *Spergula arvensis* and *Plantago coronopus* in plenty; one plant of the common *Ornithopus perpusillus*; a single minute specimen with a solitary white flower of *Sedum anglicum*; rather surprisingly, three small plants of the pretty blue-flowered *Jasione montana*; two small plants of *Senecio sylvaticus*; a few

plants of *Leontodon taraxacoides*; a great many plants of a peculiar form of Toad Rush — *Juncus bufonius* var. *fasciculatus* which grows closely pressed to the ground and has the flowers in close compact heads; several plants each of *Vulpia bromoides* and *V. myuros*.

In addition there were many plants which are completely alien to the British Isles, few having an English name, and among these were some of the most striking and beautiful. Several proved extremely difficult to name, even by experts. A *Spergularia* with attractive deep pink flowers, larger than those of the native *S. rubra* was quite plentiful, and has been tentatively named, though with some doubt, *S. capillacea*, a species that comes from granite soils in Spain; several plants of a hairy medick, believed to be *Medicago littoralis*, an abundant species in the Mediterranean area; a few specimens of the small yellow-flowered *Melilotus indica*; many plants of a beautiful little pink-flowered clover with small flowers, glabrous calyces, and the fruiting stalks reflexed, *Trifolium cernuum*; another yellow-flowered bird's-foot, with the small flowers in the axils of bracts and long curved pods, *Ornithopus compressus*; an erect cudweed with cottony leaves and stems, and dull purple flowers, quite plentiful, which has proved most difficult to name even at the British Museum or by other experts, but has been provisionally named *Gamochaete purpurea*; a chamomile, *Anthemis mixta*, which is unusual in having the white ray-florets yellow at the base; several plants of a Corn-marigold, *Chrysanthemum myconis*, resembling our native *C. segetum* in having large deep yellow heads, but the leaves quite undivided except for regular shallow teeth; two species of Bromegrass, one *Bromus rigidus*, related to our native *B. sterilis*, but very distinct in the closely erect panicle, and the other a species closely related to *B. mollis* but unknown even to Dr. Hubbard; several specimens of a grass with long slender flower-spikes and awned florets which turned out to be *Gaudinia fragilis*; one plant of the distinctive *Agrostis semiverticillata*; several specimens of a most peculiar composite with deeply divided leaves like those of an *Anthemis*, but with green flowers in dense, sessile heads at the base of the leaves, the whole plant being very tiny and inconspicuous, named *Soliva pterosperma* by Mr. Lousley but still un-named by the British Museum; a few specimens of a very beautiful composite with quite large yellow flower-heads, deep brown in the centre, *Tolpis barbata*; a single plant of another composite, *Cryptostemma calendulaceum* which is quite striking with very large pale yellow flowers, the disc florets purplish-brown, and the leaves deeply cut and whitish cottony on the under-side, a native of S. Africa frequent as a shoddy plant; and finally two large plants of the cultivated Rye, *Secale cereale*.

Four strange *Agrostis* which resembled *A. tenuis* in many respects were sent to Dr. Hubbard for determination. One of these appeared to be *A. castellana* Boiss. et Reut. var *mixta* Hack. while others appeared to be intermediate between *castellana* and *tenuis*.

Many of the plants were photographed *in situ*. Examples of most species were collected for voucher material. Unfortunately it was impossible to discover the origin of the cargo of granite and sand in which the plants must have been carried, and later in the summer the whole area was sprayed. It is hoped that further adventives will appear next season.

My grateful thanks go to Dr. C. E. Hubbard for naming or confirming many of the grasses, to Mr. M. G. Daker for naming the *Fumaria*, to Mr. E. Clement for naming

the *Leontodon* and other species, and to Mr. J. E. Lousley for the *Soliva* and Mrs. S. C. Holland for help with the production of this article.

C. W. BANNISTER

CAREX MONTANA L.: A NEW CORNISH RECORD

There is an old record (W. Curnow 1878, published in *J. Bot., Lond.*, (1906) p.280) from Hustyn Wood, near Wadebridge (v.c.2); but I have never been able to refind the plant there and am suspicious of the record. *C. montana* has, however, been well-known for some forty years on a cliff-top at Carbis Bay near St. Ives (v.c.1) where it is plentiful. Until now the nearest known British stations to this, in a curiously disjunct distribution, have been about 100 miles away, near Porthcawl (v.c.41), and about 125 miles away, near Cheddar (v.c.6).

On 26th April, 1975, Mr. L. J. Margetts, recorder for v.c.1, visited a SSSI on the coast between Cross Coombe and Cligga Head, some 15 miles east of Carbis Bay. He noticed a sedge, which he suspected could only be *C. montana*, and sent me a specimen which I confirmed as that species. On 10th May, 1975, we surveyed the site together.

Carex montana is locally abundant along a stretch of cliff path for about 170 yards, in a narrow strip extending from a yard or so on the north (seaward) side of the path to some 15 yards on the landward side. The habitat is "maritime heath", with some gorse (*U. europaeus*, with *U. gallii* coming in only outside the area of the sedge) and an abundance of *Genista pilosa*. Other associated plants were *Agrostis* sp. (probably *setacea*), *Betonica officinalis*, *Calluna vulgaris*, *Erica cinerea*, *Molinia caerulea*, *Potentilla erecta*, *Scilla verna* and *Serratula tinctoria*. The sedge was flowering freely.

Soil samples were taken, but have not yet been analysed.

R. W. DAVID

CONSOLIDA IN BRITAIN

There has long been confusion concerning the species of this genus which occur as aliens in Britain due to nomenclatural and taxonomic problems. The *Flora Europaea* Vol. 1 (CUP 1964) account by A. O. Chater provided a useful base for examining herbarium material which I have done in **BM**, **CGE** and **K**. Three species were detected:

Consolida ambigua (L.) P. W. Ball & Heywood (*Delphinium ajacis* auct.) on 150 sheets.

C. regalis S. F. Gray (incl. *Delphinium consolida* L.) on 10 sheets (none post 1953).

C. orientalis (Gay) Schrödinger subsp. *orientalis* (*Delphinium orientale* Gay) on six sheets (none post 1930).

Thus *C. ambigua* appears to be the common British alien, contrary to *FE* 1, which gives only *C. orientalis*. Mr. Chater has acknowledged this error (pers. comm.). D. McClintock's *Supplement to the Pocket Guide* (1957) seems to make the same error, describing only *C. orientalis* and calling it "common in gardens". Is this true? The *RHS Dictionary of Gardening Supplement* (Clarendon Press 1969) states that both *C. orientalis* and *C. ambigua* are commonly grown. All cultivated plants that I have seen (except in Cambridge Botanic Garden) have been *C. ambigua*. It would be interesting to know other members' experience. It is worth noting that these two species are reported to be intersterile.

The key below, which is adapted from various sources and my own observation, should help to distinguish the three species. A few comments on characters separating *orientalis* and *ambigua* and on previous descriptions must be made. *CTW2* (CUP 1962) gives glandular hairs for *orientalis* and not for *ambigua*: they occur on *both* (very rarely on *regalis*) and the yellowish gland is at the *base* of the hair. The position of the bracteole is a good character but is inaccurately expressed in *CTW2*. It is not infrequently inserted above the middle of the pedicel in *ambigua*, but rarely overlaps the base of the flower (and then usually on upper flowers). Flower colour varies widely, especially in *ambigua*, from typical deep blue to pale blue, various pinks, white and some variegated varieties; there are also double forms. Many of these colour forms occur as aliens and there is a host of cultivar names available. *C. orientalis* can also be other than the very characteristic violet-purple but I have seen no such alien specimens. Post (in *Flora of Syria, Palestine and Sinai* 1, 1932) states that the violet-purple colour was only slightly faded in garlands on mummies 3,000 years old!

The following key covers the three alien *Consolida* species occurring in Britain:

1. Follicle glabrous; bracts entire (or lower with 2-3 lobes); outline of ultimate branches of inflorescence \pm triangular *C. regalis*
(The subspecies in *FEI* do not seem to "work" on alien material — both may occur).
1. Follicle pubescent; lower bracts much divided; outline of ultimate branches of inflorescence \pm cylindrical 2
2. Bracteoles on lower flowers reaching well beyond base of flower; flower violet-purple; spur <12 mm; apical part of ventral margin of ripe follicle (seen in lateral view) abruptly contracted to apex, which hardly overtops it
C. orientalis ssp. *orientalis*
2. Bracteoles on lower flowers not overlapping base of flower; flower typically deep blue; spur 12-18 mm; apical part of ventral margin of ripe follicle usually gradually tapered to apex, which conspicuously overtops it *C. ambigua*

A recent study of Norwegian herbarium material (J. T. Hovda in *Blyttia* 30, 1972) showed the same three species to be aliens in Norway. In view of the lack of recent herbarium specimens of *regalis* and *orientalis* and the confusion over names in the past, it would be useful to have confirmation of recent records for these two (and any other species except *ambigua*) particularly as some county floras have published records for them in the past few years.

A. C. LESLIE

ARBUTUS UNEDO AND GERANIUM PRATENSE

There was a letter in *Country Life* (12th December, 1974) about the strawberry tree in which the usual views seemed to be accepted that the plant is a native and that *unedo* used by Pliny and others had reference to the taste of the fruit, though the name is also used for the tree itself. Gilbert-Parker in his well-known *Glossary* does not comment on the etymology, at least in my 1950 edition. I notice that the *Oxford Book of Food Plants* mentions that in France the fruit is used in making liqueurs and confectionery. We know that *nasturtium* means "nose-twister" but is it certain that *unedo* was really meant to suggest, "I eat one"?

Regarding its standing, I have often wondered about a remark made by Reynolds Green in his *A History of Botany in the U.K.* that the strawberry tree was introduced by the monks of St. Finnian in the 6th century. I have never noticed a reference to that statement in any discussion of the standing of the plant. I wonder whether anyone has any ideas regarding either of the points I have mentioned.

Except as an obvious escape, *Geranium pratense* is found in Ireland only near the north coast between Portrush and Ballycastle, but nowadays mainly in the neighbourhood of Ballintoy, where it seems to be increasing. Lately I have seen it in fields to the south of the coast road, where I had not seen it before for well over forty years. Is it really a native? One's thoughts go to the "Age and Area" hypothesis of Willis. A local name is "flower of Dunluce" but there are few plants now in that neighbourhood, no doubt because there are so many visitors. I believe that it is not a native — but shall we ever know? It is an attractive plant, of the kind that is likely to be introduced. Perhaps it was brought here by friends of the first Lord Antrim, who held Dunluce Castle, or by his forebear Sorley Boy Mac Donnell. I am very interested to find that *Geranium sylvaticum* occurs in Ireland only near another castle, at Glenarm, the baronial house of the present Earl of Antrim, a descendant of the Mac Donnells, who have had their home there since 1636. The family finally ceased to reside at Dunluce after the rebellion of 1641. Could this other geranium also be an introduction?

C. R. NODDER

BOOKS FROM OUNDLE LODGE

The following has been added to the list of books available to members:

Flora of Gloucestershire, H. J. Riddelsdell, G. W. Hedley and W. R. Price.
Reprint £9.50 post paid.

The original stock of *English Names of Wild Flowers* is now nearly exhausted. A few copies of the limp edition still remain at £1.40 post paid.

All other titles in Newsletter No. 9 still available.

Members are being independently circulated with an advertisement from Tieto Ltd. for Parts I and II of *Atlas Florae Europaeae*. Tieto is willing to give the Society favourable terms for bulk orders which could be distributed from Oundle Lodge. If you are willing to place a standing order for future parts (c. one per year) please let me know.

F. H. PERRING,
Oundle Lodge,
Oundle, Peterborough, PE8 5TN

EASTERNESS

Miss M. McC. Webster, Rose Cottage, Dyke, Forres, Moray, would be grateful for lists of critical species identified by *B.S.B.I. referees* for the Flora of Moray, Nairn and Easternness (v/c 95, 96b and 96) nearing completion. Locality, 1 km grid square, collector and date are required. Data required by October 31st.

RECENT DEVELOPMENTS AT LEICESTERSHIRE MUSEUMS

In April 1974 the former City Museum and Art Gallery, Leicester, became the Leicestershire Museums, Art Galleries and Records Service. At the same time, the new post of Assistant Keeper (Botany) was created, with responsibilities for the Herbarium and associated botanic gardens. This position was filled by D. C. Lindsay, who commenced duties in July 1974.

Since then, the herbarium has been sorted and much routine maintenance carried out. At present it consists of over 50,000 specimens, comprising about 38,000 sheets of flowering plants and ferns and about 12,000 packets of non-vascular cryptogams. The phanerogamic section of the herbarium is restricted to the British flora and contains the collections of the Leicester Literary and Philosophical Society, W. Bell, C. R. Billups and the Leicestershire Flora Committee. This last organisation is an independent body supported by Leicestershire Museums which intends to produce a new flora of Leicestershire, with a projected publication date of 1978, updating the previous flora of Horwood and Gainsborough published in 1933.

The cryptogamic section is world-wide in scope and has recently been greatly enriched by the bequest of the extensive cryptogamic herbarium of the late F. A. Sower. Research is now being conducted into the relationships of cryptogam distribution and the changing environment in Leicestershire.

There are several gardens associated with the Museums, the most important being Belgrave Hall Gardens. These cover three-quarters of an acre and are concerned both with horticultural and taxonomic aspects of botany. The scope of the living collections is being enlarged and at present about 3,000 species are represented.

UNIVERSITY OF LONDON CERTIFICATE IN FIELD BIOLOGY

This Certificate is open to persons interested in the study of living things in their natural habitats.

The regulations prescribe a directed course of private reading at home, attendance at two Practical Courses each of two weeks' duration in the summer of consecutive years, an approved plan of field-work suited to the student's locality to be written up in the form of an essay, and examinations.

The next Practical Course for new students will take place at the Slapton Ley Field Centre, Slapton, Nr. Kingsbridge, Devon, from 4th to 18th August, 1976. As accommodation is strictly limited, early application is advisable.

The fees payable to the University by each student who takes up the work for the Certificate are as follows:—

(a) Registration, and direction of studies.....	£4*
(b) Practical Course (Section I)	£5
(c) Practical Course (Section II) and Practical Examination	£10
(d) Written and Oral Examination	£14
	<hr/>
	£33
	<hr/>

* £2 up until 1st August, 1975.

The cost of any necessary books and apparatus for home study, residence at the Practical Course (£27.50 per week) and fares are additional expenses.

Copies of the detailed regulations and syllabus, and the form of application for registration, may be obtained from P. M. J. BURTT-JONES, Senior Assistant, Dept. of Extra-Mural Studies, University of London, 7 Ridgmount Street, London, WC1E 7AD.

CHURCHILL MEMORIAL GRANTS **Grants for Travel**

The Winston Churchill Memorial Trust was founded in 1965 when thousands of people, grateful for the inspiration and leadership of Sir Winston Churchill, subscribed £3,000,000 to provide Travelling Fellowship grants in his memory.

These grants are offered once a year to enable men and women in all walks of life, who might not otherwise have the chance, to travel to countries of their choice and learn more about their trade, profession or interest.

The categories in which awards are offered are changed each year so as to give everybody a chance. This year's list includes: Naturalists, Coastal Ecologists, Horticulturalists.

There are no age limits and no educational or professional qualifications are needed, but candidates, who must be U.K. citizens, have to suggest their own project and be able to convince the selectors that the information they will gain can be put to good use in their work or community when they return.

The grants cover all Fellowship expenses for two to three months, and in certain cases home expenses as well. Interviews will be held in London in February, 1976 and successful candidates will be expected to start their travels during the following 12 months.

To apply, send your name and address only on a postcard to: The Winston Churchill Memorial Trust, 15 Queen's Gate Terrace, London, SW7 5PR.

You will be sent an explanatory leaflet and a form to complete by return of post. Your completed form must reach the Trust Office before November 1st, 1975.

ORKNEY FIELD CENTRE

Orkney Field Centre is situated on the lip of a white sand bay with the huge seabird cliffs of Marwick, the Kitchener Memorial at their summit, to the South, and to the North, the tidal Brough of Birsay with its Viking palace and cathedral from which Thorfinn the Great ruled as far south as the Isle of Man. In the village there are the dramatic ruins of a Seventeenth Century Stewart Earl's palace and the site of the oldest prehistoric house found in Northern Europe; near the freshwater Boardhouse Loch, a working watermill. Only a few miles away is the marvellously preserved neolithic settlement of Skarabrae; Maeshowe, the finest of chambered cairns; the Ring of Brodgar. All around is bold land and seascape and silence. Our aim is to provide a high standard of comfort and food for our guests and facilities for groups to do basic academic work in a laboratory and studio-seminar room.

Domestic Arrangements

The accommodation is arranged as a single room, two double, two treble, and a bedroom for seven. There is a large dining room and sitting room and a spacious

garden. Breakfast is served between 8 and 9 and dinner at 7 sharp. Packed lunches can be provided and hot drinks are always available. Indoor shoes are needed and drying facilities are available.

Travel

There are several air and sea routes and Orkney Tourist Organisation (Kirkwall 2856) are always ready to advise. Rail travel can be surprisingly cheap (e.g. Economy return) and a roll-on, roll-off ferry is about to be put in service between Thurso and Stromness.

Terms of Business

The minimum charge is £3.90 per day, £27 per week. Courses will be £40 per head per week. A non-returnable deposit of 25% must be forwarded to make a firm booking.

THE FIGHT FOR THE FLASH

In the autumn of 1971 some officials of the Welshpool High School Conservation Club attended a meeting of the Montgomeryshire Conservation Association at which much concern was expressed over a scheme by the County Planning Officer to fill in a two-acre pool with fringing reed-beds to make extensions to the Welshpool High School playing fields. The pool was a refuge for many species of water birds and about 20 years previously *Hottonia palustris* had been recorded there in one of its only two locations in Wales.

As the site adjoins the school campus it seemed an eminently suitable subject for a conservation project, giving scope for many varied interests, including nature study, bird watching and art.

Our plan fell into four sections:—

1. A scientific survey of the area, to assess its value to the school in particular and to the public generally.
2. A publicity campaign to show what would be lost if the Flash were filled, and to lobby support for keeping it.
3. An alternative plan for siting the playing fields needed.
4. A management and development plan for the Flash if retained.

We were fortunate over sections 2 and 3. An old pupil, now working in an estate agent's office undertook the professional drawing and costing of an alternative plan, which he did free of charge.

Colin, our chairman, was a tower of strength over publicity. He managed to arrange press, radio and television coverage of many of our activities, lobbied local officials, our M.P., and national conservation bodies for support in saving the site, drew up an attractive Nature Trail leaflet to include the Flash, and arranged an afternoon's conference and exhibition with prominent speakers.

Joanna encountered more difficulty in organising the survey, but here again we were most fortunate in receiving outside help. For this we wish to thank particularly, Miss D. Pugh of the B.S.B.I., Mr. P. Hope-Jones of the Nature Conservancy and the Biological Recording Group for Wales. Four major environments were delineated,

i.e. the hedge, the meadow, the reed beds and the water, and in all 58 species of flowering plants were recorded. These included *Oenanthe aquatica*, a new record for this square and rare in Wales as a whole, and the rediscovery of *Hottonia palustris* still flourishing in at least four places.

The work done was carefully recorded and the records helped us to become joint runners-up in one National Environment Competition and winners of another. The former provided finances for site work, the Nature Trail booklet and the conference while the second took us to Amsterdam to study conservation work in Holland.

By 1974 we had managed to arouse considerable interest in the site, and in May, 1974 H.R.H. the Prince of Wales came to school to see something of our work.

In April, 1974 under local government reorganisation, responsibility for detailed planning passed from the County to the Local District Council, and in July, 1974 we felt our work had really been successful when the responsible body passed resolutions accepting alternative plans for playing fields and suggesting that the Local Education Authority be asked to purchase the Flash and develop it as a local nature reserve and outdoor laboratory.

MARY HIGNEIT,
Welshpool High School Conservation Club

LETTERS TO THE EDITOR

182 Randolph Avenue,
London, W.9
16th July, 1975

Dear Sir,

The attached clipping from the *Sunday Post* (a Scottish paper) may amuse the readers of the *B.S.B.I. News!*

I may say I took the Editor to task, asking for the authority to the claim that the "spotted" pimpernel (whatever that is) is one of the rarest wild flowers in Britain. When I get the reply I will let you know.

Yours faithfully,
(Miss) VALERIE G. HYSLOP

He Always Knows When It's Going to Rain

When Jack Thirwall, Windcrest, Scotby, Cumbria, wants to know what the weather's to be like, he just looks at his garden path.

In the gravel grows a frail little plant. It's only two inches high, with bright scarlet flowers.

If the flowers are closed, Mr. Thirwall knows to expect rain.

If the flowers are open, Mr. Thirwall knows he won't need an umbrella, even if it's a cloudy, overcast day.

The flower with the magic power is the spotted pimpernel, sometimes called the "poor man's weather glass" because of its ability to forecast rain — and it's never wrong.

Mr. Thirwall found it growing wild on his path.

That's just as remarkable because the spotted pimpernel is one of the rarest wild flowers in Britain.

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

Dear Sir,

With reference to the correspondence about the poster campaign and conservation generally (3, No. 2, 20/21), should not *all* attempts at conservation be welcomed?

The poster campaign, though admirable, did it go far enough? Surely, there is still a lot to be done at grass-root level in educating the public at large. One wonders if all opportunities have been fully exploited, especially in respect of co-operative action with conservation, naturalist, historical and other societies with overlapping interests.

For instance — in the whole of the large Ashridge complex (Herts./Beds.), belonging to the National Trust, as far as I know, there is only *one* insignificant sign on a lesser-frequented track pleading to no avail "do not pick plants". On any fine week-end one meets hordes of people who have themselves or have allowed their children to pick whole bunches of *Orchis mascula*, *Anacamptis pyramidalis*, *Gymnadenia conopsea*, *Onobrychis viciifolia*, *Campanula glomerata* and even several *Ophrys apifera*, according to the season. By the time they return to their cars the flowers droop and more often than not, the lot is discarded. By late afternoon, the pathetic evidence of general ignorance is everywhere.

Such wanton waste might be slightly curbed if all car parks had large notices *forbidding* the picking of flowers, together with the poster appeal to "leave them for others to enjoy" (although this may be taken to apply to the illustrated species only).

In this case, a very eminent member of B.S.B.I. is also closely associated with the administration of this particular Trust property. If such resources, multiplied throughout the country, could be utilized to set up a clamour for preservation, it could not fail to get the attention of the majority of people who use these leisure facilities and who do not consciously wish to destroy them. With the large number of genuine conservationists involved, the cost of such ventures should not present a deterrent.

Although it is a mammoth undertaking, would it be possible to compile a list of B.S.B.I. members who are also connected with other relevant organizations and institute a procedure for reporting instances of misuse with suggested improvements? Such venture may even be within the scope of the Conservation Committee.

Yours faithfully,
J. KINSELLA (Mrs.)

Flowers in danger . . . ‘Non angeli sed vandeli’

Dear Mr. Beckett,

The Note from the Conservation Committee in Vol. 3.2 is not before time! A Trust member recently informed me that “I am taking a party to a Reserve in a month’s time”. . . . Whom do I ask for permission? You, the farmer or both? I was told of the arrangements made without by your leave, let alone advice, to which I shall return.

The comments which have already been made, are valid. It often takes two to three years to conclude an Agreement and it is often the question of access for Trust members, which holds up an Agreement. Although in Suffolk we have a Guide to Reserves which spells out the terms of entrance, it is still possible to run into difficulties when members or other visitors fail with the courtesy of making inquiries. Many Trusts will have Agreements on old meadows, subject to visiting up to the end of May, after which it is laid up to hay. This is something which can be flouted and wreck an Agreement.

The exchange visits which take place between Trusts are probably not fully exploited. Many of us are working out our plans of management and often, one interest is in conflict with another. There are methods and there is time and place of experience which could be exchanged. We are not always afforded these opportunities and in fact, not always consulted about a visiting party. Many visitors not only waste their time trying to locate plants, but in so doing trample over areas, not knowing of the harm they are doing. I refer as an example, to our little Breckland species which are often no more than 2 cm high.

Rights of way can be cancelled, agreements can come to an end and unwitting damage can be done, unless we can return to former courtesies of seeking permission and information which avoids dangers to plants and disappointments to the visitor. The Trust member who preemptorily informed me of her own arrangements to take a party to see some plants on a reserve, was proposing to visit the site some two to three weeks after the plants had finished flowering!

P. J. O. TRIST,
Conservation Officer (Suffolk)

BOOKS WANTED

Flora of Oxfordshire by Druce. If anyone has a copy for disposal, please contact Mr. E. J. Adnams, 64 Evans Road, Eynsham, Oxon. OX8 1QS.

Flora of Berkshire by H. J. M. Bowen, 1968. Has any member a spare copy of this flora for a new member? If so please contact Dr. G. Dunn, Egrove Cottage, Kennington Road, Kennington, Oxford OX1 5NX.

B.S.B.I. Calendars. If anyone has any spare copies of B.S.B.I. Calendars pre-1964, and of B.S.B.I. Annual Reports for 1971 and 1972, Mrs. M. Briggs, White Cottage, Slinfold, Horsham, Sussex RH13 7UG would be grateful to receive them.

Flora of Wiltshire by J. D. Grose, for R. S. Cropper, 14 Rosewood Close, Burnham-on-Sea, Somerset TA8 1HG.

For a little light relief, try your hand at this plant quiz. Simply fill in the common names of British plants in the appropriate places. They are all to be found in either the *Flora of the British Isles* (Clapham, Tutin and Warburg, 1962) or *English Names of Wild Flowers* (Dony, Rob and Perring, 1974). Two words of advice, several of the answers involve two or more words, e.g. Shrubby Hare's-ear; and there are several acceptable alternatives for some answers. Good luck!

Answers to be found on page 30.

BARBARA GREENWOOD

After our usual breakfast of(1)....., Timothy, Heather and I set out for a walk in the country. We left home as the Leed's(2)..... struck ten. Before we had travelled very far, a group of rogues who didn't know the meaning of the word(3)..... attacked me. Timothy, always the(4)..... defended me, but in the thick(5)....., knocked off a(6)..... who to our amazement was only wearing a(7)..... underneath. This didn't do Timothy any good, and he had to appear in the(8)..... in front of the(9)..... ".....(10)..... are a menace to society," they said, and sentenced him to the(11)......

When he had done his(12)..... we continued our walk and were amused to see a(13)..... on a banana skin getting her(14)..... dirty.

As we were walking over a(15)..... it suddenly began to(16)..... so we made a(17)..... for a nearby shooting(18)..... where we sat on Heather's (19)..... until it stopped. Heather had somehow lost her(20)....., so she had to(21)..... all the way. Timothy very kindly produced his(22)..... which was like(23)..... to our frozen limbs.

On the way home we passed a farm where we saw the farmer's wife, who had very(24)..... cheeks and was wearing a(25)..... dress, chasing a(26)..... out of the yard with a(27)......

NEW MEMBERS

To December, 1974

Mr. J. D. Young, 11 Churchill Place, FAIRFORD, Gloucestershire.

Mr. D. C. Woodward, 15 Sycamore Place, STIRLING, Scotland.

R. G. Woods, c/o Nature Conservancy Council, Plas Gogerddan, ABERYSTWYTH, Dyfed.

Mr. C. Weightman, c/o Botany Department, Kings Buildings, Mayfield Road, EDINBURGH 9.

Mr. M. J. Weighall, 6 Fentham Close, Hampton in Arden, SOLIHULL, West Midlands B92 0BE.

Professor P. V. Webb, M A , F R S M , F R S A , 155 Harbour Tower, Trinity Green, GOSPORT, Hants.

Mr. G. P. Weaver, 19 The Lees, SHIRLEY, Croydon CR0 8AR.

Dr. C. G. Vosa, Botany School, South Parks Road, OXFORD OX1 3RA.

Mr. J. M. W. Topp, c/o Barclays Bank, 3 Waverley Road, The Strand, SOUTHSEA, Hants PO5 2PH.

Mr. C. T. W. Tipper, 8 Fishery Road, Boxmoor, HEMEL HEMPSTEAD, Herts.

Mr. I. R. Thirlwell, 85 Mayles Road, PORTSMOUTH, Hants.

Mr. M. A. Stevens, 18 Roxy Avenue, ROMFORD, Essex RM6 4AY.

Mr. J. V. Smith, 22 Highfield Road, Kemsing, SEVENOAKS, Kent.

Mr. C. D. Preston, St. Catharine's College, CAMBRIDGE CB2 1RL.

Mr. R. Perry, "Barnacre", Puddington Lane, BURTON IN WIRRAL, Cheshire L64 5SE.

Mrs. S. J. Patrick, 27 Islay Road, SINFIN, Derby.

- Mr. A. G. Pattillo, Springbourne, SHREWTON, Nr. Salisbury, Wilts.
 Mr. M. L. Page, c/o Botany and Microbiology, University College, SWANSEA, W. Glam.
 Mr. W. G. Moles, 67 Upper Richmond Road, LONDON SW15.
 Mr. E. Mellar, 20 Swathwick Lane, Wingerworth, CHESTERFIELD S42 6QW.
 Mr. J. W. Meiklejohn, 1 Avon Bank, DEFFORD, Worcester WR8 9BD.
 Mr. P. J. Masters, Botany Department, University College, Cathays Park, P.O. Box 78, CARDIFF CF1 1XL.
 Mrs. V. V. Kilburn, Pentre, Green Lane, PORTREATH, Cornwall TR16 4NX.
 Mrs. A. Kelham, Chestnut Cottage, Green Lane, WITCOMBE, Gloucester GL3 4TX.
 Mrs. J. Johnson, Lorne Villa, 44 Upgang Lane, WHITBY.
 Miss S. W. Jones, 172 Reservoir Road, Selly Oak, BIRMINGHAM B29 6TE.
 Mr. J. G. Jones, 35 The Broadway Nortons, STOURBRIDGE, West Midlands.
 Mr. B. G. Jeffery, 2 Drawbriggs Lane, APPLEBY, Cumbria CA16 6HY.
 Miss V. G. Hyslop, 182 Randolph Avenue, LONDON W9.
 Mr. H. Hughes, 2 The Dreys, STOKE-ON-TRENT ST4 8DU.
 Mr. J. J. Hopkins, Kings College, Department of Plant Science, Halfmoon Lane, Herne Hill, LONDON SE23.
 Mr. R. J. Hobbs, 59 Woodmuir Place, Breich, WEST CALDER, Midlothian.
 Mrs. D. J. N. Hind, 23 Falmer Close, Goring-by-Sea, WORTHING, Sussex BN12 4TB.
 Mr. C. B. Hill, 311 Dickson Road, BLACKPOOL, Lancs FY1 2JL.
 Mr. D. K. Haselgrove, 44 Monkham Drive, WOODFORD GREEN, Essex.
 Mr. R. M. Harvey, 211 Newbury Lane, Oldbury, Warley, SANDWELL B69 1JQ.
 Mr. J. W. F. Harris, 12 Claywood Lane, BEAN DARTFORD, Kent DA2 8BU.
 Miss F. D. Harris, 120 Casterton Road, STAMFORD, Lincs PE9 2HQ.
 Mr. R. N. Hall, Tolleshunt, Kents Lane, Ettington, STRATFORD-ON-AVON, Warwickshire.
 Dr. D. Griffith, 27 Southway, Totteridge, LONDON N20.
 Mr. M. S. Green, Department of Botany, University College, P.O. Box 78, CARDIFF CF1 1XL.
 Mr. D. B. Green, 43 Russley Road, Bramcote, NOTTINGHAM NG9 3JF.
 Mrs. A. J. Gregory, School House, School Lane, Lea Marston, SUTTON COLDFIELD, West Midlands P76 0BW.
 Mrs. M. Gray-Parry, Bryn Bras Castle, Nr. CAERNARFON LL5 4RE.
 Goole and District Natural History Society, c/o Mrs. M. F. Withers, 11 Rutland Road, GOOLE, N. Humberside.
 Mrs. S. E. C. Gee, 11 Thames Road, Skelton, SALT BURN-BY-THE-SEA, Cleveland TS12 2LX.
 Miss H. M. Gee, Biology Department, Keele University, KEELE, Staffs. ST5 5BG.
 Mrs. R. Gardner, 6 Bonheur Road, Chiswick, LONDON W4.
 Mrs. G. W. Ford, 9 Kynance Place, LONDON SW7.
 Mr. H. C. Finn, 58 East Park Parade, NORTHAMPTON.
 Mr. F. W. T. Fagence, 98 Howard Drive, Allington Park, MAIDSTONE, Kent ME16 0QB.
 Dr. G. Dunn, Egrove Cottage, Kennington Road, Kennington, OXFORD OX1 5NX.
 Miss M. C. Dumbleton, 25 Warfield Road, BRACKNELL, Berks.
 Mr. N. S. De Sausmarez, Featherbeds Farm, St. Allen, TRURO, Cornwall.
 Mr. N. T. Deeley, 173 Hubert Road, Selly Oak, BIRMINGHAM B29 6ET.
 Mr. D. P. Deaville, 34 Jopling Way, HAUXTON, Cambs. CB2 5HY.
 Mr. H. L. Davies, 66 Link Lane, WALLINGTON, Surrey.
 Mrs. S. R. Darken, 330 Garstang Road, Fulwood, PRESTON, Lancs.
 Miss G. A. Cornelius, 8 Vineyard Row, Hampton Wick, KINGSTON-UPON-THAMES, Surrey KT1 4EG.
 M/S J. M. Corke, 3 Launceston Avenue, Hanham, BRISTOL.
 Miss P. A. Coates, Top Flat, 45 Swinburne Road, DARLINGTON, Co. Durham.
 Mr. R. T. F. Chifton, 99 Woodside Gardens, LONDON N17 6UN.
 Mrs. J. M. Chatfield, 3 Cyncoed Close, Duntant, SWANSEA, Glam. SA2 7RS.
 Mrs. J. R. Cameron, Drumgeith House, Lamington, BIGGAR, Lanarkshire ML12 6HW.
 Mr. E. S. Clay, Merlin, Cadbury Camp Lane, PORTISHEAD, Nr. Bristol BS20 9SA.
 Mr. P. C. Brookes, Berwick, Berkeley Heath, BERKELEY, Glos.
 Mrs. E. M. C. Brewster, Hereward House School, 14 Strathray Gardens, LONDON NW3 4NY.
 Mr. S. Beesley, 51 Downview Road, Greenisland, CARRICKFERGUS, Co. Antrim, N. Ireland.
 Mr. G. A. Beattie, 17 Mill Lane, BENSON, Oxfordshire.
 Miss J. A. Batten, 26 Heston Road, Heston, Nr. HOUNSLOW, Middx. TW5 0QJ.
 Mr. K. Barnett, 35 Fairmead, SURBITON, Surrey KT5 9BA.

Mr. F. J. Badre, Laboratoire de Phanerogarnie, 16 Rue de Buffon 75005, PARIS.
 Miss J. A. Anyan, Westfield Farm, Corringham, GAINSBOROUGH, Lincs. DN21 5RD.
 Miss D. M. Allnatt, 62 Beverley Gardens, WEMBLEY, Middx. HA9 9RA.
 Mr. A. R. Agar, 19 Ramsdean Avenue, WIGSTON, Leicester LE8 1DX.
 Miss D. Adkins, 479 Blackmoorfoot Road, Crosland Moor, HUDDERSFIELD HD4 5NR.

To April, 1975

Mr. C. Wright, 13 Eppleworth Road, COTTINGHAM, Nr. Humberside.
 Mr. D. Woodland, Pine Cottage, Ampfield, ROMSEY, Hants. SO5 9BL.
 Miss C. M. Williams, Department Botany, P.O. Box 147, LIVERPOOL L69 3BX.
 Mrs. G. M. Whittaker, Olde English Herbs, BURLINGHAM, Norfolk NR13 4SZ.
 Mr. J. S. Watson, 395 Barnsley Road, Sandal, WAKEFIELD, West Yorkshire WF2 6BG.
 Miss J. Waller, Flat 3, 11 Mortlake Road, RICHMOND, Surrey TW9 3JE.
 Mrs. M. G. Wakeford, 7 Downsview Road, Portslade, BRIGHTON, Sussex BN4 2HQ.
 Mr. J. A. Vaughan, 6 Lilly Hall Road, Maltby, ROTHERHAM, South Yorks.
 Mr. C. H. Turner, Pallaflat House, Bigrigg, EGREMONT, Cumberland CA22 2TX.
 Mr. M. B. Telford, Botany Department, Trinity College, DUBLIN 4, Eire.
 Mr. W. F. Taylor, Angles, Hammersley Lane, PENN, Bucks.
 Mr. C. W. Taylor, 78 Wallington Avenue, Marden Estate, CULLERCOATS, Tyne and Wear
 NE30 3QB.
 Mrs. C. D. Trayler-Smith, 28 Connaught Road, Roath, CARDIFF.
 Mrs. E. M. Stephenson, 94 Winstanley Road, Billinge, WIGAN WN5 7XA.
 Mrs. R. C. Staddon, 3 Hillside Close, WOODFORD GREEN, Essex IG8 7QP.
 Mr. K. E. Smith, 16 Keats Close, COLNE, Lancs. BB8 9SA.
 Mr. D. C. Smeed, Edith Villa, Brantham, MANNINGTREE, Essex.
 Mr. B. F. Simpson, 5 Ilex Close, Forest Estate, Englefield Green, EGHAM, Surrey TW20 0TH.
 Mr. K. A. Sandell, 53 Cleveland Close, BASINGSTOKE, Hants. RG22 5AW.
 Mrs. D. Rudd, 2 Victor Road, BRADFORD 9.
 Miss J. Rowles, Myrtle House, North Newton, BRIDGWATER, Somerset TA7 0BN.
 Mr. D. T. Reid, 9 Woodfield Road, AYR, Ayrshire KA8 8LZ.
 Mr. A. B. Reid, 35 Rose Crescent, PERTH PH1 1NT.
 Mr. H. A. Reeve, 47 Ridge Lea, HEMEL HEMPSTEAD, Herts HP1 2AZ.
 Colonel J. R. C. Pitcairn, 24 Blenheim Gardens, KINGSTON-UPON-THAMES, Surrey KT2 7BW.
 Mr. H. U. Piontkowski, Eichkamp 10, 233 Eckernforde, West Germany.
 Mrs. A. V. Pearman, The Dell, Pilton, SHEPTON MALLET, Somerset.
 Mr. N. H. A. Patterson (Chairman), 123 Youth Association, 25A Osborne Park, BELFAST 9.
 Mr. R. W. Parr, Tynwydd, Cwm Goleu, WELSHPOOL, Powys SY21 9EZ.
 Mr. D. C. Parker, 45 Ailsa Avenue, EAST TWICKENHAM, Middlesex.
 Miss M. A. Palin, Ashfield, Manley, Nr. Helsby, Via WARRINGTON WA6 9EW.
 Mr. J. K. Ockenden, "Brookside", Middle Street, DUNSTON, Nr. Lincoln.
 Mr. M. St. John O'Grady, Malts House, WROTHAM, Kent TN15 7RA.
 Dr. T. Norman, Old Rectory, Winterborne Houghton, BLANDFORD, Dorset DT11 0RD.
 Mrs. F. M. Newsam, 41 Newfield Crescent, Dore, SHEFFIELD, Yorkshire S17 3DE.
 Miss D. A. Neale, Iscoed, Nantglyn, DENBIGH, North Wales.
 Mr. M. Mitchell, The Old Cottage, Bishopsbourne, Nr. CANTERBURY, Kent.
 Mr. I. K. Morgan, 107 Denham Avenue, LLANELLI, Dyfed.
 Mr. T. H. Mawdsley, Flat 1A, 45 Shrewsbury Road, Oxtou, BIRKENHEAD, Merseyside L43 2JB.
 Mrs. H. M. H. Mack, Avonvale, 112 Bath Road, Bitton, BRISTOL, Avon BS15 6HS.
 Mr. D. MacIntyre, Riverside Cottage, Stairaird, MAUCHLINE, Ayrshire, Scotland.
 Mrs. E. McKenzie, The Nook, Canterbury Road, Etchinghill, FOLKESTONE, Kent CT18 8DE.
 Mrs. A. H. McKenzie, The Nook, Canterbury Road, Etchinghill, FOLKESTONE, Kent CT18 8DE.
 Mrs. S. M. Luce, 14 Keswick Heights, Keswick Road, Putney, LONDON SW15 2JR.
 Mr. C. A. Luce, 14 Keswick Heights, Keswick Road, Putney, LONDON SW15 2JR.
 Mr. D. G. Long, Department of Agriculture and Fisheries for Scotland, East Craigs, EDINBURGH
 EH12 8NJ.
 D. R. Lerner, 22 Chapel Close, DUKINFIELD, Cheshire.
 Miss H. E. M. Kiefer, Elmside, 49 Grange Road, CAMBRIDGE CB3 9BN.

- Mr. T. Jones, The Rowans, 27 Lower Road, MILTON MALSOR, Northampton NN7 3AW.
 Mr. R. Johnson, 44 Eastfield Avenue, MELTON MOWBRAY, Leics.
 The Curator, Ipswich Museums, High Street, IPSWICH IP1 3QH.
 Mrs. E. M. Hyde, Woolverstone Hall, Woolverstone, IPSWICH, Suffolk.
 Mrs. E. M. Huntley, Hurstwood, Saxon Hill, BATTLE, Sussex.
 Mr. B. B. Hopton, 47 Himley Crescent, Goldthorn Park, WOLVERHAMPTON.
 Miss A. Hollifield, 8 Cockfield Avenue, BILLINGHAM, Cleveland County TS23 3QA.
 Mr. A. M. Herridge, 4 Wilmington Avenue, Chiswick, LONDON W4 3HA.
 Mr. A. Herdman, Attonburn, Yetholm, KELSO, Roxburghshire, Scotland.
 Mr. P. Harrold, Royal Botanic Garden, EDINBURGH EH3 5LR.
 B. J. F. Haller, Sandcroft, Uphill Road South, WESTON-SUPER-MARE, Somerset.
 Mr. K. R. S. Hainge, 109 Rothesay Avenue, GREENFORD, Middx. UB6 0DB.
 Mr. S. N. Griffiths, Arden Cottage, Easton, WINCHESTER, Hants. SO21 1EJ.
 Mr. A. J. Gregory, School House, School Lane, Lea Marston, SUTTON COLDFIELD, West Midlands B76 0BW.
 Mr. W. S. Graham, 15 Long Lane, HALESOWEN, West Midlands B62 9LL.
 Mrs. F. Goudy, 28 Middle Hillgate, STOCKPORT, Cheshire.
 Dr. J. E. G. Good, 34 Broomieknowe Park, BONNYRIGG, Midlothian EH19 2JB.
 Mr. M. F. Godfrey, 135 Station Road, Thatcham, NEWBURY, Berks.
 Mr. G. Gasson, 17 David Avenue, WICKFORD, Essex SS11 7BG.
 Mr. D. Flude, "Borrowdale", 21 Upper Wish Hill, Willingdon, Nr. EASTBOURNE, Sussex.
 Mr. J. J. Finney, 207 Hampstead Way, LONDON NW11 7YB.
 Dr. M. A. Farragher, Dept. of Agric. Biology, Faculty of Agriculture, University College, Ballymun Road, Glasnevin, DUBLIN 9, Ireland.
 Mr. T. Evans, 8 Dartmouth Park Avenue, LONDON NW5.
 Mr. A. D. Downie, 14 Bedford Road, TWICKENHAM, Middlesex.
 Mr. D. M. Donovan, Home Farm Cottages, Worten, Great Chart, ASHFORD, Kent TN23 3BU.
 Miss C. A. Darby, 37 Mostyn Road, STOURPORT-ON-SEVERN, Worcestershire DY13 8PW.
 Mr. A. J. Crosse, Walnut Tree Cottage, Elmwell, Nr. BURY ST. EDMUNDS, Suffolk.
 Mr. J. J. Cox, 38 The Street, Manuden, Nr. BISHOPS STORTFORD, Herts. CM23 1DJ.
 Miss G. M. Cook, 89 Brookfield Avenue, RUNCORN WA7 5RF.
 Mr. S. C. Conway, 75 Brindley Street, STOURPORT-ON-SEVERN, Worcs.
 Mr. Emilr Contre, Paizay - Le - Tort, 79500 - MELLE, France.
 Bradford Met. District Council, Cliffe Castle Museum, KEIGHLEY, West Yorks.
 Mr. L. Clemons, 76 Tonge Road, SITTINGBOURNE, Kent ME10 3NR.
 Mr. A. R. Catlin, 41 Irwin Road, BEDFORD, Bedfordshire MK40 3UN.
 Mrs. E. M. Carr, 115 Langer Lane, Birdholme, CHESTERFIELD, Derbys. S40 2JP.
 The Warden, Bryansford Field Study Centre, 56 Bryansford Village, NEWCASTLE, Co. Down, Northern Ireland.
 Mr. N. H. Brown, Cross Grove House, Baslow Road, Totley, SHEFFIELD S17 4AP, Yorks.
 Miss R. S. Bromfield-Jones, Cove, 2 West Terrace, BUDLEIGH SALTERTON, Devon EX9 6LU.
 Miss E. M. Breakwell, 8 Pinewood Close, ORPINGTON, Kent BR6 8BB.
 Mr. G. I. M. Bloom, 64 Stevenage Road, KNEBWORTH, Herts SG3 6NN.
 Mrs. M. Blamey, Trelidden, Coombe, LISKEARD, Cornwall.
 T. H. Blackstock, Tylehurst School, FOREST ROW, Sussex.
 Mr. P. A. Beetham, Kingswood Hall, Royal Holloway College, Coopers Hill Lane, Englefield Green, EGHAM, Surrey TW20 0TH.
 Miss C. F. Baxter, Bankers Hill House, Cefncribbwr, BRIDGEND, Glamorgan.
 Miss B. M. Baldock, Goldney House, Clifton, BRISTOL BS8 1BH.
 Mr. H. E. E. Babb, "Rochdale", Bromsgrove Road, Lower Clent, Worcs, Via STOURBRIDGE, West Midlands DY9 9PY.
 Mrs. F. M. Babb, "Rochdale", Bromsgrove Road, Lower Clent, Worcs, Via STOURBRIDGE, West Midlands DY9 9PY.
 Mr. T. L. S. Attwell, Bryn Awelon, Llangynhafal, DENBIGH, Clwyd.
 Mr. C. W. Atkins, 15 Thornash Close, Horsell, WOKING, Surrey GU21 4UP.
 Mr. R. Allison, 20 Arnolds Close, BARTON-ON-SEA, Hants. BH25 7JW.
 Mrs. H. L. Allott, Odellville, BALLINGARRY, Co. Limerick, Eire.

Answers

Any other alternatives are acceptable as long as they make sense.

1. Bacon and Eggs
2. Townhall Clock
3. Honesty
4. Gallant Soldier
5. Yorkshire-fog
6. Policeman's Helmet
7. Skullcap
8. Dock
9. Lords-and-ladies, Elders
10. Yew
11. Stocks
12. Thyme
13. Cowslip
14. Rustyback, Whitebeam
15. Heath, Plane
16. Snow-in-summer
17. Rush
18. Box
19. Lady's-mantle
20. Lady's-slipper
21. Hop
22. Brandy-bottle
23. Balm
24. Pink
25. Violet, Rose, Orange, etc.
26. Fat-hen
27. Broom

STOP PRESS

Humphrey Gilbert Carter Memorial Volume

As long as copies last of the memorial volume to Humphrey Gilbert Carter, these are available free to those who knew him personally. Please apply to Dr. S. M. Walters, The Director, University Botanic Garden, Cambridge, CB2 3EA.

Flowers of the Burren

Saturday, 31st January, 1976 at 3 p.m. A lecture on the Burren, its flowers and ecology, (with a film), by Mrs. Maryangela Keane. Sponsored by the Irish Tourist Board. British Museum, South Kensington.

New Membership List

Mrs. Rachel Hamilton, Hon. Membership Secretary, is preparing a new membership list for publication at the end of the year. If your address — or county — has changed since the last list was published in 1973, and you have not informed the B.S.B.I. Administration Office, would you please do so as soon as possible.

Poterium polygamum

A request has come in for seeds of *Poterium polygamum*. If any member can supply even a small amount, please send it to the Hon. General Secretary, Mrs. Mary Briggs, M.P.S., White Cottage, Slinfold, Horsham, Sussex, RH13 7RG.

THE FRIARY PRESS LTD., DORCHESTER, DORSET