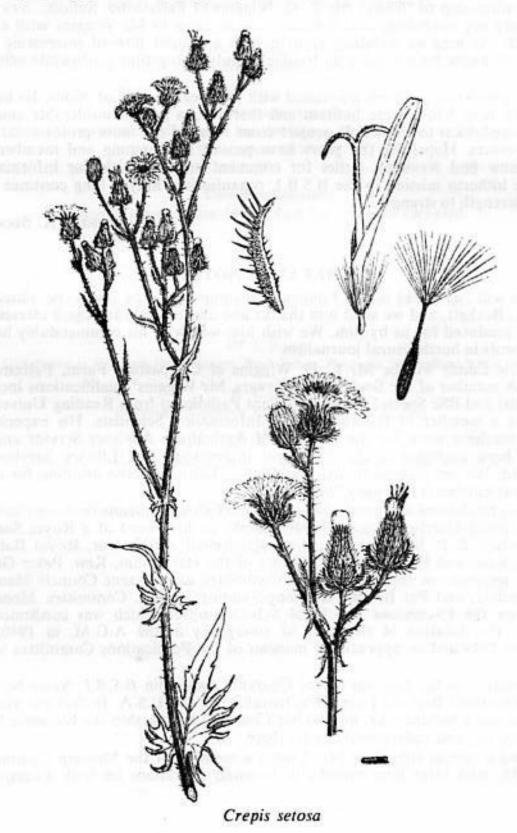
B.S.B.I. NEWS

Edited by KENNETH A. BECKETT Bromley Cottage, Stanhoe, King's Lynn, Norfolk PE31 8QF

December 1976 No. 14



EDITOR'S NOTES

Much more promptly than anticipated, a volunteer has come forward to take over the editorship of 'News', Mr E. D. Wiggins of Felixstowe, Suffolk. News 14 is therefore my swan song and I hand over the reins to Mr Wiggins with every good wish. As long as members send in such a regular flow of interesting and informative items, he will have no trouble in putting together worthwhile editions of News.

I am pleased to have been associated with these early years of News. Its beginnings with John Elsley were hesitant and there was a not inconsiderable amount of quiet opposition to the whole project from some of the more professional and elder members. Hopefully the years have proved them wrong and members in general now find News an outlet for comment and a vehicle for information exchange hitherto missing in the B.S.B.I. organisation. May it long continue and go from strength to strength.

KENNETH A. BECKETT

SECRETARY'S NOTES

As you will have read in the Editorial, this number is the last to be edited by Mr K. A. Beckett, and we send him thanks and appreciation for the 9 interesting numbers produced for us by him. We wish him well with his commendably heavy commitments in horticultural journalism.

Our new Editor will be Mr E. D. Wiggins of Cowpasture Farm, Felixstowe, Suffolk. A member of the Society for 20 years, Mr Wiggins' qualifications include BSc (Hons) and BSc Special in Botany (Plant Pathology) from Reading University and he is a member of the Institute of Information Scientists. His experience includes teaching work for the Ministry of Agriculture Advisory Service and he has also been manager of the Technical Information and Library Services at Fisons Ltd. We are pleased to welcome him as Editor and the deadline for copy for the next number is *February 7th 1977*.

Our congratulations and good wishes go to the following members: -

Prof. J. Heslop-Harrison, (past Vice-President) on his award of a Royal Society Professorship; J. P. M. Brenan on his appointment as Director, Royal Botanic Gardens, Kew, and P. S. Green as Keeper of the Herbarium, Kew. Peter Green is a past secretary of the Publications Committee and present Council Member of the Society, and Pat Brenan is a long-standing B.S.B.I. Committee Member. He was on the Excursions and Field Sub-Committee which was confirmed in office for the duration of the state of emergency at the A.G.M. in 1940, on Council in 1949 and an appreciated member of the Publications Committee since 1953.

A correction to the note on recent Churchill awards in B.S.B.I. News No. 13, where I described Barbara Everard as travelling in the U.S.A. In fact her visit to the States was a lecture tour, and on her Churchill Scholarship she has since been to Malaysia to paint endangered flowers there.

We send a special tribute to Mrs Gibby, a member of the Meeting Committee since 1955, who after long months in hospital, operations on both knees, and having then to learn to walk again, came walking with two sticks to Meetings Committee, having travelled for the day from Durham and back on the midnight train. In 21 years besides representing the interests of Northern England, Mrs Gibby has been a constant helper at countless B.S.B.I. meetings, mostly unobtrusively in the background often wielding a tea towel to good effect, or a well-known figure as doorkeeper collecting the tickets etc. Known with affection to her friends as Nellie, she has also a nearly worldwide conference coverage and is well known to visiting professors who address her more respectfully as Madame Antoinette. We send our best wishes to her for steady progress to complete mobility.

From time to time we are asked if back numbers of the Society's Journals are of use. Yes, please—particularly the older numbers. At present we know of some provincial museums whose departments of Botany have no set of B.S.B.I. Journals and under the present financial strictures no money can be allocated for purchase of back numbers. So should any member have spare copies please let me know.

The Yorkshire Naturalists' Trust requested an exchange of publications with B.S.B.I., but we are unable to undertake exchange arrangements, having no Library. However possibly a Yorkshire member could help by offering on loan requested copies, if so please contact Mr S. W. Warburton, Y.N.T. 20 Castlegate, York.

We have another good offer for 3 Vascula from Miss Sylvia Haines, so have still some in the pool—any member who would like the use of one of these please let me know. New Vascula are available still to individuals on cash-with-order basis from the address given in *B.S.B.I. News* No. 12, but the name of the firm has reverted to T. Gerrard & Co. Enquirers should state that they are B.S.B.I. members and ask for current price: Gerrard House, Worthing Road, East Preston, Sussex.

Orders for the 1976 Edition of Atlas of The British Flora, £20.00, should now be sent to Mr A. Gill, E.P. Publishing Ltd., Bradford Road, East Ardsley, Wakefield, Yorkshire. Members who have only the 1976 Edition may have found difficulty in locating a vice-county with no v-c overlay. Dr F. H. Perring can supply a copy of a base map, which helps to allocate a reference to its vice county, to any member of the Society who sends a stamped addressed envelope (at least 9" x 6") to him at Biological Records Centre, Monks Wood, Abbots Ripton, Huntingdon, PE17 2LS.

Still available are some copies of the limp edition of English Names of Wild Flowers, Dony, Perring & Rob, £1.40 by post from The Landsman's Bookshop Ltd. Buckenhill, Bromyard, Herefordshire.

Overheard at a non-botanical meeting: "We know that it was a good place for plants as we could see all the botanists with their books in their hands".

MARY BRIGGS

REMINDER TO MEMBERS

Nominations for vacancies on Council. in writing, signed by two members of the Society and accompanied by the written consent of the candidate to serve, if elected, should be sent to the Hon. Gen. Sec. before February 1st 1977.

NEW RECORDS FOR ENDANGERED PLANTS A procedure recommended to members of the B.S.B.I.

Introduction

The completion of the Red Data Book for the flora of Great Britain shows that 115 species are endangered or vulnerable. Conservation organisations are being asked to take action to ensure that the extant sites of all these species are protected. But, even if this ideal were achieved, there would remain the problem of new finds for these threatened species—and what should be done by those lucky or clever enough to make them.

The Conservation Committee of the Society believes that everything should be done as soon as possible to ensure that a new locality is adequately protected and that nothing should be done which could harm the site. To this end a panel has been set up to receive information *in confidence* and advise. The panel consists of the Secretary of the Conservation Committee and representatives of the Royal Botanic Gardens, Kew, the British Museum (Natural History), the Nature Conservancy Council and the Biological Records Centre. As present constituted the panel consists of only four as the Secretary is a member of the Kew staff. They are Dr P. Brandham (Kew), R. Pankhurst (BM), Dr F. H. Perring (BRC) and Dr D. A. Ratcliffe (NCC). Between them they should be able to ensure the accuracy of the record, relate its importance to the national distribution pattern, and co-ordinate the necessary conservation action.

Recommended Procedure

It is suggested that members finding new localities of any of the species in the lists (Appendix 1) including also of course the supposedly extinct species and species new to Britain should first inform the Secretary of the Conservation Committee, Dr P. Brandham, The Jodrell Laboratory, Royal Botanic Gardens, Kew, Richmond, Surrey. The Secretary, having first satisfied himself that the identification is correct, would then inform the Biological Records Centre. BRC would check the known distribution and, if the species were truly threatened, would alert the Chief Scientists' team of NCC. It would then be the NCC's function to initiate any necessary conservation which would be undertaken in collaboration as appropriate with local bodies including the County Naturalists' Trust and the landowner or occupier. In most cases the County Recorder would be informed at this stage. Only when the NCC were satisfied that the site was adequately protected should information about the locality be released. It is hoped that the finder and the panel would agree on the amount of detail which could safely be published. The finder should then ensure that any exhibit about the find at a Conversazione or other similar meeting did not disclose more details than were released for publication.

As an extra precaution those arranging Exhibition Meetings are asked to check that no exhibits are displayed which might endanger the plants concerned whilst the Editorial Committee are asked to refer to the Secretary of the Conservation Committee any paper, note or plant record for species in the list (Appendix) for comment. County Recorders may well be the first to hear of records made by members of the public who are not BSBI members. In these cases it is suggested that Recorders pass the information to the Secretary of the Conservation Committee.

Post-Script

Members have from time to time expressed concern about what to do if they made a new and exciting find. The temptation to tell everyone from the postman to next door's cat is enormous. However for the safety of our plants could you please save your "good news", howbeit often only temporarily, for the Secretary of the Conservation Committee.

F. H. PERRING

Alchemilla minima A. subcrenata Allium sphaerocephalon Althaea hirsuta Alyssum alyssoides Anthoxanthum puelii Apium repens Arabis scabra Arenaria norvegica Armeria maritima subsp elongata Arnoseris minima Artemisia campestris

Bupleurum baldense

Calamagrostis scotica Calamintha sylvatica Carex buxbaumii C. depauperata Centaurium scilloides Cephalanthera rubra Corrigiola litoralis Cotoneaster integerrimus Crassula aquatica Crepis foetida Cyclamen hederifolium Cynoglossum germanicum Cyperus fuscus Cypripedium calceolus Cystopteris dickieana

Damasonium alisma Dianthus gratianopolitanus Diapensia lapponica Dryopteris cristata Epipogium aphyllum Equisetum ramosissimum Eryngium campestre Euphorbia peplis

Fritillaria meleagris Fumaria martinii

Gagea saxatilis Galium spurium Gentiana nivalis Geranium purpureum Gnaphalium luteo-album

Herniaria glabra Homogyne alpina

Iris spuria Isatis tinctoria

Leersia oryzoides Leucojum vernum Limonium paradoxum L. recurvum Linaria supina Liparis loeselii Lloydia serotina Lobelia urens Lonicera xylosteum Lychnis alpina Lythrum hyssopifolia

Maianthemum bifolium Matthiola sinuata Melampyrum arvense Minuartia stricta Muscari atlanticum

Najas marina

Ononis reclinata Ophrys sphegodes Orchis militaris O. simia Orobanche caryophyllacea O. maritima O. picridis O. purpurea O. reticulata

Paeonia mascula Petrorhagia nanteuilii Phyllodoce caerulea Polygonatum verticillatum Polygonum maritimum Potentilla rupestris Pulicaria vulgaris Pyrus cordata

Ranunculus ophioglossifolius Rhinanthus serotinus Salvia pratensis Saxifraga cernua Scheuchzeria palustris Scirpus triquetrus Scleranthus perennis Scorzonera humilis Selinum carvifolia Senecio paludosus Sorbus leyana S. subcuneata S. vexans Spartina alterniflora Spergularia bocconii Stachys alpina S. germanica

Taraxacum acutum T. glaucinum Teucrium scordium Trichomanes speciosum Trifolium stellatum Tuberaria guttata

Valerianella eriocarpa Veronica praecox V. spicata subsp spicata V. triphyllos V. verna Viola persicifolia

Woodsia alpina W. ilvensis

THE EASTERN ENGLAND RARE PLANT PROJECT

This project, based at the University Botanic Garden, Cambridge, has now been running since August 1974. In August 1976 the Nature Conservancy Council renewed the Contract for a further five years. A general description of this Project has been published in News 9 and 11.

Survey work is continuing on an Administrative County basis, but the collection of seed for the Kew Seed Bank is according to species' threat numbers as defined by Red Data Book criteria. As a result of work both nationally and in Eastern England, the list of species which now occur in 15 or fewer 10 KM squares has had to be considerably revised since the publication of the Lists of Rare Species in Code of Conduct (Watsonia 9:69-70) and the list of Nationally Rare Species sent to Vice-County Recorders by Dr F. H. Perring in 1973. For instance, at the start of the Project there were 90 species which had occurred in Eastern England (including 6 species known to be extinct). Over the past two years some species have been added since they no longer occurred in more than 15 of the 10 KM squares, and others have been removed because records for new 10 KM squares have been made. In reviewing my list for Eastern England in September 1976, it became clear that there was considerable cause for alarm, for 15 species may have become extinct in the last 25 years; 11 species are reduced to one locality, and 7 species are each in only 2 localities. 39 out of the 68 species are therefore now extinct or highly endangered, and a further 9 species are endangered on a Vice-County level. So far, the main cause for a reduction in numbers has been due to species being more widespread than had been thought; but now we may be faced with a massive loss over a considerable portion of England.

The following list of Nationally Rare Species in Eastern England is published as a guide to the many people who are continuing to give me so much help with field work and old records, and to draw attention to the endangered species. I hope that anyone who has a later record than is shown below, will send me details.

There is also an urgent need to record annually those species which have only one or two sites in a Vice-County, and to make an annual search for species which have recently become extinct.

NATIONALLY RARE SPECIES IN EASTERN ENGLAND (with date of last record)

Alisma gramineum—1975 Alyssum alyssoides—1976 E. Anthoxanthum puelii—1972 Armeria maritima subsp. elongata—1974

- E. Arnoseris minima—1960 Artemisia campestris—1976 (Bromus interruptus—1972) B. tectorum—1976 Bunium bulbocastanum—1975 (Bupleurum falcatum—1962)
- E. B. rotundifolium-1961 Cerastium brachypetalum-1973
- E. Cirsium tuberosum—1971 (Crepis foetida) Crocus purpureus—1967
- E. Cynodon dactylon-1970
- E. Cynoglossum germanicum-1950
- E. Damasonium alisma—1958 Dryopteris cristata—1976 Equisetum ramosissimum—1975
- E. Eriophorum gracile—1959 Festuca caesia—1976 (Filago gallica—1955) Fritillaria meleagris—1976 (Galeopsis segetum) Galium spurium—1976
- E. Genista pilosa-1840

- E. Gnaphalium luteoalbum-1973 (Halimione pedunculata) Herniaria glabra-1976 Himantoglossum hircinum-1976 (Holosteum umbellatum-1860) Hypochoeris maculata-1976 Iris spuria-1975 I. versicolor-1954 Juncus filiformis-1970 Limonium bellidifolium-1976 Liparis loeselii-1976 Luzula pallescens-1976 Lythrum hyssopifolia-1975 Maianthemum bifolium-1976 Melampyrum arvense—1970 Muscari atlanticum-1976 Najas marina-1976
- E. Ophrys sphegodes Orchis militaris—1976
- E. Orobanche picridis—1960 O. purpurea—1975 Peucedanum officinale—1971 Phleum phleoides—1976
- E. Pulicaria vulgaris Rhinanthus serotinus—1970
- E. Rorippa austriaca—1958 Scleranthus perennis subsp. prostratus—1976 Selinum carvifolia—1976

Senecio paludosus—1976 (S. palustris) Seseli libanotis—1976 Silene otites—1976

- E. Stachys germanica Tetragonolobus maritimus—1971 Teucrium scordium—1976
- E. = Extinct in Eastern England ()=Extinct in Britain

E. Valerianella eriocarpa—1964 Veronica praecox—1976 V. spicata—1976 V. triphyllos—1976 V. verna—1976 Viola persicifolia—1976

Thymus serpyllum—1976

Eastern England = Vice Counties 18, 19, 20, 25, 26, 27, 28, 29, 30, 31, 32, 53, 54, 55, 56.

G. CROMPTON 4 October 1976

FIELD STUDIES AT ARDTORNISH

In the light of experience gained during the three trial courses I organised last summer at Ardtornish, I am proposing to repeat the experiment in 1977 on an extended scale and in a rather more methodical, if still informal manner. Each course will again last a week; some will run from Wednesday to Wednesday. others from Saturday to Saturday; the period within which courses on field botany will be held is from May 28th to July 23rd. I hope once again to enlist the help of well-known botanists as leaders, and I shall of course be there myself to make my local knowledge available, to arrange transport and to co-ordinate activities. The maximum number on each course will be restricted to twelve and, in view of the individual attention to the needs of each member that this small number will permit, the overall charge for a week will not be less than £60, including a deposit of £20 to confirm a reservation. Before finally determining the number of courses to be held and the precise dates of each, I should be glad to hear as soon as possible from anybody who might contemplate coming. Please write to me at the address below and tell me, with a second choice if possible, the approximate dates you would prefer.

In case any who read this note are interested, I might add that I am also thinking of holding two similar courses for ornithologists in the latter half of April and one, or perhaps two, for bryologists in September. Again I should be grateful to hear fairly promptly from any potential participant.

John Raven, Docwra's Manor, Shepreth, Royston, Herts. SG8 6PS.

REX GRAHAM RESERVE

Once again, B.S.B.I. members and their friends are invited by the Suffolk Trust for Nature Conservation to see the military orchid in flower in the Rex Graham Nature Reserve, on Forestry Commission land near Mildenhall. The invitation is for Saturday, 4th June, 1977 when the reserve will be open from 11.00 a.m. till 3.30 p.m. Members are reminded that Orchis militaris is one of the rare species protected by the Conservation of Wild Creatures and Wild Plants Act of 1975, and that although it occurs also in the Chilterns, it can be shown to and photographed by members only in the Rex Graham Reserve, where it and its habitat are protected from damage by a raised walk provided by the World Wildlife Fund. The reserve also contains *Daphne mezereum*.

Please approach the reserve from the north side of the Icklingham to Barton Mills road (A 1101) by Forestry Commission fire route no 305 (at TL 741741), where signs to the car park should be followed. The reserve is about 200 yards further on. There will be no charge, except 50p for cameras, but donations towards management expenses would be welcome. No dogs will be allowed, and access from the A 11 is inadvisable. E. MILNE REDHEAD

THE SCOTTISH FIELD STUDIES ASSOCIATION LTD. Kindrogan Field Centre

The programme of courses for 1977 is now available. Individual adults and small groups are welcome at Kindrogan at any time, either as participants in advertised courses or independently.

Courses of particular interest to B.S.B.I. members are:-

Field Botany-June 29th-July 6th. Tutor: Ailsa Lee.

Lichens-July 6th-13th. Tutors: F. H. Brightman and P. B. Topham.

Mountain Flowers-July 20th-27th. Tutor to be announced.

Field Botany-August 3rd-10th. Tutor: Paul Harrold.

Water Plants-August 10th-17th. Tutor: Ursula Duncan.

Ferns and Related Plants-August 17th-24th. Tutor: Chris Page.

Plant Sociology-August 24th-31st. Tutors: D. J. Bellamy and B. D. Wheeler.

Fungi-August 24th-31st. Tutor: Brian Coppins.

Bryophytes-September 28th-October 5th. Tutor: Brian Brookes.

Natural History Illustration-August 10th-17th. Tutor: Roger Banks.

The fee for each course is £45 inclusive of board and accommodation. Our member, Mr Brian Brookes, Warden, Kindrogan Field Centre, Enochdhu, Blairgowrie, Perthshire PH10 7PG, will be pleased to provide further information about these and all other courses at Kindrogan on request.

J. E. LOUSLEY'S CARD INDEX

The late J. E. Lousley's card index to the bibliography of the British flora was bequeathed to the B.S.B.I., and is being kept by the British Museum (Natural History) on behalf of the Society. It is housed in the British Herbarium, and is accessible to any member of the Society during normal opening hours (10 a.m. to 4 p.m., Monday to Saturday). Members intending to come on Saturday are requested to give us notice.

The index includes about 30,000 cards in species order, using the numbering scheme of the List of British Vascular Plants (J. E. Dandy), and the remainder concerns references to the Watsonian vice-counties (c. 5,000 cards). Mr G. A. Mathews, of the Museum staff, has been making a bibliographical index (c. 5,000 cards) which will be combined with the Lousley's index. Newly added cards are marked in a distinctive way. Miss R. Sedergreen is working voluntarily with Mr Mathews to expand the index. R. J. PANKHURST B.M. (N.H.)

LOCAL FLORAS AVAILABLE FOR SALE

Since the publication of this list in B.S.B.I. News No. 13, pages 8/9/10, I have been informed of a few additions and changes as follows (prices include postage): Flora of Huntingdonshire. Wild Flowers. J. L. Gilbert, (31) Hon. Secretary, Peter-

borough Museum Society, The Museum, Priestgate, Peterborough. 40p.

A Contribution to a Flora of Merioneth. P. Benoit & M. Richards. (48) Hon. Gen. Secretary, West Wales Naturalists' Trust, 20A High Street, Haverfordwest, Dyfed. 61p. (Pleaes note new address.)

Flora of Uig. M. S. Campbell. (110) T. Buncle & Co., Arbroath. (Price uncertain.) H.6 Dr Ferguson will make Xerox copies available of all his papers at 50p. Flora of Lincolnshire. Now £4.20 plus 50p post and packing.

CONSERVATION POSTERS

Every member will certainly be familiar with the two conservation posters which were produced recently to appeal for practical conservation and to draw attention to the plants now protected by law. Although many of these have been distributed we have been disappointed by the scant support of the B.S.B.I. membership. If you have friends, a club or society, W. I. branch, etc., to whom you could sell some copies of the cowslip poster or the protected plants poster please place your order with Dr Perring at Monks Wood. Copies sell at 35 pence each, but for bulk orders ten and over cost only 20 pence each, and five hundred and over are 15 pence each.

The Conservation Committee would greatly welcome as many members as possible acting in this valuable way as conservation agents.

> PETER BRANDHAM (Secretary) Conservation Committee

UPPER TEESDALE

Vegetation maps of Upper Teesdale and an explanatory booklet compiled by Dr M. E. Bradshaw, Dr A. V. Jones, Mr M. Evans and Mr I. Newton

Coloured vegetation maps of Widdybank Fell in the Upper Teesdale N.N.R. in the North of England have been printed at the scale of 1: 10,000 and 1: 2,500 together with an explanatory booklet on the phytosociology of the same area. The phytosociological classification is based on the Zurich-Mountpellier school, the method of survey and analysis used in Teesdale is described and short accounts of the major ecological factors, climate and geology are provided. Vegetation of eleven classes were found and their distribution is shown in appropriate colours on the maps. Within the associations the vegetation is divided into sub-associations, variants and facies. These are identified by the character, differential and companion species, arranged in each association as a "key" to the mapping units which appear as numbered areas on the five large scale maps. The work and publications have been financed by the Teesdale Trust (I.C.I.).

These are available from The Secretary, Department of Extra-Mural Studies, University of Durham, Durham, England, at a cost of: booklet 50p, map scale 1:10,000 50p, set of 5 maps scale 1:2,500-£2.50, all post free.

FLORA OF SURREY

Those of you who have received and are enjoying Ted Lousley's Flora of Surrey may or may not have noticed an error in the captions to the colour plates of *Epipactis* species—they are the wrong way round. That on page 234 should be *E. leptochila* and that on page 237 *E. phyllanthes.* As most botanists have difficulty perhaps we should not be too hard on the printers, who humbly apologise. Copies are still available to members of the B.S.B.I. from Oundle Lodge, Oundle, Peterborough PE8 5TN for £8.75 until the 30th March, 1977. After that the price will rise to £10.75.

BOOK REQUESTS

Mr W. P. Chambers has been trying to obtain a copy of European Alpine Flowers in Colour by T. P. Barneby, published by Nelson. The book is out of print and will not be re-printed. Will anyone able to help please contact Mr Chambers at "Woodstock", 29 Hastings Road, Southport, Merseyside PR8 2LN. Dr J. H. Chapman wishes to obtain copies of Flora of Bedfordshire (Dony 1953), Flora of Dorset (Good 1948) and Flora of Wiltshire (Ghose 1957) none of which are available commercially. Will anyone able to help please contact Dr Chapman at 11 North Drive, Ruislip, Middlesex HA4 8HA.

B.S.B.I. REFEREES

Lactuca—Dr L. Boorman, Institute of Terrestrial Ecology, Colney Research Station, Colney, Norwich.

Centaurium—Dr R. A. E. Ubsdell. Polygonum—Miss A. P. Connolly. Rumex—D. H. Kent. Amsinkia—Dr H. J. M. Bowen.

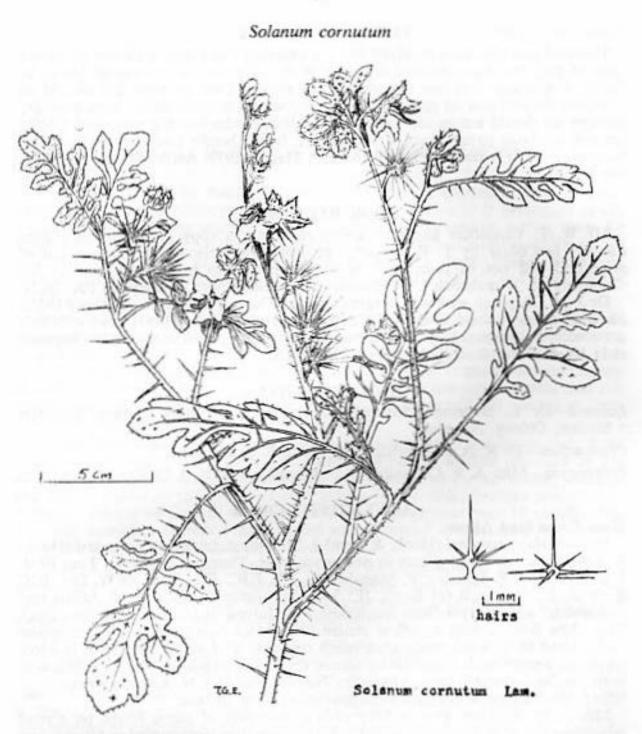
ADVENTIVE NEWS 6

More Grass Seed Aliens

Plagiobothrys scouleri (Hook. & Arn.) I. M. Johnst. (Allocarya scouleri (Hook. & Arn.) Greene): Many plants in new-sown grass, Thurso (Caithness), June 1974. J. M. Gunn, J. E. Lousley, P. Macpherson. Hb. EJC, JEL, **BM**, **KEW**. Det. EJC & Dr R. K. Brummitt (of Kew); JEL's original determination as "P. fulvus var. campestris" was an error (both species share the fulvous indumentum on the calyx). The white flowers with a yellow centre (the throat being closed by five yellow bumps) and its general appearance much resemble a Myosotis species; it is a low spreading annual with linear entire leaves, the lowest opposite. Minute differences in the nutlets separate the many species. Native of western N. America (Vancouver Island, Washington & Oregon) and apparently new to Britain.

Mrs F. D. Richards sent in May 1976 a collection of plants found on a road rebuilding site at Salisbury (S. Wilts) to Kew where they were named as Sisymbrium altissimum, Lepidium perfoliatum L., Amsinckia intermedia Fisch. & Mey., Plagiobothrys scouleri and Poa bulbosa var. vivipara Koel. with the comment that "it seems likely that they have arrived in their present site with imported topsoil." Surely they all came in with N.W. American grass seed? (all are known there).

Mrs M. B. Becher also found Lepidium perfoliatum, in June, by the new motorway roundabout at Cadnam (S. Hants). Hb. EJC.



Some Carrot Seed Aliens

Artemisia annua L .: Row of carrots on allotments, Norbury (Surrey), 9 Dec.

1966. H. W. Phillips. Hb. EJC. Det. J. E. Lousley. Echinochloa crus-galli: In some quantity in two or three carrot fields near Beccles (Suffolk), 1976 P. G. Lawson. No other more interesting species were found here this year.

Cuscuta campestris Yuncker: Covering two yards square of carrot crop in garden, Pew Hill, Chippenham (Wilts), July 1976. Mrs J. Swanborough. Conf. Dr B. Verdcourt (at Kew).

Picris echioides: Row of carrots in garden, Woking (Surrey), 1975. W. E. Warren. Det. EJC. (Not known as a native in this area).

Salsola pestifer A. Nels. (not S. pestifera Nels. as it appears in more than one book!): Carrot field, near Great Bircham (NW Norfolk), Sept 1976. Mrs B. Burt. Conf. EJC.

Solanum triflorum Nutt.: One plant only seen, growing with abundant S. nitidibaccatum, in carrot field at Flitcham (NW Norfolk), Sept. 1976. Mrs B. Burt. (See Graham Easy's drawing which was inadvertently omitted from the last News).

Alien Notes from Cambridge (By A. C. Leslie)

Solanum luteum Miller ssp. luteum: More than a dozen plants scattered over the cultivated ground of the Botany School Field Station, Cambridge, Aug. 1976. R. I. S. Brettell. Hb. ACL. Differs from S. nigrum ssp. nigrum (also present) in being villous (the hairs patent and gland-tipped) and in the colourful orange-red berries. The plant seems to be established and had no obvious source since the Station has not been used for experimental work on Solanum as has the University Botanic Garden, which is 2 miles across the city. Flora Europaea 3 (CUP 1972) lists this as a British native but this needs checking; there are no other Cambridgeshire records.

Sesamum indicum L.: Two young plants (in bud) on dried sewage, Cambridge Sewage Works, Sept. 1976. G. M. S. Easy & ACL. Hb. ACL. This is the tropical crop sesame or gingelly cultivated for its seeds and oil. The plants showed considerable heterophylly—the lower leaves trifoliate, segments oblong-lanceolate, remotely toothed, with intermediates to the upper leaves which are undivided, lanceolate and entire. The flowers are solitary in the axils of the upper leaves and were apparently going to be pale pink with yellow internal marks. Two small orange "buttons" (?sterile undeveloped buds) occur at the base of each pedicel and are characteristic, although omitted in most descriptions.

The Sewage Works also held much *Glycine max*, *Citrullus lanatus (vulgaris)* in fine fruit, *Brassica juncea* and a patch of the thick orange threads of an alien dodder, possibly *Cuscuta campestris*, parasitising tomato plants (GMSE recorded this species from here in 1970 when it was named by Dr S. M. Walters).

Mixed Bag

Cotoneaster lacteus W. W. Sm.: On an old wall top by the Castle in Guildford (Surrey), Jan 1976. A. C. Leslie. Four seedlings (one in fruit), the parent tree being just across the road. Gardeners well know that this free-fruiting evergreen species, a native of China, sows itself about (presumably by birds), but botanists seldom seem to record its occurrence.

Cuscuta campestris: This N. American alien has already been mentioned three times above; Dr B. Verdcourt of Kew tells me that "it seems to appear in this country quite frequently now and is common all over Southern Europe." It has been confused (by me and others) in the past with C. australis R. Br. and it is not always easily separated. Fortunately for us in Britain this horticultural strangler does not apparently ripen its seed over here; gardeners, I presume, meet it much more frequently than British botanists.

On Lavatera trimestris in rock gardens, Southsea (Hants), Aug. 1963. A. W. Westrup. "Flowers pale greenish-yellow; stems orange-yellow." Collected as C. epilinum but this species, like our native species, has elongate stigmas (they are capitate in C. campestris).

Garden weed, Cottingham, Hull (SE. Yorks), Aug. 1976. E. Chicken. Hb. EC. Conf. EJC. Introduced here with basil herb seed.

Crepis setosa Haller fil.: One sprawling plant on wall of a newly constructed picnic site, Taddington (Derbys), Sept. 1976. Miss M. C. Hewitt. Conf. EJC, as a forma which lacked the normal conspicuous bristles on the peduncles and stems. Miss K. Hollick, who communicated this find, remarks that the comprehensive description in CTW was also not convincing in other details—e.g. the ribs of the achenes are alwasy rough above, not "below" as wrongly stated there.

Eight plants in a patch of new-sown grass, Newmarket Heath (Cambs), July 1976. Found by G. M. S. Easy who took this opportunity to provide us with the excellent cover illustration of *News*.

Cyperus eragrostis Lam. (C. vegetus Willd.): Waste ground between Hayle and Lelant (W. Cornwall), Sept. 1976. L. J. Margetts. Det. EJC. Occurs as a wool alien but was perhaps a horticultural escape here—Beth Chatto in *RHS The Garden*, Sept. 1976, recommends it (p. 453) as a good plant for the small garden: "it does not run, but makes a neat clump of sharp, rushy foliage which in autumn is topped with large heads of chestnut and green spikelets surrounded by long green ribs [bracts] like an umbrella frame. It stands about two and a half feet high and seems to grow as happily in dry soil as damp." Ducks and other waterfowl can readily spread the seed from one waterside margin to another, as in Guernsey, Jersey and continental Europe; it is a native of S. America.

Echinochloa colonum (L.) Link: Pavement weed, outside Natural History Museum, S. Kensington (Middlesex), Oct. 1975. J. M. Mullin. Conf. Dr A. Melderis. Not infrequent on tips, probably coming in with bird seed, etc. J. E. Dandy has kindly explained to me that the origin of "colonum" in the basionym *Panicum colonum* L. is still a mystery. Some think it must be a noun in apposition (but in which case why the neuter gender?), while others regard it as an adjective, in which case, under *Echinochloa*, it would become *E. colona*. Because we do not know the answer it is best to stick to the original "colonum".

Helichrysum bellidioides (Forst. f.) Willd.: Rocky turf by burn near house, Tagon, Voe, Mainland Shetland, May 1975. R. C. Palmer. Hb. **OXF** & Hb. Lerwick Museum. Conf. Martyn Rix (Botanist at the RHS Garden, Wisley). This matforming species with rigid thyme-like leaves silvery beneath and prominent white petal-like inner phyllaries was looking quite at home over a small area. It is common in mountainous areas of New Zealand and is grown in rockeries in Britain.

Medicago arborea L.: South side of Wain's Hill, Clevedon (Somerset), 1973. One bush, in cleft of cliff immediately above beach. Miss I. F. Gravestock communicated this find. It is a yellow-flowered sericeous shrub, some 4 feet tall, and is a native of rocky places in the S. Mediterranean region. Medicago intertexta (L.) Miller: Abundant weed (probably from bird seed) but setting no fruit, in garden, Bourton-on-the-Water (Glos), autumn 1975. Mrs Cock; comm. Mrs S. C. Holland. Det. EJC. This form which had brown blotches on the leaves is only occasionally met with in the wild, but it is the normal cultivated variety of it usually called Calvary Clover (M. echinus DC.), which is not worthy of specific rank and is sold by Thompson and Morgan, etc., the blood spots on the leaves and the crown of thorns (the large spiny fruit) attracting attention. The specimen submitted had a few long glandular hairs on the stems and petioles; it is usually nearly glabrous but specimens from S. Spain (e.g. in Hb. EJC) and ?elsewhere can be densely glandular (but with glabrous fruits)—quite contrary to *Flora Europaea 2* and C. C. Heyn *The Annual Species of Medicago* (1963). Brown blotches can also occur on the leaves of M. arabica and M. truncatula (a hairyleaved species) and it is a feasible deviate of other species. Such forms of M. truncatula have occurred in wool shoddy at Blackmoor (N. Hants) and Wateringbury (Kent)—see Hb. EJC.

Pteris tremula R. Br.: One tuft in brickwork of north side of the old St. Peter's-in-the-East Church, Oxford (now the library of St. Edmund's Hall), 1974. R. C. Palmer. Hb. **OXF** (a depauperate specimen looking not unlike a form of *Pteridium*). Conf. Dr T. F. G. Walker. A native of New Zealand, Australia and Tasmania; it is, unfortunately, sensitive to frosts and in 1975 only the blackened skeleton was visible, though a flourishing colony of *P. cretica* L. (discovered by K. E. Bull) at the entrance to a vault on the other side of the church had escaped unscathed.

P. tremula was also found by KEB in May 1969 in a derelict greenhouse ruin at Tunbridge Wells (W. Kent) but again it failed to survive over the following winter. Hb. EJC. Det. J. M. Mullin; conf. Dr T. G. Walker, who wrote the paper "Species of *Pteris* commonly in Cultivation" in *Brit. Fern Gaz.* 10(3): 143-151 (1970) and which gives a key and useful silhouettes of all the species. This plant sows itself so freely in greenhouses as to become a regular pest; according to E. J. Lowe in *Ferns: British and Exotic* "no ferns grow so freely from spores as *P. tremula...*"

Sigesbeckia jorullensis Kunth (S. cordifolia Kunth): Two plants growing among roses in the front garden of a house in Ainsdale (S. Lancs), Oct. 1975. Miss A. Franks. See Proc. Bot. Soc. Br. Isl. 7(1): 20 (1967) for the remarkable history of this plant which is established in this area—the finder had no idea what her plant was—not surprisingly since it has rarely been illustrated (any offers?), being a native of Central and South America.

Solanum cornutum Lam.: Potato field, E. Chittington (E. Sussex), 1976. Comm. Mrs M. Briggs. Conf. **KEW.** The field had been dressed with granular rock phosphate which is much mined in N. America. Was this its means of introduction here?

T. G. Evans has kindly provided the illustration, drawn from a plant from Newport rubbish tip in 1975. I saw, or heard of, a variety of other records for this species mostly as casuals from bird seed, but it also occurs in wool and soyabean waste, etc.—the large (2-3 cm diameter) yellow flowers and the sharp spines making it conspicuously exotic. Trigonella laciniata L.: In garden of newly built houses on lower slopes of Tunstall Hills, Sunderland (Durham), July 1976. D. Hall, comm. Rev. G. G. Graham. Hb. EJC. This area was filled in with ship ballast in about 1870—had the garden rotivator brought an ancient seed to the surface which had germinated? There was no evidence of bird seed or bird tables in the area. As a native this plant seems to be limited to Egypt and Syria; it was, not surprisingly, submitted as a *Medicago* species as these two genera are in part almost confluent.

Wild Flower Society and Finale

These notes attempt to produce a countrywide summary of alien records not a new idea since the Wild Flower Society magazine has annually produced such an "Exotics" report for the last sixteen years. I have now inherited this task from its originator, D. McClintock, and because many of us are members of both societies, some of your alien records will be printed there, especially those with a more hortal flavour (print is too expensive to duplicate records). A most excellent series of ten illustrated articles on Bird Seed Aliens by Dr J. L. Mason has also recently appeared there (hopefully soon to be republished as a booklet). Enquire of Mrs V. V. C. Schwerdt or our own Harvest House at Reading if you would like more details of the Society (current subscription is £3–). The Society primarily caters for the beginner in botany and is ideal for introducing youngsters to the joys of wild-flower hunting—but some of us never grow up. . . !

Do, please, keep writing-records, specimens, criticisms, or offers of line drawings-all are most welcome. ERIC J. CLEMENT

13 Shelford, Burritt Road, Kingston, Surrey KT1 3HR

ALIEN UMBELLIFERAE

Dandy's List of British Vascular Plants includes a number of introduced species of Umbelliferae. Some of these, for example *Aegopodium podagraria*, are all too often seen, but others are rare or perhaps extinct in this country and appear to be better established in Floras than in the field.

I have never seen any of the following in the course of more than 50 years of field botany: Caucalis platycarpos, C. latifolia, Laser trilobum, Levisticum officinale and Smyrnium perfoliatum, and should be glad to hear of any recent records, other than those from shoddy or rubbish tips.

The existence of Bupleurum rotundifolium in Britain also seems rather doubtful, as most specimens so labelled prove to be *B. intermedium* Poiret (*B. lancifoilum* auct., non Hornem.). *B. rotundifolium* has usually 5-10 rays, oblanceolate to ovate bracteoles and smooth fruit, while *B. intermedium* has usually 2-3 rays, suborbicular bracteoles and densely tuberculate fruit. Any information about the occurrence of these would be welcome. T. G. TUTIN

EPILOBIUM

Professor Peter H. Raven of the Missouri Botanical Garden has written to me recently on a matter which we both feel may be of considerable interest to many B.S.B.I. members.

H tells me that the dwarf New Zealand Willowherb, Epilobium brunnescens (=E. nerteroides or E. pedunculare of most British works) "can easily be hybridized" with all other Epilobia of section Epilobium, i.e. with all other British species except E. angustifolium. Moreover, hybrids between E. brunnescens and E. adenocaulon have already been found in the wild in New Zealand (where the latter is also naturalised), and Professor Raven goes on to say that hybrids of E. brunnescens "should, therefore, be looked for in the field by British botanists and I believe they will be found." Professor Raven has given some information on these hybrids in the book based on the B.S.B.I. Manchester Symposium "Taxonomy, Phytogeography and Evolution (1972)", and in a recent monograph of his, "The genus Epilobium in Australasia: a systematic and evolutionary study (1976)."

I hope many of us will take this as a challenge and aim to be the first to find such a hybrid in Europe! Incidentally, Professor Raven also tells me that E. adenocaulon is not specifically distinct from the N. American E. ciliatum Raf., and that the latter is the correct name.

On the subject of correct names in Epilobium, it is, of course, a matter of opinion whether or not E. angustifolium should be put in a separate genus. If it is (and many of us believe it should be), the correct name is not Chamaenerion but, according to J. Holub of Prague, Chamerion, C. A. STACE

MORE CAREX PUNCTATA

Under the heading Carex punctata in Cornwall (B.S.B.I. News no. 11, November 1975). I suggested that careful search should turn up other localities for this supposedly rare sedge; and the 1976 season has verified that prediction.

On 26 June Mr L. J. Margetts was surveying Camel's Cove, between Portloe and Nare Head (GR 10/93), where there is a fine raised beach. He found two small colonies of C. punctata Gaud., about fifty yards apart, at the junction of the gravelly cliff and the rock shelf. The severe drought made the cliff appear dry, but the presence of Salix and Phragmites showed that it is not normally so. The sedge has not been reported from this area before.

On 22 September a further exploration of Polstreath Cove Mevagissey, (GR 20/04) at last succeeded in repeating Miss E. S. Todd's discovery of about 1930. The finding of this healthy colony of some 20 mature plants and as many seedlings, in a cliff-gully composed of very fine, wet, soft shale was particularly welcome in view of the fact that at Charlestown, the original Cornish station a serious cliff-fall has, at least for the time being, obliterated one of the two sites which C. punctata has recently occupied there.

An interesting feature of the Camel's Cove station is that C. punctata grows there in close association with C. distans L., and so disproves my theory that there was some incompatibility in the ecological requirements of the two species. Both here and at Polstreath the broad leaves, the comparatively erect habit, and the very fine, prickle-like beaks of the utricles of C. punctata, which are smaller than those of C. distans, were instantly noticeable characters.

R. W. DAVID October 1976

LOCH MORAR ISLAND FLORA

On August 8, 1976, I landed on a small island at the west end of Loch Morar (v-c 97), Eilean Ghibbi (707916) on which quite possibly no botanist has ever landed before. The flora of these small islands must be as near to a natural flora as exists in the Scottish Highlands, so although it was quite unexciting, it seems worthwhile putting it on record:

Alnus glutinosa	0	Pinus sylvestris	d
Carex binervis	0	Pteridium aquilinum	c
Calluna vulgaris	d	Quercus petraea	0
Dryopteris filix-mas	0	Rubus fruticosus	0
Erica cinerea	0	Rumex acetosella	0
Festuca ovina	0	Scirpus fluitans	0
Hypericum pulchrum	0	Sedum anglicum	0
Juncus sp.	0	Solidago virgaurea	0
Lobelia dortmanna	0	Sorbus aucuparia	0
Lonicera periclymenum	0	Vaccinium myrtillus	с
Myrica gale	0		
The second se			

On an immediately adjacent islet I was able to descry two additional species: Ilex aquifolium and Leontodon autumnalis. R. S. R. FITTER

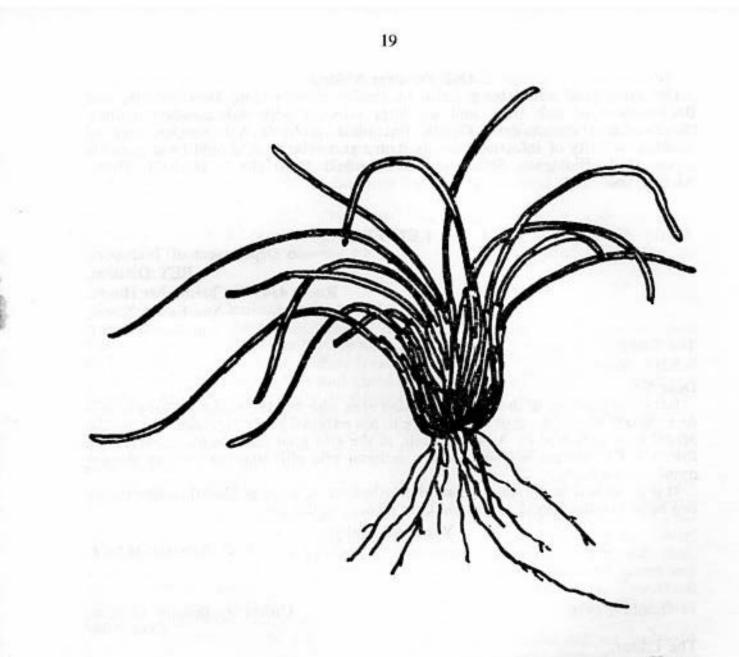
ELEOCHARIS PALUSTRIS

In July 1975, whilst enjoying an outing with fellow naturalists, of the W.W.N.T., I noticed a small colony of plants growing in the shallows of the seaward arm of Bosherston Pools, Pembrokeshire. The plants were small, mostly 5 to 6 cm. in diameter and some 3 cm. tall. They were growing in otherwise plantless sand 30 to 60 cm. below normal water level. The drought had reduced levels and many plants were above water. I, casually I fear, registered the plants as Shoreweed (*Littorella uniflora*).

By October I began to wonder if the plants were perhaps Quillwort (*Isoetes* sp.) for I recollected their rather wiry growth quite unlike the softer tubular leaves of Shoreweed. On 5 October my wife and I visited the Pools. We soon found the colony, now fully exposed by the effect of drought, which was certainly not Shoreweed—could it be Quillwort? The very base-rich waters of Bosherston Pools did not seem to be a likely habitat of Quillwort but the plants did seem to be *Isoetes palustris* and I confess that for a brief period I credited myself with the first record of Quillwort for v.c. 45.

Specimens were collected and sent to the National Museum of Wales and by T. A. W. D. to Dr S. M. Walters, the B.S.B.I. referee for *Eleocharis*. My discovery was soon relegated to a plant far more likely in this habitat, for the identification was Common Spike-rush (*Eleocharis palustris*)—a peculiar growth form. It still seems hard to accept that these small entirely vegetative plants, 150 or so scattered sparsely over sand, could be the same species as the large robust typical Common Spike-rush growing along the shore on either side of the small beach feature. The illustration will, I hope, render my uncertainty understandable. J. W. DONOVAN

Reprinted with permission from "Nature in Wales", March, 1976, Vol. 15, No. 1.



EUPHRASIA IDENTIFICATIONS

Dr P. F. Yeo wishes to inform members that his inability to provide determinations of *Euphrasia*, except in urgent cases, announced in *B.S.B.I. News* no. 9, p. 10, 1975, will continue until further notice.

PLANT REQUESTS Hieracium aurantiacum

Calling all members, especially juniors. I require information about the distribution of *H. aurantiacum*, also *H. brunnocroceum*, otherwise known as fox and cubs. If you can help will you please drop me a line. Postage will be refunded with my return letter. Send to D. Foote, 12 Elmwood Close, Alton, Hants. GU34 1RW.

Oak Powdery Mildew

Dr Avice Hall would be grateful to receive records from Hertfordshire and Bedfordshire of oak trees and seedlings infected with oak powdery mildew (Microsphaera alphitoides). Details (including probable oak species, tree of seedling, severity of infection and six figure grid reference) should be sent to Dr Avice Hall, Biological Sciences, The Hatfield Polytechnic, Hatfield, Herts. AL10 9AB.

LETTERS

c/o Department of Transport, BET Division, Room 4/42 St Christopher House, Southwark Street, London SE1 0TE

The Editor, B.S.B.I. News

Dear Sir.

Botanists working in the central London area who find the 1:63,630 ("one inch") or 1: 50,000 maps too small, but require to use national grid references, can use the Mobil map, prepared by A. W. Gatrell, as the grid used there to locate streets on the "C5, F8" system is based on the national grid although the squares are not numbered as such.

It is possible that the squares on other urban street maps produced commercially can be co-related with the National Grid directly in this way.

Yours faithfully,

J. G. SAMSON, M.I.C.E.

11 October, 1976

University Botanic Garden, Cambridge

The Editor. B.S.B.I. News

Dear Mr Beckett.

Senecio paludosus

Thank you for publishing my cri de coeur regarding visitors to the only site for S. paludosus in Britain.

May I make it quite clear that Mr Lawson, like so many other people, already knew the locality; nevertheless he very courteously wrote to enquire about the possibility of taking a party there, and for this I was most grateful. The extract published in the September News therefore was not in reply to a request for the locality of the plant. I have since heard that the party were taken to the Botanic Garden, and I hope that we may see many more visitors to S. paludosus here in future. Yours sincerely,

GIGI CROMPTON (Mrs) V.C. Recorder (29)

Bracken Hill, Platt, Kent 7 August, 1976

Dear Mr Editor,

My good friend Mr Edees takes me gently to task in *Watsonia* for calling a botanist a plantsman. But this I do not: the two are, alas, too often different.

A botanist studies the science which treats of plants (cf SED) in one or more of its very varied aspects. A plantsman is one who loves plants for their own sake and knows how to cherish them. This is a wider concept and may include a botanist: it certainly includes a host of admirable amateurs who may not know what a chromosome looks like or what taxonomy means, but know the growing plant, wild or cultivated, first-hand. To my mind they are the cream of those in the plant world, a fund of invaluable first-hand observation. If I may say so, I know no better example of the species than our own Editor, you, Sir. It is much to be regretted that so few botanists, amateurs or professional, know even how to take cuttings or propagate a plant. How much better to do this, circumspectly, and so get to know the living plant better, than just to press and dry the specimen.

Yours truly,

DAVID MCCLINTOCK

117 Vicarage Hill, South Benfleet, Essex

27th July, 1976

Dear Sir.

We were working this year in the south of Spain and were glad to get help from Spanish and Swedish botanists. They spoke English very well and understood us when we spoke English to them; but they did not understand us when we spoke Latin. The Spaniard spoke Latin as though it were Spanish and got much nearer to the professionally recommended Latin in that he got his vowels "right". I learnt both Spanish and Latin at school and for both languages I was taught to pronounce the vowels a e i o u as in "Pa let me off too". We might leave the consonants aside for the time being but please let us change our ways with the vowels.

We could start by getting these endings right and saying

ata as ahtah instead of ehtah eta as ehtah instead of eetah ita as eetah instead of ightah

This would encourage those of us who would like to see a mending of our ways, to promote international understanding, at least among botanists.

I am,

Yours sincerely,

JOHN W. CARR, B.A.

West Lane House, Bishopdale, Nr Leyburn, North Yorkshire

5 July, 1976

OSMUNDA IN SCOTLAND AND OTHER MATTERS

Dear Sir.

With reference to the finding of Osmunda regalis in Caithness. Dunnet Head seems a most extraordinary habitat for this plant. I wonder if perhaps it is the Irish variety which has smaller leaves, usually more pointed in outline than the English type? This has 5-6 pairs of sterile pinnae in the fertile leaves which do not decrease in size upwards until the last 5 pinnae. The sterile pinnae have 5-12 pinnules, the rachis not winged, and the veins of each pinnule not reaching the margin.

From the Atlas of the British Flora one might draw a conclusion that its presence on the north coast of Caithness is part of a natural progression. However, to one acquainted with the area it does not make sense, because of the large gaps in distance and the generally inhospitable climate, that the English Osmunda regalis should be found in a place like Dunnet Head. It seems not unreasonable that this could have been planted, together with a number of other unlikely species, at some time in the past.

I, also, have a specimen of what I thought at first was Orthilia secunda from the same site near the old Caithness/Sutherland border as that recorded by Mr K. J. Butler, but on further examination it proved to be Pyrola minor, which is the only member of the genus with 10 glands in the disk. Orthilia secunda has 9 glands, Pyrola media and P. rotundifolia ssp. rotundifolia have 10 glands while P.r. ssp. maritima (which I have found as far inland as Peebles-shire) has 13. Linnaeus is my authority here, not C.T. & W.

I do not propose to send any further specimens to anyone for identification purposes, never having had some orchids returned which were sent—and passed to another—over 2 years ago. It seems that amateurs like myself are perhaps such small fry that they get overlooked by professionals.

On the controversial matter of verge trimming, no doubt county councils feel they have a duty to keep their roadsides tidy. Hopefully the situation is being closely watched and a careful record kept because of the likelihood of the less robust species being smothered out by trimming at the wrong time. My own view is that a complete ban on verge trimming is likely to be as harmful as the wholesale shaving of roadsides so often carried out during the last few years.

Yours faithfully,

P. J. KINGTON

N.B.—Serious comment on the various points raised by Mrs Kington will be very much appreciated.—Ed. 5.10.1976 The Editor, Dear Sir, c/o Department of Transport, BET Division, Room 4/42 St Christopher House, Southwark Street, London SE1 0TE

Now that a campaign is mounting against photographers, presumably by those who have trampled their way to completion of their sets of botanical slides, it is worth knowing that for those who have a single-lens reflex camera with interchangeable lens facilities, that a long focus (telephoto) lens used with extension tubes can produce effective close-up photographs, the image on the negative being almost the size of the object, having the advantage that the photographer can keep a metre or more distant from the object.

The correct exposure must be calculated as the aperture setting will have to be adjusted as the effective focal length of the lens will be increased.

Let f = focal length of lens

D = effective diameter of aperture

A = aperture number.

A is sometimes called the aperture ratio or f. number and is marked on the lens in the 16, 11, 8, 5.6... series of numbers called stops.

By definition A = f divided by D.

Varying the iris diaphragm alters the effective diameter of the aperture, thus altering A.

if f1=focal length of lens

A1 = marked aperture number (or stop)

f2 = extended focal length of lens

A2 = correct aperture number for extended focal length.

Thus for a fixed effective diameter of aperture, D

If A = f divided by D

D = A divided by f

therefore D = A1 divided by f1

= A2 divided by f2

therefore $A_2 = (A_1 \text{ divided by } f_1) \ge f_2$

As the aperture number has *increased*, the amount of light entering the camera will have *decreased* and so the exposure will have to be increased. Since the exposure settings are not continuously variable, it is easier to open the aperture. This all seems complicated, but can be cleared with a worked example.

Focal length of lens = 135mm

Length of extension tube barrel=30mm

Then f1 = 135mm f2 = 135 + 30 = 165mm

therefore A2=(A1 divided by 135) x 165

=1.22 A1

This means that the aperture number has increased by about a quarter, so the exposure must also be correspondingly increased. As this cannot be done, the diaphragm must be opened by about a quarter of a stop interval.

This calculation is approximate since it is based on a simple lens and not compound lens design, but I have proved it in practise with Kodachrome X slide film and presumably Kodachrome 64 with equal or better latitude will give satisfactory results.

Yours faithfully,

J. G. SAMSON

23

The Editor, B.S.B.I. News Dear Sir, 84 West Savill Terrace, Edinburgh 9, 12.10.76

I am writing to express my concern about the lack of responsibility shown by some persons on recent C.S.S.F. meetings I have attended. Many such excursions are in remote mountain country and it is essential that persons taking part are aware of the dangers and are asked to follow a few simple rules of mountain safety. I would suggest the following might be appropriate:—

(1) Keep with, and follow the advice of the leader of the excursion. If you do wish to separate from the rest of the party then tell the leader personally and do not relay a message second-hand via another member of the party.

(2) Under no circumstances scramble up crags unless you have clearly stated your intention to all members of the party. If you do dislodge a stone then shout to those below (I have witnessed several near accidents this year through people failing to follow this simple rule).

(3) Be adequately shod (boots are in my opinion essential) and clad for any weather, however fine it may be when you set off. If possible carry a one inch map, compass, and whistle.

I would propose that the Botanical Society of the British Isles advise members each year of the above guidelines and I hope that members will take heed, otherwise I fear that the Society could be faced with a tragedy on one of their excursions in the not too distant future, with the attendant suffering and disgrace to all concerned.

Yours faithfully,

ROSALIND A. H. SMITH (DR.)

18th CENTURY BOTANY

From Sir John Cullum's Naturalist's Journal, 1773 (West Suffolk Record Office) 23 Aug. 1773 Many foreign Plants may be procured by sowing the Dirt which Grocers pick from their Currants, the practice of an old Botanist at Sudbury.

What a pity there was no 'Adventive News' to record his finds!

From Sir John Cullum's interleaved copy of *Flora Anglica* 1762 by W. Hudson. (West Suffolk Record office Library)

Cicuta virosa Mr Tyson and I found it both in seed and in Blossom, in great Perfection, 10 Aug. 1773, on the right Hand of the River, about a Mile from Prickwillow Bridge, 5 Miles from Ely: but not in great Abundance; perhaps it may grow more plentifully, farther into the Fens, it grew on a quaking, water Bog, among the high Fen Grasses: We employed a Fen-Man to get it for us, not daring to venture for it ourselves. We observed but two Plants of it, and those not in Blossom, on the River. the highest Specimens were not above 3 Feet. it's fatal Virtue does not seem to be known there: we enquired of a sensible Man who knew nothing of it's poisonous Qualities, and called it the Water Parsnep, evidently confounding it, with the Sium latifolium, which predominates in these Fens.

J. C. ann. Hudson, p. 106

PUBLICATIONS

Messrs E. W. Classey have now resigned as the B.S.B.I. publications agent. As from 1st November 1976 Dr F. H. Perring has been appointed the sole agent for the distribution of all Society publications other than *Watsonia* and *Abstracts*. Orders in future should be sent to Dr F. H. Perring, Oundle Lodge, Oundle, Peterborough PE8 5TN.

PUBLICATIONS AVAILABLE

£

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Flora of Skye	1.10
Flora of Cambridgeshire	2.00
Flora of Isles of Scilly	5.75
Flora of Surrey (£8.75 until 31st March, 1977)	10.75

Posters

"Please leave wild flowers" (Cowslip)	15p each, 10 or more 10p each		
"Save these flowers"	15p each, 10 or more 10p each		
"Endangered Plants"	35p each, 10 or more 20p each -		
	500 or more 15p each		

All prices quoted include postage as at 1st November, 1976.

Any subsequent increases in postal charges should be allowed for.

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OBITUARY

Obituary notices are generally written about people who have made their mark on their chosen subject or profession. That printed below is different in concerning a young man of great promise, but still unknown, who, had he lived, would surely have enriched botany with his enthusiasm and knowledge. [Editor]

David Francis Archer, Junior member from May, 1974

David Archer died on 5th February, 1976 when he was 19 and on a botanical expedition in Argentina. His overriding interest in botany had begun when he was quite young, about 10 years old, from his mother (a graduate botanist) and his two grandmothers, both skilled amateur botanists. When he went to Westminster School in 1971 he joined the Royal Horticultural Society and was encouraged by his housemaster to attend the society's shows and meetings whenever school duties could be arranged to permit it. By then he had begun a deep interest in the Lathyrus species and he joined both the Botanical Society of the British Isles and the National Sweet Pea Society. His collection of Lathyrus gradually became considerable (described in the National Sweet Pea Society Annual for 1976) and was probably one of the most complete yet assembled. It lacked any South American species and for this reason David decided to make a one-man expedition to Argentina between leaving school and taking up the place he had gained at Trinity Hall, Cambridge, to read botany and mathematics. He was fortunate to have as a base in Argentina the friendship of a family living in Venado Tuerto. With this family he went camping in the foothills of the Andes mountains near Bariloche. On a walk in these foothills he slipped when crossing a shale scree and was killed instantly by hitting his head on a rock; he then fell some 200 feet in an obscure place from which his body was recovered 24 hours later with considerable difficulty.

On the day of his death David Archer had found two Lathyrus species, making some 20 specimens and about 200 other pressed specimens prepared with great care and enthusiasm during the six weeks of his stay. The pressed plants and available seed which he had collected were returned by courtesy of the Argentinian Ministry of Agriculture through the good offices of the British Consul in Buenos Aires. The specimens, after further treatment by David's mother, have been accepted for inclusion in the Herbarium of the Royal Botanic Gardens, Kew.

There seems no doubt that, but for David's accidental death, he would have been a lifelong and enthusiastic member of the Society. His interest in plants, and particularly Lathyrus species, was compelling and his enthusiasm most infectious. Though a Junior Member for only a short time, his pride of membership in this Society was great and it would have been his wish to contribute to its activities and its journal whenever he could usefully do so. The ninetieth anniversary of the birthday of Professor K. W. Braid, O.B.E., M.A., B.Sc., B.Sc.(Agric.), FLS, will occur in 1977 at the end of May and it is hoped to arrange a reception in Glasgow at about that time at which friends can meet Professor Braid. Those who wish to contribute to and/or participate in this are invited to write, enclosing a stamped addressed envelope, to Mr B. W. Ribbons, Department of Botany, The University, Glasgow G12 8QQ, who will send details nearer the time. Professor Braid was at the Royal Botanic Gardens, Kew 1921-5 and then Professor of Botany at the West of Scotland Agricultural College, Glasgow, until his retirement in 1952. He has been a member of our Society for fifty years.

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Orders temporarily to B.S.B.I. c/o Department of Botany, B.M. (Nat. Hist.) except for publications and posters as listed on page to: B.S.B.I. Oundle Lodge, Oundle, Peterborough PE8 5TN

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