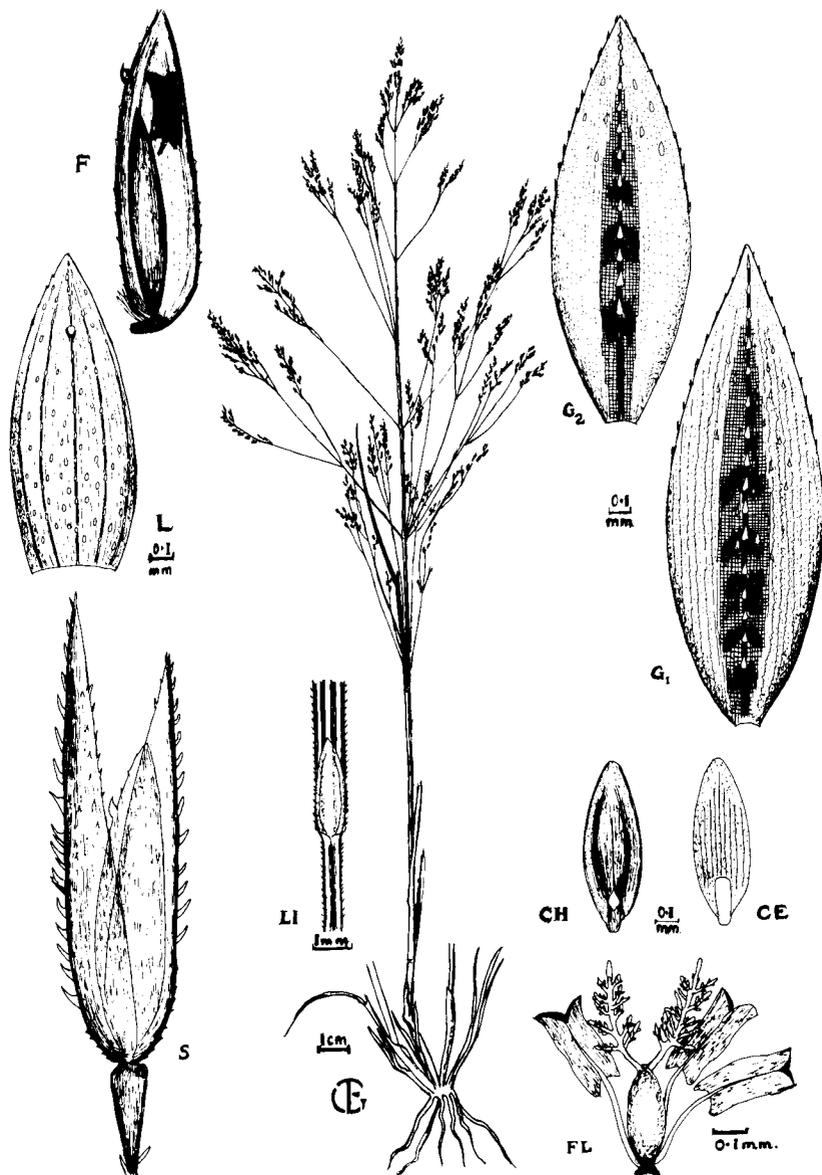


Edited by EDGAR D. WIGGINS

Cowpasture Farm, Felixstowe, Suffolk IP11 9RD.



Agrostis scabra © del. T.G. Evans

ADMINISTRATION

HON. GEN. SEC. (General Enquiries)

Mrs. M. Briggs, White Cottage,
Slinfold, HORSHAM, West Sussex. RH13 7RG.

HON. TREASURER. (Payment of Subscriptions and change of address).

Mr. M. Walpole, 68 Outwoods Road,
LOUGHBOROUGH, Leics. LE11 3LY.

(Please quote membership number on correspondence concerning membership or subscriptions.)

HON. FIELD SEC.

(Information on Rare Plants, Field Meetings etc.)

Miss L. Farrell, N.C.C. P.O. Box 6,
Godwin House, George Street,
HUNTINGDON PE18 6BU.

SUBSCRIPTIONS – IMPORTANT NOTICE

Once again over 100 subscriptions have been received by **standing order** (mainly at the old rate of £5), and we have been unable to trace the members concerned through lack of detail. It is possible that in some instances the banks have failed to cancel standing orders which have been replaced by direct debit mandates. Will you therefore **please check your bank statements** and if you find that you have in fact paid twice, please advise the Treasurer as soon as possible, and also cancel your standing order.

We are delighted to report that apart from the failure of a few banks to cancel the standing orders, the direct debiting system got off to a good start, with over 1,000 members entering the scheme.

A number of members have **not paid** their 1981 subscription, please let me have your cheque as soon as possible to save the expense of a reminder.

M. Walpole, Hon. Treasurer

NEW MEMBERSHIP LIST ?

Council will shortly be considering whether or not to print a new membership list, as stocks of the 1979 list are almost exhausted and in any case very much out of date. The costs of producing such lists are very high, and it is very difficult to gauge how many members do in fact use the list and would want one. It would be very useful in considering the future of the membership list to know how many members do actually benefit from it. If you feel very strongly that a new list should be produced, perhaps you would kindly write to the Hon. Secretary (address above) expressing your views **on a postcard please**. If in fact only a small number of members require lists, we can then investigate the possibility of producing them very cheaply in quite small quantities .

Mary Briggs

BSBI NEWS 28

Contributions intended for publication in this issue
must reach the Editor

BEFORE 31st JULY, 1981

HON. GEN. SECRETARY'S NOTES

Annual General Meeting

Notice of the AGM on Saturday May 9th is in the mailing to members with this issue. The programme for the meeting and for the field excursion on Sunday May 10th together with booking form for the Saturday lunch and/or the Sunday excursion was sent to members in the December mailing. If you have mislaid this AGM booking form spare copies are available from Mrs. Lee, 3 Rosliston Road, Stapenhill, Burton-on-Trent, Staffordshire DE15 9RJ. Please *remember to send s.a.e.* when requesting a spare form, or sending booking – if acknowledgement is required.

We are indeed fortunate to have this opportunity to attend a meeting led by John and Chris Dony, who have not only great experience and knowledge of field botany, but also long associations with this Society and all its activities.

The closing date for booking is April 25th.

Index to BSBI News 1 – 16

Also in this mailing is the Index to the first 16 issues of *BSBI News*, and we thank Mr A.E. Moon for compiling this. As stated in the Index, there are no runs of back numbers of *BSBI News* available – these were published for members according to the membership figures at the time. However, I do have some spare copies of some numbers; if any member has a particular interest in any specific paper or note in a back number of *BSBI News*, I can arrange for a photocopy, or in some cases a spare copy, of individual numbers.

Staines Moor

The Application for gravel winning at Staines Moor v.c. 21 has been turned down at a Public Enquiry, in spite of two alternative planning proposals being put forward.

Staines Moor is neutral grassland in the flood plain of the River Colne in the Thames Valley. It has never been ploughed and is an important site for both plants and birds. We are pleased to report the successful outcome of this Enquiry in which the large volume of work for the conservation of the site, and especially in assembling the evidence for the Enquiry, put in by members of the Surrey Trust for Nature Conservation, supported by BSBI and other conservation bodies has been rewarded.

Sowing wild plants

We know that the whole topic of growing wild flowers has been a controversial subject to some BSBI members. However, I hope that these members will find reassurance in this quotation from the preface by Dr Derek Ratcliffe (Chief Scientist NCC), to the new book on creating grassland – see p. 29. “The Plant species used are all relatively common and widely distributed natives so that their use in this way will not cause scientific confusion by altering geographical distribution patterns. This booklet is concerned with the development of new grasslands starting from bare soil, and does not deal with the establishment of additional species in existing grassland.”

A recent article in the *Sunday Times* on Growing Wild Flowers brought 800 + enquiries to Derek Wells, NCC, Huntingdon in the following 3 weeks! The BSBI Information Sheet on wild flower seeds which I have been sending out has now been updated as a revised NCC/BSBI version of this information leaflet and is available from Mrs M. BRIGGS, White Cottage, Slinfold, HORSHAM, W. Sussex RH13 7RG, or from Mr D. WELLS, NCC, Godwin House, George Street, HUNTINGDON PE18 6BU. (Please send s.a.e.)

A Vasculum in the Attic?

Following the request for Vascula from the attic, *BSBI News* 26:4, there is now a small surplus on offer. Since David Allen's plea *Conserve the Vasculum*, *BSBI News* 12:23-24, we have had a surprisingly varied collection of vascula kindly donated for redistribution to members.

The last quotation we had for a new Vasculum was £11 – £20 according to size, from T. Gerrard & Co, Gerrard House, Worthing Road, East Preston, Littlehampton, West Sussex – please state that you are a BSBI member if writing, and enquire current price.

Medicines for Spring

“An Onlooker's Notebook” in the *Pharmaceutical Journal* of May 10th 1980, reported on the wild plants formerly used in tonic medicines for spring-time in days when the dearth of fresh vegetables and fruit in the long winter months caused deficiency illnesses (including scurvy) in the spring. The plants included *Rorippa nasturtium-aquaticum*, *Lepidium latifolium*, *Galium aparine*, *Stellaria holostea*, *Menyanthes trifoliata*, *Centaureium erythraea*, *Fumaria* spp. *Sedum acre* and *Veronica beccabunga*.

The “Onlooker” of the P.J. quotes a prescription for the spring tonic of John Pechey in 1694. “To cure the scurvy, take of the juice of Brook-lime, Water cresses and scurvy-grass each half a pint, of the Juice of Oranges, four ounces, fine Sugar two Pounds; make a Syrup over a gentle Fire; take one spoonful in your Beer every time you drink.”

Identification from Photographs

Some members disagree with our suggestion that it is not always possible to identify unknown plants from photographs, however clear and photographically good these may be. Those protesting, it seems, are interested mainly in orchids, and I understand that an orchidologist can almost always identify a specimen from a pair of good photos – one of the plant and a close-up of a floret. When photographing a *known* plant it is often possible to ensure that diagnostic features are shown sufficiently clearly, but where the plant species, genus (or even family) is unknown it is not easy to know in advance which are the diagnostic characters, or sometimes not possible to show these in a photograph. I recall the agonised tones in which Eric Clement exclaimed, looking at a (good) slide of a white crucifer from Crete, “if *only* I could dissect its ovary.”

Botanising on Dartmoor

We have a new member Mr F. Allanson, who has a hotel – the Two Bridges Hotel, near Yelverton, Devon, where BSBI members can be assured of a warm welcome. The surrounding area is moorland and an ideal base from which to visit Wistman's Wood – for details of the recently published paper on this, see Book Notes page 28.

Recorders

BSBI vice-county Recorders were mentioned in the BBC Radio 4 Programme “A Small Country Living” in September 1980 (repeated January 1981). Mr Chris Fuller of the NCC, Aberystwyth spoke on his survey of old meadows, with the recommendation that any introductions should be recorded. The accompanying information sheet from the BBC mentions local BSBI Recorders as “always keen to record rare plants.”

Thanks once again to Kathleen Lawson who interrupted her early Spring gardening to type the copy for this *BSBI News*.

Mary Briggs
Hon. Gen. Sec.

THE WILDLIFE & COUNTRYSIDE BILL

A report from the President

At the time of going to press, the Bill has just completed a long and hotly discussed passage through the committee stage in the House of Lords. It has still to go through the report stage, and then all stages in the House of Commons, so that it is not easy to predict what it will look like in its final form.

To the Bill as drafted, a record number of amendments (560) were tabled in the Lords. Botanists were specifically concerned with only four of these.

An amendment to enlarge the list of protected plants was accepted, and it is probably safe to say that this decision will not be reversed. The list is now much more logical, for it contains *all* species endangered in Britain (as listed in the new edition of the British Red Data Book). The only exceptions are some half-dozen which are almost certainly not native or are annuals depending for their survival on their habitat being regularly disturbed. Some vulnerable species are included also. Two Scottish lords attempted to have *Primula scotica* (listed as rare), added to the schedule. If the Government could stretch a point we would welcome the addition of this charming plant to the list, but we could not support the amendment, because we have stressed that our own list included only plants that, on the strictest criteria, appeared to be threatened; and the abundance of the Scottish Primrose in its admittedly restricted stations is contrary to these criteria.

Our second concern is with the sale of protected plants. The Bill allows this, provided that those offered for sale have been reared in cultivation and not taken from the wild. This provision is desirable, both because wild Cheddar Pinks are less likely to be dug up if cultivated plants can be bought from nurseries, and because we do not want unnecessarily to obstruct the legitimate nursery trade. We have merely sought to make policing easier by putting on the vendor the onus of proof that the plant offered for sale is not a "wild plant", so far without much success, but we shall try again.

The deliberate or careless introduction into "the wild" of "any plant not ordinarily growing in Great Britain in a wild state" is wholly banned by the Bill as drafted. We believe that much more precise definitions are needed if this provision is to be anything more than window-dressing, but the Government has not so far been persuaded of this.

Limestone pavements are under special discussion because of their unique geological features, particular vulnerability and associated rare plants. Dr. Geoffrey Halliday has assembled the relevant data to put forward the case for the protection of this very specialised and fast-disappearing habitat.

The conservation of habitats — all S.S.S.I's at the very least — is of the greatest importance as the protection of individual plants becomes meaningless without the conservation of the habitats upon which they depend. This cannot be ensured without the co-operation (in the last resort enforced) of landowners, and the availability of funds for compulsory purchase or compensation. Here the Bill is lamentably weak, and so far the Government has resisted all attempts to strengthen it; but the fight continues.

By the time that *BSBI News 27* reaches you the Bill may be in the House of Commons. If you would like to help, please write to you MP asking him to take an interest in the Bill, and to take a particular interest in the protection of habitats, in marine reserves, and in the *enforcement* of legislation.

R.W. David

IRISH PLANTS – protection at last

The (Irish) Wildlife Act 1976 provides for the protection of the flora and fauna of Ireland. When the Act was published it contained appendices or schedules listing species of birds and mammals which were statutorily protected. No list of plants was given. In recent years the Irish Regional Committee of BSBI has actively advocated that a schedule of rare plants be added to the Act and supplied copious advice to the Minister. We can now report that on 5th November 1980, our efforts bore fruit. The Minister for Fisheries & Forestry, whose department implements the provisions of the Wildlife Act, signed the Flora (Protection) Order 1980, affording protection to fifty-two plant species in Ireland (excluding, of course, Northern Ireland). It is important that all BSBI members living in or visiting Ireland should be aware of this list and the relevant provisions of the Wildlife Act. (see extract below).

There are two categories of species in the list, those which the BSBI Irish Region considers to be rare and endangered and about which we made representations to the Minister, and those which are considered rare in a European context, however rare or common they may be in Ireland. This latter group is included by international convention and includes some species which, relative to the rare and endangered plants on the list, are not uncommon in Ireland. These species are indicated by an asterisk (*).

You may note that the new schedule excludes several species which are known to be very rare in Ireland. Some of these may be extinct, such as *Scheuchzeria palustris* or *Oenanthe pimpinelloides*. It seemed unreasonable to the Irish Regional Committee, and more importantly to the Minister's scientific staff, to include on the list species for which there was little or no contemporary information. Indeed, it has become apparent that there is an embarrassing lack of recent information on several very rare Irish plants. When this becomes available we shall be able to make a case for their protection and a second plant schedule will then be forthcoming if necessary, we are assured. It is now necessary to collate information on the present status of Irish rare plants, in all their known and reported stations so that the provisions of the Wildlife Act can be effectively implemented.

In the case of some species even now on the new schedule we are also in a quandry. *Limonium paradoxum* is on the list because of its European rarity, not because the BSBI asked for it: as far as we know, the cliff on which it once grew has collapsed into the sea!

The Irish Regional Committee is now actively reconsidering the status of Irish plant recording and new guidelines are being drawn up for transmission of records. (see p.25).

Meanwhile, BSBI members should note carefully the provisions of Section 21 (3) of the Act: they must now obtain a licence from the Minister of Fisheries & Forestry, Leeson Lane, Dublin 2, to collect *any* of the scheduled species. Under Section 21 (5) *bona fide* scientific and educational reasons may qualify for the issue of a licence, but (naturally) to date we have no experience of the operation of this section. The National Botanic Gardens, Glasnevin, Dublin 9, maintains living specimens of some of the species listed in the Flora Protection Order. These have been indicated in the list below (†). Enquiries for specimens or seeds of these species should be addressed to the Director of the National Botanic Gardens, if they are required for scientific (*not* horticultural) purposes. It is now the policy of the BSBI Irish Regional Committee to use the Wildlife Act to protect the Irish flora and it will urge the Minister to refuse licences for plant collection in all but well-merited cases, when living material is not otherwise available from the Botanic Gardens at Glasnevin or other botanical gardens. Sad to say, many of

our rare plants have been endangered less by gardeners than by botanical cognoscenti. Our Wildlife Act for all its aspirations and sanctions will be difficult to enforce at best, and impossible to enforce unless it has the wholehearted support of botanists resident in and visiting Ireland, their willingness to abide by it, and to report breaches of it to the Minister.

Copies of the Wildlife Act (1976) and of the Flora Protection Order (1980) are obtainable from the Government Publications Sales Office, G.P.O. Arcade, Dublin 1., at price shown below.

Prices: Wildlife Act IR £1.30; Fl Prot. Order IR £0.24; Postage IR £0.12.

(At present exchange rate IR £ = £0.80 Sterling, thus send £1.04 for Act + 10p postage).

JAMES WHITE, (Chairman, Irish Regional Committee BSBI), Dep't of Botany, University College, Belfield, **DUBLIN 4**.

Extract from Irish Wildlife Act 1976

Protection of 21. (1) Where the Minister considers that a particular species, or particular
flora. species, of flora should be protected, he may by order declare the species to be protected either throughout the State or in a particular area or areas thereof and an order made under this section shall apply –

(a) in case the order declares a species of flora protected throughout the State, as regards any specimen of that species in every place in the State,

(b) in case the order declares a species of flora protected in a particular area or areas of the State, as regards any specimen of that species in every place in an area specified in the order;

provided that in case the Minister proposes to make an order under this section declaring a species of flora protected in a particular area or in particular areas of the State, he shall, before making the order, consult any planning authority in relation to whose area, or any part of such area, the proposed order would, if made, apply.

(2) The Minister shall, as soon as may be after it is made, cause a copy of an order under this section to be sent to the Board and to any planning authority in relation to whose area, or any part of such area, the order applies.

(3) Subject to *subsection (5)* of this section, a person shall not, save under and in accordance with a licence granted by the Minister under this section

(a) cut, pick, uproot or otherwise take any specimen to which this section applies or the flowers, roots or other part of such specimen,

(b) purchase, sell or be in possession of any such specimen or the flowers, roots or other part thereof.

(c) wilfully alter, damage, destroy or interfere with the habitat of environment of any species of flora to which an order under this section for the time being applies.

(4) A person who contravenes *subsection (3)* of this section shall be guilty of an offence.

(5) The Minister may grant a licence to a person for such scientific, educational or other purposes as shall be specified in the licence to do any or all of the following:

(a) to cut, pick, uproot or otherwise take flora of a species specified in the licence and which is of a species to which an order under this section for the time being applies or the flowers, roots or other part of a specimen of the species so specified,

(b) to alter or otherwise interfere with the habitat or environment of any such specimen.

Irish Wildlife Act 1976 (cont'd)

SCHEDULE

<p>* not uncommon in Ireland</p> <p>† living specimens in Nat. Bot. Gdns, Dublin</p> <p>† <i>Ajuga reptans</i></p> <p>† <i>Arenaria ciliata</i> incl. ssp. <i>hibernica</i></p> <p><i>Arthrocnemum perenne</i> (= <i>Salicornia perennis</i>)</p> <p><i>Asparagus officinalis</i></p> <p><i>Asplenium billotii</i> (= <i>A. obovatum</i>; <i>A. lanceolatum</i>)</p> <p><i>Asplenium septentrionale</i></p> <p>† <i>Astragalus danicus</i></p> <p><i>Cardaminopsis petraea</i></p> <p><i>Crambe maritima</i></p> <p>* <i>Deschampsia setacea</i></p> <p><i>Epilobium alsinifolium</i> (= <i>E. alpinum</i>)</p> <p><i>Epipactis phyllanthos</i></p> <p>† <i>Erica ciliaris</i></p> <p>* <i>Eriophorum gracile</i></p> <p><i>Geranium purpureum</i></p> <p>* <i>Groenlandia densa</i> (= <i>Potamogeton densus</i>; <i>P serratus</i>)</p> <p><i>Gymnocarpium robertianum</i> (= <i>Thelypteris robertiana</i>)</p> <p>† <i>Helianthemum canum</i></p> <p><i>Helianthemum nummularium</i></p> <p>† <i>Hydrilla verticillata</i></p> <p>†* <i>Hypericum canadense</i></p> <p>† <i>Inula salicina</i></p> <p><i>Lathyrus japonicus</i></p> <p><i>Lathyrus palustris</i></p> <p>* <i>Limonium paradoxum</i></p> <p>* <i>Limonium transwallianum</i></p>	<p><i>Lotus hispidus</i> (= <i>L. subbiflorus</i>)</p> <p>* <i>Malaxis paludosa</i> (= <i>Ophrys paludosa</i>; <i>Hammarbya paludosa</i>)</p> <p><i>Mentha pulegium</i></p> <p>† <i>Minuartia recurva</i></p> <p>* <i>Najas flexilis</i></p> <p><i>Orobancha rapum-genistae</i> (= <i>O. major</i>)</p> <p>† <i>Otanthus maritimus</i> (= <i>Diotis maritima</i>)</p> <p>* <i>Pilularia globulifera</i></p> <p><i>Poa alpina</i></p> <p><i>Polygonum maritimum</i></p> <p><i>Pyrola rotundifolia</i></p> <p><i>Ranunculus tripartitus</i></p> <p><i>Rorippa islandica</i></p> <p>† <i>Salix phylicifolia</i></p> <p>† <i>Salvia horminoides</i></p> <p><i>Saussurea alpina</i> (= <i>Serratula alpina</i>)</p> <p>† <i>Saxifraga hartii</i></p> <p><i>Saxifraga hirculus</i></p> <p><i>Saxifraga nivalis</i></p> <p><i>Simethis planifolia</i></p> <p><i>Spiranthes romanz offiana</i></p> <p><i>Taraxacum gotlandicum</i></p> <p>† <i>Trichomanes speciosum</i> (= <i>T. radicans</i>)</p> <p><i>Trifolium glomeratum</i></p> <p><i>Trifolium subteraneum</i></p> <p>† <i>Trollius europeus</i></p>
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Survey at W. Sussex C.C. College of Horticulture and Agriculture, Brinsbury

During 1980, volunteers from conservation and natural history organisations, under the auspices of the Sussex Farming and Wildlife Advisory Group, took part in a survey of the wildlife on the WSCC Brinsbury College Farm. One of the seven groups involved was the Sussex Botanical Recording Group who in seven visits recorded over 420 plants on this fairly typical mixed wealden farm. The total variety was very good (reflected also in the number of bird species found breeding — 70 plus), and one particularly interesting plant *Stellaria neglecta* (an uncommon plant in West Sussex) found in one of the woodland areas. Also of interest was the carpet of *Adoxa moschatellina* only in one woodland, where a band of sandstone lightened the weald clay.

The work is not over yet. It was not just a recording exercise, but the results have led to various management suggestions being put forward. Already, hedgerow saplings Oak, Ash, Field Maple, Willow and Spindle have been marked so that they are allowed to grow on to trees as the hedges are trimmed in winter, and it is planned to plant a new hedgerow on a very open part of the farm and to manage one of the farm ponds in the interests of nature conservation.

All this could not have been achieved without the help of many volunteer helpers, to whom thanks are expressed.

ANN GRIFFITHS, Secretary, Sussex Farming and Wildlife Advisory Group, County Planning Dep't, County Hall, CHICHESTER PO19 1RL.

NOTICES

LADY'S SLIPPER ORCHID

Thanks to the excellent response by botanists to the appeal **NOT** to visit the site during 1980, the badly eroded ground is recovering and the plant actually produced 4 flowers.

However, may I once again request pilgrims (and others), to exercise restraint and **REFRAIN FROM VISITING** this site in 1981, and thus enable last year's improvement to continue.

A colour slide (£1) and prints (colour £2, B & W 50p – all proceeds to conservation) are available from:

NCC Office Matmer House, Hull Road, YORK YO1 3JW

BRITISH MUSEUM (Nat. Hist.)

SATURDAY OPENING OF THE BOTANY DEPARTMENT

As a result of the present financial squeeze, which will be only too familiar to all members of the BSBI, the Department of Botany at the BM(NH) will no longer be open on Saturdays for general inquiries. However, we are anxious to be of assistance to *bone fide* amateur botanists who want to make use of the Museum collections, but find it difficult to come to the Museum during normal weekday opening hours. We are therefore introducing a system that will permit members to work in the Department on Saturdays, *providing reasonable advance notice is given*, by letter or telephone, to the officer in charge of the appropriate section. We have endeavoured to make these arrangements as widely known as possible, but members can assist us by telling anyone known to them who might be interested, but may not have heard about the new arrangements. For your convenience, I am listing below the telephone extensions of the heads of sections most likely to be involved with BSBI inquiries:

Museum telephone number – 01 589 6323
British Herbarium – Richard Pankhurst Ext. 701
General Herbarium – Arthur Chater Ext. 512
European Herbarium – Chris Humphries Ext. 405
Fern Section – Clive Jermy Ext. 428

J.F.M. CANNON, Keeper of Botany.

KEYS FROM BRITISH MUSEUM (NAT. HIST.)

Demand for the keys publicised last year (*BSBI News* No. 24) has been considerable and very encouraging. Each key comes as a pack of cards with instructions, and sometimes (where marked *) with a printed key as well.

Keys available are:

- 1) *Taraxacum*. A new version (Mark 4) with new species and other revisions, will be ready this spring.
- 2) *Euphrasia*. As previously advertised.
- 3) * Key to grasses by vegetative characters. Revised version, covering grasses of acid, neutral and basic grasslands, to be ready this spring.
- 4) * *Rubus* in Scotland. A new key, covering all species known north of the border.

All keys have been checked and tested, but corrections and comments will be gratefully received. Costs of computing and postage have increased, and the standard charge will now be £2.00 per key.

R.J. PANKHURST, Botany Dep't, British Museum (Nat. Hist.) LONDON SW7 5BD.

UNIVERSITY BOTANIC GARDEN CAMBRIDGE
150th Anniversary Celebrations, 10th & 11th July 1981

In 1831 Professor J.S. Henslow persuaded the University of Cambridge to buy the site of the present Botanic Garden, an event which is being celebrated by special meetings and publications in Cambridge this year.

The main meetings are on Friday 10th and Saturday 11th July, and interested members of the Society are invited to apply to attend some or all of these, and take part in a tour of Gardens on Sunday 12th to Tuesday 14th July, following the meetings. A detailed programme and applications forms are available on request from the address given below.

In connection with the Anniversary, the Cambridge University Press is publishing in April/May, a book entitled '*The Shaping of Cambridge Botany*' by Dr S.M. Walters, Director of the Garden, and the Garden is publishing privately a Facsimile of Henslow's 1831 paper '*On the Examination of a Hybrid Digitalis*'. The main book will be available from booksellers, and order forms for the Facsimile publication can be obtained from: THE DIRECTOR, University Botanic Garden, CAMBRIDGE CB2 1JF.

J.E. LOUSLEY – commemorative address

The commemorative Address entitled "William Turner (c. 1508 – 1568) and Job Edward Lousley (1907 – 1976)", delivered by Prof. W.T. Stearn, President of The Linnean Society at the dedication of the memorial tablet to Ted Lousley in St Olave's Church, Hart Street, City of London, on 28th October 1979, was published in the *Biological Journal* of the Linnean Society, 14, parts 3 & 4. Offprints are available by sending 50p and large SAE to:

Mrs D.W. LOUSLEY, 14 Javelin Court, 22 Streatham Common North, LONDON SW16 3HL.

THE LATE C.E. HUBBARD'S LIBRARY

Members may like to know that the above has been purchased by the specialist bookseller Mike Park of Wimbledon, who will be offering the books and serials, some 600 titles, for sale, in a catalogue due for issue in mid-April 1981. Botanists, private or institutional, can obtain copies of this catalogue in advance of its general distribution by applying to:

MIKE PARK, 119 South Park Road, LONDON SW19 8RX. (01-542 8390)

FLORA OF NORFOLK

In *BSBI News* 26, under "BSBI PUBLICATIONS" it was announced that a second edition of the above is being prepared. We have since heard from Mr. E.L. Swann that the publishers consider it would be uneconomic to publish it at the present time, hence, it is unlikely to appear in the near future.

A COUNTY FUNGUS FLORA

As a follow-up to the survey of vascular plants and bryophytes in Warwickshire published in 1971 as *A computer-mapped Flora* (Cadbury, Hawkes & Readett), a survey of the fungi and lichens in the same county was undertaken, and has recently been published as *A Fungus Flora of Warwickshire* edited by Malcolm C. Clark. Claimed to be the first of its kind, this Flora records some 2,600 species and gives much information on habitats and distribution, as well as interesting introductory chapters describing the methods adopted. The book, of 272 pages, with soft cover, is published under the auspices of the British Mycological Society and is offered to B.S.B.I. members at a reduced price of £7.00 (incl. £1 p. & p.), obtainable from its Editor who is also dealing with the distribution: M.C. CLARK, 1 Bittell Lane, Barnt Green, BIRMINGHAM B45 8NS.

PRACTICAL BOTANY

Amongst the 370 courses being held at their nine centres during 1981, by the **Field Studies Council** there are a number with special appeal to botanists. Impossible to mention them all, here is a selection to demonstrate the range and versatility of the syllabus offered by FSC.

Considering first the main groups of plants to which whole courses are devoted: *Fungi* occupy 3 weekends in Surrey, a week's foray in Somerset, besides three week-long studies, all taking place in September and October; *Lichens*, which are becoming increasingly popular, get three weekends and two full-week courses; *Mosses and Liver worts* have two, and *Ferns* only one, but the various aspects of *Trees* (which embraces woodlands) have more than half a dozen. There are two opportunities to have a *Weekend with Orchids* in Surrey in June, and two separate weeks and a weekend looking at *Grasses, Sedges and Rushes* in places as far apart as Gwynedd, Shropshire and N. York, all in July, or, for those who like to be beside the seaside, *Seaweeds and Seashores* in Dyfed.

Ecology, of course, features prominently, covering *Estuaries, Seashores, Saltmarshes and Sand-dunes* also in Dyfed, *Plants of the Coast* in Pembroke, *Mountain Ecology* in Snowdonia, *Flowers of the Limestone and Rocks, Flowers and Scenery* both on the Pennines, and for the Wets, *Grassland, Meadow and Marsh* and a rather more advanced course, *Fresh Water, Marsh and Stream*, both in Constable's country, or *Bogs and Fens* in N. Yorks should be suitable. *Backyard Safari* sounds intriguing as does *Churchyards or Wild Gardening* (one in May, another in late September). Those who think small is beautiful will find *Mini-environments* in Somerset, *Identification and Ecology of Lower Plants* at Malham Tarn, and *Micro-climate Measurement for Ecologists* of interest since they are for people who already have some knowledge of these subjects.

Apart from the choice locations in which the FSC Centres are situated, there are specific studies of Dartmoor, Exmoor, Snowdonia, Suffolk, Pembrokeshire, the North Downs, the Welsh Border, the Yorkshire Dales, the River Severn, Bristol Channel, Quantock Hills and Somerset Levels.

Inevitably, costs have increased and the charge for a standard week, (Wednesday to Wednesday) at one of the Centres is £86, though in the programme there are a number of weekend (Friday to Sunday) and other short courses with fees from £32.

Only the sketchiest outline is possible here, so if you want to know about any or all of the Council's courses, you should contact:

Field Studies Council Information Office, Preston Montford, SHREWSBURY SY4 1HW.
Telephone: Shrewsbury (0743) 850380.

SNOWDONIA STUDY CENTRE

This National Park Study Centre is situated close to Maentwrog in a large country house overlooking the beautiful Ffestiniog valley and runs a series of courses on a wide variety of courses. In this year's programme, is a week's study entitled "Difficult Plants" (conducted by Eileen Bradbury, a BSBI member on the Centre's staff and Peter Benoit, the Recorder for Merioneth) on July 11 - 18 (£78). Two study holidays suitable for family groups organised by The Holiday Fellowship are (1) "Mosses, Ferns and Flowers" (July 25 - August 1st) and (2) Wild Flowers and their Habitats (Aug 15 - 22), both £99.50 which includes rail travel from any part of Great Britain.

Further details and programme from:

The Principal, Tan y Bwlch, Maentwrog, BLAENAU FFESTINIOG LL41 3YU.

THE CONSERVATION OF FLOWERLESS PLANTS

A one-day Symposium on the conservation of non-vascular cryptogams is being organised by the Linnean Society at Burlington House on Saturday 26th September 1981: the convenor is Mr Frank Brightman. The idea of holding this Symposium sprang from the Cambridge Conference on "Biological aspects of rare plant conservation" held in July 1980. Speakers will include: Dr Derek Ratcliffe on bryology, Dr D.E.G. Irvine on seaweeds, Dr Bruce Ing on fungi, Dr Oliver Gilbert on transplant experiments with lichens, Dr Paddy Coker and Dr Mark Seaward. For further details please write to: The Executive Secretary, The Linnean Society of London, Burlington House, Piccadilly, London W1V 0LQ.

Lundy Field Society Excursion to Lundy

This will take place on Saturday, May 30th 1981, leaving Ilfracombe Pier 10.30a.m., returning 7.45 p.m. Tours of the island (including a botanical tour) will be arranged. Further details and tickets (£7 each) available from:
PETER COLE, 2 Beaufort Close, REIGATE, Surrey RH2 9DG.

Countryside Film

Whatever Happened to the Countryside? is a new 25 minute colour film, sponsored by the Countryside Commission contrasting landscapes today with those of 20 years ago, and including "the variety of wild plants in hedges, explored by John Hillaby." Hire is free from:
Central Film Library, Bromyard Avenue, Acton, London W3 7JB.

University of London Certificate & Diploma in Field Biology

The two-year course for the Certificate is mainly through a home study scheme, but with two full-time practical courses, each of two weeks, held in August of consecutive years. A third year course for the Diploma is now also available. Further details, syllabuses and application forms can be obtained from:
MISS H. BOONE, Department of Extra-Mural Studies, Room 255, 26 Russell Square, LONDON WC1B 5DQ.

Danywenallt Study Centre. Brecon Beacons National Park.

The programme at this centre includes a basic ecology course for conservationists *Plants in their places* June 23 – June 25 1981. Further details and programmes from the Director of Studies, JOHN JONES, Talybont-on-Usk, BRECON, Powys LD3 7YS.

Losehill Hall, Peak National Park Study Centre, Castleton.

The programme includes *Wildlife and Flowers of the Peak* June 5 – 7. Further details and programmes from:
PRINCIPAL, Peak National Park Study Centre, Losehill Hall, CASTLETON, Derbyshire S30 2WB.

The Open University

Although there is no course in Botany, there is this year an interesting series on ecology. The Open University accepts undergraduate applications from January to June for the academic year which starts the following February. Further details and 'Guide for Applicants' from:
A. DAVIES, Information Services, The Open University, P.O. Box 48, MILTON KEYNES MK7 6AA.

NEW ILLUSTRATED BRITISH FLORA (Butcher)

If anyone has a copy of Vol. 1 of this work, by R.W. Butcher and published by Leonard Hill 19, that he is willing to dispose of, will they please contact – naming price required.
T.G. Evans, La Cuesta, Mounton Road, CHEPSTOW, Gwent NP6 5BS.

REQUESTS

BRITISH AND IRISH HERBARIA

British Herbaria, an index to the location of herbaria of British vascular plants, with biographical references to their collectors, was published by the Botanical Society of the British Isles in 1958. Since then, data on many additional collections have been accumulated, and some information given has become outdated. The Society has, therefore, authorised the preparation of a **new edition** of the book with a view to its being published in 1983. Curators of herbaria at university botany departments, museums and other institutions are accordingly invited to submit to the undersigned data on collections in their care for inclusion in the revised edition. The information required is (1) Surname and full Christian names of collectors. (2) For deceased botanists, year of birth and of death, where known, alternatively approximate period when collection was made. (3) Approximate number of sheets in each herbarium or collection if known. A herbarium should be prefixed by an asterisk to distinguish it from smaller collections. (4) Any area of specialization, e.g. vice-county or smaller area, particular groups or genera studied, etc.

Similar data in respect of herbaria in private hands is also solicited.

D.H. KENT, 75 Adelaide Road, West Ealing, LONDON W.13 9ED.

Letters of the late DR C.E. HUBBARD

The BSBI Records Committee at their February meeting decided that efforts should be made to retrieve correspondence the late Dr C.E. Hubbard had, with members of the Society. Many of his letters contain valuable and interesting information on British and alien species of grasses; invariably they illustrate the trouble he took in giving service to members.

The Committee feels these letters should be retrieved or accounted for, lest they get lost, and placed in the care of the Society's Hon. Archivist. Two options are open. Members can either, (i) make an immediate gift of their letters, or (ii) inform the Society that they intend to leave instructions in their wills to ensure that the letters go to the BSBI Hon. Archivist. In the latter case, they are requested to see that the bundle or folder containing them is clearly labelled to this effect.

I have been asked to co-ordinate this project, and would therefore be grateful if members who have retained letters or notes from Dr Hubbard, will get in touch with me saying whether they are prepared to send their collection now or are amending their wills to leave instructions for these documents to go to the BSBI.

P.J.O. TRIST, Glovers, 28 High Street, Balsham, CAMBRIDGE CB7 6DJ.

SAXIFRAGA GRANULATA IN EUROPE

Would anyone botanising on the Continent this Spring, please look out for *S. granulata*. For my taxonomic research project I need a few bulbils or seed from European (and North African) populations together with a note on locality and habitat. Living material of *S. graeca*, *S. carpetana*, *S. corsica*, *S. cintrana*, *S. bulbifera*, *S. dichotoma*, *S. gemmulosa*, *S. haenseleri*, *S. cernua* and *S. rivularis* would also be of value. Postage will be refunded.

I should like to thank those botanists who have already offered to collect European material and those who have kindly supplied information concerning populations of *S. granulata* in the British Isles.

D. STEVENS, Plant Biology Dep't. The University, NEWCASTLE UPON TYNE NE1 7RU.

UPPER TEESDALE RESEARCH, 1981

The annual Teesdale Field-Week directed by Dr Margaret E. Bradshaw, MBE, will be spent working for the Nature Conservancy Council in the National Nature Reserve there on July 18 – 25. In 1981, we shall continue the valuable work of surveying the calcareous flush systems in Widdybank Pasture and adjacent areas. These flushes are rich in Teesdale specialities and it is important that a record be made of their frequency and distribution. Alternative projects will be planned in case the weather is unsuitable for the primary project. Whatever we do will be interesting and suitable for amateur and professional botanists, young and older from 5th form to 60+, who are interested in the distribution and history of the British Flora.

It is not necessary to know the Teesdale plants before coming to help. After a little practise, identification of the particular plants to be mapped has been quickly learnt – but *this is not work for the absolute beginner*. Chief requirement is a keen eye for plants much chewed by sheep cattle and ponies. Reward – a “holiday” with a difference, the opportunity to participate in a specific research project and experience of what some research entails, plus good company and food. Although not a botanical sight-seeing tour, during the week there will be a chance to see many Teesdale species, besides illustrated talks about the Dale and its flora.

Accommodation at Langdon Beck Hotel is excellent at about £80 inclusive of VAT, and there is a comfortable Youth Hostel near-by. **Do not book accommodation yourself. I will do it.** Early replies will be much appreciated. Youth Hostel residents **please reply early**. For booking form, or further details if required please send s.a.e. to:
Dr M.E. BRADSHAW, 32 Old Elvet DURHAM DH1 3JB.

HELP WITH THE ALIEN FLORA

Many members will know of my Alien Flora, long overdue, to be published by the Ray Society. It will be in full harmony with the scholarly lists being produced by Mr E. Clement of all the aliens ever recorded in our islands, and will contain illustrations and descriptions of about 450 of these which are not already in Vols 1 and 2 of Dr R. Butcher's *New Illustrated British Flora*. The three volumes therefore cover in effect, all the established or regularly recurring plants of the British Isles.

Most of the drawings are done and most of the descriptions at least drafted, but the final stages are taking far too long, as my time gets ever more eroded by endless other duties. So, help is badly needed to finish off the job. Much of what remains is checking, co-ordinating and editing, but in the course of it quite a bit should be learnt of useful interest, plus the satisfaction of having had a hand in this much needed book.

I envisage helpers each taking whatever families appealed to them. How many will, please, come to my aid?

D. McCLINTOCK, Bracken Hill, Platt, SEVENOAKS, Kent TN15 8JH.

SILENE PRATENSE (= *S. alba*)

I am working on the variation pattern and habitats of *S. pratensis* in Britain and would be most grateful for seed samples from as many localities as possible. I am especially interested in populations from the chalk or chalk/clay transition in S. England.

Please take 10 – 20 seeds (from more than 10 individuals, ideally) and put them in a paper bag or envelope. Also, please record number of individuals sampled, locality, grid reference and habitat. Send (postage refunded) to:
DR H.C. PRENTICE, Biology Dep't, Building 44, The University, SOUTHAMPTON SO9 5NH.

ALIENS and ADVENTIVES

ADVENTIVE NEWS 19

compiled by Eric J. Clement

This issue is devoted entirely to the family *Gramineae* in memory of the late Dr C.E. Hubbard who befriended so many of us. I have quoted freely from his treasured letters. Some 15% of all Br alien species are graminaceous, rising to a hefty 30% in wool waste: CEH graciously gave up very much of his valuable time to determine them.

BULBOUS CANARYGRASS IN BRITAIN

Phalaris aquatica L. (*P. tuberosa* L.) is briefly mentioned on p. 13 of the 2nd edition, only, of Hubbard's *Grasses* (but does not appear in the index of species), as being "occasionally sown for grazing or hay." I first drew attention to it in *BSBI News* 21, p. 18, since when I now realize that it may be quite widespread, but unrecorded. Mrs E.M. Hyde points out that in the 1980 *Farm Seeds* catalogue of W.A. Church (Bures, Suffolk), p. 12, it is proffered as a "game cover crop". It reads (*sic.*): "Canary Grass (*Phalaris Tuberosa*) – Deep rooted Perennial. Excellent Game cover and recommended by the Game Conservancy. Can withstand severe dry weather and very cold winters." Bulbous Canarygrass is the English name recommended by the U.S. Dept. Agr. (E.E. Terrell, 1977) for this native of the Mediterranean region.

P.J.O. Trist found it at Rushbrooke, (Suffolk) near Bury St. Edmunds, sown as a silage crop back in 1969, on arable headland (= strip left unploughed at end of field) game cover at Stetchworth, (Cambs) near Newmarket, and similarly at nearby Balsham (Cambs.), both in 1978. It was at first confused with *P. paradoxa* (comm. G.M.S. Easy). Det. EJC. Dr A.C. Leslie also saw it, "self-sown", on trackside, by Catley Park Farm, near Linton (Cambs.), Aug. 1980. Hb. ACL. Det. EJC. It was not in the close-by 1980-sown mixture of pheasant food (consisting of *P. canariensis*, *Helianthus annuus* & *Fagopyrum esculentum*), but one mile away, at Linton, *P. aquatica* had been sown this year for pheasants.

P. aquatica was also seen near Birmingham by G.M. Kay *et al.* on the Wild Flower Society meeting in Aug. 1980, led by Prof. J.H. Fremlin. Det. EJC. "It was the remnants of a previous year's crop presumably or an abandoned crop, there being so much of it. All very tall, with heads like *P. minor*," and apparently setting good seed. I also received 1980 reports of it as a crop in Suffolk and W. Kent (see last *BSBI News* p. 19).

Dr C.E. Hubbard always wisely avoided using the name "*P. aquatica* L.", as it has been long misapplied to *P. coeruleascens* Desf.) e.g. in Nyman's *Conspectus Florae Europaeae*) – swapping the names round, as demanded by the ICBN, causes potential confusion to all. Even the draft of *Fl. Eur.* 5 was altered at a late stage!

This species is also a regular (but never common) wool alien, although, very surprisingly, it is unmentioned in R. Probst, 1949, *Wolladventivflora Mitteleuropas*. Perhaps it is also only recently established in wool-producing areas? Miss M. McCallum Webster has distributed to our national herbaria at least 10 separate wool alien gatherings of it from vc s 30, 37, 63, 64 & 79, and it has also occurred as a shoddy weed in vc s 3, 12, 59 & 62, according to J.E. Lousley and T.B. Ryves.

R.J. Flood, taxonomist at the Official Seed Testing Station, Cambridge, tells me of its past presence as weed seeds in grass seed and clover seed from the Med., NZ, & Amer. One final point – *P. aquatica* × *arundinacea* could be looked for in suitable spots. It would be new to Br, but this hybrid occurs naturally, as well as being cultivated, in tropical E. Africa, according to W.D. Clayton (1970). It is also being tested for its crop potential in New Zealand (*N.Z. J. exp. Agric.* 3:147-51 (1975)).

THREE PANICUMS

About 26 species of *Panicum* spp. have been recorded as aliens in Britain. The very great majority of specimens are *P. miliaceum* L. (mis-spelt in CTW as “*P. mileaceum*”). CEH wrote (3.5.79): It is “commonly introduced to tips as waste from the seed fed to cage birds. There are numerous cultivars varying in plant size, in the form of the inflorescence, length of awns when present, colour of glumes and seeds which may be white, yellow, red, brown or black. An account of the varieties is given by F.T. Hubbard in *Rhodora* vol. 2: p. 187-196 (1915).”

P. dichotomiflorum Michx (see RHS of Graham Easy’s splendid drawing) is very much rarer, but is typical of soya bean waste from N. America. From this source it was at Harefield (Middx) in 1945, and repeatedly in the Stone – Erith area (W. Kent) since 1975, whence the plant is depicted. It rarely develops its panicles very well in Br, needing more heat for its proper development, and is thus probably sometimes overlooked, esp. if in leaf only. It has, for example, become a serious pest of maize crops in Italy. One plant was on the disused Brislington tip (N. Somerset) in Oct. 1979, seen by A.L. Grenfell & T.G. Evans. Hb. ALG & Hb. TGE Det. CEH *Fl. Eur.* 5 keys it out as an annual, without tillers at anthesis, with leaf-sheaths glabrous and spikelets 2 - 3 mm. But compare, “usually 3 - 3.5 mm”, given by Jean Vivant in *Bull. Soc. bot. Fr.* 125:522 (1978), where he critically compares it with *P. chloroticum* Nees and *P. laevifolium* Hack., and illustrates spikelets of all three species. He points out the constant presence of palea in the sterile floret, which is always absent in *P. chloroticum* (a species not yet recorded for Br).

P. gilvum Launert (*P. laevifolium* Hack. var. *contractum* Pilger) occupies the LHS of our drawing. It was not described as a species until 1970 (in *Mitt. Bot. Munchen* 8: 153-156) and has never been fully illustrated before. It is a native of sandy soil on the margins of vleis in SW Africa, and only 4 gatherings exist from there! Var. *contractum* (1940) has been confused until recently with the plant now called *P. impeditum* Launert (1970). Our drawing shows one of the offspring from the plants (det. CEH) that occurred as a wool alien at Blackmoor fruit farm (N. Hants) in late 1973. From Blackmoor, it curiously became a weed for several years in my own gardenlet and Dr E. Launert, himself, kindly confirmed the name and accepted fresh and pressed specimens for BM. CEH wrote of it (8.1973): “it agrees well with this relatively new species in habit, branching of culm, partially enclosed inflorescences and in the structure of the spikelets. The upper glume and lower lemma are many nerved (c. 11-nerved).”

CONFUSION BETWEEN WHITE AND JAPANESE MILLETS

Dr Hubbard’s *Grasses* (1968) gives (p. 365), as “rarely introduced”, the Asiatic cereal *Echinochloa frumentacea* Link. Alas, “splitters” now point out, and fairly too, that two separate species are involved: *E. frumentacea* (s.s.) and *E. utilis*, the former being much the scarcer in Br, but the complex is to be found, nowadays, on most large refuse tips in most years (although published records are few!) Both are important constituents of bird-seed mixes. It means that all published records need re-checking from the voucher specimens (I hope they were preserved!). CEH explained the differences to me; he wrote (18.11.1978):

“While *E. frumentacea* Link is a derivative of *E. colona* (L.) Link and is a cereal of Indian origin, *E. utilis* Ohwi & Yabuno is derived from *E. crus-galli* (L.) Beauv., and is a cereal of Japanese origin. The latter cereal differs from *E. frumentacea* by its slightly larger (–4mm), more pointed, ± purplish spikelets; it has a brownish grain at maturity, whereas in *E. frumentacea*, the spikelets are about 3 mm long, pale, and obtuse at maturity, and with a whitish grain when ripe. You will find an account of both by Yabuno



Panicum gilvum

© del. G.M.S. Easy 1977

Panicum dichotomiflorum

in *Cytologia* (27:296-305, 1962) and *Jap. Journ. Bot.* (19:277-325, 1966), and by Joyce Vickery in *Flora of New South Wales*, No. 19:195-198, 1975). *E. frumentacea* is commonly known as White Millet and *E. utilis* as Japanese Millet.”

True *E. frumentacea* (s.s.) was certainly at Brislington tip (N. Somerset) in Oct. 1978, found by A.L. Grenfell & T.G. Evans, and I have a few other definite records. Graham Easy’s very professional drawing (reproduced here, with permission, from *Trans. Kent Field Club* 6:89 (1977), clearly shows the diagnostics of A) *E. utilis* (*E. frumentacea* auct., non Link) and its wild, weedy relatives of B) *E. crus-galli* and C) *E. colonum*. True *E. frumentacea* is not depicted, but it would very closely resemble A).

ROUGH BENTGRASS IN BRITAIN

Agrostis scabra Willd. is probably the only alien grass not appearing in Dr C.E. Hubbard’s *Grasses* (Penguin Books; 2nd edn., 1968) or in CTW that has recently become widespread and fully naturalized in Br. (*A. castellana* might also qualify? – but field records are very scanty). Species of this critical genus are only too readily overlooked! “I walked through an abundance of *A. scabra* for several minutes before I realized it wasn’t a British species” is how Miss F.E. Crackles first stumbled on it, in a disused railway siding in West Hull (SE York) in 1978; “It has persisted and is now in even greater abundance in 1980.” This site “was once important and had connections with widely scattered sites. There was a link with the docks in Hull where there was a corn silo, so there could have been importation from N. America.” CEH wrote (3.5.79):

“The *Agrostis* is *A. scabra* Willd., a N. American species occasionally introduced to the British Isles, perhaps established in some places as it produces a plentiful supply of seeds. At one time it was treated as a synonym of the closely related *A. hyemalis* (Walt.) B.S.P. as in the first edition of A.S. Hitchcock *Manual of the Grasses of the United States* (U.S. Dep’t Agric. Misc. Publ. No. 200, 1935) but in the second edition, revised by Agnes Chase, p. 349, fig. 489, 1951, the two species are separated *A. hyemalis* has smaller spikelets 1.5 - 1.7 mm long etc., whilst those of *A. scabra* are 2 - 2.7 mm in length, with lemmas longer than the caryopsis, as in your plant. I have seen specimens from various parts of Britain where materials of N. American origin have been introduced.”

It is a perennial grass, but, I suspect, it often behaves as an annual in Br. Indeed, the *Fl. Eur.* draft (Stage 2) keyed it out as “annual” only! These poorly, annual specimens key out to *A. clavata* Trin. in *Fl. Eur.* 5, but this has flat leaves, up to 4(-7) mm wide, and lacks the characteristic, bristle-like basal leaves of *A. scabra*. Trevor Evans has supplied the super cover drawing, drawn from locality c) below. Note that the panicle is often partly enclosed within the uppermost leaf sheath and that the long panicle branches are naked for 2/3 their length. The long ligule (2 - 3 mm) and the tiny anthers (c. 0.5 mm) are other diagnostics. It must exist undetected in many vcs; railways provide the most likely site, but sand-pits and quarries should also be searched in mid to late summer. It is undoubtedly established both N. and S. of Glasgow (see *BSBI News* 25, p. 14) – its native range may include Greenland and NE. Asia, and certainly Alaska!

W.R. Phillipson gives the earliest records for Br. in *J. Lin. Soc.* – *Botany* 51:103 (1937), as Fessit (Westerness) in 1896, Finchley (Mddx) in 1910 and Avonmouth Docks (W. Glos.) in 1928. So many records now exist that I quote just a few. It is, for example, “established or a frequent casual in W. Lancaster” (comm. E.F. Greenwood). I, personally, first found it with Dr J.L. Mason at Bordon Camp (N Hants) in Sept. 1966, a NCR (= new vice-county record); Lady Anne Brewis tells me it is still abundant and persisting there (in 1979), although the railway lines have now been removed. Introduction here was probably via unloading of wool-shoddy: in wool waste it is scarce, but has occurred



A — *Echinochloa utilis*

B — *E. crus-galli* (var. *brevisetata* to left of B)

C — *Echinochloa colonum*

D — *Bracharia marlothii*

© del. G.M.S. Easy 1981

in at least vcs 12, 30, 37, 59 & 64 (see LTN and RNG). Later in Sept. 1966 I discovered it again, with the Surrey Flora Committee, on railway tracks at Nine Elms goods-yard (Surrey), hundreds of plants, all very sooty! It was on Shepperton tip (Middx) in 1972 – EJC *et al.* A railway siding at Blackheath (W. Kent) provided another NCR, in Aug. 1971, for R.C. Palmer – he found several clumps that “looked as though they would persist” (OXF). Finally, three new records:

a) A few tufts at the end of the platform at Waterloo Station (Surrey), 1980. Dr A.C. Leslie. Passenger trains, only, arrive here; probably it has spread, perhaps indirectly, from the nearby Nine Elms (now defunct), two miles down the main line. Doubtless, it is elsewhere on BR Southern Region lines!

b) Abundant in sand spread to cover a rubbish dump at Stone (W. Kent), Sept. 1980. J.R. Palmer. Conf. EJC. Whence came the sand?

c) Railway ballast (mainly boiler ash), Newport Docks (Monmouth), July 1980. T.G. Evans, A.L. Grenfell, *et al.* Amongst bark strippings from huge telegraph poles were 35 plants of *Illecebrum verticillata* (not a grass!) and hundreds of *Agrostis* plants all around. The timber had been imported from Norway, Finland, Scotland and Hampshire. TGE remarks that the Newport plants do not match the *Fl. Eur.* 5 description very well; numerous spikelets were examined, most were c. 2 mm, max 2.5 mm (not 2-3.5 mm) and anthers were mostly 0.25 - 0.3 mm (not up to 0.8 mm); the scabridity of the lemmas needs a x 100 mag. before it is convincing (not a field character!); the dorsal awn (“often” present) was never more than a tiny basal stump (see drawing). The very minute (to absent?) palea was never satisfactorily dissected out – hence none appears on the fig.; the lodicules were similarly elusive. Presumably more than one “strain” of this species exists – I note that the Greenland (& E. Canada) plant has been referred to var. *septentrionalis* Fern. (Pederson, 1972:73).

Rough Bentgrass is the English name quoted by E.E. Terrell, 1977 (USDA Agriculture Handbook No. 505, *A checklist of names for 3,000 vascular plants of economic importance*), and should be acceptable to us in Br. I should, perhaps, add that *A. hyemalis* (s.s.) has never yet been correctly recorded for Br, although many printed records exist.

FINALE

Only five members submitted CEH quotes or letters – I still seek more, please, for future issues of *News*. I also much need records of alien conifers or exotic trees *regenerating* or growing apparently “wild”: the craze for carelessly reporting blatantly *planted* trees in floras has much confused the status of several species – e.g. is *Corylus maxima* Mill. really naturalized in Br? All records, please, for this species.

On 26th May I lead a 2-week *Cox & Kings Ltd.* (01-734-8291) botanical tour to the Azores, where many exotic aliens are genuinely and extensively naturalized amongst the plentiful endemics . . . a few vacancies still exist! – no mail, please, over this period, but otherwise I look forward to receiving your records and problem specimens.

E.J. CLEMENT, 13 Shelford, Burritt Road, KINGSTON-ON-THAMES, Surrey KT1 3HR.

New Broom for the M1 Motorway

Many passing motorists must have been impressed by the gorse and broom on the banks of the M1 motorway about halfway between junctions 12 and 13 in Bedfordshire. *Ulex europaeus*, *Cytisus scoparius* and *Spartium junceum* flower successively and, in some years, provide a display right round the calendar. In 1977 I discovered that *Cytisus striatus* is also present there in considerable quantity (see *B.S.B.I. News* 20:12, 1978). Apart from the characters mentioned in the last reference it can be told easily from

C. scoparius by the twigs, which are brittle and much less deeply grooved. I first noticed it at 70 m.p.h. by its paler flowers.

In July 1980, at the same speed, I noticed other shrubs in the same locality with smaller, denser flowers, in full bloom after the *Cytisus* species had finished. Investigation showed them to be *Genista florida* L., apparently not previously recorded from Britain. Both *C. striatus* and *G. florida* are natives of the Iberian Peninsula hardly (if at all) grown in this country, and they presumably originate from Spanish or Portuguese seed. They are both hardy and form much better-shaped plants than *C. scoparius*. *G. florida* can be told from the *Cytisus* species by its linear-elliptic simple leaves and denser racemes. I have no evidence that any of the alien species of broom are regenerating here. C.A. STACE, Botany Dep't, The University, University Road, LEICESTER LE1 7RH.

***ELAEAGNUS UMBELLATA* on Dartford Heath, W. Kent.**

A small seedling of this Far Eastern shrub was first noticed on the Heath on 21st October 1978 (*BSBI News* 24 p. 16) and more specimens were observed subsequently. The species is partly evergreen and accordingly, a full investigation was made in January 1981 when it would be easily visible. Within an hour 25 plants were found, varying in size from six inches to eight feet in height, scattered over several hundred yards in a dense scrub-covered valley and in rough acid grassland on a hillside. Even the largest specimens were less than half-grown to maturity and thus a further considerable expansion in the colony can be expected. (There is only one house within ½ mile).

E. umbellata is not common in gardens but it is often used as a rootstock, especially for *E. macrophylla* Thunb. and *E. pungens* Thunb. which are increasingly planted on roadsides etc. I have often observed it exceeding in height, and eventually surviving, the species grafted on to it. One may expect therefore that *E. umbellata* will be found naturalized more widely, since it fruits reliably every year and is very attractive to birds.

The only other Kent record is of a small seedling on an industrial dump at Greenhithe in October 1979. This is being grown on and appears to be of the type, whereas the colony on the Heath is referable to var. *parviflora* Schneid.

J.R. PALMER, 19 Water Mill Way, S. Darenth, DARTFORD, Kent DA4 9BB.

GAME ALIENS

As a botanist interested in native plants, I have always looked at records of aliens in *B.S.B.I. News* with a degree of disinterest. However, when one finds something oneself, the subject suddenly becomes interesting and this was the case with me when I found some aliens in 1976. Being seven feet high with heads of yellow flowers the size of dinner plates, they were hard to ignore. Obviously they were plants of sunflower (*Helianthus annuus* L.), about a hundred of them, growing in a field of Kale at Foremark (SK/353.259) in Derbyshire (v.c. 57). Closer examination of the field revealed drifts of buckwheat (*Fagopyrum esculentum* Moench), occasional plants of white mustard (*Sinapis alba* L.), and a few plants of flax (*Linum usitatissimum* L.).

At the time I was at a loss to explain the presence of the plants. However, as the Kale field was surrounded by woods I knew to be preserved for pheasants, I came to the conclusion that these plants must have grown from feed put out for the birds. I was interested therefore to read J.R. Palmer's note in the last *B.S.B.I. News* indicating that these species are sown for pheasants in Kent. Have we here a new field for alien botany? It would be interesting to hear if others find these species in similar circumstances.

A. WILMOT, Derby Lonsdale College, Kedleston Road, DERBY DE3 1GB.

A NOTE ON NATURALIZED *DORONICUM* IN BRITAIN

Only two species of *Doronicum* — *D. pardalianches* and *D. plantagineum* — have been recognised as widely established plants in the British Isles, but on investigation it is clear that at least four taxa can be distinguished amongst naturalized plants referred to these species. These correspond to *D. pardalianches* and *D. plantagineum* var. *plantagineum* (as described in CTW) and to two described varieties of *D. plantagineum* whose origins are not altogether clear. They may be separated as follows:

- 1 Basal leaves (fig. g) all gradually narrowed to petiole, sparsely hairy to glabrescent; peduncles with short, glandular hairs only; capitula often solitary; receptacle glabrous *plantagineum* L.
var. *plantagineum*
- 1 Basal leaves mostly truncate to deeply cordate below, sparsely to densely hairy; peduncles usually with some long, flexuous, eglandular hairs (as well as shorter, glandular hairs); capitula 1-several; receptacle hairy 2
- 2 Basal leaves (fig. h) deeply cordate; capitula usually 3 - 8, mostly 45 mm broad *pardalianches* L.
- 2 Basal leaves mostly truncate to shallowly cordate below; capitula usually 1 - 3, mostly 45 mm broad 3
- 3 Basal leaves (figs. d-f) often truncate below, apex often obtuse, margins with relatively inconspicuous teeth; young leaves often densely hairy
. *plantagineum* L. var. *willdenowii*
(Rouy) A.B. Jackson
- 3 Basal leaves (figs. a-b) typically shallowly cordate (late season leaves may be more like 'c'), apex acute, margins with prominent teeth; young leaves much less hairy *plantagineum* L.
var. *excelsum* N.E. Brown

Both of the last two varieties are probably of hybrid origin. *D. plantagineum* var. *willdenowii* in particular is a convincing intermediate between *D. plantagineum* and *D. pardalianches*. It is the *D. scorpioides* of Willdenow (1800, non Lamarck, 1786) which is usually described as of this parentage and also looks identical to the plant Coste illustrates (in *Flore de France* 2:297 (1900) and describes as *D. emarginatum* Le Grand, but which appears in his key as *D. subcordatum*! In cultivation here at least one stock has set apparently fertile seed, but from the ray florets only. I have yet to see this variety in cultivation elsewhere or being offered for sale.

D. plantagineum var. *excelsum* however, was described from cultivation and supposedly arose spontaneously in the garden of the Rev. H. Harpur-Crewe (1830 – 1883), whence the cultivar name 'Harpur Crewe' under which it is frequently offered for sale. It has been suggested that it too is a derivative of *D. pardalianches* × *plantagineum* (and it is so labelled in the Cambridge Botanic Garden), but the shape of the spring leaves and in particular their prominent teeth suggest that a third species (possibly *D. columnae*) might be involved. Clearly, experimental work is required to elucidate fully the origin of this taxon. In cultivation it seems to set no fertile seed and is presumably the plant referred to in the cryptic note at the end of the CTW account of the genus.

An examination of herbarium material at K, BM, LTR and in Herb. E.J. Clement, combined with my own field observations, has so far provided records of *D. plantagineum* var. *excelsum* in vice-counties 17, 21, 24, 25, 34, 55 and 74 and of *D. plantagineum* var. *willdenowii* in vice-counties 17, 19 (five separate localities), 26 and 77.

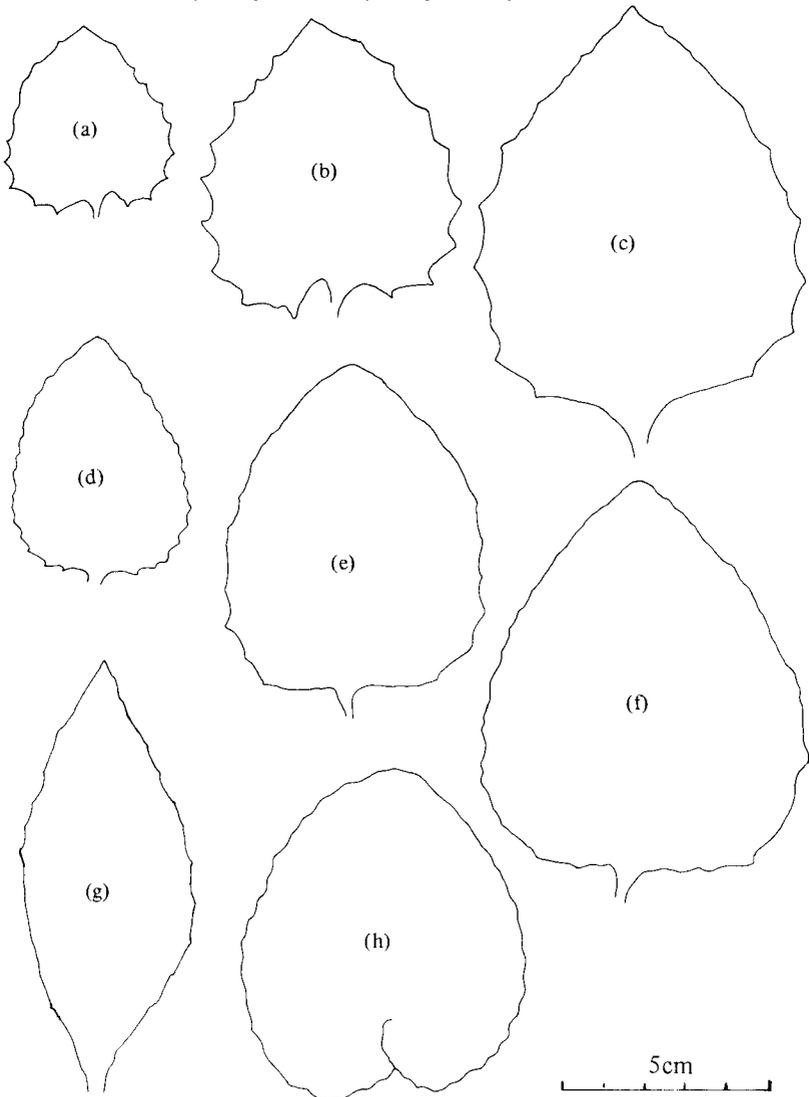
One site for the latter, at Widdington, Essex (v.c. 19), was first recorded in 1800 by one E. Forster, and is still flourishing 180 years later, a remarkable record of persistence which demonstrates that all old records of the species are worth chasing up.

Clearly, the distribution of the two varieties is incomplete and I would welcome help from members in putting together a more complete picture in 1981. Please send me any new records, preferably together with a voucher specimen, which must have basal leaves. A detailed list of those records already known is available on request.

A.C. LESLIE, Monksilver, 72 Boxgrove Road, GUILDFORD, Surrey GU1 1UD.

Basal leaves of *Doronicum plantagineum* var. *excelsum* (a, b, c), *D. plantagineum*

var. *willdenowii* (d, e, f), *D. plantagineum* var. *plantagineum* (g) and *D. pardalianches* (h).



PERRING'S PIECE

RECORDERS' CONFERENCE – 1981

The next BSBI Recorders' Conference takes place at Cartrefle College, Wrexham from 11th – 14th September 1981. On this occasion the main topics for discussion will be: (1) the new records handling system at Monks Wood, (2) research needs to build up records on possibly declining species, (3) the future for Comital Floras and (4) the relationship between the Society's Conservation and Records Committees. Excursions will also be made to sites of particular botanical interest in the area.

Whilst this meeting is primarily arranged for County Recorders, and they have first claim to the accommodation, efforts will be made to try to fit in as many other members who would like to attend as possible. Day visits are welcomed for those who will not need a bed at the College.

If you are not a Recorder but would like to come, please write to DR F.H. PERRING, Oundle Lodge, Oundle, PETERBOROUGH PE8 5TN. All Recorders will receive an invitation with details of accommodation and the programme in due course.

ENGLISH NAMES OF WILD FLOWERS

Although the reprint of this book mentioned in News No. 26 in December 1980 contains very few changes from the original published in 1974, it is suggested that those owning a copy of that edition may wish to have a note of any changes which are significant. They are as follows:

Pps 19 & 112 add	(<i>Centaurea</i>) <i>diluta</i>	Lesser Star-thistle
Pps 25 & 93 alter	(<i>Dactylorhiza</i>) <i>kerryensis</i>	to Broad-leaved Marsh Orchid
Pps 26 & 71 add	(<i>Dryopteris</i>) <i>expansa</i>	Northern Buckler-fern
Pps 26 & 93 add	(") <i>oreades</i>	Mountain Male-fern
Pps 26 & 118 add	(<i>Elodea</i>) <i>nuttallii</i>	Nuttall's Waterweed
Pps 30 & 88 add	(<i>Galium</i>) <i>erectum</i>	Upright Hedge-bedstraw
Pps 33 & 84 add	(<i>Hieracium</i>) <i>aurantiacum</i>	Fox-and-cubs
Pps 34 & 106 alter	(<i>Hypericum</i>) <i>linarifolium</i>	to Toadflax-leaved St. John's-wort
Pps 41 & 100 add	(<i>Mentha</i>) <i>x piperita</i>	Peppermint
Pps 41 & 95 add	(") <i>x verticillata</i>	Whorled Mint
Pps 44 & 95 add	<i>Panicum mileaceum</i>	Common Millet
Pps 50 & 117 add	(<i>Ranunculus</i>) <i>peltatus</i>	Pond Water-crowfoot
Pps 50 & 117 add	(<i>Ranunculus</i>) <i>penicillatus</i>	Stream Water-crowfoot
Pps 51 & 121 alter	(<i>Rorippa</i>) <i>islandica</i>	to Northern Yellow-cress
Pps 51 & 117 add	(<i>Rorippa</i>) <i>microphylla</i>	Narrow-fruited Water-cress
Pps 51 & 121 add	(<i>Rorippa</i>) <i>palustris</i>	Marsh Yellow-cress
Pps 55 & 70 add	<i>Setaria italica</i>	Foxtail Bristle-grass
Pps 56 & 85 add	(<i>Solidago</i>) <i>gigantea</i>	Early Goldenrod
Pps 60 & 75 alter	(<i>Trifolium</i>) <i>boccconeii</i>	to Twin-headed Clover
Pps 60 & 76 add	(<i>Trifolium</i>) <i>occidentale</i>	Western Clover
Pps 60 & 94 add	(<i>Tripleurospermum</i>) <i>maritimum</i>	Sea Mayweed
	subsp. <i>maritimum</i>	

There are also a number of minor corrections to spelling and punctuation. If you would rather have all these changes made for you then the paperback reprint is now available for £3.65 post and packing paid from BSBI Publications, Oundle Lodge, Oundle, Peterborough PE8 5TN.

In preparing the reprint the printer made an unfortunate error on page 30. This has now been corrected but there may be some members who bought a copy before the end of the year which is faulty. If they send us a self-addressed envelope we will send a new, correct (adhesive) page 30.

BRITISH RED DATA BOOKS 1 : VASCULAR PLANTS

We still have a small stock. Copies available from BSBI Publications, Oundle Lodge, Oundle, £3.50 postage and packing included.

FOOLISH THOUGHTS ON FOLFOLARUMS

From time to time the botanist is tempted to leave the woods and fields and wander along the leafy lanes of etymology in pursuit of a name. Like the literal lanes of the English countryside, these metaphorical ones are not easy to negotiate safely and one can easily get lost. I am therefore grateful to George Barker of NCC W. Midlands Region for leading me up an interesting path. He writes:

Fritillaria meleagris has a number of local names and in Staffordshire it is called 'folfolarum'. This has clear affinities with a Yorkshire name 'folfolaries'. To seriously try to trace the derivation of a name like 'folfolarum' is a time-consuming job best left to etymologists and archivists, and no-one has attempted it in this case so far as I know. Having none of the expertise, time or money required for a serious assault on the problem one is left seeking opinions from learned acquaintances.

So far I have had three suggestions from the world of science. First, that it is a 'word of mouth', corruption of 'fritillary' – dull but probably right. Secondly, that it is a derivation from 'folifularum' (foolish lily) – more exciting but almost certainly wrong. The third possibility involved the Norman-French word 'falbala', which can be applied to a crinkled or pleated edge to a dress or frock. Modesty prevents me from revealing the full depths to which the correspondence sank at this point. Suffice to say that 'frock-cups', youthful dalliance in meadows, places of alcoholic refreshment and Section 15 Agreements were mentioned severally and in unorthodox combinations.

The classicists have suggested 'folium falernum' (the Falernian plant). This has the merit that the Romans often did name plants after places, but the drawback that Falernia has no real attraction so far as *Fritillaria meleagris* is concerned. A beautiful theory slain by an ugly fact! An alternative is 'follis (or folliculus) foliatus' (plant with a bladder-like flower – or, as my informant preferred it, 'leafy wind-bag').

The net result of all my researches to date seems therefore to be nil in terms of the advancement of human knowledge, but excellent in discovering the possibilities of applying the descriptive term 'folfolarum' to verbose botanists! e.g. "Frank is a bit of a folfolarum isn't he!"

Perhaps readers can suggest other possible derivations, serious ones preferably.

CHANGES OF RECORDERS

At their meeting in February 1981, the Records Committee approved the following appointment to fill vacancies:-

v.c. 23 Oxford	– H.J. Killick	84 Linlithgow	– M.M. Scott
81 Berwick	– M.E. Braithwaite	86 Stirling	– Dr R.J. Keymer
82 Haddington	– Miss H. Jackson	109 Caithness	– Dr T. Keatinge

The Society's thanks are due to Dr S.R.J. Woodell, A.G. Long, Miss E.P. Beattie, B.W. Ribbons and J.M. Gunn for the invaluable service they gave as our Recorders and we hope they will all continue to be involved in the Floras of their areas.

The Committee was saddened to learn of the death of A.W. Robson, for so many years the sole recorder for Perthshire. Though recently helped by Dr R.E. Thomas (VC 87) and Dr R.A.H. Smith (VC 89) Mr Robson continued to cover Mid Perth and his death leaves a vacancy there.

There is one correction to the List of County Recorders printed in the *List of Members and Subscribers 1979* – T. Curtis has pointed out that he should have been listed for H.20 Co. Wicklow in place of H.J. Hudson.

Dr P.M. Taschereau, *Atriplex* Referee, has a new address:
Appt 205, 188 Margaret Ave., Kitchener, Ontario, N2H 4JZ Canada

Plant Records from Ireland

The BSBI Committee for Ireland has arranged that all Irish records should now go first to the Irish Biological Records Centre, Dublin. Will any members visiting Ireland and botanising there, please send records to:

Miss E. NI LAMHNA, Irish BRC, St. Martins House, Waterloo Road, DUBLIN 4.

Eanna will then transmit these records to the Irish vice-county Recorder, where appropriate to Ulster, and to the BSBI Records Scheme Organiser Derek Wells at NCC Huntingdon – for transmission finally to the Biological Records Centre at Monks Wood.

Mary Briggs

Key to WELLSIACEAE by Lynne Farrell

It would appear that members of this critical group have caused confusion amongst botanists recently, so it is hoped that this key will enable people to identify them more readily in the future.

General Description

Erect perennials, overwintering, with four limbs, having deeply digitate endings. Flowering irregular, with emergence any time between April and September. Visited by numerous botanists and recorders. Native, spread thinly across the British Isles, but more frequently in Cambridgeshire.

2 species:

Clean-shaven, sandy hair, measured pace, DAW
Bearded, blonde, rolling gait, TCEW

1. DAW Derek Arthur Wells (NCC) 'Wet Wells' (*Wells palustris*)

To be found almost exclusively in wet meadows or neutral grasslands, therefore the *wearing of wellingtons* often a distinguishing characteristic.

Newly appointed BSBI plant recording liaison scheme organiser. i.e. liaison between BSBI recorders and BRC (Monks Wood).

Co-opted member of BSBI Records Committee.

Official Designation

Member of Chief Scientist's Team, responsible for Grasslands.

Official address: Nature Conservancy, Godwin House, George Street, Huntingdon, Cambs PE18 6BU. Telephone: (0480) 56191

2. TCEW Terence Charles Ernest Wells (ITE) 'Dry Wells' (*Wells campestris*)

To be found on dry chalk grassland slopes. Often associated with orchid species. (This may explain the facial 'fungal' growth.) Walking boots or father's gardening boots usually worn.

Member of BSBI Records Committee. Recorder for v.c. 31, Huntingdonshire.

Official Designation

Member of Plant Community Ecology Divn.

Special interests: Re-creation of chalk grassland; orchid population dynamics.

Official address: Institute of Terrestrial Ecology (ITE), Monks Wood Experimental Station, Abbots Ripton, Huntingdon, Cambs PE17 2LS. (Abbots Ripton 381).

Note

Any doubtful specimens in this critical group should be sent to the Wellsiaceae referee, L. Farrell. (Live specimens not required, a descriptive note on the activity of the subject should enable LF to identify the specimen).

BLACK NIGHTSHADE SURVEY

We regret that the Third Interim Report on the above, dated February 1981 was received too late for inclusion in this issue. It will appear in BSBI News 28.

BOOK NOTES

Before discussing the books that have been received and reviewed recently, I should like to ask that all books (whether for review in *Watsonia* or notice in *B.S.B.I. News*) be sent to me.

In the July part of *Watsonia*, Vol. 13 (4), reviews of the following books will be included:

Science and Colonial Expansion : the role of the

British Royal Botanic Gardens, by Lucille H. Brockway.

Flora of East Ross-shire, by Ursula K. Duncan.

The Common Ground, by R. Mabey.

Sussex Plant Atlas, edited by P.C. Hall.

The Northwest European Pollen Flora, 11, edited by W. Punt and G.C.S. Clarke.

The Arctic and Antarctic : their division in geobotanical areas, by V.K. Aleksandrova.

Petaloid Monocotyledons : Horticultural and Botanical Research, edited by C.D. Brickell, D.F. Cutler and Mary Gregory.

Flora of New Zealand, vol 3, by A.J. Healy and Elizabeth Edgar.

Anatomy of the Dicotyledons (ed. 2), vol. 1, by C.R. Metcalfe (and L. Chalk).

I Fiori delle Alpi, by F. Rasetti.

A Guide to the Naming of Plants (ed. 2), by D. McClintock.

Living in a Wild Garden, by R. Banks.

Plant Taxonomy and Biosystematics, by C.A. Stace.

Excursion Flora of the British Isles (ed. 3), by A.R. Clapham, T.G. Tutin and E.F. Warburg.

The following books have been received recently. Those that will NOT be reviewed in *Watsonia* are marked with an asterisk:

Flowers of the Balkan Peninsula, by O. Polunin.

A Taxonomic Revision of the Genus Origanum (Labiatae) by J.H. Jetswaart.

Name that Succulent, by G. Rowley.

The Flowering of Britain, by R. Mabey.

Ancient Woodland : its history, vegetation and uses in England, by O. Rackham.

Three-dimensional Structure of Wood (ed. 2), by B.G. Butterfield and B.A. Meylan.

A Common Green (Duleek, the Botany and History of a Meath Commonage), by D. Synnott and M. Ward.

100 Families of Flowering Plants, by M. Hickey and C.J. King.

Gardening with Children, by Alison Ross.

Süßwasserflora von Mitteleuropa, vol. 23 (1) : Lycopodiaceae bis Orchidaceae, by S.J. Casper and H.-D. Krausch.

* *The Brassey Nature Reserve, Descriptive Handbook*, edited by Sonia Holland.

Gloucestershire Trust for Nature Conservation, Church House, Standish, Stonehouse, Gloucestershire GL10 3EU, 1977. Price 75p or £1 by post (from above address).

When this guide to an important area of limestone grassland and fresh-water marsh was published in 1977, it was not noticed in B.S.B.I. publications, and so I am taking this opportunity of drawing the attention of members to it. As well as detailed chapters on the site (with maps), its history, flora, fauna and management, the guide includes (as appendices), lists of the vascular flora of different habitats, of bryophytes, lichens and charophytes, and of various animal groups. It also contains nine fine photographs, of which the five in colour include studies of *Dactylorhiza praetermissa* and *Campanula glomerata*.

* *Journal of Garden History : an international quarterly*, vol. 1 No. 1, Jan. – Mar. 1981. Taylor & Francis Ltd., London. Price £7.50.

The first part of this new journal is very tastefully produced.

Indeed it gives the impression of a fine-art journal rather than a horticultural one. This impression is enhanced by the contents, which, though most interesting, are of more concern to the art historian than the biologist.

* *Changes in Wistman's Wood, Dartmoor : Photographic and other Evidence* by M.C.F. Proctor, G.M. Spooner and Molly F. Spooner. Pp. 37, with 16 black & white plates. *Rep. Trans. Devon Ass. Advmt Sci.* 112:43-79 (1980). Obtainable from the Secretary, Devonshire Association, 7 The Close, Exeter. Price 75p + inland postage & packing 25p.

Pairs of old (up to 90 years) and recent photographs show changes in tree form, canopy height and extent of this well known and unusual wood. Comparative measurements of heights and girths over the last 14 years, and with 1921 data, show that rapid growth is continuing. The wood is becoming more normal.

* *The Use of Scientific Information Services (ed. 4)*, by R. Davidge and E.R. Wooding. Royal Holloway College, 1980. Obtainable from The Library, Royal Holloway College, Egham Hill, Egham, Surrey, TW20 0EX. Price £2 including postage.

N.K.B. ROBSON, Botany Dep't, British Museum (Nat. Hist.), LONDON SW7 5BD.

* *Nature Conservation Why and How? An Introduction* by Andrew Ruck.

This booklet on Conservation gives general information on the need for nature conservation followed by sections on Threats to Wildlife, Legislation and Practical Involvement. Organisations involved are listed (though not BSBI), and a short booklist includes recommendations for teachers and students; useful for a conservation project. Available from:

SPNC, The Green, Nettleham, Lincs., at 60p (p. & p. inc.), or your local County Trust bookshop.

* *Advice for Young Naturalists* compiled by Mark R.D. Seaward.

An updated version of the booklet originally published by Council for Nature in 1965, its 24 pages contain ten clearly presented sections covering Societies, Books, Fieldwork, Recorders, Codes, Nature Trails, Equipment and the Law, with many useful references. Recommended for young enquirers – and teachers also. Available from: CoEnCo Youth Unit, Zoological Gardens, Regents Park, London NW1 4RY. 70p (p. & p. inc.).

* I.T.E. Publications

Recent titles from the Institute of Terrestrial Ecology include : *Native Pinewoods of Scotland* (£3.14), *Natural Environment of Snowdonia* (20p), *Sand Dune Machair 2* (£1.75), and *Synoptic Limnology* (£3.31) – a framework for future research in British freshwater ecosystems. Related titles of interest: *Atlas of the Bumble Bees of the British Isles* (£2.31), *Birds of St. Kilda* (£3.87), and *Polecats in Wales* † (20p), (all prices quoted include p. & p.). A complete list of these publications is available from Mr M. WOODMAN, Institute of Terrestrial Ecology, 68 Hills Road, CAMBRIDGE CB2 1LA.

† Margaret and Hugh Todd found a Polecat in residence in their house in Llanarmon-y-lal on their return from plant-hunting in South Africa last Autumn.

* Nature Conservancy Council

Creating attractive grasslands using native plant species by Terry Wells, Shirley Bell and Alan Frost, is a useful guide to growing native species, particularly welcome just now, as the widespread interest in growing wild flowers as an aid to conservation is currently bringing large numbers of enquiries on sources of seed and growing methods.

This book contains advice on seed; collection, handling and storage, germination procedures and instructions on propagation for seed production. There are suggested lists of species suitable (depending on soil type) for successful sowing in grass/wild-flower mixtures, advice on management of sown areas, with a Bibliography and a Glossary. Illustrated by graphs, B. and W. and 12 colour photographs. Available from: Interpretative Branch, NCC, Attingham Park, SHREWSBURY, SY4 4TW at £3.20 (p. & p. incl.).

Mary Briggs

N. HERTS HERBARIA – New location

North Hertfordshire Museums Natural History Department was established in 1976 following Local Government Reorganisation, and collections formerly housed at Letchworth and Hitchin Museums were amalgamated. Whilst displays are maintained at these two museums the reserve collections, biological data bank, archival material and library are now housed at Baldock.

In excess of 20,000 plant specimens are held, with the main emphasis upon the British and particularly local floras, including the Hertfordshire County Herbarium of voucher specimens – many collected by Dr J.G. Dony. Other herbaria include the following: Hugh Phillips, Margaret Sturrock-Phillips, Frida Sinclair (nee Phillips), Thomas Alfred Dymes, A.W. Graveson, Joseph Pollard, A.G. Harrold, H.C. Littlebury. There is also the Letchworth Naturalists' Society herbarium representing many collectors such as, J.E. Little, R. Morse, D. and H. Meyer, D.W. Brunt and L.W. Gardner, and, in addition, a collection of fruits and seeds.

Other material includes ferns and bryophytes by H. Seebohm, bryophytes by Sir Henry Pitman, N.J. Winch, Railton and the Hertfordshire voucher collection by G. Bloom, also charophytes by H. and J. Groves.

Vascular plants have been fully documented and data are available on a vice-county and collector basis.

Other relevant collections of manuscripts and photographs are also maintained, including field note books of J.E. Little, Richard Morse's diaries, photographic negative and glass slides by A.W. Graveson together with botanical records of the Letchworth Naturalists' Society. The fairly comprehensive library contains many works, particularly those relating to the Hertfordshire flora.

Biological and geological records are being actively collected and collated for the data bank housed within the Department. In conjunction with the County Herbarium and in collaboration with Dr J. Dony, County Recorder, flora distribution records are continued on a 2 x 2 Km basis for Hertfordshire. For the northern part of Hertfordshire records of flora and fauna are grouped according to sites with 2 x 2 Km distribution maps for most major taxonomic groups.

These collections are available for study, by appointment, at the address below. Any further data relating to Hertfordshire specimens or records would be gratefully received by:

BRIAN SAWFORD, Nat. Hist. Dep't, Old Fire Station, High St, BALDOCK SG7 6AR.
(Tel: 894352).

HOW TO DRAW PLANTS

The drawings of two close friends, Hilary Broad and Rosemary Wise have adorned our pages from time to time. At the Exhibition Meeting in November last, they showed some of their work and offered a pamphlet (25p) of notes on their methods. Very generously they have allowed the Editor to adapt this for readers of *BSBI News*. Here is Hilary's contribution. Rosemary's will appear in *News* 28.

DRAWING IN PEN AND INK FROM A FRESH SPECIMEN

I enjoy drawing weeds because they are readily available, and I can choose an average-sized specimen, typical with regard to the shape of the leaves, etc., and not diseased or moth-eaten. It may be a whole plant or part of a plant, and sometimes I even pot up a whole plant and stand it on a windowsill for a while so that the leaves turn to face the same direction. The plant must be kept well watered and if it wilts it should be covered with polythene until it recovers.

The next thing is to decide which view to draw. I try not to have too many leaves at awkward angles, as it is easier to draw a leaf "full face" and more useful botanically. It is also easiest to draw actual size, so I place the specimen at the same distance from my eye as I place the paper. In this way "sight size" equals "natural size". From time to time I close one eye so that I get a single, 2-dimensional image.

I use a ruler to measure the height of the plant, the distance between nodes, length and breadth of leaves, etc., and make some corresponding pencil marks on the paper. Then I sketch in the rough outlines and gradually proceed to fill in the details, at frequent intervals, comparing my pencil drawing with the specimen, making alterations where necessary, always drawing in the correct line before rubbing out the wrong one. Finally, when I am satisfied with the pencil work, I start inking in. *

By varying the thickness of the line I can suggest shading, and I use a finer pen for petals and very delicate parts. All the features are put in, in black ink – even white hairs. Unfortunately this does not always give the exact impression, but this is one of the limitations of black and white. Drawing aids such as flexible rulers and French curves, where appropriate, are useful, and shading in the form of dots or broken lines to give a 3-dimensional effect, may be added.

Sometimes the drawing may need to be adjusted. Small changes can be made using white water-soluble paint and re-drawing when it is dry. If it is necessary to change a large area, I take a clean sheet of paper, trace the good parts of the drawing and re-draw the rest.

* *A simple device for obtaining proportional size, using a sheet of glass and a "spy-hole" at measured distances from the object, reputed to have been employed by Holbein when painting his famous Windsor Castle protraitis, was described by the late L.N. Staniland in an article in the Annals of Applied Biology 33 (2):170-7 (1946) and reproduced in his book The Principles of Line Illustration (Burke, London 1952) p. 99 et seq.*

(Ed.)

LETTERS

Early Buttercup

Elizabeth Riches, of Five Ashes, mid-Sussex, reports finding *Ranunculus acris* in flower – albeit only 4 ins in height – on February 8th this year, on a SE-facing verge of Meres Lane near her home. Yes, it is *acris*, she insists, she's checked it.

Late flowering Wayfaring Tree

I have had three responses to my letter in the last *BSBI News* of late flowering of *Viburnum lantana* with records as follows:

Langland, Mumbles, Gower, Glamorgan: Sept. 9, 1928 (National Herbarium of Wales);

Lullington Heath, East Sussex, mid-August 1980 (Seaford Natural History Society)

Brown's Folly nature reserve, Bath, Som., Oct. 1, 1980 (Richard Workman).

So it is evidently an unusual, but not unknown phenomenon.

RICHARD FITTER, Chinnor, Oxon.

Long Bramble

In *Rep BEC XII* (V):476, (1944), Mr. Wilmott reported on some *Rubi* I had noted reaching 13 ft 2 ins long.

This winter, one annual shoot in my garden at Platt was 16 ft 8 ins long, and I should not be surprised if some were longer. Can other members do better? I await a visit from David Allen or Alan Newton before venturing a name!

D. McCLINTOCK, Brackon, Platt, SEVENOAKS, Kent TN15 8JH.

We sincerely apologise

to: **Mr. C.E. Andrews** whose retirement as referee for *Hieracium* was announced on p. 5 of *News* 26, but, in the Contents List, was shown to be already deceased. We are happy to record that he is still very much with us, and we hope he suffered no embarrassment.

to: **Mr. John Jeffers**, Director of the I.T.E. at Monks Wood, for referring to him, in the President's Message, P.S., as Heffers.

to: those who contemplate a visit to Icklingham (Suffolk) on June 8th, and may not be aware that *Daphne mezereum* will not be in flower then. The Open Day there took place on **March** 18th.

to: **Mr Raymond Piper** the distinguished artist, referred to as David Piper in the first part of Mr Turner Ettlinger's article on "Photography and Plant Identification" (*BSBI News* 25, p. 20). With so many talented Pipers to choose from – David, John, Louis and, of course, Raymond – a slip of the pen, says our author, may perhaps be forgiven.

EDITOR'S NOTE

Despite the cut-off date for the following issue being boldly displayed in the current one. contributions – quite long ones – arrive, without warning, up to ten days late. These get held over. *BSBI News* is not elastic; our 32-page format is the most economical for publishing.

To ensure your contribution does appear in the next issue you should:

(1) keep it as brief as possible.

(2) send it to the Editor well before cut-off date. (If a long article or report cannot be ready until closing date, please advise the Editor earlier to hold space).

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