# **B.S.B.I.** NEWS

Dec. 1986 Edited by R. Gwynn Ellis Dept. of Botany, National Museum of Wales Cardiff CF1 3NP No. 44 N/ /11. j lmm lmm petal flower Imm 1 longitudinal section of flower with petals removed Imm underside of leaf fruiting stem ] imm stone lcm Cotoneaster simonsii Baker del. Hilli Thompson C 1983

#### ADMINISTRATION

HON. GENERAL SECRETARY (General Enquiries) Mrs Mary Briggs, M.B.E., White Cottage, Slinfold, HORSHAM, West Sussex RH13 7RG

HON. TREASURER (Payment of Subscriptions and change of address) Mr Michael Walpole, 68 Outwoods Road, LOUGHBOROUGH, Leics. LE11 3LY (Please quote membership number on correspondence concerning membership or subscriptions - your membership number is on the address label of your mailings).

HON. FIELD SECRETARY (Enquiries on Field Meetings) Mr Roy Smith, 8 Ripley Road, Sawmills, Ambergate, DERBY DE5 2JQ

#### SECRETARIES OF PERMANENT WORKING COMMITTEES

N.C.C., Northminster House, PETERBOROUGH PE1 1UA PUBLICATIONS: Mr Arthur O. Chater, Dept. of Botany, British Museum (Nat.Hist.), Cromwell Road, LONDON SW7 5BD

#### MEETINGS:

CONSERVATION:

Mrs Ailsa Lee, 3, Rosliston Road, Stapenhill, BURTON-ON-TRENT, Staffordshire DE15 9RJ

**RECORDS:** 

Mr David J. McCosh, 13 Cottesmore Gardens, LONDON W8 5PR

Miss Lynne Farrell,

#### PERMANENT WORKING COMMITTEES FOR 1986-1987

- CO-ORDINATING: J.F.M. Cannon (Hon. Sec.), A.O. Chater, Miss L. Farrell, Mrs A. Lee, D.J. McCosh.
- CONSERVATION: Miss L. Farrell (Hon. Sec.), O.T. Cairns (Asst. Sec.), Miss I.F. Gravestock, Dr H.A. McAllister, D.R. Donald, Dr N.T.H. Holmes, M.A.R. Kitchen, Ms S. Oldfield, Miss H.E. Stace (Scotland), A.C. Jermy (British Ecological Society), Dr F.H. Perring (Royal Society for Nature Conservation), Ms J. Taylor (National Council for the Conservation of Garden Plants).
- MEETINGS: Mrs A. Lee (Hon. Sec.), R. Smith (Hon. Field Sec.), Dr N.K.B. Robson, J.M. Mullin, Dr H.J.M. Bowen, Miss E. Young, Dr J.R. Akeroyd, Miss G.M. Barter, Lady Rosemary FitzGerald, J. Ounsted, B.A. Gale, Mrs M.J. Cannon, A.R. Outen, Miss E.J. Rich, Mrs E.G. Wood.
- PUBLICATIONS: A.O. Chater (Hon. Sec.), Dr R.J. Gornall, Dr N.K.B. Robson, Dr J.R. Akeroyd, Dr B.S. Rushton, C.D. Preston, D.H. Kent, R.G. Ellis, Dr F.H. Perring, J.F.M. Cannon, Dr P.F. Yeo, E.J. Clement, A.C. Jermy, Dr S.L. Jury, A. Newton, Prof. C.A. Stace, P.H. Oswald, E.D. Wiggins, C.R. Boon, A.C. Jermy, Mrs M.D. Perring.
- D.J. McCosh (Hon. Sec.), D.E. Allen, E.G. Philp, Dr I.K. Ferguson, R.J. RECORDS: Pankhurst, Miss E. Ni Lamhna (Ireland), J. Bevan, R.G. Ellis, Miss H.E. Stace (Scotland), Dr Q.O.N. Kay (Wales), T.C.E. Wells, D.A. Wells, C.D. Preston, A.O. Chater, R.M. Burton, Dr G. Halliday, A.J. Worland (British Pteridological Society).

The President, Hon. Treasurer and Hon. General Secretary are ex officio members of all the above committees.

#### NOTICE TO MEMBERS

Nominations for vacancies on Council, in writing, signed by two members of the Society and accompanied by the written consent of the candidate to serve, if elected, should be sent to the Hon. General Secretary, White Cottage, Slinfold, HORSHAM, West Sussex RH13 7RG, to arrive BEFORE FEBRUARY 1st 1987. (See <u>BSBI</u> <u>News</u> 43: 2 (1986) for the list of present members on Council.)

# MARY BRIGGS Hon. General Secretary

#### SUBSCRIPTION NOTICE

Any member who is over 21 and under 25 on January 1st, <u>still in full time education</u>, and who wishes to continue subscription payment at the Junior Rate, should notify the Hon. Treasurer, Mr M. Walpole.

#### \*\*\*\*\*\*\*

#### THE BOTANISTS

Members are reminded that copies of <u>The Botanists</u> by our President D.E. Allen, are still available from the Treasurer, 68 Outwoods Road, Loughborough, Leics. LE11 3LY, at the special offer price of £10.00 including post & packing. (£16.00 plus p. & p. to non-members.) [See also letter on page 26.]

#### 

CONTRIBUTIONS INTENDED FOR

BSBI NEWS 45

should reach the Editor before

# 28th FEBRUARY 1987

#### 

## CORRIGENDA CORNER

Under this heading (which will not, I hope, become a regular feature), will appear those errors in the previous issue(s) which have been made known to the editor and which should be brought to the attention of members.

It was perhaps inevitable, given the subject matter, that some errors should have crept into the letter on **Printers' Peccata** (<u>BSBI</u> <u>News</u> **43**: 25 (1986)). The most significant was in the fourth paragraph, where the parenthesized phrase should read: (how can anyone get three out of five typed **letters** wrong?).

My apologies to the author Jill Lucas.

I must also apologise to our Irish members for the mix-up over the border marked on the map in the **Field Meetings** section (<u>BSBI News</u> **43**: 27 (1986)). The corrected border appears on the map in this issue. (My thanks to Dr Charles E. Nelson for pointing out this unfortunate error.)

EDITOR

#### EDITORIAL

First my thanks to all those who have commented favourably on the last issue of <u>BSB1</u> <u>News</u> and my apologies to those who found the print size too small for comfort. There is obviously a direct link between the print size and the amount of information that can be published in <u>News</u> and, at a recent meeting, the Society's Publications Committee decided that on balance the print size of the last issue should be retained. At the same meeting it was decided that the unjustified right margin should also be retained.

A letter from Mrs Kathleen Stevens of Tywyn, Gwynedd, provides some information on the late Miss McCallum Webster's trip to Africa. She writes: 'She [Miss McCallum Webster] went out to Northern Zambia and stayed with Miss Mary Richards at Abercorn (near M'Bala) to study African grasses. Of all the people who Mary [Richards] invited out to stay with her ..., who must have all helped her in her search for plants, it was only Miss McCallum Webster, regarding a grass, that she mentioned in her records ... She did not even mention Desmond Vesey FitzGerald who accompanied her on most of her Safaries...'

A letter has also been received from Mr Douglas Chalk who contributed an article on Hedge Veronicas in the last issue. He enclosed a copy of his latest paper, to be published in <u>Hebe Society News</u> on how **Hebe x franciscana** got its name. Any member interested in obtaining a copy should write to Mr D. Chalk, Broadway, Edington, BRIDGEWATER, Somerset TA7 9HA.

Members may have noticed the recent inclusion of photographs in <u>BSBI News</u>. These can now be processed quite easily and cheaply from black and white or colour negatives or slides. All offers of interesting or amusing photographs of plants or people will be considered for publication, especially if accompanied by a note or article.

Among the many inserts distributed with this issue are some which merit special mention, if only to make sure that you have received them.

The 1987 Calendar and Field Meeting Programme booklet should be present together with a separate notice for the 1987 Annual General Meeting to be held in Cardiff.

There should also be a booklet containing detailed instructions on the new Monitoring Scheme and samples of the new recording cards specially designed for use during the scheme. There are five versions of the main recording card: England North, England South, Ireland, Scotland, and Wales. The card enclosed with your booklet should be the right one for your area; if it is not, or if you would like to see samples of the other cards, please contact the Scheme Organizer, Tim Rich, at the Biological Records Centre, Monks Wood.

Finally there should be a Supplement to this issue of <u>BSBI News</u>, the first supplement to be published. It consists of a 24 page guide to identification manuals for Western Europe and the Mediterranean, compiled by Bob Press of the British Museum (Natural History). It is anticipated that additions to this list will be published in future issues of BSBI News.

Any member who has not received the above enclosures should contact the Editor.

### Rear-end

Confession is said to be 'good for the soul', so here goes. The group mentioned by Chris Preston in his article on the Lancaster Conference (page 9) as having decided that a visit to the Carnforth Steamtown railway museum was essential to a thorough survey of the flora of their tetrad, was the South Wales Contingent (otherwise known as the 'Gang of Four'). The fact that our tetrad was some three to four miles distant from the museum did nothing to dampen our enthusiasm and we were rewarded with some excellent specimens of **Senecio squalidus.** Some considerable time was spent photographing these, and the particularly fine examples of near extinct steam locomotives that appear in most pictures were only included to provide habitat details!

After botanizing our appointed tetrad, the 'Gang of Three' (the member for Gwent being unaccountably more interested in an endemic **Sorbus** and other rarities) spent a happy half-hour discussing the most pressing problem of the day; why were all the trains travelling south headed by a diesel as well as an electric locomotive, while those travelling north had only one electric locomotive pulling them! No satisfactory explanation was forthcoming, any suggestions on a postcard please...!

Congratulations: to Lynne Farrell, Secretary to the Conservation Committee, who has won a Churchill Travelling Fellowship (one of the categories this year was 'Endangered and Threatened British Species', see BSBI News 40, 21), for travel to Australia and New Zealand to see plant conservation in action down under; to Richard Mabey who has won the Whitbread Literary Award for his biography of Gilbert White; to Prof. David Wigston, a past Watsonia Editor, for his new appointment as Dean of the Faculty of Science, University College of the Northern Territory, Darwin, Australia; and to our President, David Allen, who now has a computer named after him - the Archive Computer at the University of Essex. A note in the Data Archive Bulletin reads: 'David Allen, who was, since the Archive's founding, its main contact with the ESRC (and SSRC) will be leaving the Council in late 1986. It is difficult to think of the best way of acknowledging his contribution to the Data Archive's development, particularly as many of the projects he has been instrumental in helping to establish will continue to mature for years. Nonetheless, we think it appropriate that we use one current project as a reminder of his many valuable deeds on our behalf. Thus the network node for our new optical-disk, Micro-Vax based mass storage system will be called the Data Archive's Vast Information Depot ("DAVID"). Thus, just as Archive staff in the past have usually responded to every new question about the Archive's own development by saying "Ask David", so too will new quantitative researchers in the wider social research community begin by "asking DAVID".

The photograph in <u>BSBI</u> News 43: 3 (1986), lacks identification - those who enlivened the sesquicentenary excursion by coming in period dress and were photographed outside the Bluebell Railway Station at Sheffield Park were, from left to right: Muriel Bowen, Humphrey Bowen, Elizabeth Young, Olive Linford, John Akeroyd and behind him (avoiding his knokkerrie) Frank Brightman, Janice Brightman, Ro FitzGerald, Nick Stewart and Chris Preston.

Fortuitously the date of our 1986 Annual Exhibition Meeting happened to coincide with the actual date taken as that of the founding of our forerunner Society, the Botanical Society of London - November 29 being chosen as the supposed date of Ray's birthday - so very appropriate for our sesquicentenary year.

# Asarina procumbens (see BSBI News 43: 20-21 (1986)).

Prof. D.A. Webb sent the following comment: 'This is <u>not</u> a "native of the southern Mediterranean", but of the Cevennes, Pyrenees and Catalonia, where it favours shady situations and can ascend as high as 1750m. From the purely climatic point of view there is nothing surprising about its flourishing in central Nottingham'.

Horticultural views were sent following the comment on getting this species to grow 'even half as well' as on the vertical sandstone cliff in Nottingham:

Mrs Jane Smallwood sends some seed, saying that in Hythe it is 'very easy providing it is in an extremely dry place'.

Victor Smith from Derby writes: 'From my garden experience I don't think it would have any difficulty growing "wild" - in any sunny dry exposure it appears to perpetuate itself with ease and seeds germinate like cress in places. It first established itself on a hot dry south facing bank, rooting under a horizontal juniper and emerging to smother other plants if permitted. It has now seeded itself into a dry-stone terrace wall, into a heather bed, under birch trees and under a cupressus. Last winter's weather discouraged it very little'.

On the other hand, Miss Palmer tells us that in Nottingham, members of the Notts. T.N.C. have tried to establish the plant on other parts of the sandstone escarpment; 'But have had no success.' Some seeds collected in 1969 and sown in soil failed to germinate, however when that gardener cleared his greenhouse some months later, seedlings covered the tufa under the staging - and the **Asarina** continues to grow there!

## Ted Wallace - a memory

After a long spell in hospital, Ted was after all able to accompany a botanical group to Rhodes in the Spring, and his special request was to see **Carex illegitima**. Dr W.A. Sledge had marked a cross on Ted's map of Rhodes and we were able to get Ted to this spot - and there he found what became known as 'Ted's Sledge Sedge'. The picture overleaf is a reminder of the happy moment when Ted achieved one of his last ambitions.



Ted Wallace and Carex illegitima Photo: Mrs M. Briggs

#### Wiggy

Great care is taken to get nomenclature correct in botanical publications; when in 1977 Mr E.D. Wiggins formerly of Cowpasture Farm became Editor of BSBI News, I enquired what we should call him and received the following reply:

Wigginius pascum-vaccarum - the general usage is Wiggy - free for any and all; an informal colloquialism, used universally. It comes naturally and trips easily off the tongue.

Edgar - generally used by those with a professional relationship, or those who dislike, or prefer to avoid, the vernacular. (Origin - from being entered on registers as WIGGINS, Edgar. D.).

Dunstan - restricted, as far as possible to family and intimates.

But don't take this too seriously; I respond to "Darling" or "Hi you" from anyone.' We hope that Wiggy will be a welcome feature of BSBI meetings, to be accosted by members with the appropriate term from the selection above, for many years to come.

#### Popeye (see BSBI News 43: 7 (1986))

Prof. E.I. Shellard writes:

'I am not sure that Prof. Szendrei found anabolic steroids in Chenopodium album but rather 12 - OH ecdysones.

I was present at his lecture when he gave this information (F.I.P. Budapest 1985). Incidentally, he also reported the presence of this substance in spinach, thus giving Popeye full credit. It was the newspapers who thought it was the iron - practically non-existent as you say'.

# Tailpiece - As others see us

'Amateur botanists tend to be interested in plant identification and habitat, their great thrill being to discover some rarity which nobody else has ever found.

The professional botanist tends to concentrate more on the structure of plants and their metabolism, and the diseases and pests which affect crops of economic value.' (From a Careers leaflet)

MARY BRIGGS, White Cottage, Slinfold, HORSHAM, West Sussex RH13 7RG

## SESQUICENTENARY EXHIBITION

A notable part of the Society's celebrations of its 150th anniversary on May 10 was an exhibition of documents and photographs illustrating its history down the years, mounted by the President with the assistance of Vaughan Fleming and Brian Gale. The fact that this filled a series of panels and tables grouped along one and a half sides of the Linnean Society's library gives some idea of its extent.

The <u>pleces</u> <u>de</u> <u>resistance</u>, each prominently occupying a corner of the room, were three large oil paintings on easels - of J.E. Gray (the first President), H.C. Watson (mainstay of the Botanical Society of London, the BSBI's ancestor) and J.G. Baker (rescuer of the Society after its temporary collapse), the first kindly loaned by the Royal Society, the others by Kew. The portraits of Gray and Watson are historical documents in themselves, for the cost of painting them was subscribed for by the membership in 1846 and they hung originally on the walls of the Society's rooms at 20 Bedford Street, near Covent Garden.

Less conspicuous than these, but in no way inferior to them in relevance, was a head-and-shoulders bust in bronze (complete with doctoral cap) of G.C. Druce, the autocratic Secretary-Treasurer during the first three decades of this century. This normally graces the herbarium of the Department of Plant Sciences at Oxford, to which we were also indebted for the loan of the fascinating album of signed photographs of members and other friends presented to Druce on his eightleth birthday in 1930.

Despite the appalling vicissitudes the Society underwent in its earlier years, an impressive number of relics of the founding period have turned out to be traceable. Among those on display were a minute-book, the initial prospectus, the first set of rules, one of the earlier annual reports and the catalogue of the auction of the library and collections in 1857 - variously lent by the Linnean Society and the British Museum. A later series of documents illustrated the heated 'civil war' which broke out in 1915 when a group of members headed by C.E. Moss made an ultimately vain attempt to force Druce to run things democratically. Later still, bringing up the rear, came mementoes of the Distribution Maps Scheme of 1954-62, including contemporary photographs of mappers and mapping and - in pride of place - a copy of the culminating <u>Atlas of the British Flora</u>.

## \*\*\*\*\*\*\*

## RECORDERS AND RECORDING

## DATE FOR YOUR DIARY

The 1987 Recorders Conference will be held in Glasgow from September 4-6; details will be given in the next BSBI News.

# AMENDMENT No. 2 to Vice-county Recorders, December 1985 New Addresses:

- v.c. 72 Dumfriess. Mrs M.E.R. Martin, 18 Rowanbank Avenue, DUMFRIES DG1 4NB. Please note this especially if sending for a copy of the new Check List for v.c. 72. See <u>BSBI News</u> 43: 6. (£2.50 incl. p. & P. from Mary Martin or from Oundle Books).
- v.c. 81 Berwicks. Mr M.E. Braithwaite, Clarilow, HAWICK, Roxburghshire TD9 8PT.
- v.c. 87 W. Perth. Mr N.F. Stewart and Miss H.E. Stace, 40 Deronda Road, Tulse Hill, LONDON SE24.

## Vice-county Recorders - New appointments and changes:

- v.c.71 Man. Dr Larch S. Garrad, Rose Cottage, Cronk Road, Union Mills, ISLE OF MAN. Dr Garrad, an active contributor to the Flora and an island resident, takes over from David Allen who has retired, having been Recorder since 1950 culminating in the publication of the Flora of the Isle of Man in 1984.
- v.c. 84 W. Lothian. Michael Scott retires due to pressure of work with the Scottish Wildlife Trust. v.c. 84 temporarily vacant.
- v.c. H.24 Co. Longford. Noel McGough changes v.c. from H.24 to H.29. v.c. H.24 temporarily vacant.
- v.c. H.29 Co. Leitrim. Now Mr N. McGough and Dr D.L. Kelly.

## SUPPLEMENT No. 1 to Panel of Referees and Specialists, September 1986.

Dr J.T.H. Knight retires as Referee for **Epipactis**, and we thank him for the help and good advice he has given to many members through many years.

We are pleased to announce the appointment of the following new Referees:

## AMARANTHACEAE

Amaranthus: B.T. Ryves, mature fruits, colour notes. 48 Galsworthy Road, KINGSTON HILL, Surrey KT2 7BS.

## LEGUMINOSAE

Medicago: R.M. Burton, mature fruits. Sparepenny Cottage, Sparepenny Lane, Eynsford, DARTFORD, Kent DA4 0JJ.

# ONAGRACEAE

Oenothera: J.C. Bowra, O. biennis, O. erythrosepala, O. stricta, O. cambrica, fresh material preferred, whole stem, buds, flowers, mature fruits. 29 George Road, WARWICK CV34 5LX.

# VALERIANACEAE

Valerianella: Dr A.J. Byfield, fresh material preferred. NCC, 1 Southampton Road, LYNDHURST, Hampshire SO43 7BU.

## ORCHIDACEAE

**Epipactis:** Dr A.J. Richards, no whole plants to be sent, but <u>photo</u> of whole plant and close-up photo of upper open flowers, two uppermost flowers of spike, fresh or pickled (as for general **Orchidaceae**), lowermost leaf (often very small). Dept. of Botany, The University, NEWCASTLE-UPON-TYNE NW1 7RU.

MARY BRIGGS, Hon General Secretary DAVID J. McCOSH, Hon. Secretary, Records Committee

# \*\*\*\*\*

# 'THE LONG TRADITION' - CALEB THRELKELD'S BRITISH PLANT RECORDS

Caleb Threlkeld was born at Keibergh, Kirkoswald, Cumberland on 31st May 1676. He studied at the University of Glasgow, and received a doctorate in medicine from the University of Edinburgh, before arriving in Ireland on 3rd April 1713. He lived in Dublin for the rest of his life, dying there on 28th April 1728.

On Thursday 27th October 1726, Dr Threlkeld published <u>Synopsis Stirpium</u> <u>Hibernicarum...</u>, which is regarded as the first Irish Flora. It is a fascinating pocket-book, full of folk-lore, comments on witchcraft and religious attitudes, and even has a few records of plants seen by its author in Britain (mostly Cumberland). As these records may be of interest to local botanists I have transcribed the text from Threlkeld's Flora below and supplied modern botanical names. Threlkeld used long phrase names as he was living at the time before the invention of binomials by the Swedish botanist, Carl Linnaeus.

In the list below, the page number is given in square brackets (the original book is unpaginated, but a facsimile edition in press will bear these page numbers).

I have only transcribed the entries in which Threlkeld makes it clear that he himself saw the plant. There are other occasions when he obviously quoted earlier authors including John Ray. Also, I have not transcribed entries where Threlkeld makes references that are not localities for wild plants; he mentions, for example, the street criers of Edinburgh selling edible seaweeds, and boys eating the roots of **Potentilla anserina** in the north of England.

Further information on Dr Threlkeld is contained in my paper 'On the Contemplation of Vegetables', published in the Journal of the Society for the Bibliography of Natural History 9: 257-273 (1979). The facsimile (in press) contains indexes and glossaries as well as a full biography of Dr Threlkeld and details may be obtained from Boethius Press, Clarabricken, Clifden, KILKENNY, Republic of Ireland.

- [20] Narthecium ossifragum:- Asphodelus Lancastriae verus...It is common in our rotten Mosses in Cumberland...
- [23] Bellis perennis:- Bellis minor sylvestris simplex...It is...caled by our People in the North of England Banwurt, by which Name I knew it forty Years ago at Keibergh in the Parish of Kirk-oswald, and County of Cumberland, where I drew my first Breath, May the last 1676.
- [37] Armeria maritima:- Caryophyllus marinus minimus...I have seen it in Cumberland upon the Banks of Esk between Carlisle and Allison Bank.
- [103] Lycopodium clavatum:- Muscus clavatus Lycopodium...its grows plentifully in the North of England, and particularly upon the low Plains, where McIntosh with his Red-shanks were stopt upon November 2d.1716. by the Posse Comitatus of Cumberland for several hours.
- [112] **Oenanthe crocata:** Oenenthe cicutae facie Lobelij...I have seen Plenty of it in Cumberland, where our Country People do call it, Dead-tongue
- [156] **Taxus baccata:** Taxus...Found in the Church-yard at Sedbergh in York-shire. and at Threlkeld in Cumberland, both places invironed with Mountains
- [123] Ulmus glabra:- Ulmus vulgatissima folio lato scabro...what some have suggested, that the Elm is a Foreigner in England, and that it is not found Northward of Grantham, is trifling and false, for near the small River of Croglin in Cumberland, from the Place where it diembogues itself into the Eden, up to the very Fells, I have seen the Elm grow, some of which are large Trees, without any Art or Culture...

E. CHARLES NELSON, National Botanic Gardens, GLASNEVIN, Dublin 9, Republic of Ireland

#### \*\*\*\*\*

# VICE-COUNTY RECORDERS' CONFERENCE, ST MARTIN'S COLLEGE, LANCASTER 5-7th SEPTEMBER 1986

About 70 BSBI members, including over 40 vice-county recorders, met in Lancaster for the biennial Recorders' Conference. This saw the launching of the new Monitoring Scheme, the most ambitious enterprise the Society has attempted since the publication of the <u>Atlas</u> of the <u>British</u> Flora. The recorders were pleased to welcome Tim Rich, already known to some as an expert on Cruciferae, in his new role as Monitoring Scheme Organizer.

The morning of Saturday 6th September was devoted to an explanation of the new scheme. Derek Wells, in his introduction, explained how it built on and developed the techniques pioneered by the Society in the production of the <u>Atlas</u>. The two aspects of the scheme were then outlined: Frank Perring dealt with the recording of sample 10km squares and Tim Rich described the plans to record in detail three tetrads in each square.

On Saturday afternoon we broke up into small parties to experiment with different types of habitat mapping in three tetrads north of Lancaster. Some groups were asked simply to make a species list, others also tried out three ways of habitat recording of different degrees of sophistication. The weather conditions were ideal, being bright and sunny, and only one group decided that a visit to the Carnforth Steamtown railway museum was essential to a thorough exploration of their tetrad.

On Sunday morning the results of the pilot study were discussed in a session led, with considerable aplomb, by the new Scheme Organizer. It was generally agreed that an element of habitat recording was important and the discussion centred on the amount of detail which a recorder could be expected to provide. The field exercises provided a valuable test, indicating that in general the groups using more sophisticated techniques of habitat mapping recorded a smaller species list. Not surprisingly, the largest number of species in a tetrad (243) was recorded by a group in which the local knowledge of Geoffrey Halliday was combined with the expertise of Arthur Chater.

Although the Monitoring Scheme was the main feature of the weekend, other topics were not entirely excluded. Unfortunately Eric Greenwood, who had been going to talk about 'The Botanist's Lancashire', was prevented at the last moment from attending. However Geoffrey Halliday stepped in at short notice to give a fascinating, and superbly illustrated, lecture on the 'Flora of Cumbria'. Other sessions were devoted to botanical identification by computer (Richard Pankhurst), computer generated distribution maps for county Floras (Andrew Malloch), and the work of the Conservation Association of Botanical Societies (Nick Stewart).

Members dispersed on the Sunday afternoon; some to record tetrads in Yorkshire that have been recently (and I hope temporarily) annexed by Cumbria. Derek Wells was warmly thanked for organizing the meeting, and there was much appreciation of the excellent standard of accommodation and food provided by the friendly staff of St Martin's College. The Monitoring Scheme had been successfully launched, and we all eagerly await the start of fieldwork in 1987.

C.D. PRESTON, Biological Records Centre, Monks Wood Experimental Station, Abbots Ripton, HUNTINGDON PE17 2LS

#### \*\*\*\*\*\*

## VICE-COUNTY RECORDERS' CONFERENCE, ST MARTIN'S COLLEGE, LANCASTER -2

Running concurrently with the BSBI's Recorders Conference at St Martin's College Lancaster, was a Liturgical Conference attended by Roman Catholic priests, nuns, and lay-persons.

After dinner on the Saturday evening the South Wales contingent attending the BSBI Conference were the last to leave the dining hall, being busy finishing off a second bottle of wine accompanied by repeated visits to the excellent cheese board. They were approached by the Organizer of the Liturgical Conference (a Monsignor from Liverpool) who related the following story.

On Friday afternoon he and some colleagues had gone to Lancaster Railway Station to pick up a Bishop. The Bishop duly arrived and was sent off to the college in one car while the Monsignor waited for a member of the Bishop's entourage who had gone to the station bookshop. He looked around the platform in case there was anyone else needing a lift to the college and noticed a lady looking rather lost. With the changing times, he wasn't sure whether she was a nun or not; she was wearing a blue scarf and carrying suitcases so he decided to approach her. He was very relieved to to find that she was indeed attending the conference at St Martin's College and would much appreciate a lift. Polite conversation followed during which the 'nun' made the startling announcement that although she was looking forward to the Conference she was a little concerned about one part of the programme. Agog to know what a nun was questioning about Roman Catholic liturgy, he was even more startled to hear that Britain was divided up into 10km squares (he had only heard of Dioceses and parishes), but what concerned the 'nun' most were the TETRADS. What on earth were tetrads? He had visions of some sort of improved Trinity but not wishing to appear ignorant merely replied, 'ah yes, the tetrads.' By this time the second priest had returned so they got into the car to drive to the college. The Monsignor, was by now, having doubts about his female passenger, especially when he discovered that she was from a part of the country that already had its full quota of delegates. He finally plucked up the courage to ask if she was with the Liturgical Conference, to which she replied emphatically, 'Oh no, I'm with the botanists'. This caused great amusement when related to the members of the Liturgical Conference; they had no idea what tetrads were, although being connected with botany, a possible link with 'triffids' had been put forward. The members finished their first evenings discussions with prayers followed by the dismissal, 'I hope the tetrads let you sleep in peace.'

The Monsignor assured us that if he remembered nothing else about his conference he would never forget the tetrads.

GWYNN ELLIS, Dept. of Botany, National Museum of Wales, CARDIFF CF1 3NP

At the same moment as the tetrad misunderstanding, I was booking in a lady from their Conference!

She bounced in smiling and saying 'Hello' and I was frantically trying to think who she was - casting my eye down our list of names for inspiration - whereupon she said: 'I'll not be on the list, as I am a late booker', - adding 'and because I was late I have my room number' and she produced a slip of paper with the number of her room. This surprised me as no one else had been given a room number in advance, and checking the list, saw against her number the name of a very prominent male member! At that point I asked 'Is it the <u>Botanical</u> Conference?' and, to my relief, she replied 'Oh no, I'm going to the Liturgical Conference', which was in a different Hall of Residence!

MARY BRIGGS, White Cottage, Slinfold, HORSHAM, West Sussex RH13 7RG

#### THE BSBI MONITORING SCHEME

The BSBI Monitoring (or Mapping) Scheme (<u>BSBI</u> <u>News</u> 43: 7 (1986)) has been set up to assess the current status of the flora of Great Britain and Ireland. All BSBI members are invited to participate in the Scheme, and the instructions for recording are enclosed with this issue of <u>BSBI</u> <u>News</u>, together with species and habitat record cards.

Because of the short time period for the survey (1987 and 1988 <u>only</u>), it is important we get off to the best possible start. Members wishing to record for the Scheme should, if possible, contact their v.c. Recorder <u>before</u> recording so that duplication of work can be avoided. I hope you will all be able to contribute to the Scheme, which should be fun to do, as well as producing lots of really useful data. Further supplies of record cards are available on request to me at BRC.

To help cover some of the more remote 10km squares and tetrads, we are, in addition to ordinary field meetings, advertising special 'Monitoring Scheme Holidays'. Join the Monitoring Scheme, travel to lots of exotic vice-counties, meet interesting botanists and do lots of recording! In this first brochure, we have two holidays for 1987; book early to avoid disappointment!

JULY, BODMIN MOOR (v.c.2): Walking tours of Bodmin Moor offered for keen, fit botanists to record tetrads in the 10km square 20(SX)/1.7. Look for **Drosera** and **Pinguicula** amongst beautiful scenery. A tent might be useful! Volunteers should contact Rosaline Murphy, Shangri-La, Reskadinnick, CAMBORNE, Cornwall TR14 0BH.

SUMMER, ORKNEY (v.c.111): Help wanted with recording in the Orkney Islands. Spend a week exploring those idyllic islands with their interesting vegetation and long summer days. Please contact Elaine Bullard, Toftwood, KIRKWALL, Orkney KW15 1SB, who may be able to help with accommodation.

If any member has a boat and would be prepared to offer help with transport to islands - particularly on the West coast of Scotland - for a week or two in the Summer, we could offer Monitoring Scheme Cruises! I've already heard of plans to visit one unbotanized island.

TIM RICH (BSBI Monitoring Scheme Organizer), Biological Records Centre, Monks Wood Experimental Station, Abbots Ripton, HUNTINGDON PE17 2LS

#### \*\*\*\*\*\*\*

# RAILWAYS AND PLANT DISTRIBUTION

Is it generally appreciated to what extent railways have been instrumental in increasing the range of several species of vascular plants?

**Corrigiola litoralis** on the track and **Gymnocarpium robertianum** on station brickwork in East Anglia are obvious introductions and are depicted as such in the <u>Atlas of the British Flora</u>.

In S.E. Yorks. (v.c. 61), Cystopteris fragilis has occurred on two station platform walls and in no other habitat. This is surely another introduction but was not depicted as such in the <u>Atlas</u>.

The spread of species across a vice-county is less obvious. During the 'British Rail land survey', undertaken by the Institute of Terrestrial Ecology in 1977, Sison amomum was found near Bridlington, some 32 miles north of the Humber bank where it occurs by dykes at its natural northern limit.

In Holderness, east of the River Hull valley, are several species which would be rare or absent but for the disused railway lines. Such species include sand-lovers. Aira caryophyllea is frequent along both the Hull to Withernsea and Hull to Hornsea lines but otherwise only occurs in S. Holderness at Spurn. On the disused railway line at Hollym, near Withernsea, is a local abundance of Spergularia rubra and with it just one patch of Arabidopsis thaliana, some 50 miles east of any other record for the species. I am told that in steam train days, sand was carried on the locomotive and scattered on the track to assist with braking and this seems to be the explanation of the occurrence of this species on the railway line.

Chaenorhinum minus, one of the most characteristic species of loose cinders, would be virtually absent from Holderness, and many another area of Britain, but for the railways.

Although many species have undoubtedly spread along the railways, I do not know of a single example of a species spreading from the railway into another habitat and becoming established there. In time many of these species will disappear again as succession takes its course or the track is destroyed.

When records were collected in the 1950s for the first edition of the <u>Atlas</u>, the opportunity to botanize on railway property was severely limited. Now the disused line provides the best botanizing area in many a district.

When records are being collected as part of the new mapping scheme, should members be requested to indicate which species occur only on a railway in the tetrads and 10km squares selected for study?

EVA CRACKLES, 143 Holmgarth Drive, Bellfield Avenue, HULL, N. Humberside HU8 9DX [Tim Rich (Monitoring Scheme Organizer) says in reply to the question in the last paragraph: 'Yes please - include this in your habitat survey notes'. Ed.]

#### \*\*\*\*\*

# A REMARKABLE SITE FOR SPIRANTHES SPIRALIS

In August 1972 drought conditions caused a cessation of mowing at Dowdeswell Reservoir. It was then that the groundsman noticed the small white flowering spikes of a flower he had never seen before scattered over the dried up turf on top of the covered underground reservoir supplying water to Cheltenham. This phenomenon so excited his curiosity that he asked me to visit the Reservoir and identify the plants. They were, of course, Spiranthes spiralis, a species whose low rosettes of leaves lie flat on the ground and are missed by the blades of lawn mowers. The orchid colony numbered about 300 plants and contained some particularly fine inflorescences up to 7 inches tall with 20 florets to a spike. For years the reservoir top had been regularly mown from April to October but once the groundsman had seen the Autumn Lady's-tresses and a colourful display of other wild flowers, he readily agreed to leave the turf unmown from mid-August to early October to allow flowering to take place.

This management has led to a spectacular increase of Spiranthes with maximum counts of 1000 plants in September 1977 and 1800 in 1978 although numbers do fluctuate from one season to another in typical orchid fashion and 1986 only produced about 400. The main concentration occurs in the middle of the site between Severn-Trent's metal markers Nos. 107 - 113.

The reservoir top is rectangular in shape, measuring approximately 390 x 40 feet and stands above the open settling tanks and the surrounding grassland. The turf was originally brought from an oolitic limestone hill some 400ft above and to the south of the Reservoir when the Chlorination Plant buildings were erected in 1886. The soil has a pH of 7.5 and, as it lies over a corrugated concrete base, varies in depth from 4 to 7 inches. This variation is apparent by the uneven composition of the sward: where the soil is thinnest bare patches caused by droughts support a dense concentration of low-growing herbs with few grasses, while other parts have a more lawn-like texture. Plants growing round and under the rows of curved metal air vents get some protection from the mower and can attain a more normal growth.

The reservoir top has an interesting and unusual assemblage of plants. Unexpected species growing in abundance are Carex caryophyllea, Geranium columbinum, Filago vulgaris, a declining species now rare in the Cotswolds, and Hypericum humifusum, a calcifuge rare in the Cotswolds but occurring along a ride in nearby Lineover Wood. The September flowering of Centaurium erythraea and Sherardia arvensis with the Spiranthes provides an attractive feature. A densely tufted grass with somewhat glaucous leaves was identified as Festuca rubra L, subsp. commutata Gaud. by Dr C.E. Hubbard; this species is frequently sown for turf formation.

At the present time S. spiralis is not known to occur elsewhere in the Cheltenham area (v.c. 33). In v.c. 34 (West Gloucs.), small colonies have appeared on some five lawns when mowing was discontinued during spells of particularly dry weather in late summer. In its natural Gloucestershire habitats the species favours poor, dry, thin grasslands mainly on calcareous soil.

# Acknowledgement

I would like to express my thanks to Severn-Trent Water Authority for giving me permission to visit Dowdeswell Reservoir regularly and for their co-operation in helping to conserve this spectacular colony of Autumn Lady's-tresses.

SONIA HOLLAND 64 All Saints' Road, CHELTENHAM, Gloucestershire GL52 2HA

[A complete list of the vascular plants and cryptogams found on the reservoir top at Dowdeswell is available from the Editor on receipt of a s.a.e.]

## RECOMMENDED PROCEDURE IN BRITAIN FOR NOTIFICATION OF A RARE PLANT DISCOVERY BY A BSBI MEMBER

As a result of the different weather conditions this year, several rare plants have reappeared, and many species have flowered for the first time in years. However, some of the situations have not been handled very well because the BSBI personnel involved did not act according to the recognised procedure that was worked out and agreed to by various parties and published in BSBI News 32: 6 (1982).

This procedure is reprinted below (with minor amendments) and members are urged to follow its recommendations exactly.

LYNNE FARRELL, Hon. Sec. Conservation Committee, c/o Northminster House, PETERBOROUGH PE1 1UA

The Nature Conservancy Council has the legal responsibility for rare plants in Britain, but would very much appreciate the help of BSBI members and Recorders in the protection of these plants, (i.e. those with 15 or fewer 10km square records in Britain or as listed in <u>BSBI News</u> 31: (i) - (viii) (1982).

The safeguarding of a rare plant depends on maintaining its habitat. This primarily requires the co-operation of the landowner and tenant of the piece of ground on which it occurs, but it is also necessary that the Nature Conservancy Council (NCC) is notified so that the site may be safeguarded from planning developments and other land use changes. How to secure a particular landowner/tenant's co-operation is a matter best left to the judgement of someone with local knowledge, which would normally be the BSBI Vice-County Recorder if residing in the area or the Assistant Regional Officer (ARO) of NCC. The recommended procedure for notification of a rare plant is as follows:

1. Notify the BSBI Recorder who will ensure that a rare species population form is completed, and who will also notify the NCC ARO.

The NCC ARO who will then be responsible for 2 and 3, in conjunction with the BSBI Recorder and the finder.

- 2. Notify the Owner and the Agricultural Tenant. This should preferably be by personal visit by those mentioned in 1. Record visit on rare species form (and amend population details if necessary).
- 3. Notify the Chief Scientist's Team Member for Rare Plants, NCC, Peterborough (at present, Lynne Farrell).

Where appropriate the Recorder/ARO should:

4. Notify the Secretary/Conservation Officer of the local Trust for Nature Conservation (or equivalent body where there is no Trust for N.C.).

Where there is imminent threat, the Recorder should also:

5. Notify the BSBI Conservation Committee Secretary (at present, Lynne Farrell at address above).

NCC will notify current workers on the species.

Findings of rarities should be published by BSBI in <u>Watsonia</u> (in 'Plant Records' or as a paper), but this or any other reference should not give enough details of the locality to cause a threat to the plant's security.

R.A.H. SMITH (then NCC Observer on BSBI Council) D.J. McCOSH (Hon. Sec. BSBI Records Committee) October 1982

Approved by Council 19.X.82.

This largely green-flowered form, which appears sterile, may be induced by prolonged wet weather (Grose 1957). It was first noticed at the Wotton-under-Edge, Glos., Stachys alpina site during the summer of 1986 by R.D. Randall and reported as the putative hybrid S. alpina x S. sylvatica (= S. x medebachensis Feld & Koenen). This hybrid has been recorded from Ga, Ge, He and Hu but not from Br (Green 1975). Its true identity was first established by M.A.R. Kitchen who saw the plant <u>in situ</u> on the GTNC reserve and later another near Berkeley, Glos. T.G. Evans reports its occurrence in Gwent in 1986.

On visiting the Wotton site in September I was immediately impressed by the size of the plant (almost six feet in height) falsely indicative of hybrid vigour, and its unusually long flowering period which again could suggest hybridity. Closer examination revealed minor enlargement of the middle lobe of the corolla, otherwise the plant appeared morphologically identical with the type.

## References

Green, P.S. (1975). <u>The Flora of Wiltshire</u>. Devizes, W.A.N.H.S. Natural History Section. Grose, D. (1957). Stachys L. in Stace, C.A. ed. <u>Hybridization and the Flora of the British</u> Isles. London, Academic Press.

ADRIAN L. GRENFELL, 19 Station Road, Winterbourne Down, BRISTOL BS17 1EP

#### 

# NOTES AND ARTICLES

# WOOLLY BEARS DEVOUR DORSET HEATH IN IRELAND

During a brief visit to Connemara on 29 September 1986, in company with Dr Patrick Coker and a party of final year students from Thames Polytechnic, I watched a herd of six woolly bears (Macrothylacia rubi) grazing on one of Ireland's rarest plants. The woolly bears were clearly enjoying their meal, munching the young shoots of the Dorset heath (Erica ciliaris) as if they were sticks of celery.

There are two factors which make this observation noteworthy. Firstly, that particular area of Connemara is the richest in these islands for heathers - five species of Erica, Daboecia and Calluna - but during our fieldwork woolly bears were only seen grazing on Erica ciliaris. Secondly, E. ciliaris is extremely rare in Ireland and is a protected plant. There are only six or seven individual plants in this solitary Irish population, and the woolly bears were substantially reducing the number of young growing shoots.

Under such circumstances, and bearing in mind the law which protects wild plants and animals, what does one do? Destroy the herbivores, or leave Nature to take its course? We compromised, and removed two of the animals (big hairy caterpillars) for purely scientific reasons - to have them identified! The four remaining, no doubt continued to enjoy a succulent meal of heather shoots.

According to standard references, the normal food plants of Macrothylacia rubi are members of the Ericaceae. Cattle, sheep, goats and donkeys are also known to graze the heathers of Connemara.

E. CHARLES NELSON, National Botanic Gardens, GLASNEVIN, Dublin 9, Republic of Ireland

#### \*\*\*\*\*

## HOOKED EPIDERMAL HAIRS

Whalley (1986) recorded various insects caught on the hooked hairs of **Picris echioides** (Bristly Oxtongue) and E.S. Brown (1973) recorded army worms (**Spodoptera exemptor**) trapped on the hooked hairs of three unrelated East African plants. The hooked hairs of French Beans (**Phaseolus vulgaris**) were used in the Balkans to catch bed bugs and also to protect growing plants against aphids (Johnson, 1953).

Insects specialized to feed on plants protected by hooked or sticky hairs may themselves be protected from all but equally specialized natural enemies. Tobacco whitefly (**Bemisia tabaci**) may thrive under the lower leaves of tobacco crops while many of its hymenopterous parasites (**Encarsia**, Aphelinidae) are entangled by the sticky hairs on the young growth. S.C.S. Brown (1973) observed a similar fate for members of another family of parasitic Hymenoptera, Mymaridae. Some bugs live on carnivorous plants and those belonging to the Dicyphini are thought to feed on insects trapped by the plants (China, 1953).

There is a considerable literature concerning the protective value to plants of sticky glandular hairs and of breeding pest-free varieties of crops protected by such hairs (Gibson, 1971). The sticky hairs of putative protective function resemble those of carnivorous plants (Heslop-Harrison, 1978). It would be interesting to know whether plants protected by hairs grow better when festooned with insects, than when deprived of them.

The evolutionary significance of antagonistic relationships between plants and insects is much more difficult to evaluate than that of symbiotic relationships such as pollination. Recent reviews are to found in Forey (1981), Futuyma & Slatkin (1983), Jermy (1984) and Stone & Hawksworth (1986).

# References

- Brown, E.S. (1973). The destruction of army worms, Spodoptera exemptor (Walker) (Lep. Noctuidae), by certain trap plants in East Africa. <u>Entomologist's Monthly Magazine</u> 109: 63-64.
- Brown, S.C.S. (1973). A novel way of obtaining 'Fairy Flies' (Hym. Mymaridae). Ibid. 108: 94 (1972).

China, W.E. (1953). Two new species of the genus Cyrtopeltis (Hemiptera) associated with sundews in Western Australia Western Australian Naturalist 4: 1-8.

Forey, P.L. (1981). [Ed.] The Evolving Biosphere. British Museum (Natural History) and Cambridge University Press, Cambridge.

Futuyma, D.J. & Slatkin, M. (1983) [Eds.] <u>Coevolution</u>. Sinauer Associates, Sunderland, Massachusetts.

Gibson, R.W. (1971). Glandular hairs providing resistance to aphids in certain wild potato species. <u>Ann. appl. biol.</u> 68: 113-119.

Heslop-Harrison, Y. (1978). Carnivorous plants. Scientific American 238: 104-108.

Jermy, T. (1984). Evolution of insect/hostplant relationships. <u>Am. Naturalist</u> 124: 609-630.

Johnson, B. (1953). The injurious effects of the hooked epidermal hairs of French Beans (Phaseolus vulgaris L.) on Aphis craccivora Koch. <u>Bull.</u> ent. <u>Res.</u> 44: 779-788.

Stone, A.R. & Hawksworth, D.L. (1986) [Eds.] <u>Coevolution and Systematics</u>. Systematics Association.

Whalley, P. (1986). Bristly Oxtongue, Picris echioides L., A hazard for insects? <u>BSBI</u> <u>News</u> 43: 13-14.

V.F. EASTOP, Dept. of Entomology, British Museum (Nat. Hist), Cromwell Road, LONDON SW7 5BD

#### \*\*\*\*\*\*

## A PERENNIAL PROBLEM IN THE COUNTRYSIDE - WILL WE EVER LEARN?

In a small booklet, <u>Cave Explorers in Co. Fermanagh</u> (1907), the well known Irish botanist and author, Robert Lloyd Praeger, my father Dr Charles A. Hill, E.A. Baker and Harold Broderick, describe their Whitsuntide weekend explorations of the Marble Arch caves in the Florencecourt demesne, now a major tourist attraction in N. Ireland, which I visited this year.

The last paragraph reads 'The party walked down to the gate at the entrance to the glen (Marble Arch Glen) which we reached at 8.30pm after a thoroughly hard day's work. Only one thing marred the enjoyment in walking down - one of the prettiest parts of the glen, which in the morning had been a most beautiful sight, was now littered with paper, orange peel, banana skins, broken bottles, and egg-shells, so that it made one feel that one could not blame the landowner who, allowing tourists to walk through his grounds, becomes disgusted at the habits of the few, and closes these beauty spots of Nature to the many. This has happened in England in many cases, but we hope that such will not become necessary in Ireland. It would have been a simple matter to pick up and carry away the debris.'

# Tailpiece

These spelaeologists of eighty years ago were undoubtedly a hardy and determined breed. When confronted by an underground lake or stream flowing down a narrow low passage, they stripped, and dressed in boots, and hats in which candles were fixed, pressed on with the serious work of exploration in chilly water and pitch darkness. Besides candles, which unfortunately left a black deposit on the limestone rocks, the only other form of illumination was magnesium flares used when calculating the height of chambers.

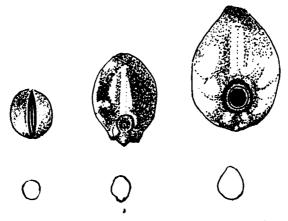
SONIA HOLLAND 64 All Saints' Road, CHELTENHAM, Gloucestershire GL52 2HA

# \*\*\*\*\*

## SEA PEAS AMONG TROPICAL DRIFT SEEDS

In <u>BSBI News</u> 34: 11-13 (1983), I reported on large strandings of tropical drift seeds on Irish and Cornish beaches during that year. Such substantial strandings are now known to be the common state of affairs on west-facing beaches in western parts of these islands especially during the stormier months. Collections of several hundred seeds can be made with ease if a beach-comber is on a suitable beach at the right time of year.

In that note I included illustrations of eleven different seeds, including half a dozen of the more common, large tropical species. Also shown were three very much smaller seeds which had only been tentatively identified at that time.



Drift seeds from Cornwall and Ireland; from left to right, Lathyrus japonicus subsp. maritimus (note the linear hilum) (11), Calystegia soldanella (note the distinctly three-pointed base) (10), Ipomoea alba (9).

The drawings in the upper row are enlarged 3 times; the lower outlines indicate the approximate  $\frac{\text{maximum}}{\text{del. Bernie Shine 1986.}}$ 

No. 9 has been germinated at the National Botanic Gardens, Glasnevin, and is a climbing herb resembling the common bindweed of gardens, and it is almost certainly **Ipomoea alba** (morning glory) which is a strandline plant in subtropical North America and frequently recorded among drift on beaches in the eastern USA. While the plants at Glasnevin have not flowered. I am confident about the identification of this plant.

No. 10 has also been germinated; it is a smaller seed and is definitely a member of the Convolvulaceae. Des and Roger Lidstone were the first to raise seedlings, and when some leaves were sent to Dr R. Brummitt (Royal Botanic Gardens, Kew) he had no hesitation in identifying the plant as Calystegia soldanella. A young plant (an offset of one of the Lidstones' seedlings) is thriving in the National Botanical Gardens, Glasnevin, but none of the seedlings has flowered yet. Calystegia soldanella is, of course, a native plant in these islands but it is not abundant; however it is common on coasts in south-western Europe. I am perplexed by these records because the seeds are stranded in what can only be described as VAST quantities. Reports from Cornwall and Ireland record collections, each of over one hundred seeds, on separate beaches on consecutive days. If in a few hours a beach-comber can collect such quantities, and bearing in mind that many more seeds will not have been collected, the numbers stranded must be enormous. Can the populations

of **Calystegia soldanella** in Western Britain and Ireland possibly produce seeds so prolifically? Or, are seeds washed northwards from southern Europe?

No. 11 was identified as 'probably Lathyrus maritimus' (i.e. L. japonicus subsp. maritimus), and that identification has now been confirmed. Seedlings were raised by the Lidstones in Cornwall - their's flowered in 1985 - and by the writer - mine blossomed in 1986. There can now be no doubt about these small pea-like seeds, but again their presence in huge quantities on British and Irish beaches is most perplexing. It is more certain than in the case of Calystegia soldanella that these seeds cannot have come from indigenous plants - there are so few plants in western parts (Dr Randall reported in 1977 (see below) that there were no plants on western coasts of Britain and Ireland) that there is no possibility that extant populations could supply such quantities of seed. Since 1977 in Ireland, the sea pea has been reported, invariably as single plants growing on isolated beaches, but none of the plants was a mature, flowering specimen. In Cornwall, the sea pea is still considered extinct (see R.E. Randall, Watsonia 11: 247-251 (1977)).

What does the evidence of the stranded seeds indicate? The majority of the stranded seeds that I have reported are most certainly of American nativity, and are from plants with tropical or subtropical centres of distribution. Ipomoea alba belongs to this suite of plants, and its seeds are almost as frequent as those of Calystegia soldanella (in fact, the two species's seeds are distinguished only with difficulty) and Lathyrus japonicus. Most importantly, the seeds of these three plants are found mixed together at the same time on the western beaches. But C. soldanella does not occur on eastern coasts in North America, and the source of the stranded seeds remains a mystery - the ocean currents in the Eastern Atlantic are not suitable for transport from south-western Europe.

Lathyrus japonicus does grow in eastern North America and it is more than probable that the seeds collected here have floated across the Atlantic; they are capable of making this journey and remaining viable. Thus the western populations (or plants) of sea pea are really <u>casual adventives</u>, and moreover if the beaches were less frequented by tourists I strongly suspect that plants of this species would be more frequently seen (but never common) in Cornwall, the Western Isles and western Ireland. It should also be added that the current patterns make it improbable that Lathyrus (and Calystegia) seeds originating in the North Sea or English Channel populations constitute a significant proportion of the stranded material, and in any case the largest of those populations are not established on the tide-lines whence seeds could be washed into the ocean.

A corollary of this is that the sea pea will continue to invade western Europe along with tropical drift seeds, as long as the American populations remain prolific and the ocean currents flow as they do today.

E. CHARLES NELSON, National Botanic Gardens, GLASNEVIN, Dublin 9, Republic of Ireland

#### 

#### ALIENS AND ADVENTIVES

Due to the unfortunate indisposition of Adrian Grenfell, ADVENTIVE NEWS 34 has been postponed until the next issue. We send Adrian our best wishes.

# MONTIA PARVIFOLIA - NEW TO SCOTLAND

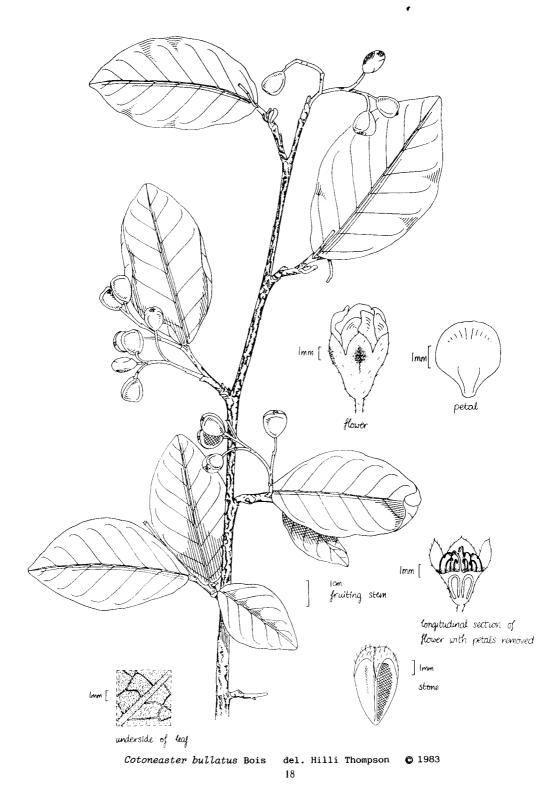
When wading along the Lanarkshire (v.c. 77) side of the River Cart to the south of Busby near Glasgow in June 1985 to record the flora, a patch of Montia was found (by PM) on a steep bank (grid ref. 26/57.55). A specimen was subsequently identified (by EJC) as **M.** parvifolia (Moc. ex DC.) Greene.

A return visit was made in June 1986 to check that the plant was established and to record the associated species.

There are two fairly dense mats of the plant each 3ft by 2ft, and separated by a 3ft strip of almost bare rock over which grow a few straggling plants. One patch came down to within 1ft of the normal water level and the other ended 3ft above.

Associated species were Anthoxanthum odoratum, Dactylis glomerata, Poa trivialis, Luzula sylvatica, Centaurea nigra and Rumex acetosa. On the bank above were Crataegus monogyna, Filipendula ulmaria, Geum rivale, Heracleum sphondylium, Rosa canina s.l. and Vicia sepium.

In addition, a boulder with a 5ft by 3ft face rises out of the water, partly overlapping one of the patches. This rock has thinly scattered plants of **M. parvifolia** 



growing on it. Associated species were Erophila verna, Polypodium vulgare, a stunted Taraxacum and moss.

M. parvifolia is a native of western North America, from Alaska south through the Pacific States to Monteray County, California. It has a predeliction for growing on damp rocks on river banks. It is a creeping perennial, primarily reproducing by runners or bud scales. The stem leaves are alternate and +/- fleshy. Pink flowers (1-10) are racemose, at the ends of the branches. Two forms are recognised: var. parvifolia with petals 7-8mm and basal leaves 1-3.5cms; and var. flagellaris (Bong) Hitchc. with petals 12-14mm and basal leaves 2-4cms. The Lanarkshire colony seems to be somewhat intermediate.

The plant is rarely grown in British rock gardens. The only previous British record as an escape that we can find is from Leagram Hall (grid ref. 34/62.44) near Chipping, W. Lancs, v.c.60, 6.6.1913. (<u>Rep. botl Soc Exch. Club Br. Isl.</u> 3: 461 (1914) and 4: 10 (1919)). Eric F. Greenwood (BSBI Recorder for v.c. 60) tells us (9.1.86) that he possesses no more definite or later information than that in the two Reports mentioned above.

We have found no source for the Lanarkshire colony. The only habitation comprises a small village about a mile upstream and, beyond, a few scattered houses near the river and its tributaries for the remaining seven miles of its course.

The River Cart site is obviously very well established and the species can be expected to remain as a permanent component of the Scottish flora.

Specimens have been lodged in E, GL, herb. E.J.C. and herb. P.M..

P. MACPHERSON, Ben Alder, 15 Lubnaig Road, GLASGOW G43 2RY E.J. CLEMENT, 13 Shelford, Burritt Road, KINGSTON-ON-THAMES, Surrey KT1 3HR

#### \*\*\*\*\*\*

## COTONEASTER BULLATUS Bois

This large deciduous shrub with arching branches is one of those most commonly naturalized and also one of the most distinctive. The pointed oval leaves are very corrugated and up to 3.5 inches long (larger in the case of var. macrophyllus). They are darkish green above and more or less glabrous when mature, but paler green and more hairy beneath. The flowers have upright petals of a whitish-pink colour. The large, dark-red, shining fruits are slightly obovate. Drawing by Hilli Thompson.

A WORD OF WARNING. A number of the deciduous <u>black-fruited</u> Cotoneasters do resemble C. bullatus quite closely in leaf and flower and some of these are now also being found naturalized. If fruits are not available, the bronze-coloured young leaves of C. bullatus are thought to distinguish it from other similar species.

NOTE: A similar difficulty regarding fruit colour has arisen in the case of a record of the red fruited Cotoneaster acuminatus which appeared in <u>BSBI</u> <u>News</u> 37: 15 (1984). When this very well naturalized specimen was traced in Ampfield Wood, S. HANTS., by Brian Gale, Sally Lister and myself in September 1986, it was found to have black fruits and is therefore likely to be C. ambiguus. A seedling was found nearby, but the ten-foot main specimen is in danger of being shaded out by growth of the woodland in which it was originally birdsown. As we have no other wild specimen of C. ambiguus in Britain a little conservation work would seem in order. (The note about C. acuminatus in <u>BSBI</u> <u>News</u> 41: 26 (1985) should also be deleted.)

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

The cover illustration of Cotoneaster simonsii Baker was also drawn by Hilli Thompson (see BSBI News 41: 26 (1985)).

## \*\*\*\*\*

# CROCUS VERNUS (L.) Hill - I

It is known that species of Crocus other than C. sativus contain Saffron and it has been shown that in C. nudiflorus and C. speciosus it can be of good quality; in fact it is thought that C. nudiflorus was brought to Britain over 300 years ago by the Knights of St John of Jerusalem to provide a source of Saffron. This species flowers much more readily in the British climate than C. sativus and is, or has been, naturalized in several places throughout the country. C. vernus would almost certainly be inferior to these three species in the Saffron content of its stigma but would provide some sort of alternative, and it is easy to grow, so might well have been planted as an experiment.

I have obtained a corm from Mr Horwood of the Berkshire, Buckinghamshire and Oxfordshire Naturalists' Trust with a view to studying the plant and checking its chromosome morphology to see if it matches any of the European populations of **C. vernus.** Studies at Kew have shown that this species varies considerably from region to region and it might be possible to say roughly where the Inkpen stock originated; any interesting results will be communicated later.

BRIAN MATHEW, Royal Botanic Gardens, Kew, RICHMOND, Surrey TW9 3AB

#### \*\*\*\*\*\*

## CROCUS VERNUS (L.) Hill - II

The Crocus Field at Inkpen is one of the few British sites for this naturalized species (see <u>BSBI News</u> 40: 25 (1985) and 43: 18 (1986)). Following an appeal to purchase the field when it was placed on the market in late 1985, I am pleased to say that it is now a Berkshire, Buckinghamshire and Oxfordshire Naturalists' Trust reserve. However, it is not only of interest for its **Crocus** population. The sward is very rich in a wide range of vascular plants characteristic of unimproved pastures, and the field has been notified as a Site of Special Scientific Interest by the Nature Conservancy Council.

It is at its best for **Crocus vernus** around the end of March, and in 1986, coincident with BBONT's acquisition of the site, the showing was the best for many years. All are welcome to visit this attractive field, with its commanding views over West Berkshire and into Wiltshire, although large parties should contact the BBONT office first. Thanks go to all who contributed to the safeguard of 'Inkpen Crocus Field', including many local people, local authorities, the Nature Conservancy Council and the World Wildlife Fund.

IAN S. FRANCIS, (Assistant Conservation Officer (Berks)), BBONT, 3 Church Cowley Road, Rose Hill, OXFORD OX4 3JR

## \*\*\*\*\*\*

## DOWNINGIA ELEGANS REFOUND IN EAST SUSSEX

Three earlier reports of **Downingia elegans** at Newport Pagnall, Milton Keynes and at Ardingly, East Sussex (see <u>BSBI News</u> 20:10 (1978), 21: 14 (1979) and 23: 10 (1979)) were all recorded from newly constructed lakes or reservoirs. There is a strong likelihood that the source of all these introductions was from grass-seed mixtures, and at Ardingly it is known that the seed sown on the edges of the reservoir after construction, had been imported from America as a special mixture for sites with fluctuating water levels. When the **Downingia** first appeared at Ardingly it was quite unknown to us, but a chance spotting in Mary Elizabeth Parsons' <u>The Wild Flowers of California</u> led me to **Downingia** - described there as lobeliaceous plants, growing in wet places, often making the ground blue, and familiar as roadside flowers 'upon the borders of puddles'.

The plants were identified as **D. elegans** by Eric Clement and there is an illustration by Pam Haddon in <u>BSBI News</u> 23: 11 (1979). Within two years the Downingia at Ardingly had disappeared, crowded out by colonizing sward, although the Mentha pulegium first seen with it and presumed from the same source, persists there still.

This year Rosemary FitzGerald has found Downingia elegans in a second East Sussex site, but interestingly this introduction is apparently from a different source.

Rosemary writes: 'Four plants of this Central American alien were found on Hooe Level, Pevensey, E. Sussex in July 1986. They were growing in a field South of Middle Bridge well away from any farm or house. The field had been re-seeded in the autumn of 1985, using an ordinary Timothy/Rye Grass/Clover mixture, but long flooding last winter had caused failure of most of this to germinate. In July large areas of bare cracked mud were visible, lightly covered by sprawling plants of Alopecurus geniculatus. Other plants present in small quantity included Lolium perenne and Trifolium repens, survivors of the crop; wet area weeds such as Gnaphalium uliginosum, Juncus bufonius and Ranunculus sceleratus; a few normal arable weeds like Polygonum persicaria and Sherardia arvensis; and a few relics of vegetation more characteristic of the sea walls and ditch banks in unimproved grazing marshes in the south-east, Lotus tenuis, Trifolium fragiferum and Ranunculus sardous. There were no alien species which might suggest an exotic grass-seed mixture origin, such as that used at Ardingly, and it seems extremely likely that the Downingia could have been bird-sown, as the flooded pasture would have been extensively used by waterfowl during the winter. All the plants were close together, and none found in the rest of the field in spite of a thorough search. One plant of Apera spica-venti was found about 400 metres north, on a track, but that species has long been recorded as a persistent casual in this area.'

MARY BRIGGS, White Cottage, Slinfold, HORSHAM, West Sussex RH13 7RG ROSEMARY FITZGERALD, c/o NCC, Church Street, Wye, ASHFORD, Kent TN25 5BW

# \*\*\*\*\*\*\*\*\*\*\*\*

## NOTICES (BSBI)

## WILDLIFE AND COUNTRYSIDE ACT 1981, QUINQUENNIAL REVIEW OF PLANTS LISTED ON SCHEDULE 8

This review has now been completed by NCC and a number of recommendations have been made. It is proposed that all of the existing 62 Scheduled plants should remain on the Schedule and that a further 32 species should be added. A more detailed statement on these proposals will be presented during early 1987.

Amongst the proposed additions is **Gentianella ciliata** (Fringed Gentian), an attractive species which was recently rediscovered at its only British locality in the Chilterns. A number of other species confined to only one British locality are similarly recommended for adding to Schedule 8.

SUE EVERETT and LYNNE FARRELL, NCC, Northminster House, PETERBOROUGH PE1 1UA

#### \*\*\*\*\*\*

#### BSBI MEMBERS LEADING BOTANICAL PARTIES ABROAD IN 1987

Destination	Tour Dates	Leader
RHODES	MARCH	Mary Briggs
CRETE	MARCH	John Richards
	APRIL	Mary Briggs
CORFU	MAY	Sir Charles Willink
CORSICA	MAY	Maureen Ponting
SEYCHELLES	MAY/JUNE	Mary Briggs
DOLOMITES	JUNE/JULY	John Mason
KANDERSTEG (Swiss Alps)	JUNE	Sir Charles Willink
BOHINJ (Julian Alps)	JUNE	Mary Briggs
	JULY	Peter Jepson
WENGEN (Swiss Alps)	JULY	Mary Briggs
GREECE	JULY	John Richards
SAASFEE (Swiss Alps)	JULY/AUGUST	Sir Charles Willink
CORFU	OCTOBER	Mary Briggs

Further information concerning the above tours can be obtained from: Cox and Kings Special Interest Holidays, 21 Dorset Square, LONDON NW1 6QG (01-724-6624).

Destination			Tour Dates Leader		eader		
GREECE	(Thessalia	&	Epirus	)	MAY/JUNE	Jo	ohn Akeroyd

Further information from Serenissima and Heritage Travel Ltd., 21 Dorset Square, LONDON NW1 6QG (01-730-9841).

Destination	Tour Dates	Leader
RHODES & KOS (Greek islands)	APRIL	Frank Perring

Further information from Twelve Islands, Angel Way, ROMFORD, Essex RM1 1AB (0708-752653).

## ENGLISH NAMES OF WILD FLOWERS Second Edition, J.G. Dony, S.L. Jury and F.H. Perring

English Names of Wild Flowers has now been revised and a second edition published. Since the first edition was produced, a considerable amount of taxonomic work has been carried out, much of it as a result of the the Flora Europaea project. This has resulted in some members of our flora having their Latin names changed. Most of these changes were incorporated in the third edition of <u>The Excursion Flora of the British Isles</u> published in 1981. The authors have revised <u>English Names of Wild Flowers</u> accordingly. They have also added a considerable number of new (mainly naturalized) species, and made some corrections. For example the name 'Fenugreek' should refer to the fodder and spice plant **Trigonella foenum-graecum** L. of asiatic origin; now that **Trigonella ornithopodioides** has been transferred to **Trifolium**, the name 'bird's-foot clover' seemed appropriate and has been adopted. All such changes have been kept to an absolute minimum. The same cover design of the reprint of the first edition has been used, but the colour changed to a bright blue.

The data were computer-processed and printed from camera-ready copy. This means that any future editions or reprints can be efficiently and rapidly prepared. Already 'fringed gentian' for **Gentianella ciliata** (L.) Borkh. has been put on file as the latest addition to our flora!

English Names of Wild Flowers, Second Edition, can be purchased for £5 post paid from BSBI Publications, 24 Glapthorn Road, OUNDLE, Peterborough PE8 4JQ.

### \*\*\*\*\*\*

#### SCOTTISH NEWSLETTER 8, SPRING 1986

The 1986 issue of the Scottish Newsletter contains details of the administrative activities of the BSBI in Scotland, together with a report of the 1985 Scottish Exhibition Meeting.

Included are obituaries of Miss Mary McCallum Webster and Miss C.W. Muirhead, members who were prominent in Botanical Circles for many years.

Articles include a review, by C.D. Preston, of the Scottish records of Groenlandia densa and a challenge to prove that the plant is not extinct in Scotland; helpful notes on determining critical Aira species by Olga M. Stewart and identifying some Garden Escapes by Alison Rutherford.

Members outside Scotland can obtain future issues by sending at least  $\pounds 1$  (to pay for postage until exhausted) to Dr P. Macpherson, Ben Alder, 15 Lubnaig Road, GLASGOW G43 2RY.

#### 

#### NOTICES (OTHERS)

## BRITISH BRYOLOGICAL SOCIETY MEETINGS 1987

April 1-8. Spring field meeting, Penzance, Cornwall. May 7th. Joint Linnean Society - BBS meeting, Burlington House, London. August 5-12., 12-19. Summer field meeting, Achill Island, Co Mayo, and Westport, Ireland. September 26-27. AGM and paper-reading meeting, Wye College, Kent. Further details from Dr M.E. Newton, Dept. of Botany, University of Manchester, MANCHESTER M13 9PL, who reminds us that BSBI members are 'always welcome' at BBS meetings.

#### \*\*\*\*\*\*

## EUROPEAN YEAR OF THE ENVIRONMENT

1987 has been designated 'European Year of the Environment' (EYE). There will be funds and sponsorships available for a wide variety of environmentally related activities.

Further details from: The UK Eye committee, Room A315A, Romney House, 43 Marsham Street, LONDON SW1P 3PY.

Across Lambeth Road from the headquarters of the British Pharmaceutical Society, is the Museum of Garden History, established since 1977 in the former church of St Mary-at-Lambeth and founded by the Tradescant Trust.

In 1978 the building was a derelict near-ruin, under threat of demolition, standing in a wilderness of a churchyard.

The Trust commemorates the two John Tradescants, father and son, who are buried in a fine tomb in the churchyard. The elder John was gardener successively to Robert Cecil, the first Lord Salisbury, the Duke of Buckingham and Charles I and Henrietta Maria. The younger John travelled three times to Virginia on plant-hunting expeditions. Both men were collectors of 'all things strange and rare' and their unique collection formed the nucleus of the Ashmolean Museum, Oxford.

The Trust was set up to save the building from demolition and to found there the first Museum of Garden History, but the first priority was the vast amount of restoration work that had to be carried out.

In 1979 the entire roof was renewed. The following year the tower and porch were cleaned and rebuilt and the new floor laid down and the interior stonework cleaned.

1981 saw the installation of the new Tradescant window, the gift of the Worshipful Company of Glaziers, and the planting of the replica of a 17th century garden in the churchyard.

Opened by her Majesty Queen Elizabeth the Queen Mother in 1983, the Garden contains only plants introduced by the Tradescants or other plants of the period. It is maintained entirely by volunteers, as is the Museum.

Among the rare plants in the Garden are Plantago major rubrifolia, Digitalis ferruginea, Punica granatum, Mandragora officinarum and Primula 'Gerarde's Double White'.

Besides the permanent exhibition, other successive exhibitions are on view in the Museum throughout the year and lectures and illustrated talks are regularly held.

The whole project is funded entirely by voluntary contributions. Future plans for the completion of the restoration of the building and for the Museum depend upon the result of the Appeal, the first stage of which was launched in 1978 and the second in 1984.

The Museum is open from the first Sunday in March to the second Sunday in December, from Monday - Friday 11am - 3pm and Sunday 10.30 am - 5pm (closed Saturdays).

All information from: Mrs John Nicholson, 74 Coleherne Court, Old Brompton Road, LONDON SW5 OEF. Tel. 01-373-4030 (between 7 & 9am only please) or 01-261-1891 (between 11am & 3pm).

#### \*\*\*\*\*\*\*

#### EXPEDITION ADVISORY CENTRE

Any members contemplating an expedition or overseas project are reminded that the Expedition Advisory Centre provides a number of specialist services to those planning scientific and adventurous projects overseas. At its offices, a wide range of information sources are available including reports of past expeditions, details of planned expeditions, lists of expedition consultants and suppliers, and access to information on expedition organization in all climates.

For further information please contact SHANE WINSER, Information Officer, Expedition Advisory Centre, 1 Kensington Gore, LONDON SW7 2AR or Tel. 01-581-2057.

#### \*\*\*\*\*\*

## REPRODUCTION OF ORDNANCE SURVEY MAPPING - 'FAIR DEALING'

The Ordnance Survey will permit reproduction of up to 4 copies of an extract of up to 700 sq. cms from any sheet without the payment of a royalty, provided it is required for the purpose of private study, research, criticism or review. An acknowledgement to the Ordnance Survey should appear on the face of each extract.

Should you wish to make further copies of your work at a later date, separate permission will be necessary and a royalty may be charged.

Any member with any queries about photocopying maps should contact: Ordnance Survey (Copyright Branch), Romsey Road, Maybush SOUTHAMPTON SO9 4DH (Tel. 0703 775555).

## XIV INTERNATIONAL BOTANICAL CONGRESS, BERLIN ROYAL SOCIETY TRAVELLING GRANTS

Grants are available from the Royal Society to help with travelling expenses to the above Congress. These will only be awarded to non-government scientists of Ph.D status, who are permanently resident in the UK, or to scientists working in State-aided institutions, government laboratories etc. who are under 35 years of age.

Application forms may be obtained from Miss Brenda de Vere, The Royal Society, 6 Carlton House Terrace, LONDON SW1Y 5AG (Tel. 01-839-5561 ext. 222). The closing date for submission of applications is Friday 16th January 1987.

#### \*\*\*\*\*\*

#### HIGHLAND FIELD STUDIES

Brian Brookes has again put together an interesting and varied programme of courses in the Scottish Highlands. Some are specifically botanical and several others, though more general, have a high botanical content. All will be run as small friendly groups in a relaxed, informal and enjoyable atmosphere, mostly using Guest House accommodation.

Specially recommended to BSBI members are the courses on 'Dandelions' (May 24-29) led by Chris Haworth and on 'Sedges & Rushes' (July 11-18) led by Clive Jermy.

The programme also includes (amongst others): 'Spring Flowers' (April 25-3 May); 'Mountain Flowers' (June 27-4 July) and 'Wildflowers of Tayside' (July 18-25).

The full programme and details of any particular course are available from: BRIAN BROOKES, Glenshieling, Hatton Road, BLAIRGOWRIE, Perthshire PH10 7HZ.

#### \*\*\*\*\*

#### KINDROGAN FIELD CENTRE

Kindrogan Field Centre continues to offer courses of interest to BSBI members in 1987. This year the joint BSBI/SFSA course is on Roses and will be led by Rev. G.G. Graham. The course will run from August 27 (evening) to August 31; accommodation can be made available on the nights preceding and following the course.

Other courses include a repeat of the very successful 'Getting to grips with grasses' by Rachel Hamilton (August 8-15); 'Mountain Flowers' led by Mike Scott and Grant Roger (June 27 - July 4); and Chris Page on 'Ferns', July 25 - August 1).

Full details of these and other courses can be had from: The Director, Kindrogan Field Centre, Enochdhu, BLAIRGOWRIE, Perthshire PH10 7PG.

#### 

#### REQUESTS

## MERTENSIA MARITIMA - OYSTERPLANT

Nick Stewart, the Conservation Officer, and I are working on the past and present status of **Mertensia** in Britain and adjacent localities. If anyone has records of this species in recent years we would be very grateful for information, and if you are visiting Scottish shingle beaches in 1987 please record any occurrences. The ideal information required is a sketch-map of the site, a 6-figure grid reference, description of the site, and associated species, plus comments on disturbance factors, if any. If you counted the rosettes or can estimate the area covered by **Mertensia** so much the better, but <u>any</u> information, however brief, will help.

Please contact: R.E. RANDALL, Girton College, CAMBRIDGE CB3 0JG.

I am endeavouring to establish, as far as possible, the incidence of colour variation in Allium vineale.

I am of the opinion that the greenish-white flowered form is very rare, particularly in the British Isles.

Any information relating to studies or observations on this aspect of the species biology from members would be much appreciated.

Please contact: MICHAEL O'SULLIVAN, Knockauota, MILLTOWN, Co. Kerry, Ireland.

## \*\*\*\*\*

#### TRANSLATION FROM SWEDISH

In connection with work on a proposed BSBI Handbook on Roses, Gordan Graham is very anxious to get an English translation of a recent paper in Swedish by Ulf Malmgren, Slaktet Rosa i Sverige, <u>Svensk Bot. Tidskr.</u> 80: 209-227 (1986). This is a substantial and very useful account of all the native and naturalized taxa in Sweden. If any member is able and willing to prepare a translation (and to learn a lot about roses while doing so), would they please get in touch with The Rev. G.G. Graham, The Vicarage, Hunwick, CROOK, Co. Durham DL15 0JU, who would provide them with a copy to work from.

## \*\*\*\*\*

# ZAKINTHIAN BIOTA

We are currently collecting data on the biota of Zakinthos (Zante) and would welcome records of any nature. These will eventually form the basis of an account to be published in Greece: an interim summary is in an advanced stage of preparation. All contributions will be acknowledged, however small.

The natural history of this small Ionian Island, which lies to the west of the Peloponnisos and south of Cephalonia, is poorly documented and, despite its close proximity to the mainland and lack of high mountains, Zakinthos has much of interest to the naturalist. Its diverse habitats include coastal dunes, saltings and saltmarsh and remnant Mediterranean forest: as yet it is largely unspoilt by tourism.

We should be pleased to undertake the identification of plants and insects in connection with the survey. Plant specimens should be sent to ALG and insects to PFW.

ADRIAN L. GRENFELL, 19 Station Road, Winterbourne Down, BRISTOL BS17 1EP PAUL F. WHITEHEAD, Moor Leys, Little Comberton, PERSHORE, Worcestershire WR10 3EP

#### 

#### LETTERS

#### PLANT PHOTOGRAPHY

As the original author of <u>The Nature Photographer's Code of Practice</u> perhaps I may be allowed to comment on Lady Anne Brewis' and Mr D.H. Manners' letters on this topic (see <u>BSBI</u> News 42 & 43).

'Gardening', when done discreetly and with a knowledge of what is being done, is a perfectly reasonable and ethical activity; to hold that one must put up with a poor photograph because one must not remove a couple of dead grass stems or an out-of-focus daisy is ridiculous. If the out-of-focus object happens to be a rarity, of course, then

one does have to put up with it, or choose another viewpoint. 'Gardening' does not consist of exposing the subject to all and sundry by removing all its surroundings, nor of mowing the area in front of it with a pair of nail-scissors; the best 'gardening' is minimal, intrusive objects are gently moved out of the way rather than plucked, and the situation is restored to normalcy after the photograph has been taken [see note below. Ed.].

As to getting close to the subject being something one can be 'guilty' of, words almost fail me. The Society's Referee for 'Orchidaceae, General' is not going to have much to do if that proposition is adopted, since he (alone in the list, as far as I can see, unfortunately) is prepared to accept photographic material. Obviously any reasonable person takes care where he puts his feet, whether taking a photograph, taking a specimen for submission to one of the other Referees or just examining it. I am not at all sure, by the way, that 'trampling' is as devastating as is often made out, except perhaps in marshes; the pressure per unit area exerted by a person in shoes is much less than that of a sheep or a cow, grazing by which is so essential for the maintenance of many habitats; furthermore, there is a colony of Early Spider-orchids near Mr Manners' home which owes its continued existence to trampling, since the few remaining plants grow on a well-used path; off the path the grass is much too long.

<u>The Nature Photographers' Code of Practice</u> was written in the early 1970s, when I was Secretary of the Association of Natural History Photographic Societies, primarily to codify the criteria which responsible Nature photographers had always respected, for the benefit of new members of our Societies and, indeed, non-members. We were delighted when the RSPB (one of a number of bodies, including the BSBI, which we had consulted about it) offered to publish it for us; this they have now discontinued (<u>not</u>, incidentally, in favour of their other leaflet <u>Bird Photography</u> and the Law, which has a much more restricted field of application). However, the successor to the ANHPS, the Nature Group of the Royal Photographic Society, has recently issued a reprint of the Code. It is also printed as an Appendix in <u>Natural History Photography</u> (Ettlinger <u>et</u> al., Academic Press) in which the 'Plant Photography' chapter was written by Dr M.C.F. Proctor.

D.M. TURNER ETTLINGER, Royden Cottage, Cliftonville, DORKING, Surrey RH4 2JF

[The comments on 'gardening' are possibly the intended ideal, but in practice are far from always carried out. Also, in fairness to our previous correspondents on this subject, it was not suggested that 'getting close to the subject' was wrong in itself, but rather that without special care this could cause damage to the plant and/or to the habitat.

Many members some years ago saw the Monkey Orchid site at which each flowering orchid on the sloping hillside had a fan-shaped area of flattened vegetation from SE to SW below the plant, where knees and toes of photographers had left their mark! Ed.]

#### \*\*\*\*\*\*\*\*

#### THE BOTANISTS

As a very non-professional, I purchased a copy of <u>The Botanists</u> more out of duty than for any specific interest. Indeed it lay on my bedside table for some weeks awaiting its turn amongst other sleep inducing works.

But far from being a long boring historic account of the formation of the Society I found it most fascinating reading and read it from cover to cover - including the notes and Appendices (a rare occurrence for non-fiction books).

The intrigues, the clash of personalities, the personal characteristics of botanists who were just names before, made first class reading. David Allen must be congratulated for the immense amount of research and scholarship he has put into the book and the clear and lucid style in which it is written. I commend it to all members.

R.M. HIGGINS, Somerville House, Allendale Road, HEXHAM, Northumberland NE46 2NB

[This unsolicited letter expresses very well the feelings of most members fortunate enough to have read the book. See page 3 for details of the special offer. Ed.]

## BOOK NOTES

# NEWS FROM 'BOTANICAL BOOKS, OUNDLE'

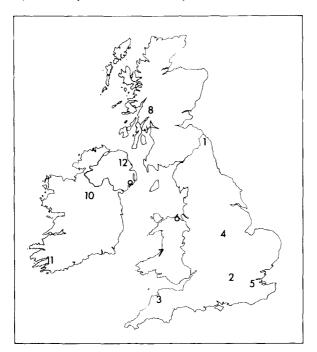
The Post Office put up their parcel and letter rates again this Autumn after publication of my latest list. In most cases I can absorb these increases but when publishers add one to five pounds to the cost of books, I must pass these on. Already the Floras of Lincoln, Foula, The Balearics and Lang's Orchids are more expensive, whilst I underestimated Iceland by £4-00! CUP will put their prices up in January. Books out of print are <u>Natural History of the Somerset Levels, Welsh Ferns, Wild Flowers of Kenya</u> and <u>The Bryophyte Flora of Moray</u>. There are also additions to the list which include two on John Ray, <u>The New Forest</u> (New Naturalist), <u>Mediterranean Check-list</u> Vol 3 and, in contrast, <u>Flora of Tierra del Fuego</u>, both these last two at £36. If you are interested in the supplementary list please let me know. I can also supply any book in print and not just those on my lists.

MARGARET PERRING, 24 Glapthorn Road, OUNDLE, Peterborough PE8 4JQ

#### \*\*\*\*\*\*\*\*\*\*\*\*

#### FIELD MEETINGS, 1985

The map shows the approximate locations of those 1985 field meetings whose reports are published in this, or were published in the last, issue.



#### IRELAND

# 9. MURLOUGH AND KILLARD, CO. DOWN. 1ST-2ND JUNE

On Saturday morning the party of eight members and friends assembled at the visitors car park, Murlough Dunes National Nature Reserve, Co. Down. During the morning we were conducted by the warden of the Reserve, Mrs Jo Whatmough who made numerous interesting remarks on the general ecology of the dune system, which is one in which no new dune formation is taking place and where leaching and a drastic collapse of the rabbit population has led to acid conditions and a decline in some of the more notable species such as **Ophrys apifera**, Echium vulgare and **Cynoglossum officinale**. The last two species are present where disturbance of the sand has been brought about by deep ploughing - part of the experimental management policy to encourage germination of dormant seeds of these species and aid the re-establishment of viable populations.

Probably the most interesting species seen was **Teesdalia nudicaulis**, which was present in great abundance in the dry slacks (there are no wet slacks on these dunes). The party also saw **Botrychium lunaria**, **Thalictrum minus** subsp. **arenarium**, **Clematis vitalba**, **Calystegia soldanella**, **Myosotis ramosissima**, **Carlina vulgaris**, etc. A population of naturalized **Ornithogalum umbellatum** was observed on a roadside bank on the return to the car park.

On Sunday, having decided not to visit Tyrella as originally planned, the party visited the sandy promontory of Killard Point which is covered by machair-like vegetation. **Cynoglossum officinale** was observed to be abundant but entirely associated with areas of rabbit-burrowing. Much interest was given to the **Orchis morio** population, the only known site in Northern Ireland for this species. Other **Orchis** species which are abundant on Killard Point were not much in evidence because of the early date of the visit.

Finally, the party broke up, but two members paid a brief visit to Killough Bridge, where fine specimens of **Dactylorhiza incarnata** subsp. **coccinea** were observed in a damp depression between the road and old railway line, together with **Equisetum variegatum** one of its only two Co. Down sites, **Briza media** etc. This depression is at least partly artificial having been excavated as a gravel pit, and contains vegetation generally similar to that of a damp dune slack.

P. HACKNEY

# 10. LEITRIM/LONGFORD. 27TH-28TH JULY

The wetland flora of the rather under-worked region of Leitrim/Longford was the focus of our interest at this meeting. However, despite a keen leader overladen with the paraphernalia of field botany, only two press-ganged members attended this outing. Even the scheduled co-leader favoured a trip to South America over a weekend in Leitrim/Longford.

Undaunted, this small group set out to comb the banks of the Shannon river below Roosky for **Viola persicifolia** - a 1900 Praeger record for Co. Longford. After a fruitless search, the party moved to Cloonboniagh Lough (GR 22/06.93). Eleocharis acicularis occurs at this lake and both **Carex vesicaria** and **C. acutiformis** were found to be frequent in the marsh which borders the lake to the south and west. Alisma lanceolatum and Lemna polyrhiza were noted in the drains traversed in an attempt to circle the lake, an attempt foiled by a rain-swollen channel. Our return to the car for lunch was timely, as we avoided a heavy shower, a portent of things to come.

After lunch, with a brighter sky lifting our spirits, we journeyed on to Cloonfinnan Lough (GR 22/05.95). Here, despite an impressive and fragrant display of **Gymnadenia conopsea**, no species of note were found. As we moved on, the summer weather returned in the form of a rainstorm so violent that the small group mutinied. They were only quelled when shown a new vice-county record (H29), in the shape of **Ceratophyllum demersum**, occurring in an enriched Lough Erril (GR 22/05.96).

After waiting in vain hope for new arrivals at Roosky on Sunday morning, our original small party headed for Ballinamore, the gateway to northern Leitrim, guided by Colman O'Criodain. Here we investigated the extensive stands of **Carex aquatilis** at Edintinny turlough (GR 23/108.100.). The turlough was approached by means of a low drift ridge on which **Coeloglossum viride** was recorded. **Carex aquatilis** formed large colonies and was accompanied by occasional plants of **Equisetum fluviatile**, **Myosotis laxa**, **Polygonum** 

amphibium, Apium inundatum, Agrostis stolonifera, Eleocharis palustris, Ranunculus flammula and Galium palustre. The ditch flora at this site was investigated in detail by Ms A.M. Logan, the third member of our party.

Ballinamore proved to be the last stop of the field trip as the summer weather once again intervened. The party returned to Mohill, Co. Leitrim and their generous hosts for the weekend, Mrs M. Logan and family, to whom we owe our sincere thanks.

N. McGOUGH

# 11. CAHA MOUNTAINS, CO. CORK. 10TH-11TH SEPTEMBER

This meeting, centred on Glengarriff, was arranged with a view to working floristic areas in this region of West Cork (H3) and refinding the site of **Minuartia recurva.** The species was first discovered in Ireland during the initial field meeting of the Irish Regional Branch of the B.S.B.I., in July 1964. The station on the Caha Mountains represents a considerable extension in range from north-eastern Portugal. In September 1964, Moore made a more detailed survey of the ecology and distribution of the species and found that there were two populations, one on Knockowen and the other 2km to the north-east at Cushnaficulla (Ir. Nat. J., 15: 130-132). Moore concluded that the populations may be relics of a formerly more continuous distribution.

On Saturday, as the mountain range was clear of cloud, it was decided to take the opportunity of the relatively good conditions and to work Knockowen (657m). The party travelled to the Healy Pass (c. 300m) and ascended over the rough ground of Claddaghgarriff to Knockowen peak. After a brief lunch we cast about looking for M. recurva, <sup>1</sup>in narrow cracks on bare Old Red Sandstone slabs with a bedding plane of 30 degrees dipping to the SE of the summit from 2000ft to 1700ft'. After searching for a while, plants were spotted by Mary Claire Sheehan, and then, with our 'eyes in', we worked niches in the extensive rock outcrop and observed some 100 specimens. When in flower, M. recurva is conspicuous, however in August, with most plants at the fruiting stage, it is not readily visible. A small number of capsules were collected for cultivation at the National Botanic Gardens under license issued by the Department of Fisheries and Forestry in accordance with the Wildlife Act, 1976. Other flora noted, in rough grazing, peat troughs or rock caverns were, Huperzia selago, Hymenophyllum wilsonii, Blechnum spicant, Empetrum nigrum, Calluna vulgaris, Erica cinerea, Galium saxatile, Saxifraga spathularis, Festuca vivipara, Molinia caerulea, Carex demissa and others. Salix herbacea, found in 1964, was not seen on this occasion.

Later in the day, the party worked the lower ground about Adrigole. Here, in roadside hedges, Fuchsia magellanica alternated with Fuchsia magellanica 'Gracilis', the latter conspicuous with pale leaves and slender flowers. Osmunda regalis was seen frequently in the ditches of rushy fields. Chamaemelum nobile was common on some stretches of roadside.

On Sunday morning, heavy rain gave way later to warm sunny weather which continued throughout the day. We proceeded to Cooleiragh and worked about Seal Harbour and further along the strip of coast to the south-west, incorporating shingle, rock pools, a Hazel-Oak copse, maritime pasture and roadsides. The flora included **Carex punctata**, **C. extensa**, **C. distans**, **Tripleurospermum maritimum**, **Melampyrum pratense**, **Centaurium erythraea**, **Euphorbia** hyberna and others. The party then drove to Castletown Bearhaven, intending to seek for **Spiranthes romanzoffiana** in rushy meadows, and other flora noted from that district, but as it was by then late in the afternoon it was not possible to pursue the matter and so we botanized roadsides and left early to make the journey home.

M.J.P. SCANNELL

# 12. GLENARM, THE GLENS OF ANTRIM. 22ND SEPTEMBER

Sixteen members and guests attended the excursion. Throughout the day the going underfoot was extremely wet after much recent heavy rain but the day was mainly dry in spite of an adverse weather forecast.

Glenarm is a typical Antrim glen and is well wooded in the lower parts with basalt escarpments rising to the plateau above.

The first part of the excursion was up the south side of the valley through steep woodland (mainly Oak). Typical woodland plants of the glens were seen.

After lunch we drove a short distance up the glen and then continued up the valley.

This area is more marshy and interesting plants (including **Pinguicula lusitanica**, **Carex lepidocarpa**, etc.) were seen. By the river, **Prunus padus** (which is a speciality of the Antrim glens) was not infrequent.

S. BEESLEY

### HUNGARY

## HUNGARY. 25TH MAY-8TH JUNE

Twenty three members joined the tour of National Parks and other special botanical sites in Hungary. On arrival in Budapest we were met by our Hungarian guides and later treated to an evening meal on a pleasure boat on the Danube and, on the following morning, a sight-seeing tour of the city. Botanizing started in earnest on the Sunday afternoon when our coach took us to the Somlyo Hills at Fot on the northern outskirts of the city. This formed an excellent introduction to the Hungarian flora with over 150 species recorded. Many of the plants which were initially strange to us were to become familiar during the next fortnight. Among the more attractive species were Dianthus serotinus, D. pontederae, Dictamnus albus, Salvia pratensis, S. austriaca and Verbascum phoeniceum. Also present were the steppe grasses Stipa capillata, S. joannis and S. pennata subsp.

On Monday morning we headed eastwards out of Budapest towards the town of Eger and the Bukk National Park. The Park covers some 39000 ha of the Bukk Mountains which are predominantly of dolomitic limestone. En route we stopped at the Kerecsend Forest Reserve. Both Acer campestre and A. tataricum were recorded. The ride flora was particularly spectacular with Doronicum hungaricum, Clematis integrifolia, Iris graminea subsp. pseudocyperus and I. variegata. Much of the Bukk Mountains are covered by high forest dominated by Fagus sylvatica. Open areas of limestone grassland with scrub of Juniperus communis, Viburnum lantana and V. opulus are also present. The latter areas support populations of **Cypripedium calceolus.** A particularly rich area which is specifically managed for its botanical interest, is the 'Great Meadow' at Nagymezo which lies at 800m on the high Bukk plateau and was visited the following day. Here the Carpathian endemic Aconitum moldavicum was noted along with the rare alpine labiate Dracocephalum ruyschiana. Associated species included Anemone sylvestris, Gentiana cruciata, Gentianella austriaca, Iris sibirica, Pulsatilla vulgaris subsp. grandis, Scilla bifolia and Symphytum tuberosum. The ground flora of the adjacent woodland edge was also rich, with Actaea spicata, Asarum europaeum, Bupleurum longifolium, Cardamine bulbifera, Daphne mezereum, Festuca altissima, Maianthemum bifolium, Neottia nidus-avis, Paris quadrifolia, Polygonatum verticillatum and Pulmonaria officinalis. Later the same day Clematis alpina and Saxifraga paniculata were seen on a steep limestone cliff in a location reminiscent of Symonds Yat only on a larger scale. On the return to Eger we visited another hillside where one outcrop of Gabbro rock provided locally a more acidic soil. Here Isatis tinctoria was a feature.

Wednesday and Thursday were spent in two day excursions to the Hortobagy National Park (52000 ha) situated further to the east on the Great Hungarian Plain. Extensive dry alkaline grassland or 'puzta' is a feature of this area. Here many saltmarsh species were encountered including Artemisia santonicum subsp. santonicum, Limonium gmelinii and Scirpus maritimus. Associated species included Camphorosma annua, Lepidium perfoliatum, L. ruderale, Matricaria recutita, Puccinellia distans and the 'Caterpillar Grass' Beckmannia eruciformis. Small relict Oak woods were also seen with Quercus cerris, Q. pubescens and Q. robur. Associated trees included Acer tataricum and Ulmus laevis, while in wetter areas of marsh Alisma lanceolatum, Oenanthe silaifolia and Utricularia vulgaris were recorded. Further wetland species were seen while returning to Eger on Thursday, associated with the River Tisza.

On Friday we left Eger travelling northwards through the Bukk Mountains towards Aggtelek near the Czechoslovakian border. Further extensive areas of Fagus forest were passed and in one we stopped to visit one of Hungary's few peat bogs. Sphagnum species present were identified as S. capillifolium, S. fimbriatum and S. recurvum. Polytrichum commune was also abundant. Ferns included Dryopteris carthusiana, D. cristata and Thelypteris thelypteroides, and among the flowering plants were Drosera rotundifolia, Eriophorum angustifolium and E. vaginatum. The bog was being actively colonized by Betula pubescens, the only time during the tour when we saw this species. The party had only just rejoined the coach when a violent thunderstorm broke over the mountains. This continued throughout our journey to the hotel near Aggtelek. This limited botanizing in the afternoon and also precluded a visit to the extensive cave system which is normally open to the public. The whole of the next day was spent walking in the mountains where at times we were only a few hundred metres from the Czech border. New species included **Cynoglossum hungaricum**, **Digitalis grandiflora**, **Echium russicum** and **Globularia punctata**. The highlight of the day was the find of the second Hungarian **Dracocephalum** species - **D. austriacum** in full flower on the mountain top which is its only Hungarian locality. After a very late lunch we set off in the rain again for the town of Nyiregykaza, not far from the Russian border, but also near the wine growing region of Tokaji. Tokaji Hill itself is an extinct volcano. Areas not cultivated with vines support a very rich flora. Almost 130 species were recorded. These included Aster oleifolius at its only Hungarian locality. **Cephalanthera rubra**, **Orchis militaris** and **O. tridentata** were among the orchids seen.

For the second week of the tour we were based in another hotel on the outskirts of Budapest. Two days were spent in the Buda Mountains south-west of the city and two in the Kiskunsag National Park (30000 ha) to the south-east. The final day was spent visiting the meadows around Ocsa and Dabas also to the south-east of Budapest. The Buda Mountains are characterized by dry limestone slopes; soils are very thin and in places non-existent. Characteristic species were Ajuga chamaepitys, Alyssum alyssoides, A. montanum, Daphne cneorum, Dianthus plumarius subsp. regis-stephani and Fumana procumbens. Linum catharticum, L. hirsutum and L. tenuifolium were also present, but the speciality of the area was the yellow-flowered Linum dolomiticum, found nowhere else in the world.

The Kiskunsag National Park is divided into several distinct areas. Sand-dunes formed from sand spread over the Hungarian Plain by the Danube and Tisza in post-glacial times are a feature of the area. Some of the dunes are still mobile and have a colonist flora. Elsewhere the dunes are more stable and colonized by Juniperus communis and Populus alba. Cephalanthera rubra was seen once more along with Epipactis atrorubens. In grassland adjacent to the dunes, Lathyrus palustris, Muscari neglectum and Schoenus nigricans were seen, along with further orchids including Ophrys sphegodes, Orchis laxiflora subsp. palustris and O. coriophora. The second day in the Park saw us in a further area of salt-marsh with Aster tripolium subsp. pannonicus and Artemisia santonicum. Orobanche cernua, an introduced species, was found growing among Artemisia. The meadows at Ocsa and Dabas were found to have a very rich flora similar to that in the National Park. Orchis laxiflora subsp. palustris was very abundant along with Gymnadenia conopsea. Sedges recorded include Carex appropinquata, C. davalliana and C. elata. Veratrum album was a surprise component of the meadows.

So ended the tour of Hungary and the following morning saw us back at Ferihegyi Airport. Here we said our goodbyes to our two Hungarian guides: Professor Attila Borhidi of the Research Institute for Botany, and Ferenc Nemeth of the National Bureau for the Environment and Nature Conservation (O.K.T.H.), who gave their services freely throughout the tour, during which they had shown us not only the best of Hungary's flora, but also its wealth of other wildlife, especially birds and butterflies. Thanks are also due to the many other staff of the O.K.T.H. who acted as guides within the National Parks and other protected areas.

P.J. HORTON

#### 

The Editor, Gwynn Ellis can be contacted by phone at  $0222\text{-}397951\ \text{ext.}\ 218\ (NMW)$  or  $0222\text{-}496042\ (home)$ 

All text and illustrations appearing in <u>BSBI News</u> and its Supplements are copyright and no reproduction in any form may be made without written permission from the Editor.

Offers and special terms apply only to members of the Society and copies are not available on an exchange basis.

'BSBI NEWS' (ISSN 0309-930X) is published by the Botanical Society of the British Isles. Enquiries concerning the Society's activities and membership should be addressed to:- The Hon. Gen. Sec., c/o Dept. of Botany, British Museum (Nat. Hist.), Cromwell Road, LONDON SW7 5BD.

Printed by J & P Davison, Library Road, Pontypridd, Mid Glamorgan CF37 2BT.

CONTENTS LIST

ADMINISTRATION	2
Secretaries of Permanent Working Committees	2
Permanent Working Committees for 1986-1987	2
Notice to Members	3
Subscription Notice	- 3
The Botanists	3
CORRIGENDA CORNER	3
EDITORIAL	4
EDITORIAL	5
Asarina procumbens	-5
Ted Wallace	5
Wiggy	6
Popeye	6
SESQUICENTENARY EXHIBITION	7
RECORDERS AND RECORDING	7
Changes in Recorders	7
Changes in Referees	8
'The Long Tradition' - Caleb Threlkeld's British Plant Records .	8
Vice-county Recorders' Conference, Lancaster	9
Vice-county Recorders' Conference, Lancaster -2	10
The BSBI Monitoring Scheme	11
Railways and Plant Distribution	11
A Remarkable site for Spiranthes spiralis	12
Recommended Procedure for Notification of a Rare Plant	13
Stachys sylvatica forma viridiflora	14
NOTES AND ARTICLES	14
Woolly Bears Devour Dorset Heath in Ireland	14
Hooked Epidermal Hairs	14
A Perennial Problem in the Countryside	15
Sea Peas among Tropical Drift Seeds	16
ALIENS AND ADVENTIVES	17
Montia parvifolia - New to Scotland	17
Cotoneaster bullatus	19
Crocus vernus – I	19
	20
Downingia elegans refound in East Sussex	20
NOTICES (BSBI)	21
Quinquennial Review of Plants listed on Schedule 8	21
BSBI Members leading Botanical Parties Abroad in 1987	21
	22
Scottish Newsletter	22
NOTICES (OTHERS)	22
British Bryological Society Meetings 1987	22
	22
Museum of Garden History	23
	23
Reproduction of Ordnance Survey Mapping - 'Fair Dealing'	23
International Botanical Congress; Royal Society Travel Grants . 3	24
	24
Kindrogan Field Centre	24
REQUESTS	24
Mertensia maritima - Oysterplant	24
Allium vineale - Wild Onion	25
	25
	25
	25
Plant Photography	25
The Botanists	26
BOOK NOTES, News from 'Botanical Books, Oundle'	27
	27
	28
	30