

On Her Majesty's Service

WASC1023

WASC 1023

CONTENTS LIST

ADMINISTRATION	2
Addresses	2
Committee for Wales — A.G.M. Programme	3
BSBI Region VII — Scotland — Council Representative	3
Committee for Scotland — Nominations	3
Subscriptions	4
Programmes of 4 Meetings	4
HON. GEN. SECRETARY'S NOTES	4
From 'C. for N.' to CoEnCo	4
Membership Administration	5
Toxic Sprays	5
BSBI Publications at privilege prices	6
Vice-county names	6
Vascula again	6
Evening Primroses in Wales	6
Botology	7
Planting Native Trees & Shrubs	7
Legacies	7
WALTHAMSTOW MARSHES	7
NOTICES	8
Fern Meeting at Ambleside	8
Irish Region — meeting at Lough Carra	8
BSBI Rubber Stamp	9
Orchid Problems	9
Keys from the B.M.	9
Conservation of British Bryophytes	10
The Botanical Research Fund	10
New County Trust — Avon	10
Course on Water Plants	10
Field Studies	11
Excursion to Lundy Island	11
IBRA Publications	11
Natural History Articles index	11
BANC	12
Profile — R.W. David	13
Ted Lousley Tablet dedicated	14
ALIENS and ADVENTIVES	14
Adventive News 16	19
BEE ORCHID SURVEY	20
BLACK NIGHTSHADE SURVEY	21
<i>Solanum nigrum</i> ssp. <i>schultesii</i>	22
REQUESTS	22
Rosa mapping	23
<i>Rumex crispus</i> on tidal mud	23
Bristol Adventive Flora	24
Roadside halophytes	24
Shepherd's purse	24
<i>Downingia elegans</i>	25
<i>Leucojum vernum</i>	25
Plant records for Shropshire	25
Flora survey at Mill Hill	26
Orchid Species at Waltham Abbey	27
<i>Anacamptis pyramidalis</i> in Sussex	27
Naturalized Fuchsia populations in Ireland	28
BOOK NOTES	30
RECENTLY PUBLISHED WORKS ON LOCAL FLORAS	30
SCOTTISH NEWSLETTER	30
CHANGES OF RECORDERS	31

All text and illustrations appearing in *BSBI News* are copyright and no reproduction in any form may be made without written permission from the Editor.

"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., BSBI, c/o Botany Dept, British Museum (Nat. Hist.), Cromwell Road, London SW7 5BD.

Printed by Suffolk Offset, 50 Victoria Street, Felixstowe Tel. 77117

B.S.B.I. NEWS

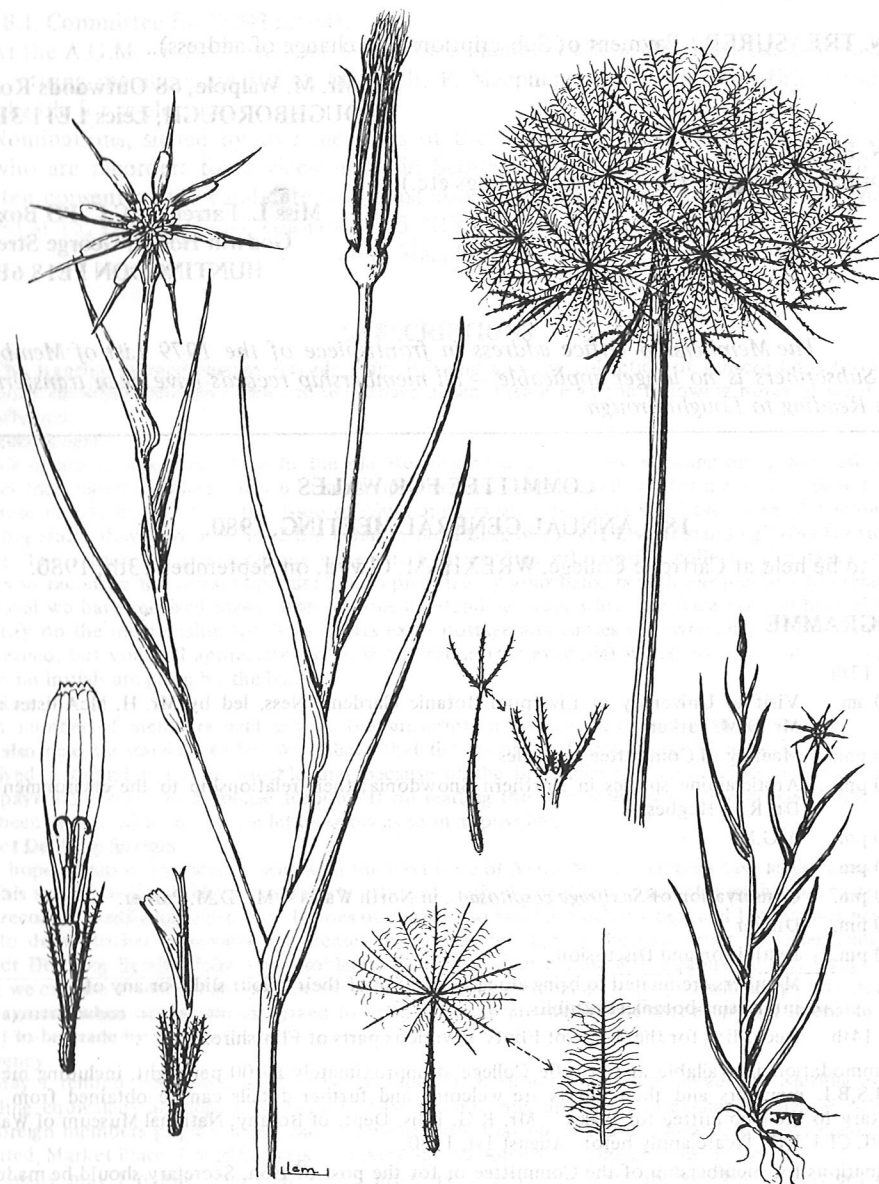
With the Editor's
Compliments

WASE 1023
April 1980
No. 24

Edited by EDGAR D. WIGGINS

Cowpasture Farm, Felixstowe, Suffolk IP11 9RD

(see p 26)



Tragopogon hybridus (see p.18)

© del. J. Smythies 1979

ADMINISTRATION

Addresses

HON. GEN. SEC. (General Enquiries)

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

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

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

HON. FIELD SEC.

(Information on Rare Plants, Field Meetings etc.)

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

N.B. The Membership Office address in frontispiece of the 1979 List of Members and Subscribers is no longer applicable – all membership records have been transferred from Reading to Loughborough.

COMMITTEE FOR WALES

18th ANNUAL GENERAL MEETING, 1980.

to be held at Cartrefle College, WREXHAM, Clwyd, on September 13th, 1980.

PROGRAMME

Sept. 13th

10.00 am. Visit to University of Liverpool Botanic Gardens, Ness, led by Mr. H. McAllister and Mr. D.M. Parker.

1.30 pm. Meeting of Committee for Wales.

2.30 pm. Arctic-alpine species in Northern Snowdonia; their relationship to the environment – Dr. R.E. Hughes.

3.30 pm. A.G.M.

4.00 pm. Tea

4.30 pm. Conservation of *Saxifraga cespitosa* L. in North Wales – Mr. D.M. Parker.

7.00 pm. Dinner

8.00 pm. Exhibition and Discussion.

Members are invited to bring along a selection of their colour slides or any other interesting botanical exhibits.

Sept. 14th Recording for the 'Flora of Flints' in various parts of Flintshire.

Accommodation is available at Cartrefle College at approximately £7.00 per night, including meals. All B.S.B.I. members and their guests are welcome and further details can be obtained from the Secretary to the Committee for Wales – Mr. R.G. Ellis, Dept. of Botany, National Museum of Wales, Cardiff, CF1 3NP. Please apply before August 1st, 1980.

Nominations for membership of the Committee or for the post of Hon. Secretary should be made in writing with the signature of the nominee, before the end of June to the Hon. Secretary at the above address.

B.S.B.I. REGION VII – SCOTLAND (v.c. 72–112.) In 1980 the quadrennial appointment by the Committee for Scotland of a Representative to B.S.B.I. Council falls due. Members resident in Scotland who elect the Committee for Scotland will elect three new members to that Committee on November 1st, 1980 as set out below.

Mary Briggs, Hon. Gen. Sec.

B.S.B.I. Committee for SCOTLAND.

At the A.G.M. on 1st November 1980, three members will be elected to the Committee. The retiring members are R.J.O. McBeath, P. Macpherson and A.Mc.G. Stirling and all are eligible for re-election.

Nominations, signed by two members of the Society normally resident in Scotland or who are recorders for a vice-county in Scotland though not resident, and with the written consent of the candidate who must also qualify as above, should reach the undersigned at 15, Lubnaig Road, Glasgow, G43 3RY., by 4th October, 1980.

Peter Macpherson, Hon. Sec. Committee for Scotland.

SUBSCRIPTIONS

The transfer of membership records from Reading and the collection of subscriptions for 1980 has gone smoothly, though a few problems have arisen. Please read the following notes to see if you are affected.

Bankers Orders

All members who, according to the old Reading records, paid by standing order were asked to cancel their bankers orders. Over 600 subscriptions were still received by this method, mainly at the old rate of £5. By the time this issue of *News* appears such members will have received a reminder and hopefully they have now paid the balance, but **PLEASE CANCEL your standing order for future years**. The reason for changing our system is to streamline subscription collection, it takes many hours to reconcile the often imprecise details provided by your bankers with *our* membership records. As usual we have received many subscriptions by standing order which we have not yet been able to identify on the membership list. This incurs extra postage and causes inconvenience to the members concerned, but you will appreciate we must be certain (for example) which Jones or Smith has paid when no initials are given by the bank.

Invoices

A number of members paid against the subscription invoices sent out at the end of December and **also** paid by standing order. We believe that the majority of those who did so will by now have received a refund but it is possible that because of the insufficient detail referred to above some overpayments lie in our suspense account. If on reading this you realise you have overpaid and have not been contacted by us, please let us know as soon as possible.

Direct Debiting System

I hope details of this will be sent with the next issue of *News*. Many members have urged us to take up this system as it provides an extremely efficient method of collection and also enables us to update our records speedily and correctly. It does of course also save us much postage and labour thus helping me to defer further subscription increases. We are aware that in the past other Societies using the Direct Debiting System have had problems, but the system is now well established and I am confident we can use it without inconvenience or worry to our members. I hope you will adopt this method of payment when details are explained to you, if not, an invoice will be sent each year to enable payment to be made by cheque.

Currency

May I remind our overseas and Irish members that subscriptions are **payable in Sterling** or the Sterling equivalent and due account should be taken of any difference in exchange rates. A number of foreign members pay by bank transfer, please note that our account is now held by Barclays Bank Limited, Market Place, Loughborough and **NOT** the National Westminster Bank, Oxford.

Finally may I remind you that in the interests of economy, mailings **will not be sent out after the 1st May** to members who have not paid their subscriptions and should yours be in arrears this will probably be the last mailing you will receive.

M. Walpole, Hon. Treasurer.

ADMINISTRATION (Continued)

PROGRAMMES

The Programmes of Annual General Meeting and no less than three Symposia this year, are on offer to members with this mailing.

Booking Procedure reminders :-

1. **Climate and Plants** Saturday, April 26th 1980. Joint Meeting with the Royal Meteorological Society at University College, London. 10.30 — 1700. Programme and Booking form enclosed with this mailing; (They will be accepted up to April 19th).
2. **The A.G.M., Cambridge.** May 10th and *Breckland Excursion* May 11th bookings to: Mrs. Ailsa Lee, 3 Rosliston Road, Stapenhill, Burton-on-Trent, Staffordshire, DE15 9RJ before May 1st. (For information on overnight accommodation in Cambridge apply to: The Tourist Information Office, Guildhall, Cambridge).
3. **Biological Aspects of Rare Plant Conservation.** July 13th — 19th, 1980, King's College, Cambridge. (See *BSBI News* 23, p.19). Programmes available now from Mrs. Hilary Birks, Cambridge Conservation Conference, University Botanic Garden, 1 Brookside, Cambridge CB2 1JF.
4. **Fern Conference.** Joint meeting with British Pteridological Society, September 26th — 28th, 1980, Brathay, Ambleside, Cumbria. Programme and booking instructions on page 8.

My I remind you that compliance with the booking instructions greatly assists the organisers. Of 36 A.G.M. bookings sent, only three members had remembered the request to send s.a.e. This s.a.e. not only contributes to the organising expenses but it is also a considerable time saver for the organiser. The request for Field meeting bookings to be sent on postcards (perhaps surprisingly also accompanied by a s.a.e.) again helps the leaders to deal with administration in the minimum time — the cards are neat and easily filed.

HON. GEN. SECRETARY'S NOTES

From Council for Nature to CoEnCo.

Many members will already know that the Council for Nature was dissolved on 31st December, 1979. On its formation this Council provided vital links between many societies, but with changes in patterns of policy in recent years it was decided to provide this essential liaison through an alternative organisation. Two particularly useful services provided by Council for Nature through the years: a) the production of *Habitat* and b) information leaflets, have now been transferred to the **COUNCIL FOR ENVIRONMENTAL CONSERVATION** (CoEnCo) at 29 Greville Street, London, EC1 8AX. The 'C for N.' leaflets are still available, i.e. 2. Pollution 3. Careers 4. Educational Aids 5. Wildlife Projects and Recording Schemes 6. Conservation of Wild Creatures & Wild Plants Act 1975, are now obtainable from CoEnCo at the above address; up to 5 copies are free of charge on receipt of a *News* size s.a.e.

MEMBERSHIP ADMINISTRATION

Since the B.S.B.I membership record cards and stencils were moved to Loughborough, we have heard that there was a fire at Harvest House in Reading which gutted the room in which B.S.B.I. membership work was carried out until 31st December, 1979, and all the records and stocks of journals there (belonging to other societies) were destroyed. Our sympathy goes to the Society of General Microbiology and all the Societies affected. How narrowly the B.S.B.I. escaped this disaster! On an earlier occasion, as John Dony has reminded me, the B.S.B.I. was not so fortunate as in April 1941, Francis Druce who was then Hon. Treasurer and also Acting Secretary of B.S.B.I. was killed during an air raid by a bomb which burst outside his shelter after passing through his flat. In the raging fire which followed the blast, all the Society's documents were lost. Three quarters of a century earlier when the Society's papers were in Thirsk, a fire there destroyed the records of the Botanical Society and Exchange Club; after both these disasters the accounts and lists of members had to be reconstructed with the assistance of the members themselves at the time. Now we have an arrangement for membership records to be kept in duplicate as a safeguard.

Each member now has a number — you may have noticed this above your name on the address label of your recent mailings. It is very helpful to Mr. & Mrs. Walpole if you quote this number in any correspondence on subscriptions or membership. Your number will provide the Treasurer with Instant Identification — enabling him to "key" you out from other members with the same or similar name/address etc.!

TOXIC SPRAYS

The British Beekeepers' Association is hoping to establish an agreed code of practice to ensure that any necessary poison spraying of crops could be carried out with minimum hazard to bees, wild pollinating agents and wild flowers. They also hope that some products more lethal to honeybees and wildlife could be removed from the list of "Approved Products for Farmers and Growers" issued by the Ministry of Agriculture, Fisheries and Food. Price £3 through booksellers.

The B.B.K.A. is appealing for data on the effects of pesticides and other polluting chemicals used and spread. Any member who can supply information on this is asked to send it to MR. R.O.M. PAGE, (B.B.K.A. Spray Liaison Officer), 452 Chickerell Road, WEYMOUTH, Dorset, DT3 4DH. Papers relative to these problems are published in *Naturopa* No. 33 - 1979: this entire issue is devoted to the compatibility of agriculture and forestry with conservation of the environment; including *Making a Choice* by Ian Samuel (p.9 - 11) and *There is another Way* by Rudy Rabbinge and R.S. Loomis (p.32 - 34). (*Naturopa* is obtainable from Nature Conservancy Council at Banbury).

BSBI Publications at privilege prices

One copy of *Hybridization and the Flora of the British Isles* at £8.80 (published price £14.80). Copies (unlimited number) of the Conference Report *The Pollination of Flowers by Insects* ed. A.J. Richards at £9.50 (published price £12.60). Application forms for both above offers from: Mrs. Mary Briggs, White Cottage, Slinfold, Horsham, West Sussex, RH13 7RG. (s.a.e. please).

Vice-county Names

In *B.S.B.I. News* 23 page 4, I mentioned that a list of vice-county names is published in *Watsonia* 13: part 1. To find the name of the appropriate county in the numbered list of v.c. recorders in our *List of Members and Subscribers* (p.41. 42), or to locate Counties for plant records, members are reminded that lists of the v.c. names are also published in *Atlas of the British Flora* ed. Perring & Walters (p. 409 - 410) and in *Hybridization and the Flora of the British Isles* ed. C.A. Stace (p.95 - 96). It will be noticed that all 3 lists differ slightly (there is no 'official' list for these names) but the most recent in *Watsonia* 13: 1 has been amended with the assistance of the Committees for Wales, Scotland and Ireland, with careful consideration given to the choice of abbreviations for clarity and to avoid confusion — e.g. abbreviations which are also the name of a town have not been used.

Vascula again

Since David Allen suggested that the Society should operate a vasculum pool, "Conserve the Vasculum" (*B.S.B.I. News* 12, p.23) we have passed on 19 vascula kindly donated by members no longer using them, to other members of the Society undertaking special studies for which a vasculum has been particularly helpful. On travels abroad, I have been impressed by the mini-vasculum for small specimens used by Michael Harker of Oswestry i.e. a Henri Winterman 50 Panatella tin. As other wilting specimens were produced from plastic bags at evening identification sessions, Michael's bits of plants from his 'Winterculum' were pristine. Although not equipped with independent carrying straps, these slim oval tins (16 cm. long) fit neatly into the rucksack; non-smokers may acquire one by a timely word with a friendly tobacconist.

(New vascula are available from T. Gerrard & Co., Gerrard House, Worthing Road, East Preston, BN16 1AS. (Tel: (09062) 72071). Enquirers should state they are members of BSBI).

Evening Primroses (*Oenothera L.*) in Wales, by Krzysztof Rostanski and Gwynn Ellis is published in *Nature in Wales* 16: No. 4. September, 1979. A paper dealing with *Oenothera* sp. throughout Britain will be published in *Watsonia* in 1981. Meanwhile members interested in *Oenothera* information (based on Wales) for the 1980 season can purchase this number of *Nature in Wales*, (50p including postage) from Mr. Dillwyn Miles, Castle Hill, Haverfordwest, Dyfed. A key only will appear in *BSBI Abstracts* 10.

Batology

All members may possibly not realise that the field meeting on July 25th — 28th 1980, advertised in the 1980 Field Meetings Programme as a 'specialist meeting for Batologists' is for the study of brambles. 'Batologist' simply comes from two Greek words meaning 'bramble' and 'discourse'. This meeting has been planned for experienced workers in this group.

Those who have enquired about the identity of the 'rare plant' reported by the Daily Telegraph on September 12th, may like to know that this has finally been tracked down. Under the headline "*Rare Anemone*" and named "*Nemataestella vectensis*" found at Pagham Harbour, West Sussex, we find that this is a *Sea Anemone*, *Nematostella vectensis* which was found by R.L. Manuel of Oxford.

Planting Native Trees and Shrubs, Ken & Gillian Beckett, Jarrolds Colour Publications £1.99.

The production of this book was planned by the BSBI Working Party set up to investigate the use and availability of British Native plants for naturalising. A generous grant from N.C.C. enabled BSBI to appoint Ken and Gillian Beckett to research and write the book. Now published as above, it will provide information for landscape architects and others interested in conservation planting of native woody species.

Legacies

The Society most gratefully acknowledges two legacies received recently. **Gilbert Smithson Adair** a member from 1914 — 1979, was known only to a very few fellow members — even in Cambridge where he worked in the Low Temperature Research Station for 55 years. He was a pioneer in the physical chemistry of proteins. An Honorary Fellow of King's College, Cambridge, his obituary in the King's College Annual Report makes us realise sadly what we missed in not being acquainted with this long supporter of our Society, who is described as "A loveable character — small and Dickensian in appearance with a twinkling smile and a fund of quaint stories and instances." We are also told that "The collections of pressed flowers and grasses . . . made with his father, Harold Adair, who was manager of a copper mine in West Cumberland, . . . are now in the museums of Carlisle and York respectively."

His notebooks on the subjects will also be sent to those Museums. We are indeed grateful that he remembered the Society by his bequest.

Wilf Warren (1933 — 1976) had by contrast many friends in the Society. He made his generous bequest to the B.S.B.I. in these words "For the general purpose of the said Society" but with the request that it be used for the promotion of Field Botany as a lifelong pleasure and interest by aiding attendance at field meetings and advancing the production of local floras. His obituary was published in *Watsonia* 11: (4); 420 — 21.

Once again I have to thank Kathleen Lawson, who, returning after a week's absence from home, typed and despatched the Hon. Gen. Sec's notes in one day.

Mary Briggs, Hon. Gen. Sec.

WALTHAMSTOW MARSHES

This 88-acre relic of pre-London water-meadow on terrace gravel where 340 species of flowering plants, 110 birds, hundreds of moths and 17 butterflies have been recorded, is situated only five miles from Westminster. The Nature Conservancy Council have recognized its very special value and interest quite outside their normal SSSI definitions. It is part of Britain's first ever "Regional Park" and therefore surprising that the owners, the Lea Valley Regional Park Authority should make application to the G.L.C. for permission to extract over one million cubic yards of gravel, thereby ruining the area as a wild-life sanctuary. And this, is in complete contradiction to the Authority's declared promises made in the Act which created it, and repeated in popular brochures.

Fortunately an extremely vigorous campaign led by Mr. Brian Wurzell of Tottenham has resulted in the project being unanimously rejected by the G.L.C. Minerals Sub-Committee.

The lesson is clear. Not even Authorities professing to promote wild-life conservation can be guaranteed not to abrogate promises when commercial considerations are involved. The price of conservation would seem to be eternal vigilance.

NOTICES

OFFICIAL BSBI NOTICES

FERN MEETING AT AMBLESIDE 26th – 28th SEPTEMBER, 1980.

A joint weekend meeting with the **British Pteridological Society** is being organised by Clive Jermy and Lynne Farrell on the above dates at Brathay Hall Field Centre. The meeting will convene on the Friday evening for dinner, followed by an identification seminar when participants can bring specimens difficult to identify in front of a panel of specialists.

On the mornings of Saturday and Sunday there will be papers illustrating aspects of taxonomy and ecology of the larger fern genera with particular reference to current researches in *Lycopodium* (*Diphasiastrum*), *Polypodium*, *Equisetum*, *Dryopteris*, *Asplenium* and *Cystopteris*. There will also be a paper on the significance of cytology in fern taxonomy. Speakers will include Drs. M. Gibby, C.N. Page, A. Sleep, B. Croxall and A.C. Jermy. It is also hoped that pteridologists from Paris (M.F. Badre) and Zürich (Dr. J. Schneller) will attend the meeting to talk on their researches into aspects of our fern flora.

Saturday afternoon will be a visit to the Borrowdale area for *Asplenium* and *Dryopteris* led by M. Gibby and F. Jackson. On Sunday, field work will be confined to the woods around the Centre where a number of *Dryopteris* hybrids can be demonstrated. The cost of the weekend will be £23.00; booking forms and programmes for those interested are obtainable from:

LYNNE FARRELL, N.C.C., Godwin House, George Street, HUNTINGDON, PE18 6BU.

IRISH REGION

Taxonomic meeting to Lough Carra, Co. Mayo. July, 1980.

The Irish Regional Committee is organizing a taxonomic meeting centred at Lough Carra, Co. Mayo between July 25th – 27th. The area is rich floristically and groups which could be studied include *Carex*, *Potamogeton*, *Rosa*, *Salix*, *Dactylorhiza* and *Quercus*. The aim of this meeting is to familiarise members with the more critical plant taxa and consequently laboratory facilities are being secured close to the lake at which field collections can be studied at leisure.

Several British experts have already agreed to attend this meeting, and it is the hope of the committee that this short note will stimulate other British members to come too. The venue is close to Connemara to which an excursion is planned. Those interested in obtaining further details should contact me at the address below.

TOM CURTIS, School of Botany, Trinity College, DUBLIN 2.

BSBI RUBBER STAMP

Featuring the BSBI bluebell and the message 'Please leave wild flowers for others to enjoy' this rubber stamp is now available from Oundle Lodge, price £2.50 (incl. p. & p.).

It is hoped that more BSBI members will obtain one of these and join the growing number who have begun to use it on their outgoing letters.

OTHER NOTICES

ORCHID PROBLEMS

A ghostly tale. Again I have to report that several specimens of *Epipogium aphyllum* have been removed. The selling price for our specimens abroad has been quoted at £300 each! Anyone with information concerning the destruction of the Ghost Orchid, please notify me.

Nearly a slip-up. Visitor pressure on the Lady's Slipper, *Cypripedium calceolus*, is increasing. This has caused erosion in the immediate area, which may affect the survival of the plant. In the interests of conservation and research, **PLEASE DO NOT VISIT THE PLANT IN 1980.**

LYNNE FARRELL, N.C.C., P.O. Box 6, Godwin House, George Street, HUNTINGDON, PE18 6BU.

KEYS FROM THE BRITISH MUSEUM

Several keys to British plant groups from the British Herbarium of the British Museum are now available. Each consists of a pack of punched cards and instructions on how to use them. Keys currently available are:

- 1) *Taraxacum* Prepared jointly with Dr. A.J. Richards, and includes 180 species, some 50 of which are additional to the monograph of 1972. Descriptions of these species are provided. The key includes the distribution of all species by vice-counties (up to Sept. 1978). Notes on *Taraxacum* characters are provided.
- 2) *Euphrasia* Prepared jointly with Dr. P.F. Yeo, and up-to-date with his recent account of European species (*Botanical Journal of the Linnean Society* Vol.77, (4, Dec. 1978,) pp 223 - 334, available from Academic Press at £6.25).
- 3) A key by *vegetative* characters to species of either basic, neutral or acid grasslands, or all three. About 70 species are included. Prepared with the help of Miss J. Martin (NCC) and the Field Studies Council.

Each of the above keys has been checked and tested, but corrections and comments from users would be welcomed. A charge of £1.50 per key is made to cover costs. Cheques etc., payable to British Museum (Natural History).

R.J. PANKHURST, British Museum (Nat. Hist.), LONDON, SW7 5BD.

CONSERVATION OF BRITISH BRYOPHYTES

The *British Bryological Society* has prepared a Code of Conduct which is concerned with the conservation of mosses and liverworts. As a result of increasing environmental and human pressures, many species are in danger either through direct collection (for private herbaria or horticulture) or through loss of suitable habitats through, for example, drainage or change in land use.

The Code has been distributed fairly widely but if any BSBI member would like a copy, please contact the BBS Conservation Officer at the address below, who would also be interested to hear of any actual or potential threats to sites which might have bryological interest. A stamped, addressed envelope would be appreciated.

DR. P.D. COKER, School of Biological Sciences, Thames Polytechnic, Wellington Street, LONDON, SE18 6PF.

THE BOTANICAL RESEARCH FUND

This small private Trust Fund exists to aid individual research workers in botany. Grants, usually not in excess of £100, are awarded for specific items of expenditure connected with their work and are generally made to those who are not in receipt of any official funding to support their research.

Applications, accompanied by the name of an appropriate referee, should be sent to the Secretary, (address below), from whom further information may also be obtained.

DR. K.L. ALVIN, 2 Little Gaynes Lane, UPMINSTER, Essex, RM14 2JP.

A NEW COUNTY TRUST

On 1st January, 1980, the Avon Wildlife Trust came into being. This Trust, which covers the County of Avon, incorporates those areas in South Gloucestershire and North Somerset which were formerly in the territory of the Gloucestershire and Somerset Trusts for Nature Conservation respectively. The headquarters is expected to be in Bristol. A formal launching of the Trust will take place on 3rd May. Anyone who is interested should contact:

AVON WILDLIFE PROJECT, 17 Whiteladies Road, BRISTOL, 8, Tel: Bristol 36822.

COURSE ON WATER PLANTS

A short residential course entitled "Water Plants" will be held on 27th July - 2nd August, 1980. It is based on field studies to select freshwater sites in the North Leicestershire/Charnwood district, and includes the identification, ecology, educational value and management of water plants, for nature conservation. No previous knowledge is required. Further details from : DR. MAX WADE, c/o Centre for Extension Studies, University of Technology, LOUGHBOROUGH, Leics. LE11 3TU.

FIELD STUDIES

The Field Studies Council has issued its series of programmes detailing the courses at its ten centres. Regretfully the fees have risen steeply from £56 in 1979 to £70 this year, reflecting the drastic increases of V.A.T., inflation and other costs. But, considering the facilities provided, they still represent remarkable value.

Besides the general and beginners' courses to be found at each centre, the following somewhat more specialised subjects offered at particular localities, are often determined by the resources of the area concerned. Examples of the specialised groups of plants catered for are: Orchids, Trees, Ferns, Grasses, Sedges and Rushes, Mosses and Liverworts, Lichens, Seaweeds, Fungi and what are grouped under "Useful" plants, and "Difficult" plants.

For those interested in ecology, Seashore, Woodlands, Limestone, Bogs, Fens and Freshwater habitats have several courses devoted to them. Courses concerned with specific areas, in which ecology plays a big part, include: N. & S. Downs, S. Devon, Dartmoor, Pembrokeshire, N.W. Wales, Snowdonia, Atlantic Islands, River Severn, Suffolk Coast and Yorkshire Dales.

For further details, write for the classified list of courses entitled "1980 Courses for All", obtainable in return for a s.a.e. (News size) from F.S.C. Information Office, Preston Montford, Montford Bridge, Shrewsbury SY4 1DX.

In addition to these there are courses featuring techniques in flower painting, photography, weather, mini environments and statistics.

An innovation at Slapton Ley is the series of 13 short 3-day courses in countryside exploration for residents and holiday makers staying locally, with such titles as Moor to Sea, Freshwater and Coastal, Life in Ponds and Streams.

EDW

EXCURSION TO LUNDY ISLAND

Once again the Lundy Field Society has organised a special day trip to the island, giving both members and the general public the chance to spend 4 - 5 hours ashore, with the opportunity to join tours led by various LFS specialists.

To encourage the widest possible support we are again keeping our charges as low as possible, and the return fare, £6, gives unrivalled value. As a non profit-making Charity, the Society devotes all profits from this Excursion to conservation and scientific work on the island and to the publication of scientific reports.

The M/V Balmoral, will sail from Ilfracombe at 10.30 am. on Saturday, June 7th, and should anchor off Lundy at about 12.15. During the long stay ashore Society specialists will lead parties on Ornithological, Botanical, Archaeological and General tours. It is likely that the excursion will be over-subscribed, so we recommend an early response. Further information from :

PETER COLE, 2 Beaufort Close, REIGATE, Surrey, RH2 9DG.

IBRA PUBLICATIONS

The **International Bee Research Association** announce two new Reprints from 1979 issues of *Bee World*.

These are: M100 *HONEYBEE POISONING BY CHEMICALS: SIGNS, CONTRIBUTING FACTORS, CURRENT PROBLEMS AND PREVENTION* by Dr. C.A. Johansen.

M101 *THE HONEYBEE COLONY IN WINTER* by T.S.K. and Mrs. M.P. Johansson

The Reprints are available direct from IBRA, Hill House, GERRARD'S CROSS, Bucks. SL9 0NR. Price 75p each post free.

NATURAL HISTORY ARTICLES IN 1977 and 1978

DR. RICHARD GULLIVER sends us copies of the above which appeared in the Spring and Winter 1979 issues of *Natural Science in Schools* (pp 13 - 24, and 81 - 88). He explains they are an index of all articles appearing in 8 magazines devoted to natural history and the countryside in 1977 and 1978. A similar index for 1979 is in preparation. Offprints of the 1977 and 1978 indexes are available from him at 60p per copy from: 11 Minster Avenue, Huntington, YORK, YO3 9DJ.

BANC

We note the formation last year of the British Association of Nature Conservationists (BANC). Its prospectus says it "is concerned with planning the future countryside, and is an independent voice for conservation". The membership includes planners, naturalists, nature conservationists, environmental educationalists together with earth, life, and social scientists. It publishes a quarterly journal, *ECOS*, and the subscription is £5. Further information from:

N.J. PINDER, 57 Cambridge Street, NORWICH, Norfolk.

R.W. DAVID

Cambridge botany has always been distinguished by a very strong link between amateur and professional expressed in the enjoyment of field studies and excursions in the vicinity of the University city, a tradition which can be traced in a virtually unbroken line right back to John Ray's famous 'Cambridge Catalogue' of 1660. Indeed, a reading of the history of botany in Cambridge reveals that the distinction between amateur and professional is, so far as the University is concerned, a relatively recent development. We find the third Professor of Botany, Thomas Martyn, who held the Chair from 1762 to his death in 1825, is actually on record as saying 'being then engaged in academical studies and afterwards in those of the profession I had determined to adopt, Botany was rather the amusement of my leisure hours, than any serious pursuit.'

Dick David, our President, sits very firmly in that tradition. With a distinguished career as Publisher to the University behind him, as a Fellow of Clare College and resident (at least in the winter!) in the City, he is a perfect example of the gifted field botanist whose quiet enthusiasms have endeared him to amateur and professional alike. Dick was trained by his mother to help colour in the Bentham and Hooker illustrations, and it is rumoured that he had contributed both Daisy and Dandelion to this exercise before the age of five. In his school days at Winchester his natural history interests broadened to cover birds, and particularly bird photography, but botany, his first love, seemed to remain the dominant passion, to which he turned whenever spare time came his way in a busy working life. His botanizing shows that familiar pattern: he knows that Cambridge is a marvellous place to operate from, but is under no illusion where the really stimulating and exciting countryside is — in the north and west of Britain! As Recorder for East Cornwall v.c.2 from 1955 — 1967, and for both East and West Cornwall, v.c.1 and 2, from 1961 — 1967, Dick has served his apprenticeship admirably to the Society in what is probably scientifically the most important permanent activity which members readily undertake. Thus it is particularly fortunate at the present time, when important negotiations are in train between the Society and the Government bodies involved (Nature Conservancy Council and Institute of Terrestrial Ecology) about the future of the Biological Records Centre, that we have as President someone who knows in his own experience both the complexity and the value of botanical recording in Britain. For years also, Dick has served on the Society's Publications Committee, where his professional opinion, always very courteously and willingly made available, has been especially valuable to a group which was often deficient in precisely those areas of knowledge in which he excelled.

In recent years Dick has narrowed his sights until only the genus *Carex* is visible. He has been systematically visiting all recorded British sites of the rarer species to assess their present status, and the fruits of this devoted and energetic survey can be seen summarized for the rarest of our sedges in the British Red Data Book. In addition he has tackled the notorious critical groups in the genus, with a particularly close look at the *muricata* sedges, where he has even dealt with, in the pages of *Watsonia* (11: 59 — 65, 1976), one of the most complicated nomenclature problems. A specialist who can range from turgid nomenclature to field population assessment in his chosen critical group is always to be welcomed!

It is not only in expert knowledge, however, that Dick's help has been for so long useful to the Society. As many of his friends and colleagues would agree, his quiet charm and willingness to help, which at times may even have disguised to casual acquaintances how much he knew of the subject in hand, are qualities for which the Society in particular owes him much. Outside the 'charmed circle' of his botanical friends these same qualities, of course, are a source of pleasure and admiration. A glance at Who's Who will indicate that two other hobbies, namely music and fly-fishing, play an important part in Dick's life, and we botanist friends of his rejoice to think that other people benefit as well.

It is conventional at this point to close with a reference to wife and family. The fact that this presents difficulties must not inhibit us — the difficulties are simply that Baroness David should clearly have a profile in her own right! Perhaps it would suffice to say that Dick and Nora are a very happy couple, with a grown-up family and grandchildren. Each is obviously happy with their very different 'hobbies' — if Nora will forgive the use of that term to cover a lifetime of devoted political service — and each vicariously enjoys the other's happiness. What, indeed, could be better than that? S.M.W.

THE TED LOUSLEY MEMORIAL TABLET

This was duly unveiled and dedicated by the Rector of St. Olave's, Hart Street, London, Rev. L.E.M. Claxton. (See *BSBI News* 22, p.25). Prof. W. Stearn gave a splendid memorial address which will appear in the *Biological Journal of the Linnean Society*.

In memory of
JOB EDWARD LOUSLEY
1907 — 1976
Botanist and Banker

"The range of the mountains is his pasture
and he searcheth after every green thing"
JOB 39:8

The mention of William Turner in connection with the memorial in St. Olave's, brought an interesting letter from G.T.L. Chapman, Headmaster of King Edward VI School, Morpeth, who enclosed a copy of the article he wrote on Turner in "Roebuck" No. 14 (Summer 1976). Turner, the son of a tanner, spent his boyhood in Morpeth where he attended the self-same Grammar School and thence to Pembroke Hall, Cambridge.

The article describes many details of Turner's life with quotations from his work and illustrations from his "Herbal", a copy of which is in the possession of Morpeth Library. It is noteworthy that in the reign of Edward VI, Turner, a staunch protestant, returned to this country from a sojourn in several places on the Continent, and became chaplain and physician to the young King's Lord Protector, the Duke of Somerset who lived at Sion House, since converted into a well-known garden centre.

To this day, in the grounds of the King Edward VI School there grows a mulberry tree, a scion of what is reputed to be the first mulberry tree ever introduced into England, brought by Turner himself for the garden at Sion House. (For those interested, "Roebuck" is the magazine of the Northumberland Wildlife Trust). E.D.W.

ALIENS and ADVENTIVES

ADVENTIVE NEWS 16

Compiled by Eric J. Clement

MIXED BAG

Amaranthus hybridus L. : "Pick your own fruit" nursery, Hersham (Surrey), Oct. 1979. J.M. Montgomery. "A fantastic outbreak (literally in thousands)." See drawing in *BSBI News* 22, p.18. I predict that it will persist here for at least a few years, as it has done in arable ground near Chilworth (Surrey), comm. A.C. Leslie.

Berberis wilsoniae Hemsl. & Wils. : Sand-dunes, Branton Burrows (N. Devon), July 1979. Mrs. B.E.M. Garratt. Hb. EJC. One good-sized bush, overtopped by marram grass and so not easily spotted. Presumably bird-sown here — it is much grown in gardens.

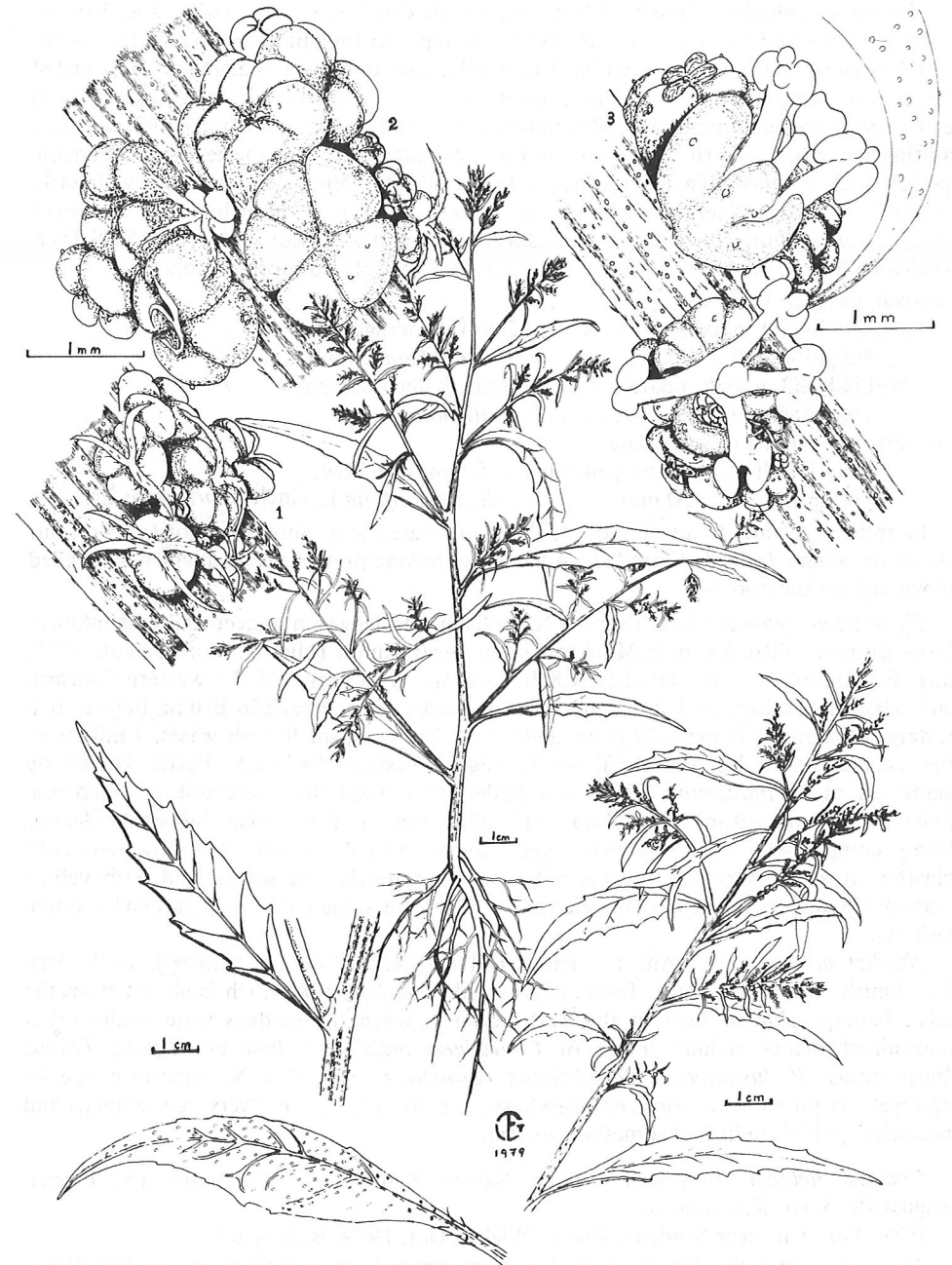
Ceratonia siliqua L. : Industrial dump, Greenhithe (W. Kent), Sept. 1979. J.R. Palmer. A score of seedlings, which were up to 10 ins. tall. See *Gorteria* 5(1): 5 (1970) for a drawing of these baby Carob trees, when they germinated on a railway yard in Rotterdam harbour in 1966 and along the river Zaan (N. Holland) in 1967. They were also very plentiful at the Greenhithe site in 1978, Hb. EJC (see *London Naturalist* 58:63). The Locust Bean Gum is extracted and used "to thicken sauces, ice-creams, etc." (G. Usher, 1974), as well as for sundry other uses. It is *not* valueless in modern Br, as suggested in the latter ref.

Chenopodium ambrosioides L. : Disused rubbish-tip, Brislington, Bristol (W. Glos.), Oct. 1979. T.G. Evans & A.L. Grenfell. Conf. EJC. A solitary plant had germinated on a warm, smouldering part of the tip: it is strongly aromatic, an annual to short-lived perennial, variably pubescent, and covered with sessile golden glands (x 10 lens). Quite unlike any of our familiar species! TGE has bravely depicted details of the plant for us — the flowers were variable and not easily interpreted: hence the three enlargements. 1. shows the earliest flowers that are always clearly female only; 2. shows a later stage; 3. shows the final, larger, hermaphrodite (or male?) flowers. The long stigmas varied from 2 — 5 (constantly 2 in all *CTW* spp), and the stamens 4 — 5. A polymorphic weed, occurring throughout the more tropical parts of the world, and rather rarely reported from Br.

Coronilla emerus L. : In hedge, Bryants Avenue, Gidea Park (S. Essex), 1979. B.L. Coombes, comm. R.M. Burton. Conf. Dr. K.J. Adams. The road is used for overnight parking of lorries freshly arrived from the continent, and BLC suggests that these have introduced this plant, *Centaurea calcitrapa* and *Silybum marianum*. The shrubby *Coronilla* has, I would add, long been grown in gardens and has escaped into a hedgerow in Lincs. — see *Wild Flower Magazine* 364:28 (1972).

Cotoneaster affinis Lindl. : Bargate-stone quarry, Godalming (Surrey), Oct. 1971. LNHS excursion, led by A.C. Leslie & Mrs. J.F. Leslie. Hb. EJC. Many saplings, presumably bird-sown, on the steep, overgrown quarry face, but with no evidence of fls/frs. J.R. Palmer grew on one root in his garden and by 1978 the virtually black fruits confirmed his provisional det. of *C. affinis* var. *bacillaris* (Lindl.) Schneid. (*C. bacillaris* Lindl.), the usual form in cultivation. This species appears in Druce's *Br. Plant List*, but almost nowhere else in the alien literature. Growing with them was a solitary bush of *Elaeagnus umbellata*, Hb. EJC (see below for comments).

Was this site perhaps a starling (*Sturnus vulgaris*) or thrush (*Turdus* sp.) roost or gathering point? It certainly suggests that inspection of roosts of berry-eating bird species might well provide exotic growths of well-manured garden plants. I have received no records to (dis)prove this! Have we any ornithologists who can help?



Chenopodium ambrosioides

del. T.G.Evans. 1979 ©

Elaeagnus umbellata Thunb. : Dartford Heath (W. Kent), Oct. 1978. J.R. Palmer. Hb. EJC. One bird-sown sapling, about 18 ins. high, in the gun club area of the heath. In JRP's own South Darenth garden the edible, speckled-silver orange-red, one-seeded drupes are freely produced in the autumn. It is an essentially deciduous shrub with leaves green above, shining and silvery beneath, and is often used horticulturally as a grafting rootstock (see Hb. EJC) for the more popular evergreen species. It is a variable species (incl. *E. parvifolia* Royle), hence the conflicting book descriptions: "yellowish-brown shoots" of *Hilliers' Manual* versus "densely white-scaly branchlets" of J. Ohwi's *Flora of Japan*. Our young shoots were silvery, hence it keys out wrongly in RHS *Dict. Gardening* 2:737. The erring couplets, 3 – 5, could be replaced more reliably by:

Lvs oval, ovate or obovate

Fls 1 – 7+ in axils, pedicels 3 – 12 mm; fr orange-red, subglobose, 6 – 8 mm *E. umbellata* Thunb.

Fls 1 – 3 in axils, pedicels 15 – 50 mm; fr deep orange, oblong, c. 15 mm *E. multiflora* Thunb.

Lvs narrowly oblong to lanceolate

Fls 1 – 3(–5) in axils, pedicels 1 – 5 mm; fr yellow, ellipsoid, 10 – 20 mm *E. angustifolia* L. (incl. *E. orientalis* L.)

In spite of claims to the contrary, the two related spp. above are not (yet) on our list of Br. aliens. Indeed, *E. umbellata* has only the one previous record which is detailed above under *Cotoneaster*.

Hypericum xylosteifolium (Spach) N. Robson: On ledge on a steep rail embankment (now disused railtrack), near Monkton Moor, near Ripon (Mid W. York), Sept. 1979. Mrs. F. Houseman. BM. Det. Dr. N.K.B. Robson, as "a native of the western Caucasus and adjacent Turkey, and it has not been recorded as an escape in Britain before. It is widely, though not commonly cultivated here." The one, small bush was c. 1 mile from the nearest habitation (a farm), on Permian limestone bed-rock. Better known by gardeners as *H. inodorum* Willd., non Miller. Our plant does resemble *H. inodorum* Miller (*H. elatum* Aiton), a well-known Br. alien, but the Ripon plant has smaller leaves, stems compressed or slightly two-winged above, solitary or very few-flowered, tight clusters of small, terminal flowers with narrower petals and sepals, and with yellow marginal glands to the sepals (the glands are absent in some wild – and garden? – populations).

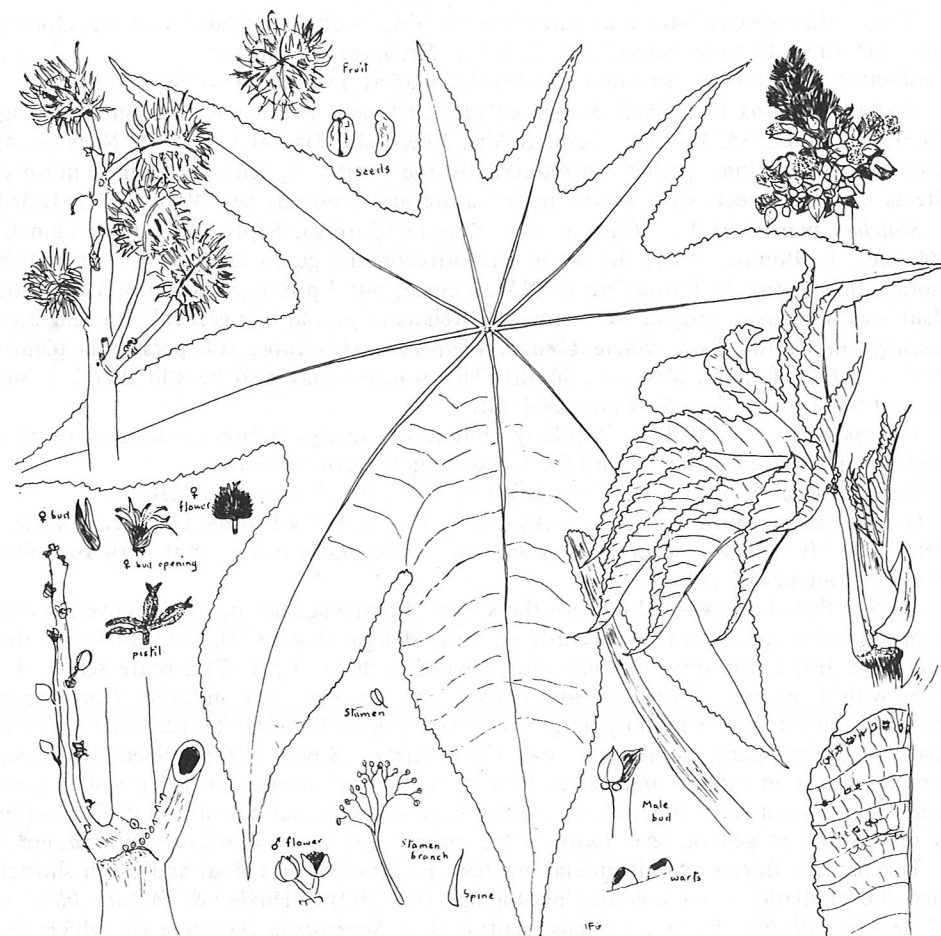
Nuphar advena (Ait.) Ait. f. : Pain's Hill Park lake, Cobham (Surrey), 1979. Mrs. J.E. Smith. Conf. Ken Page. Previously recorded as *N. lutea*, which is absent from the lake. Perhaps planted here in the 18th century, when the gardens were made: other naturalised plants include sheets of *Convallaria majalis*, *Tellima grandiflora*, *Prunus laurocerasus*, *P. lusitanicus*, *Philadelphus coronarius*, etc. This N. American species aggregate is probably overlooked elsewhere: the form here has "very red stamens and nectaries", which indicated something exotic.

Crassula helmsii: Fingringhoe Wick Nature Reserv, near Colchester (N. Essex), August 1976. Dr. K.J. Adams.

River East Yar, near Sandown (Isle of Wight), Oct. 1979. B. Shepard.

These two records, comm. A.H. Vaughan escaped my summary in the last *News*, pp. 12 – 13. Dr. J.L. Mason and myself also saw it, dominating a garden pond in Newton (I. of W.) back in Sept. 1966, and flowering profusely (Hb. EJC), but I have yet to find ripe seed on any Br. material.

Ricinus communis L. : Industrial dump, Greenhithe (W. Kent), Sept. 1979. J.R. Palmer. Some 30 plants up to 4 ft. tall, flowering well, and with a few, well-developed fruits. Florence Gravestock has kindly provided a drawing for us of a cultivated plant which shows up well its exotic appearance, with leaves up to 2 ft. across. The Castor Oil Plant is a variable shrub (usually grown as an annual) that keeps the "splitters" happy, but not me! Presumably introduced here by the oil/food processing industry, as was the accompanying *Ceratonia siliqua* (see above).



Ricinus communis

del. I.F. Gravestock ©

Pachyphragma macrophyllum (Hoffm.) Busch: Grounds of Broncroft Castle, near Craven Arms (Salop), June 1979. Miss M.S. Fuller. Hb. EJC. Presumably once introduced, in a partly-shaded area left quite wild; close by is *Dentaria bulbifera* in similar habitat, but not intermingling. A rhizomatous crucifer with white flowers in the spring, originating from the Caucasus and E. Asia Minor; described in *Fl. Turkey* 1:341 and RHS *Dict. Gardening* 4:2101. Known also as *Thlaspi macrophyllum* Hoffm. and *T. latifolium* Bieb., the only previous Br. record is from a wood near Failand (N. Somerset) — see *Wild Flower Magazine* 349:27 (1967).

Many other species have also naturalized in this locality: a shaded wall was clothed with the tiny *Arenaria balearica* (det. EJC); *Saxifraga cymbalaria* and *Cardamine raphanifolia* ("spread into many damp areas") were also noteworthy.

Rubus pergratus Blanchard: Margin of Merrist Wood, near Guildford (Surrey), Aug. 1979. G.R. 963.535. Dr. A.C. Leslie & Mrs. J.F. Leslie. Hb. ACL. Det. A. Newton. At least two populations, perhaps introduced by the nearby Agricultural College nursery. Stems c. 3 m., erect, with almost no armature and grooved. See *Watsonia* 11(4):381.

Sonchus maritimus L.: Gatton, near Reigate (Surrey), Sept. 1857. John Linnell. BM. Det. L. Boulos, 1961, the world authority on the genus as "new to the British Flora". It is native in Europe up to N.W. France, but I presume (no proof!) that this plant was in marshy ground by a stream ("Relicts of an old bog garden", quoting J.E. Lousley) in Gatton Park, where *Cirsium oleraceum* (L.) Scop. still persists in plenty 1955 — 1970+ (comm. Mrs. J.E. Smith). The *Sonchus* may also be still there! — but most of the introductions have now died out.

Tragopogon hybridus L.: Regularly (but rather rarely) occurs about gardens as a singleton introduced with wild-bird food. Two sample records follow:

Garden casual, Swaffham (W. Norfolk), July 1977. E.L. Swann. Det. EJC.

Garden casual, Swanland (S.E. York), July 1978. R. Essex-Crosby. Hb. F.E. Crackles. Det. EJC. "It had pink flowers, appeared to be *Tragopogon*-like, but with very few flowers in one head." (FEC).

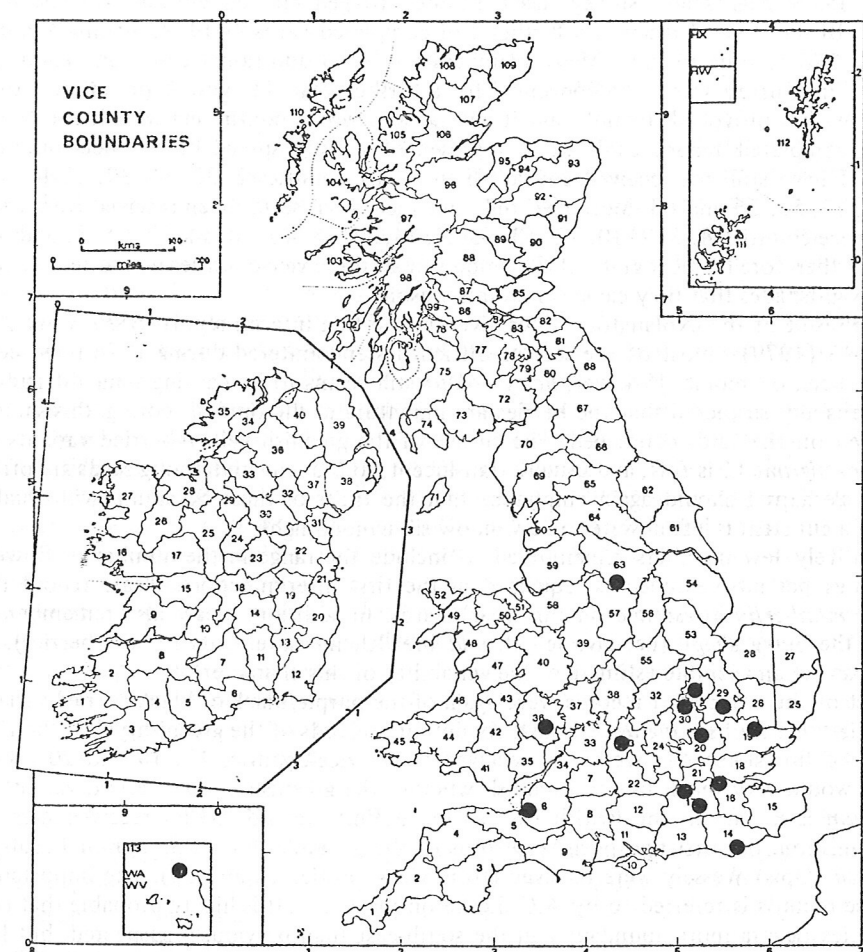
Jill Smythies has provided us with the superb, botanical drawing on our cover, drawn from a Spanish specimen (Casares turning, prov. Málaga, May 1979). Noteworthy are the dimorphic fruits: the outer achenes are crowned with (3—) 5 (—7) aristate scales, the inner with a pappus of long plumose hairs — this separates it from other *Tragopogon* spp. and puts it into a monotypic genus as *Geropogon hybridus* (L.) Schultz Bip. (*G. glaber* L.) for many botanists — e.g. *Flora Turkey* 5:668 (1975). Such dimorphic cypselas occur in other Compositae: it is an 'advanced' mechanism for utilising more than one mode of seed dispersal. Current thought suggests that it is not, in itself, worthy of recognition at generic level (witness the "sunk" genera of *Thrincia*, *Spitzelia*, etc.).

The ligulate florets of this annual are few, pinkish-lilac in colour and much shorter than the phyllaries — see coloured photograph (no. 292) in Huxley & Taylor's *Flowers of Greece and the Aegean*, wrongly captioned as *Scorzonera purpurea* (in which the florets exceed the phyllaries). It is frequent throughout the Mediterranean region and the Near East, on both rocky slopes and in cultivated ground.

Please drop me a line if you spot errors in these notes: I fight long and hard, and I often lose, trying to sort out which book is correct when two or more contrary facts are expressed! And don't forget to keep sending to me all your exciting records or bewildering finds, even the old ones (the *Sonchus* above was an 1857 record).

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

BEE ORCHID SURVEY



We now have 14 recorders scattered throughout England and the Channel Isles, but we would welcome more participants, particularly in the blank areas.

So far we have observations on the percentage of flowering plants in each colony, the mean height of the inflorescence and the number of flowers, in addition to the number of vegetative plants. It is already clear that considerable differences exist in the number of plants which flower at any site in the same year, even at sites which are close together. Mr. R. Day, who has now recorded for two years, has had dramatic changes in his population near Cambridge. In 1978, 39 out of 58 plants were flowering, whereas in 1979 only 3 plants were found, all of which were in flower.

If you are interested in this investigation please contact:

LYNNE FARRELL, NCC, Godwin House, HUNTINGDON, PE18 6BU.

TERRY WELLS, ITE, Monks Wood, Abbots Ripton, HUNTINGDON PE 17 2LS.

BLACK NIGHTSHADE SURVEY – SECOND INTERIM REPORT

The Black Nightshade Survey has continued to generate an enthusiastic response from BSBI members. I received a further 178 completed cards in 1979, making a grand total of 278 records to date. Many members requested additional cards, and enquired whether the survey was to be continued for a further year. In view of the interest that the survey has provoked, I think that it will be well worth continuing with it for 1980.

The completed record cards again represented a good spread of the vice-counties, though I have still not received any at all from vice-counties 2, 30, 36, 39, 42-44, 46, 47, 49, 52, 53, 56 and 63. Moreover, only one record has so far been received from each of the vice-counties 4, 5, 7, 10, 12, 13, 23-25, 34, 37, 38, 40, 50, 54, 57, 61, 62 and 64. I should therefore be most grateful if members in all these vice-counties would record any Black Nightshades that they came across this season.

As a result of the explanatory notes given in the first interim report (*BSBI News*, 21: pp. 12-13 (1979)), most of the scoring difficulties encountered during 1978 now seem to have been overcome. However, *berry colour* still seems to be causing some difficulty. If there is any suspicion that the berries are immature at the time of scoring, this should be noted on the cards concerned. The cuticle of the greenish/yellow-berried variants of *Solanum nigrum* L. is soft, and usually translucent, so that the underlying seeds are often visible. Perhaps I should again emphasise that the fruits of these *Solanums* will usually ripen if a cut stem is left in water on a window sill in good light.

Relatively few members remembered to include the range in the number of flowers or berries per inflorescence as requested in the first interim report. Please record the *pedicel number/inflorescence* on this year's cards. In addition, please also remember to record the *berry shape* (i.e. give length and breadth measurements for the berries), so that I can get an accurate estimate of the variability of this character.

Most of the completed records were again of the purple/black or black-berried variant of *S. nigrum* L. subsp. *nigrum*, though six definite records of the greenish/yellow-berried variant of this subspecies were also received (from vice-counties 17, 19 and 20). This year, I would very much like to establish whether the greenish/yellow-berried variant of *S. nigrum* is as rare in the British Isles as the definite records so far received suggest.

In addition, the first two positive records of the glandular-haired *S. nigrum* L. subsp. *schultesii* (Opiz) Wessely were received (from vice-counties 18 and 28). The importance of these records is referred to by A.C. Leslie on page 21. It is highly probable that this subspecies occurs more abundantly in the south-east than previously suspected, but has simply been overlooked. I should therefore be most grateful if recorders in the appropriate vice-counties would especially look out for this subspecies, particularly on refuse tips and waste ground. The differing hair types of subsp. *nigrum* and subsp. *schultesii* are illustrated on page 21. When any potential records of subsp. *schultesii* are encountered, I should very much like to receive a good specimen of the plant concerned so that a positive identification can be made, and a voucher specimen kept.

Among the possible casual relatives of *S. nigrum* found in Britain, no records have yet been received of the following three species: the red/orange/yellow-berried *S. villosum* Miller, either as subsp. *villosum* or as subsp. *puniceum* (Kirschleger) Edmonds (previously referred to as subsp. *alatum* (Moench) Dost.; see Edmonds, J.M., *Bot. J. Linn. Soc.*, 78: 213-233 (1979)); the Garden Huckleberry *S. scabrum* Miller; or the tiny-flowered *S. americanum* Miller. The only two records so far received of *S. chenopodioides* Lam. (previously known as *S. sublobatum* Willd.; see *Bot. J. Linn. Soc.*, 78) came from Sark in the Channel Islands.

However, seven new records of the glandular-haired casual *S. sarrachoides* Sendtn. were received, making a total of 11 to date (from vice-counties 14, 16, 17, 18, 20, 24, 29, 34, 37 and 40). Two of these records were of the form with the completely accrescent calyx which encloses the entire berry. Again, this species is probably more widespread in the south-east than previously supposed, and more positive records of it would prove invaluable in solving the taxonomic problems associated with this species (referred to by A.C. Leslie in *BSBI News*, 12: p.13 (1976)). Where any identificatory difficulties arise with this species, I should be most grateful for a good pressed specimen of part of the plant concerned, and particularly any specimen where the calyx is completely accrescent. In addition, where populations of *S. sarrachoides* are found growing next to, or near, populations of *S. nigrum*, members should especially be on the look out for possible hybrids (i.e. *Solanum* × *procurrens* Leslie). These are usually large, vigorous plants covered with flowers and small, purple, seedless berries. Such hybrids are again thought to be more common than previously supposed, and, where hybridisation is suspected, I would very much like to see a branch of the appropriate plant.

Members continued to send in useful notes on the morphological variation apparent in the plants being scored, and on the habitats from which they were collected. These are providing important information on the morphological variation exhibited by both *S. nigrum* and *S. sarrachoides* in Britain, and on their preferred habitats. When scoring difficulties were encountered, members often sent me sample specimens, which usually resolved the relevant problem. I am most grateful to all members who have so far helped in the survey, either by scoring plants, by sending me specimens, or by kindly answering my queries over scoring problems. I have tried to write to every recorder acknowledging their record and confirming their identification. If I have overlooked anyone, please accept my apologies and be assured that your record was most gratefully received. This year, please keep a special look out for *S. nigrum* subsp. *schultesii* and for *S. sarrachoides*, and also for the missing casuals *S. scabrum*, *S. americanum* and *S. chenopodioides*. I shall look forward to receiving your new records, and will be pleased to send more blank cards to any member requesting them.

JENNIFER M. EDMONDS, Botany School, Downing Street, CAMBRIDGE, CB2 3EA.

SOLANUM NIGRUM L. subsp. *SCHULTESII* (Opiz) Wessely in Britain

This alien race of the Black Nightshade comes from the drier parts of central, southern and eastern Europe and apparently has not been recognised before in Britain, although it was first collected over 30 years ago. It is distinguished from subsp. *nigrum* by its hairier stems, with at least some hairs ascending or spreading and most of them with a small apical gland. In subsp. *nigrum* the stem is less hairy, the hairs are all appressed and long (multicellular) glandular hairs are absent. The illustration (reproduced from *Flora Neerlandica* 4:156 (1966) by kind permission of the Royal Netherlands Botanical Society), clearly shows the two extreme cases. Not all plants of ssp. *schultesii* however have quite such uniformly spreading hairs. The following are all the known British records

Stem hairs of *Solanum nigrum*

(a) subsp. *nigrum*

(b) subsp. *schultesii*

(a)



(b)



The following are all the known British records for ssp. *schultesii*:

- v.c.11 South Hants. Southampton Docks. J.E. Lousley. 12th October 1958. BM, K. Det. J.M. Edmonds. 1973.
- v.c.16 West Kent. Refuse tip, Greenhithe, GR51/589.746. E.J. Clement and J.R. Palmer. 28th October 1979. **Herb.ACL.** Det. EJC.
- v.c.17 Surrey. Near Thames Lock, Weybridge. Mrs. J. Mclean. 29th July 1971. **Herb.ACL.** Det. EJC (1979).
- v.c.18 South Essex. (a) Near Rainham Station. N.Y. Sandwith. 1946. K. Det. JME. 1973. First British record.
(b) Waste ground on the former Hornchurch Marshes east of the Ford Motor Works, Dagenham, GR52/505.819, 508.820 and 504.816. A.C. Leslie. 30th October 1979. **Herb.ACL.** Conf. JME.
- v.c.28 West Norfolk. Sand dune, Thornham Harbour, Holme Nature Reserve, GR53/723.447. D. M. Donald. 20th August 1979.

Re-visiting the last locality a few weeks later DMD and I could only find plants of subsp. *nigrum*; unfortunately the specimen collected previously had not been retained. However its characters were entered on a BSBI Solanum Survey record card and this definitely showed that it had spreading, multicellular, glandular hairs.

It is interesting that the Rainham and Dagenham sites are less than one mile apart and in view of the persistence of *Solanum sarrachoides* Sendtn. em. Bitter in this area for over 50 years, it seems highly likely that *S. nigrum* subsp. *schultesii* has also been about here, un-noticed, since at least 1946. Is it perhaps still in Southampton Docks?

If anyone has specimens or records from other localities or can comment further on those given I should be glad to hear from them. It is clearly a plant that is easily missed and may well be more widespread on refuse tips and on waste ground in big cities. Don't forget that any new records of this and any other species in the *S. nigrum* group should also be entered on a BSBI Solanum Survey record card and sent to Dr. J.M. Edmonds in Cambridge (see page 21). I am grateful to Dr. J.M. Edmonds, Mr. E.J. Clement and Mr. D.M. Donald for their help in preparing this note.

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

REQUESTS

ROSA MAPPING

The Rev. G.G. Graham (see *BSBI News* 23, p.31) is particularly interested in mapping roses by tetrads as has been successfully adopted in Leicestershire and Durham. But some degree of rationalisation is essential.

Therefore: (i) he would prefer to see a representative sample of fresh specimens collected in the early fruiting stages, before advising on procedure.
(ii) pressed specimens should be collected in duplicate and one of each pair of specimens sent to him, the other being retained by the sender.

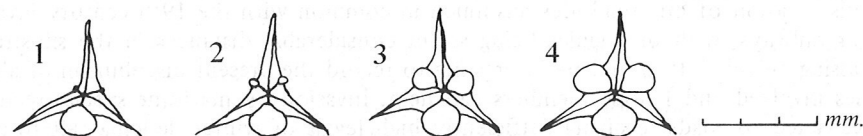
Good specimens if adequately labelled will be placed in the herbarium of the Sunderland Museum. It is too expensive of time and postage to return specimens from a private address.

G.G. GRAHAM, The Vicarage, Hunwick, CROOK, Co. Durham.
(Tel: Bishop Auckland (0388) 4456).

RUMEX CRISPUS L. (CURLED DOCK) ON TIDAL MUD

As part of an investigation of variation in *Rumex crispus*, I have been studying populations of this species from tidal mud in rivers. These populations, referable to var. *uliginosus* Le Gall, show a number of distinctive morphological and ecological features.

Compared with other populations of *R. crispus*, plants from riverine tidal mud have almost uncrisp leaves and a very tall (to 2.5 m) inflorescence, with long, loose branches. The perianth segments, in mature fruit, bear three well-developed corky tubercles. These plants commence flowering towards the end of May – earlier than other populations of *R. crispus*. Their characteristic habitat is near the top of steep, muddy banks in the zone where fresh and salt water interact. Often the plants are immersed by high tides.



Fruits of *R. crispus* viewed from above to show arrangement of tubercles.
1 - 3 var. *crispus* (3-) 4 var. *uliginosus*

I am mapping the distribution of this variant in Britain and Ireland and would therefore be very grateful to receive any information from B.S.B.I. members about 'Docks' growing on tidal mud of rivers. Var. *uliginosus* is probably much overlooked. At present it is known with certainty from the Rivers Medway, Taw and Wye (notably at Tintern Abbey) in Britain and from the Fergus (notably at Clarecastle), Nore and Shannon in Ireland.

Any field observations are of value to me, especially if accompanied by a herbarium specimen. To convey maximum information, herbarium material is best collected at the time of flowering or when the plants are in mature fruit (late August - early September). Basal leaves should be included if possible, together with a note on the height of the plants in the population. I should also be interested to know whether *R. crispus* was present nearby as a 'weed' of cultivated ground, waysides etc.

I shall gladly refund postage and I shall be happy to explain more about *Rumex* to those who send information. I must add a word of warning – the mud on which these plants grow is glutinous and smelly! It can be hazardous, so **please do not take any unnecessary risks.**

J.R. AKEROYD, School of Botany, Trinity College, DUBLIN 2, Eire.

BRISTOL ADVENTIVE FLORA

1982 will mark the 50th anniversary of the publication of *The Adventive Flora of the Port of Bristol*, by Cecil I. Sandwith, and, as a tribute to an eminent Bristol botanist, it is my intention to prepare a *Supplement* to this work. I should therefore welcome any previously unpublished records of aliens from the Bristol area.

During the forthcoming season I hope to commence a mapping scheme for the city covering the commoner alien taxa and offers of help from members would be gratefully accepted.

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

ROADSIDE HALOPHYTES

I have recently begun a Ph.D. project studying the invading halophyte species of N.E. England's trunk roads. These include the British maritime species *Puccinellia distans*, *P. maritima*, *Spergularia marina*, *S. media*, *Plantago maritima*, *P. coronopus*, *Aster tripolium*, *Cochlearia officinalis* and *Suaeda maritima*. As part of the project I would like to record any invasion of roads elsewhere in Britain. I have unconfirmed reports of at least *Puccinellia distans* growing on the A1 to London and across the Pennines on the M62, presumably spreading from the North East. I hope to visit these and any other reported sites and have already visited the Kent roadside sites reported by J.S. Badmin (*Watsonia* 12 (4) 390) which have *Puccinellia distans*, *Spergularia marina*, *Plantago coronopus* and *Hordeum marinum*.

This invasion of our roadsides has much in common with the 19th century invasion of our railways, with propagules being swept considerable distances in the slipstreams of passing vehicles. It would be interesting to record the present distribution of all the species involved and I hope members can help. Invasion by maritime species seems to be restricted to roads receiving sufficiently high levels of winter de-icing salt to cause small bare patches on roadside verges (often referred to as 'saltburn').

Other invading species are also of interest. In the last decade in the North East we have had quite a spectacular invasion by the species *Hordeum jubatum* which now lines most of our trunk roads. I hope to find time to work on the roadside invasion of this species and would be interested to hear reports (particularly first reports) of this and any other roadside invading alien species. Roadsides are not a particularly pleasant habitat to botanise in and can be a hazardous one. Still I hope some members will be sufficiently interested in this phenomenon to look at their local trunk roads.

NICK SCOTT, Dep't. of Plant Biology, University, NEWCASTLE UPON TYNE NE1 7RU

SHEPHERD'S PURSE

I am currently engaged in research at the New University of Ulster, Coleraine, involving a study of the variation displayed by the common weed Shepherd's purse (*Capsella bursa-pastoris* (L.) Medik). A subspecific classification of the species in Ireland is being attempted, and I should be extremely grateful for seed material accompanied by a few general site descriptions, e.g. 'rubbish tip with compacted sandy soil, or a back garden with freshly disturbed soil'. Grid references of the population sites and some herbarium specimens would be an added bonus.

Seed material to be collected in paper envelopes, please, *not* plastic bags; and only above-ground parts of leafy herbarium specimens are required. Postage refunded if requested. Please send to:

MARTIN BRADLEY, School of Biological and Environmental Studies, The New University of Ulster, COLERAINE, Co. Londonderry.

DOWNINGIA ELEGANS

Further to the note in *BSBI News* 21, p.14, and 23, p.10 about *Downingia elegans* in Milton Keynes, the site at Loughton was destroyed in 1979 by the construction of a footpath.

After a moderate but by no means extensive search one plant was found at Willen in 1979.

JOHN G. KELCEY, Bradwell Abbey Field Centre, MILTON KEYNES.

LEUCOJUM VERNUM

As a result of the letters and specimens received concerning *Leucojum vernum*, (see *BSBI News* Nov. 1974, p.11), a few interesting points have arisen which may help to shed light on the status of the plant in this country.

The variable factor in this very early flowering *Leucojum* is the colour of the small mark near the tip of the three outer tepals of each bloom. In those from the Dorset populations and from France the markings are a true green, and though the shade can vary in different seasons, they remain of this colour. In the forms usually grown in gardens, *L.v.* 'Wagneri' and *L.v. carpaticum* they are much more yellow green, in fact some forms of the latter can be almost yellow. As these forms were both originally collected in Eastern Europe, this appears to indicate a geographical variant, perhaps continuous across Europe from west to east.

All naturalised plants in this country that have been examined belong to one of these two continental forms and have conspicuously yellow or yellow-green markings. If, as some authorities state, the English colonies are all introductions too, one would expect them to be of the same origin. The fact that one at least of the two colonies believed to be native shows affinities only with the truly wild colonies of Western Europe does seem to point to their origin being a continuation of their distribution across the Channel.

Obviously before anything other than tentative suggestions could be put forward it would be necessary to have more information about the continental populations, particularly those of mid-Europe, but the facts as observed do seem to have some significance.

KENNETH A. & GILLIAN BECKETT, Bromley Cottage, Stanhoe, KING'S LYNN, Norfolk. PE31 8QF.

PLANT RECORDS FOR SHROPSHIRE (VC 40)

The current project for the publication of a new Flora of Shropshire is due to come to an end in 1980. I would be very grateful for any plant records for Shropshire for the period 1970 – 1980. I would be particularly grateful for any records for critical plant groups.

Perhaps I could take this opportunity to thank those visitors who have already supplied greatly appreciated records for the county.

I.C. TRUEMAN, Department of Biological Sciences, The Polytechnic, WOLVERHAMPTON, WV1 1LY.

I am a Local Government Parks and Open Spaces Officer with the London Borough of Barnet and am currently undertaking a course in Leisure Management, part of which involves writing a detailed report. I have chosen as my project the establishment and management of a Nature Trail in the Scratchwoods Open Space, Mill Hill, London N.W.7.

Might I ask if any members living in the vicinity would be interested in helping me, together with others, to carry out a survey of the flora at this Open Space. Would anyone willing to assist please contact me at:

J.D. REA, 4 Audax, Lower Strand, Colindale, LONDON NW9 5LX.

ORCHID SPECIES AT WALTHAM ABBEY

We hear from Dr. C.A. Beck of the Ministry of Defence, Propellants, Explosives and Rocket Motor Establishment (PERME) about the interesting stand of *Dactylorhiza* on this industrial site.

The orchids occur on one of the smaller firing ranges in an area which is very little disturbed or visited. The land was formerly a worked-out gravel pit which was filled with fly ash from an adjacent power station and left to regenerate naturally. The water table is high and the area is frequently waterlogged, particularly in winter. Over the years the area has become heavily overgrown with *Salix* save for small clearings where firing experiments are carried out.

In 1970 the presence of an orchid population was recognised, and they were visited and identified by Dr. Brenan and Mr. Hunt of the Royal Botanic Gardens, Kew. They recorded *Dactylorhiza fuchsii*, *D. incarnata*, *D. incarnata* ssp. *pulchella* and *D. praetermissa* the latter in three colour forms. They also noted three hybrids, *D. x wintoni*, *D. x grandis*, and *D. x kernevorum*. Until about 1975 someone from Kew visited us annually during the flowering season to view and count them.

The orchid population has maintained its numbers up to the last year or two, but now appears to be declining. They survived the exceptional summer of 1976 when the water table in the soil virtually vanished and their declining numbers now may be due to the steadily encroaching undergrowth and to the increasing rabbit population. It seems a pity to let what must be the only colony of *D. incarnata* near London, fade into oblivion and I would welcome any suggestions you may make to prevent this happening.

We are anxious to ensure the continued existence of this interesting orchid colony, and although it is proposed to utilise a proportion of the surrounding land at some time in the future, we have been careful to designate the orchid area for preservation. If any member of BSBI would care to visit the site and see these orchids in flower during June, I am sure this can be arranged if adequate prior notice is given. Applications should be addressed to:

THE DIRECTOR, PERME, Powdermill Lane, WALTHAM ABBEY, Essex EN9 1BP.

Editor's note

Mr. E. Milne-Redhead says he visited the site last year and confirms the urgent necessity of some conservation work to maintain this valuable colony.

The full taxonomy, with authors and common names kindly supplied by the Herbarium at Kew is given below for the benefit of those interested in this group.

Dactylorhiza fuchsii (Druce) So6 (Common Spotted Orchid)

D. incarnata (L.) So6 (Early Marsh Orchid)

D. incarnata (L.) ssp. *pulchella* (Heslop Harrison f.) So6 (Purple Early Marsh Orchid)

D. praetermissa (Druce) So6 (Southern Marsh Orchid)

Hybrids

D. x grandis (Druce) P.F. Hunt *D. praetermissa* x *D. fuchsii*

D. x kernevorum (So6) So6 *D. fuchsii* x *D. incarnata*

D. x wintoni (Druce) So6 *D. incarnata* x *D. praetermissa*

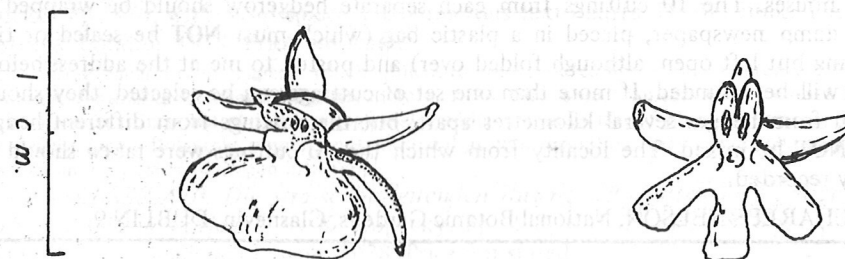
Foreign Botanical Tours 1980

Further to the note on BSBI members who are leading tours this year we should add the names of Susan Eden (one of the Editors of *Watsonia*), and Humphrey Bowen (formerly Meetings Secretary) who are conducting tours for Peregrine Holidays (40 - 41 South Parade, Summertown, Oxford, OX2 7JP.

ANACAMPTIS PYRAMIDALIS (L.) RICH. IN SUSSEX

Six years ago I found an area on the South Downs with an abundance of *A. pyramidalis* some of the plants bore flowers with emarginate labella. I estimated that one plant in ten had emarginate lips. In subsequent years the numbers have diminished until last year when I was unable to find a single plant bearing emarginate lips.

Last Autumn I was shown a photograph of this emarginate form on another part of the South Downs about 30 miles from the original site. In this case only a single specimen was found, although it must be added that a diligent search was not carried out. Shortly after this I saw a paper-weight for sale at a garden open day. It was made from a photograph mounted in transparent plastic. To my surprise it was a fine close-up of the intriguing form of emarginate *pyramidalis*. Enquiries were made about the manufacturer in the hope that I may find yet another site, but my findings were negative.



forma emarginata

typical pyramidalis

I have had a close look at both forms and the only perceptible difference is the shape of the lip. The only other orchid in the immediate area of the first site was *Gymnadenia conopsea*, with *Dactylorhiza fuchsii* growing about half a mile away. The thoughts of a bigeneric hybrid had passed through my mind, but as both these orchids have trilobed labella I doubt very much if this is the reason for the emarginate lip.

It would be most interesting to hear from anyone who has seen this form or who could give me any information regarding habitat and associated species etc. So far all I have been able to do is to suggest the name *Anacamptis pyramidalis* forma *emarginata*. Any comments would be most welcome.

A.G. HOARE, 159 St. Mary's Drive, Pound Hill, CRAWLEY, Sussex. RH10 3BG.

Giant Hogweed

Thank you Miss Hatch Barnwell for your interest in Giant Hogweed *BSBI News* 22, p.27 and reference to medical usage. In Kashmir I visited the Government Research Station and saw *Heracleum* sp. growing there for experimental production of phototropic chemicals. Used in India as cover creams in melanophoric diseases (which produce pale patches on the skin), this use has been taken up in the western world for browning creams to give a sun-tanned appearance. Did I detect a sardonic smile on the face of our Kashmiri guide at the thought of pale-skinned Europeans paying for browning agents?

Mary Briggs

NATURALIZED FUCHSIA POPULATIONS IN IRELAND

In coastal areas of Ireland, hedges "dripping" with the scarlet and purple flowers of *Fuchsia* are a spectacular feature of the landscape. Early records indicate that a cultivar called 'Riccantonii' was used as a hedge plant in Kerry but Praeger, at least, considered that *F. magellanica* var. *macrostema* (syn. *F. gracilis*) was also used. Until recently seed of *Fuchsia* was sold in Kerry, but reports indicate that *Fuchsia* does not set viable seed in some areas.

A study of variation in *Fuchsia* populations in Ireland is being undertaken. I request the co-operation of botanists to obtain cuttings of *Fuchsia* from as many areas of Ireland as possible. I require about 10 cuttings of *Fuchsia*, approx. 25 cm. long, taken at random from hedges in widely separate localities. Each cutting should be taken after the beginning of May so that there is young growth available from different plants, say at 3 metre intervals — along a hedge, but cuttings should not be taken from around presently inhabited houses. The 10 cuttings from each separate hedgerow should be wrapped in slightly damp newspaper, placed in a plastic bag (which must **NOT** be sealed or tied with string but left open, although folded over) and posted to me at the address below; postage will be refunded. If more than one set of cuttings can be selected, they should be taken from hedges several kilometres apart, but the cuttings from different hedges should **NOT** be mixed. The locality from which the 10 cuttings were taken should be carefully recorded.

DR. E. CHARLES NELSON, National Botanic Gardens, Glasnevin, DUBLIN 9.

BOOK NOTES

In the July part of *Watsonia*, Vol. 13 (2), reviews of the following books will be included:

A Selective Dictionary of Trees, Plants and Flowers, English-French/French-English, by J. - P. Michaux.

Holy Thorn of Glastonbury, by A.R. Vickery.

Plant Breeding and Genetics in Horticulture, by C. North.

The Flora of Kintyre, by M.H. Cunningham and A.G. Kenneth.

Investigating Chromosomes, by A.F. Dyer.

The Biology and Taxonomy of the Solanaceae, edited by J.G. Hawkes, R.M. Lester and A.D. Skelding.

Island Ecology, by M. Gorman.

An Ecological Flora of Breckland, edited by P.J.O. Trist.

Secretory Tissues in Plants, by A. Fahn.

Botany. A Study in Pure Curiosity, by J.-J. Rousseau.

Survival or Extinction, edited by H. Synge and H. Townsend.

A Wood in Ascam, by A. Fitter and C. Smith.

Mountain Flower Holidays in Europe, by L. Bacon.

Survey of Taxonomy in Britain, A.B.R.C. Review Group on Taxonomy.

Orchids of Northern Europe, by S. Nilsson.

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

Tropical Botany, edited by K. Larsen and L.B. Holm-Nielsen.

Vegetation Dynamics, by J. Miles.

The Flora of Wiltshire, by J.D. Grose (reprint).

Topics in Plant Population Biology, edited by O.T. Solbrig, S. Jain, G.B. Johnson and P.H. Raven.

The Flora of County Carlow, by Evelyn M. Booth.

Wetmoor Nature Reserve. A Guide, edited by G. Hendry.

Synoptic Limnology: the Analysis of British Freshwater Ecosystems, by P.S. Maitland.

Discovering Botany, by P.F. Hunt.

**How Grasses Grow*, 2nd edition, by R.H.M. Langer. Studies in Biology no. 34. Pp.66, with 28 text-figures. Edward Arnold. London. 1979. Price £1.95.

This booklet on the structure and growth of agricultural grasses was given a qualified welcome by Dr. Launert in *Watsonia* 10: 102 (1974). The shortcomings that he mentioned — narrowness of scope and imprecise morphology — are still in evidence, although the text is stated to have been "brought up to date or modified in the light of recent research".

**Photosynthesis and Plant Development*, edited by R. Marcelle, H. Clijsters and M. Van Poucke. Pp. 376, with frontispiece and numerous text-figures. Dr. W. Junk. The Hague, Boston & London. 1979. Price not stated.

This volume includes 32 papers, which constitute the proceedings of a conference held at the Limburgs Universitair Centrum, Belgium, in July, 1978. The subject appears to be covered in depth, as can be seen from a list of the headings under which the influence of photosynthesis is discussed: leaf development, flowering, mineral nutrition and growth regulators, source-sink relations, nitrogen metabolism, pesticides, pathogen infection.

**Vegetace CSSR.A10. Die strassenbegleitenden Rasengesellschaften im Gebirge Orlické hory und seinem Vorlande*, by K. Kopecky. Pp. 258, with 21 black & white plates and 90 text-figures. Academia Prague, 1978. Price not stated.

The latest volume in this useful and comprehensive series on Czech vegetation deals in great detail with roadside plants and plant communities in and around the Orlické mountains.

**Biology*, 2nd edition, by J.F. Case. Pp. xii + 672, with numerous text-figures. Collier Macmillan Publishers, London. 1979. Price £10.95.

In this well-illustrated text-book, plants, animals and man are treated under general headings such as Genetic Biology and Multicellular Life and Evolution. The latter section in particular, will be of interest to B.S.B.I. members. Like the rest of the book, it contains clear explanations of modern developments in the subject. Indeed, those who require a general text-book of biology should give this one serious consideration.

NORMAN K.B. ROBSON, Dept. of Botany, British Museum (Nat. Hist.), LONDON SW7 5BD.

D.E.D. — but resurrection coming

Perhaps the million or so elms did not die in vain, if the attendant publicity has revived interest in our native trees, both woodland and hedgerow. Brian Boaler of Pershore reports that his free service supplying oak and ash to farmers has reached 2,000 trees in each of the last two years.

Melinda Appleby, formerly Secretary, Council for Nature is now having considerable success in Suffolk working on one of the four New Agricultural Landscape projects set up by the Countryside Commission. She finds the local farmers co-operate eagerly with the local Conservation Corps in planting Oak, Ash, Field Maple, Small-leaved Lime, Hornbeam, Alder, Scots Pine, Dogwood and Hazel.

RECENTLY PUBLISHED WORKS ON LOCAL FLORAS (Available, cash with order)*

The Flora of County Carlow: Evelyn M. Booth 172 pp; 5 text figs; £4.00 (paperback) £7.00 (hardback); Royal Dublin Society

This Flora fills a gap in our knowledge by covering an inland, as opposed to a coastal county. It has sections on the history, climate, geology, soils and distribution, together with short articles on trees and woodland, bryophytes, lichens, fungi and algae, contributed by well-known Irish and British specialists.

Paperback available from Oundle Lodge, £4.50 incl. p & p. Hardback from Royal Dublin Society, Thomas Prior House, Bellsbridge, Dublin 4. £7.50.

An Ecological Flora of Breckland: P.J.O. Trist (Ed). 210 pp including 570 distribution maps; £18.50, EP Publishing.

This important new work is still available to members at the pre-publication offer price of £18.50 (otherwise £22.50).

The *Flora* as first published lacked an overlay for the distribution maps. The publishers have now agreed to produce an overlay which will be issued free of charge to anyone who would like it on receipt of a stamped addressed envelope 9" x 6", sent to Oundle Lodge.

The vegetation of the Outer Hebrides: Andrew Currie, 46 pp. — £1.00 (Reprint).

Taken from a Symposium on the area published by the Roy. Soc. Edinburgh in 1979, this gives a concise account of the vegetation of vc.110 with an historical introduction, a 200 item bibliography, and a provisional check list of the vascular flora as a 25 page appendix.

Shropshire Flora verge survey: Charles Sinker, John Packham and Ian Trueman.

Wood sorrel on the Long Mynd: John Packham.

Two Occasional Papers of the Caradoc & Severn Valley Field Club pp.60; text figs; £1.20 + 31p p. & p. (paperback).

This first part of the Shropshire Flora project, analysing results from 78 road verge sites, had 3 objectives: 1) a 'trial run' using a large number of amateur botanists: 2) to ascertain the commonest species of vascular plants in a widespread habitat: 3) to discover the relation between species distribution and environmental factors.

The paper on Wood Sorrel demonstrates the effect of aspect on a species sensitive to low humidity and high light intensity.

POSTER

'THESE ENDANGERED PLANTS ARE PROTECTED BY LAW'

Millions of people have still not got the message our poster conveys. The Society has a large stock which we wish to clear as soon as possible, at a reduced price.

Please help the Society and the conservation of our flora by buying a small quantity — say 10 - 20 and selling these to local schools, colleges, libraries etc., or give them to children as prizes or for birthdays. They are attractive and eagerly snapped up. (I sold 17 in 10 minutes at a Women's Institute after a talk on endangered wild flowers, a few weeks ago).

The posters are now available at the cost price of 25 p each plus packing and postage, or 10 for £3.00, 20 for £5.50 (p. & p. incl.). All the above, cash with order, from:

* F. & M. PERRING, Oundle Lodge, Oundle, PETERBOROUGH, PE8 5TN.

SCOTTISH NEWSLETTER

Issue No. 2 (Spring 1980) will be available to all BSBI members. Regularly sent to members resident in Scotland and recorders for v.c. in Scotland, members elsewhere can receive a copy by sending s.a.e. to:

DR. P. MACPHERSON 15 Lubnaig Road, GLASGOW G43 2RY.

CHANGES OF RECORDERS

The following recommendations for changes in Recorders made by the Committee for Scotland were approved by the Records Committee at its meeting on 5th February.

VC		
82	Haddington	Vacant
83	Edinburgh	D. McKean, Royal Botanic Gardens, Edinburgh
84	Linlithgow	Vacant
87	Perth, West	Dr. R.E. Thomas
89	Perth, East	Dr. R.A. H. Smith
90	Forfar	A. Ritche
107	Sutherland	J.K. Butler

The changes in VCs 82 — 84 follow the resignation of Betty Beattie from a task she has undertaken long and well for the Society. I understand she is leaving Scotland to live further south and I am sure all her friends will wish her a happy botanical future in her new terrain. I would like to pay a personal tribute to her work for the Distribution Maps Scheme, not only in the 'Lothians' but for Scotland in general: for about 5 years Betty acted as organiser for Scotland and had it not been for her hard work and enthusiasm in the field and in administration, the results from Scotland would undoubtedly have been far less complete.

It is sad also to see Ursula Duncan relinquishing Forfar — the county she has served so well as Recorder for so long. I cannot believe anyone has ever, or will ever, know as much about the flora of Forfar as she does — she covered the county almost single handed for the Maps Scheme. We must all hope that this depth of knowledge will be encapsulated in a publication which does justice to her years of dedicated enquiry. It is good to know that Dr. Duncan retains E. Ross and that her Flora of that vice-county will be available shortly.

Not long after moving from Wales to live near her daughter in Suffolk, Mrs. H.R.H. Vaughan, M.B.E., was involved in an unfortunate accident and confined to hospital for several weeks. However, she is up and about again now and would still be willing to give her expert opinion on the genus *Rosa* at her new address: 20 St. John's Terrace, WOODBRIDGE, Suffolk. IP12 1HP. With the recent increase in postage may we remind members to send return postages with all enquiries. This Society has a long tradition of members giving voluntary service, including our Referees, but is not fair to leave them to pay postage on replies or return of specimens. F.H. Perring

STOP PRESS

Field meeting Louth/Monaghan/Cavan will now be held from 3rd — 6th July and not 26th — 29th June as shown in "Field Meetings, 1980".

1980 EXHIBITION MEETING — 22nd NOVEMBER (NOT 29th)

BSBI NEWS 25

Contributions intended for publication in this issue
must reach the Editor

BEFORE 1st AUGUST 1980