

WILTSHIRE BOTANICAL SOCIETY

(W.B.S.)

NEWSLETTER EDITOR - MRS RITA GROSE, THE SMITHY, SMITHY LANE, WOODBOROUGH, PEWSEY, WILTSHIRE. SN9 5PL. 0672 851244

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EDITOR'S NOTES

Our first AGM and our Winter Meetings have been enhanced by exhibitions of interesting botanical material. If any members have specimens which they think might be of interest to other people which could be displayed at future meetings, would you contact the meetings secretary - Joy Newton on 0672 40356.

Malcolm Hardstaff has agreed to take on the task of W.B.S's Recorder, and at the end of the Newsletter you will find a list of the Wiltshire Plant Records (mostly those that 'flora mappers' knew as 'C' species) which he has compiled for 1993. We hope it proves useful and interesting to members. Malcolm is happy to accept future records which can also be sent to the Vice-County Recorders, Dave Green (VC 7) and Ann Hutchison (VC 8), with whom Malcolm will liaise. These records will be stored on database and will provide significant information regarding Wiltshire plants following the publication of the Wiltshire Flora. If you wish to send in records please follow the formula of the Plant Records List giving the Latin and common name, the date of sighting with a grid reference and some brief notes on the locality and habitat.

Would members please note that our Treasurer, Katie Hill was married in September 1993 and her name is now Mrs Katie Long of 31 Malthouse Close Blunsdon, Swindon, Wiltshire. SN2 4BG Telephone 0793 726371

Finally, thank you to all the people who have contributed articles to this Newsletter.

THE WILTSHIRE FLORA

EDITOR BEATRICE GILLAM

PUBLISHED BY PISCES PUBLICATIONS 1993

The County of Wiltshire is large and geologically complex, this new Flora produced by the Wiltshire Flora Mapping Project under the auspices of the Wiltshire Natural History Forum, is more than equal to the task of describing its vascular plants in all their forms and variety. Sincere thanks must be extended to all those concerned with this excellent project; especially the two vice-county recorders, Dave Green and Ann Hutchison and of course the editorial team.

On Friday 24th September 1993, hundreds of excited and enthusiastic botanists gathered, (where it all started), in the Avon Hall of Lackham College, to witness and celebrate the launch of 'our' flora. After what seemed like life-times we at last heard Salisbury's M.P. Robert Key declare the flora open and for that first glorious moment we were able to share in the joy of our combined efforts! Eight years work by some 230 recorders who had collected over 250,000 records, all of which had to be checked, stored and processed. Thousands of hours of work gladly given by committed and enthusiastic people, sleepless nights, endless committees. How many phone calls, letters, notes; how many hasty meetings and furrowed brows?

And for what? A record of the vascular flora of the county at the end of the twentieth century. By any standards this impressive work is a worthy successor to Grose's highly acclaimed work published in 1957. The descriptions of the county, its floral treasures and its habitats form an essential introduction for any interested newcomer. The flora itself is the part which I'm sure botanists will return to time after time. The information distilled and contained in over 250 pages is the 'raison d'etre' of the book, which I for one find quite compulsive reading, only spoiled slightly by having to search for the species distribution map.

One last small point, I'd be grateful if anyone could tell me what I'm supposed to do with the plastic overlay....

STEVE WHITWORTH.

WINTER PROGRAMME REPORT by Joy Newton

On 13th November '93, seven of us gathered in the rain and enjoyed a good walk in Savernake Forest led by Dave Green. We found five different fern species, *APHANES INEXSPECTATA* and *BIDENS CERNUA*, as well as an interesting *POTAMOGETON*. It's surprising what one can find on a rainy day in November.

On 20th November '93, John Presland gave a slide show on the 'Umbrella Flower', which was quite stunning; twenty of us were enthralled. The slides ranged from close-ups of common species, showing the variety of seed shapes, to rare plants - some taken abroad, and all quite beautiful. Malcolm Hardstaff put together a display of recent finds which we tried to identify over tea. A very successful afternoon.

29th January 1944 was a talk and slide show on THE FLORA OF GREENLAND. Barbara Last's intrepid holiday in Greenland provided outstanding slides and an intriguing display. How many of us have brought back Lemming bones and Snowy Owl pellets as mementoes of our holidays? Her slides covered the plants growing in the very varied terrain of North-East Greenland, from moss sedge meadows with swathes of *ERIOPHORUM SCHEUCHZERI* (bog cotton grass) to the frost raised beaches covered in gravel where she found three varieties of *Silene*. Particularly interesting were the plants whose relatives can be found in Britain - the *EPILOBIUMS* (willow herbs), a harebell that was not quite *CAMPANULA ROTUNDIFOLIA* and even *TARAXACUM* (dandelion). She concluded with a few wild life photographs - an Arctic hare, a herd of Musk Ox and a bright eyed Ermin.

This report of a W.B.S Summer meeting in 1993 is reprinted from the January 1994 BSBI Newsletter. It was written by Jack Oliver.

HIGHER PLANT EPIPHYTES

Ten members of the Wiltshire Botanical Society identified twentyfour Angiosperm (and one Gymnosperm) Epiphytes on six adjacent crack willows (*SALIX FRAGILIS*) pollards by the River Kennet at Marlborough in July '93. Roughly three-quarters of the epiphytes grew on the debris at the top of the pollard, but many also grew on the rough bark. At Avebury, an 8ft high crack willow pollard carries a healthy 10ft ash tree which must, by now, be rooting towards the ground inside the host.

The four commonest host trees around Marlborough appear to be (in order) crack willow, white willow (*SALIX ALBA*), sycamore (*ACER PSEUDOPLATANUS*) and osier (*SALIX VIMINALIS*). Commonest epiphyte grasses include Yorkshire fog (*HOLCUS LANATUS*), cock's foot (*DACTYLIS GLOMERATA*) and rough meadow-grass (*POA TRIVIALIS*). All these disperse seeds from their high vantage points, as does cleavers (*GALIUM APARINE*), the most common epiphyte of all. Also very frequent as an epiphyte dispersing seed from in situ is the stinging nettle (*URTICA DIOICA*).

Epiphytic tree seedlings and saplings are very often found, especially ash (*FRAXINUS EXCELSIOR*), sycamore and elder (*SAMBUCUS NIGRA*). Unfortunately the human and bureaucratic urge to tidy up will stop observations on whether any of the tree roots will grow through to the ground and so permit eventual maturation of the (originally epiphytic) trees.

W.B.S.SUMMER MEETINGS 1994

We welcome members and friends to our meetings whether you are a comparative beginner or more experienced. Any queries please contact - Joy Newton, 1, Grasshills, Aldbourne, Marlborough, Wiltshire SN8 2EH Telephone 0672 40356

1. Saturday 16th April 2.00 pm RAVENSROOST WOOD G.R.029887
Leader Steve Whitworth Ancient coppice woodland
Afternoon only 2 kilometres
Parking in layby on minor road between Minety and Brinkworth.
2. Saturday 23rd April 10.30 am SAVERNAKE FOREST G.R.229648
Leader Rod Stern Bryophytes. Meet at the Colum in Savernake Forest.
Take lunch. 2 kilometres
We will collect specimens in the morning and examine them in the Marlborough
College Science Laboratories in the afternoon.
3. Sunday 8th May 10.30 am LANGLEY WOOD G.R.218204
Leader Phil Wilson Ancient woodland
Take lunch 5 kilometres
Park at small layby on North side of Redlynch - Hamptworth Road.
4. Saturday 21st May 10.00 am BREAN DOWN NEAR G.R.297586
Leader Dave Green WESTON SUPER MARE
Carboniferous limestone, white rockrose, small flowered buttercups, other rarities.
Take lunch 3-4 kilometres.
Park in National Trust car park below Brean Down. (There is a charge)

After lunch we visit BERROW SANDS G.R.295535
Sand dunes & salt marsh vegetation with pools. Rare sedges & other goodies.
Park in front of the Church on the dunes. 4-5 kilometres.
5. Wednesday 1st June 10.00 am JONES'S MILL G.R.169611
Leader Audrey Summers Morning only
5 kilometres BOOTS ESSENTIAL.
A unique fenland habitat owned by the Wiltshire Wildlife Trust.
Take B 3087 East from Pewsey, turn Left after 1 km at crossroads into Dursden Ln.
Park on verge by railway bridge.
6. Tuesday 14th June 10.30 am BENTLEY WOOD G.R.239297
Leader Pat Woodruffe Ancient woodland
Take lunch Flexible mileage
Park just S of the Livery on E. side of road. Small track leading to locked gate.
7. Tuesday 28th June 10.30 am PLAITFORD COMMON G.R.286177
Leader Roger Veall Very interesting acidic flowers.
Take lunch up to 8 kilometres
Approach along Canada Road from round-about on A.36 at G.R.293188 and
park at Canada Common.
8. Saturday 9th July 10.00 am SOMERSET LEVELS NR GLASTONBURY.
ASHCOTT NNR AND CATCOTT. G.R.445388
Leader Dave Green 2 kilometres
Take lunch. Peat fen and woodland with rich assemblage of species.
Leave Glastonbury on A39 towards Street. In half km turn N. onto B3151 to
Meare. Turn S in Meare to Ashcott-2 km on R. (If you reach Buscott crossroads
you have gone too far).

After lunch we visit one of the last untamed areas of Sedgemoor where
Marsh Pea, Lemna and Wolffia species flourish.
4 kilometres

SUMMER MEETINGS CONTINUED

9. Saturday 16th July 10.00 am NR.SHAFTESBURY,DORSET G.R.717215
 Leaders David Pearman and Dave Green. Recording for Dorset Flora.
 Take lunch. Square bashing in the morning.
 We will visit an exciting habitat in the afternoon.
 Meet at large car park at Five Bridges on South side of A30, 11 klms
 West of Shaftesbury.
10. Wednesday 10th August 10.00 am BRADFORD ON AVON G.R.624607
 Leader Gwyneth Yerrington River and canal walk
 Morning only 3 kilometres round trip
 Meet at station car park. Signed West at mini-roundabout at 'Y' junction
 of A363 and B3109 and just South of bridge.
11. Wednesday 5th October 10.00 am SAVERNAKE FOREST G.R.218667
 ARBORETUM.
 Leader Jack Oliver Morning only. Very little walking.
 Help for those who find tree identification difficult: mostly alien trees.
 Park at Thornhill Nursery, just West of Eight walks.
12. Saturday 8th October 2.00 pm MARLBOROUGH COLLEGE G.R.183684
 SCIENCE LABORATORIES.
 Talk by Martin Cragg-Barber with slides, and discussion.
 'FLOWER VARIATIONS'
 See Martin's article in our Newsletter. Please save your specimens through
 the season and bring them with you.

Instructions for finding the Science Laboratories, Marlborough College.

Turn South off A4 - 100 metres West of College Bridge, just West of the
 Memorial Hall. Continue for 200 metres past the Science Laboratories and
 park in the Parade Ground. The main entrance to the Science Laboratories
 is between the Labs and the Memorial Hall.

VARIETIES ARE THE SPICE OF BOTANY (AS ARE TERATA)

By Martin Cragg-Barber

Most of the plants that we see belong to the same species that we saw yesterday and the day before. Having learnt to recognize a species and come to appreciate its changes through the seasons, is there anything else that we can watch out for, even in the commonest plants on or around our own doorsteps? How variable is each species? Are there forms of common plants growing on Wiltshire doorsteps that are unique?

The Victorians and earlier botanists used the word 'teratology' to refer to the study and recording of abnormal forms. Such aberrations were called 'Terata'. On the simplest level this could be a double-petalled form. (A doubling of petals can be at the expense of other parts of the flower but need not be). One of the commonest double flowered forms occurs on Creeping Buttercup which I have recorded twice at Nettleton and once at Chedglow.

'Peloria' is a term used to describe occasions where normally irregular or asymmetrical flowers become regular. A foxglove with peloric flowers at the top of the spike has been known in Minety for a number of years and a new peloric common toadflax has been discovered by John Presland near his home. This is subtly different from the peloric version in cultivation and may well be unique.

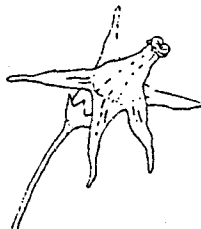
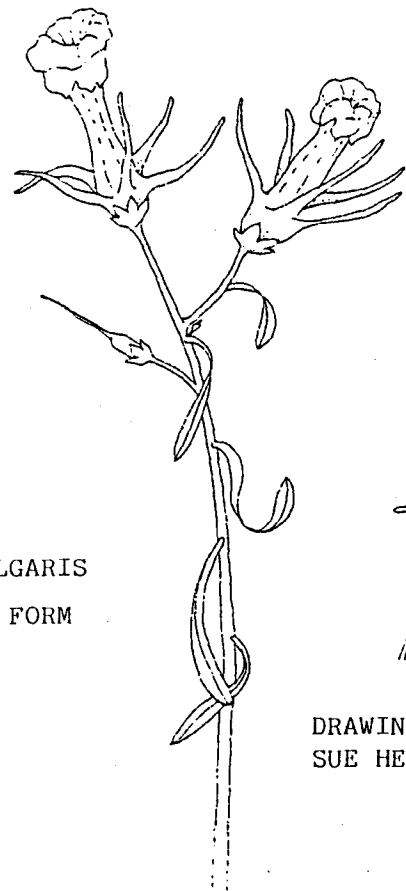
Some flower colour aberrations gain entry into modern floras but pigment aberrations concerning leaves seem to be neglected. A wonderful purple foliage form of wild angelica was noticed three years ago in a ditch at Anstey, (This has been recorded in some numbers from Naini's Wood on Anglesey). On Somerford Common populations of wood anemone are entirely purple when they come into leaf but later this fades to green.

If people can become aware of the possible array of aberrations of form and pigment I am sure this will add an extra dimension to our enjoyment of the local flora. If records of such aberrations can be sensibly kept perhaps one day there will be 'An Aberrant Flora of Wiltshire' to sit coyly beside 'The Wiltshire Flora' on your bookshelves. I would welcome any reports from within the County or beyond.

Martin Cragg-Barber
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LINARIA VULGARIS
PELORIC FORM



DRAWING BY
SUE HERBERT.

This report is reprinted from the first issue of 'That Plant's Odd' November 1993. It was written by John Presland.

CORN POPPY COLOURS

In June 1992, I was surprised to come across a corn poppy with petals which were pure white except on the basal areas which are normally black - and they were a deep pink. All neighbouring plants in the arable field in which it occurred had flowers of a normal corn poppy colour. In July 1993, I encountered a plant with pale pink (almost white) petals, again surrounded by normal plants. The basal area was coloured scarlet and this colour continued outwards for some distance in the veins. Some of the later flowers on this plant were a deeper pink with a network of white lines, giving a sort of 'cracked' effect. The plant was in a cultivated bed outside a garden, but the poppies were wild as far as the owner knew.

Stace, in his new flora, simply says that the flowers of corn poppy are sometimes white, pink, mauvish or variegated, almost as though this was not uncommon. But among millions of corn poppies seen over the years, these were my first experiences of such variations. It would be interesting to hear of other sightings.

BOTANICAL NOTES JANUARY 1994

by Barbara Last

IVY.

Ivy is present in 94% of tetrads in the county and visible in midwinter with its shiny evergreen leaves. It seems to have an unjustified bad reputation. I would like to quote from Oliver Rackham's "Trees and Woodlands in the British Landscape": 'Pseudohistory has no connection with the real world and is made up of factoids. A factoid looks like a fact and has all the properties of a fact except that it is not true.....One example, the notion that Ivy kills the tree it grows on, can be traced all the way back to Theophrastus in the fourth century BC without anyone stopping to think whether it can be true!' Ivy certainly can damage brickwork with its haustoria and probably weights a winter tree and causes excessive wind-drag. It may also overgrow a hedge, but not a tree unless the tree is already moribund.

However these disadvantages are undoubtedly outweighed by Ivy's considerable value to wildlife. It provides dense shelter for birds and insects in winter, butterflies hibernate among the thick leathery leaves, wrens subsist in winter by seeking spiders in its crevices, and small birds find secret nest sites in spring. The very late flowers in November provide a banquet of last pollen for bees and other insects.

Bacchus reputedly wore an Ivy wreath and it has been associated with intoxication (as a cure). The porous wood has been used to filter and clear wine. An old tavern sign "A GOOD WINE NEEDS NO BUSH" is enigmatic but associated with this use of Ivy. An infusion from the leaves has been used for bruises and inflammation and to soothe sun-burn.

The berries are slightly poisonous but the plant is edible to stock and provides good winter browse. An old song runs - "Mareseatoats and doeseatoats and lillelambseativy, a kiddleativytoo, wouldn't you!"

Continued

Continuation of BOTANICAL NOTES by Barbara Last.

ELDER (SAMBUCUS NIGRA)

The Elder is a well known bush throughout the U.K, and it has been used for centuries for cooking, baking and wine making - as well as for medicinal and cosmetic purposes.

It has a long history. Hippocrates prescribed it for numerous diseases, the Romans used the berries for a black hair dye and Culpeper speaks of it as too well known to need description. All parts of the bush have been used medicinally. Some of the concoctions are reputed to alleviate rheumatism, gout, neuralgia and sleeplessness. The leaves can be used as a diuretic, the flowers to make a soothing skin lotion - or for culinary purposes. The berries, though never to be eaten raw, make delicious syrups, wine, and dried, were used during the 1939-45 war as a substitute for currants.

The folk lore surrounding the elder is extensive. Leaves gathered on the Eve of May Day were believed to be effective for toothache, depression and the bites of a mad dog. Cradles should never be made of Elder for fear of the tree spirit harming the infant, although a person carrying any part of an Elder in his pocket was safe from all evil. It was planted in old gardens because of its reputation of repelling witchcraft.

Altogether an interesting and versatile bush.

MISTLETOE

Mistletoe, a well known and conspicuous semi-parasite plant has played an important part in Western Folklore. The symmetrical paired leaves could be visualised as supernatural hands and was supposed to symbolize power over forest spirits. It was used by ancient peoples and Druids as a protection from evil and was traditionally cut with a golden knife in mid-winter ceremonies and used for magical cures. It was believed to be a fertility symbol and an aphrodisiac because of the shape of its buds.

There are separate male and female plants, there being twice as many female as male. Although each berry has only a single seed, polyembryony is common and several seedlings of both sexes can be produced. The inconspicuous flowers occur in February. Seeds are dispersed by thrushes, especially Missel thrushes, who wipe their beaks on a tree branch to dislodge the seed from the sticky juice. If the berries are fermented, a resin is produced which contains a drug used in the past to control epileptic convulsions. Preparations using mistletoe have been used in heart disease and nervous complaints.

PHOTOGRAPHING PLANTS 1

By John Presland

Photographing plants has its advantages and its problems.

Advantages

They don't run away like animals.

They don't grimace or fidget like people.

They don't mind your going close to them to take their pictures.

Problems

They move about in the wind, so you can get a blurred picture.

They get mixed up with each other, often forming dense masses, so that it's difficult to photograph individual plants.

When you photograph one plant, other plants can form a background in which the one you're photographing gets lost - and so can man-made objects.

If you want a group of plants, or a plant together with its habitat, it can be difficult to get everything important in focus.

Some plants are small, or have very small parts that you want to photograph, so they're too small in the picture.

The closer you get to a plant to make it a larger part of the picture, the shallower your depth of field, so it can be difficult to get everything in focus - even sometimes different parts of the same flower.

The first requirement is to decide precisely what you want to photograph, because the techniques will vary with the purpose.. For this first article I'm going to concentrate on photographing just the plant as a whole, the priority being to show its features as clearly as possible, rather than to portray it in its characteristic habitat or against a particular background.

The techniques will, of course, differ from one camera to another. Mine is a single lens reflex camera, which allows both focussing and light metering to be done looking through the lens at the actual scene being photographed or any part of it that needs to be selected. All operations can be carried out manually. However, some of the techniques described here could be used even with a fully automatic camera. The choice of film is also relevant. I use Kodachrome 64, usually recommended as giving the sharpest pictures for a film of that speed - though I personally can't tell the difference from the corresponding Agfa film which has a speed of 100.

All techniques commonly involve manipulations of the following:

The length of exposure. A longer exposure increases the total amount of light but also gives time for any movement of the object to register and thus blur the picture. A shorter exposure increases the chance of a sharp picture of a moving object, but cuts down the amount of light. 1/30 or 1/60 is best for most films when the light is not very low or excessively bright, though very fast films will need shorter exposures and very slow ones longer exposures.

The size of the aperture. A larger aperture lets in more light, but decreases the depth of focus. A smaller aperture increases the depth of focus but cuts down the light.

The focus, and particularly the range of objects in the view which will be in or out of focus.

Getting the right aperture

This requires particular mention because different cameras meter aperture in different ways. Sometimes they just average the light coming through the lens from the whole field of view. A bright sky needs a smaller aperture than a dark green tree, so cameras like this will give an average which is not ideal either for the sky or the tree, but something in between. Others give more weight to what is in the centre of the picture, which is why the main subject should be viewed in the middle. One has to experiment with the camera to see how to get the best exposure. With mine, when I photograph a plant against a bright sky, I find it best to make sure some of the sky is in the view finder when I set the aperture. For a bright coloured flower, I have more of the sky showing than for a dark coloured flower. When the sky is dull, I ignore it, but I set the aperture to be half a stop or so smaller if the flower is bright.

Getting the plant to stand out from its background

This may be a problem because of a similarity of colours or confusing textural patterns. There are various ways of coping with this:

Use a shorter exposure. To provide enough light, the aperture then has to be larger, so that the depth of focus is narrow. This makes it possible to adjust the focus so that the plant is sharp and the background out of focus.

Use a long focus lens, which automatically has a narrow depth of focus, and again adjust the focus.

If it's sunny, you can manipulate the illumination of the plant or its background. for instance, I made a twayblade stand out more from the grassy slope on which it grew by getting someone to stand in a position which cast a shadow over the background but not over the plant. I then set the right aperture for the sunny part of the picture, and got a picture of a nice bright plant against a relatively dark background. If the background is more distant, you can't do that, but you can cast a shadow over the plant instead and then set the aperture for the shady part. You then get a clear plant against a washed out background. Either way, the picture has been improved by increasing the contrast between the plant and its background.

Using flash sometimes helps, presumably because the plant is nearer to the flash than its background is and therefore gets more illumination and stands out more. Indeed, if the background is a long distance away from the plant, it disappears and you get the plant framed against darkness - and therefore very clear. Strikingly beautiful pictures can often be obtained by this technique. Flash is, of course, essential for plants like evening primroses, which open at night - unless you're an early riser and can get to them before they close up in the morning.

Some plants are particularly prone to lose themselves against the background, for instance, grasses or umbellifers with very divided leaves. It is often helpful to look for a specimen which has a uniform and contrasting background, such as a fence or water. I have found plants like rough chervil and upright hedge parsley more or less impossible to photograph in the hedgerows they most commonly inhabit, but I have them very clearly against rivers, where both can sometimes be found.

If all else fails, I have large sheets of hardboard painted with blackboard paint and I prop these up behind the plant. Strangely, the background comes out grey rather than black, but the plant is usually very clearly portrayed. If the sun is out, however, the shadows also show very clearly, so it's better to do it in shade. On the other hand, leaf shapes are sometimes shown more clearly by the shadows!

Isolating a plant from surrounding vegetation

Related problems are where the plant is surrounded by a mass of vegetation, sometimes others of its own kind, and where the plant itself is in an entwined mass which makes its characteristics difficult to clarify - common fumitory, for instance. Sometimes flash has a clarifying effect, though I am not quite sure why. My painted hardboard is particularly helpful. One picture using this technique, in particular, shows the beautiful tracery of fumitory leaves far better than a "natural" picture would be likely to do. It's also wise to be on the lookout for unusual opportunities which just present themselves. Tufted vetch is a particularly tangled plant, but on our WBS visit to the Cotwold Water Park, there was a specimen which had grown up a wire netting fence, and each stem was separated from the others, so that the features could all be seen clearly. There was open space behind, which also prevented the background confusing things. If I'd got the exposure right it would have been a perfect picture.

Compensating for movement

Another problem arises from plant movement, which blurs the picture. I use two main devices to overcome this:

A short exposure. With my Kodachrome 64, an exposure of 1/60 usually compensates for slight movements, and 1/125 for quite fast ones. A back and forward movement requires less shortening of the exposure than a side to side one. A short exposure reduces the depth of focus, of course, and this may sometimes mean that you can't get both the back and the front of some plants in focus at the same time. It may, therefore sometimes be necessary to find the best compromise between reducing blur and maintaining enough depth of focus.

Flash, which automatically gives a short exposure time. Again, if the background is a long distance away from the plant, it disappears and you get the plant framed against darkness.

Getting the colour right

Getting the colour right can also be a problem. I often have trouble with blue. I will photograph a plant with blue (or purple) flower and it comes out pink. I am not convinced that this problem can be eliminated by choice of film. I've seen pink forget-me-nots on Agfa film, often said to be good for blues, and the gentian pictures produced in illustration are no bluer than the ones I get on Kodachrome. It seems to be a problem with particular species. I think the problem is less if the picture is taken in diffuse light rather than direct sunlight or flash. I also sometimes use a blue filter. An 82C filter gives a small blueing effect and an 80C a more marked one. I found this device very effective with Ground Ivy and Water Mint. It doesn't always work - some water forget-me-nots came out grey! It also, of course, makes the green parts bluish green, but this may not be too obvious if the flower is striking enough.

Remaining topics

Two major topics remain - photographing plants in relation to their backgrounds and photographing them in close-up. But they will be the subjects of future articles.

ASTERS IN WILTSHIRE

by Jack Oliver

1. ASTER LANCEOLATUS

The most common Michaelmas Daisy so far found in the wild throughout Wiltshire is *Aster lanceolatus*. It usually flowers dull white or pale lilac, in Wiltshire after Michaelmas Day (29th September), in October or sometimes November. It has been naturalised in England and Scotland since the 1600's, and is the original 'Michaelmas Daisy' (CTM 1985). A huge semi-interrupted stretch extends one and a half miles from North Tidworth down into Hampshire, spreading along the River Bourne, but more extensively into a variety of unshaded dry habitats around Tidworth.

The BSBI experts (Drs Alan Leslie and Peter Yeo) consider that many of these colonies of *Aster lanceolatus* have a small dose of *Aster novi-belgii* and/or *Aster laevis* in their ancestry, but have back-crossed in such a way that 'Aster lanceolatus, generous interpretation' is the correct designation. Asters have a deserved reputation for being promiscuous (Semple & Heard 1987). The Wiltshire hybrids with a more equal balance of alternative species in their parentage will be considered in the next issue, and demonstrated at the AGM in March.

Aster lanceolatus has its heartland in Ontario, with at least two subspecies and four extra varieties which, along with other *Aster* subspecies have all been evolving very rapidly in areas free from glacial ice, around and North of the Great Lakes, in the last 20,000 years. (Semple & Heard 1987). *Ssp lanceolatus var. lanceolatus* occurs throughout Ontario (and in other adjacent Canadian provinces and the United States), in habitats ranging from open fields and ditches to edges of marshes and stream banks. Clones can be very extensive, producing hundreds of shoots. This is the most common roadside *Aster*, and includes plants with $2n = 48, 56$ or 64 (polyploid clones). This short summary of habitats for *Aster lanceolatus* by Semple & Heard 1987 in Ontario could have been written for Wiltshire, except that we should also include railway embankments and cuttings, suburban sites (including car parks) and woodland edges.

Clapham, Tutin & Moore (1985) *Flora of the British Isles*, 3rd Edition,
Cambridge University Press.

Semple & Heard (1987). *The Asters of Ontario*. University of Waterloo.
Biology Series No.30 ISSN 0317-3348

WILTSHIRE PLANT RECORDS IN 1993

The following is a selection of the more interesting finds of vascular plants made in 1993 (plus a few from 1992). A more comprehensive list will be available at the AGM. (Some Watercourse Survey records are to be added). Records will be stored and the intention is to publish an annual list of significant finds. This one has been compiled with the cooperation of the BSBI vice-county recorders for Wiltshire, Dave Green(vc7) and Ann Hutchison(vc8). We are keen to have your records in 1994, preferably containing the type of data used in this list.

Please let me know of any errors.

Species are named and listed in taxonomic order, see Stace's New Flora of the British Isles (1991), or Kent's List of Vascular Plants (1992).

Arrangement of Information

Latin Name (Common Name) * = non-native

Recorder: Date (Yr/M/D) : Vice-County: Grid Ref.

Locality and other notes.

++ = additional records filed for that species

Grid references are not available for all species.

Note that some sites are on private land.

The inclusion of a grid reference does not imply any right of access.

List of Recorders:

PAndrews DBlackford BChadwick ADale SDale
JEFulford DGreen DOGraiff RGroser MHardstaff
BHarris DHodgson BLast JNewton GNicholls
RNicholls JEOliver DPearman JPresland SPrice
ARobertson JRobertson TRich WBSociety Meeting
DPStevens ASummers PJOTrist JWall DJWood
GYerrington

Malcolm Hardstaff
February 1994

Athyrium filix-femina (Lady-fern) ++	DG 931003 7	241653
Savernake, nr dry ditches - Grand Avenue		
Dryopteris affinis (Scaly Male-fern)	GN 930000 8	2134
Porton, Thorny Down		
Dryopteris affinis (Scaly Male-fern)	BL (WBS) 930630 8	8442
Shear Water, Aucombe Marsh		
Dryopteris carthusiana (Narrow Buckler Fern) ++	DG 931000 7	253655
Bedwyn Comm. block-felled conifer plantation		
Dryopteris carthusiana (Narrow Buckler Fern)	BL (WBS) 930630 8	8442
Shear Water, Aucombe Marsh		
Blechnum spicant (Hard Fern)	BL (WBS) 930630 8	8442
Shear Water, Aucombe Marsh		
Azolla filiculoides (Water Fern)	JEO/WBS 920814 7	841861
Sherston Avon, both sides of Stan Bridge		
Juniperus communis (Juniper)	BL 930000 8	9537
Stockton		
Nymphaea alba (White Water-lily)	DH,DB,JR 930700 7	967833
Gt. Somerford, R. Avon		
Helleborus viridis (Green Hellebore)	GN 930000 8	0
Clarendon		
Eranthis hyemalis (Winter Aconite)*	BL 930000 8	84408
Winterbourne Stoke		
Nigella damascena (Love-in-a-mist)*	JEO 921021 7	128699
Swindon, Delta indust. est & waste depots		
Ranunculus lingua (Greater Spearwort)	JEO/WBS 920814 7	841861
Sherston Avon, both sides of Stan Bridge		
Ranunculus peltatus (Pond Water Crowfoot)	BL 930000 8	0.076407
Winterbourne Stoke		
Aquilegia vulgaris (Columbine)	DOG 930000 8	0
Newton Toney		
Papaver hybridum (Rough Poppy)	GN 930000 8	0
Boscombe Down		
Fumaria densiflora (Dense-flowered Fumitory)	GN 930000 8	0
Boscombe Down		
Claytonia sibirica (Montia sibirica Pink Purslane)*	DPES 930000 8	0
Alderbury		
Sagina nodosa (Knotted Pearlwort)	JN 930719 8	2150
SPTA/E, Sidbury Hill, a bare sandy area		
Sagina nodosa (Knotted Pearlwort)	BG 930805 8	2150
SPTA/E, Sidbury Hill on scraped chalk		
Agrostemma githago (Corncockle)	PA 920000 7	133842
Swindon, "planting" with grass seed		
Dianthus deltoides (Maiden Pink)	BL 930000 8	0.1948
Bourne Bottom		
Persicaria amplexicaulis* (Red Bistort) ++	JEO 931020 8	230620
Derelict area E of High St. Burbage, N. of Smithys Lane		
Rumex sanguineus var sanguineus (Wood Dock)	M Storey 900000 7	226658
Savernake, 12 O'clock drive, 1 plant		
Hypericum androsaemum (Tutsan)	AR 921000 7	0.023883
Ravensroost Wood, a single plant in shade		
Hypericum humifusum (Trailing St John's Wort)	DG 931000 7	253655
Bedwyn Common, recently cut plantation		
Hypericum humifusum (Trailing St John's Wort)	DG 930900 7	955683
The Warren, nr Spy Park Sandy Lane, Calne,		
Hypericum pulchrum (Slender St John's Wort)	DG 931000 7	253655
Bedwyn Common, recently cut plantation		
Hypericum pulchrum (Slender St John's Wort)	BL (WBS) 930630 8	8442
Shear Water, Aucombe Marsh		
Tilia cordata (Small-leaved Lime) ++	JW 930517 7	0.023898
Braydon Hall, Minety 020885, 019890, 019891		
Populus alba (White Poplar)	JW 920630 7	889871
Sherston Avon, W. of Malmesbury		
Populus alba (White Poplar)	DH,DB,JR 930700 7	967833
Gt. Somerford, bridge over Avon		
Populus nigra (Black Poplar) Male tree ++	JN 930000 7	215697
Ramsbury, on island		
Populus nigra (Black Poplar) ++	DG 930600 7	137841
Swindon, growing alongside River Ray		
Populus candicans (Balm of Gilead/ Balsam Poplar)*	JEO 930700 7	144884
Swindon, Pinchurst, spreading, suckering		
Rorippa palustris (Marsh Yellowcress)	DH,JR 930823 7	923682
Lacock, R. Avon		
Rorippa sylvestris (Creeping Yellow-cress)	JEO 930700 7	148675
Lockeridge, tarmac at road edge		
Rorippa sylvestris (Creeping Yellow-cress)*	MH 930707 7	183698
Marlborough, rubbish dump nr Wedgwood stone		
Cardamine bulbifera (Coral-root)	BL 930500 8	0.0063
Roundway, Home Court, 1st vc record conf. DG (non- native location)		
Cochlearia officinalis (Common Scurvygrass)	Tim Rich 920000 7	1980
Swindon, M4 central reservation, 1st vc rec.		
Erucastrum gallicum (Hairy Rocket)*	BL 930000 8	1948
Bourne Bottom		
Calluna vulgaris (Heather)	DG 931000 7	253655
Bedwyn Comm. 1st rec. here for many years		
Calluna vulgaris (Heather) ++	DG 930000 8	843435
Longleat, edge of Redway Plain, abundant		
Erica cinerea (Bell heather)	DG 930000 8	843435
Longleat, edge of Redway Plain		
Vaccinium myrtillus (Bilberry)	DG 930000 8	843435
Longleat, Redway Plain, 1 plant- side of wood		
Potentilla palustris (Marsh Cinquefoil)	DJW 930630 8	2816
Bramshaw (Hants)		
Alchemilla mollis (Lady's mantle)*	JEO 930727 7	147674
Lockeridge, spreading to banks & roadside		
Alchemilla mollis (Lady's mantle)*	JEO 930727 7	186686
Marl., garden escape spreading to riverside		
Rosa micrantha (Small-flowered Sweet-briar)	JN 920000 7	200733
Ogbourne, old railway line		
Prunus cerasifera (Cherry Plum)*	DPES 930000 8	0
Clarendon		
Sorbus torminalis (Wild Service-tree) ++	JW 930517 7	0.027895
Minety, Braydon Hall Estate, standard tree		
Cotoneaster horizontalis (Wall cotoneaster)*	JEO 930725 7	184684
Marl. Coll. 3 plants epiphytic on S. fragilis		
Galega officinalis (Goat's Rue)*	DG (WBS) 930703 7	0.018934
Cot. Water Pk, Som. Keynes, gravel working		
Ornithopus perpusillus (Bird's foot)	DG 930900 7	955683
The Warren, nr Spy Park, - newly turned soil		
Securigera varia (Crown Vetch)*	DOG 930000 8	0
Newton Toney		
Lathyrus nissolia (Grass Vetchling)	GN 930000 8	0

Trifolium fragiferum (Strawberry Clover)	BL	930823	8	73427	
Shrewton, old meadow by R. Till, nr sewage works					
Trifolium fragiferum (Strawberry Clover)	JW/WBS	920814	7	841861	
Sherston Avon, Stan Bridge					
Ulex galli (Western Gorse)	DG	930000	8	843435	
Longleat, Redway Plain, 3 sites with Calluna					
Lythrum portula (Water Purslane)	BL(WBS)	930630	8	8442	
Shear Water, Aucombe Marsh					
Geranium endressii (French Crane's-bill)*	JEO	930800	7	186686	
Marlborough, escape to banks and riverside					
Hydrocotyle vulgaris (Marsh Pennywort)	BL(WBS)	930630	8	8442	
Shear Water, Aucombe Marsh					
Heracleum mantegazzianum (Giant Hogweed)*	GN	930000	8	0	
Salisbury					
Hyoscyamus niger (Henbane)	AD	930000	8	0.049443	
Shrewton, 100s in a set-aside field					
Nymphoides peltata (Fringed Water Lily)	BL	930000	8	8744	
Warminster					
Borago officinalis (Borage)*	DOG	930000	8	0	
Newton Toney					
Amsinckia micrantha (Common Fiddleneck)*	DG	930900	7	955683	
Sandy Lane, Nr. Spy Park, newly exposed sand					
Myosotis secunda (Creeping Forget-me-not)	JN (DG)	930630	8	846423	
Shear Water, Aucombe Marsh					
Myosotis sylvatica var culta? (Wood Forget-me-not) * + +	JEO	930300	7	184684	
Marlb. Treacle Bolly, prob. from gardens					
Galeopsis bifida (Bifid Hemp-nettle)	JEO	930800	7	160688	
Clatford Xrds disturbed ground, wood piles					
Teucrium chamaedrys possibly hybrid x T. lucidum*	JEO	930000	7	147677	
Lockeridge, walls, a former garden escape					
Clinopodium ascendens (Common Calamint)	DH, JR	930712	7	903864	
Sherston Avon, Cowage Farm, nr. Foxley Green					
Plantago arenaria (Branched plantain)*	BH	930700	7	968671	
Chitto, Sandy Lane, 1st county record					
Misopates orontium (Weasel's-snout)	PA	921000	7	158839	
Swindn. Drove road, Old Tn, sandy waste land					
Veronica catenata (Pink Water Speedwell) + +	JEO	930725	7	0.0977	
Kennet, fr. Avebury - Marlb. 097700 to 199692					
Veronica longifolia (Garden Speedwell)*	JEO	930726	7	182685	
Marlborough College, rubbish dump and marsh					
Melampyrum pratense (Common Cow-wheat)	SP	930000	8	0	
Dinton					
Utricularia minor (Lesser Bladderwort)	DJW	930623	8	2816	
Bramshaw (Hants) 1st vc8 (Hants) record					
Campanula poscharskyana (Trailing Bellflower)*	JEO	930811	7	186681	
Marlb. River Park riverside & roadside					
Campanula portenschlagiana (Adria Bellflower)*	JEO	930700	7	147676	
Lockeridge, seeding on garden wall					
Galium palustre elongatum (Marsh Bedstraw)	BL(WBS)	930630	8	8442	
Shear Water, Aucombe Marsh					
Aster x salignus (Common Michaelmas Daisy) + +	JEO	921020	7	188701	
Marlb. N., A345, roadside scrub & grassland					
Cirsium dissectum (Meadow Thistle)	BL(WBS)	930630	8	8442	
Shear Water, Aucombe Marsh					
Pilosella aurantiaca ssp aurantiaca (Fox and Cubs)	JEO	930700	7	148675	
Lockeridge West, spreading in short grass.					
Hieracium subleptostoides	JN	930000	7	193702	
Ogbourne, old railway line					
Gnaphalium sylvaticum (Heath Cudweed)	BG	930911	8	654	
SPTA(Central) Chilton Down					
Aster x versicolor (Late Mich. Daisy)*	JEO	931012	7	197685	
E. of Marlborough, bet. WCC depot & dump					
Aster x salignus (Common Mich. Daisy)*	JEO	931012	7	191685	
Marlborough, N. of Postern House, roadside					
Aster lanceolatus (Narrow-leaved Michaelmas Daisy)* + +	JEO	931000	8	237493	
Tidworth, banks of R. Bourne 237493-235470					
Aster lanceolatus (Narrow-leaved Mich. Daisy)*	JEO	931014	7	182683	
R. Kennet, bet. M. College & Preshute-nr. Treacle Bolly					
Erigeron acer (Blue Fleabane)	JEO	931000	8	274504	
Ludgershall, car parks and railway embankments					
Chrysanthemum segetum (Corn Marigold)	RN	930000	8	189276	
Alderbury					
Petasites fragrans (Winter Heliotrope)*	AD	930000	8	0	
East Grimstead					
Galinsoga quadriradiata (Shaggy-soldier)*	RN	930000	8	0	
Salisbury					
Galinsoga quadriradiata (Shaggy-soldier)*	MH	930806	8	118597	
Woodborough, Ware's Nursery					
Bidens cernua (Nodding Bur-marigold)	DG	930000	8	811428	
Longleat, Ford Pond, frequent					
Butomus umbellatus (Flowering Rush)	BL	930000	8	8744	
Warminster					
Sagittaria sagittifolia (Arrowhead)	BL	930000	8	8744	
Warminster					
Sagittaria sagittifolia (Arrowhead)	DH, JR	930823	7	923682	
Lacock, R. Avon					
Elodea nuttallii (Nuttall's Waterweed)*	DG (WBS)	931113	7	217666	
Savernake, Thornhill pond					
Acorus calamus (Sweet-flag)*	DG	930000	8	811428	
Longleat, Ford Pond					
Lemna minuta (Least Duckweed)* + +	JEO	920000	7	275714	
Ramsbury, R. Kennet, downstream from Axford					
Lemna minuta (Least Duckweed)*	BL	930000	8	0	
Blackmoor Copse					
Luzula forsteri (Southern Wood-rush)	BL conf. AH	930820	8	8442	
Shear Water, Aucombe Marsh					
Luzula sylvatica (Great Woodrush)	SP	930000	8	0	
Dinton					
Isolepis setacea (Bristle Club-rush)	DG	931003	7	221665	
Savernake, one plant on ride					
Carex strigosa (Thin-spiked Wood-sedge)	DP	931120	8	792310	
Zeals, laneside by Bagmore Wood, 1 plant,					
Carex binervis (Green-ribbed sedge)	DG	930000	8	8443	
Longleat, Redway Plain and Hart Hill, 8442					
Festuca rubra ssp megastachys (Red Fescue)	JEO (POT)	920800	7	150676	
Lockeridge, Marlb. village stonework & grass					
Puccinellia distans (Reflexed Salt marsh-grass)	DG	931000	7	193809	
Swindon E, M4 jn roundabout 1st vice county record					
Glyceria declinata (Small Sweet-grass)	BL(WBS)	930630	8	8442	
Shear Water, Aucombe Marsh					
Glyceria notata (Plicate Sweet-grass)	JEO	930725	7	100739	
Kennet, Ber. Bass- Marlb. c.x10 > G. fluitans					
Aira praecox (Early Hair-grass)	BL(WBS)	930630	8	8442	
Shear Water, Aucombe Marsh					
Calamagrostis epigejos (Wood Small-reed)	BL	930000	8	0	
Blackmoor Copse					
Molinia caerulea (Purple Moor-grass)	DG	930000	8	8443	
Longleat, Redway Plain, in 8443, 8442					
Fritillaria meleagris (Fritillary)	BL	930000	8	882314	
East Knoyle					
Ornithogalum angustifolium (Star of-Bethlehem)	DOG	930000	8	0	
Newton Toney					
Hyacinthoides hispanica x H. non-scripta + +	JEO	930500	7	184684	
Marlb. Treacle Bolly					
Narcissus pseudonarcissus (Daffodil)	SD	930000	8	0	
Whiteparish					
Narcissus pseudonarcissus (Daffodil)	DPES	930000	8	188277	
Alderbury					
Epipactis purpurata (Violet Helleborine) + +	DG	931000	7	0	
Savernake, Grand Ave. 2 clumps by roadside					
Epipactis leptochila (Narrow-leaved Helleborine)	BL	930000	8	0	
Garston Wood (DORSET)					
Epipactis phyllanthus (Green-flowered Helleborine)	BL	930000	8	0	
Hanging Langford					
Neottia nidus-avis (Bird's-nest Orchid)	DOG	930000	8	0	
Porton (HANTS)					
Coeloglossum viride (Frog Orchid)	BL	930000	8	0	
Middleton					
Coeloglossum viride (Frog Orchid)	DOG	930000	8	0	
Porton Down					
Dactylorhiza incarnata (Early Marsh-orchid)	BL	930000	8	0	
Warminster					
Orchis ustulata (Burnt Orchid)	DOG	930000	8	0	
Porton					
Aceras anthropophorum (Man Orchid)	Skelton	930613	8	0	
2nd vc8 record, 1st for Wilts. conf. E. Smith et al					
Ophrys apifera (Bee Orchid)	DG(WBS)	930703	7	0	
C. Water Pk, Somerford Keynes, gravel working					
Ophrys apifera var. alba (Bee Orchid)					