

# WILTSHIRE BOTANICAL SOCIETY

## NEWSLETTER

Issue 25 Spring 2005



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8 September 2004

## TREES AT URCHFON MANOR

Leader: Jack Oliver

On a clear September day we gathered at the lovely Urchfont Manor (circa 1678) with Jack Oliver to guide us around many of the glorious trees in the Manor grounds.

As we left the car park we saw two distinctive Scots Pines *Pinus sylvestica* with their characteristic heavily striated lower bark, changing to a smoother orange with papery thin scales in the upper sections. These were very tall and thin and looked like classic Forestry Commission examples of plantation timber possibly because they were surrounded by other trees and bushes and had pushed up for air and light. In the same area was a very tall straight American Tulip Tree *Liriodendron tulipifera* justifying its North American Indian description as "canoe wood" since single canoes carrying up to 20 people could be hollowed out of one trunk.

Next on our route was a very fine Sycamore, *Acer pseudoplatanus* (although not beloved by naturalists!) with its typical grubby palmate leaves which appear to scavenge so much dirt from the air, giving the lie to the attractive creamy timber popular for furniture, veneers and musical instruments. In the same family a beautiful London Plane, *Platanus x hispanica* stood close to the Manor. Its large shiny palmate leaves, when washed by rain, are more readily able to lose the dirt. Similarly it also sheds its bark in patches to prevent it being stifled by atmospheric grime. This is how Plane trees over 200 years old have managed to survive in London before the passing of the Clean Air Act.

Onward past a Weeping Ash to a spectacular European Lime *Tilia x europaea* obvious at a glance by the presence of extensive Witches Broom growth and an abundance of shoots from all parts of the tree. This is the tree that can wreck your parked car's paintwork with deposits of honeydew from aphids. This is a fascinating process because the honeydew exuded by the aphids falls to the ground which stimulates the growth of nitrogen fixing bacteria which enhance nitrates which are then absorbed by the tree's roots. Thus the aim is not to wreck your car but to promote the further growth of the tree. Park somewhere else!! (see Jack's following article for details)

We moved on to the first of many majestic English Oaks *Quercus robur* reputed to support more than 200 species of wildlife. The ground beneath was a carpet of shed spangle galls, the hosts of gall wasp grubs. In its natural forest environment that ground would normally support an abundance of other plant life since the typical open canopy of the oak permits light and air

down through the tree to encourage such growth.

We then passed the first of several Atlas Cedars *Cedrus Atlantica* which must recently have flowered and produced a carpet of male catkins. On to the very old Lime which due to extensive but necessary surgery looked wrecked. Another rather unattractive tree was a large Horse Chestnut *Aesculus hippocastanum*, unkindly pollarded, a tree which due to its lack of close cover appears unable to support any wildlife, especially birds.

We then wandered over to a magnificent looking very straight and tall oak only to discover it was a Turkey oak *Quercus cerris*, whose good looks belie its uselessness as timber, this being of all round poor quality: it warps, distorts, is prone to split and decays quickly out doors. Thus this tree is purely ornamental, its acorns are particularly fetching with curly mossy cups. We turned back past a handsome stand of mixed conifers including two golden Lawson cypress *Chamaecyparis lawsoniana* Lutea and thence to two old and inseparably intimate Yew trees *Taxus baccata* known now within the group as Charles and Camilla! (Photos supplied in a plain brown envelope!)

Elsewhere we passed Weeping Lime, Weeping Ash *Fraxinus excelsior*, several young Indian Bean Trees *Catalpa bignonioides* and evidence of recent plantings to perpetuate the Arboretum we had enjoyed. Other trees seen were Monterey Pine *Pinus radiata*, Arizona Cypress *Cupressus glabra pyramidalis* smelling of pineapple when crushed, Beech *Fagus sylvatica*, Cut-leaved Lime *Tilia platyphyllos laciniata*, Italian Alder *Alnus cordata*, Yellow leaved Grey Alder, *Alnus incana* var. *aurea*, various imposing Redwoods and the very romantic heart shaped leaved Japanese Cherry.

After a robust picnic we set off across the fields to Oakfrith Wood. En route Jack treated us to a lesson on the pubescence of the 3 native oak taxa. Hairs of all shapes and sizes, stellate, flat, brush and medusoid (truly bad hair day!) What a world under the lens!

Oakfrith is an ancient wood with a typical earth bank boundary with plenty of Ash, old Hazel coppice stools, Holly, Blackthorn, some Wych Elm. *Carex pendula* graced the paths together with the balletic Lady Fern, Male Fern and Broad Buckler Ferns. Predictably Bracken and Bramble, those perversely comfort species as you can rely on them always to be in a wood.

Flowers included Yellow pimpernel, Enchanter's Nightshade, after Cerci the enchantress who turned Ulysses sailors into pigs because she found them so disgusting – silly girl! *Galeopsis bifida*, Horehound, Hemp Nettle, *Galeopsis tetrahit*, and surprisingly Skullcap *Scutellaria galericulata*, diagnosed without flower and out of usual habitat – well done Jack! We also passed Marsh cudweed and Oat grass on the way back. Thanks for a lovely day.

Lesley Wallington

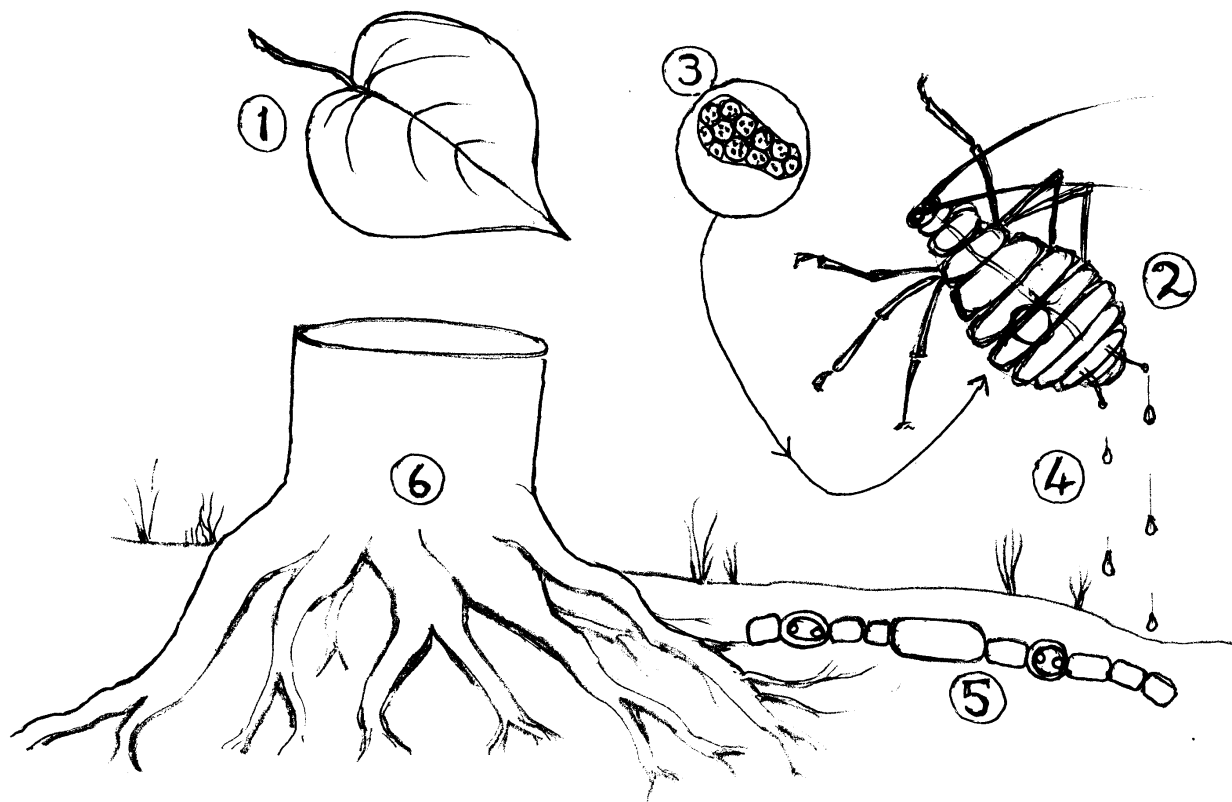
# The Lime Aphid and a Complex Four-way Symbiosis

Silver Limes, because of their dense felted indumentum, tend to resist aphids, but most other limes are susceptible. The aphids excrete the honeydew which drips from the leaves and which can damage cars by causing pitting to car body paintwork when cars are parked underneath. The lime most liable to cause this effect is the European Lime, *Tilia x europaea*, at a rate of at least 1kg of sugar(s) per square metre per year.

The sugars falling in the aphid honeydew onto the ground stimulate the growth of nitrogen-fixing bacteria in the ground, in turn enhancing nitrates, to be absorbed by the roots encouraging further growth of the tree.

This is known as *nitrate-enhanced symbiosis*. The symbiosis is actually even more complicated, because the Lime Aphid has symbiotic bacteria housed *within* some of its body cells! The Lime Aphid feeds on the phloem sap, a diet very low in the ten or so essential amino acids required for protein building. The intracellular bacteria provide these.

*Jack Oliver*



## Key to the diagram

1. Linden leaf, *Tilia x europaea*, the largest of the limes, Britain and Europe's tallest broadleaved tree. Sugar synthesis.
2. Lime Aphid needs the phloem fluids.
3. Intracellular bacteria! These concentrate phloem sap, and create the ten essential amino acids for the aphids.
4. Honeydew drops onto soil (or cars!), providing the nitrogen-fixing soil cyanobacteria with their fuel.
5. The cyanobacteria use atmospheric nitrogen to make nitrates and enrich the soil. "Nitrogen-Enhancement Symbiosis"
6. Linden roots absorb the extra nutrients.



Jacqueline Wright with the giant *Fissidens* - photo Ivan Wright

Saturday October 12<sup>th</sup> 2004

## Mossing at Limpley Stoke

**Leaders: Sharon Pilkington and Jacqueline Wright**

Dundas Aqueduct is justly famous as a local landmark, and, for plant buffs, has the added attraction that in summer, one can see a good colony of the Avon's special pondweed *Potamogeton nodosus* in the dreamy waters below.

Few, however, are aware of the bryological riches that await in the ancient limestone woods rising steeply up from the canal. So, with rain clouds threatening, a small but very enthusiastic group started up the picturesque climb through the woods, which are full of old Hazel coppice, Hart's-tongue fern, and limestone exposures.

A short reconnaissance a week earlier had revealed nearly thirty common species of liverwort and moss, growing on rocks, trees, stumps and banks close to the footpath. With the addition of the sharp eyes of Jacqueline Wright, who is the BBS Bryological Recorder for Oxfordshire, we soon found many other species.

High humidity in this woodland provides ideal conditions for cryptogams, and the ground was carpeted with luxuriant carpets of some of the

particularly robust, shaggy species, such as *Thamnobryum alopecurum*, which resembles a little tree when uprooted. The calcicolous moss *Anomodon viticulosus* was also common on rocks, looking like a mat of miniature pipe-cleaners. This is one of the easier mosses to identify, with its unique tongue-like leaf shape and unbranched habit. A particular feature of many of the trees was roughly circular patches of two small liverworts, appressed to the bark. *Metzgeria furcata* is a slender thalloid species which forms dull green patches, whilst a leafy species, *Frullania tamarisci*, often looks a little like dull red-brown threads on the bark, and which, when viewed with a hand-lens, has the most complex leaf arrangement.

Jacqueline's enthusiasm and knowledge of her subject really came across, and she had even brought some home-made but very effective 'props' including a model of a *Fissidens* leaf which must have been at least one hundred times larger than the real thing!

In two hours we only covered about 100 metres, and the sheer diversity of species started to make heads ache a little. A most interesting diversion was the large numbers of fungi also present along the path, including some magnificent earth-stars *Geastrum* sp.

As we made it back to the cars, the heavens finally opened with a vengeance: near-perfect timing. Despite the small turnout, Jacqueline and her husband Ivan (trip photographer) said they had a great time, and really enjoyed being with such a friendly group of people! Many thanks to Pat, Jack, Lesley and John for being such enthusiastic bryologists!

*Sharon Pilkington*

Saturday 23 October 2004

## Fungus Foray in Bedwyn Brail

**Leaders: Peter Marren and Malcolm Storey**

There were fifteen attenders for this autumn's tour-de-force by Peter Marren and Malcolm Storey. The morning started wet and became wetter, but even so, over 50 species were identified.

There were variously coloured "fungal gardens" on the giant fallen beeches. A guesstimate was 10-20 visible surface fungi, with a probable further 20-30 not yet visible types of fungal hyphal network on and in one large dead tree. A mass of mycorrhizal toadstool species was seen around the base of one mature Birch tree. These included some poisonous species from the Amanita genus, with Fly Agaric, Death Cap, False Death Cap, Grisette and Tawny Grisette all represented. In addition there was also present in the same place the Ugly Milk Cap (*Lactarius turpis*) with white acrid sap and the emphatically named *Cortinarius triumphans* (previously *C. crocolitus*). Around a Sycamore, there was a ring of the saprophytic, edible Clouded Agaric (*Clitocybe nebularis*). This ring had a diameter of 20 feet or so, perhaps 30 years old.

Peter again emphasised the importance of field mycology, despite the advances in DNA and chemical analyses. Smell and taste can be as important as well as vision; for instance the base of the stem of the *Russula turci* which we examined (with a pink-magenta cap) had a distinctive smell of the antiseptic iodoform. Towards the end of the foray, as the rain increased, we saw the little *Omphalina fibula* growing on moss, and the equally diminutive *Collybia cookei* arising from a yellow sclerotium (hyphal tuber). The *Collybia* was at the base of a mature Birch, growing on a decaying Honey Fungus from the previous year.

As in previous years, Peter and Malcolm provided a stimulating and instructive session. Some members of the Wiltshire Botanical Society have been fired to persist and improve their field mycology by their examples.

*Jack Oliver*



*Limestone pavement, the Burren - photo John Presland*

**Saturday November 6<sup>th</sup> 2004**

## **Wild Plants in Ireland**

**John Presland**

Twenty-one people attended for John's talk and slides on the flora of Ireland (or, as he amended, the flora that he had seen in Ireland!). The tour started in Wicklow where the soils are uniformly acid, and the plants consequently are rather monotonous,

The soils are acid in Killarney too, but the flora has more variety. The star is *Arbutus unedo* (Strawberry Tree), which is an 'outlier' from the Iberian Peninsula. There is also *Euphorbia hyberna* (Irish Spurge), Wilson's and Tunbridge filmy ferns, *Pinguicula grandiflora* (Large-flowered Butterwort) and *Saxifraga spathularis* (St Patrick's Cabbage).

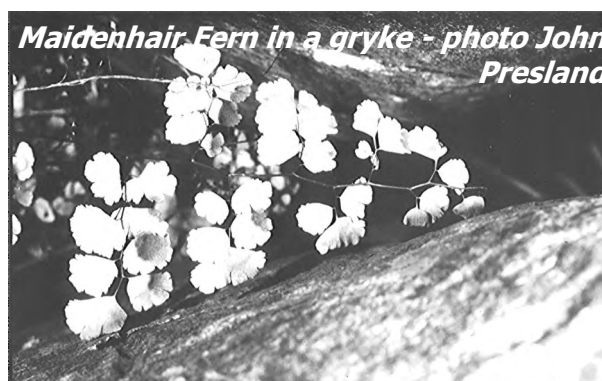
Of course one thinks of peat when one thinks of Ireland, and indeed 17% is still peatland, but it is in need of conservation and the Irish Peatland Conservation Council is doing a good job buying up



*Fen Violet - photo John Presland*

reserves. Other countries have left conservation too late. Holland, for instance, has lost all of its peat bogs, and is buying up peatland in Ireland (for conservation, not extraction!).

That botanical Mecca, the Burren, was the next feature. This has an amazing collection of arctic/alpine and Mediterranean plants, and calcifuges as well as calcicoles. In fact it has 80% of all Irish plant species. The clints and grykes of its limestone pavements are a wonderful site in May and June. John's photos did them justice. Some plants are very local, and I thought I recognised the rock formation at Poll Sallach where he found *Ajuga pyramidalis*! The seasonally filled 'turloughs' particularly interest me, with their rarities like



*Maidenhair Fern in a gryke - photo John Presland*

*Viola persicifolia* (Fen Violet) and *Teucrium scordium* (Water Germander).

It would be wonderful to have a Wiltshire Botanical Society trip to the Burren, but it is a long way off! Perhaps its inaccessibility adds to its magic.

*Simon Young*

Saturday 29 January 2005-02-10

## Bulgaria – A Botanist's Paradise

### Talk by Jeremy Wood

Why Bulgaria? Jeremy explained that he and his wife had previously visited neighbouring countries including Greece and Slovakia. It seemed a good idea to “fill in the gap”. Additionally there was an attractive brochure from Naturetrek promising good scenery and many endemic plants.

Just a week before departure Jeremy received a checklist of species. This was no ordinary list. It contained some 3,400 species. The sender was the party leader, Alan Outen. He proved to be an enthusiastic and knowledgeable botanist. The flora is typically European so there are many familiar genera whereas the species are often different. A particularly mouthwatering prospect was the Balkan Lizard Orchid, *Himantoglossum caprinum* to be compared with our own *H. hircinum*.

The Party flew to Sophia and within three hours everyone was involved in looking at plants.

The agriculture in Bulgaria is very backward away from the larger towns. Tractors are few and far between. Ploughing is horse driven. Hay is cut by scythe. One consequence of the low level agriculture is an

abundance of flower rich meadows and verges. Much botanising can be done without moving far from the transport. The plan for the week was to stay in three hotels in different regions.

The first afternoon was spent in the Vitosha National Park. Plants seen included *Trollius europaeus*, *Geum coccineum*, *Lychnis atropurpurea*, *Viola tricolor*, *Cerastium decalvens*, a *Dactylorhiza* sp. and a downy willow, *Salix lapponum*.

On day two the party visited another region of the National Park in the mountains. Swathes had been cut through the forest to accommodate ski runs and a chair lift. There was still plenty of scope for the botanists who enjoyed searching among the limestone rocks. Finds included: *Aquilegia aurea*, *Achillea clipeolata*, *Sidiritis montana* (a labiate), *Euphorbia reigidiana* (an endemic species), *Medicago sativa*, *Xeranthemum annuum*, *Digitalis lanata*, *Salvia sclarea*, *Allium rotundum*, *Onosma tauricum*, *Himantoglossum caprinum* (the aforementioned Balkan Lizard Orchid – a splendid specimen) and *Lychnis coronaria* (Rose Campion).

Day three involved a trip to the Pirin Mountains National Park with a stop en route at the Rila Monastery. This was originally founded in the 10th century. It is famous for its bell tower and frescoes. *Linaria dalmatica* was found on a very steep slope.

On day four, still in the Pirin Mountains park, the party climbed from 1800 to 2200 m. along a hard track. The roadside verges produced an abundance of finds,



*Geum coccineum*

photo Jeremy Wood



*Rhinanthus javorkae* - photo Jeremy Wood

including: *Daphne oleioides*, *Linum capitatum*, a specimen of *Pinus peuce* (Macedonian Pine) reputedly 1350 years old, *Onobrychis scardica* (Sainfoin), a large milkwort: *Polygala major*, *Rhinanthus javorkae*, *Polystichum lonchitis* (Holly Fern), *Dianthus petraeus*, *Dianthus cruentus*, *Scutellaria alpina* and *Aubrieta gracilis*. Above a mountain chalet the party found *Gymnocarpium dryopteris* (Oak Fern), *Dianthus microlepis*, *Genista depressa* and *Campanula patula*.

The party split on Day 5. The fitter element climbed still higher while the majority enjoyed a woodland walk, encountering: *Digitalis viridiflora*, *Centaurea manaugottae* (a yellow Knapweed), *Ajuga chamaepitys* (Ground Pine which emits a strong smell of pine resin when crushed), *Neottia nidus-avis* (Bird's nest Orchid) and *Cephalanthera rubra* (Red Helleborine).

Day six en route to the Rhodope Mountains the party stopped in a river valley. Here were found *Verbascum* sp., *Carduus canescens*, *Anchusa azurea* (Large Blue Alkanet), *Gladiolus illyricus*, *Orchis ustulata*, *Dactylorhiza pindica*, *Orchis laxiflora* ssp. *elegans* and *Oenanthe fistulosa* (the Tubular Water Dropwort).

Day seven was spent in the Trigrad Gorge. New finds included: *Arenaria rhodopaea* (an endemic Sandwort), *Sedum hispanicum*, three *Campanulas*: *C. hemschinica*, *C. orphanidea* and *C. macrostachys*, *Trifolium alpestre* and *Haberlea rhodopensis* (endemic sp.).

Above the gorge were found *Silene otite* (Spanish Catchfly), *Marrubium friwalskianum* (Labiatae), *Viola*

*orberica*, *Morina persica*, *Cicerbita alpina* (Blue Sow-Thistle), and *Dactylorhiza cordigera* (Heart-shaped Marsh Orchid).

Jeremy's final slide showed the party packing up outside the hotel at Pamparova. Subsequent discussion revealed that at least two of the audience had visited Bulgaria. Jeremy's talk might well persuade others to follow. The botany and scenery are quite breathtaking.

*Malcolm Hardstaff*





*Geranium incana x robustum* - photo Ron Hurst

**Saturday 28 November 2004**

## The Cultivated Weed

**Ron Hurst**

At the recent meeting on 28th November, Ron gave us a conducted tour of his garden, that he described as full of 'thugs' and intrepid additions to his plot by some with a predilection for concrete paths and squeezing into cracks in the paving. If only the weeds in my garden could be so prolific and various! He described his patch as being 'small', just 100 feet by 100 feet, yet it contrived to hold over 600 species (only 16 of which were natives); containing several raised beds, a greenhouse, a pergola, a hedge, a fence, and most precious of all, a pond, all of these comprising a number of micro-habitats. There happened to be a bungalow in the middle. He had worked the garden for just eight years. It overlaid oolytic limestone, which gave the soil a pH of 7.5 but in parts was more acid after liberal addition of manure. The digging of the pond provided some excitement as at three feet he reached the rock, which apparently resonated to his spade and called to mind that it overlaid a system of caves. He stopped digging then lest he disappeared into a black hole. The pond soon became habitat for a range of plants which are threatening to close it over including an aggressive *Typha*, variegated *Glyceria maxima*, sweet flag, *Cyperus longus* and two species of spearwort. There is a resident heron that no doubt feasts on various aquatic life.

The long string of wonders he showed us came in any order and of which I can only represent a few. There was a particularly attractive pink variety of *Eschscholzia* and a white clone of *Epilobium angustifolia* which he said was well behaved, not as the normal aggressive pink variety. There was the rare



*Prunella laciniata* - photo Ron Hurst

*Galeopsis angustifolia* and the even rarer *G. segetum*, a beautifully silky pubescent plant. There were forty species of *Geranium* of which he showed us but a few. There was *Comalina coriestis*, a blue member of the Spiderwort family called after three brothers, two of whom were expert botanists because the flowers have two good petals and one reduced one! There were two species of Lupin, one, *Lupinus texanus* is known as the Texas Blue Bonnet and is the state flower as it is prolific on all the road verges and waste ground there.



*Menyanthes trifoliata* - photo Ron Hurst

Another common plant in Texas is the beautiful *Oenothera speciosa* which Ron describes as one of his thugs, so abundant it is in his garden. It is one of a large American family of Evening Primroses. There was Mexican prickly poppy, *Argemone ochroleuca* that is well protected in desert areas against browsers by all-over spines. He has a large population of red tulips that he is positive he had no hand in planting! There was an abundance of *Cerinthe purpurea* a glabrous Honeywort with drooping purple flowers that has a long flowering time and he assured us grows anywhere. Salsify grew there (*Tragopogon porrifolius*) with an edible root and the related Blue lettuce. He seems fond of Salvias but not so much of *Salvia sclarea* as he does not care for the smell. (I love it)



*Stachys coccinea* - photo Ron Hurst



*Nymphoides peltata* - photo Ron Hurst

Well, the list could go on, but sufficient to show that Ron has incredibly green fingers and that plants crowd in and queue up to find a space in his amazing plot.

*Barbara Last*



*Crassula helmsii* - photo Sharon Pilkington

sufficient 'forests' of the last-mentioned invader to justify employing a Knotweed Control Officer. By comparison, species such as New Zealand Willowherb and Buddleja have been present in this country for many years and pose no significant threat. Some of these neophytes originated from the horticultural trade and it is interesting to note that Clive Stace, in his recent flora, which is available on DVD, includes species that are commonly planted along roadsides and in other community schemes.

Another important part of the recording effort is to monitor the effects of global warming – clearly, without a basis for comparison, we cannot evaluate trends.

**Saturday January 15<sup>th</sup> 2005**

## Keeping the records straight

**Sharon Pilkington and Purgle Linham**

Sharon Pilkington, our no-longer-new-but-very-hard-working County BSBI Recorder, started her talk by describing Wiltshire as the largest inland county in southern England. Although it lacks coastal plants, its species counts and diversity are both moderately high and it has some notable rarities, particularly in chalk grassland and arable habitats.

Sharon outlined the various reasons for recording; to establish population trends, to inform those dealing with planning applications, to monitor introductions and also changes in BAP species (those designated in Biodiversity Action Plans). She mentioned in particular Early Gentian which is believed to be declining because of a reduction in suitably close-grazed chalk grassland. Apparently, DNA analysis is shedding some doubt on the recognition of Early Gentian as a species distinct from Felwort – a fact that will intrigue botanists, at both the molecular and field level, for years to come. Perhaps WBS members will feel the urge to fight the good cause of *Gentiana anglica* spp. *anglica*. Wiltshire can't lose a nationally scarce plant that easily!

Attention was given to neophytes and the importance of establishing whether they are becoming problem plants or casuals. Plants such as New Zealand Pygmy Weed, Indian Balsam and Japanese Knotweed not only threaten our native species but also become a problem in their own right. Swansea Council has

The number of people employed as environmental consultants has increased many fold in recent years. This is because of legislation which requires landowners and developers to carry out ecological assessments before projects can commence. Sharon was able to cite an example where her own work had allowed a project - to refurbish some old pylons in the heathlands near Poole – to proceed but not before certain constraints to safeguard the fragile habitat were



*Orchis morio* - photo Sharon Pilkington



put into place.

Sharon concluded her part of the talk with the phrase 'Knowledge is Power', having illustrated very effectively that without information we are in no position to conserve.

Purgle Linham, who works at the Wiltshire and Swindon Biological Records Centre, began by telling us about the work of WSBRC, emphasising how it acts as a 'one stop shop' for records and is able to supply information in an impartial, independent fashion from a trusted source. It is able to work at the local level, using data supplied by groups such as our own as well as by professional bodies, and at the same time function as part of a national network of biological record centres.

The centre is able to process data and map distributions of key species, identify important sites and make projections about apparently suitable sites which do not support key species. In this way, for example, sites might be identified onto which an (re)introduction

could be attempted. The significance of being able to distinguish between older and more recent records was discussed. Both are important, but in different ways and on different occasions. A developer does not need to know what was on site 30 years ago, but an ecologist will find that information very useful when considering management.

Summing up, Purgle emphasised the role of WSBRC in the local community and mentioned that the web site now offered an opportunity to record on-line. She also indicated that the publication 'Recording Wiltshire's Biodiversity' is to be superseded by web pages allocated to each of the County Recorders.

Our thanks to both Sharon and Purgle for a very informative talk and for encouraging us to keep those records coming in.

*Pat Woodruffe*

**Saturday 12 February 2005**

# **Farming and Arable Weeds – the Wiltshire Context**

**Simon Smart**

Simon is the Farming and Wildlife Advisory Group (FWAG) officer for Wiltshire, and is responsible for the Wiltshire Farmland Biodiversity Project. He aims to promote awareness of important arable species, including plants, for which Wiltshire is nationally important; to identify the most important areas for them and to work to protect them with the help of other agencies, in particular through the new agri-environment scheme to be launched this year by DEFRA.

A number of once-common arable plants have undergone a serious decline as a result of intensification of farming methods, but Wiltshire is still an important county for some of these rare species. It is nationally important, for example, for Red Hemp-nettle which thrives in compacted tank tracks on the Imber Ranges, and for Pheasant's Eye for which we have 14 of only 22 sites nationally. The area to the southeast of Salisbury is especially important for communities of rare arable plants, as is the edge of Salisbury Plain and the Greensand soils around Brompton, Easton Royal and Shalbourne.

Simon's project began with a review of existing plant records by Phil Wilson, and now it is our turn to help. Simon has asked us to survey 20-25 farms in 2005. These have been chosen either because they have old records for arable plants, or because they are in good areas with a long history of cultivation and south-facing slopes on light soils. Simon will send us notes on the survey method, details of any old records and recording forms, but recommends that we start by asking the farmer for advice – we will need to be selective as we cannot hope to cover the whole of each farm. If time allows, two visits, one in June and one in August, would be useful.

While in the past farmers have received payments linked to production of crops and livestock, the new agri-environment scheme will instead reward environmental stewardship. Thus, rather than being encouraged to intensify and over-produce, farmers will look after wildlife through, for example, creating conservation headlands, leaving cultivated crop margins, over-wintering stubbles, using wildlife seed mixes etc. More details of the scheme can be found on the DEFRA website: [www.defra.gov.uk](http://www.defra.gov.uk).

Simon finished by talking about some of the rare arable plants we are hoping to find and protect: Rough and Prickly Poppy, both of which fortunately have long-lived seed; Cornflower, which still has four sites on the

Greensand; Corn Marigold, for some reason often associated with Weasel's Snout; Corn Buttercup, one of the few arable plants regularly found from heavy clay soil, and for which all the Wiltshire sites are on organic farms; Dense-flowered Fumitory, which is closely associated with the distribution of Turtle Dove; Field Cow Wheat, for which there is one Wiltshire site, a garden in Wootton Bassett; Round-leaved Fluellen, still relatively frequent, and a good indication that other arable plants may be present.

*Sarah Priest*

# Introducing the Wiltshire County Plant Register

## VOLUNTEERS NEEDED!

Within the Botanical Society of the British Isles (BSBI) there is currently much talk about production of county rare plant registers (RPRs), and all VC recorders are being encouraged to make a start on one for their area. Recently produced CRPRs include Dorset and Shropshire, and many others are in preparation. In Wiltshire, ours is in the early stages, and will be a double edition to include the Watsonian vice-counties of North Wiltshire (VC7) and South Wiltshire (VC8).

## What is a CRPR?

Essentially, it is a mini-flora, which identifies the vice-county's rarest species by detailed location. A few species considered to be very rare and/or vulnerable will be listed in the register, but not given very detailed locations in order to protect them from unwanted attention.

Rather than replacing an existing flora (a daunting task!) the CRPR should supplement it, and be of assistance to land managers, ecologists, conservation workers, statutory and non-statutory wildlife bodies. It will be updated at regular intervals, and will thus hopefully enable clear monitoring of the rare species. The first edition should be published in either late 2006 or early 2007.

## Criteria for inclusion

The Wiltshire CRPR has 300 plant species. To be included, these must be Wiltshire natives (or archaeophytes) and must meet at least one of the following criteria:

- Nationally rare (current JNCC list)
- Nationally scarce (current JNCC list)
- Rare in either vice-county (recorded in 1-3 sites separated by at least 1 km)
- Scarce in either vice-county (recorded in 4-10 sites separated by at least 1 km).

Many poorly-recorded species have been left out, and many (but not all) sub-species and hybrids, leaving a robust set of species.

In Wiltshire, 61 species are nationally important, leaving 239 VC rare or scarce species.

## Where has the data come from?

The list is mainly based on records gathered during the Wiltshire Flora Mapping Project, followed by the records compiled by the Wiltshire Botanical Society, and thus represents a reasonably accurate set of data in the county for the past 20 years. Wiltshire and Swindon Biological Records Centre have offered support for the Wiltshire RPR, and are seeking other significant sources of records.

## Get involved

Many of the records are between 10 and 20 years old, and therefore of dubious value. Volunteers could help in several ways:

- By selectively verifying records for particular taxa: For example, Narrow-lipped Helleborine is a nationally scarce orchid with records from 3 sites in S. Wiltshire. It has not been recorded since 1984. Is it still there?
- By 'adopting' a botanical hotspot where many of the rare species have been recorded in the past, and surveying it to re-affirm the records, and maybe add new ones. For example, sites like Milk Hill and Walkers Hill, Avebury, Savernake Forest and Bedwyn Brail.
- By 'adopting' an area, for example a 1km or 10km OS square and attempting to re-find as many of the rarities previously recorded there as possible.

I can provide guidance, and print-outs for the above, detailing grid references etc.

I have not included all 300 species here, for obvious reasons, but I will happily send or (preferably) email a spreadsheet to anyone who asks.

Any help you can provide will be **very gratefully received**, and all recorders will be credited in the WRPR.

For more information, please email me on [sharon.pilkington1@btinternet.com](mailto:sharon.pilkington1@btinternet.com), or call (evenings or weekends) 01225 775945.

*Sharon Pilkington*



## A Last Word

One of my pet irritations is the outbreak of yellow at this time of year. I mean the *Narcissus* cultivars, all bright, big and blousy that appear on the verges of many rural roads. This is not to say I don't like daffodils; in my garden, yes; in urban parks, yes, but on road verges they do seem so inappropriate and out of place. Well-meaning councils have no doubt used council funds to obtain and plant them. In place of what? No doubt there were some inconspicuous struggling specimens of our native flora that are now out-competed and overgrown by these showy monsters.

In some places, near woodlands, there may have been remnants of our native *Narcissus pseudonarcissus*. There now appear bigger hybrids at the edge of the wood, diluting the native gene pool. This has been recorded in Ulswater adjacent to Wordsworth's famous colony.

In Gloucestershire, there have been planted purple polyanthus along the A417. What happened to the humble primrose?

*Barbara Last*

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## Membership

We welcome new members, beginners and experts alike. If you would like to join, please complete the slip and send it to:

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### Subscriptions (new rates):

Ordinary Member----- £10.00 per year  
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## From the Editor

Many thanks to all contributors of articles and reports. Thanks also to members who have lent me slides or sent digital pictures to illustrate the stories.

Please keep sending material to:

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*Richard Aisbitt*

## Future meetings

Please suggest ideas for meetings or talks. Contact me by writing to:

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*Pat Woodruffe*