

EDITORIAL

This issue of Wiltshire Botany breaks further completely new ground in that it contains our first article on Fungi. For some years, work has been in progress on a Wiltshire Fungus Flora, and Dave Shorten, one of the organisers of the project, gives us an account of some of the methods and findings in relation to Great Wood, which is near Stanton Fitzwarren in North Wiltshire. We hope for more on this project in later issues.

In our second article, John Presland offers systematic help in identifying the yellow- and cream-flowered members of the *Cruciferae* (or *Brassicaceae*) which have been found in the County, pursuing a similar approach to that which he used with the *Umbelliferae* in Issue No. 2.

In our last issue, we published Barbara Last's flora of Berwick St James. In this issue, she offers an analysis of the findings by type of habitat, together with some information on other sites nearby.

The two previous issues have contained historical accounts of recording brambles in Wiltshire by Rob Randall. In this issue, he brings us up-to-date by providing what is, in effect, the first Bramble Flora for the County.

Jack Oliver describes new findings on the genus *Brachypodium* in Wiltshire, to the effect that there are three species rather than the two which were previously identified.

Finally, we continue to include a selection of the Society's plant records, this time for 1999, with, additionally, some updates for 1995 to 1998 for Vc 8. Updates for Vc 7 have had to be held over for the next issue. The 1999 records include many from the national Flora 2000 project. The recording system for this project is different from the one we normally use for our records, and this has produced many problems in coordinating the two. Many thanks to those who have worked so hard to sort these out and to the many recorders who have done even more work than usual because of this project.

Ideas for articles for Issue No 5 are already being hatched, but further contributions are needed to make up a complete issue. Articles should be submitted to John Presland, 175c Ashley Lane, Winsley, Bradford-on-Avon, BA15 2HR, who will also be pleased to discuss proposed articles informally (Tel: 01225 865125). A leaflet is also available offering guidance to authors on the most helpful forms in which to submit articles.

HABITATS OF BERWICK ST JAMES

Barbara Last

Introduction.

An article in issue no. 3 of this journal (Last 2000) described the systematic recording of plants in the parish of Berwick St. James and tabulated the plants found under the main habitats in the village. The plants amounted to 351 species including 54 tree species and 50 grass and sedge species. The habitat locations were shown in the map in the earlier article and included:

- Y The village itself and main street, which provide some considerable variety especially by way of both arable and ruderal weed species and a number of introduced tree and shrub species that were in the main visible from the street.
- Y Those associated with the River Till and its adjacent water meadows, for the most part unimproved.
- Y Woodlands, composed of secondary woodland and new plantations of largely broadleaved trees.
- Y Arable land remarkably clean and free from original flora, the greatest area.
- Y A chalk downland remnant, on a section of the old iron age fort, Yarnbury Castle, which has remained unimproved grass pasture.

Here the habitats are described in more detail to highlight the particular combinations of plants in them and some of the factors responsible for their occurrence. Information was also available about the habitats just outside the parish boundary and those thought to be of particular interest are described separately after the within-parish account.

The village street

In one of the gardens by the mill leat is a small stand of several plants of Green-flowered Helleborine (*Epipactis phyllanthes*) that are being carefully conserved. In another garden several Bee Orchids (*Ophrys apifera*) regularly appear on remnant natural turf. An unusual grass has made its appearance between cracks in paving stones, Rat's-tail Fescue (*Vulpia myuros*) which has probably originated from the underlying sand. Along the main road through the village (B3080) is a stand of Wild Clary (*Salvia verbenaca*) that has been recorded in Grose (1957). This road bank is now managed as a protected verge to control mowing by the council, although the plant, being perennial, is fairly vigorous and withstands an erratic mowing schedule and so far has not been treated with herbicide. As a micro-habitat in the village, a garden wall supports a population of Biting Stonecrop (*Sedum acre*) along with Common Whitlowgrass (*Erophila verna*) which flourishes early in the year on a very well drained exposed location. Non-native cultivars that have become established along the outside of garden walls are

Alkanet (*Anchusa officinalis*), Borage (*Borago officinalis*) Red Valerian (*Centranthus ruber*), Yellow Corydalis (*Corydalis lutea*) and Procumbent Yellow-sorrel (*Oxalis corniculata*). Among the annual introductions that spring up regularly are Opium Poppy (*Papaver somniferum*) and Wood Forget-me-not (*Myosotis sylvatica*), which is surely a cultivar. Several garden ponds are now covered with the newly introduced Least Duckweed (*Lemna minuta*).

Among the tree species in the village are several large beech trees including two copper beeches. Introduced species include Norway and Silver Maple (*Acer platanoides* and *Acer saccharinum*), Horse Chestnut (*Aesculus hippocastanum*), Hornbeam (*Carpinus bet- ulus*), Walnut (*Juglans regia*), Balsam Poplar (*Populus trichocarpa*), Laburnum (*Laburnum anag- yroides*), Ornamental Cherry (*Prunus sp.*), Weeping Willow (*Salix x sepulchralis*), Hybrid Lime (*Tilia vulgaris*) and the ubiquitous Lawson's Cypress (*Chamaecyparis lawsoniana*). There is a row of Elm (*Ulmus procera*) that has succumbed to Dutch Elm disease, died back, regrown to about 15 metres and recently died back again. There are Hops (*Humulus lupulus*) growing among two of the hedge remnants. In one garden there is an avenue of Hybrid Cockspur Thorns (*Crataegus x lavalleyi*), an American species that produces spectacular flowers and berries. There is one notable old tree in the churchyard, Box Elder or Ashleaf Maple (*Acer negundo*), another American species. There are three large Yew trees (*Taxus baccata*) in the churchyard of considerable age, two females and one male, plus two recently planted Irish Yews; a new one will be planted to commemorate the millennium

River Till

Within the parish, the River Till can be considered in two sections:

- Y the northern winterbourne stream running in from the adjacent parish of Winterbourne Stoke to Asserton (a part of the parish) which, as the name suggests, has no flow of water in part of the year;
- Y the perennial stream from Asserton southwards.

The distinction between these two sections changes seasonally depending partly on climatic conditions of precipitation but, more recently, on ever increasing abstraction by Wessex Water who are legally obliged to maintain a public water supply. In 1990 the Till was quite dry along the entire section as far south as Berwick Farm pond, a section normally reckoned to be a perennial stream even in summer, and, for several years following has been only a trickle of a

flowing stream from Asserton southward fed by springs in the water meadow. Wessex Water has plans to augment the water flow by pumping up from a deep aquifer to counter dry periods in the hitherto perennial stream

The winterbourne stream, regularly dry in late summer, is characterised by Pond Water-crowfoot (*Ranunculus peltatus*) that germinates in spring when there is sufficient flow of water. This plant produces drought resistant seeds and is thus adapted to surviving periods out of water. It produces leaves in two forms, long and filiform that flow with the current when the water is present and broad flat lobed laminate leaves that lie on the surface of the mud when the stream is in process of drying out. In May the stream bed is covered in masses of floating white blossom. Following this, the emergent vegetation takes over and may cover the whole width of the stream bed. Plants such as Water-cress (*Rorippa nasturtium-aquaticum*) and Fool's Water-cress (*Apium nodiflorum*) then dominate and effect the drying out of the stream but die back in winter on the resumption of flow. Increased flow in the stream washes out dead vegetation creating conditions for the regrowth of *Ranunculus* in early spring.

A similar annual river cycle also occurs in the more permanent river below Berwick Bridge. Stream Water-Crowfoot (*Ranunculus penicillatus ssp pseudofluitans*) gradually replaces the Pond Water-Crowfoot. This has only the long undulating leaves, flowing like hair in the fast current with no broad flat ones and is less able to tolerate drying out. It also produces the well known sheets of white blossom. Beds of Crowfoot support a large population of fly and mayfly larvae which are in turn predated on by fish. It produces an astonishing biomass, the vegetation blocking the stream flow. This causes silt deposits which reduce the flow still further so that the gravel bed becomes covered in a slimy brown alga and brown submerged Willow Moss (*Fontinalis antipyretica*). Emergent plants such as Watercress now thrive and take hold and overgrow the Crowfoot, rooting deep in the unstable sediment. This further slows the flow and promotes siltation. Autumn rains promote a vigorous flow and clean gravel is again exposed. In slower-flowing stretches may be found Common Water-starwort (*Callitriche stag- nalis*), Fool's Water-cress (*Apium nodiflorum*) and Hemlock Water-dropwort (*Oenanthe crocata*). This last is very common here and can be seen all along the margins of the Till together with Water Forget-me-not (*Myosotis scorpioides*), Water Mint (*Mentha aquatica*), Hemp-agrimony (*Eupatorium cannabinum*), Fleabane (*Pulicaria dysenterica*), Brooklime (*Veronica beccabunga*), Blue Water Speedwell (*V. anagallis-aquatica*), Water Figwort (*Scrophularia auriculata*), Reed Sweet grass (*Glyceria maxima*) and others.

Water meadows

In the 17th century, much of the low land adjoining chalk streams in Wiltshire, Hampshire and Dorset was managed as water meadows in conjunction with sheep farming. Water, in a system of channels and ditches, was controlled by sluices to cause it to flood the fields in winter. In early spring the water was drained off, sheep were put on and the land grazed until the end of April and the grass cut for hay in June. The advantages were that the spring water flooding the land was warm and constant at about 11⁰ centigrade even in frosty conditions and nutrients from the silt in the river water were added to the soil. This resulted in early growth of grass for the sheep. The field became pasture again in late summer. This system was labour intensive, but manpower was available. In the winter floods, the field acted as a sponge, water soaking slowly into the aquifer below forming a water reservoir to supply springs later in the year. In this parish, remnants of the ditches may be found near White Lodge, below Asserton House and on Mrs. Gifford Mead's meadow which remain largely unimproved and on which is a remarkable spectrum of wet meadow plants. One of the most conspicuous flowers here is Southern Marsh-orchid, (*Dactylorhiza praetermissa*) often in considerable numbers which flower in mid summer along with a splendid display of Yellow Iris (*Iris pseudacorus*). Earlier in the season are numerous Ragged-Robin (*Lychnis flos-cuculi*), a campion with divided petals which is becoming quite scarce now. There are stands of Water Avens (*Geum rivale*), another plant that is becoming scarce. There is one small clump of Bog Stitchwort (*Stellaria uliginosa*). Marsh-marigold (*Caltha palustris*) and Cuckooflower (*Cardamine pratensis*) are both abundant early in the spring. Much of this special habitat has disappeared as a result of increased drainage, and improvement with fertilisers to maximise the value of pasture. Monkeyflower (*Mimulus guttatus*), with its bright yellow flowers with red spots, occurs on the edge of a ditch in the meadow. This, an alien from North America, was first recorded in 1830 in Downton and has rapidly spread. Marsh Ragwort (*Senecio aquaticus*) also occurs and a most beautiful Marsh Thistle (*Cirsium palustre*) grows on the Asserton field, but sadly has recently disappeared from the Gifford Mead meadow. Later on there is Marsh Valerian, (*Valeriana dioica*) a plant that bears male and female flowers on separate plants along with Meadowsweet (*Filipendula ulmaria*) and Fleabane (*Pulicaria dysenterica*), a bright yellow daisy that is a great attraction for many bees and hoverflies and is frequent in the meadow. Along the river margins, grows Comfrey (*Symphytum officinale*), Marsh Woundwort (*Stachys palustris*) and Wild Angelica (*Angelica sylvestris*). Both Water Horsetail (*Equisetum fluviatile*) and Marsh Horsetail (*E. palustre*) occur in one locality.

Alongside part of the Till is another wet field to the north of Asserton and west of the Till that has not been grazed for many years as it is generally too boggy, but in the autumn of 1998 sheep were put on and cattle in the winter of 1999. This meadow contains a similar spectrum of plants. It is largely dominated by Lesser Pond-sedge (*Carex acutiformis*) which grows profusely and provides effective shelter for fawning Roe-deer. There are also large stands of Hard-rush (*Juncus inflexus*). Well concealed is a small colony of the scarce Adder's Tongue fern (*Ophioglossum vulgatum*). Along the river margins is Reed Canary-grass (*Phalaris arundinacea*). Rather suprisingly, in the centre of this fen-meadow are three oak trees (*Quercus robur*), the only oaks in the parish.

The low lying area alongside the Till to the north east of the village is largely willow carr, unmanaged and impenetrable with dead trees decaying as they fall and supporting lush mosses and fungi. This habitat is found isolated on the several small islands between the meandering channels of the Till. There are clumps of Polypody fern (*Polypodium sp.*) growing as epiphytes on fallen tree limbs. This was probably an extensive habitat in river valleys in ancient times before man set about systematic clearances and drainage. As this fen area has such a wide range of species, it is designated a 'Wildlife Site'

Woodlands

There is very little in the way of woodlands in the parish, certainly no ancient woodland. A number of belts of Beech (*Fagus sylvatica*) seem to have been planted as windbreaks. There is a block of plantation wood up the slope eastward of Asserton of largely mature beech, which is now coming to the end of its life span, and many are suffering from a bark disease, weakening them, and every winter a number fall leaving considerable spaces.

Along the edge of the private road between Asserton Farm and White Lodge there has been planted a line of 24 Small-leaved Lime (*Tilia cordata*) edging a block of regenerating Ash and Sycamore and some thinning of these stands has recently taken place (1999). These Small-leaved Limes are now about 20 years old and just beginning to reach flowering. About 6,000 years ago, it was a dominant tree in British woodlands (this is known from pollen records as the distinctive pollen grains can be discovered in old soil cores) but has declined to become rare. Five thousand years ago, stone-age people cleared much of the original wild-wood. Further decline was possibly caused by climate changes as it needs a hot sunny summer with temperatures of 20⁰ C for several days to effect pollination and also it rarely

sets seed and these are readily eaten by bank voles. However, once established it is tenacious and good at regenerating from stools when coppiced. The Small-leaved Lime is distinctive in that there are tufts of ginger hairs in the leaf axils on the undersides while the leaf stem is not hairy. The leaves are only about 4-6 cms wide. This tree is not so given to produce suckers from the base as the Common or Hybrid Lime which is widespread. So it is particularly pleasing to see the reintroduction of this native tree to the area. The rest of this section of wood is comprised of young regenerating ash and sycamore that has recently been thinned and managed.

The track along the edge of this wood is notable for a prolific growth of Hart's-tongue (*Phyllitis scolopendrium*), a fern with shiny undivided leaves. There is also a number of Wall Lettuce (*Mycelis muralis*). In one area there are several spikes of the orchid Twayblade (*Listera ovata*). Along Duck Street there have been stands of Broad-leaved Helleborine (*Epipactis helleborine*), another orchid, but this has not appeared for several years and I fear it has gone now, possibly as a result of tidying, cutting and spraying. The majority of this wooded area is clothed with Ivy, commonly found in secondary woodland but absent from ancient stands. In the small line of wood behind Druids Lodge, just within the parish boundary, are several small specimens of Spurge Laurel (*Daphne laureola*), a rare native shrub. The greenish flowers can be seen in early February. Another early flower that occurs is Sweet Violet (*Viola odorata*) while on woodland edges grow Wild Onion (*Allium vineale*).

On the beech hanger above Asserton, there are undulations in the terrain which we understand to be the site of an old part of the village, now vanished, (a plague village perhaps?). When some of the large beeches blew down recently, the resulting clearing produced an open light area. A few years ago in early summer, following this, the area was covered in mauve blossoms of Dame's-violet (*Hesperis matronalis*). This is not a native plant, but typically a cottage garden flower that can become naturalised as an escape. This may have originated in long dormant seed from an old garden.

Recently planted are areas of conifer plantation and hybrid poplar along the river margin south of the Till towards Winterbourne Stoke. To the west side of the parish, Berwick Hill farm, which is largely given to arable, has three mature copses; Henry's Plantation, Middle Covert and The Lawn. In Middle Covert there are recently introduced Bluebells (*Hyacinthoides non-scripta*) and Common Dog Violet (*Viola riviniana*). There have been considerable new plantings of a variety of native trees along the track ways of Berwick Hill Farm in the last few years. These include a pleasing range of native

species, listed in the Table in the previous issue. These are in addition to the older coverts that are mainly Beech. In these older mature woodlands, there is a remarkable lack of variety in the ground flora, not even a celandine, the area being dominated by nettles.

Arable

Much of the parish is utilised as arable, and following modern agricultural practices, is extremely clean, devoid of all but a few annual weed species around the edges. In a small corner of a field on Berwick Hill Farm near Henry's covert, there appeared in 1998, a small corner that had missed the herbicide spray and allowed a few plants of Venus's-looking-glass (*Legousia hybrida*) to flower, probably an inter-mittant appearance from long buried seed. It was not in evidence in 1999. The plant produces tiny blue flowers that open in sunshine above a long capsule which opens by three pores. The seeds are shining and may have given rise to the curious name. Otherwise the arable fields are remarkably clean and only in a few corners are found Common Poppy (*Papaver rhoeas*), Garlic Mustard (*Alliaria petiolata*), Shepherd's-purse (*Capsella bursa-pastoris*), Field Forget-me-not (*Myosotis arvensis*), Fumitory (*Fumaria officinalis*), Henbit Deadnettle, (*Lamium amplexicale*) and Field Pansy (*Viola arvensis*). A considerable variety of species persist on the edges of farm tracks which are in predominantly arable areas. These are detailed in the lists of species in the table in the previous issue.

In 1990 there was a considerable population of Black-grass (*Alopecurus myosuroides*) in several of the cereal fields but this has not been a problem in more recent years.

In 1998, Druids Lodge Farm initiated a change of practice and several arable areas adjacent to the steeply sloping lynchets have been sown with a grass ley including some wildflower seed, which were then used as sheep pasture and now include the hitherto unused lynchet slopes. These may contain a seed bank of calcicole flowers that have been largely suppressed by herbicide spray drift from the adjacent arable. In 1998, beside an assemblage of typical annual weed species, among the Italian Rye-grass (*Lolium multiflorum*) there have appeared small numbers of Lady's Bedstraw (*Galium verum*), Meadow Vetchling (*Lathyrus pratensis*), Bird's-foot-trefoil (*Lotus corniculatus*), Black Medick (*Medicago lupulina*), Selfheal (*Prunella vulgaris*), Wild Mignonette (*Reseda lutea*), Salad Burnet (*Sanguisorba minor*), Bladder Campion (*Silene vulgaris*) and Bush Vetch (*Vicia sepium*) which may have originated in the seed mix.

Chalk downland remnants

Most of this terrain has been typically unimproved sheep pasture for much of its history, with unfenced downlands spread widely as described by W H Hudson in "A Shepherd's Life" (1910). During the second world war, much of these pastures were ploughed and converted to arable or improved grass leys. These conditions are hostile to the naturally occurring chalk plants, adapted as they are to an impoverished thin soil.

The segment on the ramparts of Yarnbury castle, an SSSI, that is included in the parish does represent good unimproved ancient turf of predominantly *Bromopsis erecta* (Upright Brome) community, with some *Festuca ovina*-*Helictotrichon pratense* (Sheeps-fescue-Meadow Oat-grass) community. Although it is exceedingly hard-grazed it still supports a wonderful spectrum of typical chalk downland plants. I have recorded 70 species in this area and these are listed in the previous issue; they include Fragrant Orchid (*Gymnadenia conopsea*), Cowslip (*Primula veris*), Chalk Milkwort (*Polygala calcarea*), Squinancywort (*Asperula cynanchica*), Wild Thyme (*Thymus polytrichus*), Dwarf Thistle (*Cirsium acaule*), Eye-bright (*Euphrasia* sp), Dropwort (*Filipendula vulgaris*), Lady's Bedstraw (*Galium verum*), Common Rockrose (*Helianthemum nummularium*), Mouse-ear-hawkweed (*Pilosella officinarum*), Rough and Autumn Hawkbit (*Leontodon hispidus* and *L. autumnalis*), Fairy Flax (*Linum catharticum*), Burnet Saxifrage (*Pimpinella saxifraga*), Hoary Plantain (*Plantago media*) and Salad Burnet (*Sanguisorba minor*). One notable species was Burnt Orchid (*Orchis ustulata*) of which there were 50 spikes showing in June, 1999. Another was the Field Fleawort (*Tephrosia integrifolia* ssp *integrifolia*). I was also delighted to find in the turf the stiff yellowish leaves of Dwarf Sedge (*Carex humilis*). This may not be the most exciting plant to look at as the flower is insignificant and appears in March. What is of interest is that it is an indicator of truly ancient turf possibly showing its ancestry directly back to the Iron Age or beyond. It is not a plant that travels, setting almost no seed, and its vegetative spread is extremely slow. It is moreover almost entirely confined to South Wiltshire so that its presence here is interesting. It also grows on the turf around Stonehenge and on the neighbouring National Nature Reserve, Parsonage Down. One I could not locate was the Bastard-toadflax (*Thesium humifusum*), a scarce semi-parasite that had been recorded here previously. The centre of the ring on the castle has been improved or sown as a ley *Lolium perenne*-*Cynosurus cristatus* (Perennial Rye-grass-Crested Dog's-tail) mixture and has a very limited flora. The outer ramparts are considerably richer in number and variety of species than the inner rampart but there is very little of botanical interest in the

improved central area.

Most abundant species

Although perhaps most interest is focused on the unusual, the most abundant plant in the parish and present in every compartment listed is *Urtica dioica*, the Common Nettle. This is dominant in the Berwick Hill Farm coverts (List C in the earlier article) where it excludes almost all other species. It is abundant along all the farm tracks, and in the churchyard, and frequent in Asserton Woods although here the Ivy (*Hedera helix*) is holding its own. Another very common plant is Cleavers (*Galium aparine*), again frequent in most compartments and present in all of them. Broad-leaved Dock (*Rumex obtusifolius*) is universal, but abundant in the unmanaged part of the churchyard. Cow Parsley (*Anthriscus sylvestris*) is another contender for the commonest and is particularly abundant in the churchyard where it makes a most attractive display surrounding the old grave stones in the spring. Lesser Burdock (*Arctium minus*), Creeping and Spear Thistle (*Cirsium arvense* and *C. vulgare*), Hogweed (*Heracleum sphondylium*), White Dead-nettle (*Lamium album*), Greater and Ribwort Plantain (*Plantago major* and *P. lanceolata*), and Dandelion (*Taraxacum* spp.) all make an appearance in every sector. Cock's-foot (*Dactylis glomerata*) is ubiquitous and frequent in most sectors.

Neighbouring habitats.

There is a vestige of an historic plant, but just outside the confines of the parish, that grows behind the chicken farm near Winterbourne Stoke, and that is the Dwarf Elder (*Sambucus ebulus*). It was recorded at this site by John Aubrey and has persisted ever since although most of the stand was removed when a vegetable garden was extended and only a small remnant is still to be found along the edge of the foot-path. This is a perennial herbaceous plant and thus dies back in winter; it should not be confused with the true Elder (*Sambucus nigra*).

Another remnant of unimproved old downland flora that does survive is on a small section of the bank of the school path just outside the parish boundary. Here struggle to survive Lady's Bedstraw (*Galium verum*), Common and Greater Knapweed (*Centaurea nigra* and *C. scabiosa*), Wild Basil (*Clinopodium vulgare*), Common Rock-rose (*Helianthemum nummularium*), Field Scabious (*Knautia arvensis*), Hoary Plantain (*Plantago media*), and Devil's-bit Scabious (*Succisa pratense*). A few of these can be found occasionally along some of the trackways, such as Langford Way and also on the Lynchets, but these areas are exposed to spray drift and are all but gone. One small but rich area survives in the chalk-pits by Berwick School

although this again is outside the parish boundary and is in Stapleford parish. This harbours, in addition, Yarrow (*Achillea millefolium*), Agrimony (*Agrimonia eupatoria*), Kidney Vetch (*Anthyllis vulneraria*), Horseshoe Vetch (*Hippocrepis comosa*), Common Vetch (*Vicia sativa*), Bird's-foot-trefoil (*Lotus corniculatus*), Small Scabious (*Scabiosa columbaria*), Salad Burnet (*Sanguisorba minor*), Dropwort (*Filipendula vulgare*), Yellow-rattle (*Rhinanthus minor*), Wild Mignonette (*Reseda lutea*), Chalk Milkwort (*Polygala calcarea*), Burnet Saxifrage (*Pimpinella saxifraga*), Sainfoin (*Onobrychis viciifolia*), Rough Hawkbit (*Leontodon hispidus*) and Knapweed Broomrape (*Orobanche elatior*). This comprises a fair spectrum of typical chalk flowers and is a treasure we must hope can be preserved.

Another remarkable area, again marginally outside the parish, is on the verge of the A303 just below Yarnbury Castle. In June the whole south-facing bank is golden with a brilliant swathe of Horseshoe Vetch (*Hippocrepis comosa*) which is not a common plant. There is an amazing number of unimproved grassland species present, including the Lesser Broomrape (*Orobanche minor*), Yellow-wort (*Blackstonia perfoliata*), a scarce member of the gentian family, Fragrant and Common Spotted Orchids (*Gymnadenia conopsea*, and *Dactylorhiza fuchsii*), Kidney Vetch (*Anthyllis vulneraria*), Cowslips (*Primula veris*) and Woolly Thistle (*Cirsium eriophorum*). This is a dramatic thistle with a large purple heads covered in a veil of white hair and with large spectacular leaves with four ranks of leaflets. There are also Wild Carrot (*Daucus carota*), Dropwort (*Filipendula vulgare*), Perforate St. John's wort (*Hypericum perforatum*), Rough Hawkbit (*Leontodon hispidus*), Wild Mignonette (*Reseda lutea*), Harebell (*Campanula rotundifolia*) and Clustered Bellflower (*Campanula glomerata*). All these are flowering happily alongside the thunderous roar of the trunk road traffic!

The Horseshoe Vetch (*Hippocrepis comosa*), growing on this impoverished thin chalk provides the ideal habitat for the rare Adonis Blue butterfly and there is

a very healthy colony that produces two broods each year. Its rarity relates to its exacting requirements. Apart from the vetch food plant for its caterpillars, the butterfly cannot tolerate a sward more than 2cms tall, requires bare chalk for basking to absorb sunlight and the presence of the yellow meadow ant to nurture the caterpillars. For this reason the verge has been designated 'protected' and is specially managed by the County Council and the Wiltshire Wildlife Trust to ensure the well-being of this colony of butterflies. Measures have been carried out to create open areas of chalk and some of the backing scrub of Dogwood and Hawthorn has been cleared to maintain a light open aspect for the Horseshoe Vetch, which would otherwise eventually be shaded out. As far as I recollect, this new section of the A303 was created in the 60's/70's, cutting into the old downland. The banks on the central reservation and the south side of the road have entirely different ruderal floras.

Conclusion

This and the earlier article are jointly a statement of the condition of the flora in this parish at the turn of the millennium and may stand as a reference point in the future when agricultural or building requirements may affect changes. It is fairly typical of villages in South Wiltshire overlying the chalk soil.

Acknowledgements

I wish to acknowledge the great assistance and advice of Dick Last in the preparation of this text and his company while walking the paths of the parish.

References

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- Stace C (1991) *New Flora of the British Isles*. Cambridge University Press, Cambridge.

PLANT RECORDS 1999

Explanatory notes

- Y The following is a selection from the records of Wiltshire Botanical Society in 1999. Records of common species and updates of the 1993 Wiltshire Flora are not included unless there is some special reason. Unconfirmed records have been omitted.
 - Y An asterisk indicates that the species is not native.
 - Y Where a record is identified as being a new 10 km square record, this refers to the period since the flora mapping in the 1980s and 1990s for the 1993 Wiltshire Flora and recorded there. There was no recording on this basis before this time.
 - Y For new county and vice-county records, an unqualified statement means that it is the first record ever, as far as is known to the vice-county recorders. Where the word "recent" is inserted, it means that it is the first since the flora mapping, but had been recorded before this period..
 - Y Where a recording square is partly in Wiltshire and partly outside, any comment on the status of a record in that square applies only to the part within Wiltshire.
 - Y Recorders are identified by initials as follows:
- | | |
|-------------------------|---|
| AD - A Dale | MH - Malcolm Hardstaff |
| AH - Ann Hutchison | MN - Mike Neville |
| AM - Tony Mundell | MP - Maureen Ponting |
| BG - Beatrice Gillam | MXS - Mike Stone |
| BL - Barbara Last | PD - Paul Darby |
| CM - Christine Mcquitty | PG - P Goodhugh |
| DaP - David Pearman | PMW - Pat Woodruffe |
| DG - Dave Green | PW - Phil Wilson |
| DJW - Jeremy Wood | RJL - R J Laurence |
| DOG - Daphne Graiff | RMV - Roger Veall |
| GW - G Ward | SW - Steve Whitworth |
| HK - Humphrey Kay | SY - Simon Young |
| JP - John Presland | TC - Tom Cairns |
| JN - Joy Newton | TG - T Gimlette |
| JEO - Jack Oliver | TK - T Kilburn |
| JO - John Ounsted | VH - V Hopkinson |
| JW - Jean Wall | WBS - Wiltshire Botanical Society (excursion) |
| LMS - L M Spalton | |
| MdeT - M de Their | |

VC 7 records

- Barbarea verna** * - JP, Turleigh, locally abundant on building site, new recent vc record.
- Berberis vulgaris** * - JEO, on track east of Clatford Hall, possibly planted, new recent 10km square record.
- Briza maxima** * - JEO, Chiseldon, S of dismantled railway track, new county record.
- Bromus secalinus** * - DG/SW/TC, Easton Grey, in arable crop, 2nd recent vc record.
- Carex filiformis** - DG, Clattinger Farm, huge

increase, a new population discovered in 2nd pasture.
Coeloglossum viride - MN, Highworth, 50 spikes, new 10km record.

Coronopus didymus - JP, Turleigh, local on pavement, new recent 10km square record.

Cotoneaster horizontalis * - JEO, Swindon SW, W of Princess Margaret Hospital, pavements, walls and wall-angles, new 10km square record.

Cotoneaster sternianus * - JEO, Swindon SW, W of Princess Margaret Hospital; Baydon, on bare bank of road adjacent to M4 [new 10 km square records].

Daphne x burkwoodii (D. caucasia x D. cneorum) * - JP, Swindon west of Penhill, Seven Fields Nature Reserve, planted in mid-80s but well naturalised, new county record.

Fallopia sachalinensis * - JEO, Spy Park, S & W of the lake for 55yds+, new county record.

Festuca rubra ssp megastachys * - JEO, Swindon NW, path sides and urban stonework, uncommon; Draycott Foliat Camp, paths and residual stonework, uncommon; Lockeridge, colony now almost extinct under shrubs [new recent county records].

Galega officinalis * - DG, Swindon, Hannington, disused railway track, 1st seen 1996.

Hypericum androsaemum - JEO, Savernake Forest, S of White Rd, 3 plants only, new recent 10km square record.

Lagarosiphon major * - JEO, Avebury, small pond and open ditches, new 10km square record.

Lemna minuta * - JEO, Savernake Forest, Bitham Pond and Avebury, small pond and open ditches, new 10km square records.

Lepidium sativum * - JP, Bradford-on-Avon, one plant between pavement and wall, new recent 10km square record.

Lolium x boucheanum (L. perenne x L. multiflorum) - JEO, at several locations, Lockeridge, Pewsey, Penhill, Swindon NW, Chiseldon, Callow Hill, Marlborough, Knoll Down and Calne.

Meconopsis cambrica * - JEO, West Woods, around N forestry track entrance, also 1997 and 1998, new recent 10km record.

Mentha x villosa nervata (M. spicata x M. longifolia) * - JP, Turleigh one plant, meadow, new recent county record.

Menyanthes trifoliata - JEO, Savernake Forest, Crabtree Common Pond, presumed past introduction, new 10km square record.

Myriophyllum aquaticum * - JN, Ramsbury, pond in WWT tiny reserve behind High St., 2nd vc record.

Phalaris aquatica * - DG /DaP, Heddington, Oliver's Castle, 2 cornfield sites, new 10km square record.

Polygonatum multiflorum - JEO, Ogbourne Maizey, with Helleborus viridis.

Polemonium caeruleum * - JN, Chisbury Wood, at edge of forest path a long way from vehicular access, several plants, white form, established, new recent vc record.

Populus nigra - DG, Cerney Wick; DG, Cotswold

Water Park adjacent to Glos. border; DG, between All Cannings and Horton, Kennet and Avon Canal.

Primula x polyantha (P. vulgaris x P. veris) - JEO, Great Bedwyn NW, 2 plants between populations of the parents, new recent 10 km square record.

Prunus padus * - JEO, Savernake Forest, 2 young trees, new 10km square record.

Quercus cerris * - JEO, Savernake Forest, Arboretum area, young saplings from seed, also 15yds west of 12-0'Clock Drive, huge specimen. [New 10km records]

Quercus x rosacea (Q. petraea x Q. robur) * - JEO, Savernake Forest, NNW of White Rd, E of A346.

Ranunculus lingua * - JEO, Savernake Forest, Crabtree Common Pond, presumed past introduction, 2nd recent vc record.

Ranunculus omiophyllus - JN, Chisbury Wood, in ruts for 3rd year, prolific, new vc record, but species has not been accurately determined in the past.

Rapistrum rugosum - JP, Winsley, abandoned pavement, 1 plant, 2nd recent vc record.

Rorippa microphylla - JP, Winsley, small abandoned agricultural pond, abundant, new 10km record.

Rosa stylosa - JN, Compton Bassett, nr Cherhill, 3 very large old bushes, new 10km record.

Salix cinerea ssp cinerea - TK, Swindon, front garden site, 2 single bushes, new county record.

Salix eleagnos * - JEO, Swindon NW, layering in rubble, new county record.

Salix x reichardtii (S. caprea x S. cinerea) - JEO, Swindon NW, dismantled railway line, common, 2nd vc record.

Salix x sericans (S. viminalis x S. caprea) - JEO, Clatford, by R. Kennet.

Salix x smithiana (S. viminalis x cinerea) - JEO, Clatford, by R. Kennet, 2nd vc record.

Solidago virgaurea * - PD/JEO, Somerford Common Woods, 3rd recent vc record.

Spiranthes spiralis - BG, King's Play Hill near Juniper, 8 spikes.

Thalictrum flavum - JN, Chilton Foliat, many new sites.

Verbascum virgatum - JP, Winsley, between wall and pavemen, one plant, new 10km record.

Vc 8 Records

Acer platanoides - JEO, common in Urchfont and neighbourhood, trees, saplings and seedlings, new 10 km square record; JEO, common in Pewsey and Upavon, trees, saplings and seedlings, new 10 km square record.

Adonis annua * - DJW/PMW, Downton, New Court Down, large number; SY, Lower Woodford, Salterton Farm, 2 plants, new 10 km square record.

Agrimonia procera - RMV, Landford, edge of field.

Agrostis gigantea - RMV, Landford, near A36, edge

of arable field, new 10k record.

Aira praecox - RMV, Plaitford Common, north end, dry heathland.

Amaranthus albus - PW, Hamptworth, large arable field, new county record.

Anchusa arvensis - PW, Hamptworth, arable field.

Anthemis cotula - DJW/PMW, S of Odstock, Clearbury Down, many plants; DJW/PMW, Whiteparish, Tower Farm, several plants.

Barbarea verna * - RMV, West Wellow, footpath by A36, new recent county record.

Berula erecta - JP, N of Westbury, lake margin.

Bidens cernua - AD, Stratford-sub-castle, by river.

Bidens tripartita - RMV, West Wellow, R. Blackwater, damp meadow, new 10k record.

Bromus hordeaceus 'longipedicellatus' - LMS, E of Brixton Deverill, between Pertwood Down and Little Down, new county record.

Carex rostrata - RMV, Plaitford Common, north end, in Alder carr, new 10k record.

Cephalanthera damasonium - PMW, between Winterbournes and West Tytherley, Bentley Wood.

Cerastium diffusum - PW, Porton, Battery Hill, on anthills, new recent vc record.

Chionodoxa sp * - TG, Winterbourne Dauntsey, Churchyard, naturalised.

Chrysanthemum segetum - CM, Shalbourne, Carver's Hill; DJW/PMW, Alderbury, field.

Cirsium acaule var caulescens - JH, Salisbury, Old Sarum ramparts, new 10 km square record.

Cirsium tuberosum - HK, North Tidworth, Haxton Down, one large clump, Red Data Book species, 1st record this part of SPTA, new 10 km square record.

Cochlearia danica - JO, S of Bodenham, abundant by A338, new 10 km square record.

Dactylorhiza incarnata - PW, Quidhampton.

Daphne laureola - RMV, West Wellow, 2 in roadside hedge, new 10k record.

Datura stramonium * - BL, Shrewton, Nettley Farm, 100's in pig field, new 10 km square record.

Diploxys muralis * - BL Devizes, car park by station, new 10 km square record.

Echinochloa crusgalli * - PW, Hamptworth, large arable field, locally abundant, 2nd vc record.

Erica tetralix - PMW, between Winterbournes and West Tytherley, Bentley Wood, new site.

Euphorbia lathyris - MXS, Boscombe Down, internal fence line, new 10 km square record.

Euphorbia platyphyllos - DJW, Whiteparish, Alderstone Farm, c. 300 plants; DJW/PMW, Whiteparish, Moor Farm, several hundred plants; PMW, between Winterbournes and West Tytherley, Bentley Wood, several plants just outside wood in harvested cornfield [new 10 km square records for nationally scarce plant].

Filago vulgaris - DJW, Whiteparish, Tower Farm, large patch by gateway on sandy, slightly acid ground, new 10 km square record, records for this species declining - 1st vc record since 1985.

Fumaria densiflora - DJW/PMW, Downton, New

Court Down, a few plants; DJW/PMW, Downton, Wick Farm, very common; DJW/PMW, Whiteparish, Dean Hill Farm, several plants [new 10 km square records for nationally scarce plant].

Fumaria parviflora - JN/WBS, Cholderton, field border, new 10 km square record.

Gentianella anglica ssp anglica - PW, S of Wyllye, Bilbury Farm.

Geranium pusillum - JN/WBS, Cholderton, field border, 5", new 10 km square record.

Gunnera tinctoria * - RMV, West Wellow Common, east edge, in small stream, ?from nearby garden.

Hemerocallis fulva * RMV, Landford, A36, roadside between ditch and hedge, new county record.

Hieracium acuminatum - RMV, West Wellow, 1 plant in roadside hedge, 2nd vice-county record.

Hieracium sabaudum - BL, E of Pitton, Hound Wood, miles from habitation, new 10 km square record.

Hyacinthoides hispanica x non-scripta - RMV, West Wellow, roadside, established, new 10k record.

Hypericum x desetangii (H. maculatum x H. perforatum) - RMV, West Wellow, hedge, 3rd vc record.

Hypericum pulchrum -RMV, East Winterslow, Roche Court, woodland; RMV, Plaitford, Clayford Common, in scrub beside footpath.

Impatiens glandulifera * - AH, Horningsham, cottage verge, new 10 km square record; MdeT, Britford, near sluices.

Kickxia elatine - DJW/PMW, Alderbury, fairly common.

Kickxia spuria - DJW/PMW, Alderbury, with K. elatine at most of same sites.

Lamiastrum galeobdolon ssp argentatum * - JEO, Pewsey Hill Farm, c. 15m spread on semishaded trackside, new 10 km square record; JEO, S of Broad Chalke, Chickengrove Bottom, woodland and shaded track.

Lamium maculatum * - BL, S of Coombe Bissett, Great Yew Track, big trackside patch, unusual site.

Lathyrus latifolius * - BL, Salisbury, Churchfields, new 10k record.

Legousia hybrida - DJW/PMW, Whiteparish, Witherington Down, one plant; DJW/PMW, nr. Odstock Hospital, one plant; DJW/PMW, N of Whiteparish, Dean Hill Farm, one plant; JN/WBS, Cholderton, field border, abundant; BL, Burcombe, field edge.

Lysimachia vulgaris - BL, Chilmark, Pitt Wood.

Luzula multiflora ssp congesta - RMV West Wellow, on grassy roadside bank, new 10k record.

Malva neglecta - PW, Hamptworth, arable field.

Melissa officinalis * - RMV, Plaitford, nr. Clayford Common, one plant near field gate, new 10 km square record.

Mentha x verticillata (M. aquatica x arvensis) - RMV, Landford, roadside verge; RMV, Plaitford, edge of Plaitford Common and adjoining ditch.

Minuartia hybrida - JO/AM, Everleigh, Everleigh Down, 2 on chalk track, nationally scarce species.

Muscari armeniacum * - RMV, West Wellow, casual on roadside verge, new county record.
Myosotis laxa - RMV, Landford, A36, edge of pond.
Myosurus minimus - CM, Shalbourne, Carver's Hill, new 10 km square record.
Neottia nidus-avis - PW, Landford, Langley Wood, new site.
Ononis spinosa - JP, N of Tilshead, MOD land, abundant.
Ophioglossum vulgatum - BL, Berwick St James, wet meadow, one plant.
Ophrys apifera - AD, Firs Road, protected verge near Thorny Down, A 30; BG, Tilshead, Horse Down SPTA [both new 10 km square records]; VH, Ansty, near Shave Lane, 19 scattered spikes.
Panicum capillare * - GW, Horningsham, in quantity in maize, new recent county record, new vc record.
Papaver argemone - DJW, Whiteparish, Witherington Down, a single plant on +arable field edge; DJW/PMW, Whiteparish, Witherington Down, 2 plants [both new 10 km square records for this nationally scarce plant]; DJW/PMW, nr. Odstock Hospital, a few plants; JN/WBS, Cholderton, field border, occasional, 25+.
Papaver hybridum - DJW/PMW, Nr Odstock Hospital, 25 plants; JN/WBS, Cholderton, field border, frequent, 130+ [both new 10 km square records]; DJW/PMW, N of Whiteparish, Dean Hill Farm, several plants..
Paris quadrifolia - PMW, between Winterbournes and West Tytherley, Bentley Wood.
Petasites fragrans * - BL, Salisbury, City centre car park, by pond, old site; DOG, Idmiston.
Petroselinum segetum - SY, Lower Woodford, Salterton Farm. .
Phytolacca sp* - AD, Stratford-sub-Castle, disturbed soil, several easily confused species occur in GB.
Plantago coronopus - PW, Salisbury, one plant in crack in car park tarmac, new site - 2nd for Salisbury.
Platanthera chlorantha - VH, Ansty, 12+ spikes.
Poa angustifolia - PMW, between Winterbournes and West Tytherley, Bentley Wood, new 10 km square record.
Polygonatum multiflorum - RMV, Cowesfield Green in woodland.

Primula x polyantha cultivar - RMV, West Wellow, casual, new 10k record.
Prunus domestica ssp italica * - RMV, one tree in hedgerow, West Wellow, Woodington Fishery.
Ranunculus aquatilis - JP, N of Westbury, marsh, local.
Ranunculus parviflorus * - DJW/PMW, Alderbury, roadside several plants, previously recorded at Alderbury (Preston 1888) but not refound during 1980s flora mapping, new recent county record.
Ranunculus peltatus - JP, Poulshot Common, pond, locally abundant.
Saxifraga tridactylites - JO, Salisbury, Bishop's Mill S, abundant.
Silene noctiflora - DJW/PMW, Whiteparish, Witherington Down, one plant; JN/WBS, Cholderton, field border, 1" [new 10 km square records for this nationally scarce plant].
Soleirolia soleirolii * - JO, Salisbury, abundant on car park wall, new 10 km square record.
Sparganium erectum ssp neglectum - RMV, West Wellow, R. Blackwater, in river near bank.
Spergularia rubra - RMV, Nomansland, Penn Common, in short turf.
Stachys arvensis - JW/PMW, SW of Whiteparish, Moor Farm, many plants.
Symphytum grandiflorum * - JEO/MP, Pewsey Hill Farm, flanking small (?)private road, hedgerow and trackside, c.10m spread, semi-shaded, new 10 km square record.
Symphytum x uplandicum * - AH, Bodenham, verge.
Thlaspi arvense - DJW, Whiteparish, Tower Farm, single plant; JN/WBS, Cholderton, field border, occasional, 50'+ [both new 10 km square records].
Thymus pulegioides - DG, Ham Hill; PW, Ebbesbourne Wake, Church Bottom, lots on both sides of valley [both new 10 km square records].
Tilia platyphyllos - PMW, between Winterbournes and West Tytherley, Bentley Wood, nationally scarce plant.
Trifolium incarnatum * - JN/WBS, Cholderton, field border.
Valerianella dentata - DJW/PMW, Whiteparish, Witherington Down, many plants; DJW/PMW, nr Odstock Hospital, a few plants.
Veronica scutellata - RMV, Landford, A36, edge of pond.
Vulpia myuros - BL, Berwick St James, in crack in paving, new 10 km square record.
Vinca major * - RMV, West Wellow, established on roadside verge near houses, new 10k record.
Vinca minor * - RMV, West Wellow, established on roadside verge near houses, new 10k record.

PLANT RECORDS UPDATE

VC 8 1995-1998

See page 40 for introductory details. Additional recorders not mentioned there are:

PG - P Green RVL - RV Lansdown
IG - I Green DSG - David Simpson
WWT - Wiltshire Wildlife Trust

1995

Monotropa hypopitys - PMW, between Winterbournes and West Tytherley, Bentley Wood.

1996

Carex strigosa - PMW, between Winterbournes and West Tytherley, Bentley Wood.

Thymus pulegioides - PW, Tisbury, Lawn Farm, limestone grassland, new 10 km square record.

1997

Arabis hirsuta - PG/IG, Maiden Bradley, Long Knoll, bare chalk on N face, 1 plant, new 10 km square record; WWT/SW, Mere, White Sheet Hill, small colony on top of ramparts, old site.

Callitriche platycarpa - RVL, Seend, pond near Kennet & Avon Canal, new 10 km square record.

Dianthus armeria - PW, N of Tilshead, Warren Down, single plant, fire damaged, id. confirmed 1999 by growing from a seed.

1998

Anagallis arvensis ssp caerulea - Netherhampton, record should not have been included in last issue because no specimen available.

Aster versicolor - BL, Tilshead, on A360 verge, Aster spp treated as agg. in Flora, but this species not mentioned.

Ceratophyllum demersum - DSG, Wilton, Flouse Hole, in pond with Rorippa, new 10 km square record.

Cicerbita macrophylla ssp uralensis - JEO, Bratton S, roadsides, new 10 km square record.

Eleocharis quinqueflora - RMV, Furzley Bog, Hants, among E. multicaulis, 3rd record in 70 years.

Euphorbia platyphyllos - PW, Alderbury, Junction Road, with abundant Chrysanthemum segetum, new 10 km square record.

Hypericum androsaemum - BL, Vernditch, new 10 km square record.

Mentha x smithiana (Mentha arvensis x aquatica

x spicata) - DOG, Porton, Isle of Wight woods, unusual habitat, new 10 km square record.

Misopates orontium - PW, Alderbury, Junction Road, new 10 km square record.

Oenanthe pimpinelloides - AJS, West Knoyle, near Hickman's Cottage.

Ophrys apifera - PGo, W of Amesbury, N bank of A303 with Pyramidal, Common Spotted and Southern Marsh Orchids, new 10 km square record; West Lavington, one in meadow, new 10 km square record; PMW/DJW, south of Berwick St James, Rotherley Bottom, two plants, new 10 km square record; BL, Broadchalke, Middleton Down, new location; BL, Amesbury, road verge, new 10 km square record.

Ranunculus aquatilis - PMW/DJW, south of Berwick St John - not Berwick St James as last issue.