Central Chilterns Botany Group: Reports on 2023 Field Meetings

2 January: New Year Flower Hunt

We spent 1½ hours walking from Holy Trinity church in Prestwood along Wycombe Road, Lodge Lane, Nairdwood Lane and Church Path, on a pleasant sunny day not unduly cold for the time of year (7°C). Flowers (which had to be open to release pollen to count) were quite sparse. We recorded 13 different species altogether.

Annual meadow-grass *Poa annua* (this was universally in flower wherever we saw it)

Barren strawberry *Potentilla sterilis* (one group in flower by church wall)

Chickweed Stellaria media (one plant in churchyard and one on Lodge Lane)

Daisy Bellis perennis (this was commonly in flower in grass verge and lawns along Lodge Lane)

Dandelion *Taraxacum officinale* (just one found in full flower along Lodge Lane)

Gorse *Ulex europaeus* (along edge of Lawrence Grove)

Groundsel Senecio vulgaris (this was universally in flower wherever we saw it)

Hazel Corylus avellana (one tree in full flower in the churchyard boundary)

Meadow buttercup Ranunculus acris (one plant in flower beside Wycombe Road)

Petty spurge Euphorbia peplus (several in flower along Lodge Lane)

Primrose Primula vulgaris (one plant in flower in wildflower meadow section of churchyard)

Red dead-nettle Lamium purpureum (this was universally in flower wherever we saw it)

Shepherd's purse Capsella bursa-pastoris (along Lodge Lane)

There were also three that "got away".

Common field speedwell *Veronica persica* (in bud and very close to opening)

Stinking hellebore *Helleborus foetidus* (in full flower in a garden, but site along Church Path where we expected to record it as a garden escape had recently been cleared and only young leaves were evident)

Winter heliotrope *Petasites pyrenaicus* (in full flower in a garden, but verge along Nairdwood Lane where the plant grows as an escape had recently been cleared and again only leaves were on show).

2 February: Green Hellebore

Today was devoted to the Green Hellebore *Helleborus viridis*, one of our earliest-flowering natives, which can begin flowering in February. Locally we have records for four main sites. The large colony at Gomms Wood was visited in previous years by the Group, and found to be thriving. Two other woods have records - Piggotts Wood and Cross Coppice. It also grows under the hedge along Hampden Road and into a field on the Denner Hill side, but this colony has become inaccessible because of a change on ownership on the field side of the hedge and the narrow busy road with no verge on the other. These colonies are very separate and there are no intermediate records, so that they remain isolated. There seemed no reason why they are in some woods and not in others.

In the morning we visited Cross Coppice, accessible from a footpath through Hampden Bottom Farm. On the way we saw a large flock of fieldfares circling in the sky, a memory of winter, and heard skylarks singing, a forerunner of spring. No plants were flowering on our way (not even any recorded on the New Years Day Flower Hunt), the hazel now being over. Inside Cross Coppice (a mixed planted woodland) we discovered the colony of green hellebore at the northern end along the lowest north-east facing side for a stretch of some 35m, being in a slight depression 5m wide between the boundary bank and a second bank within the wood. It was not easy to find at first because we were looking for large clumps of leaves, but both leaves and flowerstems were for the most part still just emerging from the soil, although several plants were in flower. They were still so low that they were mostly covered by fallen leaves, especially of Red Oaks Quercus rubra, these leaves being very large and leathery and slow to rot down, rather like sycamore. Typical associates in the colony, also only just emerging, were Lesser Celandine Ficaria verna and Nettle Urtica dioica. The leaf shoots of Green Hellebore and stems with flowers and bracts emerged quite separately. One plant whose leaves had already grown tall had been eaten off by deer, so that hardly any leaf remained. Roe deer (and probably muntjac) were common in the wood, as they are in the surrounding district, and Hares were also seen. We found no hellebores in any other part of the wood, which, above the edge with the colony, was seemingly more acid, as indicated by abundant Foxgloves Digitalis purpurea. It was surmised that the soil at the edge was more calcareous. The geology map shows the wood as being wholly on the Middle Chalk, with the Chalk-rock band separating it from the Upper Chalk along the upper edge, so that the chalk has presumably been leached out of the soils of the upper part of the wood. Soil samples were taken to see if any difference could be detected between the section with the green hellebore and the upper wood. The results were spectacular (although they are based on single samples and might have been influenced by extraneous factors): for the major part of the wood the results were markedly acidic pH 4.5, while the lower edge among the green hellebore had a very high

pH of 8.0. This is particularly significant because the BSBI's summary of ecological data for each native species (PlantAtt) shows an average pH for green hellebore colonies precisely the same, 8.0.



At noon we moved to Piggotts Wood, which is much more extensive and therefore more difficult to search, but we did find the colony there in the lowest part of the wood well away from paths, in an extension of some 1.7 square metres that grows further down the slope than the rest of the wood, much lower than the main path. The plants here were more advanced than those at Cross Coppice, so that it was easier to spot the groups of leaves, although they were still low. The colony spread over the whole of this section of the wood, but nowhere beyond, and was most dense in a section of about 35m by 30m at SU 85736 98685. Here there was the most impressive display we had seen this day, especially in a series of depressions in this part. The number of plants must have run into thousands, so that it is the second largest population in the area after Gomms Wood. Although difficult to find, once in the right section the plants became immediately obvious. They grew with Dog's Mercury Mercurialis perennis, Woodruff Galium odoratum, Sanicle Sanicula europaea, and Bluebell Hyacinthoides non-scripta under Beech Fagus sylvatica. The geology map shows this extension as being entirely on the Middle Chalk, again with the Chalk-rock band along the upper margin. Above that the Upper Chalk is mostly covered with Clay-with-Flints. Further north another smaller extension of the wood also stretches further down slope, but the beech woodland here was totally devoid of vegetation, including no sign of green hellebore, and only the very lowest margin is shown as overlying the Middle Chalk. It seemed that the soil was so thin here, lying upon the hard Chalk-rock, and so lacking in humus, that it could support little or no ground vegetation.

According to PlantAtt green hellebore requires very high levels of calcium, plenty of shade, and moderate amounts of moisture and nitrogen. The chalk woodlands where it is found have relatively dry thin soils, so that green hellebore would be restricted to those parts that retain very high calcium levels, some moisture (like the depressions and hollows where it was most often found) and some humus (nitrogen), requirements that are quite exacting, which would explain its limited distribution within each wood. In Gomms Wood the greatest population of this plant is similarly concentrated on the lower edge just above a valley bottom and on Middle Chalk bordered above by Chalk-rock, where there are moderate amounts of moisture and

humus. Among plants with similar high calcium needs only Violet Helleborine *Epipactis purpurata*, shares green hellebore's need for shade. Interestingly, violet helleborine also occurs in Piggotts Wood, but in a completely different section, and its known populations nowhere coincide with green hellebore!

In this area of the Chilterns at least, the woodlands are almost all above the Chalk-rock line, on Upper Chalk covered for the most part in Clay-with-flints, rarely having been allowed to extend further down-slope because the Middle-chalk was ideal for agriculture. Woodlands lying on the chalk just below the Chalk-rock, and thus characterised by high levels of calcium, are rarely found, which explains why Green Hellebore has very few sites, even though it can be abundant where such woods do occur. Fields on the Chalk-rock and the adjacent Middle Chalk that have been long-term pasture include all our best chalk grassland reserves, including Prestwood Picnic Site and Chequers Reserve.

As we finished our walk we passed the buildings of Piggotts itself and the verges held Snowdrops *Galanthus nivalis*, the first flowers of which had just opened. This was Candlemas Day, when snowdrops are traditionally supposed to open for the first time. Some things, it seems, never change. Crocuses are also just appearing.

2 March: Early Spring Flowers

This was an amble around the old churchyard at the parish church of Great Missenden. Although we were lucky to have a clear sunny day, we were in the middle of a cold spell continuing from February, so there were few precocious early bloomers. As far as natives go, the only species where some plants had produced the odd flower were Lesser Celandine Ficaria verna, Primrose Primula vulgaris (although these were probably planted, as there was no colony within the woodland), Daisy Bellis perennis, and Dog's Mercury Mercurialis perennis (of which the male plants were conspicuous but it took much searching to find those with small hardly developed female flowers). Introduced bulb plants were much more evident, especially extensive patches of the Snowdrop Galanthus nivalis. There were also clumps of the "double-flowered" flore pleno form and the distinct alien G. woronowii with its broad lax bright green leaves. A few daffodils were just coming into flower. The "native" Narcissus pseudonarcissus ssp pseudonarcissus was first of all examined, with its characteristic twisted outer tepals. There were also the cultivars Tête-à-tête, February Gold and Telamonius Plenus, plus Narcissus minor, giving us a chance to try out Michael Crawley's key. Searching a clump of another bulb plant revealed the just-developing spike of Garden Grape Hyacinth *Muscari armeniacum*. Gladdon or Stinking Iris plants *Iris foetidissima* were also readily identified, although most had already dropped their conspicuous orange seeds (one quick smell of a broken leaf was sufficient to see how it got its name). Stinking Hellebore Helleborus foetidus grew nearby, its early flowers now developed into green pods. A few Siberian Squills Scilla siberica had also appeared, although they had not opened sufficiently yet to demonstrate fully their down-facing flowers.

The churchyard had not had a full survey since 1983, and only the more conspicuous plants were recorded in a quick survey in 2018, so we recorded some common native plants not recorded in 2018 by identifying them from their leaves. These were Yarrow *Achillea millefolium*, Ground elder *Aegopodium podagraria*, Lesser burdock *Arctium minus*, Spear thistle *Cirsium vulgare*, Common sorrel *Rumex acetosa*, and Ivy-leaved speedwell *Veronica hederifolia*. Some large vault-like graves are collapsing, but there also some old gravestones in good condition that have great historical interest. There were three erected by the Carringtons of Missenden Abbey that included one dedicated to their gamekeeper with an effusive inscription that must be one of the longest ever recorded on a gravestone. The area is also good for ferns, although at the moment only Hartstongue *Asplenium scolopendrium* and Soft Shield-fern *Polystichum setiferum* were in evidence. There are several trees of over 100 or 200 years, and an unusual old Spindle *Euonymus europaeus* that had been allowed to grow tall, with several wide trunks, which does not happen in its usual hedgerow habitat. There is much Bramble *Rubus fruticosus* agg. and some encroaching Lesser Periwinkle *Vinca minor* (with a few flowers) that will be a conservation problem.

At the top of the churchyard we crossed the A-road to the wood on the other side. As a result of our last event, we had worked out that conditions suitable for Green Hellebore *Helleborus viridis* existed in one small section of this wood. We found the chalk-rock (lumps excavated by badgers are heavy and hard - they cannot be scratched with one's nails like other chalk), but the available area was small and had no evidence of green hellebore. On one of the chalk-rock stones two woodland snails were noticed - the Lesser Bulin *Merdigera* (formerly *Ena*) *obscura*, associated with undisturbed areas in shade on chalk, and with only 5 previous records in our area, and 'Common' Chrysalis Snail *Lauria cylindracea* often in woods on chalk with exposed rocks, with only one previous local record. This site would obviously repay further searches for old chalk woodland snails. By the roadside outside the wood were leaves, probably of Creeping Comfrey *Symphytum grandiflorum*,

with prominent white spots that proved under the lens to be 'cystolithic trichomes', white swellings each of which has a single erect hair from its centre. The function of these is not known for sure.

Back at the church we visited a number of trees. An ornamental crab *Malus* 'John Downie' had groups of hard woody excrescences on its twigs, the remnants of attack by the Woolly Aphid *Eriosoma lanigerum*. A silver lime *Tilia tomentosa* could be distinguished from the other common limes nearby, even without its distinctive leaves, by its lack of suckers. An uncommon Butternut *Juglans cinerea* tree from North America was also pointed out - a tree only usually found in this country in large collections. A Copper Beech *Fagus sylvatica* 'Purpurea' in the lowest corner was probably planted in the 17thC and is the oldest and largest beech in the area with a 4.8m girth.

8 April: Dandelions

We were lucky in having a sunny day for a stroll around Speen, where dandelions proved rather sparse on the ground, but there were enough to keep us busy, as each specimen took about half an hour to identify, even with the help of our instructors Jon Holt and Andy McVeigh. It confirmed our first year's experience that using the keys is not as straightforward as it might look, but expert help cleared up some issues, if only by confirming that even the experienced have to take great care in assessing all the characters. Unlike most botanical subjects, one cannot just "learn" dandelions in a few hours or even years. Jon stressed the importance with each find of photographing the specimen in all its parts - the leaf as a whole, the base of the leaf, the bracts beneath the flower-head, the flower itself - in the field, before these parts deteriorate. An attempt at ID can then be made using the key, but even Jon then sends his determination with the pictures to Professor Richards as referee for confirmation or otherwise. It is this confirmation that is an essential part of the learning process, but even after long experience it is seldom possible to name any dandelion by a cursory look at it.

As a result of this work, however, we were able to add twelve new species to our local database, our core area being largely a blank space on the national distribution maps. We also found that dandelion populations are very heterogeneous. Their seeds are light and scatter widely and most species need pretty much the same conditions (rather wet, fairly nutritious), so they get thoroughly mixed up This is something not really experienced with other plants (not even quite so much with brambles).

13 April: Prestwood Nature Reserve

Our main objective was to search for certain plants once recorded at Prestwood Picnic Site and Nature Reserve but not seen more recently. There were seven early flowerers and five shrubs/trees to check.

The first trees to check were two Alders on the western boundary, which had variously been recorded in the past as *Alnus sp.*, *A. incana*, and *A. x hybrida*. The cones were of the *incana* type and the emerging leaves were clearly pointed as in that species. The stalks to the cones, however, were not short or absent as in incana and like *glutinosa*. It was therefore concluded that they were the hybrid between these two, *x hybrida*, which is commonly planted Yew Taxus baccata was rediscovered at the west end of the site, just one specimen in a generally unvisited corner. We did not find Crack Willow, Silver Maple or Rowan [although the second of these was spotted later in the year]. Of the herbs we rediscovered Shepherd's-purse Capsella bursa-pastoris flowering in the car-park, but only as patches of plants about 1cm high, and thus looking quite untypical! There was also just a single small patch of Greater Periwinkle Vinca major at the edge of the car-park under thick shrubs, with tall-growing stems without flowers rather than the expected prostrate patch-forming form. It may have been deliberately cleared in the past as an invasive alien, but is clearly trying to re-establish itself. Lesser Celandine Ficaria verna was abundant in the lower part of the reserve by the road and may have been missed by recorders concentrating on the main site and visiting after flowering time. Early Dog-violet Viola reichenbachiana proved hard to find, out-frequented by Sweet and Hairy Violets, but was eventually tracked down in the shadier fringes. It could easily be overlooked, showing how hard it can be to carry out a complete inventory of the flora. We did not find Red Dead-nettle or Barren Strawberry, rather to our surprise, given how common both are in the vicinity and the fact they used to grow here. Nor did we see Silverweed or Pineappleweed that should have been easily recognisable in the vegetative state. Being sure about changes in the flora of a site, it is clear, is difficult, given the high probability that some species, especially the less prominent and more sparse, will be overlooked by any particular survey. Some species that might be thought to have disappeared may just be hiding!

27 April: Kingstreet Lane

This walk, which followed Kingstreet Lane, an ancient Anglo-Saxon green lane, from the top at Holmer Green to the bottom at Little Missenden, was intended to update the records for this important habitat, last surveyed in

1986. Unfortunately rain, which got increasingly heavy, did not provide ideal conditions for botanising. Even so we recorded a creditable number of plants (92) and could still appreciate the walk for its scenery, historic interest (the old medieval banks and laid boundary hedges still evident), and clear ecological zones (from flat ground on clay at the top, down through chalk woodland, continuing down between fields on chalk, and ending on the fertile river-plain.

The 1986 survey was carried out across the year, so we did not expect to see, or to be able to identify, all plants on the list in this one early visit. Nevertheless we saw 58 of the 101 recorded before, including good colonies of Moschatel *Adoxa moschatellina* and Toothwort *Lathraea squamaria* (the latter under coppiced hazel). Many of the "omissions" were grasses (11), which one would not expect to be able to record in April, and we would have been too early for some of the other "missing" plants too, although there were several that we would have expected to see and did not. Some may have been overlooked, but we did look hard for Spurge-laurel *Daphne laureola*, for instance, and it should have been obvious enough. At the same time, we added 34 new records. Many of these "new" plants were undoubtedly overlooked previously, but some were obvious enough to be surprising omissions (e.g. Bramble, Ash, Foxglove), while ferns seem to have been ignored altogether. Some plants were probably new invaders, however, such as Garden Bluebells and the Garden Yellow Archangel (which appears to have replaced the native form - one cannot be sure, of course, whether the previous surveyors were assiduous about recording the different subspecies, but on the other hand they did record the two forms of Lesser Celandine). Our "new" list includes two rarer species, Midland Hawthorn *Crataegus oxyacanthoides* and Orpine *Hylotelephium telephium*, both of which were well removed from housing and could well be native.

It is difficult to know, when comparing lists from different dates nearly 40 years apart, how much of the difference is due to real change and how much to the unreliability of this type of botanical recording - if one can fail to record bramble, one can miss anything. We really need to survey the lane again later in the year, as some of our current omissions, particularly the grasses, will then undoubtedly be re-found, so that we shall have a better idea of the real differences.

4 May: Monkton Wood

For this visit to Monkton Wood we took a list of 45 plants uncommon in the area that had at some time been recorded there. The wood is wholly on clay-with-flints, apart from a narrow chalk strip along its north-eastern edge beside the road. Being on clay, the more depressed parts tended in the past to be very boggy and in generally the soils are acidic. Many of the plants on the list had only been recorded in early surveys at the end of the 1970s and the beginning of the 1980s, although some had also been recorded in a 2013 survey by a Bucks County Council ecologist, in which one of us (Tony) had assisted.

Compared a cursory visit in 2016, the wood had considerably dried out and boggy areas were now both difficult to locate and very limited in extent. A general lack of ground cover and sparsity of herbs was immediately apparent. It seems likely that several of the wetland rarities have now become extinct there, largely because of climate warming, although there has sadly been a lack of conservation management, the woodland having been run solely for commercial forestry, including many evergreen plantations.

We headed first for a spot in the centre of the north part of the wood where there had been the largest swampy area. This was now disappointingly dry, although a small bare muddy pond survived containing young black tadpoles of the common toad, a species found spawning in the same pond seven years before. On one side was a plantation of Western Red-cedar *Thuja plicata* and in the open area there were many dwarf saplings of this species, presumably self-sown. This colony of "bonsai" trees had been seen in the same place in 2016. It is not clear whether the dwarfing of the trees, the tallest of which were no more than a metre and most considerably shorter, was due to the soil at this point or because of regular cutting to maintain the major ride which runs south from this point. It is interesting that these trees were hardly taller than they had been seven years earlier!

From here we followed the ride south. The ride had been "metalled" with coarse limestone chippings, making it relatively calcareous, thus radically changing the habitat along it. On each side were deep ditches where in the past most of the wetland ferns were concentrated, but now they were dry and virtually devoid of ferns. There were a couple of straggly plants of Gorse *Ulex europaeus*. There were many Silver Birch *Betula pendula*, and we searched for Downy Birch *Betula pubescens*. After several young trees that seemed to be intermediate in character (probable hybrids) we found one specimen that seemed to fit *pubescens*. Grey Willow *Salix cinerea* was also difficult to find among numerous Goat Willow *Salix caprea*, but one seedling was found and a sample of the leaves checked later to make sure. Most smaller plants were still in a very young state (plants largely being a week or so behind in growth this year), but along the ride we managed, with the help of

Poland's vegetative key, to relocate Slender St John's-wort Hypericum pulchrum, Greater Bird's-foot Trefoil Lotus pedunculatus, Corn Mint Mentha arvensis and one small clump of what appeared to be Hard Rush Juncus inflexus, not before recorded in the wood and perhaps an introduction with the calcareous stones. Small Poa in the ride gave rise to the speculation that they might include infirma, but samples taken for checking by two of us were quite clearly Annual Meadow-grass Poa annua from the size and shape of the anthers under a lens. From near the southern end of this ride we took a path west to the western edge of the wood, passing a depression where, among the abundant Soft Rush Juncus effusus was a lone plant of Narrow Buckler-fern Dryopteris carthusiana, which had disappeared from beside the main ride. Further along, Sticky Mouse-ear Cerastium glomeratum (a new record), Stellaria alsine Bog Stitchwort, and the locally rare Heath Speedwell Veronica officinalis were all discovered as very small plants. At the edge of the wood was an abundance of Southern Wood-rush Luzula forsteri and some of its more generally common relative Hairy Wood-rush L. pilosa, both recorded in the 2008 survey. At the north end of the wood we crossed it back by a path that follows a wide open area created by a line of telegraph poles. This was the best dry heath in the wood, with much more gorse, Heather Calluna vulgaris, Heath Bedstraw Galium saxatile, Broom Cytisus scoparius and clumps of very narrow leaves of Wood Meadow-grass Poa nemoralis. It was only as we reached the very end of this section that a lone stem of Heath Wood-rush Luzula multiflora was spotted. Other new records were Cherry-plum Prunus cerasifera, Yellow Iris Iris pseudacorus (one plant in a pond), Buddleja davidii, and Hoary Ragwort Jacobaea erucifolia, all likely to be recent invaders.

Of the original list of 45 uncommon species we re-located 15, many of them recorded for the first time in 45 years, a creditable number given the early season and dry conditions.

1st June: Cock Marsh

This all-day walk included chalk grassland slopes and the marshes and ponds below. One of the major highlights on the way was the Water Violet *Hottonia palustris*, many dozens of which were in full flower and ideal for photographs as long as you were prepared to wade through foot-high water to reach them. These unique plants of the Primulaceae family, whose flowers were indeed much more like primrose than violet, although pale violet in colour, have flower-spikes emerging from the water while the feathery whorled leaves float just below the surface, merging with the similar leaves of the Thread-leaved Crowfoot *Ranunculus trichophyllus*, also in flower.





Another highlight, although not botanical, was spotted while wading among the water violets - groups of fungi, growing on semi-submerged willow logs, that were unfamiliar. Not shown in most popular fungi books, these turned out to be the rare Tiger Sawgill *Lentinus tigrinus*, so-named because the gills have serrated edges.





The highlight of the chalk grassland was the prevalence of Meadow Saxifrage Saxifraga granulata scattered among Dwarf Thistle Cirsium acaule, Mouse-ear Hawkweed Pilosella officinarum, Salad Burnet Pimpinella saxifraga, Rock-rose Helianthemum nummularium and, after more searching, the small white flowers of Fairy Flax Linum catharticum and Squinancywort Asperula cynanchica. In one place we noticed yellow-green patches of grass devoid of other plants. A few of the grasses were beginning to flower and were clearly Torgrass Brachypodium pinnatum (separated into two species in many older works but now treated in the latest BSBI book on grasses as one species). This native grass spreads mainly by means of underground rhizomes and thus forms dense patches eliminating other flora. It was in the past kept under control by the grazing of rabbits and sheep, but reduction in keeping of sheep and myxomatosis has meant that this grass is now spreading more widely and endangering rich chalk grasslands. Once established it is virtually impossible to remove, so that grazing is essential to limiting the damage it causes.



Meadow Saxifrage

The marshes were scented by the strong odour of the ubiquitous Water Mint Mentha aquatica with its purplish leaves, while the leaves of Great Water Dock Rumex hydrolapathum and Water Plantain Alisma plantago-aquatica were prominent emerging from deeper water, while clumps of flowering Yellow Iris Iris pseudacorus were dotted all around Plants we examined in particular here included the veronicas, Brooklime Veronica beccabunga, Blue and Pink Water-speedwells V. catenata and V. anagallis-aquatica, and Marsh Speedwell V. scutellata; plus Lesser Spearwort Ranunculus flammula, Creeping Jenny Lysimachia nummularia, Common Spike-rush Eleocharis palustris, Marsh Bedstraw Galium paulstre (possibly all subspecies elongatum), Marsh Yellow-cress Rorippa palustre, the two water forget-me-nots Myosotis scorpioides and M. secunda and the sedges Hairy Sedge Carex hirta and Brown Sedge C. disticha. Tubular Water-dropwort Oenanthe fistulosa was found but not yet in flower. In the dry verge at the edge of the marsh we found low plants of Lady's Bedstraw Galium verum that had the distinctive "bobbles" of the galls caused by the gall-midge Geocrypta galii.



On the higher slopes near the car-park Hemp-agrimony *Eupatorium cannabinum* and Weld *Reseda luteola* were noted. This was an enjoyable change from the more familiar flora of the Bucks Chilterns that dominates most of our trips and gave us all a chance to visit flowers we rarely see.



Tony and Karen examining water-violets (photo Clare Padmore)

8th June: Frogmore Nature Reserve

We were met at the reserve by the warden and Marieke, a volunteer there, who ably conducted us through the three old meadows that compose the site, descending from dry chalk grassland down through wet, more or less acid, meadows bordering the River Chess. Marieke also supplied us with a list of the plants recently recorded there, which was quite comprehensive as far as flowering plants went, but did not include many of the woody species and grasses/sedge/rushes.

The list included some species that required further checking. One was *Dactylorhiza majalis*, which must surely have been a mistake, as this only grows in the extreme west of the country. We did see *D. praetermissa* Southern Marsh-orchid, however, along with some plants that seemed to be hybrids with spotted orchids. We observed Heath Spotted-orchid *D. maculata* and one hybrid specimen that certainly seemed to involve *praetermissa* and *maculata*, i.e. *D. x hallii*. Other hybrids seemed more likely to be *D. x grandis*, the hybrid with Common Spotted-orchid *D. fuchsii*. We did not see the latter on this occasion, but it has been recorded in the past. These hybrids are difficult to sort out from their physical appearance alone and DNA analysis is really needed (beyond the resources of the field botanist).

An *Alchemilla* (Lady's-mantle) had been recorded but the species was uncertain. We found one plant and it looked rather like the usual garden escape *A. mollis*, being abundantly hairy, but the leaf-shape was wrong. It had a very wide sinus where the stalk joins the leaf, whereas *mollis* has a narrow one, the leaf-edge being close to the stalk. It turned out to be Hairy Lady's-mantle *A. filicaulis ssp vestita*, the commonest of our native species, although all the native species are rare in this area. This was therefore one of the most important plants to preserve on this site.

There were two *Galium* (Bedstraw) species on the list, both with question-marks beside them. We were able to confirm Heath Bedstraw *G. saxatile* in the upper drier meadow. We came across another species in the wetter sections, but this did not correspond to the listed Fen Bedstraw *G. uliginosum*, and was puzzling to some of our members in the field. A sample turned out to be Marsh Bedstraw *G. palustre*. A week ago our group had been at Cock Marsh where we had also encountered *G. palustre*, but then it was the more vigorous subspecies *elongatum*, while the Frogmore specimens looked quite different, more slender with much smaller leaves, being the subspecies *palustre*. It may have been this that the listed fen bedstraw had been mistaken for. We did not see Hedge Bedstraw *Galium album*, but it could well have been there had we searched further. As for the heath bedstraw it was somewhat surprising to find it in the grass slope on chalk (along with the similarly acidophilous Tormentil *Potentilla erecta*), but they must either indicate local influences of recent acidic deposits, or more likely the leaching of chalk from the soil in some upper parts. At Cock Marsh we had similarly found Heath Speedwell *Veronica officinalis* common on the upper parts of the chalk slope.

We were too early to confirm Autumn Hawkbit, but this is quite likely to occur. We also saw no figworts *Scrophularia*, but there was no reason why both the listed species *nodosa* and *auriculata* should not be present. I was particularly disappointed that in our short time we did not come across any Eyebrights *Euphrasia* in order to fix the species (although *nemorosa* would be the overwhelming favourite). We did not see any Hairy Bittercress *Cardamine hirsuta*, but it is very likely to be present. We only saw a few violets and what we did examine proved to be the listed Common Dog-violet, so we were not able to confirm Hairy Violet *Viola hirta*, which would have been more obvious earlier in the year. We similarly also saw just one specimen of Knotgrass, which was growing unusually exuberantly in the shade and had no fruiting stems for confirmation of the species, although it looked to be *P. aviculare* (as listed). Others we could not refind were Marsh Willowherb *Epilobium palustre* Rough Hawksbeard *Crepis biennis*, Thale Cress *Arabidopsis thaliana* and Imperforate St John's-wort *Hypericum maculatum*. We were able to confirm the other queried species *Rumex acteosa* Common Sorrel, *Trifolium dubium* Lesser Trefoil, *Pilosella officinarum* Mouse-ear Hawkweed, Rough Hawkbit *Leontodon hispidus*, Smooth Hawksbeard *Crepis capillaris*, *Euphorbia amygdaloides* Wood Spurge and both *Hypericum perforatum* Perforate and *H. tetrapterum* Square-stemmed St John's-worts.

Additions to the list of flowering plants were *Pastinaca sativa* Wild Parsnip (common at the top edge), *Potentilla sterilis* Barren Strawberry, *Rumex conglomeratus* and *R. crispus* Clustered and Curled Docks, *Stellaria alsine* Bog Stitchwort, *Hyacinthoides x massartiana* Hybrid Bluebell, *Lemna minor* Lesser Duckweed, *Mentha arvensis* Corn Mint, and *Sonchus asper* and *S. oleraceus* Rough and Smooth Sow-thistles.

Additions to the very incomplete list of woody species were Blackthorn, Pedunculate Oak, Alder, Dewberry, Common Lime, Wild Plum, Hornbeam, Grey and Crack Willows, Dogwood, Spindle, Field Maple and the uncommon Midland Hawthorn (although this last just over the fence at the top).

Of the grasses etc, we were able to confirm False Brome, Field Woodrush, Lesser Pond-sedge, Meadow Foxtail, Oval Sedge, Common Spike-rush, Sweet Vernal Grass and Yorkshire Fog. As expected, we were able to add a good number of others. Grasses were *Dactylis glomerata* Cocksfoot, *Bromus hordeaceus* Soft Brome,

Arrhenatherum elatius False Oat-grass, Festuca rubra Red Fescue, Poa annua, P. pratensis & P. trivialis Annual, Smooth and Rough Meadow-grasses, Anisantha sterilis Barren Brome and Melica uniflora Wood Melick. Another sedge was Carex hirta Hairy Sedge, very common (as it was at Cock Marsh). Rushes were Juncus inflexus, J. effusus & J. acutiflorus Hard, Soft and Sharp-flowered Rushes. There was also Equisetum arvense Field Horsetail.

Most the these last are common enough, but we were also pleased to add one rarely seen grass - Water Whorl-grass *Catabrosa aquatica*, looking imposing in the water along one short section. The photo shows the characteristic features - the creeping rhizome from which new plants are arising, the short blunt leaves, and, less well, the whorled branches of the inflorescence that distinguish it from otherwise similar meadow-grasses (the whorls having unfortunately collapsed somewhat by the time I was able to photograph my specimen).



Inflorescence and leaf of Hairy Lady's-mantle



Water whorl-grass

22 June: Shakespeare Comes to Prestwood Nature Reserve

The day before, 21 June, was Midsummer Day. This event was based upon Midsummer Night's Dream and

specifically the quotation: I know a bank whereon the wild thyme blows,

Where ox-lips, and the nodding violet grows; Quite over-canopied with luscious woodbine, With sweet musk roses, and with eglantine; There sleeps Titania, sometime of the night, Lulled in these flowers with dances and delight; And there the snake throws her enamell'd skin,

Weed wide enough to wrap a fairy in!

The task set for the group was to find each flower referenced in the quotation, gaining one point for each. The catch was that Shakespeare was using artistic licence in representing these species as "midsummer" flowers. In the event only two were in full flower, and one just coming out, so that most of the identification had to be carried out without the use of blooms (Poland's key was ready to hand). The flowers were to be found in the reserve or in the neighbouring field to the north.

As Shakespeare's names were mostly not those we use today, the translations were given as follows:

- 1. Wild thyme *Thymus sp.* (an extra point to be awarded for the correct species ID)
- 2. Cowslip *Primula veris* (Shakespeare's "Oxlip")
- 3. Violet Viola sp. (extra points for correct species IDs 4 possible)
- 4. Honeysuckle (Shakespeare's "Woodbine")
- 5. Field rose (Shakespeare's "Musk-rose")
- 6. Sweetbriar (Shakespeare's "Eglantine")

Extra points were also to be awarded for these additional discoveries:

- 1. A fairy or fairy queen.
- 2. A snake's skin (or even better, a snake).

The group worked together (without the leader who remained as referee) and did exceptionally well! All six flowers were found. The thyme was correctly diagnosed from the larger leaves and from hairs on the stems as *Thymus pulegioides* Large Thyme. Three different violets were discovered: *V. hirta* (the dominant one), *V. riviniana* and *V. reichenbachiana*. The first of these was distinct with its long hairs standing out from the leaf-stalks, while the second and third both bore hairless leaf-stalks and could be quickly distinguished by the fact the third had leaves that had greatly expanded since flowering (as, we noticed, had those of Hairy Violet too). *V. odora* was not seen. The roses were carefully checked but were quite distinct, the field rose with its protruding style and the apple scent of the sweetbriar. Dog-rose *Rosa canina* was common and Harsh Downy-rose *R. tomentosa* was also identified, although they did not contribute to the score.

The group were very inventive with respect to the "fairy", and Fairy Flax *Linum catharticum* was accepted, not common at this site (it had not been recorded since 2010) and difficult to spot with the flowers over. (It had to be carefully separated from similar-looking Thyme-leaved Sandwort *Linaria serpyllifolia*, more common here, which had hairy leaves, while the *Linum* is glabrous with slender drooping flower-stalks.) The group also remembered that Titania's fairies in *MND* were called Moth, Cobweb, Peaseblossom and Mustardseed. Examples of the first two were easily found. There was no "mustard" in evidence, but I eventually accepted that Peaseblossom could refer to some fabaceous plant, of which the only one at this site in the Pea genus *Lathyus* was *L. pratensis* Meadow Vetchling.

Shakespeare is well-known for his knowledge of flowers and his distinction of field rose and sweetbriar would seem exceptional when most poets would content themselves with "wild rose". He also apparently knew a lot about witchcraft and the ingredients used in magical potions, including the four after which he named the fairies, which were all well-known for this. This might explain his extensive botanical knowledge, as wild plants were much better-known in his days for herbal remedies, for which accurate identification would have been necessary. It is likely, too, that he had a good "nose", as all but one of his six flowers were strongly scented (if we include Sweet Violet), as we appreciated, sprawled at the end of a hot morning on a bank of wild thyme whose strong aroma filled the air. Ah, sweet botany!

6 July: Walled Garden at Missenden Abbey

This was an unusual event for us. We were met by a group of members of the Walled Garden at Missenden Abbey. They showed us around their grounds and then we got down to business. We had been asked to carry out a survey of the walled garden premises, which consisted of the walled garden itself with its flower beds and greenhouses, an orchard area, and an intermediate field, and then to report on how we thought they might best manage it in future with wildlife in mind.

This site was mainly highly managed and very disturbed, which was quite challenging, as there was no coherent ecology. Apart from the main garden, it was a jumble of mown grass, overgrown "wasteland" areas and disturbed ground with many introduced plants from garden escapes and scattered "wildflower" seed. Although the River Misbourne passes through, outside the walled garden it is overgrown with nettles and other large wasteland plants, often shaded by trees. The only habitat with any native plants of any interest were the walls, some of flints with mortar and others of brick. These walls were the only habitat that required particular protection, as their plant community was endangered by "cleaning up". As it was, many of the remaining ferns were dry and brown, suffering from our increasingly dry climate. The river bed had also been dry for a long time and no water plants could be seen. In anticipation that the flow might return at some stage, however, it would be beneficial (although a major task) to clear the whole length of the robust plants that had invaded it, although this would have to be repeated annually. This had already been achieved for the length running through the walled garden.

The chief botanical interest was in various introduced plants, which included rank plots of Corn-cockle Agrostemma githago, Cornflower Centaurea cyanus, Common Poppy Papaver rhoeas and tall-growing Chamomile Chamaemelum nobile, all obviously from standard so-called "wild" flower mixes. Green Alkanet Pentaglottis sempervirens and Greater Celandine Chelidonium majus were well established across many parts. One abandoned cultivated plot (where dahlias had previously been grown) had had a different seed-mix more typical of farmland sown for wild-bird seed, with Phacelia Phacelia tanacetifolia, Giant Viper's-bugloss Echium plantagineum, and Crimson Clover Trifolium incarnatum ssp. incarnatum. Another similar patch of dug ground had Dwarf Mallow Malva neglecta, probably the only notable native ground plant to be found.

The rough areas were dominated by the likes of Hogweed *Heracleum sphondylium*, Burdock *Arctium lappa* and *A. minus*, Cleavers *Galium aparine*, Nettle *Urtica dioica* and Green Alkanet, with some Mugwort *Artemisia vulgaris* and Dark Mullein *Verbascum nigrum*. One area was still dominated by Japanese Knotweed *Fallopia japonica* despite efforts to remove it. These areas of tall plants at least provided much cover and food for invertebrates, whereas the mown areas were of hardly any wildlife value, consisting only of coarse plants of little interest. There were many "rough" corners with log-piles, cuttings, discarded equipment and so on, which would also be used by wildlife. A Lesser Stag-beetle *Dorcus parallelipipedus* was seen and demonstrated the value of such habitats. We were impressed by the different composting systems created in the walled garden, some with the red worms *Eisenia andrei*. These were used not only for garden cuttings but also kitchen waste from the Abbey itself.

Apart from domestic apple trees, there were also hybrid hawthorns *Crataegus x media* (and one possible Midland Hawthorn *Crataegus laevigata* judging by the leaves, but the lower branches were in poor health and no properly formed fruit could be found to check this out), and a magnificent old Copper Beech *Fagus sylvatica*.

20 July: Monkton Wood (2nd visit)

Our first visit in May was not very productive, although it was intended to catch the early plants that might be missed later on. On this occasion there were more plants in evidence and we saw all but a couple of those recorded in May. On this occasion we could identify the grasses, which was useful because the last full survey of the wood in 2008 was conducted in April and omitted most of the grasses, which had last been recorded as far back as 1981. In fact we recorded 19 common species, including grasses, that had not been noted since 1981, and another 11 from 2008.

The main intent, however, was to search for rarer species not seen here for a long time. Most continued not to be seen here, unfortunately, and so, after 50 years, must be considered to be extinct in the wood, which has not received any conservation management. In the morning the full party concentrated on the main ride through the centre of the wood and particularly the remaining boggy area where some of the old records were known to have come from. The latter was overgrown by bracken and this may have eliminated the rarer species, although Greater Bird's-foot Trefoil *Lotus pedunculatus*, Lesser Stitchwort *Stallaria graminea* and Yellow Pimpernel *Lysimachia nemorum* still survived in plenty. In the afternoon we continued to the far south of the wood, as far as a pond which was now foul-smelling, lifeless and black, from the rotting leaves filling the water to the brim. We returned up the west edge of the wood via a rarely-visited area under a stretch of pylons in the south-west corner, which again was overgrown by bracken and bramble, and then to the north end of the wood with its heathy ride alongside Grim's Ditch and under another set of pylons.

Altogether we recorded four species from our priority list, the Yellow Pimpernel from the morning, and three in the afternoon. The first of the latter was seen when we got up from lunch sat on pine-logs in a small cleared area near the SW corner. I immediately saw a distinctive patch of grass with white nodes up the stems

created by patches of long white hairs, Creeping Soft-grass *Holcus mollis*, a relative of the very common Yorkshire Fog *H. lanatus*, which has stems and leaf-sheaths hairy all the way up. *H. mollis* is very common in acid regions but has a limited distribution in the Chilterns, being a sure sign of acid soil. We saw it several times after this. The other two were seen at the north end of the wood, beside the ride - Marsh Cudweed *Gnaphalium uliginosum*, and Wavy Hair-grass *Deschampsia (Avenella) flexuosa*. The latter is another strong indicator of very acid conditions. We were particularly looking out for it, seeking the conspicuously wiggly stalks in the flower-head, but were unsuccessful. However, we took a specimen of a grass beside the ride with very narrow leaves and panicles of single-floreted flowers like the bents and hair-grasses. It keyed out afterwards to *D. flexuosa*. It had only very weakly wavy stalks, as the specimens were in a rather impoverished condition, perhaps because of the general dryness. So, in this case, the usual distinctive field sign did not work.

While it was not surprising that most of the 45 plants on the priority list have apparently disappeared, because of the changing climate and uncontrolled bracken, we did confirm 19 of them altogether, which was not bad, even if those 19 were generally more common in the area than the ones not seen.

The chief achievement of the day, however, was to add a considerable number of new species, never before recorded in the wood. Some of these were probably new invaders or introductions, but others may always have been there but overlooked (the wood has not received many botanical visits over the years). Ten new records were made in the morning and a further seven in the afternoon.

New records in the morning were: Trailing Tormentil *Potentilla anglica* (the very first record for our area), Silverweed *P. anserina* (clearly introduced with forestry operations, growing profusely in vehicle tracks), Red Oak *Quercus rubra* and Sweet Chestnut *Q. cerris* (both new plantings), Tufted Vetch *Vicia cracca* (rather weak and pale specimens that gave us some trouble), Vervain *Verbena officinalis* (close to the silverweed and again a highly probable introduction via forestry vehicles, but only our third record ever for the area), Fox and Cubs *Pilosella aurantiaca* (an increasingly common escape), Spear Thistle *Cirsium vulgare* !!, Lesser Stitchwort *Stellaria graminea* (this must surely have always been there but how could it have been overlooked on all those previous occasions? NB there was a record of Greater Stitchwort in 1981 and we never saw that species), and Common Field-speedwell *Veronica persica* (a common invader of disturbed ground, in this case along the main ride).

The new records in the afternoon began at the southern tip where Common Fleabane *Pulicaria dysenterica* and Russian Comfrey *Symphytum x uplandicum* were growing in a discrete patch not far from the gate to the road. These would seem to be recent accidental introductions, although the Fleabane is a perfectly good native species that might be expected to grow here. Nevertheless, it is distinctly uncommon in this area (perhaps because of the scarcity of wetland), with only six records, the last before this in 2010. The next discovery was in an unexpected place, as we made our way through the tall bracken underneath the southern pylons, where few other plants could survive. It might have been dismissed as Pale Persicaria *Persicaria lapathifolia* except that I tasted the leaves, which, after about a minute, suddenly caused a burning hot sensation in the mouth like chillis, a phenomenon tested out also by the rest of the party. The only *Persicaria* with "hot" leaves is Water-pepper *P. hydropiper*, so the identification was then certain. There have only been seven previous records of this in our area, all of them from ponds and marshes. This new location was not so obviously marshy, so it makes one wonder whether it is often overlooked in drier locations because the taste is not tested for. In future everyone must eat Persicaria!

After that enjoyable interlude we came across Red Currant *Ribes rubrum* (this might have previously been overlooked) and, along the north ride (probably the best surviving habitat in the wood), Slender Rush *Juncus tenuis* (the first ever record for our area), Wood Small-reed *Calamagrostis epigejos* (only five other known local sites) and Trailing St John's-wort *Hypericum humifusum*. The latter has only 5 previous records in our area and it has gone from at least two of those. Here it was usefully adjacent to the stands of Slender St John's-wort *H. pulchrum* that were recorded by us in May, enabling us to compare not only the different habits (one prostrate, the other very erect) and larger flowers of *pulchrum*, but also the conspicuous sepals between the petals in *humifusum* compared to the minute ones in *pulchrum*.



Slender rush, with its long bracts subtending the flower cluster



Trailing St John's-wprt

3 August: StJohn's-worts

The main purpose of this meeting was to study St John's-worts along a ride in Rook Wood, which was reached by a path from Missenden church across Abbey Park, where we noticed several trees had come down recently, including a Hornbeam across the path, although the largest oaks still survived. In the ride five different species of St John's-wort had been recorded several years ago, providing a fairly unique site to compare them all in close contiguity. These were *Hypericum hirustum*, *H. perforatum*, *H. maculatum*, *H. tetrapterum* and the hybrid between *perforatum* and *maculatum*, *x desetangui*. Fortunately all if them were still present and everyone was able to examine the hybrid, especially its strange calyx-teeth that are oddly, though minutely, toothed towards the apex. We found that features of the stem and calyx were better guides than the size of flowers, which was variable. Having seen *H. humifusum* and *H. pulchrum* a fortnight ago in Monkton Wood, this completed the whole suite of St John's-worts to be seen locally.

While at the site we also took the opportunity to try out ID skills on other plants there, which combined calcicoles (eg hairy St John's-wort, wild basil) and ascidophiles (eg creeping soft-grass *Holcus mollis*), plants of dry conditions and wet ones, plants of open space and shade. There were several large clumps of Grey Sedge *Carex divulsa ssp divulsa*. There were also two neighbouring trees of Silver (right) and Downy (left) Birch *Betula pendula* and *pubescens* that showed clearly the differences in the leaves:



On one side of the ride there was woodland with a considerable amount of old Box *Buxus sempervirens*, which may be native. A large number of trees were loaded with fruits, so that their branches hung down low under the weight, especially the Hornbeams *Carpinus betulus*. We thought this was likely to be the result of the previous very dry summer, putting trees under stress, which responding by over-producing fruit for future propagation, facilitated by this year's rains.

17 August: Prestwood Picnic Site Nature Reserve (2nd survey visit)

We visited Prestwood Picnic Site Nature Reserve again in an effort to check for more plants that had not been recorded there for over ten years. Despite having a long list, many of them common plants like red dead-nettle, we found very few of them, so that the remaining species have to be presumed no longer extant there. We did refind *Jacobaea erucifolia* Hoary Ragwort and *Leontodon saxatilis* Lesser Hawkbit - easily overlooked scattered among more abundant Rough Hawkbit, Rough Hawksbeard and Autumn Hawkbit. We checked the bromes and other tall grasses, about which past records show considerable confusion, but apart from abundant false-brome there seemed only to be *Bromopsis ramosa* Hairy Brome, despite looking out for the likes of Giant and Tall Fescue. I also checked for the hybrid rose *Rosa x nitidula* (dog-rose x sweetbriar), but the only bush with sweetbriar characteristics was certainly *Rosa rubiginosa*. Many roses have been cut down at this site as part of scrub clearance and if *x nitidula* had indeed been present it may now be lost due to enthusiastic but less than knowledgeable conservationists. On the other hand, there were many dwarf shoots of rose species in cleared grassland which, if left to grow, might still include our elusive hybrid.

Prunus domestica Wild Plum was in fruit, enabling us to confirm that the specimens here all appear to be Bullace or Damson, ssp. insititia. Some Blackthorns had larger than usual sloes and may include some hybrids with wild plum, which probably occur more frequently than current records indicate. We spied a fairly large fruit on the far upper branches of out Pyrus pyraster Wild Pear, which was interesting because fruits in other years found on lower branches were certainly small and hard like the native species. This confirms the hypothesis that the wild pear at this site originated from domestic pears planted here in the later 1940s (when domestic apple trees were also introduced), the domestic pears being grafted on to wild stock, so that lower branches from near the ground hold wild fruit, but higher branches from above the graft produce a cultivated variety. Although this tree flowers abundantly, it produces little fruit, so that it is only continual observation over years that enables us to come to this conclusion.

An unexpected find, new to the list for this site and for our wider area generally, was a clump of *Salvia glutinosa* Sticky Sage or Sticky Clary, with red-streaked yellow flowers (and unpleasantly tacky). This must be a garden escape and it remains to be seen whether it survives, although it is spreading at Cambridge Botanic Garden and is recorded in Stace as being occasionally naturalised. Although not far from a garden, the plants were not immediately adjacent, some 10 metres within the reserve beside a path. It could therefore be that this was a deliberate planting. (In the same way the occasional clumps of daffodils seen here in spring must be from deliberately planted bulbs.) There are some people who seem to want to convert wild spaces into gardens, probably thinking they are brightening them up, but there is a danger that some of these plants could become

invasive and out-compete native ones. They do, however, add spice to a botanical outing by providing something unfamiliar to test our knowledge!

While we were at the reserve we were able to introduce members who were not already familiar with them to some of the specialities, like Fragrant Agrimony, Basil Thyme, Chiltern Gentian (including the small biennial form), Chalk Eyebright, and Imperforate St John's-wort. Basil thyme *Clinopodium acinos* appears to be spreading, perhaps helped by the increasingly dry environment, whereas the Imperforate St John's-wort *Hypericum maculatum*, which prefers damp shady conditions, is still confined to one small spot where it has always grown and shows no inclination to spread more widely.

We also saw plenty of Bedeguar Galls, especially on the small rose-plants that had been cut down, and the remarkable Rivet Gall on Dogwood (caused by the small fly *Craneiorbia corni*). A fresh specimen of Jersey Tiger moth showed itself, nectaring on Field Scabious. This moth has spread recently from being confined to a few warm spots on the south coast to become generally frequent, presumed to be as a result of climate change. This contrasts with the fortunes of the Garden Tiger, which has gone from common to vanishingly rare in our area.

Tony Marshall





Sticky Sage at the Picnic Site, photo by Anne Evans

Sticky Sage, close-up by Rose Meech

7 September: Search for Fringed Gentian

This was arranged at the last-minute, as the weather promised to be perfect for the flowering of Fringed Gentian *Gentianopsis ciliata*. We searched the area of Coombe Hill where it can be found (if you are lucky) quite thoroughly and had to conclude that either it had come and gone this year, or it had decided to give this year a miss (although it has been known to appear in October).

We made up for this disappointment (although it is never totally disappointing to see this beautiful chalk downland site with its variety of flowers and butterflies) by paying a visit to Chisley Wood, by diverting at Buckmoorend on our drive back, a narrow dead-end track brushing hedges on both sides where our convoy of four cars had to pray nothing would come the other way, until we reached the open space for parking at the top, as there was no passing space for a kilometre. Here we met the Icknield Way, beside which occurs our only site, as far as I know, in the Bucks Chilterns for *Carex strigosa* Thin-spiked Wood-sedge. It was well over but the leaves were obvious in a dense colony, and we found just a few remains of flower-spikes by which to check

it out from its utricles and ligules. *C. sylvatica* conveniently grew next to it with which to compare. Not at its best, and not one for the photographers, but at least it was there.

14 September: Galls at Little Hampden Common

We searched Little Hampden Common for whatever galls we could find, mostly on trees. 15 species were found, which was somewhat low, largely due to the scarcity of galls on the oaks, which were expected to carry many more varieties.

Sycamore Acer pseudoplatanus

Aceria macrorhyncha red pustules on leaf caused by mite

Hornbeam Carpinus betulus

No galls found, but the long convoluted mines of the agromyzid fly *Agromyza alnibetulae* were conspicuous on some leaves, a species only recorded from Birch in our area before.

Beech Fagus sylvatica

Mikiola fagi common

Hartigiola annulipes uncommon and dwarfed, nothing like the 6mm height they should have achieved by autumn

Ground ivy Glechoma hederacea

Rondaliola bursaria Lighthouse gall, caused by a gall-midge - new record for our area Puccinia glechomatis Fungal gall

Pedunculate oak Quercus robur

Andricus fecundatrix Artichoke gall, caused by a gall-wasp, formed from a bud

A. curvator common, distorting the base of leaves and forming clusters of globular galls

Neuroterus albipes Smooth Spangle-gall, caused by gall-wasp, small green saucers on leaf underside

N. anthracinus Oyster gall, leaf underside along midribs

Cynips quercusfolii Cherry gall, large smooth round pale green galls on leaf undersides, caused by a gall-wasp

C. divisa Pea gall, very small globular yellow-green galls on leaf underside

White beam Sorbus aria

Eriophyes arianus mite gall causing small pustules on leaves

Small-leaved elm Ulmus sp, probably procera

Aceria campestricola mite gall causing small pustules on leaves

Nettle Urtica dioica

Dasineura urticae, swellings in leaves caused by a gall-midge

Trioza urticae, lumpy distortions of whole leaves caused by a psyllid bug; second record for the area