Flora News

Newsletter of Hampshire & Isle of Wight Wildlife Trust's Flora Group Autumn 2003

Dear Flora Group Member

We look forward to seeing you at some of the forthcoming events. Please let Catherine Chatters (Flora Group Secretary) know of any ideas for future events – training sessions, practical conservation tasks or places to visit. Catherine's contact details are given at the end of this newsletter

FORTHCOMING EVENTS

Sunday 21 September 2003
10.30 am
Marsh Clubmoss hunt at Woolmer Forest/Weavers Down area
Leader: Neil Sanderson

Following the interesting and enjoyable marsh clubmoss *Lycopodiella inundata* event held in The New Forest in September 2002, the Flora Group Committee has agreed it would be useful to re-survey the Woolmer Forest area where large populations of this species have been recorded in the past. The Ministry of Defence has kindly given us permission to visit the military training area during the morning. In the afternoon we will move on to land owned by Old Thorns Golf Club who have kindly allowed us to use their bar facilities at lunchtime.

Meet at 10.30 am in the informal car park at grid reference SU 785 319 just to the east of the A325 by Woolmer Pond.

Thursday 16 October 2003
7.30pm
'Britain's Rare and Localised Plants' – a talk by Brian Laney.
The Harris Hall, Church Close, Andover.

The Wildlife Trust's North West Area Group has invited Flora Group members to attend a talk by Brian Laney titled 'Britain's Rare and Localised Plants'. The talk will be held in the Harris Hall (opposite Andover Museum) in Church Close, Andover. Refreshments will be served during the interval.

Sunday 16 May 2004
10.30 am
Porton Down and AGM
Leader: Tony Mundell

Tony Mundell has kindly organised a visit to DSTL (Defence Science and Technology Laboratories) Porton Down to see the Lady Orchid *Orchis purpurea*, first found here in 2003 and to search the adjacent woodland to see if any more Lady Orchids can be found. This is early advance notice but please note that numbers may be limited. You can only be admitted if you book a place with Tony beforehand as he needs to provide a list to DSTL Porton Down at least a fortnight prior to the visit. Tony can be contacted at 38 Conifer Close, Church Crookham, Fleet, Hampshire, GU52 6LS tonymundell@ukonline.co.uk. Directions : Turn off the A30 at SU 230347 and take the entrance road to DSTL which runs north from SU 205 361. Meet at 10.30 in the car park on the left a few yards before the security gate. Bring a picnic lunch. During the lunch break we will hold a brief and informal AGM.

NEWS AND VIEWS

Herriard Park – report of Annual General Meeting and Field Meeting held on 26 April 2003

About 30 members of the Hampshire Flora Group and guests took the rare opportunity of access to the seldom recorded Herriard Estate south west of Basingstoke to re-visit old records and seek new ones.

The morning commenced with exploration of hazel woodland, some of which was coppiced on clay with flints overlying chalk. The ground flora here was dominated by a spectacular display of bluebells *Endymion non-scripta*. Where there were openings in the canopy, ground flora was more diverse including common Solomon's seal *Polygonatum multiflorum* and in one restricted patch wood cudweed *Gnaphalium sylvaticum*. At locations where the chalk was more superficial the carpets of dogs mercury *Mercurialis perennis* were interspersed with early purple orchid *Orchis mascula*, twayblade *Listera ovata*, cowslip *Primula veris*, primrose *Primula vulgaris* and the hybrid of these two. Just before lunch in a slightly more open spot in chalky rubble soils under beech a few clumps of what has been tentatively identified as lesser hairy brome *Bromopsis benekenii* were discovered, associated with hairy brome *Bromopsis ramosus*. if this provisional identification proves correct it represents a first county record for this overlooked species and would be a link in distribution between known sites in the North

Downs in Surrey and the Chilterns in South Oxfordshire.

After lunch a brisk stroll led to the location of one of the proposed highlights of the day: sword leaved helleborine *Cephalanthera longifolia*. Although the habitat had undergone significant modification the overall site still remained suitable but despite a thorough search we failed to find a specimen on this occasion. By way of compensation plants of white helleborine *Cephalanthera damasonium* and greater butterfly orchid *Platanthera chlorantha* were admired in this locality. Subsequently an area of mostly secondary woodland was investigated with many more specimens of early purple orchid appearing in a diverse ground flora. However the highlight of this location was a mature wych elm *Ulmus glabra* many hundreds of years old with a serendipitous growth of toothwort *Lathraea squamaria* on its roots. This provided a fitting end to a very enjoyable day's botanising. Grateful thanks must go to the land owner for allowing us access to this sequestered region of the Hampshire chalk.

Paul Stanley

Hayling Island 11 May 2003

About 12 people joined the trip to Hayling despite unseasonably cold weather. Unfortunately I was not there myself due to a rescheduled trip abroad. Thanks are due to Ian Thirwell and Eric Clement as guides in my absence and to Martin Rand for producing a species list.

The party spent most of the day looking at the Black Point to Eastoke Point area on the south-eastern tip of the island, including a visit to the HCC Sandy Point nature reserve. They also nipped off later to see the Childing Pink *Petrorhagia nanteuilii* at West Town.
Black Point produced a number of sand specialities including Bur Parsley *Anthriscus caucalis*, Sea Holly *Eryngium maritimum* and the grasses Hare's-tail *Lagurus ovatus*, Sand Cat's-tail *Phleum arenarium* and Dune Fescue *Vulpia fasciculata* - the first two locally abundant here.

The Sea Knotgrass *Polygonum maritimum* and Sea Spurge *Euphorbia paralias* were re-located at Sandy Point beach, and nearby, a number of acid grassland diminutives were seen including Smooth Cat's-ear *Hypochaeris glabra*, Shepherd's Cress *Teesdalia nudicaulis*, Small Cudweed *Filago minima* and Suffocated Clover *Trifolium suffocatum.*

The nature reserve supports a range of habitats from dry heathland to wet marshland and supports a number of interesting species. It is famed in Hampshire for its colonies of the nationally scarce Sharp Rush *Juncus acutus* and out-of-range Western Gorse *Ulex gallii*. These were both seen on the day, along with a small patch of Dwarf Gorse *U. minor*, Heath Dog-violet *Viola canina*, Spring Vetch *Vicia lathyroides*, Common and Heath Milkworts *Polygala vulgaris & P. serpyllifolia*, Lousewort *Pedicularis sylvatica* and Heath Pearlwort *Sagina subulata*. Many of these were widespread and abundant over the reserve.

From the reports I have received it sounds like it was an interesting and enjoyable visit. I would like to thank Hampshire County Council for permission to visit the nature reserve.

See Appendix for full list of species.

John Norton

Sword Leaved Helleborines at Chappett's.

The Wildlife Trust's Nature Reserve at Chappett's Copse is subject to detailed management and monitoring of the Sword Leaved Helleborine *Cephalanthera longifolia* led by Volunteer Reserve Warden Richard Hedley.

Richard reports that this has been a particularly good year. The number of flowering spikes, at 2185, was the highest recorded since detailed population monitoring recommenced in 1995. The only higher record was of 2689 flowering spikes recorded by Michael Bryant in 1970. The flowers need sunshine and open glades to achieve pollination by bees. After a prolonged cloudy period, during which the flowers looked magnificent but did not set seed, the weather improved in late May. There was then a week of dry sunny weather and a good seed set is anticipated.

Away from Chappett's a single plant of sword leaved helleborine has colonised the former arable land of Coulters Dean nature reserve. In England this orchid is at its strongest in East Hampshire with Chappett's being possibly the largest population. The growing appreciation of the coastal woods of north west Scotland is bringing with it reports of intriguing populations as far north as Assynt.

Clive Chatters

Noar Hill

Francis Rose once memorably remarked that 'the JCB is this interglacial's Woolly Mammoth'. Both localised broken ground and

occasional gross disturbance are natural features with many of our more interesting habitats and species associated with early stage succession. The absence of large wild animals or catastrophic landscape scale events does rather limit these niches in our modern manicured lowland landscapes. About six years ago David Sharrod arranged for one of the scrubbed over parts of the former chalk working at Noar Hill Nature Reserve to be opened up with heavy earth moving equipment. The result was a raw scar. As the years have gone on the chalk rubble has broken down into a finer tilth and the leaf litter of the former scrub land has faded away. We are now seeing colonisation by more exacting species such as Pyramidal and Fragrant orchids together with Autumn Gentian. So much of the interest of Noar Hill, now recognised as of European importance, is a legacy of its recent history as a common chalk quarry. If we are to maintain these interests and offer opportunities for these species to spread we may need to be courageous in our management techniques.

Last year Noar Hill experienced very heavy rabbit grazing following a mild winter. The short turf generated by last year's rabbits has proved ideal for the Musk Orchids *Herminium monochis* with tens of thousands of plants blooming this summer.

Clive Chatters

Saw Sedge *Cladium mariscus* rediscovered.

Nick Stewart has visited The Moors at Bishops Waltham to look at the much discussed pondweeds including the reputed *Potamogeton coloratus*. Whilst being unable to confirm the pondweed, Nick did find a single sterile plant of Saw Sedge by a spring near the Mill Pond within the County Council's Nature Reserve. Saw Sedge was last reported from the Moors in 1960 and was thought to have been lost along with other specialist fen species such as the moss *Cratoneuron commutatum* var. *commutatum* due to the progressive colonisation of the spring heads and tufa seepages of the fen by trees. It is excellent news that the species has survived and we wish the County Council well in restoring the Fen to its former glory. Our experience in scrub clearances from fens in our Greywell Moors reserve and on the Crown lands of the New Forest has shown that clearance followed by grazing can produce spectacular results.

Cladium is also found in Sowley Pond in the south of the New Forest with both Alison Bolton and Ian Ralphs reporting it doing well this year. The much smaller and much more vulnerable population near Browndown should benefit from emerging plans to find a positive future for the Alver Valley running between Lee-on-the-Solent and Gosport. On the Island *Cladium* was formerly known from the Freshwater Marshes at the head of the Western Yar, the last record

being a herbarium specimen of 1841. These marshes still exist with localised excellent open fen communities within the Isle of Wight Council's Local Nature Reserve. Would it be too much to hope that *Cladium* persists there too, unseen and unrecorded?

Clive Chatters

Conifer Clearance

Regular visitors to the New Forest will be aware that the Forestry Commission are progressively removing some of their conifer plantations on heaths. We are shortly to see this programme expanded with European funding under LIFE III supporting significant clearances on the upper tributaries of the Lymington River. The National Trust are undertaking similar work on the Dockens Water. This work is then enabling the Environment Agency to begin to restore rivers that have been damaged through engineering.

The results of these works will be monitored in some detail. In the meantime a casual wander across land at Longdown that was dense black conifers some four years ago reveals populations of Brown Beaked Sedge *Rhynchospora fusca* and Pale Butterwort *Pinguicula lusitanica* within fine grazed wet heaths. The particular place where these are growing had previously appeared on the television looking like something terrible was going on with big machinery felling trees, grubbing out stumps and building fires big enough to be seen from Southampton. At the time the Trust went in front of the cameras supporting the work of the Commission, to a rather sceptical local audience. The Forest's ability to respond to habitat improvements as at Longdown is very encouraging to those promoting and undertaking these radical works.

Clive Chatters

Marsh Clubmoss (*Lycopodiella inundata*) in the New Forest

Marsh Clubmoss (*Lycopodiella inundata*) is one of Britain's fastest declining species, particularly in the southern part of its range where the species is characteristic of open

vegetation at the interface of wet heath and valley mire communities.

The clubmoss has its English stronghold in the New Forest, whilst the plant has additionally been seen in approaching 50 colonies since 1980 on adjacent heathlands of the Poole Basin of Dorset. During the same period, around 20 further colonies have been recorded on the heaths of the Thames Basin and Wealden heaths of Hampshire and Surrey, many found by Hampshire Flora Group members such as Chris Hall and Tony Mundell. But we are spoilt for choice in Hampshire, and the relative abundance here masks a catastrophic decline across much of the rest of England. The species has long been extinct in the Midlands. By 1950 and 1975 the species disappeared from the parts of the Thames Basin heaths within Buckinghamshire and Berkshire respectively. 1978 saw the disappearance of the clubmoss from East Anglia, whilst in Sussex the species is in a parlous state on the verge of extinction. In fact, away from the heaths of Dorset, Hampshire and Surrey the species is excessively rare, and only known from a handful of sites in Cornwall (1 site), South Devon (2 sites) and Cumbria (c. 3 sites). Indeed, of the 233 10-km squares that the species has been recorded from, it has been seen in just 61 since 1987. Paradoxically, whilst the species is most abundant in the New Forest, this is the area where populations are perhaps least well monitored. So members of Plantlife – the Wild Plant Conservation Charity (acting as lead partner for *Lycopodiella inundata* on behalf of the UK Biodiversity Action Plan process), joined forces with members of the Hampshire Flora Group to assess the size of the populations of Marsh Clubmoss around Cranesmoor, to the west of Burley, at the edge of the New Forest. On 15 September 2002, and under peerless, blue late summer skies, about 25 botanists separated into three groups to survey the populations – after a quick jolly to ogle a healthy colony of the Great Sundew (*Drosera anglica*), a few plants of its hybrid with Round-leaved Sundew (*D.* x *obovata*) and a small, but apparently happy population of nearly-naturalised Venus' Fly-trap (*Dionaea muscipula*). The latter sighting triggered a heated debate as to whether such an intriguing and apparently innocuous intentional introduction should be allowed to survive or not (there has been a campaign to rid one of the Dorset mire systems of a thriving population of the pitcher plant *Sarracenia purpurea* ssp. *purpurea* as it is systematically devouring populations of nationally rare insects!).

The sheer abundance and vigour of *L. inundata* (happily) made something of a mockery of any attempt to 'count' the number of plants present. In the end, as if by convergent evolution, each of the three parties resorted to estimating the area over which each population occurred, giving an indication of the abundance of the plant therein. In total, ten separate colonies were recorded for the Valesmoor area down to the northern margin of Cranesmoor: no doubt further colonies occur on unexplored ground round the bulk of Cranesmoor. There can be little doubt that this catchment supports one of the largest English populations of the plant.

Visitors and New Forest aficionados alike were also intrigued by the range of vegetation types that the species occurred in. In the New Forest (as indeed elsewhere on southern heaths) *L. inundata* is perhaps most characteristic of the M16c *Erica tetralix-Sphagnum compactum* wet heath *Rhynchospora alba-Drosera intermedia* sub-community, where characteristic associates include *Drosera intermedia, D. rotundifolia, Rhynchospora alba, Sphagnum auriculatum* and the purplish alga *Zygogonium ericetorum*, and indeed this was the case at Cranesmoor. But here the plant also extended from the wet heath community into proper 'spongy' bog communities of the M21 *Narthecium ossifragum-Sphagnum papillosum* valley mire type. Indeed in at least one area, long vegetative shoots of *l. inundata* were seen extending for up to one metre over amorphous floating rafts of *Sphagnum auriculatum* in bog pools.

Pete Selby (e-mail address) and Andy Byfield (andy.byfield@plantlife.org.uk) would welcome records of any further, recent sightings of the species in the forest.

Andy Byfield

Habitats of Marsh Clubmoss in the New Forest

After the Flora Group Marsh Clubmoss meeting at Vales Moor, I went through a period trampling around trying to find as many Clubmoss sites in the north west of the New Forest as I could. I chose this area for my spasm of obsessive Clubmoss searching as Bryan Edwards, the Plantlife contractor producing the species dossier for the Biodiversity Action Plan for this species, had few recent records from this area.

One thing that struck me at the Flora Group meeting at Vales Moor, and in my subsequent searches, was the variety of habitats in which the

Clubmoss occurred in both terms of vegetation and in origin of the habitat. I had previously thought of this plant as a species with a very narrow niche.

Two main vegetation communities support the Clubmoss:

Valley bog (National Vegetation Community: Narthecium ossifragum – Sphagnum papillosum Valley Mire): this is the habitat of many of the colonies found at Cranesmoor / Vales Moor but a very unusual one for the species. Here the plant grows on bulky peat forming Bog Mosses, mainly *Sphagnum papillosum,* and associated algae surfaces on permanently wet peat. The mire here is sloping and spring fed but with a very low *Molinia* cover and clearly is a very low productivity version of the community. It does not appear very different from many other valley bog communities in the New Forest but the species is, as far as I know, completely absent from this habitat beyond Cranesmoor/Vales Moor area in the Forest. I have however seen a single plant on similar, but flatter, Bog Moss dominated valley bog in the Pirbright Ranges, Surrey but this habitat appears very unusual. Interestingly this habitat appears very unusual. Interestingly this habitat is much more obviously natural than the normal disturbed wet heath habitat.

Disturbed or open wet heath (National Vegetation Community : Erica tetralix – Sphagnum compactum Wet Heath Rhynchospora alba – Droserra intermedia sub-community). Most Marsh Clubmoss is found in this sort of vegetation that is characterised by much open firm thin peat colonised by purple algae with associated species including *Carex panicea, Drosera intermedia Drosera rotundifolia, Eleocharis multicaulis, Narthecium ossifraum, Rhynchospora alba* and *Rhynchospora fusca*. Occasionally in path sites the species also occurs in associated earlier succession communities with *Juncus bulbosus, Agrostis canina* and bryophytes such as *Polytrichum juniperinum, Pellia epiphylla* and *Jungermannia gracillima* on bare sand. This community appears to be replaced by the open wet heath as the sand surface is colonised by the purple algae.

This habitat is characteristically very wet in winter but dries out in summer, unlike the valley bog habitat. The Clubmoss occurs in a variety of situations in this type of vegetation; at Vales Moor the community develops without disturbance at the junction between the valley bog and more closed wet heath. Here it is not particularly disturbed; the open wet heath has developed in response to very wet winter conditions and light grazing, rather than heavy disturbance. The habitat is grazing dependent to keep down *Molinia* but like the Valley Bog habitat is very 'natural'. Again this habitat appears particular to the Cranesmoor / Vales Moor Area.

However most sites with Marsh Clubmoss in open wet heath exist because of severe physical disturbance of wet heath, followed by stability and slow recolonisation. These include the typical situation on the edges of human/animal tracks. Pure pony/cattle tracks lack the species as they are narrow due to the animals walking in single file and not minding mud. It is the tendency of humans to wander off the path to avoid soft areas and hence to created braded paths with abandoned re-vegetating areas that create the Clubmoss habitat. Similar habitat is created by more gross disturbances by machinery such as quarrying and military training. These latter situations are commoner outside the Forest but examples of both can be found on the Forest.
The path/machinery disturbed habitats are the most obviously artificial and this appears to be the reason why a recent Watsonia paper dismisses the English populations of Marsh Clubmoss as unsustainable when compared to the Scottish loch side populations. There are, however, much more natural examples of the disturbed open wet heath habitat. The most widespread is the waterhole habitat. In areas with large areas of heathland plateau on ridges that lack standing water in summer the animals congregate at the nearest water sources. In the north west of the Forest these are typically seepage step mires running along the valley sides. At the heads of small side valleys thirsty animals congregate at the springheads and create small natural waterholes by trampling. These often have steep sides and eroded gullies where the animals access the water. At some waterholes the trampling and sliding have created characteristic open wet heath habitat with the Marsh Clubmoss. These habitats are very natural; wild grazing stock must have done exactly the same thing. As well as these natural waterholes, artificial waterholes have occasionally been dug and these can also support Marsh Clubmoss, as one group saw at Vales Moor.

The final habitat is a very rare but striking one. At North Hollow in the south east corner of Ibsley Common a small mire has developed below a small spring which is called ladywell on Heywood Sumner's

maps of the common. This is on a very steep slope and the narrow mire has undergone cycles of slumping as the peat has become unstable. This has produced perfect Marsh Clubmoss on peat that has been exposed and slightly dried out by the slumping.

It seems, at least on the New Forest, that Marsh Clubmoss is found beyond the more artificial human disturbed habitats. It can be regarded as a native mire edge species, at least partly associated with disturbance by wild grazing stock, which has expanded within the heathland cultural landscape to exploit similar habitat generated by human disturbance of wet heath.

Neil Sanderson

Eriophorum gracile Refound at Holmsley

Slender Cottongrass *Eriophorum gracile* is a Vulnerable Red Data Book (also Vulnerable in Europe) mire species that occupies a distinct niche in the transition between acid bog vegetation and calcium rich Fen. It likes very swampy habitats and appears always to have been very localised (as such transitions are naturally uncommon) and has only ever been recorded from 26 sites in England, not all of these being reliable records (Winship, 1994). By the 1990s it was only known from 3 sites in the country, two of these on the New Forest and one in Sussex. Drainage and the spread of scrub appears to have been the main cause of extinction. In particular it had died out from the Wilverley – Holmsley mire complex where much suitable transition mire has been lost to the expansion of Sallow and Alder scrub.

In recent years a programme of coppicing has been initiated by the Flora Group and continued by Forest Enterprise to restore open transition mire habitat in the areas where the Slender Cottongrass was once recorded. These have produced both fen and transition mire habitat and have benefited regionally rare species such as *Carex limosa, Carex lasiocarpa, Sphagnum teres, Sphagnum subsecundum and Sphagnum contortum* but, as yet, no Slender Cottongrass has regenerated. It is therefore with great delight that I finally found a relic population of the cottongrass towards Holmsley Passage with 8 flower heads in a wet slough with *Carex limosa, Carex rostrata, Menyanthes trifoliata, Equisetum palustre, Juncus acutiflorus, Phragmites, Potamogeton polygonifolia* and *Eleocharis multicaulis*. The site is in a glade in recent Sallow scrub and is highly threatened by further encroachment.

Fortunately the programme of Sallow coppicing is planned to be accelerated under the LIFE 3 programme and conservation action will be carried out at the site in the near future.

Winship, H.R. (1994) *The Conservation of Slender Cottongrass* Eriophorum gracile *Koch ex Roth. in England.* Hampshire Wildlife Trust, Eastleigh

Neil Sanderson

Back from the Grave – the Rediscovery of the Lichen *Bacidia subturgidula*

Unlike larger organisms such as vascular plants, which are relatively well known, rediscovering a lichen species collected a few times in the 19th century and not since is not too unusual. The author has done this three times but is always very excited when it happens. In this case, it was a species for which I have been looking for nearly 15 years so finding *Bacidia subturgidula* was especially exciting.

This species has only ever been collected twice in the world, both times from decorticate (wood exposed by bark loss) on Hollies on the New Forest in 1868 by J M Crombie and 1873 by C Larbalestier.

On 20 April 2003 while recording lichens at Queen Bower with Andy Cross, I found some small pale blue-grey pruinose (speckled) fruit on the decorticate branch of an old Holly pollard which clearly did not belong to a species I knew. A small sample was taken and at home after an attempt to key it out as a *Strangospora* (a genus with oddly pruinose fruit) it was keyed out via the genus key and came straight out as *Bacidia subturgidula*. This was later confirmed by Brian Coppins of Edinburgh Botanic Gardens who also said that, having seen fresh material, it was probably not a *Bacidia* (yet another name change then!). A further search was made on 4 May 2003 at Queen Bower but it was not found on any other Holly.

The species grew on hard dry Holly lignum in old growth woodland and appears rare. The fruit is small and is a rather similar colour to Holly lignum and easily over looked. However intensive searching since it was found has failed to find any more sites. From the one tree known, and the associated species, it appears to prefer particularly old hard Holly lignum and much lignum in the New Forest is probably unsuitable. One is left pondering how this lichen has managed to evolve in the first place, let alone survive!

Neil Sanderson

A tale of two tetrads

Having had little leisure to get involved in systematic recording for about twenty years, I've been very

pleased to have some time to devote to round two of the BSBI's 'Local Change' programme. This study is run every 15 years, and aims to show changes in the flora across the whole of Britain over a long period of time. It entails recording all vascular plants in a predefined selection of 2km x 2km squares ('tetrads') during a period of two years, 2003 being the first year of this round. It's perhaps the most intensive nationwide survey of plants conducted on a grid basis, if one discounts studies of individual plant taxa. Looking in detail and at length at a limited extent of land, selected with no regard at all for its botanical thrill rating, not only develops one's field skills but also brings more than a few surprises.

I'm looking after the record keeping for four tetrads in Hampshire, and I'm botanising in three of these, as well as contributing records to a few others here and elsewhere in Britain. I'll mention two of 'my' tetrads here, illustrating the variety of pleasures and challenges that recording for the scheme presents.

Chalk and Cheese?

SU20J is a slice of the northern New Forest centred on Bratley Wood, with the A31 running diagonally across it. It includes a fine cross-section of New Forest habitats, including heath, grassland, bog, mire, ponds and pits, unenclosed plateau and valley woodlands, conifer and mixed plantations, enclosed pastures, and roadside banks. Most of it has open access, but like most Forest squares there's a lot of ground to cover! The plant list from fifteen years ago is long and full of goodies. Given the terrain, the difficulty of spotting plants in heavily grazed areas, and the number of plants in the more critical groups, teamwork has been particularly valuable here. Most of the recording to date has been done in three organised sessions each involving from three to six people. Least well supported, for some reason, was the 5am session to record the central reservation of the A31! But those who actually tried briefly to record the verges at a later time will know why that was a good decision – even by 6am the traffic was making life pretty intolerable.

These visits have been successful in refinding 83% of the originally recorded taxa so far, and it's now possible to predict the habitats where the bulk of the remaining plants are likely to occur, and concentrate effort on those.

SU53A could hardly be more different. Lying between Winnall Down and Easton, near Winchester, it's made up almost entirely of intensively farmed arable fields and reseeded pasture on the chalk. It runs into the fringes of Easton village and is crossed by a few lanes, of which perhaps two have stretches of hedgerow going back earlier than nineteenth-century enclosure. Only a tiny scrap of woodland survives that is not obviously recent plantation, and this too has been heavily replanted.

The original plant list from SU53A was short, to put it mildly – a mere 122 taxa – and we started the season suspecting that this was the Cinderella square of 'Local Change', perhaps deserving nomination for the "Hampshire's Most Boring Tetrad" award. Because of the terrain (and the difficulty of parking more than one vehicle anywhere in or near the tetrad) I decided it wasn't worth organising formal recording parties. Roger Veall and I have done most of the recording on separate visits, with a couple of other people contributing record sheets. Largely because of Roger's indefatigable hunting down both of plants and of landowners (only one of whom has refused access), all but 7 of the original 122 plants have already been refound – a 94% recovery rate.

You Win Some, You Lose Some…

Whatever the tetrad (and this seems to hold true generally), the most striking thing about the records submitted so far has been the number of additions made to the original lists. The list for SU53A is now close to 300 – not many fewer than for the original recording of the 'species-rich' SU20J. But even that tetrad has increased to over 400. One thing is clear: the potential to add new species to the lists has only a limited amount to do with the competence or experience of the original recorders. If over 60 plants can be added to the records of Paul Bowman, who surveyed every habitat in the Bratley tetrad during several visits, other factors are clearly at work.

An obvious and very significant one is the requirement this time to record all introduced plants outside a garden or park, including planted trees and agricultural crops. In SU53A, for instance, these account for roughly a third of the 'new' taxa, if one includes natives that have been planted. In some cases they have tested our identification skills, whether planted Pinus and bird-sown Berberis in the New Forest, or naturalised Narcissus in mid-Hampshire. Sometimes botanists are rather sniffy about the value of recording these things. I suspect they will reveal some interesting trends, especially 'winners' and 'losers' amongst cultivars. Looking beyond the present survey to

Hampshire in general, I am often surprised by how widely and deeply some cultivated plants generally ignored by botanists have become embedded in our countryside, in many cases with no evidence of deliberate planting.

Recording aliens has led to a certain amount of soul searching about when to record. My policy is not to record any planted specimen from a verge or hedgebank that either directly adjoins a garden, or has clearly been taken up and gardened by the neighbouring property. For anything that has gone farther, even by a few metres, I've provided a localised record with a comment about its apparent origin.

Another source of apparent gains is what I would call the 'second time round' effect. When the first survey was done, many recorders no doubt worked to a target time in the tetrad: either a standard time for the work, or that imposed by personal constraints. This time, we have a dilemma about the best approach. Should we work close to the ideal minimum of 20 hours in a tetrad, or should we work towards maximising the number of refinds? Experience so far suggests that the first will lead to a large proportion of apparent losses, balanced by a large proportion of real or apparent gains; while the latter will indeed minimise apparent losses while significantly increasing the gains – with diminishing returns, naturally, but with the refind rate perhaps dropping faster than the gain rate.

My own strategy is to go for the latter approach, based partly on a suspicion that the former will, repeated over several 15-year cycles, lead to an arbitrary pattern of apparent losses and, to a lesser extent, gains from which it will be more difficult to adduce trends. Also I think there will be a natural tendency amongst recorders to try and maximise their recovery rate, partly out of dogged interest and partly out of pride – so at least I shall fit into that pattern!

Hampshire is fortunate in having large numbers of participating botanists and mostly accessible terrain, MOD establishments apart. No doubt there will be unevenness across Britain in adopting one approach or another. In any case, to make life easier for the next generations of recorders, I (and I think most other people) have adopted a policy of spot recording localities for **anything** new, and also for any refind that appears to be localised within the tetrad, whether common or rare in the wider countryside. Of course the widespread availability of GPS has made this pretty effortless.

Then, of course, there are the real gains and losses, not to mention the things that endure. Some things are not too surprising: for instance, a lot of the additions in SU20J are associated with roadsides. What **is** surprising is the number of calcicoles among them. Some new finds are quite startling: to cite some examples from elsewhere in the county, *Verbascum virgatum* on a New Forest verge, or *Apera spica-venti* in chalk/clay country near Micheldever.

What I always find impressive, too, is the ability of plants to endure in the same spot in the most dynamic of environments: whether a small patch of *Viola lactea* on the corner of a plantation, or a long strip of *Barbarea intermedia* in the gravel of a roadside drainage channel. *Hieracium trichocaulon* still sits in sequestered splendour in the middle of the A31, surviving a complete makeover of its environment in the intervening years. *Cotoneaster sherriffii* persists despite being opened up to the tender mercies of New Forest ponies, and despite undergoing the indignity of being re-determined from *C. congestus* in the meanwhile.

Back To Base

One of the interesting features of this survey is the extent to which recorders have also been able to participate in the computer data entry process, through the use of Mapmate software on PCs. Mapmate makes it easy for recorders to share their records with the vice-county recorder or other recording centre, and have them disseminated to other participants. For most tetrads in the county, recorders have had access to frequently updated status information on plants in a tetrad. For Hampshire and its northern fringes, I've maintained a web site with latest available updates to the BSBI's recording sheets for the scheme. This means that anyone with Internet access, whether or not they use Mapmate, can download and print recording sheets that will show them what remains to be re-recorded. For the rest of the country, the software to generate these updated versions more or less automatically can be used by anyone with a copy of Mapmate and MS-Word.

For personal use, I've now come to rely heavily on other information that I can extract from the Mapmate database – for instance, a list of localized records for all the remaining 'lost' taxa in a tetrad, whether recorded during the last survey or in the intervening years.

One of the useful things (and also quite pretty!) has been a 'hotspot

map'. This takes the 6-figure grid references of all the localised records for things not yet refound, and plots 100-metre squares for their occurrence onto a 1:25,000 map of the tetrad (available for limited non-commercial use from the Ordnance Survey 'Get-a-Map' service). The squares are coloured (from pale yellow to red) according to the number of 'lost' species recorded in them. This is excellent for planning routes on later survey sessions. So far I've done this with computer tools, but with a fair amount of manual manipulation. However it would not be difficult to automate completely.

I believe this sort of aid has the potential to make computerised recording more attractive to the producers of the recording data, who are often not the major consumers of the final results and whose own needs have not always been taken into account in the computerisation of records. I'd welcome comments from anyone who's used the web site on whether it is useful to them, and any other facilities they would like to see. And if you don't already know about it, you can ask to join by contacting me at martin.rand@ntlworld.com.

What's It All For?

Because it's both more intensive and more frequent, the 'Local Change' survey can yield a lot of information that supports and extends the analysis of changes in the British flora made from the BSBI 'Atlas 2000' project. Besides its academic interest, this is of use to conservation agencies and policy-makers. But I'm not sure how effective this will be after only two rounds of recording. For one thing, the interval is quite short. For another, the 'second time round' effects I discussed earlier may be prominent. By the third or fourth go, not only should the re-recording process become that much more sprightly and comprehensive through the increase in detailed past records, but it will be easier to separate noise in the 'loss and gain' record from real trends.

One important contribution to reducing noise even at this stage is the ability of tetrad 'owners' to comment on the reasons for each real or apparent loss and gain at the end of the two-year survey. Provided we have a useful set of categorised reasons for this purpose, it should then be possible to extract useful information on a nation-wide basis.

One subsidiary aim of the scheme is to get less experienced botanists familiar with the process of surveying and recording. I don't know how other trip leaders have fared, but I've been disappointed that more people haven't shown up for the organised sessions on this footing. I hope you haven't been put off by the idea that they would be too 'high powered'. Besides, there's a general educational value to this sort of exercise whatever your level of skill. As someone who has been interested in wild plants for over 40 years, but has had extensive periods recently without much time to devote to them, it's been an excellent way to get back up to speed with species both common and rare.

And it helps to dispel some prejudices! I think most people expected us to find almost nothing of interest in the intensively farmed landscape of SU53A. Instead we have a long list of interesting chalkland weeds including *Papaver hybridum*, *Legousia hybrida* and four kinds of *Fumaria* – not to mention several chalk grassland relics. Although we all tend to congregate at a few hotspots for chalkland weeds such as Longstock and Broughton, I suspect a really intensive survey across the middle of the county would still reveal a lot more, modern farming notwithstanding.

And Finally…

'Local Change' has brought me into closer contact with a group of people who are friendly, helpful, generous, well-informed and entertaining. Thank you, botanists of Hampshire and elsewhere!

Martin Rand

Local Change News

Lots of people are getting involved with this project, both within Hampshire and also nationally. The use of MapMate as a recording tool is becoming accepted, as is the idea of synchronising records to a hub on a regular basis. This means that records held in a local copy of MapMate can be sent to a hub via the Internet, relying on the software to only send new records and edited records. In return the hub can return other people's records to others in the community of recorders.

As I am acting as the Hampshire hub, regularly sending update files to Tony Mundell, I can present the progress chart for all the Local Change Tetrads in Hampshire, as at the latest recording date shown. From the table there is at present little that can be interpreted, except that some areas need more visits. In most cases getting to an 80% recovery rate, i.e. finding things found before, is the first major hurdle and has not yet been achieved for all tetrads. The extent of the gains could be attributed to a lack of comprehensive survey last time, but is more likely that recorders of 1987/88 moved away from the recording of the A, J & W

tetrads, to record in other tetrads of the same 10k squares. This aided the recording for the Flora of Hants and also achieved the objective of raising the 10k square totals.

As each tetrad has a nominated lead recorder, who will be asked to consider the losses and gains, based on their recording and attempt to assess the actual gains and losses, and try to attribute a number of reasons for the changes. This will also be the opportunity to allocate the total time taken for the recording and to centralise the route information so that it may be archived for next time?

Finally my apologies for not including a list of notable finds in S Hants. I find it very difficult to do this during the recording season. However I must thank Roger Veall for sending corrections to the New Atlas, based on his personal records. I hope to publish a list of these updates in the next Flora News. If any of you know of any errors in the Atlas, because you have found things not shown, or in the wrong date class, please let me know, as these will need to be passed to BRC. If you have any such corrections, please pass on the full details of the record, including a date, recorder, grid reference and locality.

Pete Selby
VC Recorder S Hants and BSBI Volunteers Officer.

Table 1 - *Progress chart for all the Local Change Tetrads in Hampshire, up to 14 August 2003*.

Tetrad	Area	A 87/88	B 03/04	C Total	D Loss	E Gain	F Refound	F/A% Recovery	E/B% Expansion	(B-A)/A% Change	Party Visits	Recorder Names	Recent Visit
SU50J	Whiteley	267	332	387	55	120	212	79%	36%	24%	14	6	14 Aug
SU50W	Frater Gosport	329	340	429	89	100	240	73%	29%	3%	12	3	6 Aug
SU20A	Holmsley Walk	347	282	388	106	41	241	69%	15%	-19%	6	6	10 Jul
SU20J	Bratley Area	340	377	431	54	91	286	84%	24%	11%	16	7	22 Jul
SU20W	Brockenhurst	330	411	456	45	126	185	86%	31%	25%	12	4	25 Jul
SU23W	Broughton	271	337	363	26	92	245	90%	27%	24%	15	4	31 Jul
SU53A	S of Easton	122	311	318	7	196	115	94%	63%	155%	19	5	9 Jul
SU53J	E of Micheldever	178	324	348	24	170	154	87%	52%	82%	11	10	22 Jun
SU53W	Alresford	235	425	460	35	225	200	85%	53%	81%	16	12	12 Jul
SU56W	Heath End	380	399	501	102	121	278	73%	30%	5%	7	4	27 Jun
SU83A	MOD Longmoor	164	386	412	26	248	138	84%	64%	135%	7	5	20 Jun
SU83J	Wishanger Common	255	360	411	51	156	204	80%	43%	41%	6	6	12 Jul
SU86A	Yateley	347	322	430	108	83	239	69%	26%	-7%	7	5	20 Apr

VC 12 Records compiled by Tony Mundell

The most exciting botanical discovery within VC12 this year has been a single clump of Lady Orchid, *Orchis purpurea*, within the DSTL (Defence Science & Technology Laboratories) at Porton Down. It was found on 31 May 2003 by a party of visiting birdwatchers. I managed to get in to see it on 7 June, by which time the three robust flower spikes were going over and beginning to set seed. I have arranged for a group visit next year (see Forthcoming Events) to see if we can find any more plants of it in the woodland on Isle of Wight Hill.

Here is a selection of records received recently. As previously this is only my personal selection from the numerous records received (and often I have fuller details in the original record). A few add 10km square records to update Atlas 2000 and many are as a result of recording for the BSBI Local Change scheme. This scheme will continue until the end of 2004 so if you want to join my team helping with recording, please let me know. In the next issue I will summarise how many species have been re-found, gained or lost in each tetrad compared with the survey 15 years ago. We can then concentrate next year on looking for the 'lost' species.

Some notable plants were found during the HFG meeting to the Herriard Estate in April and during a subsequent follow-up meeting at the invitation of the landowner. I have deliberately not given precise map references for these to avoid encouraging people to trespass!

Again my thanks to those of you who have contributed records. As noted in previous issues, map references should be treated as approximate, and again I have omitted the 'SU' to save space.

Agrimonia procera, Danebury Hill 323377, Roger Veall 1985 (amendment to Atlas 2000).
Allium paradoxum, 20 spikes in Green Meadow Lane, Goodworth Clatford, 362428, Ann Ohlenschlager 22 Apr 2003.
Allium subhirsutum, c. 40 spikes on large heap of introduced soil beside lake, Wishanger 838385, Tony Mundell & Dorothy Brookman 13 Apr 2003, det. Eric Clement, but site bulldozed away 12 Jul 2003!
Anacamptis pyramidalis,single plant beside track MOD Longmoor 80473134, Barry & Jane Goater and Tony Mundell 28 Jun 2003. Also single plant Eelmoor Marsh, Farnborough 84275366, Emma Hutchings, comm. Betty Hansell 19 Jun 2003, conf. Tony Mundell. Both these are unusual as the sites are surrounded by acid heathland.
Anagallis minima, uncountable thousands of plants, dominant over a patch 5m x 1m, MOD Longmoor 80903141, Barry & Jane Goater and Tony Mundell 28 Jun 2003.
Anagallis tenella, beside ditch, Old Thorns Golf Course, Weavers Down 81463140, Pam Vass and Tony Mundell 25 Jun 2003.
Apium inundatum, in pond, SE side of Silchester Common 62426211, Bill Helyar 4May 2003.
Asplenium trichomanes, Cheriton 589283, Roger Veall 1996 (not in Atlas 2000).
Bromopsis benekenii, Herriard Estate 1km square 6647, a few plants amongst *B. ramosa* in clearing in beech wood, identified by Paul Stanley from last year's spikes, HFG meeting 26 Apr 2003.
Bromus racemosus, on broad, chalky roadside verge, opposite track to Greywell Fen, near Cholseley's Farm, Odiham 718500, Ron E. Groom 29 Jun 1970, det. Laurie M. Spalton 15 Apr 2003.
Carduus nutans, 14 along public footpath at Quarley Hill 382536, Peter Billinghurst 20 Jun 2003.
Carex arenaria, several places at MOD Longmoor 80563130, 80783136, 80993136, Barry & Jane Goater and Tony Mundell 28 Jun 2003.
Carex binervis, Chilbolton 388400, Roger Veall 1988 (amendment to Atlas 2000).
Carex strigosa, locally frequent along streams and ditches in woods, Ecchinswell 51176179, 51426187, Tony Mundell, Sarah Priest & Sarah Ball, 10 Apr 2003.
Carum carvi, Chilbolton 385392, shown to Roger Veall 1983 or 1984 (amendment to Atlas 2000).
Catapodium rigidum, N facing brick wall by B3047, Alresford 59173267, Barry & Jane Goater 13 Jun 2003.
Centaurium pulchellum, MOD Longmoor 80823144, 80903141, 80863140, Barry & Jane Goater and Tony Mundell 28 Jun 2003.
Cephalanthera longifolia, a total of 43 plants in six different places at Herriard Park 6747 and 6748, Nigel & Gwynne Johnson and Tony Mundell 21 May 2003.
Ceratocapnos claviculata, beside footpath, Wishanger 82653913, 82303887, 82533899, Tony Mundell & Sue Clark 14 Jun 2003.
Centaurea montana, garden escape by footpath, New Alresford 58783326, Audrey Hold & Vera Scott 4 Apr 2003.
Chaenorhinum minus, single plant on raised bank of disturbed soil, QinetiQ, Farnborough, 83985419, Tony Mundell 17 Jun 2003.
Chenopodium ficifolium, plentiful on bank of disturbed soil, QinetiQ, Farnborough 84205432, Tony Mundell 17 Jun 2003.
Chionodoxa forbesii, Alresford 58563217, Barry & Jane Goater & Martin Rand 4 Apr 2003.
Chrysosplenium oppositifolia, very wet sunken lane, Wishanger 82253850, Tony Mundell & Sue Clark 14 Jun 2003.
Claytonia sibirica, beside Queens Road, Old Thorns Golf Course 81543096, Tony Mundell & Sue Clark 11 May 2003.
Convallaria majalis, very large patch of leaves but only two flower spikes, SE side of Silchester Common 62156138, Bill Helyar 4 May 2003.
Cotoneaster x watereri, New Alresford 595335, Roger Veall 24 Mar 2003, det. Jeanette Fryer.
Crassula tillaea, MOD Longmoor 80293124 and 80563137, Barry & Jane Goater and Tony Mundell 28 Jun 2003. Also MOD Longmoor 81333059, 80933133, Tony Mundell 26 Mar 2003.
Crocus tomassinianus, established at Broad Street 588328, and The Avenue 582324, Alresford, Roger Veall 15 Mar 2003.
Cyclamen hederifolium, one huge plant in conservation area of churchyard, New Alresford 588326, Dorothy Brookman 3 May 2003.
Dactylorhiza praetermissa, MOD Longmoor 80363124, 80793143, 80993148, Barry & Jane Goater and Tony Mundell 28 Jun 2003. Also Old Thorns Golf Course, Weavers Down 81773125, 81513147, 81643156, 81523152, 81703155, 81503141, Pam Vass and Tony Mundell 25 Jun 2003.
Daphne mezereum, five bushes at Herriard Park 1km square 6547, Nigel & Gwynne Johnson and Tony Mundell, 21 May 2003.
Deschampsia cespitosa ssp. *parviflora*, tetrad 3838, Roger Veall 1989 (amendment to Atlas 2000).
Dryopteris affinis, Ashdown Copse 240471, Tony Mundell on walk led by John Moon 15 Mar 2003.
Dryopteris carthusiana, at pond edge, New Alresford 589333, Tony Mundell & Beryl Foote 3 May 2003.
Erigeron acer, numerous plants on disturbed soil, QinetiQ, Farnborough 84155432, Tony Mundell 17 Jun 2003.
Erigeron karvinskianus, roadside wall, New Alresford 588326, Tony Mundell & Beryl Foote 3 May 2003.
Erysimum cheiranthoides, c.20 plants on field edge, Wishanger 82723933, Tony Mundell & Sue Clark 14 Jun 2003.
Euphorbia lathyrus, two on raised bank of disturbed soil, QinetiQ, Farnborough 83985419, Tony Mundell 17 Jun 2003.
Filago vulgaris, with *F. minima* on E side of track, MOD Longmoor 80323124, Barry & Jane Goater and Tony Mundell 28 Jun 2003.
Genista anglica, 35 plants amongst *Calluna*, Heath End 58646235, Tony Mundell & Bill Helyar 20 Apr 2003.

Genista tinctoria ssp. *tinctoria*, plentiful on road verge at Lichfield 45905310, Peter Billinghurst 10 Jul 2003.
Geranium endressii, Cheriton 593284, Roger Veall 1985 (amendment to Atlas 2000).
Geranium lucidum, verge of Smithfield Lane, Wishanger 83593825, and abundant on verge 82683856 to 82603852, Tony Mundell & Dorothy Brookman 13 Apr 2003.
Gnaphalium sylvaticum, four spikes from last year, Herriard Estate 1km square 6647, HFG meeting 26 Apr 2003.
Griselinia littoralis, beside track, New Alresford 588331, Tony Mundell & Beryl Foote 3 May 2003.
Hordeum secalinum, meadow adjacent to Bentley Station Meadow Reserve 792429, Sue Clark 13 Jun 2003.
Hypericum x desetangsii, tetrad 3838, Roger Veall 1990 (amendment to Atlas 2000).
Hypericum maculatum, in coppiced clearing, Herriard Estate 1km square 6746, HFG meeting 26 Apr 2003.
Hypericum elodes, in small pond, Old Thorns Golf Course, Weavers Down 81733144, Pam Vass and Tony Mundell 25 Jun 2003.
Isolepis setacea, MOD Longmoor 80333124, Barry & Jane Goater and Tony Mundell 28 Jun 2003.
Kerria japonica, establishing at Old Alresford 591339, Nigel & Gwynne Johnson, George Burfoot & Martin Rand 4 Apr 2003.
Lamium maculatum, beside footpath, W end of The Dean, New Alresford 58343293, Roger Veall 18 Apr 2003.
Lathraea squamaria, parasitic on a Wych Elm, Herriard Estate 1km square 6646, HFG meeting 26 Apr 2003.
Lepidium draba, two plants, new to Old Burghclere Lime Quarry 47115748, Peter Billinghurst 31 May 2003.
Leucanthemum palustre, numerous plants in pavement cracks outside Alresford Gallery 58713267, Tony Mundell & Beryl Foote 3 May 2003, det. Eric Clement.
Lycium barbarum, tetrads 3638 and 3838, Roger Veall 1994 (amendment to Atlas 2000).
Malva moschata, white form, plentiful at Liz's Lakes QinetiQ, Farnborough c.851546, Tony Mundell 4 Jul 2003. This attractive white form, possibly of garden origin, forms colonies so must come true from seed.
Minuartia hybrida, plentiful on top of old wall of Lord Mayor Treloar College, Froyle 75404267 to 75504285, Tony Mundell and Sue Clark 23 Jun 2003.
Misopates orontium, noted for years as a garden weed in Husseys Lane, Lower Froyle 764441, Sue Clark 14 Jun 2003.
Moenchia erecta, SE side of Silchester Common 62166240, Bill Helyar 4 May 2003.
Narcissus pseudonarcissus ssp. *pseudonarcissus*, Ashdown Copse, patch c.15m x 15m at 240471 and several more patches spread over 100m x 20m area on hummocks of an ancient disused pit in woods 247472, Tony Mundell et al, walk led by John Moon 15 Mar 2003. Also large native colony in Herriard Estate 1km square 6647, HFG meeting 26 Apr 2003.
Narthecium ossifragum, Weavers Down Bog HWT Reserve 81123136, Tony Mundell & Sue Clark 11 May 2003.
Ophrys apifera, two spikes at Liz's Lakes, QinetiQ Farnborough c.851546, Tony Mundell 4 Jul 2003, found here first by Chris Hall. Also one spike between cycle shed and QinetiQ Cody Gate reception building, c.844543 comm. Betty Hansell 3 Jun 2003. Bee orchids do not seem to persist long in one spot but seem to crop up in slightly different locations each year – perhaps they are monocarpic.
Orchis mascula, Herriard Estate 1km square 6647, HFG meeting 26 Apr 2003.
Orchis purpurea, clump with three flowering spikes, Isle of Wight Hill, Dstl Porton Down 25143733, Lucy Delve 31 May 2003.
Ornithogalum angustifolium, beside Queens Road, Old Thorns Golf Course 81573089, Tony Mundell & Sue Clark 11 May 2003. Also several in woods, Yateley 81076115, Tony Mundell & Peter Scott 12 Apr 2003. Beside path N of Millbridge Road, Yateley 80776160, Tony Mundell & Dorothy Brookman 23 Mar 2003.
Ornithopus perpusillus, really abundant across large area of disturbed soil, QinetiQ, Farnborough e.g. 838543, Tony Mundell 17 Jun 2003.
Oxalis corniculata var. *atropurpurea*, along pavement outside a garden wall, Millbridge Road, Yateley 80786158, Tony Mundell & Dorothy Brookman 23 Mar 2003.
Oxalis exilis, roadside verge outside Mellow Farm, Wishanger 82133882, Tony Mundell & Sue Clark 14 Jun 2003.
Papaver dubium ssp. *dubium*, a few on disturbed soil, QinetiQ, Farnborough 840542, Tony Mundell 17 Jun 2003. Also one in fallow field beside Scats Depot, Micheldever 47795672, Peter Billinghurst 15 Jun 2003.
Papaver dubium ssp. *lecoqii*, noted for 12 years as a garden weed in Husseys Lane, Lower Froyle 764441, Sue Clark 14 Jun 2003.
Parentucellia viscosa, numerous plants in a couple of places at Liz's Lakes, Qinetiq Farnborough 85025442 and 85035448, Tony Mundell 4 Jul 2003. Also MOD Longmoor 80333124, 80563137, 80793143, 80823144, 80883142, Barry & Jane Goater and Tony Mundell 28 Jun 2003.
Paris quadrifolia, four plants in FC woodland to east of Bentley Station Meadow Reserve, 15-20m from dividing wire fence, Sue Clark 24 May 2003.
Persicaria bistorta, small clump on roadside verge, Plastow Green 52976142, Sarah Priest 31 May 2003.
Poa angustifolia, tetrad 3840, Roger Veall 1989 (amendment to Atlas 2000). Also N facing brick wall by B3047, Alresford 59173267, Barry & Jane Goater 13 Jun 2003.
Polypogon monspeliensis, found in 2002 on a new roadside verge inside grounds of QinetiQ Farnborough at 83835419. On 17 Jun 2003 Tony Mundell found it there but also scattered colonies over the adjacent huge area of disturbed sandy soil at 83965418, 83905429, 83885430, 83985419 and particularly plentiful at corner of raised bank at 84245437.
Potamogeton berchtoldii, in pond, Old Thorns Golf Course, Weavers Down 81593154, Pam Vass and Tony Mundell 25 Jun 2003.
Potentilla norvegica, c.20 plants beside track of disused military railway, MOD Longmoor 80663146, Barry & Jane Goater and Tony Mundell 28 Jun 2003.
Primula veris x vulgaris, a few plants at five different spots in Herriard Estate 1km squares 6647 and 6747, HFG meeting 26 Apr 2003. Also near M3 Micheldever Wood 53243890, Sarah Priest, Su Forster & Mary Cockerill 3 May 2003.
Radiola linoides, MOD Longmoor 80903141, Barry & Jane Goater and Tony Mundell 28 Jun 2003.
Ranunculus ficaria ssp. *bulbilifera*, New Alresford 588332, 587330, 58413298, Tony Mundell & Beryl Foote 3 May 2003. Also B3046 road junction, Alresford 587334 and other sites nearby, Roger Veall 18 Apr 2003.

Ranunculus peltatus, abundant in pond, SE side of Silchester Common 62416214, Bill Helyar 4 May 2003.
Rosa micrantha, one bush, Herriard Estate 1km square 6747, HFG meeting 26 Apr 2003, det. Paul Stanley.
Rosa rubiginosa, Chilbolton 386391, Roger Veall 1994 (amendment to Atlas 2000).
Rubus tricolor, spreading by roadside, Wishanger 833389, Tony Mundell & Dorothy Brookman 13 Apr 2003.
Salix purpurea, Chilbolton 386405, Roger Veall 1986 (amendment to Atlas 2000).
Sambucus racemosa, Chilbolton 388397, shown to Roger Veall 1985 (amendment to Atlas 2000).
Samolus valerandi, hundreds in main colony on disused airstrip, MOD Longmoor 81003143 plus over 50 nearby at new location at 80903141, Barry & Jane Goater and Tony Mundell 28 Jun 2003.
Sorbus hybrida, single young bush in woods, clearly bird-sown, Heath End 58686224, Tony Mundell & Bill Helyar 20 Apr 2003.
Stachys arvensis, three plants on field edge, Wishanger 82673933, Tony Mundell & Sue Clark 14 Jun 2003.
Stachys palustris, beside ditch, Queens Road, Weavers Down 81203148, Tony Mundell & Sue Clark 11 May 2003.
Stellaria pallida, locally abundant in short turf of fairway, Old Thorns Golf Course 81653069, Tony Mundell & Sue Clark 11 May 2003.
Stranvaesia davidiana, single tree in woodland, Yateley 81166115, Tony Mundell & Peter Scott 12 Apr 2003.
Thlaspi arvense, Alresford 59573254, Barry & Jane Goater 13 Jun 2003.
Trifolium incarnatum ssp. *incarnatum*, single plant in newly sown grass, evidently as a seed-contaminant, QinetiQ, Farnborough 84165416, Tony Mundell 11 Jun 2003.
Vaccinium oxycoccus, on Sphagnum in small quantity, Weavers Down Bog HWT Reserve 81123136, Tony Mundell & Sue Clark 11 May 2003.
Viscum album, on *Populus*, Old Alresford 595333, Nigel & Gwynne Johnson, George Burfoot & Martin Rand 4 Apr 2003. Also on planted *Sorbus* cultivar, Moulsham Green, Yateley 809617, Tony Mundell & Dorothy Brookman 23 Mar 2003.

Compiled July 2003, Tony Mundell, 38 Conifer Close, Church Crookham, Fleet, Hampshire, GU52 6LS
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News From A Far Shore

Early Gentian (*Gentianella anglica*).

This summer has been a bumper year for the early gentian on the Isle of Wight. The best sites include West High Down, Mottistone Down and Ventnor Downs. Most sites are Sites of Special Scientific Interest (SSSIs) and the majority are managed by the National Trust. However in bumper years the plant can turn up in small numbers on many more of the Island's downland. This includes its original site at Rew Down where the plant was first recorded in 1878 but not seen regularly every year since. It was pleasing therefore this year to find a single plant on Arreton Down, a Hampshire and Isle of Wight Trust reserve which has been under conservation management for two years. The plant had not been recorded since 1987 including the whole Island survey carried out in 1994.

Richard Grogan

Early Spider Orchid (*Ophrys sphegodes*)

The early spider orchid has a chequered history on the Island. It has been recorded at Bonchurch, Luccombe and Cowleaze at the beginning of the 20th century and on Brading Down in 1945. It was recorded as extinct in the 'Flora of the Isle of Wight' (Bevis et al 1978) but has been recorded on West High Down in the mid 1990s. This year the plant has been recorded in a garden in Norton near Freshwater on the Island which has other species of orchid in the turf.

Richard Grogan

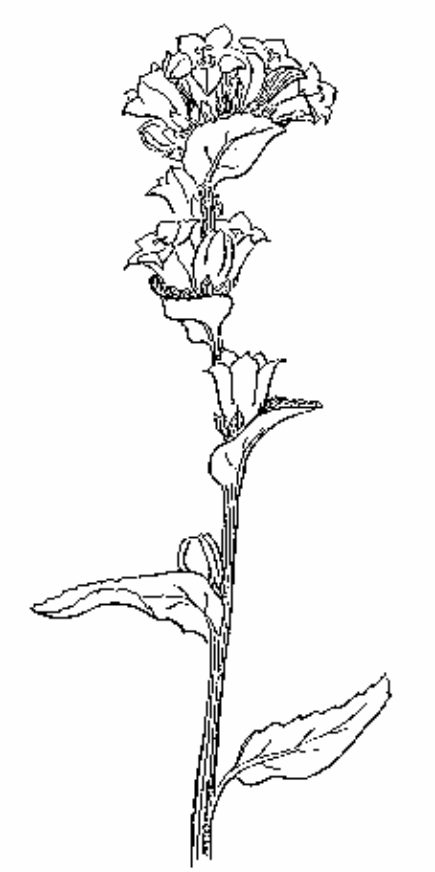
Painting a Picture of the Garden Isle

The Isle of Wight Flora – Pope et al - is due for publication in September 2003.

On the Isle of Wight, we have long prided ourselves on our isolation, our mild climate and our diverse geology and landscape. The descriptions of the Island as 'a microcosm of England' and 'the Garden Isle' are now being reinforced by the production of the new Isle of Wight Flora, as mentioned in the Spring 2003 edition of Flora News. The Island is home to a number of rare and beautiful species which are uncommon or extinct elsewhere including narrow-leaved lungwort, Martin's ramping fumitory, wood calamint and early gentian.

The first Isle of Wight flora was published in 1856 and was followed by an updated list in 1909. A full revised flora was published by the Isle of Wight Natural History and Archaeological Society in 1978. This book has been an invaluable resource for those wishing to study the Island's diversity of wild flowers but it has become out of date. Over the past few years, the recording of wild flowers by volunteers has increased, as the Society and others saw the need for vital information on plants' habitats and their distribution. There have been few extinctions of Island plants since 1978 but notable losses have included burnt tipped orchid, man orchid and lesser butterfly orchid. We have also gained 25 species that were thought to be extinct in 1978 showing the dynamic nature of the Island's ecology. The greatest levels of loss were during 1950 – 1975 when the destruction of hedges and old pastures was at its height. The plants of wet, acidic habitats are our most vulnerable species. The picture

these facts help to paint increases our understanding of how nature adapts to increasing pressures and helps inform the Biodiversity Action Plan process.



Once all these records are collected they need to be brought together and published. A team of eight Society members, from their specialised Botany Section, has undertaken this task, forming the Isle of Wight Flora Project on a winter's evening in 2001. The result will be a 256 page book with 16 colour plates of distinctive habitats and plants and over 300 distribution maps. The book will cover flowering plants, liverworts and mosses, lichens and stoneworts. It will also include chapters on the history of the study of wild plants on the Island, the Island's geology and its weather and climate.

The book hopes to paint a picture of the distinctive diversity of the Island's plant life, how it has changed over time, how it has been influenced and how it continues to change in the present day. The information is not only of interest to plant lovers but anyone who cares about wildlife and wild places on the Island and cares about their long term survival and conservation.

The hardback book (which is due to appear in September 2003) is available at a pre-publication offer price of £ 28.00. A leaflet giving details was enclosed with the Spring 2003 edition of Flora News. Details are also available from the Wight Wildlife Office, 2 High Street, Newport, Isle of Wight PO30 1SS. After publication it will retail at £35 plus postage and packing. The book can be ordered from Dovecote Press by post or on-line.

Richard Grogan

Rare arable weeds in oil seed rape

There is some concern within English Nature and elsewhere that the introduction of herbicide-tolerant oil seed rape might have a detrimental effect on relict populations of rare arable weeds. Fields sown with non-GM oil seed rape are seldom treated with herbicide and this gives an occasional chance for some arable weeds to set seed that they would not otherwise have. Clearly this opportunity will be lost if most future oil seed rape crops are regularly treated with Roundup.

EN is contemplating funding a study of arable weeds in oil seed rape but, in the meantime, if any Flora Group member has any records of RDB arable weeds in oil seed rape fields then Brian Johnson, Head of EN's Agricultural Technologies Group, would be pleased to hear of them (brian.johnson@english-nature.org.uk).

(item contributed by John Moon who has been corresponding with EN on this issue)

Arable Plants – a field guide

Phil Wilson and Miles King have written an extremely attractive and useful book titled 'Arable Plants – a field guide'. Over 100 species of Britain's rare arable plants are each covered in detail with a descriptive identification account with reference to similar species; distribution maps; flowering and germination period chart; notes on habitat, soil type and special management requirements. Additional chapters and case studies cover the origins and history of Britain's arable flora, the biology of arable plants and the management of arable land for flowers. The 312 page, A5 hardback book which is fully illustrated with colour photographs costs £15 and is available from Wild Guides, Parr House, 63 Hatch Lane, Old Basing, Hampshire, RG24 7EB, telephone 07818 403678, fax 01256 818039.

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Appendix – Plant species recorded by Hants Flora Group during the Hayling Trip on 11th May 2003.

Recorder = Hampshire Flora Group, det. = E Clement/M Rand

Code	Taxon	Vernacular	Gridref	Stage	Comment
Black Point					
532	Cochlearia anglica	English Scurvygrass / Long-leaved Scurvy-grass	SZ750985	Flowering	
592	Cymbalaria muralis	Ivy-leaved Toadflax	SZ750985	Flowering	
1489	Plantago maritima	Sea Plantain	SZ750985	Not in flower	In small saltmarsh
1777	Sarcocornia perennis	Perennial Glasswort	SZ750985	Mature	
1912	Sherardia arvensis	Field Madder	SZ750985	Flowering	Earth bank on building site behind lifeboat station
2101	Triglochin maritimum	Sea Arrowgrass	SZ750985	Not in flower	Small patch of saltmarsh behind lifeboat station
42	Aira praecox	Early Hair-grass / Small Hair-grass	SZ7598	Flowering	
74	Allium triquetrum	Three-cornered Garlic / Three-cornered Leek	SZ750987	Flowering	
97	Ammophila arenaria	Marram / Marram Grass	SZ7598	Mature	
99.8	Anagallis arvensis subsp. arvensis	Scarlet Pimpernel	SZ7598	Flowering	
123	Anthriscus caucalis	Bur Parsley / Bur Chervil	SZ7598	Flowering	
133	Aphanes australis	Slender Parsley-piert	SZ7598	Flowering	
312	Calystegia soldanella	Sea Bindweed	SZ7598	Not in flower	
344	Carex arenaria	Sand Sedge	SZ7598	Flowering	
462	Cerastium diffusum	Sea Mouse-ear	SZ7598	Flowering	
533	Cochlearia danica	Early Scurvy-grass	SZ7598	Flowering	
565	Crambe maritima	Sea Kale	SZ750987	Not in flower	
578	Crepis vesicaria	Beaked Hawk's-beard	SZ7598	Flowering	
644	Diplotaxis muralis	Stinkweed	SZ7598	Flowering	
758	Eryngium maritimum	Sea Holly	SZ7598	Not in flower	
775	Euphorbia paralias	Sea Spurge	SZ7598	Not recorded	
988	Honckenya peploides	Sea Sandwort	SZ7598	Flowering	
1097	Lagurus ovatus	Hare's-tail	SZ7598	Flowering	Abundant on sand and dry banks
1119	Lavatera arborea	Tree-mallow	SZ7598	Not in flower	
333.1	Lepidium draba subsp. draba	Hoary Cress	SZ7598	Flowering	
1247	Medicago arabica	Spotted Medick	SZ7598	Flowering	
1320	Myosotis ramosissima	Early Forget-me-not	SZ7598	Flowering	
1363	Oenanthe crocata	Hemlock Water-dropwort	SZ750987	Not in flower	
1459	Phleum arenarium	Sand Cat's-tail	SZ7598	Flowering	Widespread and abundant on sand
1877	Sedum anglicum	English Stonecrop	SZ7598	Not in flower	
2031	Tamarix gallica	Tamarisk	SZ7598	Flowering	
2227	Vulpia fasciculata	Dune Fescue	SZ750987	Flowering	
Hayling Island					
929	Glaucium flavum	Yellow Horned Poppy	SZ750984	Not in flower	By fence at back of foreshore
1377	Ononis repens	Common Restharrow / Rest-harrow	SZ750984	Not in flower	Around fence and masonry at top of foreshore
Nr Lifeboat Station					
2077	Trifolium arvense	Hare's-foot Clover / Haresfoot Trefoil	SZ7598	Not in flower	
2094	Trifolium scabrum	Rough Clover	SZ751987	Flowering	On crest of sandy ground behind beach
2204.1	Vinca major var. major	Greater Periwinkle	SZ7598	Flowering	Naturalized in E fringe of Sandy Point NR
S Hayling					
525	Claytonia perfoliata	Spring Beauty	SZ7098	Flowering	
Sandy Beach Estate					
94	Amelanchier lamarckii	Juneberry	SZ748983	Part grown	
396	Carex otrubae	False Fox-sedge	SZ748984	Flowering	
579	Crithmum maritimum	Rock Samphire	SZ746980	Not in flower	Along S edge of reserve

661	Dryopteris dilatata	Broad Buckler-fern / Common Buckler-fern	SZ748981	Mature	Damp hollows in dunes / gravel
1052	Juncus acutus	Sharp Rush	SZ748981	Not in flower	
1321	Myosotis discolor	Changing Forget-me-not	SZ748987	Flowering	
1506.5	Poa humilis	Spreading Meadow-grass	SZ748981	Flowering	
1666	Raphanus raphanistrum subsp. maritimus	Sea Radish	SZ746980	Not in flower	On back of sand / shingle ridge at S edge of reserve
1769	Sagina subulata	Heath Pearlwort	SZ748981	Flowering	Locally abundant towards S edge of nature reserve, concentrated in short turf over old made-up track. Referable to var. subulata (glandular hairs present on calyx)
2103	Trifolium ornithopodioides	Bird's-foot clover / Fenugreek	SZ748983	Flowering	

Sandy Point NR

42	Aira praecox	Early Hair-grass / Small Hair-grass	SZ7498	Flowering	
166.2	Armeria maritima subsp. maritima	Thrift	SZ7498	Flowering	
309	Calluna vulgaris	Heather / Ling / Common Heather	SZ7498	Mature	
376	Carex flacca	Glaucous Sedge	SZ7498	Flowering	
462	Cerastium diffusum	Sea Mouse-ear	SZ7498	Flowering	
726	Erica cinerea	Bell Heather	SZ7498	Mature	
822.2	Festuca filiformis	Fine-leaved Sheep's Fescue	SZ7498	Not in flower	Checked microscopically from lf characters
929	Glaucium flavum	Yellow Horned Poppy	SZ7498	Not in flower	
988	Honckenya peploides	Sea Sandwort	SZ7498	Flowering	
1072	Juncus maritimus	Sea Rush	SZ7498	Not in flower	
1204	Luzula multiflora	Heath Wood-rush	SZ7498	Flowering	
1363	Oenanthe crocata	Hemlock Water-dropwort	SZ7498	Not in flower	
1442	Pedicularis sylvatica	Lousewort	SZ7498	Flowering	Widespread and often abundant on heathier parts of the reserve
1514	Polygala serpyllifolia	Heath Milkwort	SZ7498	Flowering	Widely distributed in reserve
1515	Polygala vulgaris	Common Milkwort	SZ7498	Flowering	Widely distributed but especially common in grassland towards W parts of reserve. Mostly white-flowered
1926	Silene uniflora	Sea Campion	SZ7498	Flowering	
2113	Ulex gallii	Western Gorse	SZ7498	Not in flower	
2114	Ulex minor	Dwarf Gorse	SZ748982	Not in flower	A small patch growing intimately in / under U. gallii
2173	Veronica officinalis	Heath Speedwell / Common Speedwell	SZ7498	Flowering	
2194	Vicia lathyroides	Spring Vetch	SZ7498	Flowering	Scattered but widespread and fairly abundant on the S edge of the reserve.
2207.1	Viola canina subsp. canina	Heath Dog-violet	SZ7498	Flowering	Widely distributed and locally abundant in northern / central parts of reserve

Sandy Point, Eastoke

831	Filago minima	Small Cudweed	SZ750983	Not in flower	
1018	Hypochaeris glabra	Smooth Cat's-ear	SZ750983	Flowering	In short grassy strip to E of nature reserve
1533	Polygonum maritimum	Sea Knotgrass	SZ750983	Not in flower	40+ plants on higher parts of shingle foreshore
2041	Teesdalia nudicaulis	Shepherd's Cress	SZ750983	Flowering	Scattered in short turf of fenced strip E of nature reserve
2100	Trifolium suffocatum	Suffocated Clover	SZ750983	Flowering	A few plants in short turf in the fenced strip to the E of the nature reserve

Sandy Point

99.8	Anagallis arvensis subsp. arvensis	Scarlet Pimpernel	SZ7498	Flowering	
344	Carex arenaria	Sand Sedge	SZ7498	Flowering	
565	Crambe maritima	Sea Kale	SZ7498	Not in flower	
578	Crepis vesicaria	Beaked Hawk's-beard	SZ7498	Flowering	
775	Euphorbia paralias	Sea Spurge	SZ7498	Not recorded	
1097	Lagurus ovatus	Hare's-tail	SZ7498	Flowering	

333.1	Lepidium draba subsp. draba	Hoary Cress	SZ7498	Flowering	
1247	Medicago arabica	Spotted Medick	SZ7498	Flowering	
1320	Myosotis ramosissima	Early Forget-me-not	SZ7498	Flowering	
1397	Ornithopus perpusillus	Bird's-foot / Common Birdsfoot	SZ747980	Flowering	A few plants in the short turf of the made-up track close to the S edge of the reserve
1459	Phleum arenarium	Sand Cat's-tail	SZ7498	Flowering	
1544.2	Polypodium vulgare	Common Polypody	SZ750983	Mature	Determined from examination of sporangia (10+ reddish-brown indurated cells)
1877	Sedum anglicum	English Stonecrop	SZ7498	Not in flower	
2191	Vicia hirsuta	Hairy Tare	SZ747980	Flowering	Abundant on back of shingle ridge

South Hayling

567	Crassula tillaea	Mossy Stonecrop	SZ708988	Not in flower	Abundant in short open turf over shingle
1637	Quercus ilex	Evergreen Oak / Holm Oak	SZ7098	Mature	

Staunton Avenue

1934	Sison amomum	Stone Parsley	SZ7099	Not in flower	Survives in suburban road verges
369	Carex divulsa subsp. divulsa	Grey Sedge	SZ708992	Flowering	Against garden hedge on W side of road
404	Carex pendula	Pendulus Sedge / Drooping Sedge / Pendulous Sedge	SZ708992	Flowering	Possible garden escape

West Town

835	Foeniculum vulgare	Fennel	SZ708989	Not in flower	
1090.1	Petrorhagia nanteuilii	Chidling Pink	SZ708989	Not in flower	4 diminutive flowering shoots in bud
1497	Poa bulbosa	Bulbous Meadow-grass	SZ708989	Mature	In great quantity all the way from sea front to beach, already gone over and desiccated
2226	Vulpia bromoides	Squirrel-tail Fescue	SZ708988	Flowering	