



**Journal
of the
HARDY ORCHID SOCIETY**

Vol. 6 No. 4 (54) October 2009

The Hardy Orchid Society

Our aim is to promote interest in the study of Native European Orchids and those from similar temperate climates throughout the world. We cover such varied aspects as field study, cultivation and propagation, photography, taxonomy and systematics, and practical conservation. We welcome articles relating to any of these subjects, which will be considered for publication by the editorial committee. Please send your submissions to the Editor, and please structure your text according to the "Advice to Authors" (see website www.hardyorchidsociety.org.uk, January 2004 Journal, Members' Handbook or contact the Editor). Views expressed in journal articles are those of their author(s) and may not reflect those of HOS.

The Hardy Orchid Society Committee

President: Prof. Richard Bateman, Jodrell Laboratory, Royal Botanic Gardens Kew, Richmond, Surrey, TW9 3DS

Chairman: David Hughes, Linmoor Cottage, Highwood, Ringwood, Hants., BH24 3LE davidcchughes@talktalk.net

Vice-Chairman: Celia Wright, The Windmill, Vennington, Westbury, Shrewsbury, Shropshire, SY5 9RG celia.wright@tiscali.co.uk

Secretary: Alan Leck, 61 Fraser Close, Deeping St. James, Peterborough, PE6 8QL alanleck@plus.com

Treasurer: John Wallington, 17, Springbank, Eversley Park Road, London, N21 1JH jrwallington@blueyonder.co.uk

Membership Secretary: Moira Tarrant, Bumbys, Fox Road, Mashbury, Chelmsford CM1 4TJ m.tarrant@virgin.net

Plant Show Secretary: Malcolm Brownsword, 14 Manor Close, West Hagbourne, Didcot, Oxfordshire, OX11 0NQ malcolm.brownsword@tesco.net

Journal Editor: Mike Gasson, Moor End Cottage, Moor End, Stibbard, Norfolk, NR21 0EJ moorend@globalnet.co.uk

Wisley & Kidlington Meetings Organiser: Betty Barber, 8 Dean Close, Deeds Grove, High Wycombe, Bucks, HP12 3NS betty.barber@gmail.com

Harrogate Meeting Organiser: David Hughes (as above)

Publicity Officer: Simon Tarrant, Bumby's, Fox Road, Mashbury, Chelmsford CM1 4TJ s.tarrant@virgin.net

Seed Bank: Philip Seaton, 52 Shrubbery Street, Kidderminster, Worcs., DY10 2Q philip@seatonorchids.freeseerve.co.uk

Journal Distributor: Iain Wright, The Windmill, Vennington, Westbury, Shrewsbury, Shropshire, SY5 9RG iaincwright@tiscali.co.uk

Conservation and Website: Bill Temple, Primrose Cottage, Hanney Road, Steventon, Oxon., OX13 6AP bill@billtemple.t9.co.uk

Field Meeting Co-ordinator: David Hughes (as above)

Front Cover Photograph

Orchis (Aceras) anthropophora (Man Orchid) at Hills and Holes NNR, as featured in Jean Stowe's field trip (page 112). Photo by Mike Gasson

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Editorial Note

This issue has reports from the many field trips that were organised earlier in the year, illustrating how well these events have developed. Also, there is interesting news of a new discussion forum for HOS members that will supplement the existing website. Amongst the articles we have an update on Richard Bateman's *Platanthera* project, which has been so well supported by HOS members, and another installment of "Italy" from Paul Harcourt Davies, accompanied as always by some of his excellent photographs. In addition, we have something a little different from John Spencer in the form of an Israel "travelogue". As someone with a particular interest in the "anthropomorphic" *Orchis* species, I especially enjoyed the different colour forms of *Orchis galilaea* that John managed to photograph on his trip.

Hardy Orchid Society Discussion Forum

Moira Tarrant

This exciting new web-based service for members will be launched over the next few months. The Discussion Forum will allow members to seek advice, share views and facts, post photos and access information. Because it is accessible only by invitation to current Members of the Society and is moderated, it will provide a secure partner to the HOS website which is already a powerful and respected web presence. Over the next couple of months members who have provided an e-mail address will receive an invitation to join the Discussion Forum. You can choose to not take part at any stage of the subscription process. If you are keen to get involved and think that I do not have your e-mail address, please contact me at m.tarrant@virgin.net. This is a great step forward for the Society and we are indebted to Vikki Batten for setting up the Forum.

Chairman's Report

David Hughes

I hope you have had a good summer finding and growing plants from our favourite family. As I write this report, the Bog Orchids in the New Forest are just going over. Along with a few others, I made myself available to show HOS members these local specialties and I hope that more of you will volunteer to be used in this way as local guides. On a more organised basis, the season of field trips has run its course; all well attended and showing off orchid sites around the country. I am very grateful to those who were prepared to run these trips; you will be able to read more about them elsewhere in the journal. We are moving on towards our Wisley meeting to be held on Sunday 8th November. The application form accompanies with this journal. The meeting will include an EGM, as agreed at the April AGM. There have been requests that the Kidlington meeting, which includes the AGM, should be moved forward. This is to free those attending so that they can travel during April, which is the best orchid month in Mediterranean areas. The previous rules required the AGM to be held in April, May or June and the Committee wishes to vote again on the proposal to alter the paragraph on page 6 of the member's handbook to read: "The AGM shall be held on any day within 15 months of the previous AGM as decided by the committee." The 2010 AGM and Kidlington meeting are booked for 28th March as hall availability dictates that we book over a year in advance. We would not propose that future meetings should be held significantly earlier in March than this because of implications for orchid flowering time with respect to the plant show.

Please refer to the July edition of the journal or the website for details of the photographic competition and arrangements for the new digital classes and their entry. We will be judged this year by Pete Murray, a wildlife photographic instructor and director of Wildlife Travel. Slide and print entries must be notified to cchughes1@wait-rose.com or by post to Christine Hughes at Linmoor Cottage, Highwood, Ringwood, Hants BH24 3LE by 30th October. Those unable to attend may mail their slides or prints to Christine. Also, don't forget that we would be delighted to receive pictures for display separately from the competition.

Addendum to "Ireland's Wild Orchids" Book Review

Following Richard Bateman's review of the book by Susan Sex and Brendan Sayers in the July *JHOS*, we received a letter from the authors requesting clarification of the following points. The price of the book (Editor's error) is inclusive of the cited postage cost. The sterling equivalent with delivery to any location is £30. The review suggested that the warmly commended illustrations were derived from those in an earlier large format limited edition publication. In fact, the illustrations have been painted specifically for this new book, which has also been produced as an 850-copy limited edition, quarter-leather, boxed hardback, retailing at Euro175 inclusive of postage. The distribution maps used are based on the "old Irish geo-political county

boundaries” rather than Watsonian vice counties (these two units are very similar in the east but in the west the administrative counties are larger and thus provide even less precise distributions). The authors note that the book has been printed on a special “Polyart” material which is “waterproof, tear resistant, preserves pencil and biro notations perfectly whilst mud, rain and even a test cup of coffee wipe off with a damp cloth.” Clearly this adds to the book's robustness under field conditions.

Programme for HOS Meeting, Wisley Sunday 8th November 2009

- 09.00 Set up Trade and Members' Stands
- 09.30 Doors Open, Tea or Coffee, Sales Start, Photographic Competition entries staged by 10.30
- 10.30 Chairman's Introduction
- 10.40 Tony Hughes – Orchids of Corsica
- 11.30 Short Break
- 11.40 John Haggard – How I Grow Orchids from Seed
- 12.30 Pietro Roseo – Orchid Hunting in Iran
- 12.45 EGM (see details below*)
- 13.00 Lunch
- 14.00 Photographic Competition Results and Judge Pete Murray's Comments
- 14.30 Maren Talbot – Cypripediums and Their Culture
- 15.20 Short Break
- 15.30 Peter Mottershead – Orchids of Northern Europe
- 16.15 Tea or Coffee
- 17.00 Vacate Hall

*The EGM is to discuss and ratify the decision of the AGM of 19th April 2009 that in future the AGM may be held within 15 months of the previous AGM as decided by the Committee



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Reports from the 2009 Field Trips

26th April to Dorset, organised by Norman Heywood, led and reported by Tony Beresford

A dozen or so hardy souls gathered at Worth Matravers for the year's first outing. We opted for a slightly longer walk so as to take in "Early Purples" and a picnic lunch at Durlston Country Park. On the way back to Dancing Ledge we encountered scattered populations of rather small Green Winged Orchids. The fields close to Dancing Ledge were full of "Early Spiders" and sported a colony of rather larger and more varied "Green Wings". Just before the car park we were glad to find the pub open and serving well earned refreshments. This year we did not go on to see the Dartford Warblers but the varied birdlife included a Peregrine Falcon (and hordes of eager bird watchers).



HOS members enjoying the Dorset field trip
Photo by Vikki Batten

24th May to Kent, led and reported by Alan Blackman

Eleven members met in perfect weather for a look at what East Kent has to offer. As has happened previously, the preferred site for *Orchis purpurea* had suffered a lot of damage from deer nibbling off the flowers just as they open. Fortunately, the back-up site was in prime condition. The morning was spent at Park Gate Down where although the *Orchis simia* had suffered somewhat from the lack of rain, there were plenty of spikes in good condition. Although this site is becoming very popular due to a lot of national media coverage, there were plenty of photographic opportunities

without queues forming. Other orchid species present were *Plantanthera chlorantha* (mainly in bud), a lonely *Orchis purpurea* (this is not really the ideal habitat for this species), masses of *Neottia ovata*, *Dactylorhiza fuchsii* and *Gymnadenia conopsea* (both in bud), a few very dwarf *Ophrys insectifera*, and *Orchis mascula* in seed. The lovely *Aquilegia vulgaris* attracted attention and a singing Nightingale and butterflies (Common Blue and Painted Lady) provided more interest. In fact, this was in the middle of a ten-day period when enormous numbers of Painted Ladies crossed the Channel into East Kent. Our gar-



HOS field trip to Park Gate Down, Kent
Photo by Vikki Batten

den in Sandwich had a continual stream of these butterflies stopping off to feed during this period with at least a dozen visible at any one time. After a picnic lunch on Stelling Minnis Common, listening to more Nightingales, the afternoon session of the field trip was spent amongst hundreds of perfect *Orchis purpurea*, including a pure white variety. Other orchids here were *Platanthera chlorantha* and *Cephalanthera damasonium* just coming into flower, and a few *Dactylorhiza fuchsii*. This site is one of only a few in the country for the Duke of Burgundy Fritillary butterfly. Although it was getting late in their season, we were rewarded with good views and I believe some good photos. Also seen were Green Hairstreaks, many Painted Ladies, a couple of hornets and glow-worm larvae on the track through the wood. With the perfect weather and orchids in good numbers and condition this was a very enjoyable and successful HOS field trip.

7th June to Buckinghamshire, led and reported by Malcolm Brownsword

A party of 14 members visited Aston Clinton Ragpits in the morning and Grangelands, Pulpit Hill in the afternoon. At the former site, the *Gymnadenia conopsea* (approximately 14,000 in recent years) were truly spectacular and it was good to see a single almost pure white one. There were also 20 or so very tall specimens of *Platanthera chlorantha*, several thousand *Neottia ovata*, many *Dactylorhiza fuchsii* and a small group of unusually tall *Cephalanthera damasonium*. The *Anacamptis pyramidalis* were only just starting to flower. Of non-orchidaceous interest were several *Daphne mezereum*, many Roman snails and a rare Emperor dragonfly – *Anax imperator*. In the afternoon, further *G. conopsea*, *D. fuchsii*, Roman snails and *A. pyramidalis* were seen, but the highlight for many was finding almost 20 diminutive *Herminium monorchis* on its only Buckinghamshire site.



Almost pure white *Gymnadenia conopsea*

Photo Malcolm Brownsword

13th June to Warwickshire, led and reported by Brian Laney

Fifteen members attended my first field meeting for the Society. First stop was Ufton Fields, which is a site of old quarry workings containing a good selection of habitats. A number of species were seen, including large numbers of Common Twayblade, Common Spotted Orchid and a few specimens of Bee Orchid. Thanks to help from Colin Clay, over 40 Greater Butterfly Orchids were in flower on the day, protected from rabbits by wire cages. Ufton Fields is at present the only site in

Warwickshire for the Man Orchid. Management for the species by myself has brought the population up from one rosette in 2001 to fifteen this year. They are protected from rabbits during the summer by wire cages. There was one flowering plant in perfect condition on the day which members were queuing to photograph. Next stop was a steep roadside cutting which has also been managed by myself and a number of other botanists since around 2001. Sadly, this year was the first that the bicolor Bee Orchid (*Ophrys apifera* var. *bicolor*) was not on show. Numbers of this variety are usually low at this site but I am sure it will reappear in the future – fingers crossed! The verges did produce good numbers of Pyramidal Orchid, a few Common Spotted Orchid and a number of the normal form of Bee Orchid. Our last stop was another roadside site where again management by myself and other botanists since 2001 has benefitted the Wasp Orchid (*Ophrys apifera* var. *trollii*). Even though the verge had been cut back wider than usual, the Wasp Orchids escaped the mower this year. About nine plants were in perfect condition and much admired by the photographers. I must thank all who attended, Paul Stanley (a top botanist from the Isle of Wight) for showing me how to identify Man and Bee Orchid rosettes, Phil Clayton for watching over the roadside sites, and not to forget all the help I have had on habitat management from fellow botanists over the years.

14th June to the Cotswolds, led and reported by John Spencer

On a warm sunny day, a dozen HOS members met up at Bulls Cross, just north of the village of Slad in Gloucestershire. At The Cross itself we saw common orchid species, such as *Dactylorhiza fuchsii*, *Neottia ovata* and *Anacamptis pyramidalis*, but we also found *Platanthera bifolia* hiding in the bracken. From here it was a short walk to the adjoining Frith Wood where we saw fading *Cephalanthera damasonium* and *Neottia nidus-avis* beneath the high beeches. Also in the wood were *Epipactis helleborine*, still at least a month from flowering. After vehicle consolidation, we drove down the valley to Swifts Hill where the early flowering *Dactylorhiza viridis* were still looking good. We saw our first *Ophrys apifera* of the day together with *Gymnadenia conopsea* and a solitary *Dactylorhiza fuchsii* var. *rhodochila*. The *Ophrys insectifera* here start flowering at the end of April and were over by the time of our visit. We then drove back north along the narrow lanes to the Sheepscombe area. On Sheepscombe Common we saw more *Ophrys apifera*, some fresh *Ophrys insectifera* and, at two different points, hybrids between *Gymnadenia conopsea* and *Dactylorhiza fuchsii*. St. Georges Field, next to the Common, is an old site for *Ophrys apifera* var. *trollii* but our searches were unsuccessful. As well as the usual species, we saw some *Platanthera bifolia* which, in



HOS field trip to the Cotswolds
Photo by Vikki Batten

the open, were going over. Our next stop was Buckle Wood, where at the edges of a clearing we viewed *Platanthera chlorantha*. This is a late site and the plants were still partially in bud. Our final site was the old hill fort at Painswick Beacon, where *Herminium monorchis* was starting to flower. On the climb up we saw yet another *Gymnadenia conopsea* hybrid with *D. fuchsii*, more *Ophrys insectifera* and masses of the more common species. Skulking in the shade there were more *Cephalanthera damasonium* – mostly over, but the occasional plant still with flowers. We had hoped to see *Cephalanthera rubra* in one site but were too early. I'd like to thank the members who attended for the care they took in not trampling plants. With numbers limited to 12, the trip was repeated on another day for a second group.

14th June to Surrey, led and reported by Richard Denny

Howell Hill is a small and relatively new reserve run by the Surrey Wildlife Trust. It has a rich variety of chalkland plant species. Ten members met with one paparazzi photographer who was taking orchid photos for an article next spring in "House and Garden" magazine. We enjoyed the visit and saw seven different orchid species including masses of Common Spotted Orchid and Fragrant Orchid. There were also Bee Orchid, Pyramidal Orchid and two species of Helleborine. Considering it is only 15 miles from London, this is a quiet and pleasing reserve.

19th & 20th June to Carnforth, Lancashire and the Cumbrian limestone, led and reported by Alan Gendle



Dactylorhiza viridis
Photo by Alan Gendle

The primary objective of this year's trip was to look at Early Marsh Orchids (*Dactylorhiza incarnata*) and hybrids. The trip took us across south Cumbria, into the Furness district and on to north Lancashire. We set off on Friday afternoon from Tebay and headed east. The first stop was a roadside bank where we saw Northern Marsh Orchid (*Dactylorhiza purpurella*), Frog Orchid (*Dactylorhiza viridis*), including the variety *longibracteatum*, and Heath Fragrant Orchid (*Gymnadenia borealis*). The next stop was the Smardale NNR where we looked at the Welsh variety of the Northern Marsh Orchid (*Dactylorhiza purpurella* var. *cambrensis*). A drive to the north brought us into a different habitat in the boggy Tam Sike area. Here we encountered the first Early Marsh Orchids. Both *Dactylorhiza incarnata* subsp. *incarnata* and *D. incarnata*



Hybrid between *Dactylorhiza incarnata* subsp. *pulchella* and *Dactylorhiza fuchsii*
Photo by Alan Gendle



Hybrid between *Dactylorhiza incarnata* subsp. *pulchella* and *Dactylorhiza purpurella*
Photo by Alan Gendle

subsp. *pulchella* were present. Hybrids between *Dactylorhiza purpurella* and both subspecies of *D. incarnata* were seen. A few *G. borealis* were also seen on a grassy bank side. Travelling east we visited an SSSI which supports everything we had seen before but in addition has the scarce Small White Orchid (*Pseudorchis albida*). Two flowering spikes were seen and also a large population of Heath Spotted Orchids (*Dactylorhiza maculata*). Then rain came down, this was after all Cumbria in the Summer! The penultimate visit, as the rain cleared, was to the Cumbria Wildlife Trust (CWT) reserve at Waitby Greenriggs. Walking around the reserve we saw Fly Orchid (*Ophrys insectifera*), Frog Orchid (*D. viridis*), Lesser Butterfly Orchid (*Platanthera bifolia*), Common Fragrant Orchid (*Gymnadenia conopsea*), Northern Fragrant Orchid (*G. borealis*), Common Twayblade (*Neottia ovata*) and hybrids between Northern Marsh and Common Spotted Orchid (*D. ×venusta*). The last stop was a park with Beech trees where six spikes of Birds Nest Orchid (*Neottia nidus-avis*) were just going over.

On Saturday morning, as a light shower started, we went to an old industrial area where ironstone mining and steel making had once taken place. Normal Bee Orchid (*Ophrys apifera*) and the more unusual variety *belgarum* were seen by the track side. The dune subspecies of Early Marsh Orchid (*D. incarnata* subsp. *coccinea*) was present in the damper areas around a pond, along with some very small Northern Marsh Orchids. A drive around the head of the Duddon estuary saw us stopping for lunch at Askam. A walk along the shore side grassland brought us to a group of hybrids

between Common Spotted and Early Marsh Orchid (*D. ×kerneriorum*). The surrounding area of willow scrub and grass land contained lots of Northern Marsh Orchids, Common Spotted Orchids and various forms of Early Marsh Orchid. Hybrids between Northern Marsh and Common Spotted Orchid dominated the area. A drive to the east brought us to an old peat digging which had been excavated to a layer of calcareous marl and flooded many years ago. The orchids grow on tufts of Black Bog-rush (*Schoenus nigricans*). The purple subspecies of Early Marsh Orchid (*D. incarnata* subsp. *pulchella*) dominates the reserve. On the site we observed *D. incarnata* subsp. *pulchella* hybrids with both Common Spotted Orchid and Northern Marsh Orchid. One or two Marsh Fragrant Orchids (*Gymnadenia densiflora*) were just starting to flower. Our final port of call was a disused quarry in North Lancashire. *Dactylorhiza* dominates the site, thousands and thousands of them. All the previously seen *Dactylorhiza* species



The *gemmana* form of *Dactylorhiza incarnata*
Photo by Alan Gendle

were present but new to the *Dactylorhiza* list was the Southern Marsh Orchid (*Dactylorhiza praetermissa*). Credible hybrids between Northern and Southern Marsh Orchid (*D ×insignis*) were seen. The site also featured several very large forms of Early Marsh Orchid over 50 cm tall which were once recognised as the subspecies *gemmana* but are now regarded as no more than a form. Thanks to members for generous contributions to the funds of the CWT and the Society.

21st June to Cambridgeshire, led and reported by Jean Stowe

Nine HOS members met at the Hills and Holes NNR in Barnack together with the leader, assisted by Mike and Frieda from the Langdyke Trust. For two members of the party it was a revisit as they had been taken to the area when they were children. The limestone grassland flora included a reasonable scattering of Fragrant Orchid (*Gymnadenia conopsea*) and Pyramidal Orchid (*Anacamptis pyramidalis*), and we took it in turns to photograph some rather small specimens of Frog Orchid (*Dactylorhiza viridis*). Several stands of Man Orchid (*Orchis (Aceras) anthropophora*) seen by Jean the previous week proved elusive, but with the help of the group they were eventually found. More conspicuous were bold spikes of knapweed broomrape (*Orobanche elatior*) and an area of Dodder (*Cuscuta epithimum*) cover-

ing the ground like spaghetti. Of particular interest was the re-colonisation of a stony area restored a few years ago to how it would have been after quarrying, first by the Romans and then in medieval times. It was good to see the Pyramidal Orchids establishing here and there were bold clumps of Deadly Nightshade (*Atropa belladonna*).

Then we moved on a few miles to Castor Hanglands NNR, where Mike showed us a single elegant spike of Greater Butterfly Orchid (*Plantanthera chlorantha*) in the woodland. He also found a grass snake basking under a cover and handled it with confidence for the benefit of the group. The damper meadow carried good populations of Early Marsh Orchid (*Dactylorhiza incarnata*), Common Spotted Orchid (*D. fuchsii*), including many white versions and various hybrids. The third site, an amazing unimproved meadow, was Twayblade city, with lots of *Neottia ovata* and more Common Spotted Orchids. There was also a colony of the rare Crested Cow-Wheat (*Melampyrum cristatum*). The final port of call was Swaddywell Pit, owned and managed by a local conservation group, the Langdyke Trust. An upper area of grassland, which had previously been landfill, supports large numbers of Bee Orchid (*Ophrys apifera*) and Pyramidal Orchid. We learnt from Frieda about the connections with the poet John Clare and the complicated geology in the quarry. This field trip had been arranged to coincide with the Peterborough International Orchid Show, where Mike Powell's Bournemouth Orchid Society won a gold medal. It was also Open Gardens Weekend in West Deeping, so all in all an action-packed weekend.

21st June to North Hampshire, led by Nigel Johnson and Rosemary Webb, reported by Nigel Johnson

At 10.30 in the morning 12 members, including the leaders, met by the roadside close to the entrance to the Hampshire Wildlife Trust reserve of Noar Hill. This is probably the best orchid site in Hampshire. We saw hundreds of Musk Orchids (*Herminium monorchis*), for which the site is well known. We also saw in flower and in no particular order, Twayblade (*Neottia ovata*), Greater Butterfly Orchid (*Platanthera chlorantha*), Chalk Fragrant Orchid (*Gymnadenia conopsea*) and the albino form (*albiflora*), Common Spotted Orchid (*Dactylorhiza fuchsii*) and the albino form (*albiflora*), Pyramidal Orchid (*Anacamptis pyramidalis*), Fly Orchid (*Ophrys insectifera*), Bee Orchid (*Ophrys apifera*) and Frog Orchid (*Dactylorhiza viridis*). A good time was had by all.

28th June to South Wales, led by Mike Clark, reported by David Hughes

On a sunny morning Mike Clark assembled 20 HOS members at the remarkable reserve of Kenfig Burrows near Port Talbot. This extensive area of dunes and slacks is home to the biggest population of Fen orchid (*Liparis loeselii* var. *ovata*) in Britain and Mike prefers to show visitors these plants rather than have them wander aimlessly and trample through ignorance. The HOS group was not disappointed and despite being described as "rare as hen's teeth" several small groups of this diminutive

tive rarity were found and photographed. In addition, the group enjoyed impressive numbers of *Dactylorhiza*. This is one of the areas where Southern and Northern Marsh Orchid overlap, together with *Dactylorhiza incarnata*, subsp. *cruenta* and endless hybrids giving rise for much argument as to their origins. There was much else besides, both orchid and otherwise, making this an excellent day. Our thanks to Mike!

14th August to Hampshire, led and reported by David Hughes

For this “additional field trip”, a group of HOS members met in the New Forest to find Bog Orchid. This recognised locality is notable for a lump of concrete in the middle of the bog which allows photographs to be taken without getting wet feet. Despite exhortations to take care in this fragile locality, one member managed to fall and measure his full length in the mire. Afterwards the participants who had travelled a long way wanted more. “What about *Spiranthes*?” “Too early” said the leader. “What’s that then” asked Hilary. I have to tell you that *Spiranthes spiralis* is flowering on pony grazed sward in mid August just yards from the Bog Orchid.

A First Field Trip Vikki Batten



Early Spider Orchid from the
Dorset field trip
Photo by Vikki Batten

For those of you who are newer members of HOS, I wanted to write and share my experience so far. Having joined late in the season last year, my first exposure to the Society was at the Wisley meeting. I was amazed by how many people were there and thoroughly enjoyed the day, despite quite a bit of it being over my head. I bought lots of plants, spoke to a few people and spent the winter watching over pots containing bare soil hoping something underneath the surface was still alive! In January I received my Journal with the coming season’s events and booked myself up for the first of the season, Early Spider Orchids in Dorset. So the last Sunday in April saw me meeting a dozen of our members in a small village near to Swanage. The old hands quickly introduced themselves to the rest of us and it wasn’t long

before we were all chatting away. After this first event, I enjoyed further orchid trips to Kent and the Cotswolds. My photographs from these field trips are posted on the new discussion forum that I was pleased to set up for HOS Members (see page 111).

A Trip to Israel John Spencer

For many years I had been thinking about a trip to Israel. Finally, this year, I decided that total peace in the Middle East in the near future is unlikely and went ahead with a short visit from the 17th to the 26th of March. My Thomson flight from Luton arrived at Tel Aviv in the early evening and I broke my journey north with an overnight stay at a hotel in Netanya. Although you can find orchids in the hills to the west of Jerusalem, as a general rule of thumb, the further north you go in Israel, the better it gets. The following day I made contact with Asaf Shifman, author of “*The Wild Orchids of Israel*”, who, over the next three days took me on a quick tour of some of the best orchid sites. For the duration of my stay I rented a self-catering chalet at “The Orchid Inn” at Merhavia, on the outskirts of Afula. (By way of explanation the owners of the chalets grow tropical orchids, such as *Phalaenopsis*, for the commercial market). Afula proved to be an ideal base, with none of the northern sites too far away.

If you have a brief stopover in Israel and want to see both *Orchis galilaea* and the rarer *Anacamptis (Orchis) israelitica*, Yodfat is a site to consider. It is a hilltop roadside verge on the other side of the Beit Netofa valley from Nazareth and best approached from the west. Here Asaf and I saw strong *Orchis galilaea* plants with yellowish green flowers and the last of the local *Anacamptis israelitica*. Both species flower from the top down and have the same large crimson spots on the lip but here the resemblance ends. *Anacamptis israelitica* is a small, slight plant which flowers early and is quickly over. *Orchis galilaea* is larger, more robust, later flowering and more easily found. An unusually warm dry winter had hit the early flowering orchids hard. It was not until the end of February that heavy rain arrived. This was after a few small *Orchis punctulata* had flowered a month early, in mid-January. In a normal year *Ophrys israelitica*, one of the *Omegaifera* group, starts flowering in December. It was no surprise that it was completely over on Mt Carmel by the time of my visit. *Anacamptis israelitica*, one of my prime targets, should have flowered until the end of March but the only plants I saw initially were well past their best. It took much time and effort to come up with a few “tail enders” good enough for a photograph. Other orchid species that we saw at Yodfat were: *Neotinea (Orchis) tridendata*, *Anacamptis (Orchis) papilionacea* var. *bruhsiana* – mostly over, *Orchis anatolica*, *Ophrys sicula*, *Ophrys umbilicata* and *Ophrys bornmuelleri* – the last-named just starting to flower.

- Figure 1 White-coloured *Orchis galilaea* at Mt. Carmel
 - Figure 2 Yellowy green-coloured *Orchis galilaea* at Mt. Meron
 - Figure 3 Red-coloured *Orchis galilaea* at Mt. Carmel
 - Figure 4 Intermediate pink-coloured *Orchis galilaea* at Mt. Carmel
- Photos by John Spencer



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We went on to visit the Hanita Forest in the extreme north-west of Israel. Here no *Orchis punctulata* could be seen at all but the later flowering *Neotinea tridendata* had done well with some striking plants. *Serapias levantina*, Israel's only *Serapias*, was also in flower. Asaf drew my attention to a form of *Ophrys umbilicata* with an upright dorsal sepal. The sepals on these plants were also an odd mix of white and green, rather than being white with a green central vein. Israel has a confusing range of plants in the *Ophrys umbilicata* / *O. attica* group. Sepals are usually green, often white, but only rarely the pinkish colour so often seen in Cyprus.

The following day I accompanied Asaf to a wetland site at Ein Bdolakh in the Hula valley. The orchids we saw here turned out to be not *Anacamptis (Orchis) laxiflora*, as the Wardens of the Reserve thought, but the related *Anacamptis (Orchis) dinsmorei*. The tall spikes were a violet purple colour, the small flowers lacked an apical notch to the lip, the lateral sepals were less deflexed and the pale centre of the lip carried markings. Later, I did visit an *A. laxiflora* site in the Golan, not far from the Nimrod Crusader Castle. I was too early to see the plants in flower but the herbarium specimens I did see indicated two distinct species. We also made a visit to the best known *A. dinsmorei* site near Binyamina. Twenty years ago there were thousands of plants but numbers are now, sadly, greatly diminished. Cattle numbers need to be reduced to give the plants some protection.

Anacamptis (Orchis) sancta grows widely in Israel but *Anacamptis (Orchis) fragrans* is limited to the northern Golan and in the upper Hula valley at Horshat Tal. This reserve warrants a visit on several counts. It is usually a good site for *Orchis punctulata* and, even in 2009, I got to see a fresh plant. It is also a good site for *Anacamptis (Orchis) collina*, despite the predations of local deer. If you visit Israel in June when most orchids have gone over you will find *Epipactis veratrifolia* in flower here. In contrast, the southern populations of this species, to the west and south of the Dead Sea, can flower as early as January but be over by early March.

Another site, which I initially visited briefly with Asaf Shifman, but later returned to, was Mt. Meron where the road to the top, which starts on the north side, proved to be a really rewarding experience. On the walk up I saw *Orchis galilaea* – again the yellowy green colouring, *Orchis anatolica* – coming out in droves, *Orchis italica*, fresh *Anacamptis papilionacea* var. *bruhsiana*, *Ophrys sicula*, *Ophrys israelitica* – gone over even here, *Ophrys iricolor*, a few *Ophrys bornmeulleri*, *Epipactis helleborine* in leaf, *Cephalanthera longifolia* in bud and even the occasional fresh

Figure 5 *Neotinea tridendata* at Mt. Carmel
 Figure 6 *Ophrys flavomarginata* at Udim Reserve, Yakum
 Figure 7 *Anacamptis (Orchis) collina* at the Horshat Tal reserve
 Figure 8 *Anacamptis (Orchis) dinsmorei* at Ein Bdolakh
 Photos by John Spencer

Anacamptis israelitica. I saw several of the *Anacamptis* hybrids, between *A. papilionacea* and *A. israelitica*, (*O. ×feinbruniae*) which were surprisingly uniform with a set lip pattern. Beside the road were the chunky leaf rosettes of *Himantoglossum galilaeum*, only recently separated from *Himantoglossum affine*. It needs a late May visit to see the *Himantoglossum* in flower.

A “must see” location is Mt. Carmel which looms over Haifa. This is where I saw not only the white form of *Orchis galilaea* but also the unusual red form and pink intermediates. Off route 721, on a minor road, there was no shortage of *Limodorum abortivum*. I counted at least 50, of which several were just starting to flower. *Orchis punctulata* were over but *Cephalanthera longifolia* were in flower early. I noted that the leaves on the *Cephalanthera* were much broader than on plants in Britain. Typically 31 x 115 mm in Israel against 15 x 145 mm in Britain. Near Isfiya I found a couple of *Ophrys flavomarginata* growing alongside *O. umbilicata*. However, some of the species seen on Meron, such as *Orchis italica*, *Epipactis helleborine*, *Himantoglossum galilaeum*, *Neotinea maculata* and *Anacamptis israelitica* do not grow on Mt. Carmel. It is generally accepted that Route 70 marks Mt Carmel’s southern perimeter but the hilly country beyond is worth exploring. The woodland alongside route 6953 is particularly good for *Ophrys transhyrcana* which can be an attractive orchid. The *Ophrys apifera* in this area were still two weeks from flowering at the time of our visit. Also present here were small numbers of *Orchis galilaea*, *Neotinea tridendata* and *Serapias levantina*.

On Mt Carmel it proved impossible to ignore the non-orchid plants. A visit to the “Little Switzerland” area is recommended both for the number of flora species and the sheer number of plants. I also joined a botanical group for a walk around the Irus Natsrati Reserve at the very top of Upper Nazareth. Here you can see *Ophrys transhyrcana*, *Anacamptis papilionacea* var. *bruhnsiana* and *Anacamptis collina*, plus a wealth of other plants. However, the big attraction here is the spectacular *Iris bismarckiana*.

With time running out I drove to the Golan Heights with two local botanists from a kibbutz near Haifa. Unfortunately, we had the worst weather of the trip, a mix of icy gales, rain, fog and hail. At 1,100 m it was truly “mountain weather”. Simply to stand up straight was a challenge. The following day, my last full day in Israel, I set off again for the Golan, this time with Asaf Shifman and a young Dutch botanist Rien Schot, whom I had met earlier. This time things went according to plan. We saw hundreds of *Ophrys umbilicata*, mostly with green sepals but occasionally with

Figures 9 & 10 *Anacamptis israelitica* at Meron

Figure 11 *Anacamptis papilionacea* at Meron

Figure 12 Hybrid between *Anacamptis israelitica* and *Anacamptis papilionacea*

Photos by John Spencer

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Figure 13 *Ophrys umbilicata* at Nahal Hazor, Nimrod
Photo by John Spencer

white. Some plants near Afik looked very much like *Ophrys rhodia*. Near Nimrod Settlement we looked in vain for what is probably Israel's rarest orchid, *Anacamptis (Orchis) syriaca*. This species flowers irregularly at a couple of sites in small numbers. The hybrid with *Anacamptis papilionacea* var. *bruhnsiana* is seen more often than the species itself. A little further north we did find *Dactylorhiza romana* growing with fresh *Ophrys israelitica* and *Orchis anatolica*. Here we also saw the distinctive leaves of *Neotinea maculata* but the plants were some way from flowering. The next day, on my way to the airport, I made a detour from Route 2 to see *Ophrys flavomarginata* at a site a little to the south of Netanya. The boxy, yellow-edged lips marked the plants out as being quite distinct from the other members of the umbilicata group.

On a trip to Israel in April, you should see flowering: *Anacamptis pyramidalis*, *Anacamptis laxiflora*, *Neotinea maculata*, *Ophrys apifera*, *Ophrys episcopalis* and *Platanthera holmboei*. You would need to go even later for *Anacamptis sancta*, *Epipactis helleborine*, *Himantoglossum galilaeum* and the northern colonies of *Epipactis veratrifolia*. In general Israeli roads are good but signs in English are restricted to major routes and, if you can't read Hebrew, I recommend the use of a sat.nav. The only indication of heightened security I saw was the presence of guards at the entrance to supermarkets. I made no attempt to visit the south of Israel, let alone the West Bank or Gaza. My experience in the north was of being in a safe, Mediterranean country with friendly people. If you have visited Cyprus, despite the friction between Greek and Turk, you could give Israel a chance.

I would like to thank Barry Tattersall and Mike Parsons for site information, Rien Schot and Ilan Ben Tov for more recent site information and, above all, Asaf and Miri Shifman for their help and hospitality.

- Figure 14 *Ophrys transhyrcana* at the Iruv Natsrati Reserve
Figure 15 *Ophrys bornmeuelleri* at Yodfat
Figure 16 *Dactylorhiza romana* at Nimrod
Figure 17 *Ophrys umbilicata* (*O. rhodia*-like) at Afik Golan
Photos by John Spencer

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Elba, Boars and Chestnuts

Paul Harcourt Davies

I have to admit that I sometimes miss the South Wales coast close to my childhood home and an occasional “fix” is needed. Thus, in spring of 2008 the call of the sea took us down to Rome and thence by air to Sicily, a jaunt that will eventually be a separate installment. But this year (2009) we decided to get our seaside fix early and so in late March we travelled up the Tuscan coast to Piombino and made the one-hour ferry journey to Elba – on very heavy seas. Richard Bateman wrote of his findings there in *JHOS* April 2007 – we were lucky, being there about two months earlier and our visit was “privileged” for we were shown some wonderful sites by Giuliano Frangini and Leonardo Forbicioni, two excellent naturalists and photographers whose love of the island runs deep. Their joint knowledge of the island, its nature and its orchids is unrivalled: their generosity with us was overwhelming – there is a great kinship amongst folk who love nature.

There seemed to be orchids everywhere – memorable highlights include a road bend where a population of *O. ×macchiati* (Fig. 3), the hybrid between *Ophrys sphegodes* (Fig. 4) and *O. speculum* (Fig. 2), now thrives to a far greater extent than either parent.

Roadside ditches are great for orchids being wet in winter with poor, ungrazed soil, usually with a limestone substrate. In what may turn out to be a rash experiment we have recently had a few tons of “strada Bianca” delivered, literally “white road” – a mix of limestone chips and earth to try and duplicate the effect at home on the track to our house. Watch this space!



I had not seen *Serapias neglecta* (Figs. 6, 8 & 9) in the wild for a very long time – it happens to be my favourite *Serapias* with those lovely large flowers on low plants with the same sort of photogenic appeal as alpinines. Leonardo took us to a field, well hidden from the road, where *S. neglecta* grew in hundreds, offering colours from orange through

Figures 1[above] & 5 *Gennaria diphylla*; Figure 2 *Ophrys speculum*; Figure 3 *Ophrys ×macchiati*, the hybrid between *Ophrys sphegodes* and *O. speculum*; Figure 4 *Ophrys sphegodes*

Photos by Paul Harcourt Davies

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pink to lemon-yellow and with a single flower of a hybrid with *Anacamptis (Orchis) morio* (Fig. 7) just appearing – my idea of paradise. We were told we were a week too early for the real display when *S. cordigera* flowers as well – did I care! By a stroke of extreme luck we saw the single remaining spike of *Gennaria diphylla* (Figs. 1 & 5) as our hosts despair for the future of this species on Elba. A former population of some two thousand and more flowering plants has plunged to almost nothing in just a few years. In fact, orchids all over Elba are in danger from the ravages of wild boar. What should be good news is that over 70% of the island is protected as national park: the problem is that the realisation that the area has to be managed has not yet sunk home to the powers-that-be.

We have now visited orchid sites all over Italy to find the ground looking as if it has been deep ploughed where wild boar have rooted for orchid tubers. It is no secret that I detest hunting but one has to be realistic and control has to be undertaken when the balance of nature is upset. The irony is that the small Italian race of boar that you see in murals on walls in Pompeii is all but extinct. The hunting fraternity imported large Hungarian boars from the 1960's onwards and crossed them with the indigenous race to get an animal that can produce three litters per annum with up to ten piglets in each. Of course the hunters cry “there is a problem – we can solve it”. Those boars love orchid tubers – rare ones taste best, as vanished meadows of *Dactylorhiza insularis* testify. One of the two sites I know for ghost orchids, *Epipogium aphyllum*, has been ploughed by boars – it took a three hour hike with heavy packs to gather that information. Drastic control is needed!

It is so easy to get caught in that dreadful “things are not what they used to be” spiral. I hated hearing it when I was younger and have to watch my step from lapsing now. However, not all is gloom and doom with modern agricultural methodology, as I witnessed in late April when I visited a chestnut



Figures 6[above], 8 & 9 *Serapias neglecta*; Figure 7 hybrid of *Serapias neglecta* with *Anacamptis (Orchis) morio*. On the following pages: Figures 10, 11 & 14 *Dactylorhiza romana*; Figure 12 *Orchis mascula* and *Orchis provincialis*; Figure 13: *Orchis mascula*; Figure 15 *Cephalanthera damasonium*; Figures 16 & 17 *Orchis provincialis*

Photos by Paul Harcourt Davies





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wood near Viterbo. This was not just any old wood but one with stately giants several hundred's of years old whose fruits are much prized locally. They cut the grass beneath in late summer so the chestnuts fall onto virtually bare ground where they are, in effect, collected by "hoovering". Plant competition is thus low and there is a moss cover in winter which favours a wonderful array of orchids, beginning with thousands of *Dactylorhiza romana* (Figs. 10, 11 & 14) in colours from deep magenta through pink to yellow. Then a few weeks later the display, still magenta and yellow, is created by *Orchis mascula* (Figs. 12 & 13) and *Orchis provincialis* (Figs. 12, 16 & 17). Still to come as I write are *D. maculata*, *Platanthera chlorantha*, *Neottia nidus-avis*, *Limodorum abortivum* and various *Epipactis* species.

I discovered years ago in Cyprus that you can wait ages for spring and then when it arrives you can barely keep pace. By the end of April / early May of 2008 the later orchids had begun to flower and amazingly, what caused most excitement to my friends were the few spikes of *Cephalanthera damasonium* (Fig. 15) that appeared in a single site. *Cephalanthera longifolia* is a familiar roadside plant throughout our region wherever limestone and woods combine but *C. damasonium*, a taxon that many in the HOS will know well from limestone areas, is a rarity. The flowers we found were a cream, lemon-yellow and just that bit more open than those in the UK.

HOS *Platanthera* Spur-length Survey Concludes: Correlation Between Spur Length and Leaf Width is Weak

Richard Bateman and Roy Sexton

Background

This highly collaborative "membership participation" project was conceived by us in order to extend the geographical coverage of our own efforts to obtain measurements in general, and spur lengths in particular, from across the geographical and habitat ranges of the two European butterfly-orchids; specifically, *Platanthera bifolia* (Lesser Butterfly-orchid) and *P. chlorantha* (Greater Butterfly-orchid). Our interest in these two species was driven by their remarkable genetic similarity, the limited but clear-cut morphological differences that distinguish them, and uncertainty regarding whether they hybridise in the British Isles. In particular, we wished to explore the presumed critical contribution of spur length towards ensuring different pollinators for the two species, as outlined in some classic studies of orchid-pollinator co-evolution (e.g. Nilsson 1983). We therefore provided detailed instructions to HOS members describing how best to measure spur length, aiming to maximise consistency among supposedly inexperienced analysts.

Early results and preliminary interpretations

By the close of the first (2007) field season, our combined database of spur lengths contained 120 datasets (49 for *P. bifolia*) totalling 1876 individual plants (625 for *P.*

bifolia). Datasets generated by 19 HOS members ranged in sample size from a single plant to 118 plants, representing populations clustered in the Vercors, the Alps (both *P. bifolia* only), southern England, Cumbria, southern Scotland and north-western Scotland. Duplicate measurements of several populations demonstrated that the data gathered were both accurate and reproducible. The results were first presented to HOS members in *JHOS* (Bateman & Sexton 2008a) and then published as two peer-reviewed papers (Bateman & Sexton 2008b; Bateman *et al.* 2010). Data for both species contradicted spur lengths given in most floras and monographs, and identified convincing hybrids at a few localities. But most importantly, they challenged the widely held assumption that adaptation to accommodate the proboscis length of pollinating moths is the dominant factor controlling spur length. Instead, at any particular latitude, *P. bifolia* has spurs approximately two-thirds the length of those of *P. chlorantha*. Moreover, both species exhibited latitudinal gradients, spur length increasing by an average of 2.2% per 100 km from north to south (though results for *P. chlorantha* were weakened by the absence of data from southern Europe). We hypothesised that this gradation of spur size could simply reflect greater resourcing of plants in lower latitudes, perhaps permitted by greater photosynthetic activity generating much-needed energy for the plants.

A more focused survey

We wished to test the hypothesis that spur length is positively correlated with leaf width, which we selected as being the most readily measured proxy for leaf area. Thus, during the 2008 field season, surveyors were asked to measure not only spur length but also leaf width, and to count leaf number. In total, 14 teams of surveyors together generated usable data for 21 populations each of the two species, totalling 749 plants (402 for *P. bifolia*). The geographic coverage of the study improved considerably, not only finally encompassing much-needed populations of *P. chlorantha* from Continental Europe but also garnering a welcome additional set of populations from Poland (co-ordinated by Przemoc Baraniecki).

The new results

As expected, most of the plants sampled possessed two expanded leaves. Approximately 1% of the individuals of each species produced a third expanded leaf but, surprisingly, the proportion of plants recorded as yielding only a single leaf was greater in *P. chlorantha* (6%) than in the typically smaller *P. bifolia* (1%). The new spur-length data largely reinforced previous evidence of a significant positive correlation between spur length and decreasing latitude. The new data generally fitted well the regression lines generated from previous data. [Note added in proof: The two populations measured in western Ireland by RB in June 2009 also nicely fitted the previous regression line.] The exceptions were an unusually short-spurred population of *P. chlorantha* from Normandy and four populations of *P. bifolia* from Poland that had mean spur lengths more typical of populations from southern France

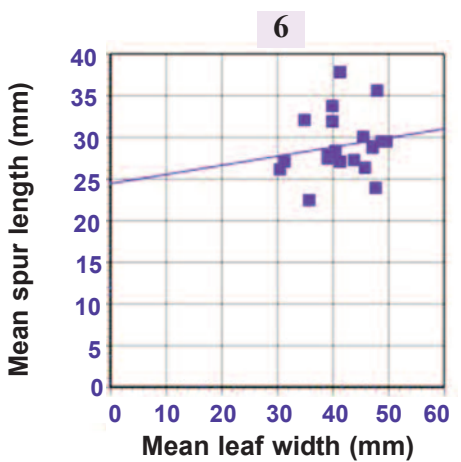
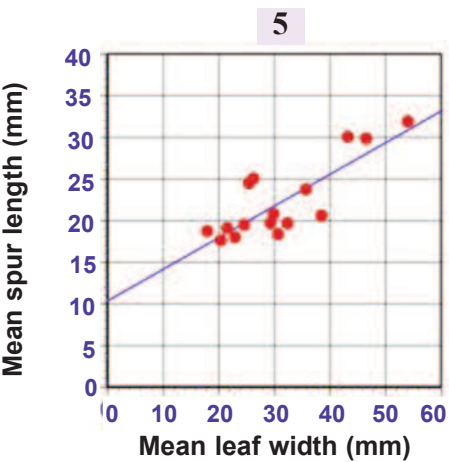
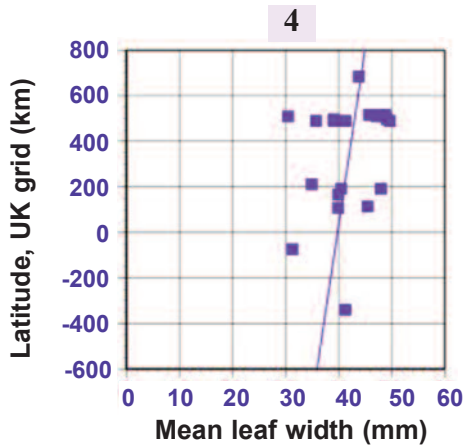
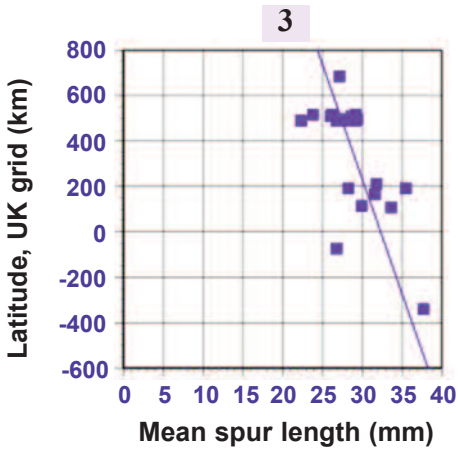
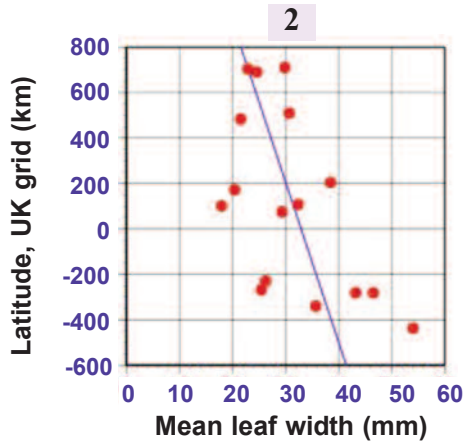
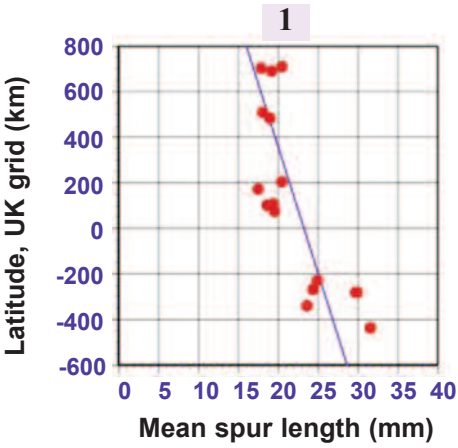
than southern England (an equivalent latitude to Poland). When the new data only were analysed, the resulting plots of spur length against latitude for both species matched closely the results obtained in the previous (2007) survey; in both cases average spur length increased with decreasing latitude (Figs 1, 2).

However, plotting leaf width against latitude gave more equivocal results. In *P. bifolia* (Fig. 3), leaf width increased southward at an average rate similar to that of spur length, though the fit of the regression line to the data (r^2) was appreciably weaker. However, the regression line for leaf width in *P. chlorantha* (Fig. 4) even suggested that leaves are on average slightly smaller(!) further south, though the r^2 value was so low that the notional trend can be considered random. When mean values for spur length were plotted against leaf width, *P. bifolia* (Fig. 5) again showed a stronger positive correlation than *P. chlorantha* (Fig. 6), primarily reflecting the occurrence in the Alps of three populations that are both relatively long-spurred and large-leaved. But for both species the relationship was weaker than anticipated. This pattern was mirrored when spur length was plotted against leaf width for all measured individuals within each of the 42 populations measured. Only eight populations (three of *P. bifolia*) showed statistically significant positive correlations ($r^2 = 0.3-0.7$), and these were more than offset by 13 populations (six of *P. bifolia*) that yielded flat or even in four cases negative graphs, which implied that in these populations larger plants generated smaller spurs!

A more problematic interpretation

So the 2008 data show that the link between spur length and leaf size is weak at best, especially in *P. chlorantha*. Either levels of resourcing make a less important contribution to spur length than our original hypothesis suggested, or our method of assessing levels of resourcing has been not just simple but also simplistic. Both explanations are credible. It could be argued that leaf width is an inadequate proxy for leaf area, which is more likely to determine photosynthetic ability. However, the majority of the field surveyors (including ourselves!) measured leaf length as well as width, permitting calculation of approximate leaf area. Leaf area gave equally poor fits when plotted against spur length. Also, one might predict that of two plants with equally sized leaves, the one that receives more incident light would generate more energy. However, as we already noted (Bateman & Sexton 2008a, b), at any particular latitude, populations growing in shaded habitats (especially those of *P.*

Figures showing the relationship between spur length, leaf width and/or latitude in a N-S transect of *P. bifolia* (red circles, 16 populations only, as Polish data were omitted) and *P. chlorantha* (blue squares, 20 populations). (1) Mean spur length versus latitude, *P. bifolia*. (2) Mean leaf width versus latitude, *P. bifolia*. (3) Mean spur length versus latitude, *P. chlorantha*. (4) Mean leaf width versus latitude, *P. chlorantha*. (5) Mean leaf width versus mean spur length, *P. bifolia*. (6) Mean leaf width versus mean spur length, *P. chlorantha*.



bifolia) tend to have somewhat longer spurs than those growing in the open. In addition, summer day-length is actually greater at *higher* latitudes. These observations suggest that the resourcing and vigour of the plants may be more strongly controlled by warmth and/or soil moisture than by light per se.

However, the fact that southerly populations of *P. chlorantha* do not have larger leaves than northerly populations suggests that the plants do not increase in average vigour toward the equator, and that additional explanations should be sought for the southward increases in mean spur lengths. Studies of spur growth cause us to remain sceptical that spur length can be precisely adaptively optimised. For example, in 2007, R. Bateman compared spur lengths on late-stage buds and recently opened flowers in a population of *P. bifolia* on Benbecula, Outer Hebrides, and found that average spur length increased by 24% between the two developmental stages. During the 2008 survey, two teams (G. Goodfellow plus A. Skinner and R. Bateman plus P. Rudall) measured the large population of *P. bifolia* at Strawberry Banks in the Cotswolds. The latter team measured the population a month later than the former, and consequently found the average spur length to be 15% greater. Clearly, the length of spur encountered by a visiting insect is significantly influenced by whether the long-lived *Platanthera* flower is fresh, mature or nearing senescence.

In conclusion, it was always likely that this morphometric survey would raise as many questions as it answered; this is the usual outcome of any scientific endeavour, and it in no way detracts from the many insights gained from this highly successful project. In drawing this project to a close we would like to end by thanking the following HOS members for their invaluable contributions to the 2008 survey: R. Bateman & P. Rudall (70 plants), L. Dudek (40), A. Gendle (117), G. Goodfellow & A. Skinner (175), W. Hanak (9), L. & N. Harbron (70), D. & C. Hughes (43), N. Johnson & R. Webb (41), L. Krajowski (32), P. Cieslak (15), K. Stott, D. Pearce & N. Henderson (83), M. Scelina (10), R. Sexton (38), and S. & M. Tarrant (6),

References

- Bateman, R. M., James, K. E. & Rudall, P. J. (2010) Contrast in morphological versus molecular divergence between two closely related Eurasian species of *Platanthera* (Orchidaceae) suggests recent evolution with a strong allometric component. *Annals of Botany* (submitted: ca 33 pp.)
- Bateman, R. M. & Sexton, R. (2008a) Ongoing HOS *Platanthera* spur-length survey a great success. *Journal of the Hardy Orchid Society* 5(1): 20–23.
- Bateman, R. M. & Sexton, R. (2008b) Is spur length of *Platanthera* species in the British Isles adaptively optimized or an evolutionary red herring? *Watsonia* 27: 1–21.
- Nilsson, L. A. (1983) Processes of isolation and introgressive interplay between *Platanthera bifolia* (L.) Rich. and *P. chlorantha* (Custer) Reichb. (Orchidaceae). *Botanical Journal of the Linnean Society* 87: 325–350.

Conservation Find Alan Gendle

During 2008 I heard rumours of a new site for the Small White Orchid (*Leucorchis albida*) in east Cumbria. The population was rumoured to be 4 times larger than the biggest populations known since the turn of the century. This proved to be true. This year, I managed to visit the site on private farm land with the site owner. On discussing site management and conservation it became apparent that over the years bracken was encroaching into the site. If not controlled it would ultimately damage the site's flora. The owner was happy to have the bracken removed, so I offered to organise some help and pull up the bracken.

On the 30th June, two fellow HOS members and Cumbria WT reserve managers (Lois and Nigel Harbron, myself and the site owner) duly commenced pulling bracken. Despite constant attacks by flying biting insects, we cleared the site of bracken in an hour and a half. Job done, we had a look at the orchids on the site. Most of the Small White Orchids were going over. We found Frog Orchids (*Dactylorhiza viridis*), Common Fragrant Orchids (*Gymnadenia conopsea*), Heath Fragrant Orchids (*Gymnadenia borealis*) and Common Twayblade (*Neottia ovata*). At the highest part of the site there appeared to be lots of *Gymnadenia* but closer examination indicated that many of the spikes were very strongly coloured Common Spotted Orchids (*Dactylorhiza fuchsii*). These plants were in fact the variety "*alpina*", the first time this has been confirmed in Cumbria. A nice reward for a morning of conservation work



Removing the bracken (top),
Leucorchis albida (middle) and
Dactylorhiza fuchsii var. *alpina*
(bottom)

Photos by Alan Gendle

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