

**Journal
of the
HARDY ORCHID SOCIETY**



Vol. 20 No. 2 (109) Spring 2023



The Hardy Orchid Society Committee

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

Chairman: Celia Wright, The Windmill, Vennington, Westbury, Shrewsbury, Shropshire, SY5 9RG celia.wright@windmill.me.uk

Vice-Chairman: Simon Tarrant, Bumbys, Fox Road, Mashbury, Chelmsford, CM1 4TJ tarrant.simon@outlook.com

Treasurer: Christopher Snelson, 43 St. George's Road, Leamington Spa, Warwickshire, CV31 3AZ christophersnelson@me.com

Secretary: Hilary Pickersgill, Sissinghurst, Warrendene Road, Hughenden Valley, High Wycombe, Buckinghamshire, HP14 4LY hilaryp52@btinternet.com

Membership Secretary: Moira Tarrant, Bumbys, Fox Road, Mashbury, Chelmsford, CM1 4TJ moira.tarrant@outlook.com

Plant Show Secretary: Neil Hubbard: 30 Thirlmere Road, Barrow upon Soar, Leicestershire, LE12 8QQ neilhubbard@talktalk.net

Photographic Competition Secretary: Neil Evans, 48 Friars Avenue, Peacehaven, Sussex, BN10 8SB neilfevans@btinternet.com

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

Speakers Secretary: Celia Wright, The Windmill, Vennington, Westbury, Shrewsbury, Shropshire, SY5 9RG celia.wright@windmill.me.uk

Southern Meetings Organiser: Simon Tarrant, Bumbys, Fox Road, Mashbury, Chelmsford, CM1 4TJ tarrant.simon@outlook.com

Northern Meeting Organiser: Philip Smith, Rantree Cottage, Birkwith Lane, Low Bentham, Lancaster, LA2 7DG philandelismith@gmail.com

Publicity & Outreach Officer: Moira Tarrant, Bumbys, Fox Road, Mashbury, Chelmsford, CM1 4TJ moira.tarrant@outlook.com

Seed Bank Manager: John Haggart, 16 Cross Street, Hove, East Sussex, BN3 1AJ johnsorchids57@gmail.com

Journal Distributor: Nigel Johnson, Cassandene, Station Road, Soberton, Hampshire, S032 3QU cassandene@waitrose.com

Conservation Officer: Bill Temple, Primrose Cottage, Hanney Road, Steventon, Oxon., OX13 6AP bill@billtemple.f9.co.uk

Field Meetings Co-ordinator: Richard Kulczycki, 206 Blythe Road, London, W14 0HH richardkulczycki@gmail.com

Front & Rear Cover Photographs

The front cover features Gillian Elsom's manipulated image of *Platanthera chlorantha* which won Class 19 and 'Best Print' in the 2022 Photographic Competition. Rear cover photograph is *Cephalanthera damasonium* by Christopher Hoskin which won Class 11 in the competition.

Password for Members' Area of HOS Website: [monkey22](#)

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 Members' Handbook, website www.hardyorchidsociety.org.uk, or contact the Editor). Views expressed in journal articles are those of their author(s) and may not reflect those of HOS.

Contents

Editorial Note by Mike Gasson	39
Chairman's Note by Celia Wright	40
Field Trips 2023 by Richard Kulczycki	41
Growing Hardy Orchids - 7 Moira Tarrant talks to Neil Hubbard	43
Results of Photographic Competition 2022	48
Addendum to the Orchid Section of the New British and Irish Plant Atlas by Richard Bateman	54
2022 Field Trip Reports by Richard Kulczycki	58
Colony of Unusual Bee Orchids in Wiltshire by Rich Mielcarek	66
2023 Video Competition	70

Editorial Note

Mike Gasson

As promised this is an issue that includes some catching up on reports from the 2022 season. We have results from the 2022 Photographic Competition and a comprehensive round-up of the 2022 field trip programme provided by Richard Kulczycki. As always the Photographic Competition provided a wealth of great images and some of the best are included here. Interesting to see an entry in the manipulated image classes come out on top in the print category and it was an easy choice to have Gillian Elsom's image of *Platanthera chlorantha* on our front cover. We also have details of the later field trips which are also on the HOS website. Elsewhere our President Richard Bateman provides some insights and updates to the orchid section of the recently published *New British and Irish Plant Atlas*. And Rich Mielcarek offers another interesting account, this time describing an unusual and interesting Bee Orchid colony in Wiltshire. Lastly, my usual plea to keep writing articles for *JHOS* as that is the life blood of your journal.

Chairman's Note

Celia Wright

Welcome to another year of HOS activities following the AGM on 16th April that resulted in a number of changes on the committee. You will find the full committee list inside the front cover of this journal with their contact details, so do get in touch with any of us if you need information or wish to offer help. One of the committee's tasks in the coming months will be to review our Constitution (unchanged since 2005) as it contains elements that no longer fit the current size and practices of the society. We hope to bring the proposed new version to an EGM later in the year.

We enjoyed a varied programme of talks after the AGM at Kidlington. My thanks go to all those who contributed, especially three of our committee members – Hilary Pickersgill, Simon Tarrant and John Haggart – who produced excellent informative and enjoyable short talks to fill a gap in the programme at a few days' notice when our guest speaker needed to cancel. As we are now planning our autumn meetings at Leeds on September 2nd and Kidlington on November 19th, do get in touch if you can offer a talk, short or long. It would be good to resurrect the "5 slides in 5 minutes" slots for short items. For our meetings at Kidlington and Leeds we need a projectionist and for Leeds an organiser of the video competition who receives entries and shows them at the meeting before the audience votes for the winner. Steve Pickersgill has filled these roles for several years and would like to hand them on, either all together or possibly split between two members, one for Kidlington and one for Leeds. Please contact Steve if you can help.

As the UK orchid season gets into its swing, the Forum is once again very active. I am delighted to see members ask for help with finding orchid sites in their area and receiving not only information but sometimes offers from other members to meet them at a site and show them where to find plants. This mutual help is one of our society's strengths. It also underlies our Field Trips programme, now underway. Do look at the list on page 41 (also on the website) and contact the organisers to book soon for any trip you'd like to join. Some are very popular and will fill up early.

From 16th to 18th June Iain and I will be back at the Malvern Three Counties Show where the Malvern International Orchid Show has been held for some years. The largest annual orchid event in the UK, this is supported by many orchid societies and a number of orchid traders. With the help of other HOS members, we construct and staff a stand that aims both to publicise HOS and to help visitors who want to learn about hardy orchids. We answer queries and hand out written information, much of it related to growing and caring for hardy orchids in gardens and on larger areas of land. We hope to see some of you there.

Field Trips 2023

Richard Kulczycki

There are a number of new trips this year. As ever, we are dependent on our volunteer leaders. If you are disappointed there are no trips near you, then I can only apologise that there were no offers to lead a trip closer to you. If anyone would be interested in being a Field Trip Co-ordinator for Scotland and Northern England, then I would be very interested in hearing from you.

Your Safety

Participants are responsible for their own safety. You must make your decision whether you are fit and healthy enough to participate in any particular walk. General indications of difficulty are below, but on the day weather and underfoot conditions may make the trip more difficult. In general you should prepare as for a remote country walk and expect uneven ground. The leader does not carry any first-aid or emergency equipment. The leader's role is to help you find your way around the area and help you to see more orchids than you would if you went on your own. It is not to ensure your safety – you are solely responsible for that. Areas visited often have no mobile signal.

We normally collect a voluntary donation to any organisation that maintains a site visited. Last year we collected about £500 for conservation – a great effort, thank you. Our insurance only covers our own members, so it is not normally possible to take a non-member friend with you.

General enquiries to Field Meetings Co-ordinator (see inside cover).

Friday 19th May: East Kent

Leader: Colin Sillence Email: colinsillence@hardyorchidsociety.org

Parkgate and Denge Wood to see Monkey Orchid, Lady Orchid, Fly Orchid and Greater Butterfly-orchid. Up to 12 orchid species are possible. Less than two miles of easy walking. This trip requires car sharing as only limited parking is possible at the reserves.

Saturday 17th June: New Forest, Hants

Leader: Vinny Blood Email: vincent@hardyorchidsociety.org

Near Burley or Brockenhurst. Several miles of rough New Forest walking, including possible bogs. We will hope to see Heath Spotted-orchid, Southern Marsh-orchid and Early Marsh-orchid. In most years there are some all white Early Marsh-orchids. Depending on the season, Heath Fragrant-orchid and Lesser Butterfly-orchid should be seen too.

Sunday 18th June: Box Hill, Surrey

Leader: Richard Kulczycki Email: richardkulczycki@hardyorchidsociety

Across Box Hill and on to Brockham Quarry. This trip is on foot and will entail about 8 - 10 miles of downland walking, some quite steep. We should see about ten orchids. Meet at Box Hill and West Humble train station. It will also be possible to join mid-afternoon to visit a quarry, the last part of this walk

Saturday 24th June: Windsor Hill, near Princes Risborough, Chilterns.

Registrations to richardkulczycki@hardyorchidsociety.org

To see Red Helleborine. The orchids are in an enclosure so we can only get within a few metres of them – bring your best lenses. The total walking is about a mile. While successful flowering cannot be guaranteed, the last few years have always produced flowering stems, although the exact timing does vary. Hence the date may need to be moved. BBOWT (the local Wildlife Trust) always has a fee per individual for guided reserve walks and indeed the warden will be on site to explain the history and current conservation policies. We need to collect donations to match these fees and to contribute to the extensive conservation efforts here. This year the warden has kindly agreed to come in on Saturday to accommodate us.

Sunday 2nd July: Minera Quarry, near Wrexham

Leaders: Celia & Iain Wright Email: celiawright@hardyorchidsociety.org

Disused limestone quarry with large numbers of several orchid species/hybrids, especially *Dactylorhizas*. We hope to find Frog Orchid in flower. An opportunity to see this large reserve and have some of the orchid flora found for you. Parking at one end of a 40 hectare site that is steep with gravelly slopes in places. (See JHOS 16/4 & 17/4).

Saturday morning 8th of July: Greywell Moors, North Hampshire

Leaders Peter & Jane Vaughan, email: pjvaughan@hardyorchidsociety.org

We will visit the northern part, which is a closed reserve (with permission). The site's specialities are large numbers of Marsh Helleborine, including var. *ochroleuca*, and Marsh Fragrant-orchid for which it is particularly well-known. Southern Marsh-orchid, Common Twayblade, Pyramidal Orchid will also be present. The site is relatively compact and so we will walk less than a mile, but the ground is uneven, wet and sloping in places, so good footwear is essential. After the site visit there will be the opportunity to go on to an excellent nearby pub for some HOS social time (and a good lunch if you like).

Growing Hardy Orchids - 7 Moirá Tarrant talks to Neil Hubbard

Neil Hubbard is well known at Alpine Garden Society shows in the East Midlands area where he has exhibited bulbous plants for many years. But when I visited him in early March, he told me that from alpines generally and later bulbous genera he has become increasingly interested in hardy orchids. That interest and expertise led to him winning the Banksian Medal, gaining most points in the combined results of the 2021 HOS Plant Shows.

I started our conversation by asking Neil about the range of hardy orchids that he grows. Most are Mediterranean species with a few Australian plus some rarities from other temperate regions. He professed to having only a few British natives but later when we were examining his plants more closely it became clear that he has a wide range of species, often being bold in how and where he tries growing them.

Neil's two green aluminium and glass, 6×8 greenhouses look fairly conventional at first glance but he has made adaptations to suit the enormous number of plants he grows. I realised (when I caught my toe tripping over the threshold) that both greenhouses are constructed on top of a low retaining wall made of breeze blocks set on edge giving increased height inside. The benching was built by Neil to carry the considerable weight of plunge beds for hundreds of plants. In the older greenhouse, paving slabs are supported by regular stacks of breeze blocks laid on their long edge but in the newer greenhouse there is only a stack of breeze blocks at each end. These support angle-iron along the length of the bench across which are laid paving slabs which gives much greater under-bench growing space. In both greenhouses sturdy treated-wood frames, painted to increase their resistance to rot and lined with thick polythene, sit on top of the paving slabs. Neil told me that they are not quite watertight as there are some drainage holes. Each bed is then filled with a sand plunge which is kept moderately wet with regular watering throughout the growing season.

Neil's orchids are grown in clay pots. He uses a small square of fine-grid shade netting to 'crock' the bottom, then compost and finally gravel to top the pots off. The compost he uses for virtually all his orchids is very simple being one part J13 and two parts of 5mm limestone grit. He talked about visiting a local quarry to sieve for himself the grade of limestone that he favours. The only exceptions to this mix are pots of *Serapias* and tuberous-rooted *Dactylorhiza* for which he uses one part ericaceous compost, one part sharp sand and one part gravel. This distinction is based on having seen *Serapias* species thriving in a peaty waterlogged ditch above granite in Portugal. I was surprised by how little ventilation he gives his greenhouses. The older, which had a recalcitrant door until he took out the door glass and replaced it with stout netting to keep out Blackbirds, is comparable to an Alpine house. The newer has only a low-level louvre window which is kept slightly open.

He doesn't provide any heating, although in a sheltered garden in a suburban setting surrounded on all sides by fencing and the house he has not found temperatures to have dropped below -3°C for the last few winters. He tells me that this temperature can be tolerated by his plants but he would use horticultural fleece to cover them if it dropped lower. We continued this conversation after the exceptionally cold spell in early Winter 2022/23. Neil found then that watering just before the temperatures plunged almost certainly produced leaf-blanching in *Ophrys* as the tubers would have been sitting in compost which was still wet.

Neil doesn't feed his plants because of using the nutrient rich J13 as the loam base for his compost and because he re-pots every year. He tried using Rainmix once but has since abandoned it. His plants are allowed to die down and dry off for a couple of weeks at the end of the season. He then removes the tubers and dries them thoroughly in fresh air until storing them in zip-lock plastic bags with a tiny amount of compost to provide some padding. They are stored under the benches in the greenhouse in cardboard boxes but checked regularly for the new shoots to appear. This can happen at any time, as soon as July and as late as October. As soon as the shoot is about 5mm long the tubers are re-potted and given a watering. He uses only rain water which is stored in the greenhouse at the same temperature as his plants. He waters around the edge of the pot carefully blotting any water caught in the rosette. He then waters every couple of weeks except in cold weather/mid-winter which is approximately December to mid-February when he doesn't water the plants direct but allows them to rely on the damp sand plunge around their pots. I asked about pests and diseases. His main problem has been greenfly but has found that watering once in the Autumn with BugClear Ultra Vine Weevil killer at full strength (N.B. not spraying) allows enough of the systemic insecticide to deter the greenfly until late in the growing season when Neil can pick off the few that appear and squish them. The insecticide is effective for a range of pests including aphids. The Vine Weevil killer solution is given as a normal watering so not specifically applied according to pot size. But as usual, Neil makes certain that no moisture is allowed to remain on the leaves.

We went out at this stage to look in detail at Neil's orchids which were numerous, vigorous and tucked among hundreds of bulbous alpines. In early March some beauties were in full flower with a lot more flower spikes evident in healthy green rosettes. Neil uses quite small pots; most plants being in three or four inch pots. I noticed a healthy group of three plants of Man Orchid *Orchis anthropophorum* in a four inch pot with flower spikes showing. He believes that orchids should not be

Fig. 1: Neil Hubbard.

Fig. 2: Contrast in colour of Giant Orchid.

Fig. 3: Large-flowered example of *Ophrys fusca*.

Fig. 4: Construction of plunge beds.

All Photos by Simon Tarrant



over-potted. Several *Ophrys* that I saw in full flower such as a pot of *Ophrys speculum* (pictured in *JHOS* v18 no4 Autumn 2021) and a handsome large flowered *O. fusca* had very bright green leaves. I wondered if this was the result of the watering regime as it is common for *Ophrys* leaves to brown and die back as the flowering reaches its peak.

Very prominent were two beautiful plants of Giant Orchid *Himantoglossum robertianum* in contrasting colour forms. In the same area was a Naked-man Orchid *Orchis italica* which was in full flower and well ahead of Neil's other plants of the same species. It was also remarkable for the flower-spike initially appearing before the leaves and for the flowers being held almost horizontally. We looked at some other plants in this house including some slender grass-like leaves belonging to *Microtis unifolia*. Neil finds that although this cannot be described as showy its small greenish flowers are fascinating as they appear to burst out of the side of the single grassy leaf. A pot packed with healthy rosettes promised good flowering from Creeping Lady's-tresses *Goodyera repens*. And from outside we could see a pot of Early-purple Orchids *Orchis mascula* under the bench which Neil explained were young but growing strongly promising good flowering in future years. He has some *O. mascula* growing out of doors but they are failing to multiply.

Out in the garden Neil showed me a variety of other species. He has a couple of *Cypripedium*, including a *C. calceolus*, which are pot-grown but remain outside throughout the year. He has tried planting Autumn Lady's-tresses *Spiranthes spiralis* in a corner of the lawn and was glad to see that it had reappeared this year. Greater Tongue-orchid *Serapias lingua* is also being tried outside planted in the corner of a trough.

Like many growers, Neil is worried about the impact of Brexit on availability of tubers for sale. He has been concerned by someone regularly selling tubers on eBay which appear to be dug from soil rather than pot-raised. He himself has propagated some of his plants by the well-known method of taking a mature tuber as it forms. If you haven't come across this, a plant with a flower spike just starting and with leaves still green, can be tipped out carefully to reveal a new tuber forming from the old one. This is broken or cut off and it and the plant put back in the pot. If you are successful this broken off tuber will mature normally and a second new tuber will develop from the original plant. But Neil warns that this is not without risk as he lost a plant completely when the broken off tuber rotted and the plant failed to replace the old with a new tuber. He is also trying a very basic form of seed propagation using seed which will germinate on oats medium and A36 fungus (which is available to

Fig. 5: Neil's packed plunge beds.

Fig. 6: *Orchis italica* with flowers held horizontally.



members from the HOS Seed & Fungus Bank). He takes the tiny protocorms out of flask when they are about 3-4mm in length and plants them in compost around an adult plant of the same genus. He finds that they will often survive this treatment producing a pair of green leaves but he is still experimenting to see how reliably they form a new tuber at the end of the growing season.

I had a lovely morning talking to Neil about his beautiful plants and how he grows them which quite made us forget the incessant cold drizzle which had persisted throughout this trip to Leicestershire. I am very grateful to him for sharing his skills and knowledge for this article.

Results of Photographic Competition 2022

Class 1. A view of an area (landscape or habitat) showing orchids in their natural environment, print size up to A4. (9 entries)

- 1st Denise Harper – *Gymnadenia conopsea*
- 2nd Steve Pickersgill – *Anacamptis morio*
- 3rd Ken Elsom – *Cephalanthera longifolia*

Class 2. A group of orchids containing at least three flower spikes. These can be all the same species/hybrid or a mixed group, print size up to A4. (8 entries)

- 1st Denise Harper – *Anacamptis morio*
- 2nd Ken Elsom – *Serapias vomeracea*
- 3rd Gillian Elsom – *Spiranthes spiralis*

Class 3. A single orchid spike, print size up to A4. (9 entries)

- 1st Hilary Pickersgill – *Neottia nidus-avis*
- 2nd Sonja Thompson – *Neottia cordata*
- 3rd Steve Pickersgill – *Anacamptis morio*

Class 4. A close-up of an orchid, showing one or more entire inflorescence(s), print size up to A4. (9 entries)

- 1st Sonja Thompson – *Platanthera chlorantha*
- 2nd Denise Harper – Vanilla Orchid
- 3rd Gillian Elsom – *Anacamptis coriophora*

Class 5. A close-up of an orchid showing part of an inflorescence, print size up to A4. (7 entries)

- 1st Steve Pickersgill – *Ophrys insectifera*
- 2nd Gillian Elsom – *Ophrys lutea*
- 3rd Ken Elsom – *Orchis anthropophora*

Class 8. A close-up of an orchid in cultivation, showing one or more entire inflorescence(s), print size up to A4 (2 entries)

- 1st Christopher Hoskin – *Anacamptis pyramidalis*
2nd Janet Hails – *Ophrys apifera*

Class 9. A view of an area (landscape or habitat) showing orchids in their natural environment, in JPEG form. (24 entries)

- 1st Ivar Edvinsen – *Epipogium aphyllum* (Maren Talbot Trophy)
2nd Graham Goodfellow – Rhodes habitat
3rd Vincent Blood – *Ophrys sphegodes*

Class 10. A group of orchids containing at least three flower spikes. These can be all the same species/hybrid or a mixed group, in JPEG form. (21 entries)

- 1st Lynne Demaine – *Serapias lingua*
2nd Ken Elsom – *Serapias lingua*
3rd Steve Pickersgill – *Orchis mascula*

Class 11. A flower spike of a single orchid, in JPEG form. (25 entries)

- 1st Christopher Hoskin – *Cephalanthera damasonium*
2nd Phil Smith – *Ophrys apifera*
3rd Elliott Hails – *Ophrys sphegodes*

Class 12. A close-up of an orchid, showing one or more entire inflorescence(s), in JPEG form. (27 entries)

- 1st Mark Dowie – *Ophrys apifera* f. *bicolor*
2nd Hilary Pickersgill – *Platanthera chlorantha*
3rd Gillian Elsom – *Ophrys lutea*

Class 13. A close-up of an orchid showing part of an inflorescence, in JPEG form. (23 entries)

- 1st Gillian Elsom – *Ophrys scolopax* ssp. *cornuta*
2nd Elliott Hails – *Gymnadenia conopsea*
3rd Anne Evans – *Ophrys apifera*

Class 14. A group of orchids in cultivation containing at least three flower spikes. These can be all the same species/hybrid or a mixed group, in JPEG form. (4 entries)

- 1st David Pearce – *Dactylorhiza fuchsii*
2nd Ivar Edvinsen – *Cypripedium ventricosum*
3rd Neville Roberts – *Bletilla striata*

Class 15. A flower spike of a single orchid in cultivation, in JPEG form. (2 entries)

- 1st Ivar Edvinsen – *Cypripedium formosanum*
2nd Phil Smith – *Dactylorhiza kerryensis* × *Dactylorhiza incarnata*

Class 16. A close-up of an orchid in cultivation, showing one or more entire inflorescence(s), in JPEG form. (5 entries)

- 1st Ivar Edvinsen – *Cypripedium Phillip*
2nd Neville Roberts – *Pleione Humilis* x *Glacier Pearl*
3rd Ron Demaine – *Cypripedium calceolus*

Class 17. Novice class, any hardy orchid print, size up to A4. (3 entries)

- 1st Denise Harper – *Orchis purpurea*
2nd Peter Sheasby – *Neottia nidus-avis*

Class 18. Novice class, any hardy orchid in JPEG form. (12 entries)

- 1st Ben Jacob – *Orchis purpurea*
2nd Mark Dowie – *Serapias lingua*
3rd Denise Harper – *Dactylorhiza incarnata* ssp. *coccinea*

Class 19. A hardy orchid subject that has been manipulated creatively using any advanced software technique to create an artistic image, print size up to A4. (3 entries)

- 1st Gillian Elsom – *Platanthera chlorantha* (Best Print)
2nd Sonja Thompson – *Anacamptis pyramidalis* var. *alba*

Class 20. A hardy orchid subject that has been manipulated creatively using any advanced software technique to create an artistic image, in JPEG form. (6 entries)

- 1st Alan Blackman – *Epipactis palustris*
2nd Gillian Elsom – *Ophrys insectifera*
3rd Vincent Blood – *Neottia ovata*

Best Digital & Maren Talbot Photographic Trophy:

Ivar Edvinsen for *Epipogium aphyllum* in Class 9

Best Print:

Gillian Elsom for *Platanthera chlorantha* in Class 19

Our thanks to the Competition Judge: Julian Cox

The following pages feature a selection of winning images. Figure numbers indicate the Class followed by the position (e.g. 11-2 is second place in Class 11). All winning images are presented on the HOS website.

9-1



1-1



12-1



2-1



5-1



8-1



17-1



15-1



13-2



11-2



Addendum to the Orchid Section of the New British and Irish Plant Atlas Richard Bateman

Approximately every 20 years, the Botanical Society of Britain and Ireland (BSBI) conspire with the Research Council’s Centre for Ecology and Hydrology to generate an updated hectad-based atlas of the British flora. The latest such Atlas was released, in both online and (affordable) printed forms, in March 2023.

PRIMULACEAE | *Primula*

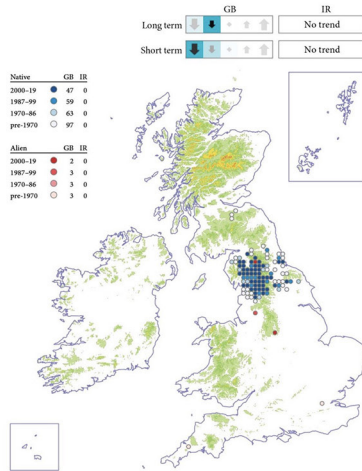
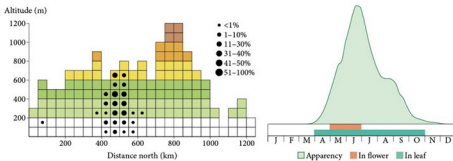
N *Primula farinosa* Bird’s-eye Primrose
L.

A short-lived perennial herb of wet, usually spring-fed, calcareous flushes and mires amongst limestone grassland. It is often found on hummocks in springs, and on seeping banks where slippage has opened up the turf, most commonly on open marl. A few sites remain in unimproved, grazed, damp pasture, where it often fails to flower due to heavy grazing pressure, or on the floor of abandoned limestone quarries. It perennates as resting-buds and reproduces by seed. 0–570 m (Jeffrey Pot, Wensleydale, North-west Yorkshire), but generally 200–400 m. There are a few sites at sea level on the Durham coast and in Silverdale.

Trends Although *P. farinosa* remains frequent in suitable habitats in its core areas in Upper Teesdale, the Craven District of Mid-west Yorkshire and parts of Westmorland and North

Lancashire on the Carboniferous limestone, elsewhere there have been many losses due to drainage and agricultural improvement. In recent years, it has suffered from summer drought in suboptimal sites, and has been outcompeted by vigorous forbs, encouraged by atmospheric nitrogen deposition. However, it still persists at lowland sites on the east coast where its survival depends on the persistence of spring-fed marls. It is extinct in Scotland, with a last record from West Linton (Peebleshire) in 1925.

Biogeography Eurasian Boreal-montane element, with a disjunct distribution.



Key refs Baker *et al.* (1994), Hambler & Dixon (2003), McKee & Richards (1998), Stewart *et al.* (1994).

A.J. RICHARDS & M. SANFORD

In spring 2021 it became my job (along with Ian Denholm for the genera *Dactylorhiza*, *Gymnadenia* and *Serapias*) to update or, in some cases, wholly replace the captions employed in the previous Atlas (Preston *et al.* 2002). However, there has been long delay in publication following the December 2019 cut-off date for accepting new plant records. Combined with the failure of the editors to provide proofs of the draft captions, this self-imposed constraint has left Atlas 2000–2019 (Stroh *et al.* 2023) rather more dated than might have been hoped; ironically, it is marginally less current than the detailed review article that I wrote to accompany the Atlas (Bateman 2022a) or the related revised taxonomic checklist that I prepared for HOS (Bateman 2022c). As I know that a significant proportion of HOS members also belong to BSBI and are likely to be active users of the Atlas, I have prepared the following brief addendum.

Few HOS members will be unaware of the fanfare that surrounded the “discovery” (more accurately, the belated media promotion) of a small population of *Himantoglossum robertianum* (Giant Orchid) in Oxfordshire, thereby adding a new

species of uncertain origin to the catalogue of British and Irish orchids (cf. Bateman 2022a; Weston 2022). This small population appears likely to persist, though I doubt that we ever unravel its mode of origin with confidence. Nor is it clear whether, together with recent finds of multiple *Serapias* species, *H. robertianum* constitutes a genuine vanguard for other classically Mediterranean species actively migrating northwards in response to climate change. In this context, a new Suffolk locality for the *S. vomeracea* group was found in 2021, in addition to that from Kent reported in 2020. None of these species features in Atlas 2020.

Uncertainty of origin is combined with uncertainty of identification in the case of several plants resembling *Spiranthes romanzoffiana* (Irish Lady's-tresses) found in autumn 2018 adjacent to a fibreglass pond installed in an Essex garden (Adams 2022), at least 300 km from its nearest known reputedly natural occurrence. A large number of species resembling *S. romanzoffiana* occur in North America, among which *S. cernua* is becoming widely cultivated. Capable of reaching flowering size in less than two years from seed, this species has established itself in several localities in the Netherlands and Belgium, and appears the more likely identity for the enigmatic Essex plants. Identification through DNA barcodes would be unequivocal, as *romanzoffiana* and *cernua* occupy opposite evolutionary poles within the genus (Dueck *et al.* 2014), which admittedly has been somewhat over-split at species level. Garden escape appears a more likely origin than air-borne or bird-borne seed transported directly from North America.

Unquestionably native rarities reported from fresh localities during the last two years include multiple re-finds of *Cephalanthera rubra* (Red Helleborine) in the Cotswolds and the detection of a lone *Orchis simia* (Monkey Orchid) in West Sussex. In addition, the South Wales coastline has yielded at least two new sites for *Epipactis helleborine* subsp. *neerlandica* ('Dutch Helleborine') and the welcome rediscovery of an additional *Liparis loeselii* (Fen Orchid) population after a century-long hiatus.

Supposedly the first ever locality for *Dactylorhiza incarnata* subsp. *cruenta* (Flecked-early Marsh-orchid) on Orkney (Bateman 2022a) proved on closer inspection to instead be the first ever locality for Pugsley's Marsh-orchid on Orkney (Bateman *et al.* 2023)! This species has for long been a nightmare of name-changing that at least reflected increasing knowledge, but Pugsley's Marsh-orchid now suffers the indignity of further name changes, enforced by the over-zealous application of the law of nomenclatural priority that (in my admittedly biased view) plagues the taxonomic community. Unfortunately, this law requires transposition of the two names employed in the new Atlas: instead of being the species *D. traunsteinerioides* that possesses a Scottish subspecies, *francis-drucei*, this taxon must henceforth become the species *D. francis-drucei* that possesses an Irish, Welsh and northern English subspecies, *traunsteinerioides*. Several taxonomic authors (including me!)

had overlooked the fact that *francis-drucei* was validly described at species level by Wilmott four years before *traunsteinerioides* was elevated to species level by Pugsley (Bateman *et al.* 2023).

I will close by making a few predictions regarding orchidological changes likely to be reported in the next UK plant Atlas, approximately 20 years hence. I hope that provision of more reliable distinguishing characters will in time yield increasingly accurate and densely populated distribution maps for the three British and Irish species of *Gymnadenia* (Bateman *et al.* 2021) and for *Dactylorhiza praetermissa* subsp. *schoenophila* (Bateman 2020), which appears to be genetically cohesive (R. Bateman & M. Hedrén, unpublished). Improved identification skills among field botanists are also likely to eventually yield more comprehensive maps for *D. francis-drucei* and perhaps also for inland populations of *Epipactis dunensis* (Dune Helleborine) – such gradual enlightenment is presently improving our knowledge of *E. phyllanthes* (Green-flowered Helleborine) in Ireland and Scotland.

Further orchid taxa not previously recorded in Britain will surely be found, most likely among the now infinite number of *Ophrys* ‘microspecies’. Unfortunately, determining whether such plants arrived without the direct or indirect assistance of humankind will remain at best educated guesswork. As this will not be the case should increasingly widely grown Southern Hemisphere genera such as *Pterostylis*, *Disa* and *Chloraea* eventually escape from cultivation, these genera may provide a crude but valuable yardstick for estimating the human contribution to such escapism. Returning to undoubted natives, it will be interesting to see whether Scotland or Ireland – the latter already in possession of six of the seven native British and Irish dactylorchids – will win the geographic race to acquire the seventh species, *D. praetermissa* (Southern Marsh-orchid).

Moving from credit to debit, at some point during the next 20 years, someone will surely be brave enough to once again join me in declaring *Epipogium aphyllum* (Ghost Orchid) extirpated from Britain. And assuming that much of the British Isles continues to suffer an increasingly continental climate featuring regular summer droughts of the kind that blighted 2022, it seems unlikely that our one surviving native plant of *Cypripedium calceolus* (Lady’s-slipper Orchid) will respond positively to such punishment; it is no coincidence that, as much as a century ago, it had already chosen to grow on a steeply north-facing slope. Woodland orchids such as helleborines are unlikely to compete successfully for moisture with surrounding trees, while orchids occupying wetland habitats that rely on runoff rather than groundwater will also be vulnerable to desiccation through longer-term soil-moisture deficits. Geographically outlying populations of declining species are also likely to be at particular risk; for example, those of *Neotinea ustulata* (Burnt Orchid) and *Pseudorchis albida* (Small-white Orchid) in Wales, and of *Goodyera repens* (Creeping Lady’s-tresses) in Norfolk.

More generally, current (albeit limited) evidence suggests that the ecological tolerance of plant species fails at specific environmental tipping points that may not be reached without further human inputs (Bateman 2022b). Allowing for the short delays that generally precede excessive losses once a tipping point has been reached, it could prove to be Atlas 2040–2059, rather than Atlas 2020–2039, that documents the more profound changes in our orchid flora. If so, a better than expected outcome reported in 2040 should not be allowed to become cause for complacency.

I thank Sean Cole for drawing my attention to some of the novel occurrences discussed in this article.

References

- Adams, K. (2022) *Spiranthes romanzoffiana* Cham.: Irish Lady’s-tresses new to Essex. *Essex Botany* 14: 3.
- Bateman, R. M. (2020) False Pugsley’s Marsh-orchid. *JHOS* 17(3): 87–97.
- Bateman, R. M. (2022a) Systematics and conservation of British and Irish orchids: a “state of the union” assessment to accompany Atlas 2020. *Kew Bulletin* 77: 355–402.
- Bateman, R. M. (2022b) Out of the frying pan? Predicting the British and Irish orchid flora of the late 21st century. *JHOS* 19(4): 119–132.
- Bateman, R. M. (2022c) Checklist of British and Irish orchids (as of October 2022). Hardy Orchid Society website (<https://www.hardyorchidsociety.org.uk/HOS%201012/checklist2022.pdf>).
- Bateman, R. M., Denholm, I., McLeod, L., Craig, W. & Ennos, R. A. (2023) Systematic reappraisal of Marsh-orchids native to Scotland. *Kew Bulletin* 78: in press [ca 20 pp.]
- Bateman, R. M., Rudall, P. J. & Denholm, I. (2021) *In situ* morphometric survey elucidates the evolutionary systematics of the orchid genus *Gymnadenia* in the British Isles. *Systematics and Biodiversity* 19: 571–600.
- Dueck, L. A., Aygoren, D. & Cameron, K. C. (2014) A molecular framework for understanding the phylogeny of *Spiranthes* (Orchidaceae), a cosmopolitan genus with a North American center of diversity. *American Journal of Botany* 101: 1551–1571.
- Preston, C. D., Pearman, D. A. & Dines, T. D. (2002) *New atlas of the British and Irish flora*. Oxford University Press, Oxford.
- Stroh, P. A., Walker, K. J., Humphrey, T. & Pescott, O. L., eds (2023) *Plant atlas 2000–2019: Mapping the distribution of the British and Irish flora*. BSBI/Princeton University Press. (Orchidaceae = vol. 2, pp. 1169–1203)
- Weston, P. (2022) Giant orchids found growing in the UK for the first time. *Guardian* website, 01.04.2022.

2022 Field Trip Reports Richard Kulczycki

Late May in Kent. We are looking at two Lady Orchids, one nearly albino, the other a much darker form. There are two lizards on the log below them. Then we hear a shout – “Duke of Burgundy!” – “Two!” What is an orchid lover to do? Stay in this extraordinary moment or hoof it down the path to see the rare butterflies? Just one of the memorable moments from this year’s field trips.

We went into 2022 orchid season in good shape with about fifteen trips planned, a historic high for HOS. The practice from last year’s Covid-influenced programme of announcing the schedule in April was kept on. This would give more time to see what happened with Covid, to see what the weather was doing to flowering times, and to reduce the burden on trip leaders who would only need to be alert to queries for three months rather than six. It proved rather more complicated, as the early summer hot weather, a late Covid wave and orchids being dug up all interrupted our plans.

We started early on 30th April seeing the Early Spider-orchids on the **Dorset Coast**. This must be one of the absolute best orchid experiences in Britain (certainly in the south). David Hughes, our trip leader, writes: “Twelve of us met on a calm sunny day at the top of the Purbeck escarpment which drops down to the sea. We were very soon surrounded by *Ophrys sphegodes* which grow in hundreds of thousands for three miles along the slopes here. With the exception of the leader this was a fit young group, so we opted to walk along the top path to the beginning of Durlston Park where the Early-purple Orchids, *Orchis mascula*, were perfect among the cowslips. Then dropping down nearer the sea we walked west along the cliff top enjoying more *Op. sphegodes* and, just before Dancing Ledge, a fine display of Green-winged Orchids, *Anacamptis morio*, in a range of colours. These were set off by mats of Milkwort. In order to avoid Easter we ran this meeting later in the season than usual. This meant that the Early Spider-orchids were slightly past their best. The advantage was that the Early-purple Orchids and Green-winged orchids had achieved perfection.”

So all the April orchids were seen in glorious conditions in a multitude of forms. David Hughes has run some twenty trips for us, since the very early days of HOS, and he is now hanging up his boots. A great day out to start the season and a wonderful final trip with David as our leader – thank you so much for so many good days.

On Thursday 26th May, the season was starting very promisingly and we were in East Kent. Colin Sillence was leading his first trip for us and his enthusiasm was infectious. Here is Colin’s account: “This field trip took in the Kent Wildlife Trust reserve at **Park Gate Down** and the **Bonsai Bank** area deep within Denge Wood. Nine members assembled at Stelling Minnis. The visit is logistically tricky as the approach roads are very narrow and parking is limited at both sites. It was important

to use as few cars as possible, so many thanks to those who volunteered to drive. Park Gate was in good shape with the first Monkey Orchids seen some 50m from the entrance. They were found in all three enclosures but the great majority were in the two nearest the road. A few Early-purple Orchids were hanging on and there were good numbers of Common Spotted-orchid, Greater Butterfly-orchid and Twayblade, plus a fair few Fly Orchids. Chalk Fragrant-orchid was mostly in bud but a few plants had a flower or two open. In the centre of the middle field was a solitary but handsome Lady Orchid. This caused an interesting debate as many felt it would be sensible to remove it to a different location to keep the Monkey population 'pure' and avoid the rampant hybridization that has all but swamped the pure Monkeys at Hartslock in Oxfordshire.

Bonsai Bank never ceases to amaze. Its glory is a huge population of Lady Orchids showing a wide range of colour variation. Greater Butterfly-orchid was common with one plant showing a strange aberration in its flower formation. In some areas Fly Orchids were counted in dozens. A few Early Purple-orchids were still fresh enough to photograph. As at Park Gate Down, Common Spotted-orchid and Twayblade were everywhere. By the lower path were some fine examples of White Helleborine. Sightings of the Duke of Burgundy, Green Hairstreak, common lizard and the splendid moth *Anania funebris* rounded out the day. £40 was kindly donated by those present and passed on to Kent Wildlife Trust."

Two days later, on Saturday 28th May, Elliott Hails led a trip to **Exmoor** to see Lesser Twayblade, an orchid that is very hard to find unaided. Here is Elliott's account: "Eight of us met at around 10:30 on Exmoor with clear skies and sun. Having walked along a footpath for around a mile or so before heading off-piste to the site; the north facing slope of a steep valley. The vegetation at the site was a mix of bracken and heather with the occasional acidic flush filled with flowering cotton-grass. We quickly identified a number of non-flowering plants. Our first flowering plant came after around 30 minutes of searching under the heather where sphagnum was present. We located six flowering spikes and over 30 non-flowering plants in total. Other notable species included Lemon-scented fern, Eyebrights, Milkwort and a calling Cuckoo."



Lesser Twayblade
Photo by Elliott Hails

The season was now moving forward rapidly. Gillian and Ken Elsom's trip to **Sheepleas, North Downs**, was moved to a week earlier than planned. Ken writes:



Bird's-nest Orchid (top)
Fly Orchid (bottom)
Photos by Ken Elsom

“The season must have been about three weeks earlier than last year; everywhere was very dry. Eleven of us started out from the car park behind St Mary’s church at Sheepleas (Surrey Wildlife Trust) to see the spring orchids of chalk downland. Surrey’s Centenary Meadow was our first stop – unfortunately this was too late for the abundant cowslips but too early for the summer flowers. Moving on we saw our first orchids: *Cephalanthera damasonium*, *Dactylorhiza fuchsii* and *Platanthera chlorantha*. We went into another meadow surrounded by woodland to find a collection of rather small *Neottia nidus-avis* under a Beech tree, then into a glade with large numbers of *Neottia ovata* and a few *Platanthera chlorantha* growing in open grassland. Just off the next clearing were some more-robust *Cephalanthera damasonium*. On into woodland where we eventually found good numbers of larger *Neottia nidus-avis*. On the side of the path were some Adder’s-tongue fern, *Ophioglossum vulgatum*. Nearby we found *Ophrys insectifera*, though unfortunately some had been destroyed by slugs. The next small glade had probably 100 *Platanthera chlorantha* and they were a splendid sight. We had lunch nearby. Afterwards we saw a few newly-flowering *Dactylorhiza fuchsii* and some *Epipactis helleborine* in leaf. We were now at the top of the North Downs with views of London 40 km away. We sought *Ophrys apifera* but without luck. It was probably too early for them and they are always difficult to predict here. We then moved to Pewley Down (just south of Guildford) where there were more than 140 *Orchis anthropophora* and at that time just one *Anacamptis pyramidalis* with

only a few flowers open. Overall we had seen an impressive number of eight species of orchid (with seven in flower) in their classic downland habitat. £63 was donated to Surrey Wildlife Trust who maintain Sheeples.”



Serapias lingua (winner of Class 10 in the Photographic Competition 2022)
Photo by Lynne Demaine

We had a third trip on Saturday 28th May. Jonathan Greenwood writes: “The **Tiptree** *Serapias lingua* colony put on a wonderful show this year with what could be described as its best season yet! The biggest surprise was that they came into flower on about the 10th May – that’s ten days early! A visit on 12th May revealed at least one plant was already at the two-flower stage, whereas in the years 2018-2021 the first flower consistently appeared on the 19th or 20th May. As a consequence the planned HOS visit had to be brought forward by two weeks. In the event thirteen HOS members attended on the day and during the week and were treated to a spectacular display with the flowers in their prime. A careful count later that day revealed 176 spikes!

Colchester Borough Council recently refused planning permission on the site but the meadow remains vulnerable. We may well have to fight an appeal by the developer. Furthermore the meadow was not mown last year and the dwarf willow is spreading and plants are getting rather large reducing the quality of the grassland. We do our best to keep the meadow clear of willow around the *Serapias*. The colony suffered

some damage from Muntjac that feed under the cover of the willow and managed to create two paths right through the *Serapias*! Additionally, several plants were nibbled, presumably by rabbits.”

The next planned trip became the cause of considerable controversy. While preparing for this, our leader discovered that some Late Spider-orchids had disappeared in the week between his visits. Moreover, there were now many holes in the ground. We engaged BSBI, Plantlife and, informally, the White Cliffs Partnership. A crime was reported to the police. We also talked to the site owner. In the end, the police took this no further, as the advice of a local botanist was that many of the holes were made by animals. Initially this was said to be rabbits, but later the possibility of badgers was raised. However, every orchid expert shown photographs of the holes was of the opinion that they had been dug by humans. A visit to the site a couple of weeks later showed that the number of flowering plants was considerably less than normal (probably about a third), although an exact count was impossible, as the Tor grass was now overtopping the plants and more damage might be done to the remaining plants. A number of members who had made arrangements to come down to Kent were individually directed to another site where they could see these orchids, but a group visit was no longer possible.

A few days later, Neil Evans, our Photo Competition Secretary, reported an incident of Burnt orchids being removed at Mount Caburn. These two incidents later led to a number of newspaper stories, including in the Times (featuring our Conservation Officer) and the Guardian. The Late Spider-orchid disappearance proved impossible to resolve, but there must be even more concern for these orchids if this is animal destruction, as both rabbits and badgers now live within meters of these plants.

On Tuesday 7th June, we took up an invitation from a recent member, Philip Honey, to come and see the orchids growing in his meadows and woods. This was in the **Cotswolds** a few miles south of Bath, near Combe Hay. Our host has cared for these habitats for about ten years now and has greatly extended the potential for biodiversity by some targeted interventions. These are very much in tune with the land use over the last centuries and with the natural Cotswold environment. As a result the meadows look wonderful and we saw plenty of wild plants, including six species of orchid. These included Bird’s-Nest Orchid and White Helleborine, which are both spreading here. We had our lunch next to the Bee Orchids on Philip’s lawn. This trip can better be described as an “orchid meadow open day”, like the familiar garden open days. It was an opportunity to see a mini-rewilding project and for members to share and discuss their experiences of trying to grow and establish orchids. And it was a great day out in an important site for canal history, as we learned about the attempt to build Caisson locks. If any members would like to show HOS around their orchids, and hold such an open day, then please get in touch with the Field Trip Co-ordinator.



Wiltshire Downs field trip
Photo by Richard Kulczycki

On Wednesday 8th June Paul Bartlett took us to the **Wiltshire Downs**. Our principal quarry was the early flowering Burnt-tip orchid. To be sure that he would not get stuck in traffic, Paul wild camped overnight on the downs – that’s dedication. Paul writes: “Ten HOS Members came from far and wide to join me at the Pewsey Downs NNR car park. After overnight rain, the day started damp but a brisk breeze helped to clear the air, though conditions remained a problem for photographers. We entered the NNR, soon coming to some chalky banks, which we all knew would be a promising site for orchids. We were not disappointed as several species were soon located. Common Spotted-orchids of course, Twayblades, some very good Fragrant-orchids (*Gymnadenia conopsea*), Lesser Butterfly-orchids (*Platanthera bifolia*) and a number of very good Bee Orchids. I asked people to check every single Lesser Butterfly-orchid in case a few Greater Butterfly were concealed amongst them, but there were none. Moving gently uphill, we soon entered the Burnt-tip zone, one of our special target species, which were present in fair numbers and good condition considering the very dry spell in May. There were a number of other special plants in the NNR such as Early Gentian, Field Fleawort and Horseshoe Vetch with attendant clouds of Adonis Blue Butterflies, to name only a few. A Red Kite flew overhead. A convivial picnic lunch was taken in a sheltered hollow near the Giants Grave. Afterwards, we trudged on for about a mile in a westerly direction with relatively little interest other than a not-very-stylish, relatively modern, 19th Century White Horse, cut into the hillside. A second excellent orchidaceous area was visited on a

branch of the ancient earthwork, the Wansdyke, which descends uncharacteristically into the valley. The same species were present. Well-satisfied after a lovely day, we returned along the Wansdyke to the car park on the crest of the Downs.”

On Saturday 11th June, Mike Parsons led a trip to Essex. In Mike’s words: “We had a fine day at **Chafford Gorge** in Essex and we were very lucky with the weather as it was quite warm but not too muggy. Seven members turned up at the Sandmartin pub, as the visitors’ centre at the Gorge has been closed for some time. However the pub offered facilities and was nearer to another entrance which enabled us to get to a grassy walkway leading into the best areas for seeing orchids. We first encountered Common Spotted-orchid (*Dactylorhiza fuchsii*) and Common Twayblade (*Neottia ovata*) in most areas, mainly beside the paths. The gorge is well known for Round-leaved Wintergreen (*Pyrola rotundiflora*) and we were not disappointed as there were many. Further on we looked for some Birds-nest Orchid and Bee Orchid, but they seemed to be having a bad year. However, nearby, just emerging, were a few Green-flowered Helleborine in bud. In the open areas there were a number of Man Orchids, some very large, which was better than last year when it was even drier. On ascending up some steep stairs to the brim of the gorge we found more Man Orchids and some Pyramidal Orchids just opening their first buds.

We then went on to **Coalhouse Fort** and followed the Thames until we found a swathe of Common Spotted-orchids mixed with some Southern Marsh-orchids (*Dactylorhiza praetermissa*) and many hybrids with the Early Marsh-orchid (*Dactylorhiza incarnata*) that had already gone over. Similarly only the stems of hundreds of Green-winged Orchid (*Anacamptis morio*) remained. There were a few Bee Orchids (*Ophrys apifera*) dotted around a well. The area looked very pink as far as the horizon where it had looked purple just a month previously. The orchids here were so plentiful that they could be seen from a hundred yards away – a very impressive sight.”

On the same day, we went to the **Stroud Commons**, as we had done last year. This year the orchids were more than two weeks earlier, so the trip was brought forward a week. Colin Scrutton writes: “The date for the field meeting was rescheduled for 11th June, a week earlier than advertised to take account of the early flowering of some orchids. The party met on Minchinhampton Common in dry, partly sunny conditions but with a strong wind that was somewhat troublesome for photography! Bee Orchids were not as common as in previous years but included no fewer than three forma *bicolor*. In the same general area, we saw Common Fragrant-orchids, Common Spotted-orchids and occasional Common Twayblades. There were signs of Early Purple-orchids and Green-winged Orchids, now well over. A roadside Lizard Orchid was showing no more than a pair of basal leaves. We moved on to the edge of Rodborough Common and walked across to the western edge. In addition to

some ordinary Bee Orchids, we found a group of forma *trollii*, delicate in size and appearance compared with more substantial *trollii* that can be found elsewhere. The whole party was invited to Nigel and Maureen's house on the edge of the common for teas and coffees to go with our packed lunches, for which we were most grateful. In the afternoon, the party moved on to **Selsley Common** to check on the condition of the Fly Orchids and Bee-Fly hybrids. Most were past their best but at least a few well-preserved flowers of both were still present.

On Tuesday 28th June, we went to see the Red Helleborines at **Windsor Hill** (BBOWT) once again. The long hot summer was causing problems as some plants had flowered early and were already going over. At one point it looked like our hosts, BBOWT, would cancel the trip, but luckily a few flowers then appeared in the original enclosure. About half the original participants managed to make it, despite the very late notice. We heard that last year a couple of plants popped up at a new site in the Cotswolds, but they did not flower this year. We were invited back for 2023, this time on a Saturday. Donations on the day were £266, and others were made online.

On the last weekend of June, there were two trips, led by Alan Gendle and Carol Armstrong, in Cumbria. See the separate accounts in the previous Journal. On Sunday 3rd July we were due to go to Minera Quarry, near Wrexham, but the hot dry weather had drastically reduced the number of orchids flowering by then. The trip was postponed to this year.

In mid-July, Sue Parker, assisted by Pat O'Reilly and the NRW warden Justin Lyons, took us to see the Irish Lady's-tresses which have miraculously appeared near **Borth Bog**. Sue has written about these before and here is this year's account: "Despite fears that the Irish Lady's-tresses plants this year would be adversely affected by the weeks of drought and intense heat, there were, in fact, around the same number of plants in evidence (around 30) as last year. Enough of them flowered on the two days of the visit to make the trip worthwhile. There were close on 100 requests to visit the plants, but Covid took a massive toll on the numbers, particularly on the second day. We accommodated around 60 visitors over the two days. Members and others kindly donated over £100 for Plantlife's orchid conservation work in Wales"

This was, all in all, a complicated season with plenty of unforeseen problems and disruptions. With many trips in the calendar, we must accept that some may need to be rescheduled or cancelled for a wide range of reasons. Despite the unprecedented weather, plenty of orchids - were seen - species (at least twenty-nine!), hybrids and unusual forms. We do not keep records, but somewhere around 190 members participated and around £500 was donated to our host organisations. Let's hope we can have a more normal season next year. Thank you so much to our volunteer trip leaders who made all this possible.

Colony of Unusual Bee Orchids in Wiltshire

Rich Mielcarek

In mid-June 2020 Sabrina Burns found an unusual looking Bee Orchid, *Ophrys apifera*, on public access land adjacent to the closed MOD firing range in Wiltshire. She posted images on the Native Orchids of Britain and Ireland Facebook forum showing a flower that was only partially open. The images raised quite a bit of discussion, particularly when somebody pointed out the similarities to a plant found in France at around the same time which had been labelled as var. *tilaventina*, a variant that had never been recorded in Britain before. Sabrina subsequently posted a further series of images of the plant showing the flower fully open and Andrew Brown visited the site in late June to see for himself (Figure 1).



Fig. 1: Unusual Bee Orchid, Wiltshire, June 2020. Note in particular the ‘spoon-shaped’ upcurved lip, the minimal patterning and the colour.

Photo by Andrew Brown

Tilaventina had been described in an article by Nonis and Liverani (1997) with the name apparently derived from the old Roman name Tilaventum for the river Tagliamento in Italy where they found their plants. I have not been able to access that 1997 article in order to read the formal description but there are images labelled as var. *tilaventina* available on the internet, for example see www.pharmanatur.com/Italie/Ophrys_apifera_tilaventina.htm. There is also a full description, in Italian, of a specimen collected in 2005 (Scheda di Botanica n64) on the Club Alpino Italiano website. Plants showing the same characters had already been named, both as *Ophrys purpurea* in Tausch (1831) and as *Ophrys integra* in Saccardo (1871), see www.guenther-blaich.de/hi_tilaen.htm for further details of the complicated history of this form.

The Italian description says the lip is ellipsoidal in shape without any evident design, being pink with a brown margin while the petals are short and conical. This matches the images published online; in addition, these all show a lip that is flattened out rather than bulbous as in a normal Bee Orchid.

All the images I have seen of *tilaventina* show flowers subtly different from the Wiltshire plant:

- a flattened lip, rather than upcurved as in the Wiltshire plant
- a wide stripe down the centre of the lip the same colour as the sepals and with a darker border, as opposed to a vaguely striped pattern of varying colours darker than the sepals and almost white edges at the tip
- petals that are short and green, rather than large and pink.

There are another two named forms from Europe that do have an upcurved lip without side lobes similar in shape to the Wilts plant but neither is a good match; var. *patinata* described from Hungary in Grabner and Kreutz (2010), has white sepals, white sepaloid petals and a bright wide stripe down the centre of the lip, and the similar var. *renatae* described from Italy in Barbieri, Barbieri, Contorni and Biagioli (2019) which has narrower but white petals and an even wider white stripe down the middle of the lip.

Andrew Brown visited the site again in June 2021 and found a similar looking plant, albeit this time with the lip flattened out rather than upcurved (Figure 2). Andrew alerted myself and several others and I was able to visit at the start of July 2021. Although I was happy the plant in question did not really fit any of the named forms mentioned, what amazed me was the rest of the colony. In my experience Bee Orchid variants normally grow amongst a colony of normal looking plants, so they stand out, but in this case the whole colony was unusual, with each plant being different.

Figures 3-7 give an indication of the range of plants at the site, particularly the more unusual. So, what are these plants? They do not fit any named forms that I am aware of, particularly as they are all different from each other, and one cannot describe them as a new form as what is the defining feature? Why most plants at this site should show such a wide range of variation is a mystery.



Fig. 2: Unusual Bee Orchid 25th June 2021 Wiltshire. Note the elongated flattened lip, with the basal area stained the same shade as the petals, and the longitudinal white stripes

Photo by Andrew Brown

3



4



5



There were common features, outside the normal range for *O. apifera*, shown by many of the plants:

- Thick elongated pink petals
- The lip shape, either flattened or upcurved and without distinct side lobes, reminiscent of the shape of var. *belgarum*
- The base of the lip, with the basal shield and/or speculum often distorted or absent
- A non-symmetrical lip pattern, often involving longitudinal white stripes
- The base colour of the lip, red rather than warm brown
- Differently patterned flowers on the same stem
- Flowers held at 90° to the stem



Fig. 3: Two flowers on the same stem, both with the flattened lip but different lip patterning, 2nd July 2021, Wiltshire.

Fig. 4: The basal shield split into two, a distorted speculum and pale longitudinal stripes down the lip, 2nd July 2021, Wiltshire.

Fig. 5: A non-symmetrical lip pattern, similar to Fig. 4 but subtly different, 14th June 2022, Wiltshire.

Fig. 6: Flowers held at 90° to the stem, 14th June 2022, Wiltshire

Fig. 7: As Fig. 6 but one flower with a flattened lip, the other upcurved, 14th June 2022, Wiltshire.

Photos by Richard Mielcarek



Fig. 8: Unusual Bee Orchid, 12th June 2018, Wiltshire.

Photo by Richard Mielcarek

As a final observation, in 2018, at a similar site about 10 km to the north west, I found a group of three unusual looking plants (Figure 8), so it may be worth checking any other bee orchid colonies that are close to the edge of the restricted MOD area for similar anomalies.

References

Barbieri, Barbieri and Contorni (2019); ‘Una nuova varietà di *Ophrys apifera*, già nota ma finora inedita’ by K. Barbieri, L Barbieri, M Contorni and M Biagioli in GIROS Orchidee Spontanee d’Europa 62 (2): 447-451

Grabner and Kreutz (2010); ‘*Ophrys apifera* var. *patinata* – eine neue Varietät von *Ophrys apifera* aus Istrien’ by U. Grabner and K Kreutz in Berichte aus den Arbeitskreisen Heimische Orchideen 27(2): 57-64

Nonis and Liverani (1997); ‘*Ophrys apifera* Hudson var. *tilaventina* var nova by U. Nonis and P. Liverani, Caesiana 9; 57-59

Saccardo (1871); ‘Nova species Italica ex genere Ophrydum’ by P A Saccardo in Nuovo Giornale Botanico Italiano 3; 165-167

Tausch (1831); ‘Allgemeine botanische Zeitung. Original abhandlungen. Plantarum minus cognitarum descriptiones offert’ by J F Tausch in Flora oder allgemeine botanische Zeitung 14; 222

2023 Video Competition

The HOS Video Competition will be held during the HOS Autumn Northern Meeting. The Tony Hughes Trophy is awarded to the best video. The winning video will also be shown at the following Autumn Southern Meeting. Entries must be sent in advance to the Video Competition Organiser, either by email, or for larger files, using one of the free transfer services such as WeTransfer or Dropbox. See the HOS website for further details. For 2023 the Video Competition Organiser will be Steve Pickersgill email: hosvc@hardyorchidsociety.org. The closing date for videos to reach him is August 16th.

Greenwings

Wildlife Holidays

Forthcoming botanical tours include:

Greece: The Pindos 18 - 25 Jun £1,295

A week of gentle paced excursions in the dramatic scenery of the Pindos Mountains with highly experienced botanist Yiannis Christofides.

France: The Vercors 30 Jun - 7 Jul £1,495

Enjoy the later season flowers of this rich part of southeast France with a wealth of butterflies too in the company of renowned natural history illustrator, Richard Lewington.

Greece: Crete 27 Oct - 4 Nov £1,295

Join Yiannis Christofides exploring this beautiful island in search of Crocus, Colchicum, Cyclamen, Galanthus, Narcissus and more in the autumn sunshine of the Mediterranean.

South Africa: The Drakensberg 17 - 31 Jan 2024 £3,795

Peak flowering season for one of the largest alpine zones in South Africa, encompassing over 2000 species and several hundred endemics!



01473 254658 ♦ www.greenwings.co.uk

