Ashmolean Natural History Society of Oxfordshire

Oxfordshire Flora Group

2019 Newsletter

*Fallopia dumetorum*

Copse Bindweed

*Photograph by Phil Cutt*
INTRODUCTION

As always, I am so impressed by the commitment of all our Flora Guardians in 2019. It was a year of strange weather, with periods of rain, periods of drought and some hot spells that were very hot indeed. As you will read in the following reports, our targeted plants were affected by this situation in various ways. This work took up a lot of time but OFG members also managed to arrange and attend many surveys that gathered data for the BSBI 2020 Atlas, with the final date for submitting results being December 2019.

We had an excellent series for Spring Term Lunchtime talks, the last to be arranged by Susan Erskine, who formally retired from that role in March 2019. Keith Kirby started the series by describing his work at Wytham in a talk entitled *A View from the Bramble Patch: Changes in the Flora of Wytham Woods*. Lisa Lane, (Upper Thames Living Landscape Manager for BBOWT) gave an illuminating talk on *Chimney Meadows – Floodplain Restoration* and Laurence Bee fascinated everyone with an introduction to plant galls called *Knoppers and Spangles*. Unfortunately, Judy Webb was forced by ill-health to cancel her talk on Marsh Lousewort but Brian Laney very nobly stood in to give a talk on *New Plant Finds in Northamptonshire*. I would like to thank Susan again for her sterling work over the years in organising so many excellent series of Spring Talks and welcome Tanya Smith who has graciously agreed to take on the role, starting in 2020.

Two events were organised by the Oxfordshire Flora Group in 2019, for which I would like to thank Sue Helm who is our Events Organiser. In March 2019, a very successful and well-attended Conference was held at CEH in Wallingford. Camilla Lambrick and Susan Erskine started the day with a talk on *Loss of Oxfordshire Species by Habitat- Extinctions over Time*. After coffee and pastries Keith Kirby spoke on *Lessons from Wytham Woods and Beyond: surveys of woodland plants and what the results might tell you*. After lunch Andy Byfield gave a stimulating talk entitled *Idle Thoughts on Conservation: 35 Years conserving plants in the south* and then David Morris finished the day looking forward to *A Future for Oxfordshire’s Flora?* All this generated lively discussion following tea and cake.

In November, a workshop was held for Flora Guardians at the Field Station at Wytham. This is an opportunity for Flora Guardians to meet, share their findings and discuss challenges and successes. Keith Cohen, Judy Webb, Wylie Horn, Tanya Smith, David Morris and Camilla Lambrick gave talks on, respectively, *Carex vulpina*, *Heliosciadium repens* and *Sioum latifolium*, Arable annuals at Wytham, *Cynoglossum germanicum*, *Rosa agrestis* and *Fallopia dumetorum*. Camilla outlined changes to some Flora Guardian roles, news about other species and on-going experiments in seed collection and propagation. There was opportunity for committee members to explain administrative matters and to lead discussion on data collection, the rationale for claiming expenses and ways to communicate with each other. The committee will consider the timing of future workshops, perhaps alternating morning/afternoon or Saturday/Sunday to enable those who are unable to attend on a Saturday morning to participate.

Camilla has decided to step down as Flora Guardian Co-ordinator but will continue as an associate member of the committee. She is happy to share her vast experience in the study of the rare plants of Oxfordshire by offering advice and guidance as well as working in the field. I would like to thank her most sincerely both for the seminal and dedicated work she has done for the Rare Plants Group and the Oxfordshire Flora Group and also for her promise of work to be done in the future. David Morris has agreed to take on the role of Flora Guardian Co-ordinator for which OFG is most grateful.

Finally, I would like to thank everyone on the committee, and its associate members for all the work they do to keep the Oxfordshire Flora Group on the road

Sally Abbey
**THE PLANTS WE MONITOR**

*Apium graveolens*  Wild Celery

A survey of this biennial species was carried out at Marcham (near Abingdon) on 26 July 2019. A modest count of 165 flowering Wild Celery plants was recorded but this year’s seedlings were too numerous to count.

Conservation management at the site has since 2014 followed a rotational pattern of cultivation under an HLS agreement, whereby six strips of land are ploughed on a three-yearly cycle to create bare soil for the Wild Celery to germinate in, before it is crowded out by more competitive grasses and ruderal thistle species. During Autumn 2018, the site was treated with Glyphosate to try to knock back these more ruderal species. However, the response to this treatment has been only modest, and species such as Bristly Oxtongue *Helminthotheca echioides* continue to impinge on the celery patch.

An uncultivated permanent grassland plot to the east continues to prove suitable for Distant Sedge *Carex distans* and Saltmarsh Rush *Juncus gerardi* appears to persist on what was a bare ground margin between the main crop to the west and the celery patch. This has now been turned over to set-aside which may prove too much competition for the Saltmarsh Rush.

The locus of the Wild Celery plants is due to be ploughed in Spring 2020 under this HLS agreement. Typically, this would take place in around March, but with water sitting pooled on the surface of the plot at the time of writing in March 2020, it remains to be seen whether it will even be possible to cultivate the land this Spring.

*Report and photograph by Rebecca Read*
**Carex vulpina  True Fox-sedge**

Another hot dry spell this year revealed differing responses by the sedge across the monitored sites, with droughted and deep-cracked soils causing stunting, reducing growth and flowering at BBOWT's Asham Meads Nature Reserve but other sites with more shade and available moisture still doing well. Plants in deeper shade, however, seem to survive rather than thriving. One private site had a record flowering year and a cleared out (desilted) ditch, which also had blackthorn cut back from over-shading it, produced 31 new plants where none had been recorded previously. This kind of result gives some hope that the species remains sustainable in the Upper Ray/Otmoor catchment despite changing climate impacts.

At two other private sites where the species was last seen in 2005 it was no longer found; this is likely to be due to changes in habitat condition and management, with shading by a dense hedge and grazing/trampling by cattle being the issues. Such changes over time are inevitable and the variable fortunes of this plant at different sites underlines the importance of maintaining populations at a range of sites. It was great to have a visit from an officer of the Millennium Seed Bank in August to collect some seed and, despite the late date, it was interesting to find that shaded sites retained enough moisture for seed to still be in good condition; further seed collections are planned in coming years. In 2020 the aim is to revisit the remaining sites where True Fox Sedge has been reintroduced, to allow a review of establishment success across all these sites. I am again very grateful to the volunteers who give up their time to help me find, measure out and record the plants, and this year two volunteers each spent about a day and a half with me, so special thanks to James Hicks and Wylie Horn.

*Part of the new ditch location where at least 30 plants had 370 flowerheads*

*Keith Cohen, who also took the photographs*
Cynoglossum germanicum  Green Hound’s-tongue

The population of Green Hound’s-tongue at Pyrton continued to thrive in 2019, with well over 1500 flowering plants in the SSSI on both sides of Knightsbridge lane. The rosettes outnumbered the adults by three to five times in different areas of the woodland. Presence ended abruptly at the northern edge of the SSSI. Further up the road towards Clare Hill, however, an outlying population was increasing from previous observations, with at least 190 adult plants present on the western side of the road, on a series of steep chalk banks with an extensive badger sett. They were surrounded by a thick population of Goose-grass Galium aparine, which has been observed to out-compete Green Hound’s-tongue in other areas, so this will be monitored.

The first successful introduced population at Aston Rowant NNR is located in the triangle opposite the Cowleaze Wood car park. Judy Webb sowed seed in a small area, approximately 5 metres square, 5 years ago and has since been monitoring, removing competition when necessary and spreading some seeds by hand every year. Because Green Hound’s-tongue is biennial, the generations continue to alternate between rosette and adult in newly established populations, and in 2019 nearly all of the plants were rosettes. Over 400 were counted, very densely packed in and around the original introduction spot. Over 200 had been spread further through the woods by animal vectors or human sowing, up to 20m in both directions. A handful of adults were also present, from which seed was collected by Judy to sow elsewhere on the NNR. The species has also been introduced, with permission, to several new potentially suitable areas of woodland across the Aston Rowant NNR between 2018 and 2020. It will be interesting to monitor the progress of these and compare their success in different areas.

Shirley Leach and Tanya Smith
Narrow-lipped Helleborine *Epipactis leptochila* is a nationally scarce plant, and whilst it does occur in Oxfordshire it is described as rare. In Oxfordshire a typical habitat is heavy shade under beech on thin calcareous soils, with virtually no other plant competition. Violet Helleborine *E. purpurata* shares the same territory whilst Broad-leaved Helleborine *E. helleborine* can also be found nearby, where there is a little more light. There might even be hybrids between the two.

BBOWT’s Warburg Reserve holds the largest population of *E. leptochila* in the county. Unfortunately, the numbers of plants there appear to be declining, such that only 14 plants were found in July 2019, compared to over 100 each year in the early 1990s. Currently all the plants are confined to an area of beechwood measuring roughly 120m by 120m, and, though there may be an outlier, the identity of plants there needs to be confirmed.

The count on 12 July (or the equivalent date in 2018) can be summarised as follows:

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of plants that emerged between 17 May and 12 July.</td>
<td>29</td>
<td>37</td>
</tr>
<tr>
<td>Lost, probably to slugs and snails before 12 July</td>
<td>15</td>
<td>52%</td>
</tr>
<tr>
<td>Extant at mid-July (equivalent to past BBOWT counts)</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Flowering</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Leaves only or chewed</td>
<td>13</td>
<td>45%</td>
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**The single flowering plant**

Curiously, the bottom flower on the flowering plant had a mutation – one ovary but two labella. Another plant produced buds but was irretrievably damaged, with the spike chewed off probably by snails or possibly by a wood mouse.

Snails were regularly seen in the leaf mould around plants, probably *Cepaea nemoralis*.
Two examples of damaged plants

Only two of the 29 plants can reliably be said to be the same as identified last year, and the remainder are probably new plants rather than plants that have been dormant for a year or more and, as such, limited flowering is to be expected from them. Almost all the plants in 2019 were in areas where there were none in 2018; there appears to have been an eastwards drift. It is encouraging that new plants are clearly being generated, but this is more than offset by the failure of robust plants to develop and produce seed.

Report and photographs by Terry Swainbank

Fallopia dumetorum  Copse Bindweed

Copse Bindweed, or Snake-weed as Sibthorp called it, is a twining annual easily confused with Black Bindweed. It is Nationally Scarce, and Red Listed as Vulnerable. It was found near Tubney in Druce’s time and was seen there by Humphrey Bowen in 1963, then not recorded again until re-found in the verge of the A420 by Roger Heath-Brown in 2009. In 2019 it flowered well, but rather late, and then the verges were mown off before seed could be collected. It is, however, self-pollinating and, though an annual, has long-lived seed, so we shall let the Highways Authority know and try to collect seed again next year.

Phil Cutt and Camilla Lambrick

Filago pyramidata  Broad-leaved Cudweed

On 19 July, four of us visited Span Hill/Flowing Spring Quarry, with permission from the Coppid Farm Estate, to conduct the annual survey of Broad-leaved Cudweed. This event has taken place each year since 1997. A transect line is laid out across the quarry and 21 one-metre quadrats are surveyed along the transect. In addition, the immediate surrounds of the quadrats were surveyed as were several quadrats outside the others.

This year a total of 506 plants were counted: 88 in the quadrats along the transect, 138 in the 50 cm strips around the quadrats and 280 in six extra quadrats. This is an increase on 2018 but not as many as in 2017. 78% of the plants in the quadrats along the transect line were flowering. 82% of the plants in the quadrats were < 2 cm high. Four plants were 5 cm tall and 5 were between 7 and 15 cm tall. 2017 is the only year in which taller plants have been seen. As noted in previous years, Broad-leaved Cudweed isn’t usually found where the coverage of other vegetation like grass, moss and brambles is high. In the past, it was assumed that Broad-leaved Cudweed needed bare ground with thin soils for germination and growth, but the large plants found in 2017 were in amongst more vegetation than usual, as were some of the larger plants this year. If the vegetation is very low it seems to be able to cope. No plants have been found, however, where
the grass is very dense so, in February, three of us removed an area of dense grass. 70% of the plants in the quadrats along the transect were found in this newly cleared area. There was no bare chalk at all in the last few quadrats along the transect line so it would probably be advantageous to remove more grass and brambles etc.

Broad-leaved Cudweed is a poor competitor, but it can survive in areas of low fertility. Its natural habitat is arable farmland, but it has adapted to other sites, where it is not subject to pesticides, fertilizers or too much competition. Span Hill Quarry is one of only two sites in Oxfordshire where it has been found in recent years. In May, a very quick visit was made to the other site, Buckland Warren SSSI, Carswell Golf Club, and some young plants were seen which were probably *Filago pyramidata*, but this wasn’t confirmed later in the season. The last confirmed sighting at this site was in 2014. There were only 16 sites in the UK listed in the BSBI Atlas 2000 and some of these have since been lost. The Atlas says ‘Populations vary greatly in size annually’ so the decrease in numbers this year may be just natural variation.

As well as Broad-leaved Cudweed, the rare plants *Centaurium pulchellum*, Lesser Centaury, and *Iberis amara*, Wild Candytuft, are found in the quarry. Our thanks go to the owners of both sites for allowing access for monitoring purposes and to the volunteers who help with the monitoring.

Sally Rankin
**Galium tricornutum  Corn Cleavers**

Two visits (in April and June) were made to the Wytham triangle, by Wylie Horn, Frances Watkins and Susan Erskine, to monitor the condition of the relic arable plot at Wytham Woods and to look for evidence of the continued presence of *Galium tricornutum* and other arable weeds.

No *Galium tricornutum* plants were seen but several other scarce arable weed plants (*Ranunculus parviflorus, Vicia parviflora, Geranium columbinum* and *Anagallis foemina*) were recorded. Future management of the site and its potential for a second possible attempt at reintroducing *Galium tricornutum* is being evaluated. Wylie Horn is to follow this up in consultation with Natural England, the Oxfordshire Flora Group and Oxford University Plant Sciences Staff.

*Wylie Horn*

**Helosciadium (formerly Apium) repens  Creeping Marshwort**

*Helosciadium repens* Creeping Marshwort (a Schedule 8 plant but now with the status raised to Critically Endangered in UK) has had mixed fortunes again this year.

In 2017, *H. repens* thrived on the south end of Port Meadow due to summer rain. Hot and dry summers in 2018 and 2019, however, have resulted in no plants at all being visible at the monitoring date in late August, despite extensive searches by three people. The peaty southern end of Port Meadow (which is under a temporary lake each winter) obviously suffered a big drop in groundwater levels by summer and was very dry and scuffed up by stock in the area where *H. repens* normally grows. Only tough plants like Silverweed, Redshank and Greater Plantain could be found, sometimes in dense sward. It is not known if there were any *H. repens* seedlings earlier. It is to be hoped that a seed bank still survives and will be there to restore the population in any wetter summer, possibly now a rare future occurrence with accelerating climate change to regular hotter and drier summer conditions. In view of the lack of the species in this, its historic native site, it is imperative that new suitable sites for it are found that will provide what it needs in a changing climate. The safeguarded population (material from Port Meadow) held by Oxford Botanic Garden (OBG) will supply plants for such new sites.

At North Hinksey, Willow Walk meadow owned by Oxford Preservation Trust, the news on the population introduced in 1996 was better. The weekly mowing of the population in the central palaeochannel continued throughout 2019. The cutting was by large rotary mower and cuttings removed, producing a sward only a few cm high and reducing competition from grass and other species. This has effectively maintained the
plants in health after the necessary heavy grazing (by up to 8 horses) ceased in 2017. The drought meant the population had retreated somewhat from the drier margins of the channel to the clay-rich centre, where rooting down into the cracks was seen. The plants affected by drought in early summer assumed a dwarfed, non-typical phenotype until rains started in late July. There was good flowering and seeding throughout the summer, even in severe dry soil conditions.

The newest introduction site for *H. repens* is the bare clayey margin of the draw-down zone of a pond in a floodplain field next to the Cherwell and adjacent to Cutteslowe Park in North Oxford on land owned by Oxford City Council. Here the plants introduced in 2017 were seen to be reduced in number when the margin emerged from pond water in May, but there was good recovery of survivors despite heat and drought; the plants started running sideways, flowering and seeding well in the dwarfed atypical form and rooting down into cracks in the clay as at North Hinksey. Augmentation of this small population with another batch of plants is to be tried in 2020.

An introduction to a close-mown calcareous spring area in the section of the Lye Valley occupied by Oxford Golf Club had been planned for 2019 (Lye Valley is a historic site for *H. repens*) but after discussion, permission was refused on planning grounds by the landowners, Oxford City Council. As a substitute, permission was achieved for introduction to the bare, clayey, wet margin of a pond in Milham Ford Nature Park LWS in Marston. *H. repens* plant portions provided by OBG were installed in October and at the time of writing look to be surviving well under pond winter water levels of 20-30cm deep. Further introductions of *H. repens* from stock at OBG are planned for two new sites in 2020.

*Report and photograph by Judy Webb*

**Himantoglossum hircinum  Lizard Orchid**

At the site north of Oxford, two Lizard Orchid shoots for 2019 were first seen on 30 September 2018. By December this had developed into a rosette and a pair of leaves, as in the previous year.

By mid-May the outer leaves began to yellow but, unlike 2018, the spike remained healthy and the lowest three flowers were found open on 6 June. By 15 June, all but the top dozen or so flowers were open.
The plant was still in flower on 17 July, although by this time looking a bit bedraggled. My next visit was not until 8 September, by which time the stem had dried and fallen forward. Seven pods appeared to have developed and opened, presumably spreading seed. Two shoots for 2020 were seen on 20 October. The second shoot is still smaller than the primary but is looking more rosette-like this year.

*Christopher Hoskin*

**Hypopitys monotropa**  *Yellow Bird’s-nest*

The Yellow Birds-nest was again not found at its site on the Aston Rowant NNR, where it was last recorded in 2015 by Judy Webb.

*Tanya Smith*

**Lythrum hyssopifolia**  *Grass-poly*

The site near Cholsey produced 12 plants. The site was not nearly so rank as usual, due to the management by the landowners, who were very pleased with the results.

*Shirley Leach*

**Microthlaspi perfoliatum**  *Cotswold Penny-cress*

*The site at Linch Hill* was visited twice in 2019, The initial site check was made on 11 March, revealing that there were already five plants flowering on the western verge. On the second visit on 11 April, when I was joined by Susan Erskine, there were 36 plants in full flower or already seeding. This is a marked difference from 2018, when only seven plants were found in total. In all, there were 27 plants on the western verge, growing between the 3rd and 4th grip. The nine on the eastern verge were generally nearer the gutter. All plants were found between the Linch Hill Leisure Park sign and the grassy triangle at the bottom of the hill, travelling south.
Plants in grass on the western verge  Plants tucked into the gutter on the eastern verge

At Bridgefield Bridge the site was dug over in the autumn/winter of 2018 and a count completed on 29 April 2019 with over 100 plants recorded (in 2018, 31 plants were recorded). Although the majority of the plants were recorded in the usual spot, at the centre of the site closer to the road, they are spreading out across the site better. A spring/early summer count will be completed again in 2020 and at the same time I’ll complete some running repairs to the fence.

Reports and photographs by Sally Abbey and Julian Thornber
**Oenanthe silaifolia**  
**Narrow-leaved Water-dropwort**

This species is Near Threatened on the GB Red List, scarce in Oxon. It particularly likes wetter versions (or wetter areas) of floodplain meadows.

*Oenanthe silaifolia* has six current sites in the county. I regularly visit the small population in Yarnton West Mead (part of Oxford Meadows SAC, floodplain of Thames) where it lives in shallow grassy and sedgy palaeochannels. Here at my visit on 10 May it was seen to be suffering much from the drought, with browning leaves and inflorescences. If climate change brings regular dry warm springs with a low water table it will probably mean this site becomes unsuitable for this plant in the future.

*Droughted Oenanthe silaifolia at Yarnton West Mead on 10.05.2019*

*Report and photograph by Judy Webb*

**Ophrys insectifera** **Fly Orchid**

Fly Orchid *Ophrys insectifera* is one of four *Ophrys* species native to Britain (a single plant of a fifth, *Ophrys tenthredinifera*, has been seen in Dorset in the last decade but its origin is unexplained). In ‘Oxfordshire’s Threatened Plants’ by Erskine et al, it is described as rare in Oxfordshire and VC23, and absent from VC22. To monitor the status of both species this year, as part of the Flora Guardians Programme, I did a number of surveys in areas where they have been seen in the past. It is notoriously difficult to find!

Combining records from the BSBI Distribution database and the preparation work for Oxfordshire’s Threatened Plants I identified 23 unique locations in BBOWT’s Warburg Nature Reserve, and eight records from elsewhere. The Warburg Reserve is the stronghold for the plant in Oxfordshire. No new records were added to the BSBI database in 2019 other than my own. New records may have been submitted to TVERC but I don’t have access to them.
A count of flowering spikes at the Warburg Reserve was made in mid-May. Plants were found in four of seven compartments, a total of 30 plants flowering or in bud, several more chewed and a few plants where there were only leaves. The count was not comprehensive. The total includes Stockings Plantation, where the plants are fairly easily seen and which were more carefully surveyed. 26 plants were found there this year, about the same number as last year.

There are records for Fly Orchids at Bottom Wood, Goring Heath, White Horse Hill, Ipsden Heath, Eversdown, Sarsgrove Wood, and at Bear Oveys, Coldmoor and Greatbottom Woods. Bottom Wood and Goring Heath were visited but nothing was found - the habitat looked unsuitable with heavy sward. This was also the case at an SSSI at Greenfield Farm where the landowner found Fly Orchids several years ago and placed cages round them. In early June 2019, the cages were still there but there were no Fly Orchids. They were, disappointingly, replaced by heavy sward.

Fly Orchid leaves in early Spring

Fly Orchid in fruit at Warburg in late July

Whilst Warburg is the stronghold, Fly Orchids may of course be under recorded elsewhere, because they are not easy to find, whereas Warburg benefits from the regular flow of visitors, many intent on finding orchids. The experience at Bottom Wood and Greenfield Farm, though, illustrates the threat from increased plant competition where they occur, because they simply get choked out, as their slender leaves close to the ground are unable to photosynthesise fully.

Report and Photographs by Terry Swainbank
**Platanthera Butterfly-orchids**

**Platanthera bifolia Lesser Butterfly Orchid**

I visited five of the eight locations in Oxfordshire where there are records for *P. bifolia* drawn from post 1980 BSBI and TVERC records. In my surveys of some of these locations in 2019, I came across just a single flowering spike of the plant – at the Warburg Reserve (four in 2018). The flowering plant was one of the four plants that flowered in 2018. Where two of last year’s flowering plants had been, there were leaves only. As far as I can tell, therefore, this was the only flowering plant of *P. bifolia* in the county in 2019. For the record it had 18 flowers in 2019 and 16 in 2018. *P. bifolia* is hanging on at the Warburg Reserve; the plants are under scrub which is unlikely to be ideal. To improve the habitat, some modest clearance of vegetation is being undertaken by BBOWT this winter.

![Platanthera bifolia Lesser Butterfly Orchid](image)

**Platanthera chlorantha Greater Butterfly Orchid**

It was a poor year for *P. chlorantha* this year. At the three main sites, all suffered falls in flowering numbers, which anecdotally was mirrored in other parts of the country. The hot dry period in late summer/early autumn last year took its toll but snail damage was also a problem just about everywhere. Habitat maintenance at all the sites where *P. chlorantha* occurs is active and consistent with the requirements of the plant. The plant is also probably under-recorded, especially in the Chilterns.

There are past records for *P. chlorantha* in 26 locations. Based on a conversation with a farmer who had seen the plant in 2015 (and had a photograph) I added a 27th location not far from a Hook Norton site. No new records were added in 2019 other than my own, but there may have been records sent to TVERC of which I am unaware.

I made the following surveys in 2019, repeating those made in 2018 and adding a few more.

Rather than try to survey the whole reserve at Bald Hill, Aston Rowant, which in any case Natural England undertakes, I repeated the transect that I followed last year at the top of Bald Hill in an area of around 500m².
amongst low scrub. I counted 15 flowering plants (28 in 2018). The plants at Bald Hill were small with an average height of only 16.2cm compared to the Warburg Reserve where the average height was 29.8cm.

![Bald Hill, Aston Rowant](image)

At Cornbury Park, in the same location as last year, in quite heavy sward on the edge of a woodland ride, 12 plants were found (5 last year but this year’s search was perhaps more diligent. There were three in bud, though one of these was chewed before flowering, probably by deer. No new sites were found.

![Orchid in bud at Cornbury Park on 27 May](image)

At Cold Harbour Farm, Hook Norton, there is a large field, on oolitic limestone, around 500m from the meadow off Cow Lane, but south rather than north of the river Swere. It is exceptionally stony with thin soil and the farmer has left it unimproved for probably 30 years. There is a hay cut annually and it is, therefore, a delightful meadow. The farm manager saw several *P.chlorantha* plants there in 2015, but no plants were found in 2019. There were no plants at Cow Lane, Hook Norton.

At the Warburg Reserve, plants are scattered throughout in scrub along woodland rides but with a concentration in the Stockings Plantation which was coppiced in the fairly recent past. A count in early June totalled 18 flowering plants (39 in 2018) of which 16 were in Stockings Plantation. There were a further two plants (at least) where the spike was chewed off before flowering. There were leaves but no flowers in several of the places where there were flowers in 2018.

At Greenfield Farm the number of flowering spikes was dramatically lower than last year; there were only 65 compared to 196 last year.
Three reasons can be given for this unhappy situation. Firstly that snails were a significant problem in early April, secondly that Ash is succumbing to die-back, resulting in increased light levels and increasingly aggressive plant competition in the herb layer (e.g. Dog’s Mercury, Cleavers and Nettles) and thirdly that climatic factors had an impact. Late summer and early autumn last year were very dry and warm, which has a negative impact on tuber development and the ability of plants to flower in the following season.

Two examples of snail damage

There are old records from Cuckoo Fen Plantation and Taylor’s Annex, Elvendon Priory Wood and Old Elvendon Wood, Wootton Wood, Horsehay Quarry near Duns Tew and Wytham Wood but no plants were found in 2019. I failed to visit a further 13 locations from where there are past records.

*Platanthera x hybrid*

No hybrids were found at Warburg this year. A plant with a leaf disappeared early to snails.

*Terry Swainbank, who also took the photographs*
2019 marked the twentieth anniversary of an augmentation project carried out within the original exclosure at Aston Upthorpe, using plants raised from seed collected in 1998 from the very small remnant population there. The present year’s monitoring confirmed survival at 46% of the original planting locations, which is considered to be a relatively good outcome in comparison with results elsewhere. Management of the Pasqueflower exclosures continues to be a challenge, however, in keeping the density of the sward down in the absence of grazing for part of the year. The rabbit grazing that is a problem at Aston Upthorpe, necessitating the exclosures, is not a factor at Hartslock where the introduced population, raised from Bedfordshire seed and planted out in 1998, is running at a little over 70% survival. In the newer exclosure at Aston Upthorpe a second augmentation planting carried out in 2015 is showing 66% survival to date.

It proved to be a particularly poor flowering year for the Pasqueflowers at Aston Upthorpe, which curtailed plans that had been discussed to raise plants for an introduction at a neighbouring location. Though flowering at Hartslock was rather higher than at Aston Upthorpe (39% of plants) around 86% of the flowering stems had been predated at the time of survey – a recurring problem possibly due to small rodents.

The in situ direct seeding experiment set up in 2018 in one of the Aston Upthorpe exclosures will be more fully reported on in 2020. Germination was observed in 2019 in each of the eighteen experimental plots. Longer term survival and establishment will be monitored in the coming year.

Among the other species of interest at Aston Upthorpe Field Fleawort *Tephroseris integrifolia* was not re-found in its previous location towards the north end of the valley and seems not to have been seen there for several years. The Burnt Orchid *Neotinea ustulata* found in 2017 at a location on the western slope has not reappeared there in subsequent years.

*Report and Photographs by Kathy Warden*
**Sium latifolium  Greater Water-parsnip**

This tall wetland perennial umbellifer is GB Red Listed, on the England Red List as Endangered and also a Section 41 (UK BAP Priority species). Despite the heat and drought of 2019, it did well in its largest population on the margins at Hagley Pool ditch part of an SSSI in the Thames floodplain near Wytham. In contrast to other ditches which dried down, water levels remained high in the wide ditch where it occupies tall marginal vegetation. Slight grazing by cows did not seriously reduce flowering and seeding. The good seed set enabled Jim Penny of Oxford Botanic Garden (OBG) and I to collect a large quantity of seed in early October. The garden staff will propagate from this seed and grow on plants for augmentation of the Wytham population and for introduction to new suitable sites. FAI farms, who manage the site, will be trying a new cutting regime for the northern bank of the ditch and this is expected to be helpful in reducing competition from tall reed.

In Marston, Oxford, the small *Sium* population on the edge of a ditch in Burnt Mill Meadow LWS near the Cherwell again did very poorly. The meadow and the ditch dried out completely in the hot and dry summer and the plants struggled against competition from tall pond sedges and overshadowing willows. Two *Sium* plants did, however, mature and produce a small number of inflorescences and a small amount of seed was collected for OBG. One of the plants was felled by (presumed) vole nibbling at the base – a new hazard of growing in a dry situation. Part of the ditch adjacent to the *Sium* population is due to be dug out in the future, the work to be grant-funded by the Freshwater Habitats Trust. This may provide a new suitable wetter site for the Burnt Mill population in the future.

In the introduction site of a pond at Milham Ford Nature Park in Marston, two plants matured, flowered and seeded despite strong competition from Water Horsetail and White Water-lily. A small amount of seed was collected. This year the pond did not dry right down during drought due to measures to keep water higher. A couple of young plants which had naturally grown from seed high on the pond margin were, however, removed as they were now in too dry a position and obviously struggling. These were taken into propagation in a couple of volunteers’ garden ponds, where they are doing well. Seed set in these isolated single garden pond plants is subject to study. Initial results show that cross pollination is most likely necessary for any seed to be formed.

*Four large flowering Sium plants at Cutteslowe pond from the successful introduction in 2018. Note deer exclusion cage, 24.08.2019.*
A trial introduction of *Sium* to a pond in a floodplain field next to Cutteslowe Park was carried out in August 2018. This pond was dug some years ago by the Freshwater Habitats Trust. It is one of several in an un-grazed meadow next to the River Cherwell. The planting area was prepared by pulling up Bullrush *Typha latifolia* in two areas of one pond and eight well grown *S. latifolium* provided by OBG were planted in two lines of four from bank top to deepest area of the pond, providing a range of hydrologies in two positions around the pond. Then they were enclosed within fences to deter deer from eating the young plants. The pond and the field are normally under floodwater during the winter. After emergence in May, all plants had survived and seven out of eight flowered abundantly in 2019 and made much seed which could be harvested for OBG. The frequent autumn rains in 2019 have meant this pond and the whole meadow has now flooded again. As this introduction has been so successful, next year the plan is to try further introduction of propagated *S. latifolium* into other positions around the margin of the same pond to build up a really strong population. Trial removal of cage netting will show if the plants can survive with deer access. Trial introduction of *S. latifolium* to a different site is planned for 2020. A challenge will be achieving a helpful grazing regime in any adjacent field, as the plant is very attractive to stock.

*Report and photograph by Judy Webb*

**Stachys germanica  Downy Woundwort**

It was a successful year on two of the three Downy Woundwort sites left for us to monitor. On those two sites Downy Woundwort seed had germinated and lots of rosettes were found as a result of ground disturbance.

At the *Freeboard, Minster Lovell (Worsham Lane SSSI)* in November 2018, the hedge along a stretch of this bridle way was cut back by a work party of WFG members in preparation for rotation in February. Fortunately, before this was carried out, the location of three rosettes reported to us was found and identified to prevent them being disturbed. As they developed and were in danger of being eaten or dug up by rabbits the plants had wire enclosures put round them. Later a fourth plant was spotted nearby. All these plants produced flowering stems. In September, 36 rosettes were found. Most of them were in the area rotavated in February between the path and the hedge where there was still some bare ground. Elsewhere the vegetation was thick and no young plants were found, which was not surprising.

*At the top, the rotavated strip in February, Photograph by Genny Early. In the centre, the caged seedling, on 7 July and, on the right, some of the seedlings on 19 August both taken by Katherine Doughty*
At the end of May on the Saltway (LWS and SSSI), Brian Laney recorded a total of 33 Downy Woundwort seedlings on the strip of disked ground. There was just the one mature plant, which had been caged last year. At the beginning of August, a total of 67 rosettes were counted. Most of them were a good size but some of them were still small. Each rosette was marked with a cane or stick and some vegetation was removed from around them to reduce competition.

When we visited Stony Field at the end of July (the exact location is confidential) we were hopeful of finding some rosettes in the area which had been ploughed last autumn but disappointingly we only found one. The vegetation had grown back vigorously leaving very little bare soil. No flowering plants were found anywhere on the site. The estate manager has agreed to plough up the other side of the clearing where in the past we have recorded many Downy Woundwort plants. Hopefully there will be seed in the seedbank ready to germinate after the ground is opened up.

Genny Early working with the Wychwood Flora Group

**Viola stagnina  Fen Violet**

The only site where Fen Violet is known to grow naturally in the wild, in this country, is now being managed by a new tenant, the RSPB. Normal surveying occurred in Compartment 2 (now called the Viola Fields) in 2019 as far as possible without overly disturbing Curlew nesting in the field. Although not botanical, it is worth mentioning that the Curlew managed to raise two young, though one died soon after fledging. As it is a relatively undisturbed field, we expect them to attempt breeding again next year. After breeding has finished and the chicks are mobile, we hope to do a full survey of the field for Fen Violets. This is billed for Monday 20th July and volunteers will be needed. (Lockdown permitting. Please see website for details).

Checking for seedling root connections at the Cutteslowe introduction site 3/6/19

The national steering group for Fen Violet also approved a study of the seedbank in the area where a wide hedge was removed 10 years ago. Estimated numbers in this part of the field have decreased from around
6000 to 600 in that time. We would like to know whether the seed bank has been replenished before attempting any extensive seed bank disturbance. The steering group also visited Wytham Ditches and Flashes SSSI where seven Fen Violet plants were introduced in 2019 - the lime-rich spring-water combined with cutting and grazing organized by Farm Animal Initiatives give a suitable looking poached sward where we hope that they will survive and thrive. The trial plots at Cutteslowe Ponds managed by the city are flourishing, with a little gardening, on an open draw-down zone.

Elsewhere, an introduced population at Kingfishers Bridge near an old site; Wicken Fen, has declined to a single plant. The two recent populations at Woodwalton and Wicken Fens have not been seen in recent years.

*Camilla Lambrick and Phil Cutt who also took the photograph*
Summary of the OFG accounts for 2019 for the OFG newsletter and the ANHSO AGM

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<th>Balance Sheet</th>
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<td>Income from Natural England</td>
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<td>Bank Balance at 31 December 2019</td>
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<td><strong>Balance of income over expenditure</strong></td>
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Notes:

The bank balance at 31 December 2019 was £6,373.35 but £2,569.48 of expenses for 2019 were paid in February 2020. More than half the expense claims had come in too late to be paid in 2019. An invoice for £4,792.40 was raised on 24 February 2020 for the work done in 2019/20 on the species that Natural England now fund: *Helosciadium repens* (was *Apium repens*), *Viola stagnina*, *Carex vulpina*, *Galium tricornutum*, *Stachys germanica* and *Sium latifolium* plus three additional Section 41 species. *S. germanica* is managed by the Wychwood flora Group and funded by Natural England through OFG.

£441.25 in the OFG account is left over from the publication of Oxfordshire's Threatened Plants.

*Sally Rankin*
*Treasurer: Oxfordshire Flora Group*
Committee

The committee is made up of volunteers. The committee for 2019 and the roles they undertook are listed below. Any member of the ANHSO who feels they can make a significant contribution to the running of the OFG and would like to join the committee should get in touch with the Chair, Sally Abbey, to find out more. There are also opportunities to become Flora Guardians. It is not necessary to be on the committee to do this. There are some species and sites on our original list which still need more help. Again, get in touch with Sally Abbey for more information.

Main Committee members:

Chair
Treasurer
Secretary
Flora Guardian Co-ordinator
Events organiser
Webmaster
Newsletter Editor
Librarian
Talks organiser for 2020

Sally Abbey
Sally Rankin
Sally Abbey
Camilla Lambrick
Sue Helm
Frances Watkins
Sally Abbey
Camilla Lambrick
Tanya Smith

Associate Committee members:
BSBI/Vice-County 23 Recorder
Talks Organiser (up to March 2019)
Hon. Auditor

David Morris
Susan Erskine
Phil Cutt
Kathy Warden
Frances Watkins
Judy Webb
Andrew Churchill Stone

PLANS FOR 2020

Please note that, as this newsletter is being produced, the country is in lockdown because of Covid-19. Hopefully, later in the year, monitoring and other events can be resumed. Useful contacts, to find out about any possible future activities are listed below.

Oxfordshire Flora Group

Numerous field events take place which involve plant monitoring and practical conservation work, not all strenuous, such as scrub clearance and scarifying. They are too numerous to list in this newsletter. Please check on the Oxfordshire Flora Group website which is regularly updated by Frances Watkins and can be found at www.anhso-ofg.org.uk. Alternatively, you can email the chairman at chairman@anhso-ofg.org.uk.
OFG Flora Guardian Co-ordinator and VC23 County Recorder: David Morris

David Morris can be contacted on david.m.morris1989@gmail.com. He also runs surveys in the Oxfordshire area and you can find his blog on oxbot.blogspot.co.uk/p/botanical-events.html

Wychwood Flora Group (Formerly Cotswold Rare Plants Group)

The Wychwood Flora Group is an active group of people with a passion for plants whose objective is to look after the wild flowers that are found in the Wychwood Project area. We monitor numbers of rare plants annually, the Evenlode Catchment Partnership and others, and undertake management activities where necessary. Flora Guardians for each site are nominated, and they liaise with landowners with regard to survey dates and access, conduct the survey, record plant numbers and note any land management requirements. Please contact wychwoodfloragroup@gmail.com if you want to know more.

Chiltemn Gentian at Yoesden Bank

*Taken by Sally Abbey on an ANHSO Field Trip*

*8 September 2019*
ABOUT THE OXFORDSHIRE FLORA GROUP

The Group (formally the Rare Plants Group) is part of the Ashmolean Natural History Society of Oxfordshire and works in partnership with many other organisations to conserve rare wild plants in Oxfordshire: