Greater Water-parsnip *Sium latifolium*, in fruit in a Wytham ditch, October 2014

Photograph by Judy Webb.
INTRODUCTION

Welcome to the 2014 newsletter. As the Chairman of the group, I am pleased to report that the second year of the OFG has seen steady progress, consolidating our excellent start. Some projects have been carried forward from the Rare Plants Group, notably work on Fen Violet and Corn Cleavers. Others have been new initiatives, such as the Conference ‘Guarding the Flora of Oxfordshire’, which was well received, and surveying work for Atlas 2020 organised by Sue Helm, our new vice-county recorder. In addition, old and new Flora Guardians have been hard at work looking after species and habitats. Reports on all these efforts will be found in the Newsletter. I hope you find these interesting and that they will encourage you to take part in activities in the coming year. A calendar of these will appear on the website and will be updated.

Susan Erskine

THE PLANTS WE MONITOR

Adonis annua   Pheasant’s-eye

Pheasant’s-eye is one of the most stunning of the annual plants that came into Britain with agriculture. It was rare in the county when Druce wrote his Flora in 1927 and between 1930 and 1999 had declined nationally by 67%. Now it is in the Red Data Book as Nationally Rare and in the England Red List as Endangered. We are thrilled that it is flourishing on one headland that is cultivated but not sown. Kew Royal Botanic Gardens are growing it on from Oxfordshire seed.

Camilla Lambrick

Photograph taken in 2014 in Oxfordshire, site and photographer anonymous to protect the plant
**Apium graveolens  Wild Celery**

The counts of Wild Celery *Apium graveolens* at Marcham have been highly variable over the past 17 years: in 2013 not one plant or seedling was seen, despite it following a year of exceptional coverage in 2012. Thankfully, 2014 saw a return to good numbers, with over 400 plants counted.

The count comprised only 4 flowering stems of this biennial species but with at least 413 seedlings identified in areas which were ploughed in May 2014. The spring ploughing represents a change to the previous management plan, to which the Wild Celery appears to be responding well. Following the August 2014 count, the management plan has been amended to include rotational cultivation of narrower strips on a three-year cycle in order ensure that a proportion of the Celery patch is ploughed every third year. In addition, the farmer is seeking permission to utilize a gramicide, which will reduce competition to the Celery from the dense grass sward that springs up each year. We hope there will continue to be a positive response to the management in 2015.

*Rebecca Read*

**Apium repens  Creeping Marshwort**

Five monitoring visits were made to Port Meadow this year. After a spring where extensive flooding of all low lying areas around Oxford continued for three months from Christmas to the end of March, weather was dry and warm most of the summer after May. Most of Port Meadow emerged from the water by the end of March but an extensive lake remained on the south end into July, ensuring death of all plants under it (the ‘killing lake’) and leaving just bare mud when it finally dried up. At the July visit some of the ‘strandline’ populations could be re-found (the best populations were adjacent to the raised ground landfill area) and germination of *Apium repens* seedlings was observed on the bare mud of the ex-lake in the northern area by the August monitoring. These plants rapidly increased in size and were running sideways by September and one inflorescence was seen. By 28 October, however, the ‘lake’ on the southern area was once again rising and the young plants would soon have been inundated, likely before any seed set. It will be interesting to see if these plants survive the winter flooding and can be found next spring when the water goes down. This winter there could be some progress in actions to allow the ‘killing lake’ to drain down earlier. Network Rail are scheduled to clean out the line ditch as part of their line upgrading works and Oxford City Council will then clean out a ditch running to the line ditch from Port Meadow alongside the Trap Grounds allotments.

*1st July 2014, A. repens flowering on bare dry mud area. Photograph by Judy Webb*

Total *A. repens* inflorescences for Port Meadow were again few – only 23 counted in mid-July and by August very few flowers could be found and no seeding observed. An interesting observation was a single very vigorous plant with an exceptionally large tooth on the leaf which was discovered amongst the strandline bank populations. The
possibility that this plant was a hybrid with Fool’s Water-cress *Apium nodiflorum* was considered as the latter was growing very nearby.

The Burgess Field corner population on Port Meadow was found to be still about the same size as previous years and remarkably was seen to be flowering quite well in July (first time flowering recorded for this population) but by the main monitoring session in August very few flowers could be located and no seed production noted. Very likely this has been another very poor seed production year for *A. repens* on Port Meadow.

In contrast, in North Hinksey horse-grazed meadow (Oxford Preservation Trust site) Creeping Marshwort had a very good year with an extensive population around the central shallow ditch and over 2000 inflorescences were estimated by surveyors in August. This is despite the earlier observed death of some of the plants from drought and stock trampling in the hot weather of June-July, as had happened the previous summer (2013). Although a good seed set seemed likely after the abundant flowering, a quick look by Camilla Lambrick in the autumn did not reveal much seed production.

Binsey Green was not examined this year as it was not thought worthwhile after several years of no-show of the plant due to rank vegetation, indicating not enough grazing. The success of last year’s trial introduction of 20 ramets of *A. repens* from North Hinksey meadow to one of the Marston Meadows adjacent to the Cherwell was finally assessed on 10 October. No *A. repens* plants could be relocated and the area of planting was seen to be rather rank with abundant Creeping Bent *Agrostis stolonifera*. No stock (normally cattle and horses) were in the field at this October date and the conclusion is that grazing had probably not been hard enough during the year to reduce competition around the transplants. However, like all floodplains around Oxford, the area had been under water from Christmas to March and it is possible that an alternative reason for the non-survival was that the exceptional prolonged flooding had caused the death of the transplants.

Natural England’s aims are to have *Apium repens* in five sites in Oxfordshire. As the North Hinksey population is doing so well, there is the possibility of using some of the plants to populate a new suitable site. With the information on lack of survival of the plant in the ranker grass conditions of Binsey Green and the Marston Meadow site, it seemed likely that only a site with more or less all round moderately heavy grazing is likely to be suitable, even if the hydrology is ideal. It has been difficult to locate a suitable site with this combination of factors.

Thus plans were made to try introduction of plants from North Hinksey to the only site nearby with guaranteed all year round moderately heavy grazing i.e. new areas of Port Meadow, specifically areas that seemed hydrologically suitable, but unoccupied, near to the extant Burgess Field corner population. The aim here was to augment this small population (which may all be a clone of a single plant) with genetically different plants in the hope of some good cross pollination and future viable seed production. Suitable permissions from NE were achieved for 20 ramets to be removed from North Hinksey and a date set for the translocation to Burgess Field corner in late September. Unfortunately weather conditions were so hot and dry in September that it was obvious that survival of the ramets might be difficult in dry baked soil, so the translocation attempt was deferred until next year. If weather conditions are propitious, this might be tried in spring or late September/early October.
Other Port Meadow rarities

Whilst surveying for Creeping Marshwort on Port Meadow this year there were a couple of other noteworthy records of rare plants. In the exposed mud of the ex-lake on the southern end of the meadow a very good population of Mudwort Limosella aquatica appeared. Flowering and seeding was abundant, so the seed bank has been well replenished. This year also saw abundant growth and flowering of dock species on the mud left after the retreat of the extensive flood water. Some of these docks seemed to resemble either Golden Dock Rumex maritimus or Marsh Dock Rumex palustris. (See photograph by Judy Webb, right) There are old records for R. maritimus from Port Meadow. Photographs were taken and specimens collected and pressed. Camilla Lambrick sent all of these to the BSBI dock expert John Akeroyd and the answer which came back (for that one specimen at least) was definitely Marsh Dock Rumex palustris Sm., which is a new record for Port Meadow. However, he did comment that hybrids of Marsh and Golden Dock may be present and we should look out for them in 2015. The biggest population of Marsh Dock or hybrids on Port Meadow was at SP5008 0782 in the ditch next to the Trap Grounds allotments.

Judy Webb

Carex vulpina  True Fox-sedge

True Fox Sedge, Carex vulpina, is known to occur at four locations across Oxfordshire, and in 2014 monitoring was undertaken at two of these: Meadow Farm Meadows, and Asham Meads BBOWT reserve (Murcott Meadows SSSI). Fox Covert by the Ray and Otmoor Spinney SSSI were not visited in 2014. In 2013 the meadows at Asham were cut early and so in 2014 an early visit was planned, on 7 June, to monitor the continued presence and condition of both the original and additional plants. The original plant grows in ‘the spinney’ and showed good growth with 184 inflorescence stalks (culms) visible. However, only 53 inflorescences actually remained (29%), most in seed, the rest having been grazed off, probably by a large deer. The browsing largely took only the actual inflorescence, often leaving even the bract; some were only partially nibbled while others had lost almost all of the flowerhead. Some similar grazing has been noted before: in 2009 this plant had “223 inflorescences and 3 that had been eaten off” (Lambrick 2009 monitoring report). However, the long-term trend of increasing numbers of inflorescences suggests this plant remains in good condition.
Photographs, by Keith Cohen, of Carex vulpina, a full inflorescence and a nibbled one

The ‘additional plants’ were grown from seed taken from the plant in the spinney, germinated twelve or so years ago by a researcher on Carex vulpina who could ensure the plant in the spinney was not a hybrid with Carex otrubae, and planted out in the adjacent meadows with the agreement of BBOWT. In Lower Marsh, where 26 plants were placed in 2004, we found six small clumps with the larger ones forming a circle of shoots with an open centre, presumably as mowing prevents the build up of a tussock form by depleting litter in the centre. This accords with the six plants that were recorded in 2008 and 2009. Overall there were 37 flowerheads with only 3 nibbled away here. In Row Bottom Field we found no Carex vulpina plants, neither vegetative nor flowering, but had omitted to take the exact location records along. In 2015 it is planned to try and relocate the planting locations with the detailed location records, triangulating with measuring tapes, to see if any growth can be found.

Keith Cohen

Cynoglossum germanicum Green Hound’s-tongue

Stratford Bridge site
This site is becoming inundated with Goosegrass which is coming in as a result of nitrogen leaching off the adjacent Oil-seed Rape field. This field slopes downwards to the woodland strip where we found only 5 flowering plants and 59 seedlings. The latter may not reach maturity because they will probably be strangled by the Goosegrass. We removed much Goosegrass in the previous April but it had returned later to smother everything. We are considering the possibility of transferring seed from the Pyrton site to a brand new site in the Chilterns which is well away from agricultural land.

Pyrton site
This is much more prolific and we no longer need to count the plants because they are so numerous. We need still to keep an eye on this site to see if there is any deterioration. We estimated the number of plants at around 3,000.

Shirley Leach
**Filago pyramidata  Broad-leaved Cudweed**

**Buckland Warren SSSI**

This was visited by Susan Erskine on 11 June 2014. This was rather earlier than usual, but I wanted to go at this time because of holiday commitments and in the hope of re-finding *Malva setigera*, Hairy Mallow. This is a small SSSI and the areas where these two species have been found in the past are easy to relocate. There was no sign of the Mallow but, as there was a twelve year gap between findings previously, I can only hope the seed is lying dormant, waiting to surprise me again. As for the Broad-leaved Cudweed, the presence of Common Cudweed (*Filago vulgaris*) continues to make the search difficult. However, after diligently looking for the obvious green lines, marking the ‘pyramid’ of the inflorescence, I found one patch of at least eight plants, in one of its two locations at this site.

This continued existence of the species at this site seems precarious, but as I have found it in 12 of the last 14 years, it would seem to be safe as long as the management remains sympathetic. The site this year was quite open and more of the heathland and arable species were found: Hare’s-foot Clover (*Trifolium arvense*), Knotted Clover (*Trifolium striatum*), Hop Trefoil (*Trifolium campestre*), Slender Trefoil (*Trifolium micranthum*), Field Madder (*Sherardia arvensis*), Bugloss (*Anchusa arvensis*) Scarlet Pimpernel (*Anagallis arvensis*), all of which bodes well.

**Flowing Spring Quarry**

This was visited by Sally Rankin and Susan Erskine on 22 July 2014. After an unusually hot dry spell, we wondered if there would be any plants surviving, but our count yielded 154 specimens, only two of which were ‘large’ i.e. over 2cms in height. This is about average for the yearly monitoring! The count within the quadrats along the transect line was 70, outside the designated quadrats was 80, so this could well be an underestimate. The plant is an annual, so it is to be expected that plants will not always appear in the same place. It is quite surprising how many do appear regularly, in the same quadrats. The quarry floor had rather more litter than usual and we used some old blinds to lay on top of some tor grass which was flourishing rather too vigorously. Otherwise the quarry remains a fairly open habitat.

**Other notable species**

Of the other two notable species in the quarry, it was very pleasing to find Lesser Centaury (*Centaurium pulchellum*) flourishing in large numbers, after none were seen in 2013. The Candytuft (*Iberis amara*) was also doing well, mainly at the base of the cliff face, on the scree slope.

**Susan Erskine**

**Galium tricornutum  Corn Cleavers**

Corn Cleavers (*Galium tricornutum*) is an annual of arable fields and is Critically Endangered and a Priority BAP Species. Corn Cleavers was last recorded near an area called the Triangle in Wytham Woods SSSI in the early 1970s. The Triangle is part of Upper Seeds within
Wytham Woods SSSI. The area has been arable since the War and probably long before that.

Corn Cleavers was re-introduced to the Triangle in Wytham Woods SSSI in 2013. This was agreed by the Vascular Plant Technical Advisory Group, in the person of Simon Leach, by the local Natural England Officers Alison Muldal and Rebecca Tibbetts and by the Wytham Committee. In 2014, nine new prepared quadrats were set up. Each quadrat was dug, weeded and raked to produce a seed-bed. Holes were made in the centre of each unit with a dibber and on the 8th May 2014 a Corn Cleavers plant was placed in each hole. Oxford University Botanical Gardens had sown and grown the plants. Plants were planted approximately 20cm apart.

_In 2014 no weeding after planting took place, but the main area was topped in late August to prevent seed being set and then sprayed with Roundup in the first week of September and then cultivated the last week of October. The concern was that if we sprayed off too early then we would be in danger of spraying off the arable weeds as well. We needed to ensure that all the arable weeds had set seed. There is also the concern that many of the arable weeds, unlike Corn Cleavers, are autumn germinators such as Small-flowered Buttercup._

We counted established plants and all the ones which we planted this year were doing well and the characteristic warty seeds were clearly there.

In 2013 and 2014 the Corn Cleavers plants grew successfully on introduction and set seed. In May 2015, it is intended that a detailed survey takes place to see what we have in the original quadrats and to see if Corn Cleavers has produced the next generation and spread.

_Rebecca Tibbetts_

_Gentianella anglica  Early Gentian_

The search for Early Gentian on Kingstone Down/Weathercock Hill took place in rather cloudy conditions. These are not the best for finding Earl Gentian and it proved to be so this
year. Despite an exhaustive search, aided by previous years’ GPS records, no plants were found. This is not quite such bad news as might be feared. The species is an annual and as such does not necessarily stay in the same place. There have been ‘no show’ years in the past and searching next year could prove productive. It was certainly present at White Horse Hill, in its usual strongholds: along the road verge between the ‘disabled’ car park and Shepherd’s Steps, and by the back legs of the Horse. This was not a full count; there were sufficient numbers there to ensure a reliable seed bank. No spring visit was made to Hackpen Downs.

Susan Erskine, based on a report from Geoff Moxon

Lythrum hyssopifolia  Grass-poly

The site at Cholsey is farmed and the owners were not able to cultivate the field this year due to the wet weather last Spring. A rampant growth of weeds had taken place but we counted 140 plants of L. hyssopifolia in spite of the lack of management. We have to accept that weather conditions and flooding affect the numbers of plants and these vary from year to year.

Shirley Leach

Microthlaspi perfoliatum  Cotswold Penny-cress

There were 3 large clumps of Cotswold Penny-cress at Bridgefield Bridge on 23 March. Each had several flowering shoots, indicating a good seed crop for next year. A month later there were 79 flowering stems. The patch was dug over in the autumn, care being taken not to remove soil from the quadrat area. Our thanks go to Network Rail for granting this area conservation status. Palmer’s Bank was visited on 22 April where 91 flowering stems were counted from 24 plants. Those doing best were in the area which had been dug over the previous year by members of the Wychwood Flora Group. Linch Hill verges were not visited this year and really need a separate Flora Guardian. If any one is interested in taking this on, please get in touch with Rob Burton robsjourneys@btinternet.com.

Susan Erskine

Oenanthe silaifolia  Narrow-leaved Water-dropwort

This year Grafton Lock Meadow near the Thames was searched at the right time for flowering of this species but none was found and it was concluded that the mention of this species in the SSSI condition assessment might be an error. The Yarnton West Mead population was checked and found to be up in reasonable numbers but no count was attempted.

Judy Webb
**Pulsatilla vulgaris  Pasqueflower**

Following last year’s abundance of flowering, the 2014 season at Aston Upthorpe proved to be disappointing in that respect as only one plant, inside the exclosure, produced flowers. Unfortunately even they had gone over by the time of an ANHSO field trip in early May. However, the survival of the transplant population, now in its fifteenth year, continues at the same level as the previous year, 57%, and more new plants are cropping up naturally outside the exclosure in all directions as they did in 2013. Unfortunately time didn’t allow a thorough survey of the hillside to try to map the extent of this apparent recovery but if anyone would be available to help with this in 2015 do please get in touch.

*Monitoring the transplant population at Aston Upthorpe, May 2014 (Photo Kathy Warden)*

Other work on site that it would be brilliant to have some help with is cutting and raking inside the exclosure (in autumn) to try to reduce the sward density – though some grazers do get in when the removable gate is opened later in the summer. As yet it doesn’t seem to be quite enough to get the sward into a good, less overgrown, condition. Also, in 2015, help with the logistics of planting out another set of Aston Upthorpe provenance transplants in a different part of the valley would be much appreciated. If you could be available to help with any of these tasks please get in touch at kathywarden@dunelm.org.uk

Meanwhile over at BBOWT’s Hartslock reserve the Pasqueflower population introduced in 1998, raised from Bedfordshire seed, is still doing quite well and in areas of more open sward there has been some natural recruitment from seed.

*Kathy Warden*

**Sium latifolium  Greater Water-parsnip**

**Wytham, Hagley Pool ditch (part of Wytham flushes and ditches SSSI)**

It has been a busy year for this species on FAI Farms land at Wytham. On 5 August 2014 a monitoring visit showed that along Hagley Pool ditch the edges were, for the most part, overgrown with very tall Common Reed and it was difficult to access the bank edge safely to search for non-flowering plants of Greater Water-parsnip. Sheep were grazing the southern
bordering fields of the Hagley section, but were kept from the extreme ditch margins by electric fencing, thus this also had fairly tall vegetation. Flowering plants of Greater Water-parsnip were identifiable from a distance and regarding just these, it was present as four separate clumps of 6, 15, 7 and 100+ flowering stems, giving 128+ flowering stems which is a very good total.

Three positions were the same as have been recorded along the banks at previous visits and one new population was recorded. As several of the ditch sections to the far west had been cleaned out the previous winter, in September the opportunity was taken to plant out eleven young *Sium* plants that had been propagated from Wytham seed by the Oxford Botanic Garden (OBG) staff under the leadership of Tom Price. Any seed from mature plants that was ready on 26 September was collected, some retained for future propagation and some scattered on the bare banks of the newly cleaned ditches near the transplants. A return visit in October enabled more seed collection and a check-up visit in December for all OBG staff involved in the propagation revealed that the transplants had survived and enabled more spreading of the collected seed upstream in newly cleaned ditch areas. OBG work showed that *Sium latifolium* has very little seed dormancy and viability lasts only for one season. The second year seed showed no germination.

Their studies also revealed that seeds can in fact germinate under water. The propagation of young *Sium* plants at OBG revealed the possibly unknown feature that this species regenerates well from root cuttings – the roots remaining in the waterlogged gravel of the propagation tray when potted plants were removed all sprouted young plantlets. This raises the possibility that *Sium latifolium* can very well survive heavy grazing that removes all the above ground parts of the plant (if the grazing is subsequently relaxed so that the roots can re-sprout). I am delighted to report that Tom Price has agreed to take over the Flora Guardianship of the Wytham *Sium* populations from 2015. Thanks are due to all involved at the OBG in propagation and planting out and the support they have given this year should generate a much larger and more secure population of this species at Wytham in the future.
Old Marston, Oxford City, Burnt Mill Meadow LWS ditch

The monitoring visit on 10 August 2014 followed a dry, warm and sunny couple of months. A very small group of Greater Water-parsnip plants was seen in the previous known location in dense tall vegetation at the edge of a ditch which is a palaeochannel of the Cherwell. There were 9 tall flowering plants which were so tall they were flowering abundantly well above head height plus there were 2 small non-flowering plants. Thus in total there were 11 plants in a zone along not more than 3m length of the bank to the channel in a vegetation of tall dense, ungrazed, waist-high, mainly sedge vegetation. This is more or less the same number of plants as last year, but the population cannot be said to be doing well as no seedlings or very young plants were seen. As in previous years, the adjacent ditch was silted up and dry. The position was over-shaded by a tall crack willow. Sheep had grazed the centre of the meadow earlier this summer but had been confined within an electric fence.

A site visit on 2 October 2014 to check on seed setting revealed that, despite abundant flowering, seed setting was very poor – most seeds were small and aborted and the plants were high and dry on a bank with dry ditch adjacent. The seed heads were dry and brown. It seemed obvious that hot and dry conditions in September prevented proper seed development, in contrast to the situation at Wytham. This site needs willow pollarding, ditch cleaning and some degree of bank grazing for this population of Sium to do more than just hang on in relatively adverse conditions. A change of tenant farmer soon may mean a more helpful grazing regime in future. A small population derived from the Marston plants (2 mature plants and 40-50 seedlings and young plants) has been maintained for 3 years now on the bank of one of the ponds in Milham Ford Nature Park, Marston as a reservoir of genes of the Old Marston Meadows, Burnt Mill Meadow ditch population. The aim is to have sufficient local plants to re-introduce to the Burnt Mill meadow ditch should appropriate management mean that more of the ditch becomes suitable for this species in the near future. For the time being I will retain Flora Guardianship of the Marston population until it seems more secure and some of the major management issues have been addressed.

Judy Webb
**Viola persicifolia  Fen Violet**

It was an exciting year for Fen Violet on various counts. It was refound at Wicken Fen, Cambridgeshire (as reported in British Wildlife, Vol 25 442) after an absence since the 1990s. It was in an area which was subject to the passage of the Konik ponies between piles of cut scrub. Plastic tags were found as well; evidence of a study plot in the 1980s. Then two fans of Fen Violet (Judy Webb and Curt Lamberth) travelled to western Ireland to see it in the turloughs, and to look for it on the Burren, where it has not been recorded for several years.

Results of soil analyses suggest that Fen Violet grows naturally on a great range of soil types, with varying chemistry from high to low nitrates, calcium and other minerals. The introduced plants at RSPB Otmoor continued to do well, with only a few of the ones in the wettest conditions failing. A species new to the county, American Speedwell, *Veronica peregrina*, was found in the same field by Fred Rumsey. Tom Carruthers’ undergraduate project growing Fen Violet on normal and raised potassium showed no difference in vegetative growth, but interestingly different production of open (chasmogamous) and closed (cleistogamous) flowers. Further projects are underway to investigate this effect and early plant establishment in a drawdown zone.

*Phil Cutt and Camilla Lambrick*

*Curt Lamberth and Micheline Sheehy-Skeffington (NUI Galway) examining Fen Violet in a turlough in County Galway. The dense sward is cattle grazed in summer and under a couple of metres of water in winter. Photo by Judy Webb.*

**Wytham Triangle habitat survey**

The Wytham Triangle continues to be monitored in June and August each year for its suite of rare arable species, including Round-leaved Fluellen, Sharp-leaved Fluellen and Dwarf Spurge. Ongoing surveys have shown that the site remains in good condition for the rare species it supports, although some species (such as Blue Pimpernel) have not been recorded for several years, so will be a search priority for 2015.
The photo on the left shows the site in June and the one on the right was taken in August.

The plot is also a receptor site for Corn Cleavers, which has taken well here following the recent introduction of plants grown by the Oxford University Botanic Garden.

*Geoff Moxon*
Of some 443 taxa (species and subspecies) considered for the Register, which were recorded in the county during 1968-1998 when the Flora of Oxfordshire was being written, we were unable to find 71 during our searches up to 2012. This set us thinking about local loss of species. In the 2013 newsletter we showed a bar-chart of the number of last records by decade with a peak in the 1880s and another in 1980s. Here is a chart showing revised figures and comparing three other lowland vice-counties for which data is available from the Botanical Society of Britain and Ireland. The pattern is similar, though Shropshire lost more species in 1880-1900 than it did during 1970-90, while Oxfordshire, and especially Huntingdonshire, suffered more in the 1970s-80s (pre 1950 data not available for Hunts). This may reflect a higher proportion of arable in these two counties. We are still working on analysis by habitat, and indeed the final list. I wonder if similar peaks would be shown by, say, invertebrate extinctions?

About 286 taxa qualify for a Rare Plant Register and have been seen since 2000. Below is a pie chart of these taxa showing the proportion with national and local status and whether or not we have Flora Guardians for them (the number of species in each category is also shown in the legend). Red to yellow slices have some national status, while the blue ones are on the Register only because they are Locally Rare or Scarce (see Key below). This indicates we are on the right lines but with much to do!
“Listed” means at least one of - Red Listed for Great Britain, Nationally Scarce, Red Data Book, or Section 41 (what used to be BAP priority species). In future we will use the new Red List for England but the Great Britain one gives similar numbers. Local status is - Locally Scarce = 10 or fewer localities in Oxfordshire, Locally Rare = three or fewer localities in Oxfordshire.

The number of Flora Guardians or their equivalent is not sharply defined, as some people look after a species at some, but not all, of its sites.

Camilla Lambrick
EVENTS IN 2014

Spring Talks

The four Spring Talks in 2014 reflected the varied interests of the OFG.

**Tim Pankhurst** gave us a detailed account of the conservation techniques being used to protect the Fen Orchid *Liparis loeselii*. It has two locations in UK: dunes in South Wales and fens and old peat cuttings in East Anglia. Dune stabilisation has reduced the area of suitable sites in Kenfig and trying to recreate mobile dunes was a bold experiment. Likewise the cessation of fens and old peat cuttings in East Anglia reduced the suitable habitat there. Again re-creation of habitat was the main aim. These experiments are on-going and seem to be successful so far.

**Ann Cole** gave us a fascinating talk on place names with their insights into local natural history.

**Phil Wilson** had an intriguing title ‘Otmoor , Alice’s chessboard. Apart from the links with Lewis Carroll we learnt a great deal about the changes which have taken place in Otmoor’s landscape

**Katherine French**, a visiting archeobotanist from the USA, gave an in-depth introduction to the medicinal value of some of Oxfordshire’s rare plants from medieval times onwards.

Our thanks go to Roni McGowan and the Plant Sciences Department for allowing us to use the Schlich theatre for our talks. This is very much appreciated. These talks are scheduled to continue under the auspices of the Oxfordshire Flora Group.

_Susan Erskine_

Plantlife in 2014

Meadows have loomed large in Plantlife’s work in 2014; the Coronation Meadows project has continued and funding has been obtained for the Magnificent Meadows project for which Plantlife is the lead partner. In Autumn 2014 a large sum was granted by the Esmée Fairbairn Trust for work on Important Plant Areas (IPAs). IPAs focus on areas where value can be added by joining up existing reserves and working with landowners to do “joined-up” conservation.

The new CEO, Marian Spain, took up her post in February and is doing a great job for the charity.

Plantlife continues to work in close partnership with other wildlife organisations, notably the RSPB and the Wildlife Trusts.

Plantlife is the only British charity devoted entirely to the conservation of plants *in situ*. To find out more, visit the website, or phone 01722 342730.

_Frances Watkins_

Educational Surveys at Hill End Field Centre 2014

Two surveys to Hill End were made in good weather, one in May and one in July. In each case a useful list was made and participants made progress in developing their identification skills.

_Frances Watkins_
Guarding the Flora of Oxfordshire

On a chilly Sunday in late November some fifty of us trooped through the gothic portals of the University Museum of Natural History, very grateful to have the use of this spectacular venue for free. We came to hear how the Flora Guardians have been getting on, and about examples from distant shores, technical fixes, historic voices and portents from the Rare Plants Register. First Curt Lamberth woke us up with an interrogator’s light on the Fen Violet and a delightful video of some 17 years-worth of records swarming forth and retreating across an Otmoor hay meadow as the weather and scrub removal dictated. Then hydrological data from all three UK sites were compared, and contrasted with the discrete zones of “Phen” Violets around the Irish turloughs. Further food for thought was added by Tom Carruthers’s student project on the effects of potassium on Fen Violet. Not only did the variability of growth by genetically different plants increase with increased potassium, but curiously also the proportion of obligate selfing (cleistogamous), rather than out-crossing, flowers. John Killick analysed the habitat preferences of the Rare Plant Register species showing that mires, and other wet environments, hold a disproportionately high number of rarities compared with the tiny area of the county they occupy. Anthropogenic habitats also hold many of these species, while woodlands harbour rather few.

Coffee-break saw an enthusiastic start on Sandra and Sally’s excellent cakes. Then we welcomed Tim Rich from Cardiff who has been encouraging the group since its early days working on Cotswold Pennycress. Now he brought us insights from an extensive study of Prostrate Asparagus, trying to understand its decline along the Welsh coast. It is dispersed by migrating birds which bring genetic mixing from Spain to Germany, as well as dollops of nutrients when the seeds are deposited. In contrast Rebecca Tibbets has a project in its infancy - re-establishment of Corn Cleavers at Wytham SSSI after a gap of 30 years. With support from Natural England, the University Botanic Garden and the Conservator, this close relative of Goosegrass has been transplanted and set seed two years running. Can it now get on by itself? Ken Betteridge described the ups and downs of Downy Woundwort at all its UK sites. It is monitored, and management initiated, by the Wychwood Flora Group using the insights published by Jo Dunn in her Biological Flora account.

Lunch, enhanced by cake, sustained us for the tour de force of Judy Webb’s Marsh-charms Spike-rush (with midges) and Henry Taunt’s Twinkling Stars (Grass-of-Parnassus) in the last truly rich fens of the Midvale (or Corallian) Ridge. The predicament of the Dioecious Sedge (male plants at Frilford Heath, female in the Lye Valley) however should be simple to solve. Kathy Warden’s long devotion to the Pasqueflower, co-operating with BBOWT, Natural England and successive landowners, is paying off at last. These purple fountains, that so delighted the eighteenth century poet John Clare, are now spreading in their secluded hollow of the Wessex Downs. Restoration of wildlife is a major aim of the county’s Lower Windrush Project led by Jane Bowley. She enlisted the ANHSO Education Group to train her volunteers to identify target species after green-hay from the adjacent SSSI was spread on specially prepared species-poor grassland around a gravel extraction lake. More cake.

Looking forwards, Sue Helm, new County Recorder for the Botanical Society of Britain and Ireland, impressed us with the need for records to document the county flora for Atlas 2020. Camilla Lambrick reported on local extinctions and a pie-chart of the threat and monitoring of Register plants. The discussion ended with a call to action - Brian Laney, Conservation Officer of the Ghost Orchid Project, needs more volunteers to look for this, and other endangered orchids.

Camilla Lambrick
Oxfordshire Flora Group audited accounts: Summary
Jan to Dec 2014

<table>
<thead>
<tr>
<th>Balance Sheet</th>
<th>£</th>
<th>£</th>
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<tbody>
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<td>Bank Balance at 1 January 2014</td>
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<td>Income from Natural England</td>
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<td>Income from Donations</td>
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<td>Donation from BBOWT for RPR</td>
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<td>Frilford Heath Golf Club</td>
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<td>OFG conference 30 November 2014</td>
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<td>Less Expenditure</td>
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<td><strong>Balance of expenditure over income</strong></td>
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</table>

This shows that we spent £1,121.51 more than our income for the year but, in fact, our expenditure included cheque 393 for £1,800 which was for work done in 2013.

_Sally Rankin_

**Committee**

The committee is made up of volunteers. The present committee and their jobs 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 a member of the committee 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 which still need more help on our original list. Again get in touch with any committee member for more information.

Chair and talks organiser  | Susan Erskine
Vice Chair                 | Frances Watkins
Treasurer                  | Sally Rankin
Secretary                  | Phil Cutt
Flora Guardian co-ordinator | Rob Burton
BSBI/Vice-County 23 recorder | Sue Helm
Records Officer            | Kathy Warden
Webmaster                  | Frances Watkins
Newsletter editor          | Sally Abbey
Liaison with OUBG          | Tom Price
Librarian                  | Camilla Lambrick
Hon. Auditor               | Judy Webb
Hon. Auditor               | Andrew Churchill Stone
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](http://www.anhso-ofg.org.uk). This site is linked to the Ashmolean Natural History Society of Oxfordshire website [www.anhso.org.uk](http://www.anhso.org.uk) where you will find a link to the calendar on the left-hand side. Alternatively, you can email the chairman at chairman@anhso-ofg.org.uk

**Wychwood Flora Group (Formerly Cotswold Rare Plants Group)**

Brenda Betteridge is the contact for the summer programme of monitoring various plants in West Oxfordshire, especially Meadow Clary. Do get in touch with her if you can help. Email - bbetteridge@phonecoop.coop

**Botanical Society of Britain and Ireland (BSBI) Update on BSBI Atlas 2020**

The important work of collecting records for the next BSBI Atlas is under way. The atlas is to be published shortly after the end of the recording period ending in 2019 so there are five recording seasons left to push on with the work! In the Atlas, comprehensive maps will be produced for all species native and introduced in the flora of Britain and Ireland and data will be used to assess changes to the flora since Atlas 2000.

In order to reach good recording coverage over each vice county volunteers are being invited to adopt a hectad and to record all species to tetrad level. The map (printed below), which shows the areas surveyed in 2014, reveals that at present, Oxfordshire (vc23) has some big gaps in areas recorded and in order to reach the BSBI target of recording at least 5 tetrads within each hectad there is much to be done.

In 2014 a few group recording days in the north of the county enabled us to collect a good number of records. The days were very enjoyable and open to all abilities. Some group recording days will be organised throughout the coming recording season so if you would like to be involved in these and have not already contacted me (sue@shelm.co.uk) please do so—everyone is welcome. The dates will also be appearing on the OFG calendar on the website.

Any records will be gladly received but please remember to give as exact a grid reference as possible especially for scarce species. If you would like to adopt a hectad do get in touch. There is good information about the project on the BSBI website ([www.bsbi.org.uk](http://www.bsbi.org.uk)) with some explanation about the recording system. I am also very happy to explain this if necessary.

Sue Helm.
Recorder vice-county 23
Sue's contact details are:
E-mail sue@shelm.co.uk
Tel. 07774205972

Call for help with events in Oxfordshire

For several years the ANHSO Education Group has been represented at local events armed with display boards and microscopes to encourage people to engage with plants. One such annual event is “Go Wild “, held at the University of Oxford Museum of Natural History; a lively day aimed at the under 12s. The day is always fun and very rewarding; activities have been as simple as encouraging children to look at plants under microscopes to encouraging them to work through a straight forward key or just asking them to “name that flower”. The parents seem to enjoy the activities as much as the children!

Sadly there are never enough volunteers to run an ANHSO stand at this event and it would be great to recruit some new faces. There is no need to be an expert botanist or to know about advanced microscope techniques- enthusiasm is the main qualification.
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:

Oxford City Council
Oxfordshire County Council
The Department of Plant Sciences, University of Oxford
Farm Animal Initiatives
and the following:

The newsletter is intended to inform about the work of the Oxfordshire Flora Group and is circulated to interested members of the Ashmolean Natural History Society of Oxfordshire, our partners, landowners we work with and other interested parties. If you don’t think you are on our mailing list and you would like to be, please email vice-chairman@anhsa-ofg.org.uk