Ledbury Naturalists Field Club

Field Survey 2007

Queen's Wood, Dymock

February 2007

Acknowledgements

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Introduction

For more than 25 years, our President, Dr. Harper, has organised a conservation group amongst the club members and friends to carry out practical clearing and coppicing of many woodland areas in the county to make them more attractive for wildlife. Much of this work has been done in Queen's Wood, Dymock, with the help and cooperation of the Forestry Commission. There are now 8 areas within the wood which have been designated " The Michael Harper Reserves", which provide varying habitats with more open aspects, attractive to wildlife amongst the more densely covered areas. Whilst Dr. Harper has recorded many species in Queen's Wood over the years, particularly moths, it was decided that the club would carry out a more general survey to monitor the progress of the reserves and to fill in some of the other taxa which may not have been recorded so regularly. This was readily agreed to be the Club's field project for 2007.

Background

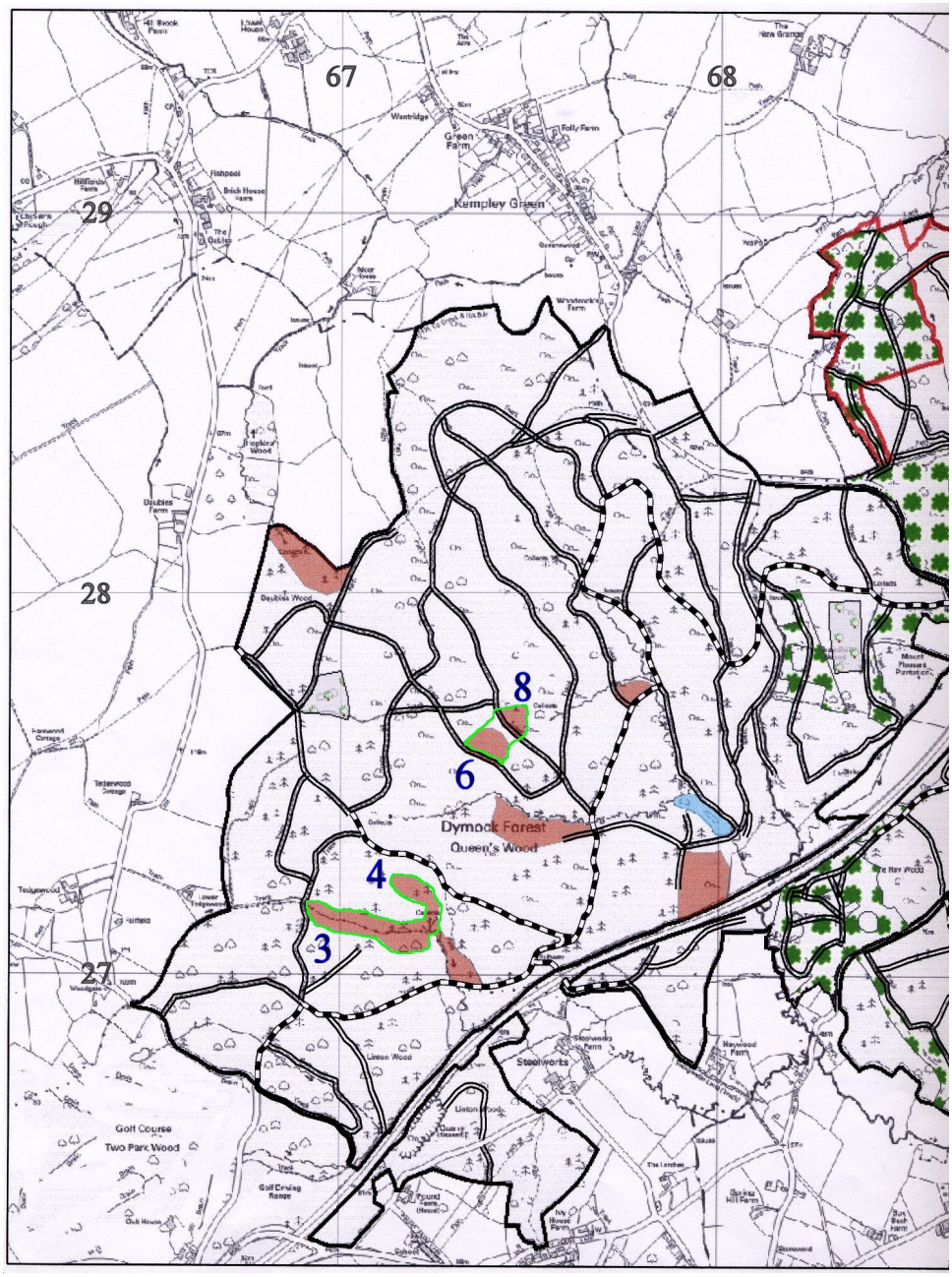
Dymock Woods complex covers a 510.6 hectare area of mixed woodland, managed by the Forestry Commission and lying either side of the M50 and just south of the villages of Dymock and Kempley. The woodland occupies gently undulating terrain either side of the Herefordshire/Gloucestershire boundary with an average height above sea level of 50 metres. Two SSSIs are found in the north eastern section. There are many footpaths through the woods which are popular with the public especially in daffodil time.

The underlying geology is a mixture of old red sandstone with mudstones, siltstones and limestones. This gives rise to a range of soils from free draining peaty podsols to more base rich ones. There are several small streams draining from the acidic soils of the old red sandstone, cutting through to the silurian limestone and giving rise to some marshy areas and patches of tufa. All this means there is a range of habitats with calcicoles and calcifuges juxtaposed in places.

Historically the area was ancient woodland, an outlier from the main Forest of Dean complex and managed as coppice. There was extensive conifer planting during 1960-80s, especially in the western central section, so the native species here are low. The current management plan is to gradually replace the conifers and help the woodland to return to native broadleaved species with far greater biodiversity.

The Survey Area

The Michael Harper reserves are situated in the Queen's Wood section in the SW of the woodland complex. Initially, the club was hoping to cover most of the reserves but this proved over optimistic for the time available so a compromise was made covering reserves 3 and 4 (SO 671 271) which are now joined together and commonly known as the "orchid reserve", and reserves 6 and 8 (SO 674 275) which are adjacent to each other and have recently been joined.



The Survey Area

Conducting the Survey

Volunteers from Ledbury Naturalists' Field Club met monthly in 2007 to carry out the survey. The dates of the meetings were March 26th, April 23rd, May 21st, June 18th, July 16th, August 20th, September 17th and October 15th. On each occasion, members spent about three hours in the morning, visiting either the newly cleared adjacent sites at 6 and 8 or the "orchid" site at 3 and 4. Getting to the reserve areas involved walking along several forest rides and species seen there were also noted and recorded in the "general" section. All flowering plants, grasses, trees, fungi, mosses, ferns, lichens, birds, insects, and other invertebrates found along the way were recorded. Dr. Harper and Peter Wiles added some extra records, particularly of birds, which they had noted on other dates in the year.

As in previous years, the group was fortunate to have the assistance of several well-known experts in their field, and great trouble was taken to verify each record to ensure the reliability of the survey as far as possible. However the records are doubtless an underestimate of the species present due to the limited time spent.

Results and Comment

All species found were recorded. Complete details of the survey can be found in the Appendix.

In summary the following numbers of species were noted.

Flowers	Grasses Sedges Rushes	Trees	Fungi Lichens Mosses Ferns	Birds	Butterflies and Moths	Other Insects and Invertebrates
126	34	42	58	41	12	136

The 126 flowering plants noted were found predominately along the rides and open coppice coupes. Of particular interest were the large numbers of Devil's-bit Scabious which regularly fringe the paths. This is not common elsewhere and is a good plant for insects. A number of Lily-of-the-valley plants were seen alongside the track at SO 677273. An interesting juxtaposition, reflecting the underlying geology was the calcicole, Yellow-wort and Ling, a calcifuge in places along the rides. The Broad-leaved Helleborine was seen along the main ride and the rare Fragrant Agrimony found near the lakeside. Other less common plants seen were Pale Flax and Cow-wheat, a food plant for an uncommon moth. There were patches of Lesser Spearwort in some of the boggy areas on the paths especially near 6&8. Generally, the other plants were those which might be expected in a mixed woodland though there were not many Bluebells in the sections surveyed.

Marsh Helleborine

The Orchid Reserve (3&4) has a mixture of habitats with acidic heathland areas containing Heather and Bilberry, and patches of limestone tufa in boggy areas. This has been monitored closely for many years. The Marsh Helleborines did not show well this year with only 6 spikes being seen on 16th July, rather than the expected 20 to 30 of previous years. In August they had been all grazed off but there were quite a lot of non flowering spikes. There was a good showing of Bog Pimpernel in the wet areas, and this seems to be increasing. Several spikes of the wild Columbine were also seen, and surprisingly, the normally lime loving Spurge Laurel. Marsh Valerian was quite frequently found in the wetter parts of the reserve.

Bog Pimpernel

Reserve 6 had been cleared in the preceding winter so looked very bare on the first visit in March, but soon had a good showing of Wild Daffodils for which the woods are famous. A clearing had been made to join it to reserve 8, which was regenerating quickly. Patches of Herb Paris and more Bog Pimpernel were found in both areas. Plants of Golden Rod were growing well in the clearer areas benefiting from the coppicing. This is an important plant for insects, attracting up to 20 species of nationally uncommon moths.

Of the grasses, sedges and rushes that were recorded, most were found in the general areas along the rides. The Glaucous Sedge was the most common and widespread sedge. One of note was the Purple Moor-grass, particularly in the orchid reserve. It is an acidic fen grass and rare in Herefordshire. Wood Small-reed is another fen grass found in the same area. The Glaucous Sedge is usually a lime lover but it was found in all areas surveyed. In 6&8, the Flea Sedge appeared which is a good newcomer.

Reserve 6

The most common fern found along many of the rides was the Hard Fern. It is a fern of rather dry acid woodland and grows well in a suitable habitat. The generally infrequent Narrow Buckler-fern, is a plant of fens, marshes, wet woods and damp heaths, and was found in both the reserve areas.

Hard Fern

The fungi list was very disappointing, only 24 species being recorded. This was probably due to the excessive summer rain and a dry autumn. The area has been seen to yield much more variety in previous years as the club has often used it for the annual fungus foray.

There was a large variety of trees in the forest. Apart from the planted conifer stands, there are many indigenous broadleaved trees and shrubs. The most common are Silver Birch, Goat Willow and both Sessile and Pedunculate Oaks. The understorey was predominantly Hazel which had been coppiced in places, creating open spaces for other species such as Broom, to appear. Notable species were the calcicoles, Spindle, Dogwood and Field Maple which were only present in very small numbers where suitable conditions prevailed. Guelder rose was found quite commonly in the damper sections. Wild Privet bushes which support the rare Barred Tooth-stripe moth, occurred throughout the survey area. The wood is the main Herefordshire site for Alder Buckthorn with its attractive red berries, turning black in autumn, growing along the rides. It is the main food plant for the Brimstone butterfly which was commonly seen. Rowan trees, not typical of lowland woods, were also found. The Wild Service trees and Small-leaved Limes demonstrate the ancient origins of the woodland as do the Yew trees. The large number of Scots Pines in the orchard reserve are ancient plantings or indigenous rather than introduced. Another unusual species was a Crab Apple tree with long spines on its branches, which occurred in several places especially in 6&8. It would be interesting to have it formally identified.

Alder Buckthorn

Apple with spines

The time of day and some poor weather did not give optimum conditions for bird spotting. However, other visits by members during the year added extra species so a list of 41 was eventually recorded though there were no unexpected species. A Sparrow-hawk and Kestrel were seen as well as both Green and Greater Spotted Woodpeckers. Two pairs of Woodcock were seen roding in both 2006 and 2007. The pond area yielded Canada Geese, Coot and Mandarin duck. No cuckoo was heard this year but it was last heard there in 2006. Dr. Harper added some historical records he had made which have been included in the appendix. These include a Kingfisher in 2006, a Nightingale in 2005 and regular sightings of Crossbill, Siskin, Mallard and Moorhen from 1980 till recently. Wood Warblers were heard in the Oak plantation in the 1960s but are no longer noted.

Lepidoptera were not frequently spotted during club visits, as the weather was not conducive to flight and only 12 were noted. However, Dr. Harper has been recording moths in particular in Queen's Wood since the 1960s and over a thousand species have been listed. This work is being published in a separate report which will be held by the chairman and president and also will be available from the Hereford Biological Records Centre.

Ant heap

Of the other 136 species of invertebrates recorded by the club this year, the most obvious were the wood ants, *Formica rufa*, with their large mounded nests occurring commonly. One species of ant, *Lassius brunneus,* is nationally rare. There were a range of galls caused by flies and wasps and 33 beetles were noted. Surprisingly, no bees or wasps were seen and only one Hornet noted, though this was probably weather related again. There was a range of woodlice, centipedes and millipedes, spiders, slugs and snails.

Mammals were not formally recorded, but there was evidence of badgers and rabbits. The Forestry Commission had dormice boxes in the area and recorded 8 on August 20th. Harvest mice have been noted in the last ten years, nesting in the pollarded Hazel, especially in some of the reserve areas. A toad was also found in the wet part of 3&4 and a grass snake seen by the Forestry Commission team.

Toad

Conclusions:

Queen's Wood is a valuable site for a diversity of wildlife. Although the survey was confined to a comparatively small area, a good range of species was recorded. The underlying soil types give it a unique range of habitats from acid heathland to marshy areas and calcareous streams. Most of the species recorded were in the open areas, either along the ride edges or in the reserves. The darker parts with dense tree cover did not yield so much variety. The work done over the years by the Conservation group together with the Forestry Commission management plan to increase felling of conifers and allow more broadleaved trees to regenerate, has contributed greatly to the improvement in biodiversity seen in much of the whole woodland area. It has especially contributed to the large list of lepidoptera with over a thousand species recorded, many of national significance. Hopefully the decline and disappearance of many moth species has now been halted with the reintroduction of the coppicing cycle upon which many species depend for their survival. This ongoing management will ensure the wildlife continues to thrive in this corner of Herefordshire.

The Team at Work

Distribution

1. Ledbury Naturalists' Field Club, survey team and committee members
2. Members of the Conservation Group working party
3. Forestry Commission
4. Herefordshire Nature Trust.
5. Natural England.
6. British Trust for Ornithology.
7. Herefordshire Ornithological Club.
8. Herefordshire Biological Records Centre
9. Ledbury Town Council
10. Ledbury Library
11. Woolhope Naturalists' Field Club

Appendix