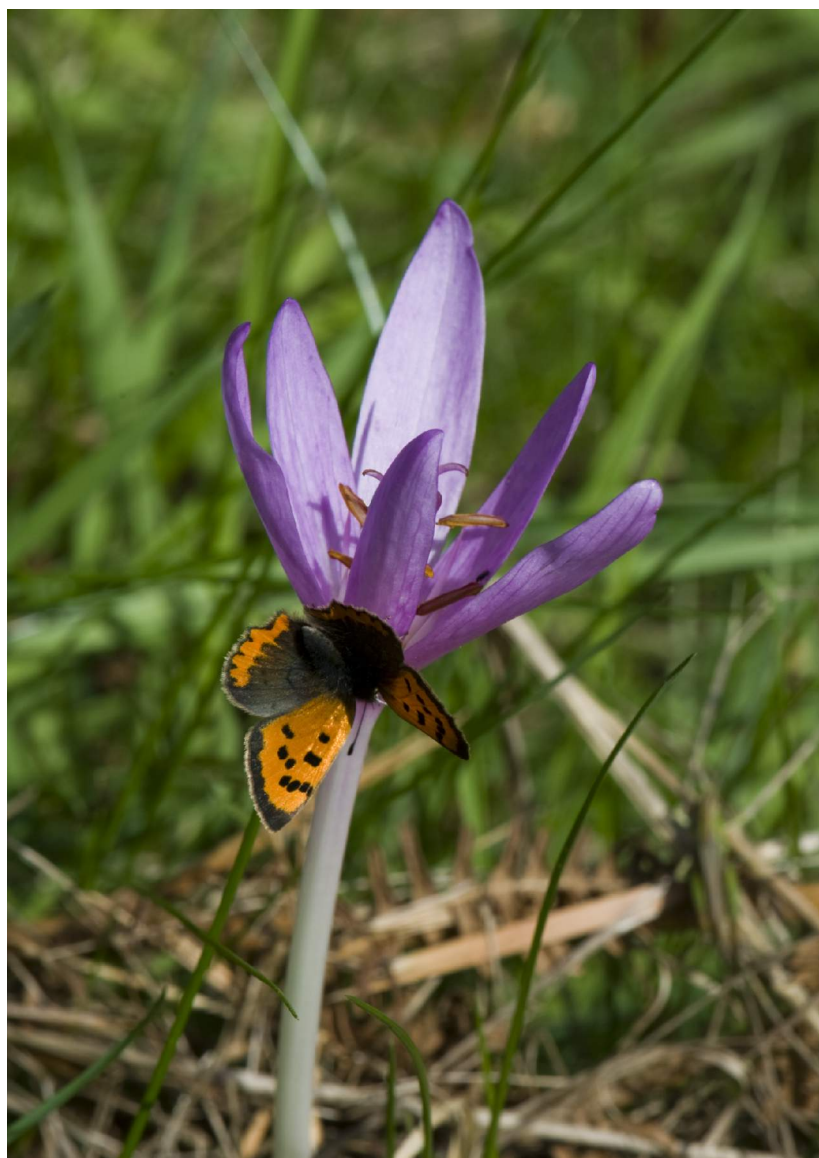


Ledbury Naturalists Field Club

Field Survey 2010

The Purlieu



Small Copper on Meadow Saffron

February 2011

Acknowledgements

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Introduction

The site chosen for the 2010 club survey was land in Upper Colwall off The Purlieu belonging to Mr. Nicholas Neve. This was suggested by Natural England (NE) as being an interesting and varied area which had not been surveyed in depth. An approach to Mr. Neve for permission to survey the land was met with enthusiasm and great interest. Subsequently, the survey was carried out over the year and the findings reported here.

Background

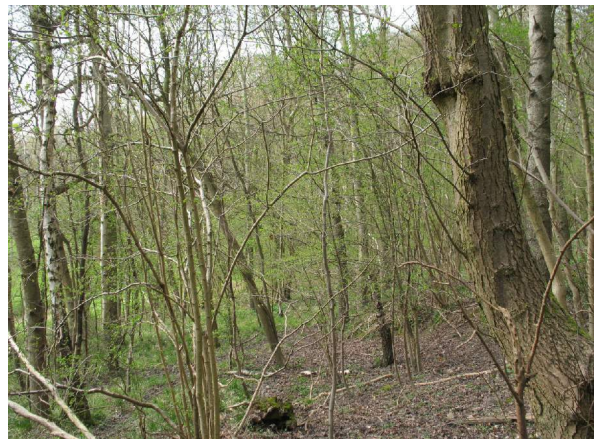


The meadow looking west

The 10 acre site at SO 767442 lies on the west slopes of the Malvern hills with extensive views towards Wales. It consists of a large meadow with woodland at the top and two smaller very steep fields. It is on the spring line where the Silurian Limestone butts up against the Malvernian rock and consequently has several boggy patches. A pond was dug out in 1975 which has since leaked and become overgrown. The land straddles the parishes of Colwall and Mathon, the boundary being along a stream running down the hill. Access is via the unmetalled road of The Purlieu which joins Brockhill Road at the bottom of the slope. There is a public footpath across the upper fields linking to the West Malvern Road. The land is bordered by Park Wood to the north and a field below to the west, both of which

are managed by the Malvern Hills Conservators. It has been in the Neves' ownership since 1973. Initially it was covered with bracken, but this has been reduced over the years and has been managed in a wildlife friendly way ever since. It was possibly an orchard in the distant past but little sign of this now remains. The land has never been ploughed due to its fairly steep slope.

In the 70s the Birch trees were thinned out in the woodland and fallen timber has been regularly removed and tidied up. There are plans to coppice some of the Hazel in the future. In the 90s the owners were away for 3 years and the land was unmanaged. On their return in 1994, the bracken had re-established itself and a new regime was put in place. Some very large ant hills were removed to allow more efficient cutting of the bracken. The land is grazed by sheep for 3 months over winter and the hay meadow is cut after the 1st July to allow the wild flowers to seed. This year the bracken was selectively cut at the suggestion of NE.



The woodland

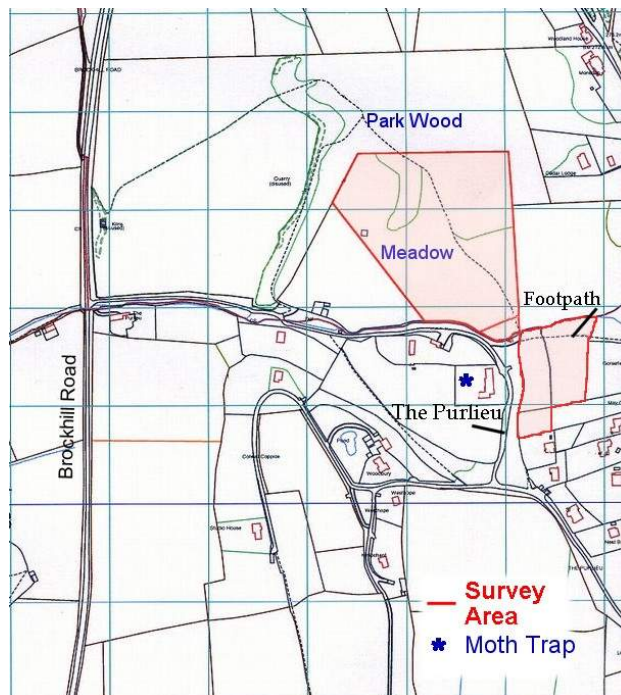
Some specimen trees have been planted, such as 5 Beech trees and a Sugar Maple. A new hedge of native species was planted along the western edge of the meadow by

volunteers in 2009, to mark the boundary with Conservators land. It is establishing well.

The land went into the DEFRA Entry Level Stewardship Scheme in 2007 and achieved Higher Level status in Dec 2009.

The Survey Area

As the area was not very big it was decided to record all of it. Though small it has a range of habitats including grassland, woodland, wet areas and a stream. The meadow proved so diverse that the upper fields did not get so much attention!



The Survey Area

Conducting the Survey

Volunteers from Ledbury Naturalists' Field Club met monthly in 2010 to carry out the survey. The dates of the meetings were March 29th, April 19th, May 17th, June 14th, July 19th, August 16th, September 20th and October 18th. Apart from the first meeting in March when it turned wet, the weather was mainly kind on survey days and no meeting had to be called off. This year it was decided to continue using the afternoon rather than morning for recording to give insects longer to become active though this was not the best time for bird song. On each occasion, members spent about 3 hours in the afternoon, walking around the site. All flowering plants, grasses, trees, fungi, mosses, ferns, lichens, birds, insects, and other invertebrates found along the way were recorded. Eight dormice tubes were positioned in the woodland at the top of the site and monitored regularly. Michael Harper ran a moth trap on 21st May, 11th August and 20th October in the garden adjacent to the site. He also made other visits on 17th, 20th and 26th of May where more observations were made.

Stephanie Thomson supervised the botany whilst John Michaeljohn focussed on invertebrates and Michael Harper identified moths. Cherry Greenway identified the fungi and Kate Wollen from the Forestry Commission and Ann Bowker from the

Mammal Society organised the dormouse survey. Gillian Davies and Lorraine Weaver from the University of Worcester came to help with the moss records. The club is fortunate to have the support of these experts in their fields, 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 Appendices.

In summary the following numbers of species were noted.

Flowers	Grasses Sedges Rushes	Trees	Fungi Mosses Ferns	Birds	Lepidoptera from Michael Harper	Other insects and Invertebrates
116	32	36	55	31	146	169



The meadow in May

The 116 species of flowering plants recorded were mostly in the meadow. Not only was there a good range of meadow plants but they were present in abundance. In season there were great swathes of Cowslips, Bluebells and Common Spotted Orchids and most unusually, very large patches of Meadow Saffron on the south facing bank below Park Wood. There was also, Pignut, Lady's Bedstraw, two types of Vetchling and both Hairy and Perforate St. John's Wort. Fairy flax and

Creeping Cinquefoil were found as well as four species of Buttercup and Yellow Rattle spread across the area. Bird's-foot-trefoil and two species of Violet provided



Marsh-marigolds

good food plants for insects. In the boggy patches and by the pond were found, Golden Saxifrage, Marsh Bedstraw, Water Mint, Lesser Spearwort, Brooklime and



Common Spotted Orchid

Water Figwort. In the pond were large patches of Marsh-marigolds and Yellow Iris.



Herb Paris

The woodland is really an extension of Park Wood which is well established ancient woodland and plants and animals can pass between the areas easily. Though not very extensive, the woodland had a big stand of Ramsons and Wood Anemone also Woodruff and Sanicle as well as a good patch of Herb Paris. Toothwort, a parasitic plant lacking chlorophyll, was found under a Hazel coppice.

There were a few garden escapes of little consequence but a patch of Himalayan

Balsam was found along the upper reaches of the stream. This had been removed in previous years but needs constant vigilance to stop it spreading.

There were 18 species of grasses recorded including Sweet Vernal Grass and Quaking Grass. It was good to find Meadow Barley as it is relatively rare in these parts though more common in the south and east of the country. Of the rushes recorded most were by the pond and in the damp areas. The Pale Sedge is fairly uncommon, though the Galingale is probably a garden escape or has been planted. Even though the pond now has little clear water, it is a good habitat for plants.



The pond area

Thirty six species of native trees were noted.

The woodland to the north-east was mainly Oak, Ash and Goat Willow with many old Birches and a varied under-storey of Hazel, Hawthorn, Field Maple and Dogwood. There were several Aspen trees with their very distinctive diamond shaped pits in the bark growing close together along the lower south-west edge of the wood. To the west of this woodland area the scattered Oaks continue forming a transitional parkland like area before grassland takes over. There was a good stand of Alder



Aspen bark

trees near the stream in the lower, damper part of

the meadow. The newly planted hedge contained a range of native shrubs such as Guelder Rose, Blackthorn, Spindle and Hawthorn. There were no veteran trees of note but a mature Yew grows in the upper field and here also was the only patch of Gorse near the top of the very steep dry slope.



Carpets of Bluebells

The fungi list contained 35 species. The dry season and the lack of deep woodland meant the situation did not lend itself to a prolific count. Most were quite common species to be expected in this type of habitat but the puffball *Lycoperdon exipuliformis* was more unusual. There were 11 species of moss, mainly by the stream side, also 4 liverworts. There are several more species of moss awaiting identification. The main ferns seen were Lady-fern, Broad Buckler-fern and Male-fern as well as Bracken reflecting the lack of damp woodland on the site.



A Parasol fungus

Once again, afternoons did not prove ideal for noting birds but 31 species were recorded including both Great Spotted and Green Woodpeckers, Treecreeper, Gold Crest and a range of woodland birds. A Sparrowhawk was spotted on one occasion and Buzzards were regularly seen gliding overhead. No Cuckoo was heard this year though the owner reported a Woodcock in the woodland.

The flowery meadow was a good site for insects providing plenty of nectar and food plants, such as Bird's-foot-trefoil. The 22 butterflies and moths noted on survey days included abundant Marbled White, as well as Common Blue, Comma, Small Copper, Peacock and Small Tortoiseshell. The Dingy Skipper has been seen regularly in this area and the adjoining Conservators field and was reported initially by Michael Harper 7 years ago. Sadly, it did not turn up on a survey day but was seen again this year by Michael Harper. There were a great many Burnet Companion and Silver Y moths in June.



Marbled White Butterfly

Lepidoptera from his 3 overnight sessions using his mercury vapour lamp (MVL) and during other day time visits. From his observations, it was noted that the Dotted Clay moth is unusual for this area and the micro-moth, *Ancylis badiana* is scarce in Herefordshire though more common elsewhere. The Mother Shipton and Burnet Companion moths are getting scarcer in the country, but seem to be flourishing at this site. All these species flourish on old grassland with some Bracken so this site suits them well.

Michael Harper added another 49 species of micro moth and a further 97 species of



Six-spot Burnet Moth on Knapweed

A total of 53 beetle species were noted, none of which were very unusual but they were abundant in places. There was also a good range of flies, bugs and bees including 5 species of bumble bee. Many galls were seen on a variety of plants caused by flies, wasps and mites. There were 4 species of Harvestmen and on the pond a Southern Hawker dragonfly and the less common White-legged Damselfly which is usually associated with river systems. There was also a selection of other invertebrates such as woodlice, millipedes, centipedes and spiders. Eight species of mollusc were seen.



White-legged Damselfly

Of the vertebrates, a common frog appeared and there was evidence of moles, rabbits, badgers and field voles, also a Roe deer and Muntjac. The 8 dormouse tubes did not yield any inhabitants though they have been found in Park Wood which is contiguous with this site.

Conclusions

This beautiful site with its extensive meadow and other varied habitats is a haven for wildlife. As well as an extensive range of species across most taxa, it yielded great abundance of many diminishing species. The large areas of Cowslips, Bluebells Orchids and Meadow Saffron were a delight to see. The range of grasses and flowering plants provided good feeding opportunities for a large number of invertebrates including the rare Dingy Skipper, whilst the pond area gave yet another distinctive habitat. Although anthills were removed previously, they are re-establishing themselves especially above the pond and show evidence of Green Woodpeckers prodding for ants. The meadow will benefit from continuing management by late mowing and winter grazing to control the ever encroaching Bracken. The small patch of Balsam in the stream needs constant removal before seeding. As this is an annual plant, control should be possible within a few years.

The woodland has less variety apart from its Herb Paris and extensive Ramsons and would benefit from the planned coppicing to create more glades and the retention of brash piles as habitat for insects, birds and fungi.

With its location next to Conservators managed land and the sympathetic management regime in place, it is hoped that this delightful patch of the county remains so for the foreseeable future.



Members of Ledbury Naturalists' survey group

Distribution

1. Ledbury Naturalists' Field Club, survey team and committee members
2. Nicholas Neve
3. Herefordshire Nature Trust.
4. Natural England.
5. Herefordshire Ornithological Club.
6. Herefordshire Biological Records Centre
7. Malvern Hills Conservators
8. Malvern Hills AONB
9. Colwall Parish Council
10. Ledbury Town Council
11. Colwall Library
12. Ledbury Library
13. Woolhope Naturalists' Field Club

Appendices