

Weir Wood LNR – Whillet's Meadows Butterfly & Moth Report 2025

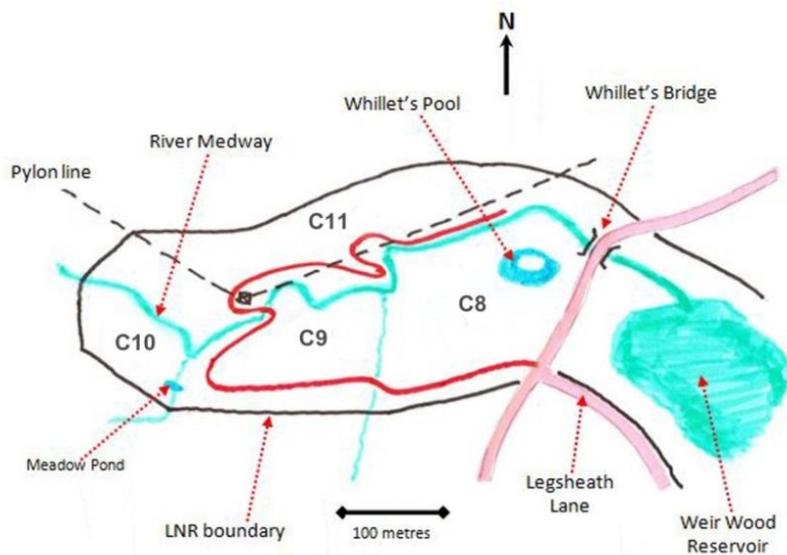
Introduction

A butterfly recording path was established in 2011 through the meadows at Whillet's. Since then, we have published annual reports describing the management of the meadows and detailing the results of regular butterfly and moth transect counts and occasional moth surveys.

We have attempted to ensure a butterfly count was carried out at least once each week during the season (1st March to 31st October) and results are given for each species (Section 3). Moth species results are all reported in Section 4.

1. The recording area and technique

The meadows at Whillet's form the western end of the Weir Wood Local Nature Reserve (LNR) and Site of Special Scientific Interest (SSSI). Apart from the occasional open day there is no public access. In 2011 the Friends of Weir Wood Society initiated regular butterfly recording in these meadows and monitoring has continued each year since. The approximate route of the recording path is shown as a thick red line on the map, but in recent years we have recorded on a walk covering both sides of each meadow in a circular edge route that ensures we cover all areas and habitats, but are careful not to double count.



The main habitats, meadows C8, C9, C10 & C11 on the map, correspond to the similarly numbered compartments in the LNR Management Plan (2022 - 2027) and are described in the next section.

All butterflies that could be seen and identified from or near the path were recorded (this is not the same as traditional transect recording where observations are restricted to a limited distance from

the path, but the meadows have clear boundaries, so it is reasonable to take our counts as valid indicators of species presence and annual trends).

The management history is in Section 2 below and the survey results are in Section 3.

2. The meadows management history.

The 2011 to 2013 individual reports gave the history of the meadows and the improvement actions taken and the individual reports to 2017 updated the management taken in the meadows for these years which included in October 2015, when seed was sown in parts of Compartment 8 & 9 to increase the flower diversity. The results in 2016 and 2017 showed no obvious increase in flowers or diversity from those seeded areas. As this seeding method did not give any noticeable improvements for the effort required, it was decided not to continue with any further area scraping and seed sowing.

Since 2018 we have seen some slow natural increase in the numbers and spread of some species of wildflowers previously sown, and we decided just to manage the meadows by allowing the spread of wildflowers by natural seeding. Betony and meadowsweet in particular have been increasing.

In 2017 & 2018 we trialled carrying out a tractor cut and using our own volunteer labour to hand rake the cuttings into piles, but this proved too arduous to continue for our elderly volunteers.

In 2019 a contractor was found that could not only cut the meadow but also had a collection box attachment that would pick up the cuttings and could then pile them in a heap at the edge of each meadow. This was expensive but affordable. At the end of September 2019, we cut over 50% of some meadows and were pleased with the results.

In both 2020 & 2021 we used the same contractor as in 2019 with a grass collection box and the cuttings were again heaped at the meadow edge. We cut approx. 40% to 60% of each meadow, and again this was arranged to be completed at the end of September, and cuts were maintained to ensure all normally cut meadow areas received a cut on at least a 2 yearly cycle.

In 2022 we were hoping to be able to put some grazing cattle on the meadows for the winter, organised through the nearby Ashdown Forest grazing scheme, unfortunately the Ashdown Forest management eventually decided they were unable to carry this out for us that winter. We had put off cutting the meadows expecting to have winter grazing instead, but by the time we knew it was too late to organise our usual contractor to carry out the cutting and collecting. As we had a very hot dry summer in 2022 the herbage and grass growth had been much reduced, so we decided to just arrange a tractor grass cut with no grass collection over just a few selected areas of the meadows only.

In 2023 it was clear that cattle grazing was not going to be an option, so in September we used our grass collection box contractor and cut at least 50% of each meadow to make up for the very limited cutting in 2022. We also carried out some summer hand cutting to reduce the increasing amount of Meadowsweet.

In 2024 grass cutting was booked in August, but the contractors tractor failed and then their driver was off sick and about to go into hospital and they put off the date. During September we had very wet weather that made the ground conditions unsuitable for grass cutting and by then any thought of cutting the meadows by anyone had to be abandoned.

In 2025 we managed to arrange grass cutting with pick-up by a different more reliable contractor. Because the meadows were not cut at all in 2024, we decided to cut more than usual and 90% of the usual cut areas of the meadows were cut, a decision made because of increasing unwanted invasives that needed control.

Details of each compartment with flora information and detail on what management work was carried out during 2025 is detailed below. (All the habitat pictures for each compartment were taken by Bob Johnson in 2025).

Compartment 8

Some slight control of Meadowsweet was carried out this summer. Also, Himalayan Balsam, an invasive alien, was removed where seen, mainly near river edges. Access paths were cut and maintained during summer. In late September approx. 95% of the meadow area was cut, just leaving a small late flowering area to the right-hand side of the meadow. All arisings were picked up and heaped at the meadow edge.

In October some selected areas for seed sowing were further cut/scarified and a small area had Ragged Robin seed sown in the wetter bottom left hand corner. Also, two strips either side of the main access path plus some other small, cleared areas within the meadow had Yellow Rattle seed sown which parasitises on grass which helps reduce sward height.

Our usual common flora species were all evident again this year, but many were not so abundant, also the wetter ground has been encouraging the spread of more rushes and sedges.

We still have a good mix of species of flowers in the meadow including: Common Birds-foot Trefoil, Bugle, Lesser Stitchwort, Meadow and Creeping Buttercup, Bluebell, Pignut, Goatsbeard, Catsear, Angelica, Hogweed, Hedge Bindweed, Ribwort Plantain, Creeping Cinquefoil, Tormentil, Clovers, Yarrow, Sneezewort, Yellow Rattle, but this year the dense grass growth has swamped the smaller growing plants.

Also, a Southern Marsh Orchid and two Common Spotted Orchids flowered which were caged to stop them being eaten and allow to them set seed.

Yellow Rattle was not very evident and suffered from no cutting in 2024 hence and why we have sown more seed this year. A few Betony plants have now spread into this meadow. It was still a poor year for our Common Birds Foot Trefoil with densities remaining low, but Common Blue butterfly numbers picked up in the latter part of the year with improved counts on last year. Dingy Skipper which used to be present in this meadow has not been seen since 2020.

The meadow remains good for Gatekeeper, Meadow Brown, Orange Tip and Ringlet, the top area is drier and normally has the lowest sward height, which attracts more of the smaller butterflies and is usually a good area for the Burnet Companion moth which had a good year.



Taken on 1st June 2025 - Looking across the bottom of the meadows from the NW corner looking E.
There is a stand of mainly Pignut in foreground, but buttercups and cuckoo flower are also out.



Taken on 1st June 2025 – View of east side of meadow showing the yellow flowers of Lesser Spearwort and the white of Marsh Bedstraw.



Taken on 25th July 2025 - Looking across to the west showing the yellow flowers of St John's Wort in foreground and white of Meadowsweet behind.



Taken on 25th September 2025 – View from the top left-hand side looking diagonally down and across to NE corner after cutting and pick up. Only a strip to RH side near trees was uncut.

Compartment 9

During the summer Himalayan Balsam was removed where noted near river edges and Hemlock Water Dropwort was removed from the central meadow areas. Access paths were maintained. Some hand pulling of bracken was carried out in July where noted in the lower central area.

During late September our contractor carried out grass cutting to all areas with pick up taken to heaps at meadow edges. The drier top area had nearly all the right side of main path cut except for a small area where Devils-bit Scabious was still flowering, and 50% was cut to the left-hand side nearest the path. After cutting strips either side of the path were also scarified/raked and Yellow Rattle Seed planted.

The top area is the driest area and dominated by a large stand of Betony, St Johns' Wort and Knapweed are common, there are a few Devils-bit Scabious, Cowslips and an Oxlip. It is one of the best flowering areas within the meadow with a good range of all the expected meadow species. This is where Six Spot Burnet moths are usually seen and is very attractive to insects generally in mid-summer.

The lower and wetter parts of central area had a strip cut to the usually uncut left side of the main path to meadow pond. A 100% of the central area to the right of this path which is rush and sedge dominated was then cut. A strip to the right-hand side of the pond path in the usually wettest areas was then scarified/raked and Ragged Robin Seed sown.

A few Snakes-head Fritillaries are seen in this area, these had cages put round to help protect them from grazing, but still very few flower heads survived to actually set seed. The dominant flowering species of the lower central area are rushes and sedges, in particular Sharp-flowered Rush and Foxtail grasses and Water Mint, also Marsh Ragwort, Betony, Cuckoo flower, St John's Wort, Greater

Birds-foot Trefoil, Marsh Thistle, Meadowsweet, Greater and Lesser Stitchworts, Lesser Spearwort, Marsh Thistle and Angelica.

There is a grassier area below the central area of rush which also had a 100% cut, an area where Bracken and Ground Elder is controlled. In this lower area we have some Tufted Vetch and Cranesbill. It is the area where Small Heath and Brown Argus butterflies have been recorded.

The area to the right-hand side of the bridge is grassier and drier and this had a 100% cut with exception of an area near the top where Devils-bit Scabious was in flower. The area includes a good amount of Marsh Woundwort and Water Mint which is again increasing and is a favoured plant by many butterflies. There are several clumps of Stinging Nettles around the edges, usually used by Peacock and Small Tortoiseshell butterflies.

This meadow complex attracts a wide spread of butterfly species but particularly attracts Meadow Brown and Ringlet, Marbled and Green-veined Whites, Small Copper, Small and Large Skippers.



Taken on 1st June 2025 showing the extensive darker green in lower central wet area of Sharp Flowered Rush, the lighter green at back is the grass area. To the left is the area we do not cut. The yellow flowers in foreground are Meadow Buttercups but similar looking Lesser Spearwort also flowers in this area.



Taken on 25th July 2025 showing the uncut area with the expanse of white flower heads of Angelica.



Taken on 25th July 2025 – Showing the drier top area with the extensive show of the purple flowers of Betony. This area is particularly attractive to butterflies and insects.



Taken on 25th September 2025 – Taken from the top of the dry area after the meadow grass cut looking down towards the lower wetter meadow and meadow pond.

Compartment 10

This meadow is intentionally being left uncut, the ground is too uneven for the main cutting machinery to operate, except for a small pedestrian mower that is able to cut a perimeter path for refugia tin access. The only other cutting has been by hand to control any invading tree scrub and hedge cutting.

This meadow contains mostly coarse tussocky grasses the main flora being the larger flowers such as Hogweed, Hemlock Water Dropwort, and Angelica, plus a stand of wild raspberries. The butterfly recording transect historically did not specifically include this meadow, but any butterflies seen are recorded.



Taken on the 10th August 2025 – A perimeter path was cut and some unwanted sapling trees were removed but otherwise the meadow was uncut.

Compartment 11

The area to the east of the central barn owl box has Meadowsweet, Water Mint and Rushes. There is also an area in the far NE corner of the meadow which is never cut and is dominated by Meadowsweet and Hemlock Water Dropwort, this area we retain uncut for breeding Whitethroats which use the Hemlock as nest sites and along that north eastern side field edge there is an increasing stand of Common Fleabane and Water Mint that attracts Common Blue and Small Copper butterflies later in the season. Meadow Brown, Ringlet and Gatekeeper are the main species seen within the general grassland. A Brown Hairstreak is occasionally seen along the north side Blackthorn hedge/tree line. Ragwort within the eastern side meadow also supports Cinnabar moth caterpillars.

Again, the invasive Himalayan Balsam was removed where noted.

There has been increasing soft rush at the eastern side of the meadow, which is undesirable, a plant that was too dense and tough for the grass cut and collect system to deal with. Therefore 70% of the usual cut areas that include all to the left of the central ditch/barn owl box was cut and collected with arisings heaped at the meadow edges, but approx. 30% with Soft Rush at the east end only had a cut and no pick-up using a different tractor and cutting attachment.

The eastern recording path continues east into a wet uncut open glade which is often favoured by butterflies due to its sheltered nature. Water Dock is controlled in some areas to maintain some openness and suitability for butterflies. This summer we completed some willow tree clearing at the wetland pool and river edge areas to improve habitat and completed the digging of a small pond for dragonflies. This area attracts Comma, Speckled Wood, Green-veined White, and an occasional Silver-washed Fritillary and other woodland species.

The western areas of the meadow have improving flora with vetches and parsleys showing with Hogweed and Angelica, Knapweed, Meadowsweet and Bindweed, meadow grasses remain dominant but by mid-summer we have ever increasing Creeping Thistle.

There is a section of meadow north beyond the ridge which is more uneven and wet and unsuitable for cutting machinery, the main plant control is by hand removal of tree saplings but it is now very Creeping Thistle dominated. An access path is maintained along the edge of this uncut area for refugia tin and butterfly recording.



Taken on 10th Aug 2025 – View looking toward the east end and glade showing yellow of Ragwort with the increasing spread of Soft and Sharp Flowered Rushes behind that are tough to cut.



Taken on 10th August 2025 – Showing glade with Water Pepper to the right, and a mix of marsh plants to the left with Fleabane and Water Mint, Water Dock and a stand of Flag Iris is further back.



Taken on 10th August 2025 – View of the north edge with the yellow of Common Fleabane amongst some Water Mint. A refugia tin is also visible.



Taken on 7th October 2025. View of west side after cut and pickup looking N towards the uncut top area and boundary hedge.



Taken on 7th October 2025. View from E after attempting to cut the eastern end Soft Rush which the grass cutting cutting machinery clearly struggled to handle.

3. Butterflies

We try and attempt at least one visit/week throughout the recording period from the 1st March to 31st October (35 weeks) if conditions are likely for butterflies to be on the wing. As some species are only on the wing for a short time, more visits are sometimes necessary and carried out in mid-summer on good weather recording days, so to try and gain accurate peak numbers rather than only complete one visit every week.

In 2025 we carried out 50 transect recording days which is our normal minimum target for the season. However during 2022 to 2024 we only averaged around 45/46 visits.

The 2025 butterflies first and last visit dates cover between 8th March to 19th October.

In total 26 butterfly species were seen in 2025, 2 more than in 2024 from the 32 species that have been recorded in these meadows since full transects began in 2011.

There are three tables at the end of this section:

Table 1 shows monthly peak counts for 2024 for each species seen.

Table 2 shows annual peak counts for the last 5 years of the survey with a 5 yearly average.

Table 3 shows the previous transect years with each species annual peak counts for historical data comparison from 2011 onwards.

In 2007 the UK Biodiversity Action Plan (BAP) was produced which is a UK Government initiative that commits to protection of species and their habitat considered to be at risk and in decline. This does include several species of butterfly that have been recorded within the meadows, these are highlighted as (BAP) where this applies.

The individual species tables are below, and show the results of our visits, with peak counts and first and last dates comparisons for the last five years (2021-2025).

Essex Skipper – *Thymelicus lineola*

	First date	Peak count	Days seen	Last date
2021	18/7	1	1	18/7
2022	-	0	0	-
2023	27/6	2	3	20/7
2024	16/7	1	2	1/8
2025	30/7	1	1	30/7

This species looks very similar to the much commoner Small Skipper and only reliably identifiable by getting views of the antennae, we suspect this species may be under recorded.

Small Skipper – *Thymelicus sylvestris*

	First date	Peak count	Days seen	Last date
2021	9/7	41	8	12/8
2022	7/6	36	10	7/8
2023	19/6	53	17	15/8
2024	8/7	25	10	1/8
2025	15/6	28	9	25/7

Another year with similar relatively low numbers but over an earlier and slightly longer flight season.

Large Skipper – *Ochlodes sylvanus*

	First date	Peak count	Days seen	Last date
2021	20/6	12	10	12/8
2022	12/6	14	12	31/7
2023	11/6	20	10	20/8
2024	9/6	16	12	1/8
2025	1/6	22	10	13/7

Another fairly good year with a higher max count emerging earlier but with a slightly shorter flight season.

Silver Spotted Skipper – *Hesperia comma*

Not seen since 9th August 2020. A chalk grassland loving species and probably just a one-off chance vagrant passing visit to the meadows.

Dingy Skipper – *Erynnis tages* (BAP)

Not seen since 23rd August 2020 and probably lost as a breeding species. In the last few years the particularly high water levels we have had during the summer would not have suited this dry earth loving species.

Orange Tip – *Anthocharis cardamines*

	First date	Peak count	Days seen	Last date
2021	11/4	6	12	1/6
2022	17/4	10	11	22/5
2023	20/4	15	11	6/6
2024	7/4	18	9	23/5
2025	3/4	6	13	25/5

An average year, peak count was well down but still seen regularly over a long flight period.

Marbled White – *Melanargia galathea*

	First date	Peak count	Days seen	Last date
2021	18/7	1	2	19/7
2022	3/7	1	2	10/7
2023	27/6	3	7	23/7
2024	10/7	4	5	21/7
2025	25/6	13	7	13/7

A good year, a high maximum count proves the species is now established as a regular breeding species, with a long flight season.

Large White – *Pieris brassicae*

	First date	Peak count	Days seen	Last date
2021	9/7	1	6	6/9
2022	20/6	5	8	12/9
2023	3/5	4	11	15/9
2024	11/7	2	8	4/10
2025	28/4 & 15/6	6	19	19/9

Unusually early 1st brood specimen seen on 28/4 but not recorded again until 15th June which is at the end of the 1st brood breeding season, regular sightings continued from then onwards taking in the 2nd brood period and possibly migrants arriving. We do not have their food plants so probably just nectar feeding at the site.

Small White – *Pieris rapae*

	First date	Peak count	Days seen	Last date
2021	13/7	6	9	18/9
2022	17/4	4	11	21/8
2023	2/7	3	11	15/10
2024	14/7	2	10	18/10
2025	15/6	4	15	19/9

Another species probably not breeding at the site. Flight period suggests second generation butterflies or passing migrant butterflies attracted to the site for nectar feeding.

Green-veined White – *Pieris napi*

	First date	Peak count	Days seen	Last date
2021	11/5	8	17	12/9
2022	23/4	6	24	25/9
2023	22/4	14	21	5/9
2024	21/7	7	11	1/9
2025	13/4	27	33	30/9

There were sightings on 1st brood and the second brood that created our highest peak counts for many years. The warm dry summer obviously suited this butterfly and continually showed until we cut the meadows.

Clouded Yellow – *Colias croceus*

	First date	Peak count	Days seen	Last date
2021	24/8	2	1	24/8
2022	7/8	1	2	10/10
2023	-	0	0	-
2024	-	0	0	-
2025	22/8	2	2	5/9

A scarce passage migrant species that was seen on a couple of occasions.

Brimstone – *Gonepteryx rhamni*

	First date	Peak count	Days seen	Last date
2021	29/3	2	7	5/9
2022	15/3	1	5	14/8
2023	15/4	3	6	15/8
2024	12/5	2	6	4/10
2025	31/3	1	5	25/7

A woodland rather than meadow species which is maintaining its presence, high numbers are not expected. It is only seen during its early April/May and then 2nd brood breeding cycles.

Speckled Wood – *Pararge aegeria*

	First date	Peak count	Days seen	Last date
2021	1/6	9	12	6/10
2022	17/4	4	23	9/10
2023	30/5	9	14	7/10
2024	7/4	2	9	3/9
2025	28/4	3	22	9/10

Primarily a woodland species but was seen over all 3 of its breeding flight seasons although only in low numbers. It had an acceptable year.

Small Heath – *Coenonympha pamphilus* (BAP)

	First date	Peak count	Days seen	Last date
2021	8/6	5	10	12/9
2022	6/8	3	6	24/8
2023	30/5	1	3	27/8
2024	20/5	3	7	3/9
2025	28/4	2	3	11/8

Our wet habitat is not typical of areas you would expect to find this species and seems to be struggling to maintain a presence in the meadows whilst reservoir levels remain very high.

Ringlet – *Aphantopus hyperantus*

	First date	Peak count	Days seen	Last date
2021	9/7	54	8	4/8
2022	20/6	86	10	6/8
2023	20/6	19	9	3/8
2024	24/6	31	9	1/8
2025	22/6	61	11	10/8

A warm summer suited this species with a notably higher peak count than last year and has had a very good year over its usual flight period.

Meadow Brown – *Maniola jurtina*

	First date	Peak count	Days seen	Last date
2021	20/6	55	21	12/9
2022	12/6	72	18	4/9
2023	11/6	101	25	15/9
2024	9/6	62	22	16/9
2025	1/6	94	20	5/9

Another species that suited our warm summer and has had a very good year with a high peak count. Peak counts were in late June rather than July with our earliest first date over a week earlier than normal.

Gatekeeper – *Pyronia tithonus*

	First date	Peak count	Days seen	Last date
2021	13/7	46	12	29/8
2022	10/7	57	9	14/8
2023	2/7	47	15	27/8
2024	11/7	49	10	27/8
2025	1/7	74	11	18/8

A very good year helped by a warm summer. Our highest peak count for many years and was in good numbers for a good part of the flight season.

Red Admiral – *Vanessa atalanta*

	First date	Peak count	Days seen	Last date
2021	5/5	4	22	11/10
2022	20/3	2	14	9/10
2023	4/4	9	28	15/10
2024	20/5	3	15	27/10
2025	3/4	3	22	30/9

A low peak count but was seen regularly over a long period. The species had another average year. Our autumn grass cut plus wet weather in October was the reason for the lack of late Autumn sightings.

Painted Lady – *Vanessa cardui*

	First date	Peak count	Days seen	Last date
2021	20/6	3	3	9/8
2022	16/5	2	8	14/8
2023	10/7	1	2	11/7
2024	20/5	1	2	3/9
2025	13/5	2	5	19/9

A usually scarce migrant species but more evident this year than last with occasional visits over a long period.

Peacock – *Aglais io*

	First date	Peak count	Days seen	Last date
2021	19/4	6	17	9/10
2022	15/3	4	16	12/9
2023	9/4	16	20	15/8
2024	20/3	7	17	27/8
2025	31/3	5	25	25/9

Another good year, with reasonable sightings over a long period, the warm summer probably helping with survival rates.

Small Tortoiseshell – *Aglais urticae*

	First date	Peak count	Days seen	Last date
2021	18/4	3	12	29/8
2022	10/4	2	11	21/8
2023	27/6	2	2	2/7
2024	20/3	4	6	18/10
2025	8/3	2	5	18/4

With just a few sightings in March and April. No caterpillars were noted on their nettle food plant and no later brood. Nationally this species is in serious decline and is now getting close to being gone from our site. Our early flight dates are no longer in line with the main growing period of their food plant.

Comma – *Polygonia c-album*

	First date	Peak count	Days seen	Last date
2021	19/4	5	14	5/9
2022	20/3	5	17	12/9
2023	4/4	9	24	7/10
2024	20/3	3	12	4/10
2025	8/3	14	22	7/9

A surprisingly good year, high peak numbers on 2nd brood, so the early brood did well. Another species that must have liked the warmer drier summer.

Small Copper – *Lycaena phlaeas*

	First date	Peak count	Days seen	Last date
2021	11/5	8	24	27/9
2022	24/4	18	22	10/10
2023	5/6	6	20	7/10
2024	25/6	7	14	11/10
2025	18/5	13	25	9/10

A good year, an improved peak count and seen over a long flight period. As usual the autumn breeding period gave the peak count and was during the late August early September period.

Holly Blue – *Celastrina argiolus*

	First date	Peak count	Days seen	Last date
2021	11/5	1	3	22/8
2022	-	0	0	-
2023	10/7	5	9	3/9
2024	12/5	3	3	13/8
2025	28/6	4	8	7/9

This more woodland species had a better year, seen over a longer flight period with a peak count of 4 in June and recorded on 8 occasions.

Common Blue – *Polyommatus icarus*

	First date	Peak count	Days seen	Last date
2021	8/6	5	17	12/9
2022	2/6	10	17	8/10
2023	5/6	5	10	15/9
2024	17/6	1	4	1/9
2025	13/5	7	16	16/9

A much better year, although we had a peak count of 7 in September, generally numbers were low. Its food plant Common Birds-foot Trefoil has still not prospered but the drier summer has helped.

Chalkhill Blue – *Polyommatus coridon*

The only sighting was of one on 29th July 2019 which has not been repeated. Normally a chalk grassland species but are fond of feeding on Knapweed and Scabious flowers which we have, so always a possibility of a vagrant visiting.

Brown Argus – *Aricia agestis*

	First date	Peak count	Days seen	Last date
2021	10/8	4	8	6/9
2022	31/7	2	1	31/7
2023	11/6	1	6	3/9
2024	-	0	0	-
2025	-	0	0	-

This species was not recorded after seeing declines over the years. All the site problems of wet meadows listed for Common Blue apply to the Brown Argus which is sun loving. Its food plant is Meadow Cranesbill which also did not have a good year.

Purple Emperor – *Apatura iris*

	First date	Peak count	Days seen	Last date
2021	-	0	0	-
2022	-	0	0	-
2023	-	0	0	-
2024	-	0	0	-
2025	25/6	1	1	25/6

Not a meadow species, last seen in 2015, now seen again at the woodland glade end of the meadows.

Purple Hairstreak – *Neozephyrus quercus*

	First date	Peak count	Days seen	Last date
2021	23/8	1	1	23/8
2022	-	0	0	-
2023	16/7	1	1	16/7
2024	-	0	0	-
2025	-	0	0	-

Not a meadow species and again not seen. A species more associated with frequenting the tops of oak trees.

Green Hairstreak – *Callophrys rubi*

A butterfly liking a drier habitat than our wet meadows, last seen on 7th May 2016.

Brown Hairstreak – *Thecla betulae* (BAP)

	First date	Peak count	Days seen	Last date
2021	5/9	2	2	6/9
2022	-	0	0	-
2023	1/8	1	3	20/8
2024	24/8	2	2	17/9
2025	25/7	1	3	7/9

This very elusive butterfly which rarely flies is not strictly a meadow species. One was seen on three occasions around its Blackthorn food plant confirming the species is still breeding at the meadows site.

Silver Washed Fritillary – *Argynnis paphia*

	First date	Peak count	Days seen	Last date
2021	12/8	1	2	5/9
2022	10/7	1	3	6/8
2023	1/8	1	1	1/8
2024	9/7	2	3	13/8
2025	28/6	1	2	25/8

This is more a woodland species, usually seen near areas with tall trees such as woodland glades. The June sighting was particularly early when the species is normally only just starting to come onto the wing

Marbled White



Large Skipper



Painted Lady



Brown Hairstreak on Bramble flower



Male Orange Tip on Cuckoo flower



Comma on Water Mint



Small Copper on Water Mint





Gatekeeper on Water Mint



Peacock caterpillars on Nettle.

Table 1

WHILLET'S BUTTERFLY PATH – MONTHLY PEAK COUNT – 2025								
SPECIES	March	April	May	June	July	August	September	October
Essex Skipper					1			
Small Skipper				18	28			
Large Skipper				22	11			
Large White		1		3	6	3	1	
Small White				4	3	2	3	
Green-veined White		3	4	15	27	12	11	
Marbled White				12	13			
Clouded Yellow						1	2	
Brimstone	1	1	1	1	1			
Speckled Wood		2	1	1	2	1	3	1
Small Heath		1	1			2		
Ringlet				61	60	1		
Meadow Brown				94	73	11	1	
Gatekeeper					74	29		
Silver-washed Fritillary				1		1		
Orange Tip		6	4					
Red Admiral		1	1	3	2	1	2	
Peacock	2	5	3	5	2	1	5	
Small Tortoiseshell	2	1						
Comma	1	4		7	14	4	2	
Painted Lady			2	1	1		2	
Small Copper			2	3	6	13	13	
Holly Blue				4	2	3	1	
Common Blue			1	1	3	2	7	
Brown Argus								
Purple Emperor				1				
Purple Hairstreak								
Brown Hairstreak					1	1	1	
COUNT DAYS per MONTH	3	8	7	7	7	9	7	3

Total count days for 2025 = 51

The Table 1 above covers monthly peak counts seen during 2025 plus those species listed that have been seen annually. The total count of 51 days included 2 blank days when no butterflies were seen during October. Our last visit date was 19th October.

Although we try to carry out a butterfly survey once a week, weather permitting, during March only 3 visits were carried out when weather was suitable and again only 3 in October.

In late September we needed to grass cut almost all the meadows, so there was very little in the meadow to attract any butterflies, and October also turned out to be a wet month generally.

Table 2

5 YRLY ANNUAL PEAK COUNTS 2021-2025

SPECIES	2021	2022	2023	2024	2025	Average 2021 - 2025
Dingy Skipper						
Essex Skipper	1		2	1	1	1.0
Small Skipper	41	36	53	25	28	36.6
Large Skipper	12	14	20	16	22	16.8
Silver-spotted Skipper						0
Orange Tip	6	10	15	18	6	11.0
Large White	1	5	4	2	6	3.6
Small White	6	4	3	2	4	3.8
Green-veined White	8	6	14	7	27	12.4
Marbled White	1	1	3	4	13	4.4
Clouded Yellow	2	1			2	1.0
Brimstone	2	1	3	2	1	1.8
Speckled Wood	9	4	9	2	3	5.4
Small Heath	5	3	1	3	1	2.6
Ringlet	54	86	19	31	61	50.2
Meadow Brown	55	72	101	62	94	76.8
Gatekeeper	46	57	47	49	74	54.6
Silver-washed Fritillary	1	1	1	2	1	1.2
Red Admiral	4	2	9	3	3	4.2
Purple Emperor					1	0.2
Painted Lady	3	2	1	1	2	1.8
Peacock	6	4	16	7	5	7.6
Small Tortoiseshell	3	2	2	4	2	2.6
Comma	5	5	9	3	14	7.2
Small Copper	8	18	6	7	13	10.4
Brown Hairstreak	2		1	2	1	1.2
Green hairstreak						0
Purple Hairstreak	1		1			0.4
Holly Blue	1		5	3	4	2.6
Common Blue	5	10	5	1	7	5.6
Chalkhill Blue						0
Brown Argus	4	2	1			1.2

Table 3 - 2011 to 2023

WHILLET'S BUTTERFLY PATH - ANNUAL PEAK COUNTS

SPECIES	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Dingy Skipper	3				2			1		1			
Essex Skipper	1		1		6	1	1	1	9	2	1		2
Small Skipper	50	10	28	32	37	21	42	31	44	29	41	36	53
Large Skipper	11	4	4	7	22	3	9	12	38	10	12	14	20
Silver-spotted Skipper										1			
Orange Tip	10	17	4	10	8	3	2	5	8	8	6	10	15
Large White	1	2	18	2	2	14	5	3	2	2	1	5	4
Small White	3	2	8	8	11	12	3	7	3	3	6	4	3
Green-veined White	17	6	17	9	6	10	5	18	6	8	8	6	14
Marbled White							1		1	2	1	1	3
Clouded Yellow			1			1		1		1	2	1	
Brimstone		1	1	3	2	1	3	2	2	2	2	1	3
Speckled Wood	3	3	3	6	3	2	4	18	3	4	9	4	9
Small Heath			2		1		1		2	4	5	3	1
Ringlet	65	31	51	34	23	21	66	83	132	28	54	86	19
Meadow Brown	24	39	206	56	79	67	90	51	97	73	55	72	101
Gatekeeper	25	12	18	15	25	22	67	39	67	33	46	57	47
Silver-washed Fritillary								1	1	1	1	1	
Red Admiral	3	2	2	5	6	2	3	2	2	4	4	2	9
Purple Emperor					1								
Painted Lady	1	1			3	1	1	1	4		3	2	1
Peacock	1	1	2	3	6	1	3	3	5	5	6	4	16
Small Tortoiseshell	4	2	3	4	9	8	4	2	1	3	3	2	2
Comma	1	2	2	4	3	3	8	7	4	13	5	5	9
Small Copper	6	2	6	2	2	2	3	11	4	13	8	18	6
Brown Hairstreak								1	1		2		1
Green hairstreak						1							
Purple Hairstreak					1			4			1		1
Holly Blue			1		1	1	5	3	1	1	1		5
Common Blue	2	1	2	13	5	2	7	16	12	27	5	10	5
Chalkhill Blue									1				
Brown Argus									1	5	4	2	1

White Admiral - *Limenitis Camilla* is a woodland species not yet recorded in the meadows but has been recorded nearby in the past.

Swallowtail Butterfly – *Papilio machaon* One was reported flying over the west end car park on 2/9/2019, an area not that far from Whillet's Meadows.

Table 3 – 2023 onwards.

WHILLET'S BUTTERFLY PATH - ANNUAL PEAK COUNTS

SPECIES	2023	2024	2025	2026	2027	2028	2029	2030
Dingy Skipper								
Essex Skipper	2	1	1					
Small Skipper	53	25	28					
Large Skipper	20	16	22					
Silver-spotted Skipper								
Orange Tip	15	18	6					
Large White	4	2	6					
Small White	3	2	4					
Green-veined White	14	7	27					
Marbled White	3	4	13					
Clouded Yellow			2					
Brimstone	3	2	1					
Speckled Wood	9	2	3					
Small Heath	1	3	1					
Ringlet	19	31	61					
Meadow Brown	101	62	94					
Gatekeeper	47	49	74					
Silver-washed Fritillary		2	1					
Red Admiral	9	3	3					
Purple Emperor			1					
Painted Lady	1	1	2					
Peacock	16	7	5					
Small Tortoiseshell	2	4	2					
Comma	9	3	14					
Small Copper	6	7	13					
Brown Hairstreak	1	2	1					
Green hairstreak								
Purple Hairstreak	1							
Holly Blue	5	3	4					
Common Blue	5	1	7					
Chalkhill Blue								
Brown Argus	1							

4. Day flying moths.

The following day flying moth species were regularly looked for as part of the butterfly transect walks. The tables below show the last 5 years peak counts and first and last seen dates. Table 4 shows all the peak counts since 2011.

Burnet Companion – *Euclidia glyphica* (Day flying- Meadow species)

	First date	Peak count	Days seen	Last date
2021	23/5/21	3	6	27/6/21
2022	16/5/22	8	11	26/6/22
2023	16/5/23	6	6	19/6/23
2024	20/5/24	3	6	30/7/23
2025	9/5/25	7	7	15/6/25

Another acceptable year, up to 4 were being recorded over the flight season.

Mother Shipton – *Callistege mi* (Day flying- Meadow species)

	First date	Peak count	Days seen	Last date
2021	-	0	0	-
2022	8/5/22	3	5	2/6/22
2023	29/5/23	2	2	5/6/23
2024	17/5/24	2	2	23/5/24
2025	-	0	0	-

Only seen twice in 2023 and 2024, not seen at all this year. The species did come back after not being seen in 2021 but the signs are not good.

Silver Y – *Autographa gamma* (Day flying- Meadow species - Migrant)

	First date	Peak count	Days seen	Last date
2021	27/6/21	4	8	18/9/21
2022	-	0	0	-
2023	19/6/23	16	6	20/7/23
2024	17/5/24	2	7	27/8/24
2025	15/6/25	2	2	22/6/25

A mainly migrant species and had a poor year.

Narrow-bordered Five-spot Burnet – *Zygaena lonicerae* (Day flying- Meadow species)

	First date	Peak count	Days seen	Last date
2021	-	0	0	-
2022	-	0	0	-
2023	-	0	0	-
2024	-	0	0	-
2025	-	0	0	-

None reported again this year. Last recorded 25th July 2015 within meadows. However, at the dam end of the reservoir this species is thriving with a high count of 31 seen in meadows near the pumping station on 18th June.

Six Spot Burnet – *Zygaena filipendulae* (Day flying- Meadow species)

	First date	Peak count	Days seen	Last date
2021	18/7/21	1	1	18/7/21
2022	5/7/22	3	2	10/7/22
2023	2/7/23	2	2	11/7/23
2024	11/7/24	3	6	30/7/24
2025	22/6/25	6	6	9/7/25

A new peak count plus being seen earlier and regularly over the flight season is very encouraging.

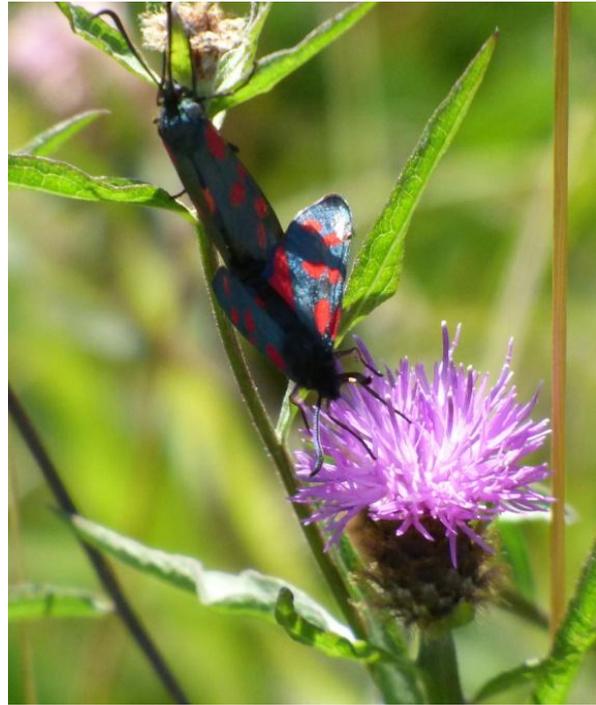
Cinnabar – *Tyria jacobaeae* (Day flying- Meadow species – (BAP))

	First date	Peak count	Days seen	Last date
2021	13/6/21	1	4	9/7/21
2022	-	0	0	-
2023	19/6/23	2	2	2/7/23
2024	17/6/24	1	1	17/6/24
2025	13/5/25	1	6	26/6/25

Although only 1 adult was seen on the wing, the Ragwort that grows within the meadows is a Cinnabar food plant, and a good number of caterpillars were seen following this flight season, which is very encouraging and evidence that it remains a breeding species at the site.



Six Spot Burnet Moth



A mating joined pair of Six Spot Burnet Moths

General

The same (BAP research) applies to moths as well as butterflies, where applicable the moths are shown as (BAP) species where this applies and are of conservation concern.

Other not true day flying moths, but amongst those considered most easily disturbed macro moth species that we recorded in the meadows by day in 2025 were:

- Blood Vein – *Timandra comae* - 1 on 11/8. (BAP)
- Common Carpet – *Epirrhoe alternata* - 1 on 20/5.
- Hummingbird Hawkmoth – *Macroglossum stellatarum* - 1 on 13/7.
- Shaded Broad Bar – *Scotopteryx chenopodiata* - 1 on 22/7. (BAP)
- Straw Dot – *Rivula sericealis* - 1 on 25/5, 1 on 8/6, 15/6 & 17/6.
- Vapourer Moth – *Orgyia antiqua* - 2 on 19/10 and 1 reported on 21/10.
- Yellow Shell – *Camptogramma bilineata* - 1 on 8/6

We occasionally see some true night flying species that sometimes get disturbed or are noted resting in the meadow area by day, those seen in 2025 were:

- Common Wave – *Cabera exanthemata* - 1 on 20/5 & 27/8.
- Knotgrass Moth - *Acrionicta rumicis* – (BAP) A caterpillar was seen on grass within the meadows on 1/10 and 4/10.
- White Ermine – *Spilosoma lubricipeda* – (BAP) A caterpillar was seen on 4/8.

The day flying micro moths are generally not recorded because many of this group are difficult to ID, and we are unable to reliably identify to individual species. However, a few species were seen and their identification confirmed.

- Rush Veneer - *Nomophila noctuella* – 2 on 25/8, 1 on 29/8, 4 on 31/8, 5 on 5/9, 2 on 7/9, 1 on 19/9. A migrant species.
- Brown China Mark – *Elophila nymphaeata* 1 on 6/5 then 5+ on 13/5 and up to 2 then seen regularly on vegetation around meadow pond until 26/6, then up to 2 again on 21/8 & 7/9. A pond based species feeds on water plants.
- Small China Mark – *Cataclysta lemnata* - 1 on 18/5 and 20/5 another pond based species.

Pyrausta Purpuralis (aka Common Purple and Gold) - 1 on 22/7 & 11/8. (one of the mint moths)
 Brown Oak Tortrix – *Archips crataegana* - 1 caterpillar seen on 29/4.
 Large Fruit-tree Tortrix – *Archips podana* - 1 on 9/6.

Although a few sessions of over-night moth box trapping have been carried out in the past, none were carried out this year.



A Brown China Mark micromoth hanging on vegetation near the water. The view is of the wing underside and body. This species habitually hangs upside down during the day when resting/hiding. Its caterpillar larvae are unusual as they are fully aquatic feeding on water plants.

Table 4

WHILLET'S BUTTERFLY PATH - MOTH ANNUAL PEAK COUNTS

SPECIES	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Burnet Companion	1	3	1	5	4	5	7	7	12	3	3	8	6
Mother Shipton	1	0	0	1	1	1	1	2	1	1	0	3	2
Silver Y	0	3	3	1	2	10	2	8	1	3	4	0	16
Cinnabar	1	1	0	1	2	1	1	0	1	4	1	0	2
Narrow-bordered Five Spot Burnet	0	0	0	2	1	0	0	0	0	0	0	0	0
Six Spot Burnet	1	0	0	0	0	0	0	2	2	1	1	3	2

SPECIES	2023	2024	2025	2026	2027	2028	2029	2030
Burnet Companion	6	3	7					
Mother Shipton	2	2	0					
Silver Y	16	2	2					
Cinnabar	2	1	1					
Narrow-bordered Five Spot Burnet	0	0	0					
Six Spot Burnet	2	3	6					

A Black neck Moth – *Lygephila pastinum* was seen on 3/7/2011 but not recorded since

Silver Y with wings Open



Burnet Companion



Cinnabar Moth Caterpillars



Cinnabar Moth

Micro-moth *Pyrausta Purpularis* on Cuckoo flower



Silver Ground Carpet Moth



Picture to the left is a Narrow-bordered 5 Spot Burnet moth which was not seen at Whillet's meadows but in the meadow area in front of the Water Pumping Station at the dam end of the reservoir on the 18th June.

Hopefully the species may eventually return and re-colonise our end of the reservoir.

Acknowledgments

The wildlife recording team consisted mainly of Bob Johnson and Alastair Gray who carried out most of the daytime butterfly transect and moth counts plus there was also recording input on Tuesdays from some of the work party volunteers. All the butterfly section pictures were taken by Bob Johnson or Alastair Gray. Moth section pictures by Bob Johnson.

Report by Bob Johnson - 4th December 2025