

WOOLSTON EYES NATURE RESERVE

BUTTERFLY REPORT 2010

AS always, there was much of interest as the constant changes to the habitat in various parts of the Reserve had a sometimes dramatic effect on the butterfly population. This was most apparent on the northern half of No1. Bed where the work associated with the recycling plant has transformed the area into a haven for a number of species, notably Common Blue, Peacock and Small Tortoiseshell. Another part of the Reserve to benefit from the ongoing work on the site was the recently excavated area near the Sandpit Ponds on No.4 Bed, which proved particularly attractive to Small Tortoiseshell, whose recovery after years of decline was one of the highlights of the year.

The weather was again untypical, with an exceptionally dry spring and early summer resulting in drought conditions and a hosepipe ban in the north-west of England. Needless to say the introduction of this measure was followed immediately by almost constant wet weather with adverse effects on those species which peak in July and early August. Gatekeeper numbers were particularly disappointing and it was not until mid to late August that butterflies were seen in good numbers.

Following the exceptionally severe winter, no butterflies were recorded until 17th March when a Red Admiral emerged from hibernation. Above average numbers of Brimstone were seen, but last year's excellent numbers of Orange Tip were not repeated.

Summer saw a welcome return of Holly Blue, after a blank year in 2009, but most other species were fairly disappointing. Late August and early September however saw counts of over 200 Common Blue and Peacock, whilst Small Tortoiseshell peaked at 120.

Butterflies remained fairly plentiful until the end of September but thereafter there were only three reports, a Small Copper on 31st October, a Red Admiral the following day and an unidentified butterfly (possibly a Speckled Wood) on 10th November.

The Butterfly Transect is now in its fifth year and thanks to the support of David Bowman and Les Jones, it was monitored every week between April and September.

As always, my fellow Wardens and permit holders have submitted valuable information and the Annual report of the Cheshire and Peak District Branch of Butterfly Conservation enables the Woolston records to be set in a wider context.

INDIVIDUAL SPECIES REPORT

Small Skipper

Thymelicus sylvestris

The first was found on 24th June and following the previous year's record, total numbers were disappointing. The highest count was nine on 30th June and butterflies were noted sporadically until the final report on 19th July. As usual most records were from No.1 Bed and Butchersfield Tip.

Large Skipper*Ochlodes sylvanus*

As with the previous species there were few records, probably due to poor weather during its flight period. Sightings began on 15th June and the maximum of three occurred during the last week of June. One on the canal track on 2nd July was the last of a below average year.

Brimstone*Gonepteryx rhamni*

Fine weather during the spring resulted in a good year for this attractive but uncommon species. Two were found along the river on 15th April and there were a series of records up to 17th May, nearly all from No.2 and 3 Beds and involving a maximum of two butterflies. There was a single report from the summer brood when one was seen on No.3 Bed on 19th July.

Large White*Pieris brassicae*

After the previous year's spectacular numbers, sightings returned to normal levels. The first report on 22nd May was unusually late. Five the following day and one on 25th May were the only other spring records. The second emergence was noted typically at the beginning of July and small numbers were regularly seen throughout July and August. The highest count occurred on 10th August when seven were found on the Butterfly Transect and one on No.1 Bed. Three on 31st August concluded a below average year.

Small White*Pieris rapae*

It was mid-April before the first sightings, with four on the 15th. Thereafter there were regular reports of small numbers, with a spring maximum of nine on 19th May. Although some continued to be seen during June, it was mid-July before there were significant counts. The year maximum was 90 on 19th July and thereafter there were only two counts in excess of ten, both during the second half of August. Sightings continued until 22nd September and this was a fairly average year for this species.

Green-veined White*Pieris napi*

A single on 21st April was the first of the year, a little later than average. Up to nine were regularly



Photograph - Green-veined White by David Bowman

reported during May and June, much fewer than in 2009. The second brood, which emerged in early July, was more numerous with a number of counts in excess of twenty. The highest totals were recorded during August and over 120 were present on the 16th, of which more than half were on No.4 Bed. The end of August found a total of 24 and there were no further records. This species was the most successful of the “whites” and the year maximum was well above average and the highest in Cheshire this year.

Orange Tip

Anthocharis cardamines

This species was seen in good numbers, beginning on 8th April when four were on No.3 Bed. Highest counts occurred towards the end of April with a maximum of 16 on 22nd, a good number but well down on 2009 totals of 34. Eight were still present at the end of April and up to four were reported throughout May. Unusually for Woolston Eyes, butterflies survived into June and a final record of four on the 3rd concluded a satisfactory season.

Small Copper

Lycaena phlaeas

Early May sees the emergence of this species the first of the year was seen on the 9th, followed by two on the 3rd June, all on No.2 Bed. July saw three reports, all f singles, including an unusual record from the south bank of No.3 Bed near the footbridge. August saw an increase in numbers, with four on the north bank of No.2 Bed on the 10th and an excellent Reserve wide count of 18 on the 15th and the 19th. Of these, 11 were on No.1 Bed, a favoured area, two on Butchersfield Tip, four on No.2 Bed and one on no.3 Bed. On 29th August two were found on No.4 Bed and on the 31st six were still present on Nos. 1 and 2 Beds. There was a September record on 2nd and a late sighting of one on No.4 Bed on 13th October. The count of 18 is the highest since systematic recording began in 2003 and this year was the best in Cheshire for this species for over a decade.

Common Blue

Polyommatus icarus

The dramatic increase in numbers reported in 2009 continued with the second brood comfortably exceeding last year's total.



Photograph – Common Blue male by David Bowman

A report of one on the canal track on 17th May was slightly earlier than usual. A promising count of 17 on the south bank of Butchersfield Tip on 25th May in cloudy conditions was followed by ten on the Butterfly Transect two days later. June opened with 27 on Butchersfield Tip, during the early evening of the 1st and 16 were found on the north-east corner of No.3 Bed on the 3rd. The only subsequent sighting was one on 30th June, until the first of the second brood emerged on 28th July. Numbers increased during August, when a series of surveys between the 15th and 21st produced the exceptional total of 201. No.1 Bed and Butchersfield Tip were particularly productive, with 33 on Butchersfield and no less than 146 on No.1 Bed. The north bank of No.1 Bed proved surprisingly attractive, with newly emerging vegetation in the area of the recycling plant attracting 45. In contrast, No.2. Bed held far fewer than in 2009 and only one was reported from No.4 Bed. Sightings continued until the end of August, with 59 still present on 31st. There were no further records.

Holly Blue

Celastrina argiolus

The reappearance of this species after a blank year in 2009 was encouraging, although this is always an uncommon butterfly at Woolston Eyes. There were four records, the first on 20th June when a faded individual from the first brood was found on the north bank of No.2 Bed. The other three sightings were between the 2nd and 15th August, one on No.1 Bed, one on the canal track and one north of the river.

Red Admiral

Vanessa atalanta

There was spring records on 17th March and 23rd May, both from No.3 Bed, but it was the end of June before butterflies were seen on a regular basis. No more than two were found until the end of August, when a count of ten was the highest of the year. Of these, five were on the north bank of No.1 Bed. Up to four were reported until the end of September and there were three sightings during October. The final record was one on No.3 Bed on 1st November. The year maximum of ten was about average for this species, although well down on the 28 found in 2009.

Painted Lady

Vanessa cardui



Photograph – Painted Lady by David Bowman

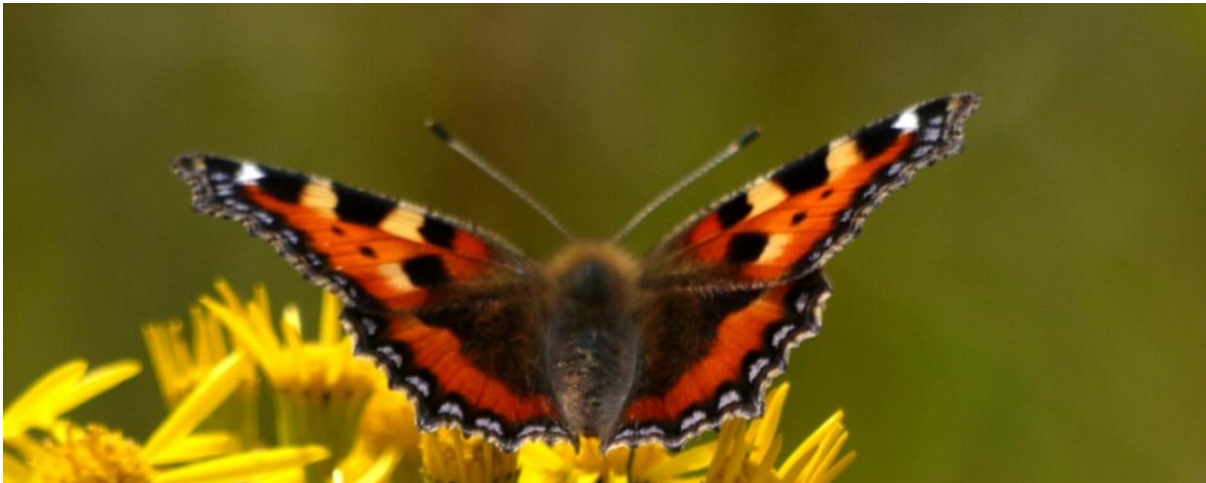
After the record numbers seen throughout Britain in 2009, there were only two sightings at Woolston Eyes this year. The first was found on No.1 Bed on 19th August and the other was feeding on Hemp Agrimony in the centre of No.3 Bed on 27th August.

This was unsurprising in view of the weather conditions and none of the migrant species were seen in good numbers.

Small Tortoiseshell

Aglais urticae

One of the highlights of the year was the recovery of this species after a continuous decline between 2004 and 2009, during which period maximum numbers fell from 150 to 17. The first report was on the 3rd April and there were frequent sightings of up to ten until the end of June.



Photograph – Small Tortoiseshell by David Bowman

The summer brood emerged at this time and numbers increased in the first week of July. Two visits on 8th and 11th July produced the highest total for many years, when 55 were found across the Reserve. Thereafter, no more than two were seen until mid-August when numbers again began to increase. A series of visits to all areas of the Reserve between 27th August and 2nd September produced the remarkable total of 121, with the north bank of No.1 Bed, the newly excavated area of NO.4 Bed near the Sandpit Pond and the paths to the south of the Loop proving particularly attractive, with totals of 29, 23 and 13 respectively. The most productive areas were those where there had been recent disturbance as a result of ongoing operation on the site. Sightings continued until September, when six were on the Transect on the 9th and three on the 16th. The reasons for the partial recovery are no doubt complex but it seems possible that the parasitic fly (*Sturmia bella*), thought to be associated with the species' decline, was adversely affected by the harsh winter of 2009/10. Given the recurrence of exceptionally cold weather in December 2010 it will be interesting to monitor numbers in 2011.

Peacock

Inachis io

Although not seen in the same numbers as in 2009 this was still a successful year for this species. Two on 19th March were the first and the spring maximum of 54 was reached on 22nd April. Thirty were present at the end of April and similar numbers were recorded up to 9th May. Butterflies were less in evidence thereafter with very few seen during June and early July. Mid-July saw the

emergence of the summer brood, with 27 on the 19th and 40 on the 23rd of which 20 were on Buddleia on the south bank of No.3 Bed.



Photograph – Peacock by David Bowman

By the 2nd August 67 were present, with no less than 50 on the south bank of No.3 Bed. Numbers peaked in mid-August when a series of visits between the 15th and 21st produced a total of 207. Of these, half were on No.1 Bed. Although far less than the 2009 maximum of 500 this is still an excellent count.

As always, numbers fell dramatically as August advanced and only 19 remained by the month end. There were only two further records when two were seen on both 2nd and 22nd September.

Comma

Polygonia c-album

This species was less numerous than in 2009 but nevertheless enjoyed a reasonable year, with butterflies recorded in small numbers from April to the end of September. The first was noted on 10th April and three were on No.3 Bed on 21st. This was the largest post-hibernation count and none were seen from 22nd May until emergence at the end of June.

In early July there were reports of up to six on the Transect and seven on the Loop paths and the highest count of the year was 12 on the 19th and 21st July. Small numbers were regularly reported throughout August and six were present around mid-month.

September began with one on No.3 Bed on the 2nd but none were subsequently recorded until eleven were found on the Transect alone on 22nd September. The final sighting was of five in the same location on 26th September.



Photograph – Comma by David Bowman

Speckled Wood

Pararge aegeria

Over the past four years there has been an annual increase in numbers at Woolston Eyes, from 56 in 2006 to 101 in 2009. Although this trend did not continue this year, butterflies were present in good numbers during August. The season began with three on 15th April and although there were frequent sightings, there were no counts in excess of 5 until August. Seven were found on the Transect on 2nd August and a series of visits around mid-month produced a total of 48. The maximum for the year was 62 in the last few days of August and this was by far the highest count in Cheshire this year. Sixteen were reported on 5th September and up to three were present until the end of the month. There were no subsequent reports, although an unidentified butterfly seen at distance on 10th November was suspected to be of this species.

Gatekeeper

Pyronia tithonus

This butterfly of high summer is usually present in large numbers. There were two early reports on 27th and 30th June and typically numbers then increased rapidly. Due to a lack of favourable weather during July it was not possible to undertake any detailed surveys of the whole Reserve. The impression however was of much reduced numbers compared with 2009 and the maximum appeared to be about 500, with the majority on No.4 Bed. Butterflies remained reasonably plentiful throughout August and 128 were counted between the 15th and 21st. This was the last significant total and a rather disappointing year ended with a count of seven on 31st August. This year's figures were considerably less than in 2009 when over 1300 were recorded, but Woolston Eyes remains the most productive site in Cheshire for this species.



Photograph – Gatekeeper by Chris Monks

Meadow Brown

Maniola jurtina

A single on 10th June was the first record, but few were noted until the last day of June when 78 were on Nos.1 and 2 Beds. Poor weather in July meant that the usual increase did not take place and the highest total for the month was 79. It was not until mid-August that numbers reached their peak and the year maximum of 245 between the 15th and 21st was slightly down on the 2009 total of 335. This year butterflies were concentrated on No.1 Bed and Butchersfield Tip which together held over 200. As always numbers fell markedly towards the end of August, although 96 were still present at the end of the month. There were few sightings thereafter, although there was a report of small numbers on the unusually late date of 26th September. Given the poor conditions in July, numbers held up surprisingly well.

Dave Hackett