

WOOLSTON EYES NATURE RESERVE

BUTTERFLY REPORT 2009

It is now eight years since the first tentative attempts to systematically survey butterflies at Woolston and this year produced the highest totals yet for many species. In cases where there has been expansion of range in recent years (Gatekeeper, Speckled Wood and Small Skipper) it is reasonable to talk of record totals but for species where this has not been the case, the most that can be claimed is that totals are the highest during the last eight years. Given this distinction, 2009 saw record or excellent counts of many species. This is perhaps surprising as the weather, though an improvement on the two previous years was by no means the "Barbeque Summer" promised by the Met. Office! There was above average rainfall in the summer months but between the rainy spells there was a good deal of warm and sunny weather.

An early report of a Peacock on 11th March was the first sighting of the year. The fine weather during April then proved beneficial to Orange Tips, which were seen in excellent numbers, with a maximum of 34 on the Reserve itself and a further 17 on the river. The end of May saw a remarkable influx of Painted Ladies. A nationwide census of these migrants was organised by Butterfly Conservation but due to holidays, it was not possible to arrange a coordinated count at Woolston. Nevertheless there were some excellent counts from the Reserve.

High summer produced some exceptional counts and the importance of Woolston Eyes was confirmed by the fact that the Reserve produced highest counts, in Cheshire, for five species. Of particular note were; 49 Small Skippers, 127 Large Whites, 230 Green-veined Whites, 137 Common Blues, 500 Peacocks, 45 Commas, 101 Speckled Woods and 335 Meadow Browns. Gatekeepers continued their revival and a total of 1355 was the second highest ever recorded. In contrast to these excellent totals some species fared badly. Few Brimstones were seen, the decline in Small Tortoiseshell continues and there were no sightings of Holly Blue.

As a result of mild conditions into late autumn, sightings continued into mid-November. On 28th October alone four species were reported, with up to 4 Red Admirals, a Brimstone, Painted Lady and a Speckled Wood. A remarkable collection for such a late date. The year ended with a sighting of what was thought to be a Red Admiral on 5th December.

The Butterfly Transect has now been monitored for four years and as always, thanks are due to Les Jones and David Bowman for being prepared to walk the route in my absence. As a result, only two weeks were missed during the season, both as a result of unsuitable weather conditions.

In last year's Report, mention was made of the deteriorating condition of the path around No.4 Bed. With the help of Brian Ankers this has now been cleared, to the benefit of Gatekeeper and Meadow Brown in particular. It is now a pleasure to walk this part of the Reserve without having to battle through brambles and nettles! Many wardens and permit holders have submitted records both verbally and via the logbook. These are always helpful, especially as regards early and late sightings and Michael Miles' counts of Orange Tip were particularly significant.

The Annual Report of the Cheshire and Peak District Branch of Butterfly Conservation provides the background to the Woolston records and I must make a special mention of Barry Shaw and Stu Barnett who provided an informative display at our Open Day.

INDIVIDUAL SPECIES REPORT

Small Skipper

Thymelicus sylvestris

None were reported until 24th June, fairly late for Woolston, when three were found on No.1 Bed. The beginning of July saw an increase in numbers with 10 present on the 1st, of which eight were on No.1 Bed. A series of counts during July resulted in a minimum of 49 across the Reserve, a total that comfortably surpasses the previous record of 37. Of these, 20 were on No.1 Bed and 12 on the canal track, where a new colony was located between the first and second barriers. It was encouraging to find small numbers in other parts of the Reserve where they had not previously been recorded, including the area to the east of the Loop of No.4 Bed. The last sighting of a very successful year was on 5th August.

Large Skipper

Ochlodes sylvanus

In contrast with the previous species, 2009 was a fairly average year for Large Skippers. Maximum counts rarely exceed ten and this year was no exception. Butterflies were recorded between 11th June and 15th July, with the highest count of five on 24th June. As usual, most sightings were from No.1 Bed and the canal track but two reports from No.2 Bed and one from No.4 Bed were encouraging. Both species of Skipper tend to be ignored by most observers, probably because of their inconspicuous nature and more records would be helpful.

Brimstone

Gonepteryx rhamni

After the previous year's disappointing performance, an early sighting of a female on the canal track on 29th March raised hopes of a better year for this attractive butterfly. However, there were only three other reports, all from the summer brood. One was found on No.3 Bed on 6th August, where there was a further sighting on 11th September. The year ended with an unusually late record, when one was seen on No.2 Bed on 28th October.

Large White

Pieris brassicae

What proved to be a spectacular year started early, when five were found on 22nd April. Reports of up to three continued up to 20th May, including a pair found mating on No.3 Bed on 19th May. The second emergence began with two present on 1st July and six were seen around mid-month. This pattern is fairly typical for Woolston and it was a major surprise when, in early August, huge numbers suddenly appeared. A detailed survey between 2nd and 11th August produced a total of 127,

which compares with a previous maximum of 14 during the past eight years! The largest concentrations were on Butchersfield Tip, where 62 were counted and Nos.1 and 2 Beds, each held about twenty. This emergence coincided with large numbers of Small and Green-veined Whites. Butterflies disappeared as quickly as they had appeared and the only other reports were of four on 27th August and a final sighting of one on 6th September.

Small White

Pieris rapae

The year started with an early sighting of one on 2nd April and small numbers were noted until the end of May, with a maximum of seven. None were then reported until 8th July when about ten were seen. By mid-month, numbers had increased to about 30 but the beginning of August saw a total of around 100 on the Reserve. This is very similar to the maximum for 2008 but there large counts after 11th August. The only other reports were of seven on 27th August, four on 9th September and a final sighting on 18th September. In summary, an excellent year but well short of the 2006 totals, when 162 were recorded.

Green-veined White

Pieris napi

The first report was typically in mid-April, with one on No.3 Bed on the 14th. About 17 were present by the 22nd April, increasing to nearly 50 by the 29th. Butterflies continued to be seen in good numbers into early May, with over 30 recorded on the 7th. Thereafter, there were only occasional sightings until the emergence of the second brood in early July. Six were noted on 8th July and by mid-month numbers had risen to around 80. As with the two previous species, the maximum count occurred during the first week of August, when an estimated 230 were present. This is far in excess of any total during the past eight years, when numbers never exceeded 50. There followed a rapid decline and by 29th August only 19 were found. This proved to be the last record of the year.

Orange Tip

Anthocharis cardamines

This attractive butterfly benefitted from a period of fine weather during April and was seen in record numbers. A sighting on No.3 Bed on 1st April was the earliest in Cheshire and an auspicious start to the season. No further reports were received until the 12th however, when twelve were found on No.2 Bed. A further seven were on the canal track on the 20th and 15 on No.3 Bed on the 22nd. This total of 34 is the highest in recent years and an additional 17 were seen on the river immediately to the north of the Reserve on the latter date. April ended with 16 on the 29th but numbers decreased during May, until the final sighting on 31st. Not only was this an excellent year in terms of numbers seen but the flight period was also the longest in recent years.

Small Copper

Lycaena phlaeas

A first report of one on 7th May was typical and there were two further May records, with single butterflies seen on Nos. 2, 3 and 4 Beds. None were then seen until the emergence of the second brood at the beginning of August, when three were found on the 5th. A detailed survey between 2nd and 11th August produced a total of seven but the highest count of the year was on 19th August when eleven were found, including eight at the east end of No.1 Bed. As one was also known to be present on No.4 Bed, the maximum total for the year was an excellent 12, just two short of the 2007 record. The final report was of one on No.1 Bed on 27th August.

Common Blue

Polyommatus icarus

Following the previous year's high counts this species continued to thrive and was seen in record numbers in 2009. The first sighting was on 20th May, although there had been earlier records locally. The first brood was disappointing, peaking at 11 on 11th June with ten of these on Butchersfield Tip. Few were then reported until the emergence of the second brood. A detailed survey of the whole Reserve, in the first week of July, failed to find a single butterfly but by the end of the month small numbers were seen, with nine present on the 22nd. In common with other species, the first week in August saw huge numbers appear and a series of visits between the 5th and the 13th found a total of 137, the highest in Cheshire this year. The distribution of this species was interesting. No.1 Bed and Butchersfield Tip held 53, a similar total to 2008, whilst there was a large increase in other areas of the Reserve. In particular, 46 were found on No.2 Bed with the north bank and centre bund especially productive, with counts of 32 and 11 respectively. The northwest corner of No.3 Bed attracted eight and the centre path through No.4 Bed 17. All these latter areas were those where early signs of colonisation were noted in 2008. At Woolston maximum numbers usually occur in early June but surprisingly this year the second brood was much more numerous than the first. As August progressed there was a marked decline. For example, none were found on the centre path through No.4 Bed on 21st August, whereas two weeks earlier 17 had been present. The last sighting was on 27th August when 15 were present. After two such excellent years it will be interesting to see whether the increase in population is maintained in 2010.

Red Admiral

Vanessa atalanta

This was another species seen in excellent numbers. None were reported in spring however and it was not until 24th June that the first was seen. Numbers rapidly increased with the result that during the first week in July, a series of visits resulted in a total of 28. This is the highest count in recent years and butterflies were distributed fairly evenly across the Reserve. Smaller numbers were present during the remainder of July and the only other significant count was of nine in the first week of August, a time when many other species peaked. Reports continued well into the autumn with regular sightings during October, when up to four were noted up to the end of the month, with three on No.3 Bed alone on the 31st. The exceptionally mild weather was then followed by heavy rainfall but a rare spell of sunshine produced a late sighting on 15th November. Even this was not the

final record, as on 5th December a butterfly, thought to be of this species, was reported from the west bank of No.2 Bed.

Painted Lady

Vanessa cardui

One of the most dramatic influxes for many years resulted in estimates of up to a billion in the UK during the summer, as innumerable butterflies migrated northwards from North Africa and Europe. While totals at Woolston were more modest, nevertheless butterflies were seen in higher numbers than in recent years. The first was observed on 1st May and a massive national influx, at the end of May, produced a total of 40 on Nos. 3 and 4 Beds alone on the 30th. Deteriorating weather meant that there were no further double figure counts until the beginning of August, when a total of 46 was found across the Reserve. This abundance proved short-lived however and there was only one further sighting on 19th August. There has long been speculation about what happens to Painted Ladies at the end of summer. The answer to this question has apparently been found, with reports to the BBC Autumn watch programme of butterflies flying out to sea in a southerly direction, a phenomenon that had not previously been observed.

Small Tortoiseshell

Aglais urticae

The depressing decline of this once abundant species continues. Sightings at Woolston reflect this trend, with reduced numbers year on year. The first reports were of two on No.3 Bed on 21st March and by early April around 15 were present. Smaller numbers were then present until 7th May, with no further sightings until emergence at the end of June. Again only single figures were noted until the second half of July, when a series of visits produced a maximum of five on the 27th. The year ended with records on 6th September.

Peacock

Inachis io

Perhaps the most spectacular event of the year was the amazing number of Peacock butterflies which appeared in early August. An early report of one on the canal track was followed by a count of 20 on 1st April and the spring high of 43 occurred on 29th April. Only small numbers were reported after 7th May and the last spring record was on 31st May. There were two sightings on 23rd and 24th June but no more were then seen until 18th July, when 11 were on No.4 Bed. The second brood emerged in enormous numbers at the beginning of August, when a series of visits between 2nd and 11th resulted in a total of 493. Additional information relating to butterflies in uncounted areas of No.1 Bed means that in excess of 500 were present at that time. This is by far the highest total recorded in recent years, more than doubling the 223 recorded in 2006 and also the highest total for Cheshire in 2009. No.2 Bed held over 200, with the north and east banks alone attracting 165! As usual, numbers declined rapidly after this peak, with only 25 present on 19th August and very few subsequent reports, the final one being four on 6th October.

Comma

Polygonia c-album

This was another species to enjoy an excellent year, with a total of 45 recorded during July. The year began with one on 21st March and by 2nd April five were on the Butterfly Transect. Small numbers were reported until 7th May and there was then a gap until 1st July. This emergence was particularly numerous and 31 were found during the first week of the month. Detailed surveys in the next two weeks produced a Reserve total of 45, which is the second highest recorded in recent years and by far the best count this year for Cheshire. Of special interest was a count of ten, in paths cut into areas of nettles to the south of the Loop of No.4 Bed. These had been created by our contractors to facilitate access and if they are kept open, it will enable more information to be collected about a hitherto inaccessible part of the Reserve. This area also held eight Small Tortoiseshells, which is a good count for Woolston. There were few other significant totals, with seven on 9th September the highest. The final report was of one on 21st October.

Speckled Wood

Pararge aegeria

As this species continues to expand its range in a north-easterly direction, so numbers at Woolston continue to increase. The first of the year was noted on 12th April at the entrance to No.3 Bed, a favoured location. By 22nd April 45 were present, with a further eight on the river. Following this spring maximum, smaller numbers were reported until 7th May when 29 were recorded. Few were seen thereafter until 11th June. Three on this date and single figure totals until 1st July were followed by an emergence in mid-July, which began with 16 on the eastern half of the Reserve. A total of 69 was recorded in late July but peak numbers occurred during August, with counts of 93 during the first week and 101 on the 27th and 29th. No other site in Cheshire came close to this total. By early September there was a reduction in numbers but 48 were still present on the 9th. There were no further high counts and the only two further reports were of singles on the exceptionally late dates of 28th and 31st October.

Gatekeeper

Pyronia tithonus

The improvement in fortunes noted in 2008 continued this year as numbers approached their 2006 peak of 1638. There were no June records this year and the first was seen on 1st July. As always, numbers increased rapidly and a series of visits during mid-July produced the excellent total of 1355. Not all these surveys were undertaken in optimal conditions and so the true total may have been even higher. As usual Woolston produced the highest count in the county. Typically there was an equally rapid decline at the end of July and in the first week of August only 185 were present. By mid month numbers were down to 19 and the last report of the year was on 29th August. It appears that work carried out on No.4 Bed to clear the perimeter paths has benefitted this species and hopefully this increase in numbers will continue.

Meadow Brown*Maniola jurtina*

An excellent year began with a sighting on 11th June and numbers increased to 35 by the end of the month. Early July saw a rapid build up and 265 were found during the first week. Numbers remained fairly stable throughout July and a series of visits, not always in ideal conditions, produced a total of 335, slightly up on the 323 recorded in 2008. Of these, about half were on No.1 Bed and Butchersfield Tip. August opened with a count of 202 during the first week, which reduced to 53 by the end of the month. The final report of a successful year was of six on 9th September. Like Gatekeeper, this species benefited from path clearing work on No.4 Bed.

Dave Hackett