

Five year study of Marbled White and Small Heath butterfly on Portway Hill Open Space, Rowley Hills.

The large expanse of open, uninterrupted grassland situated between Portway Hill and the Birmingham New Road, known as Portway Hill Open Space, is currently one of the best sites for Marbled White and Small Heath butterflies in the West Midlands. Although quite dissimilar in colour and size, both butterflies belong to the same subfamily known as the "browns", and have various grasses as the caterpillars' food plants.

The mixed fortunes of these two relatively scarce West Midland butterflies over the past five years is clearly demonstrated by this data extracted from Mike Poulton's Butterfly Transect. If this trend continues, Marbled White are set to increase and expand their range whereas the future for Small Heath at this site is a very uncertain one.

First the good news:

Marbled White *Melanargia galathea*

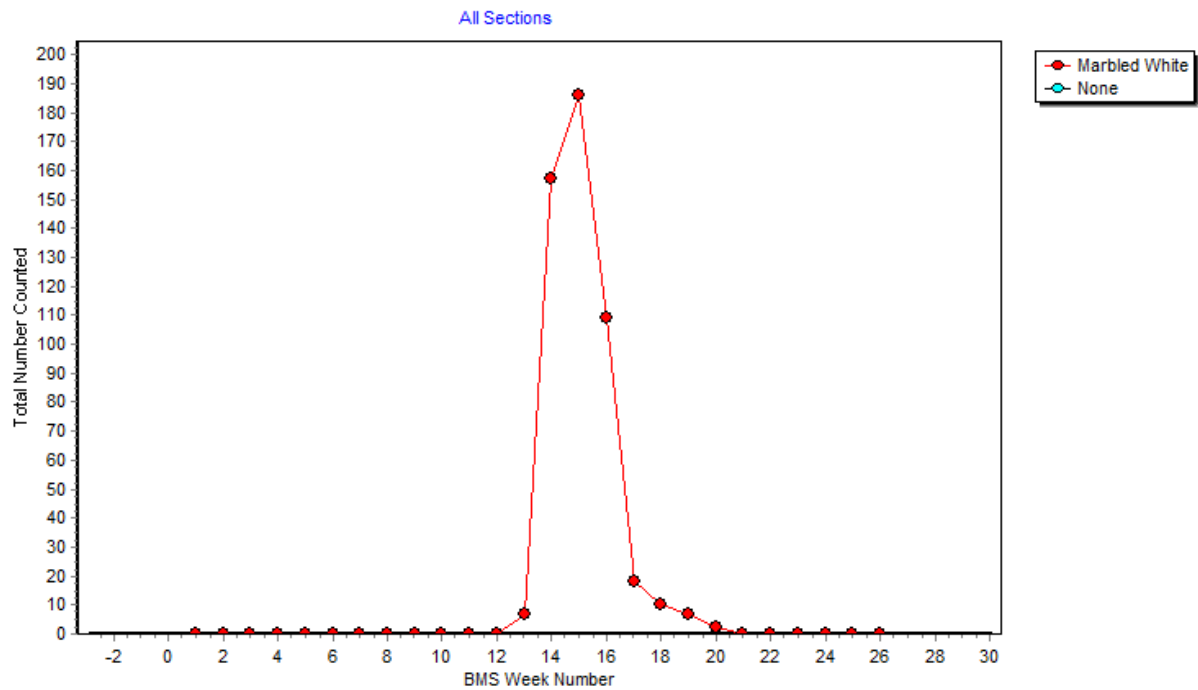
The Marbled White is perhaps the most iconic butterfly found on the Rowley Hills and appears on the logo of the Friends of Rowley Hills:



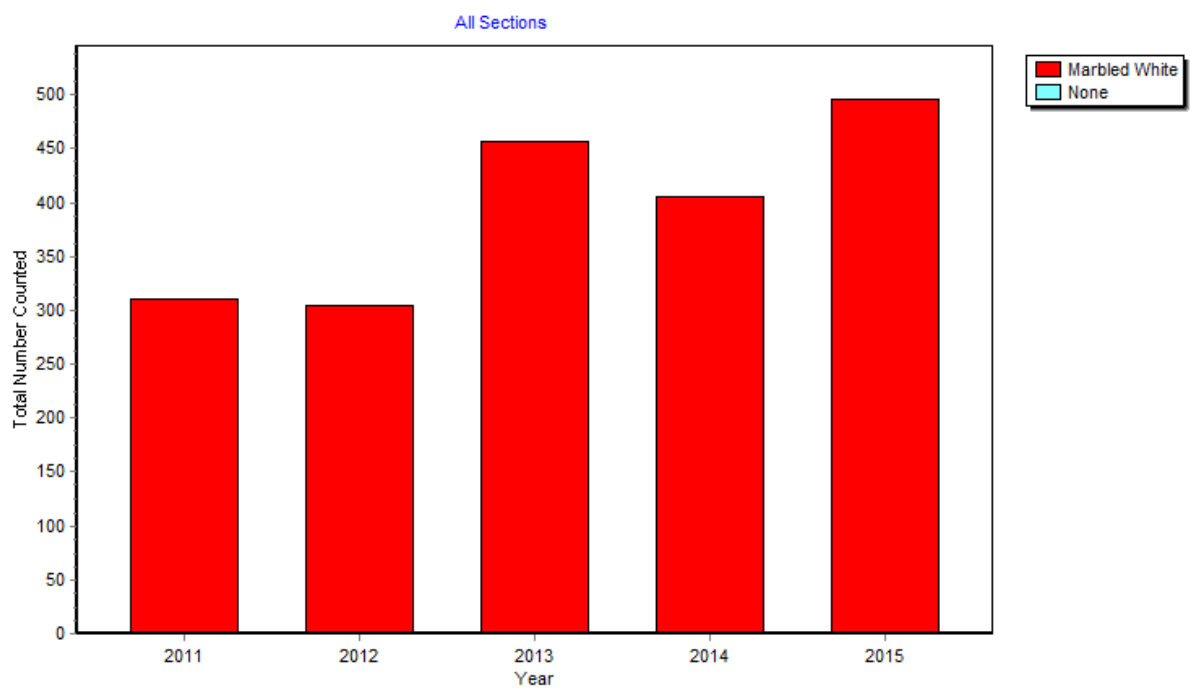
There is only one generation each year with the highest number of individuals in a typical season peaking around mid-July. The first sighting on Portway Hill in 2015 was made in Week 12 (week commencing June 24) and the last butterfly was seen in Week 19 (Week commencing August 2). The total count for the season was 487 individuals with numbers peaking in week 15 (week commencing July 8) with 186 individuals counted.

In comparison with 2011 and 2012 the last three years have seen a considerable increase in numbers, and this year has been the best year for Marbled White on Portway Hill since the transect was set up in 2011, despite many overcast days with little in the way of sunshine.

The current trend therefore is a very positive one for this butterfly as the following charts show:



Marbled White 2015 peak chart



Marbled White counts 2011-2015

The bad news:

Small Heath *Coenonympha pamphilus*

In contrast, numbers of Small Heath recorded on this site over the last two years have declined considerably and in 2015 only 115 individuals were counted compared to more than 360 in 2012.

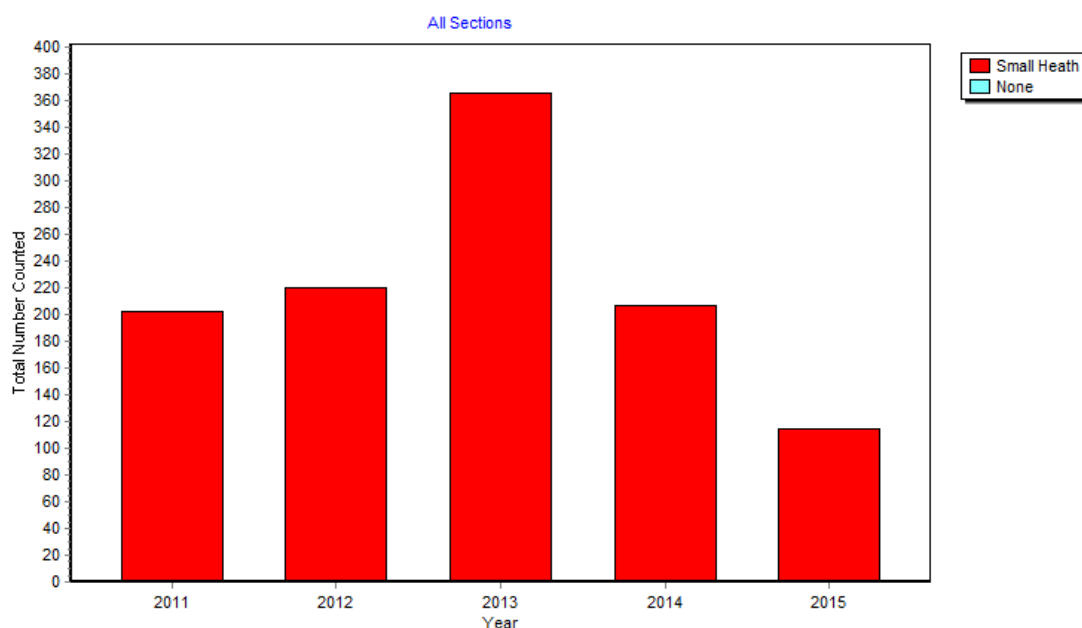
Small Heath is the smallest of our 'browns' and always settles with its wings closed, sometimes making it difficult to detect when at rest. Despite being widespread over most of the British Isles, for reasons unclear, there has been a marked decline in this species across much of its range, and in 2007 this butterfly was designated as a UK BAP Priority Species by DEFRA (research only).

In 2015 the first Small Heath was recorded in Week 8 (week commencing 20 May) and the last individual was seen in Week 23 (week commencing 2 September). Week 14 (week commencing 1 July) with a count of 29 individuals was the peak week for this species.

In previous years, individuals have been seen on the wing as early as Week 5 (week commencing 29 April) and as late as Week 24 (Week commencing 9 September) and of all the butterflies found on Portway Hill, Small Heath has one of the longest seasons on the wing.

When numbers become critically low, local extinction is a likely outcome, particularly on satellite sites such as those on the Rowley Hills where there is little likelihood of natural repopulation. Therefore, if we are to conserve this declining population of Small Heath on Portway Hill, it is imperative that the scrub hawthorn and tall ruderals are prevented from encroaching onto the open grassland habitat that is essential for many of the butterflies found here.

The chart shows the dramatic decline of Small Heath on Portway Hill over the past two years:



Small Heath count 2011-2015

Further reading on the conservation status of Small Heath butterfly can be found at:

http://www.ukbutterflies.co.uk/species_conservation_status.php

<http://butterfly-conservation.org/679-777/small-heath.html>

News

Pisces Publications have a pre-publication offer on for 'Butterflies of the West Midlands'. This book, which includes a butterfly walk on Portway Hill, can be ordered from <http://www.naturebureau.co.uk/bookshop/butterflies-west-mids-detail> and will be launched in Spring 2016.

