

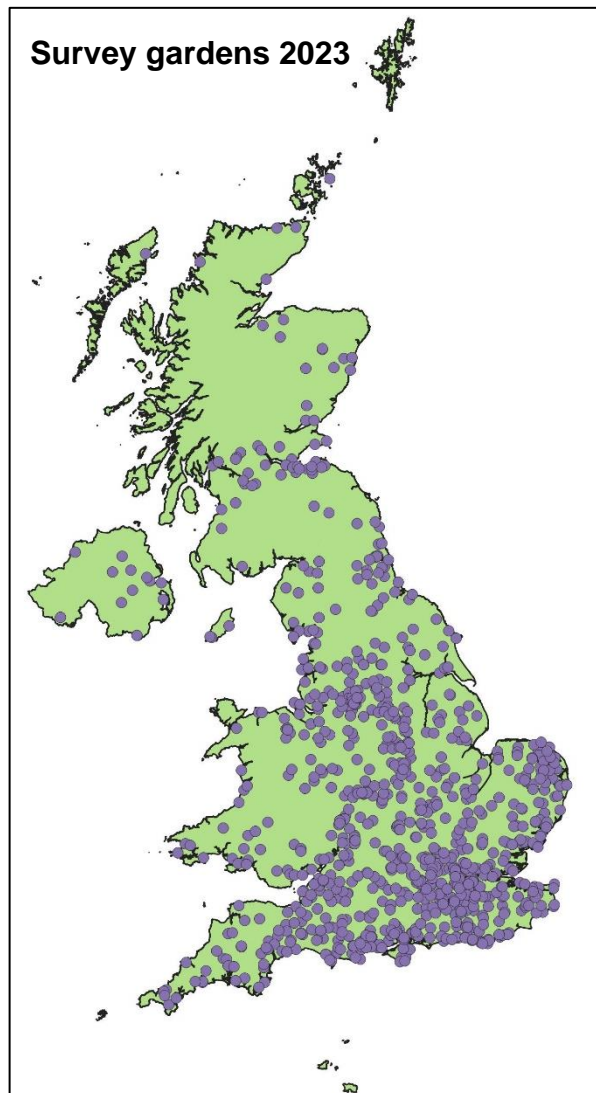


Garden Butterfly Survey Report 2023

2023 was another successful one for the Garden Butterfly Survey thanks to all those who took part. It was an average year for butterflies, but cool and often very wet weather both in spring and in peak butterfly season in July made it challenging to get out and record them. Indeed, in the poll in the August 2023 Garden Butterfly Survey newsletter, 56% of you said that the weather hadn't been suitable for surveying butterflies. Nevertheless, 78,879 records were received from 959 sites during 2023, thanks to the dedication and skill of 923 participants. This was actually slightly more records than were received from almost 1,400 gardens in 2022, which shows that participants are surveying their gardens more frequently across the year – a key aim of the Garden Butterfly Survey.

Once again it was wonderful to see people taking part in the survey right across the UK (see map right) – from the Lizard in Cornwall to Stronsay in Orkney, and from the Suffolk coast to County Fermanagh. Even with 959 gardens in the survey last year, there's plenty of room for more! So please do encourage family and friends to get involved – let's try to fill in some of the green space on the map.

As you know, it is important to record throughout the year for the Garden Butterfly Survey. Nearly 300 of you submitted garden butterfly records on 30 or more days during last year and, of those, 74 participants managed to see butterflies in their gardens on at least 100 days. Great effort! The average (mean) number of survey days was 28, but as happens most years, there were a lot of gardens with only a single survey – 206 in 2023. Both these values support the conclusion that while there were fewer gardens in total surveyed in 2023, they were on average surveyed more thoroughly than in 2022. Not surprisingly, the gardens with the greatest numbers of butterfly records were in the south, with participants near Worthing (West Sussex), Crowcombe (Somerset), near Henley-on-Thames (Oxfordshire), near Frome (Somerset) and near Andover (Hampshire) each submitting over 700 records during the year!



Species Results 2023

In 2023, your survey gardens hosted 152,092 butterflies, over 16,000 more than in 2022 despite fewer gardens being surveyed. A Small Tortoiseshell was recorded in Norfolk on New Year's Day, with Red Admiral and Peacock being added the next day by participants in Sussex and Wiltshire. The last sighting of 2023 was of a Red Admiral in Surrey on the last day of the year. The bulk of records were made, not surprisingly, during July (31% of records) and August (27%). These two months accounted for an even greater proportion of the total number of butterflies logged during 2023, with 35% in July and 30% in August. The next best month, September, accounted for a mere 13% of total butterfly abundance. The day with the highest number of records was 17 July, with 1,403 records and a total of 3,394 butterflies. However, the highest total number of butterflies reported in a single day across the Garden Butterfly Survey in 2023 was 3,587 on 29 July.

The butterflies seemed to prefer the changeable weather of 2023 to the hot, dry summer of 2022. Of the top 25 species (Table 1), 22 were recorded in a greater proportion of surveyed gardens in 2023 compared with the previous year. Only Small Tortoiseshell, Painted Lady and Ringlet were seen in a smaller proportion of gardens and these decreases were small.

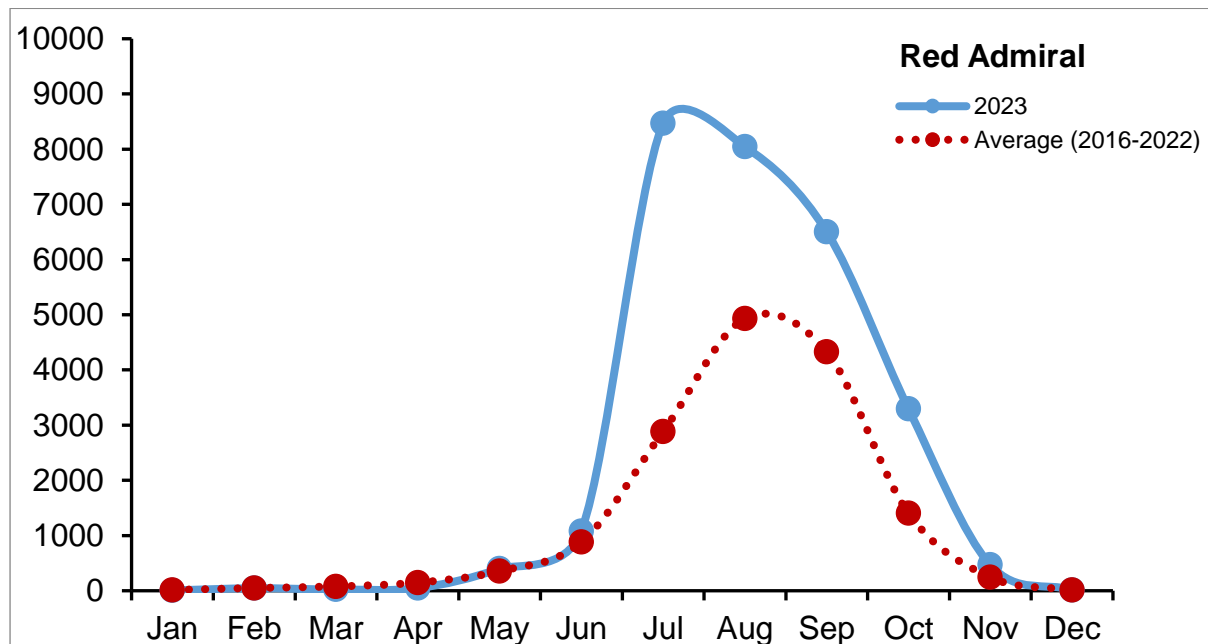
Table 1 Occupancy of top 25 species in survey gardens during 2023 and 2022

Species	Number of gardens in 2023	% gardens 2023	% gardens 2022
Red Admiral	773	81	58
Small White	677	71	65
Large White	675	70	60
Peacock	663	69	56
Holly Blue	620	65	47
Comma	576	60	50
Meadow Brown	529	55	42
Small Tortoiseshell	512	53	55
Gatekeeper	508	53	39
Speckled Wood	486	51	45
Brimstone	478	50	41
Orange-tip	452	47	43
Green-veined White	335	35	32
unidentified white	282	29	21
Common Blue	281	29	27
Painted Lady	264	28	34
Small Copper	195	20	15
Ringlet	180	19	23
Small Skipper	165	17	15
Large Skipper	101	11	9
Marbled White	81	8	8
Brown Argus	68	7	3
Silver-washed Fritillary	63	7	4
Wall	54	6	5
Small Heath	43	4	3

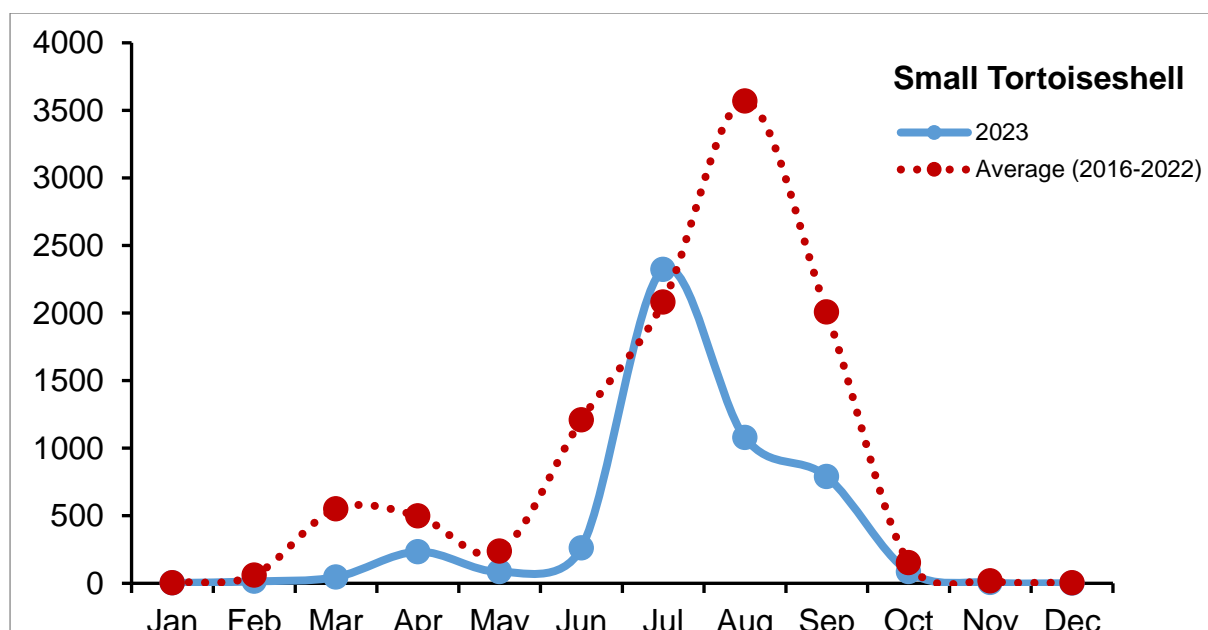
Red Admiral had an incredible year. It was the most widespread species, occurring in 81% of surveyed gardens, a huge increase on the 58% in 2022. The chart on the next page shows the monthly abundance of Red Admiral in Garden Butterfly Survey gardens in 2023 compared with the average monthly totals over the previous seven years (2016-2022). Numbers during winter and spring 2023 were close to average, but the abundance from July – October was phenomenal, likely due to a major immigration from continental Europe

supplementing home-grown individuals. As the chart suggests, there was a very rapid increase in Red Admiral numbers during the early part of July. This started around 7 July but then surged from the middle of the month, with abundance peaking on 17 July.

Although July was the peak month, the highest individual survey count of Red Admiral during the year was of 73 on 28 August at Newtonhill, south of Aberdeen. The recorder commented “12 buddleia bushes in flower which are a magnet for butterflies...There can be 10-15 butterflies on one bush. This year there is an invasion of Red Admirals. When people with dogs, children or cars go past clouds of butterflies rise up in the air. I do three separate counts one after another to check the numbers are correct.” What dedication!



At the other extreme, Small Tortoiseshell had a very poor year. Although still recorded in over 50% of gardens, the numbers seen by most participants were extremely low, as can be seen from the graph below. In recent years, butterfly enthusiasts have noticed Small Tortoiseshells entering hibernation earlier and earlier each summer, particularly in south-east England. However, while this might account for some of the reduction in abundance recorded in the second half of the year, Small Tortoiseshell numbers were well below average in the spring and early summer of 2023 too. The causes remain unclear, but the long-term decline of this once abundance garden butterfly continues apace.



It is not too late to start your Garden Butterfly Survey or to submit previous years' sightings. If you need help, please check our [FAQs](#) on the website in the first instance, or contact us via gardenbutterfly@butterfly-conservation.org.

Many thanks once again to everyone who took part in the Garden Butterfly Survey in 2023. Wishing you the best for this season and we hope you see and record lots of butterflies.



Acknowledgements

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