

BUTTERFLY CONSERVATION UPPER THAMES BRANCH

Purple Emperor (A. iris) Report for 2021

Summary- 2021

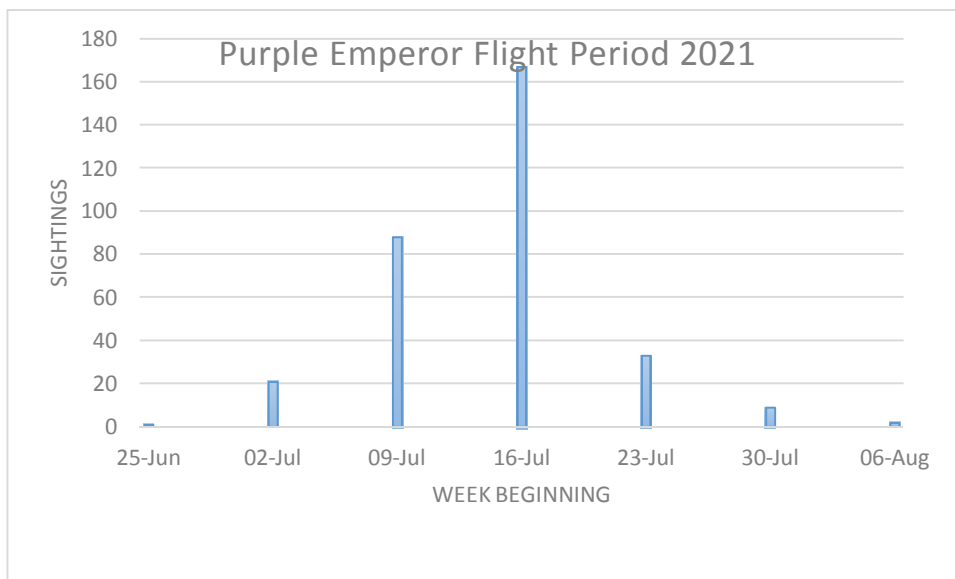
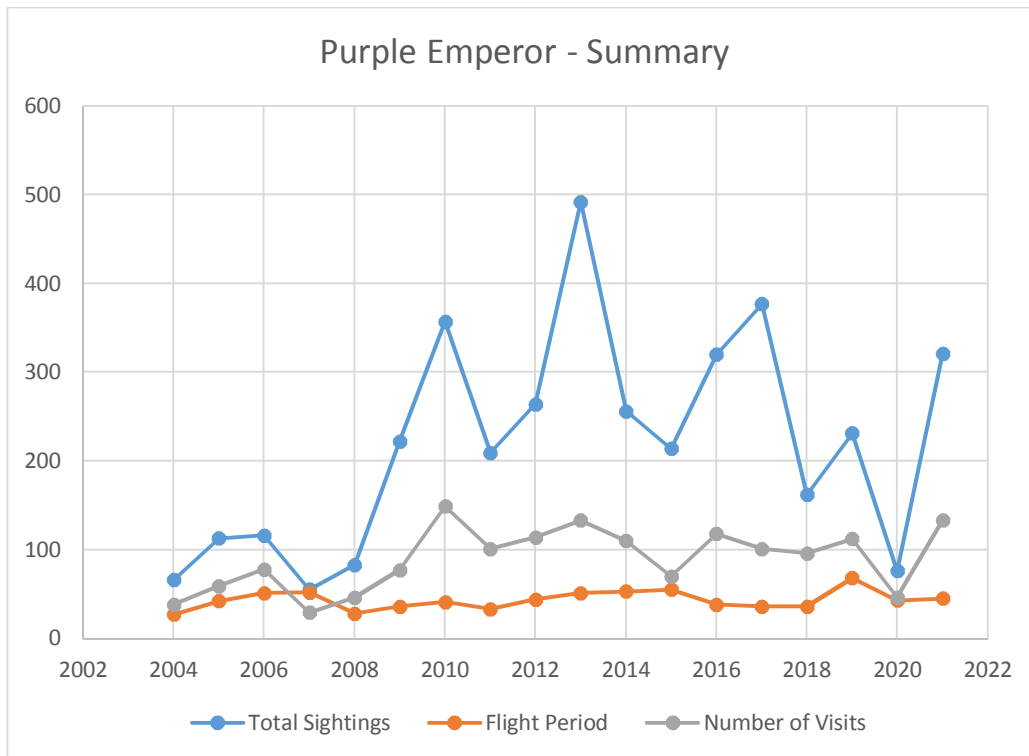
The data were obtained from various sources; sightings posted on the Butterfly Conservation Upper Thames Branch website, data from 10km square observations, sightings recorded on Irecord and separate records sent to the Species Champion. The data sources were compared and combined and any duplicates were eliminated.

As always with the Purple Emperor obtaining accurate population numbers for this butterfly is particularly challenging given its liking for forest canopies. Observing the butterfly frequently relies on it taking to the wing in suitable settings and that the insect is not backlit by the sun so that accurate identifications can be made. Sometimes the Emperor will visit the ground to take minerals or fluids from animal dung or carcasses, and in these cases it easy to identify.

Comparison with Previous Years

Year	Total Sightings	Total Visits	Date First Sighting	Date Last Sighting	Flight period (days)
2004	66	38	04-Jul	31-Jul	27
2005	113	59	27-Jun	08-Aug	42
2006	116	78	25-Jun	15-Aug	51
2007	55	29	19-Jun	10-Aug	52
2008	83	46	29-Jun	27-Jul	28
2009	222	77	25-Jun	31-Jul	36
2010	357	149	28-Jun	08-Aug	41
2011	209	101	21-Jun	24-Jul	33
2012	264	114	04-Jul	17-Aug	44
2013	492	133	01-Jul	21-Aug	51
2014	256	110	16-Jun	08-Aug	53
2015	214	70	14-Jun	08-Aug	55
2016	320	118	03-Jul	10-Aug	38
2017	377	101	17-Jun	23-Jul	36
2018	167	96	19-Jun	25-Jul	36
2019	231	112	21-Jun	28-Aug	68
2020	136	100	20- Jun	17-Aug	58
2021	321	133	26- Jun	10-Aug	45

Generally for the year 2021 sightings were well up on previous years and were the best since 2017 and the 4th best since these reports were first compiled in 2004.

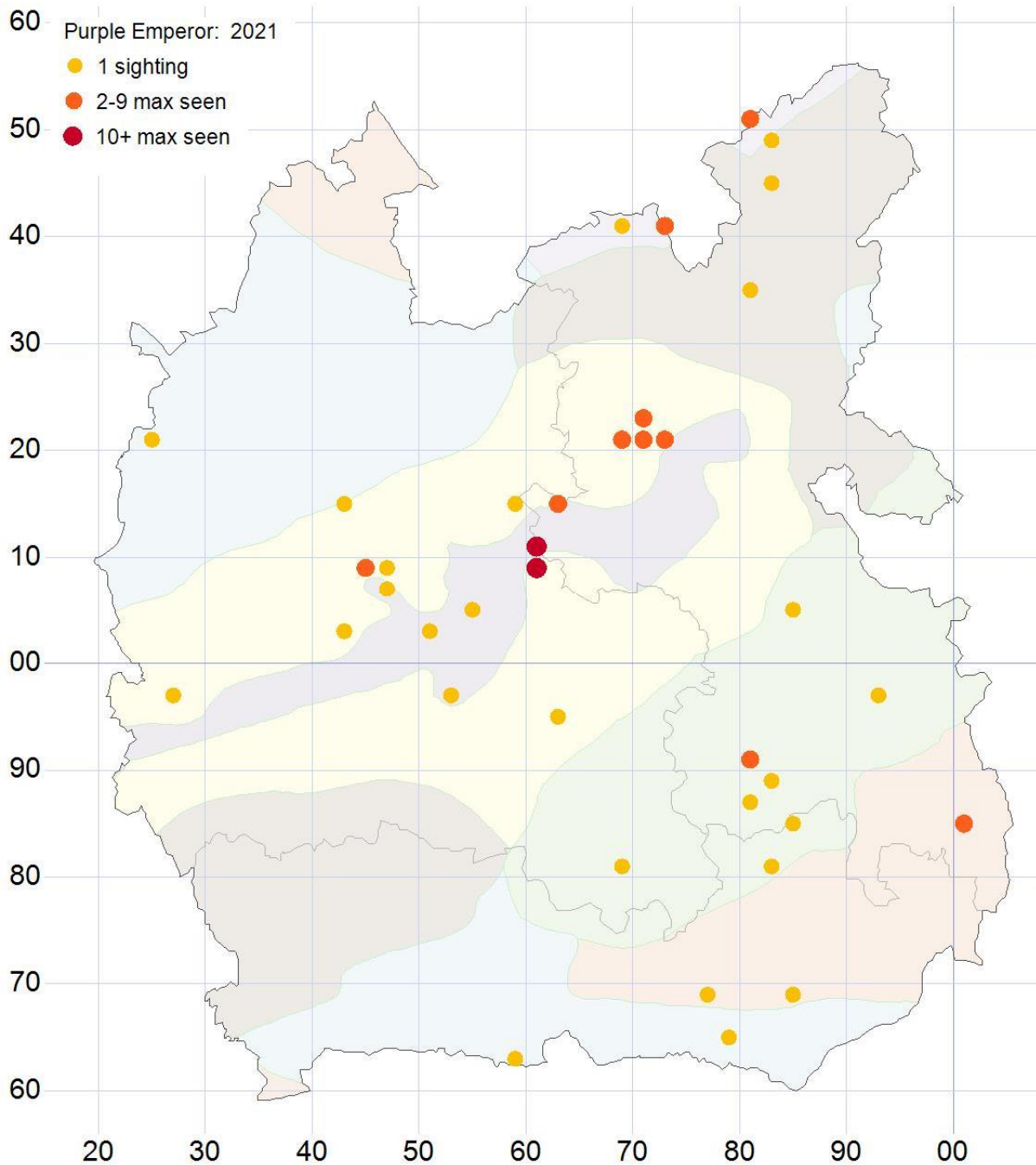


The Weather in 2021

The early months of 2021 were colder than average, particularly January and February. When April arrived the weather improved and this month was dry and sunny. Things took a backward step during May, which was particularly dull with the temperature rarely exceeding 20 degrees in the Upper Thames region. The weather picked up again in June as temperatures rose and the sunshine increased. The second half of July particularly saw sustained hot, sunny and calm weather and this fine period coincided with the peak of the sightings. This was in contrast to 2020 when the severe summer storms severely impacted the flight season.

Distribution of the Purple Emperor throughout the Upper Thames Region

The map below shows the number of sightings in 2021



The main cluster of sightings as in previous years is focused on an area due east of the Cotswolds and north west of the Chiltern Hills. The main stronghold of the Purple Emperor in the Upper Thames region is Bernwood Forest and its nearby satellite woodlands.

There were also clusters of sightings around Salcey Forest and the Leckhampstead area in north east Buckinghamshire and in north Berkshire/ south Buckinghamshire at Moerend Common, Homefield Wood and the Bisham Wood area. Many sightings were singletons, some notably distant from other sightings. Two particular examples were in west Oxfordshire- Foxholes Wood

(SP25862087) and Eaton Wood (SU260964) and another in south Berkshire at Paices Wood Country Park (SU58706394). These appearances were at least 15km from other sightings. This may indicate the presence of a small colony of the butterfly or strays setting up or searching for new territories. Eaton Wood recorded several sightings in 2020 so this probably indicates that there is a relatively isolated colony in this location.

Acknowledgements

Thanks to all the people who sent in sightings. A large number of visits and sightings as always were made by Mick and Wendy Campbell and a special thanks to them for their dedication, expertise and advice. Many thanks also to Peter Ogden who helped collate and process the data.