

Clausementum Fen
2021 Butterfly Survey: 2nd summary report

Introduction

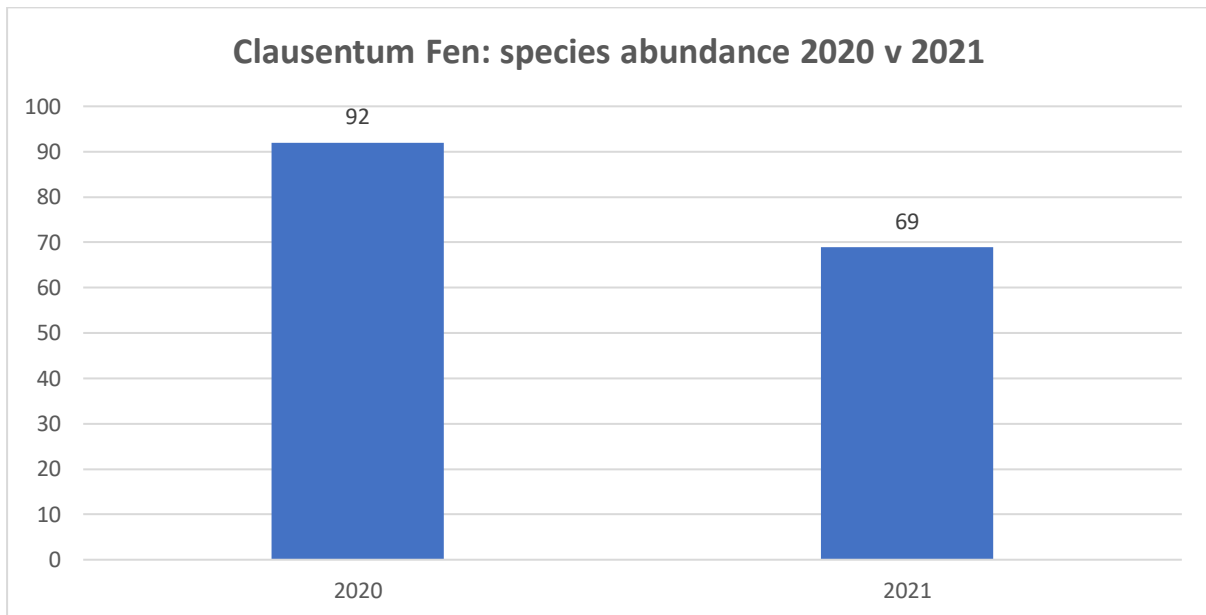
1. Clausementum Fen lies alongside the River Itchen and has chalk stream, fen and woodland habitat. It is a Site of Importance for Nature Conservation and forms part of the western boundary of the South Downs National Park. The Clausementum Fen Conservation Group was founded in 2017 by local volunteers to study the site and help manage it for biodiversity.
2. In 2019, two volunteers agreed to undertake regular surveys of the butterfly fauna on the Fen. The surveys commenced in 2020 and the results form a baseline of butterfly species and abundance against which changes can be monitored over time. This report summarises the results of the 2021 surveys.

Surveys

3. Six surveys were completed between April and September 2021:
 - i. April (Clive Wood)
 - ii. May (CW)
 - iii. June (Nick Radford)
 - iv. July (NR)
 - v. August (NR)
 - vi. September (CW)
4. All surveys used the standard Butterfly Conservation transect methodology. This involves walking a set route at a slow pace within certain minimum weather parameters and counting the number of each species seen within a 5m³ imaginary box. Surveys took place each month from April to September around 7-10 days apart from each other where possible.
5. 2021 was a below average year for butterflies in Hampshire. Records from 142 transects across the county showed a 12% fall in butterfly abundance compared with 2020. And 2020 was itself a fairly average year. Unusually persistent cold and wet weather conditions in April and May hindered the development of spring and early summer species. The conditions also meant that the minimum weather parameters were rarely met in these months, including at Clausementum Fen.

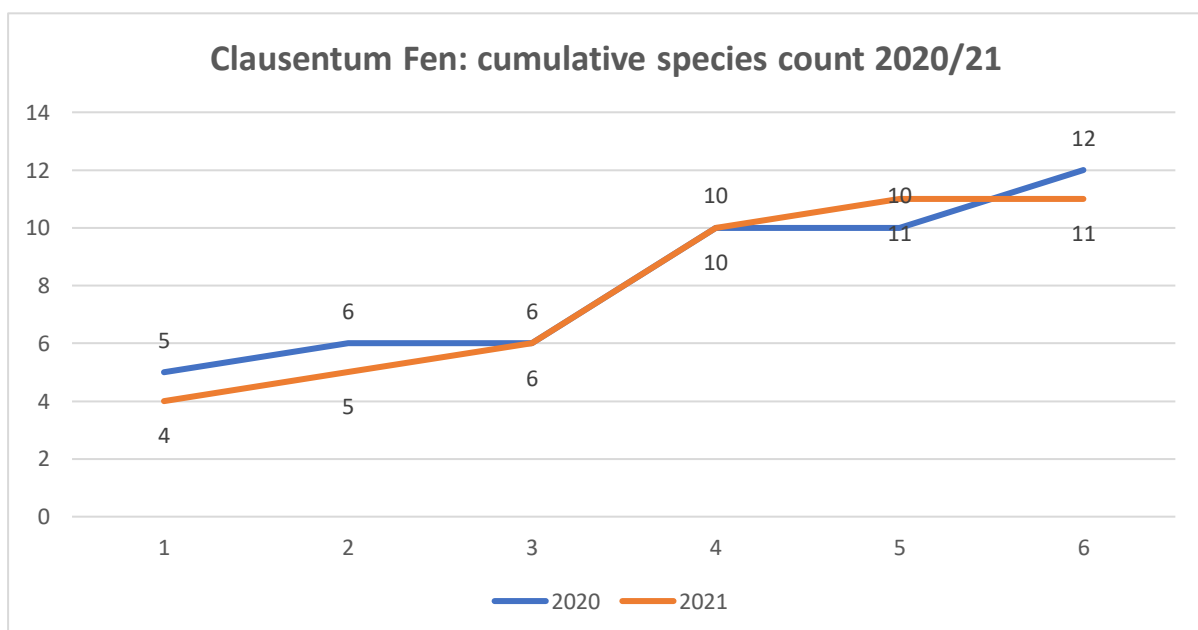
6. Survey Findings

A. The total number of butterflies seen of all species:



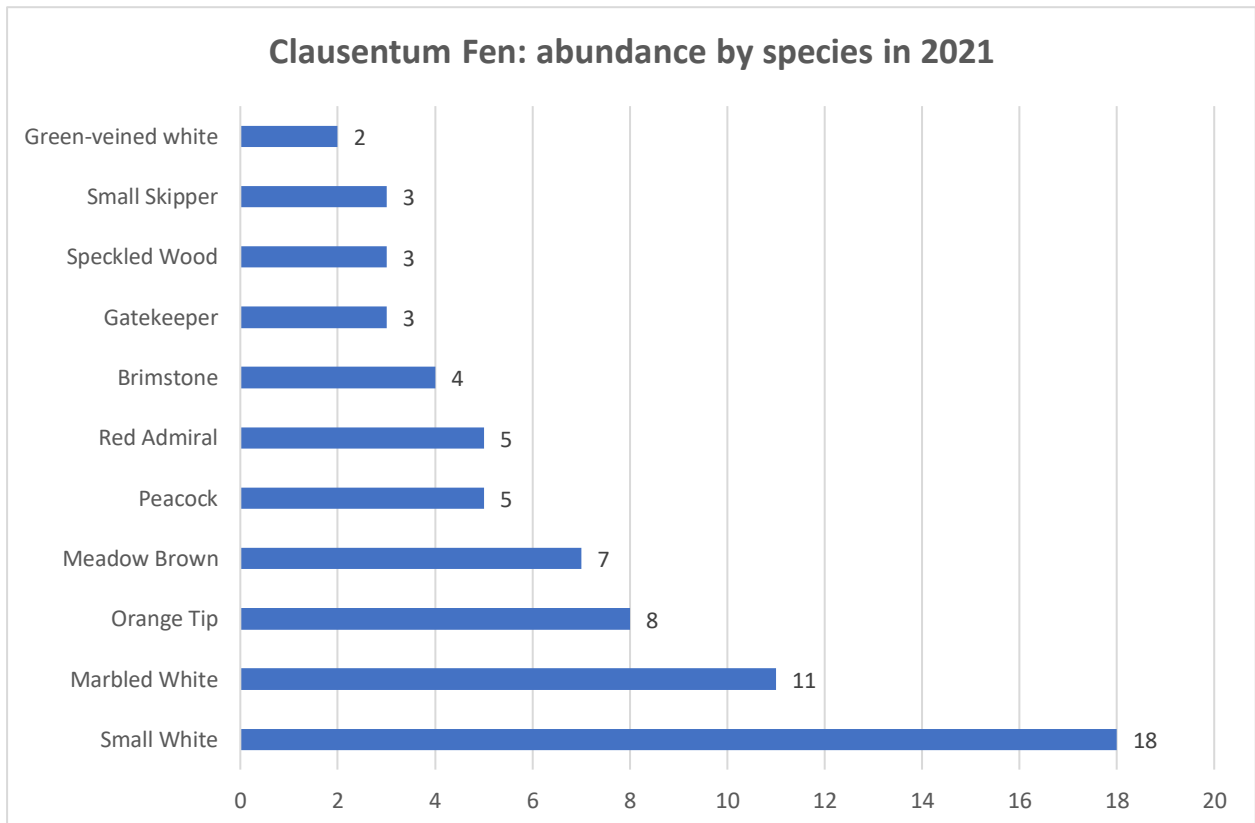
6.1 Table A shows a 25% decline in total butterfly abundance in 2021. Apart from the cold start to the butterfly season, the main reason for the overall decline was that only five **Peacock** butterflies were seen in April 2021 compared with a note-worthy count of 20 in April 2020. Despite the conditions, the early season **Orange Tip** held up well with eight seen on transect compared with 10 in 2020.

B. The cumulative number of butterfly species recorded:



6.2 The year saw a similar trend of cumulative species counts with one fewer species recorded on transect in total (11 v 12). Both **Marbled White** (11) and **Small Skipper** (3) were recorded for the first time whilst **Large White**, **Comma** and the increasingly uncommon **Small Tortoiseshell** failed to make an appearance on transect this year.

C. Abundance by species:



Top Five butterflies	Ranked Position	
	2021	2020
Small White	1	2
Marbled White	2	n/r
Orange Tip	3	5
Meadow Brown	4	7
Peacock	5=	1
Red Admiral	5=	6

6.3 Table C shows the relative abundance of each species recorded in 2021. The only surprising record is the presence of the **Marbled White**. This beautiful butterfly

enjoyed a reasonable 2021 across Hampshire but favours open downland habitat rather than wet fen meadow. It ranked second in 2021 but may not feature in 2022!

Summary

7. Some 69 butterflies were recorded of 11 different species during the six surveys. Numbers were boosted by a surprising count of 11 **Marbled White** in July and eight **Orange Tip** in April and May. It was encouraging to record three **Small Skipper** on transect. This adaptable butterfly can occupy small patches of suitable habitat including woodland clearings and open ground.
8. The total count was lower than 2020 due to the persistently cold weather conditions early in the year. Only 20 butterflies were recorded in April and May 2021 compared to 49 in the same months in 2020. Once again **Common Blue** and **Holly Blue** were not seen on transect.

Future surveys

9. Further surveys will be organised for 2022. The ongoing management work over the site should be positive for butterflies and other invertebrates.