Small Heath *Coenonympha pamphilus*

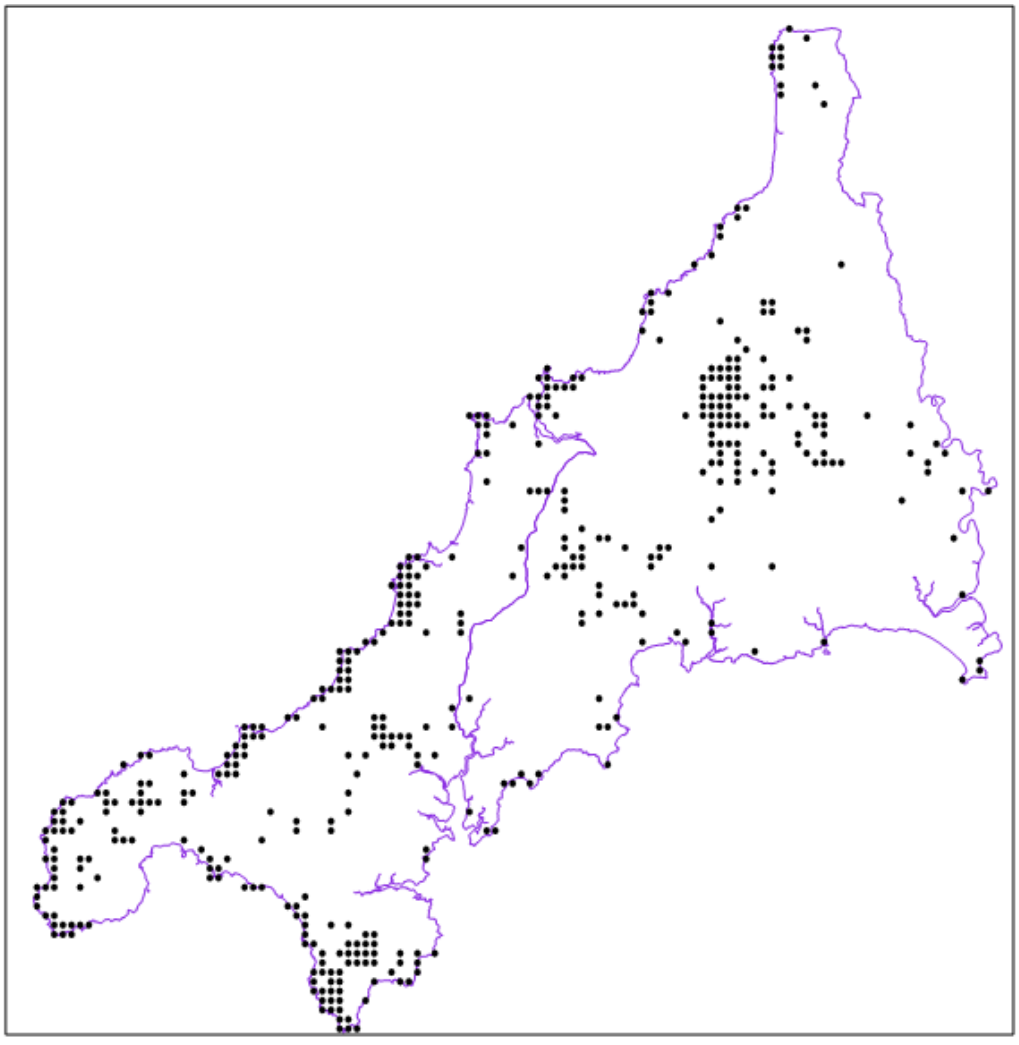
Summary Compiled by Jerry Dennis, October 2022

The Small Heath is a Section 41 Species of Principal Importance with Vulnerable status on the 2022 UK Red List. Recent Cornish analysis indicates 11% decline in occurrence in the last 20 years.

The butterfly lives in grassy areas where there is short sward and abundant fine-leaved host plant grasses such as Sheep's Fescue or Bristle Bent. The Small Heath needs sheltered stony paths and tracks for sun-basking and these are also places where males congregate to attract and compete for females.

The main issue with this species is the current low level of routine monitoring. It is likely that the best Cornish Small Heath sites are not yet identified or routinely surveyed and more frequent visits to selected sites will be required going forward.

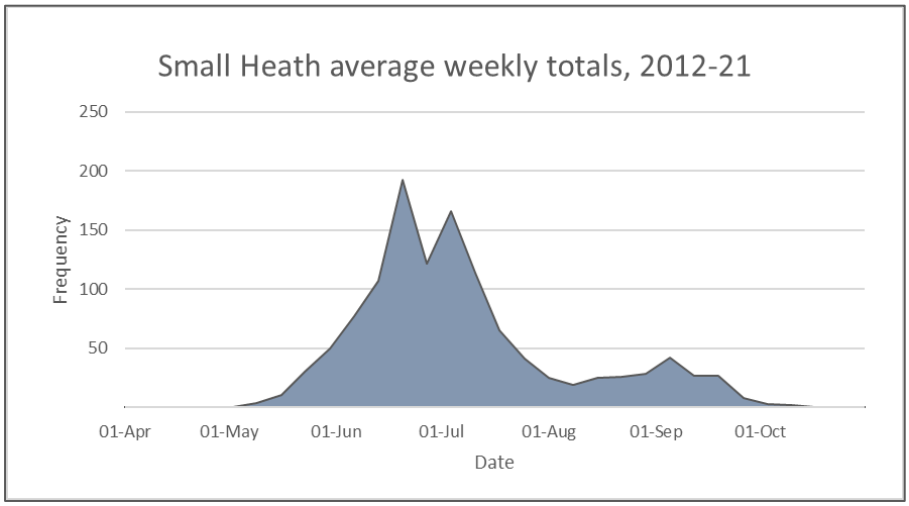
Recorded locations



The 1km squares (447) with records in the last ten years are highlighted. There are extensive sites on the Lizard peninsula and in Penwith. Good numbers of colonies are found along the north coast and at sites with unimproved land in the central spine of the county including the Camborne area, mid Cornwall Moors and the Bodmin area. There are only isolated colonies along the south coast.

1. Flight period

Average weekly totals for years 2012 to 2021are shown graphically. There are two broods per year, the second being a much smaller partial brood. The butterfly overwinters as a caterpillar but can do so in several of its five instars. This flexibility provides a complex first brood flight period that typically has two or more peaks, each representing the emergence pulse of a different winter larval instar. Second brood butterflies appear in August and September.



Top Cornish sites

Top recorded sites 2018 - 2022	2018	2019	2020	2021	2022	5yr average
Goonhilly Downs	133	178	123	1131	908	495
Porthgwarra	129	146	114	79	79	109
Upton Towans	103	120	119	125	74	108
Penhale - Gear Sands	213	61	166	62	21	105
Botallack	197	40	72	72	7	78
Cudden Point	51	27	89	101	42	62
Pentire	56	59	70	27	48	52

The top sites tabulated are based on numbers recorded in the last five years. The 2022 totals are provisional. The principal site is Goonhilly Downs and a detailed map showing five year totals by 100m square is shown overpage. An informal survey route, North Goonhilly Loop, was established at which weekly surveys were carried out in 2020 and 2021. Totals recorded were c. 1,100 in the two years. Other areas of Goonhilly Downs, with the exception of the Erisey Barton transect, were surveyed on an ad hoc basis.

At the remaining sites, all of which are coastal, weekly surveying is available at Porthgwarra, Upton Towans and Pentire as there are active transects being walked.

There are 139 1km squares with no data in years 2000 – 2017 and for which there are recent records. Amongst these Portmellon Valley (SX0043) and Emblance Downs (SX1277) are the most significant.

There are 206 1km squares with no data in the years 2018 – 2022 and for which there are records in years 2000 – 2017. Most significant of these are Rock dunes (SW9275) and Watch House Field (SX4348) that should be visited to see if colonies remain.

Goonhilly Downs	Small Heath	2017-21 data	Total 1,583

