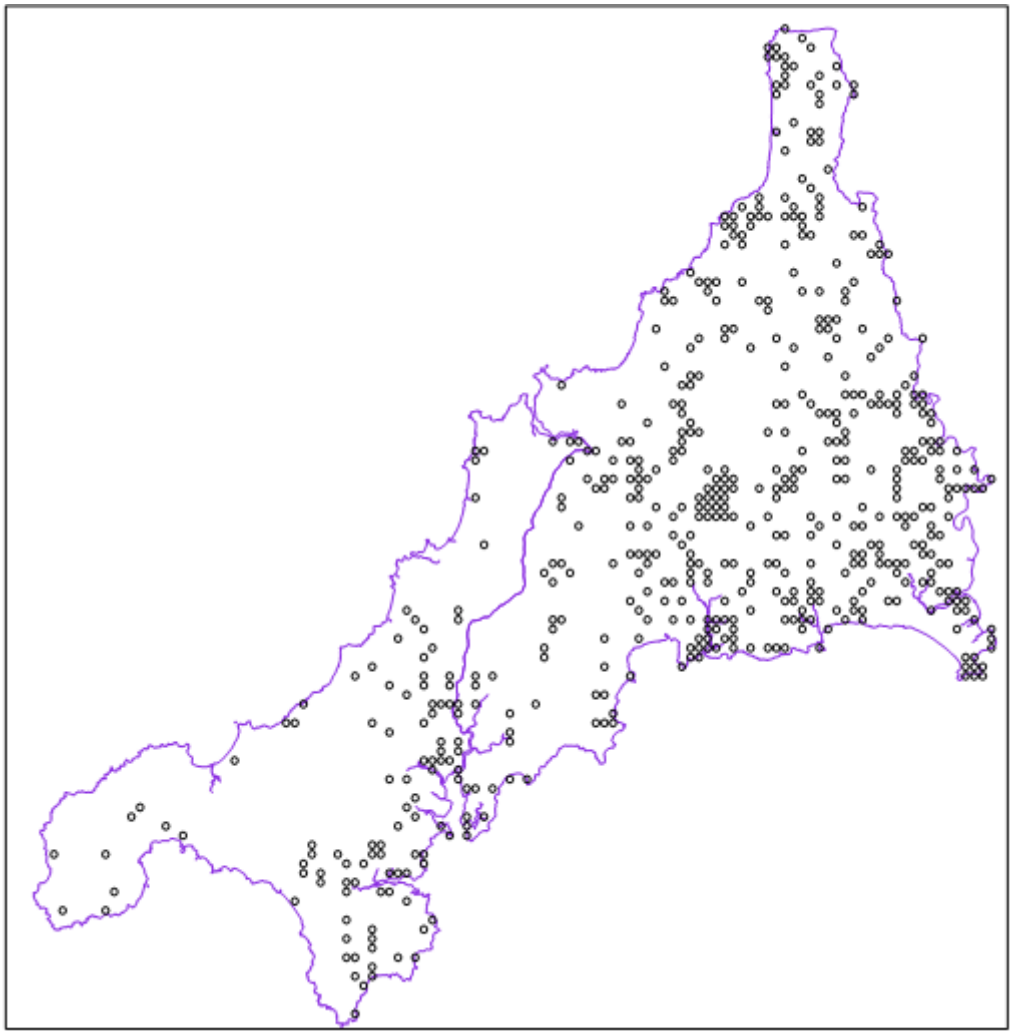
Silver-washed Fritillary *Argynnis paphia*

Summary compiled by Jerry Dennis, February 2023

This is a woodland butterfly spending much of its life in the canopy of mature trees where it feeds on honeydew. Males can be seen patrolling in sunny rides. It can also be seen in open country, wandering quite widely between woodland areas and feeding on plants such as fleabane and knapweed. It overwinters as a caterpillar in first instar, seeking the shelter of a crevice in the bark of a mature tree to hibernate in a silk pad. In spring the caterpillars descend to ground level and feed on violets.

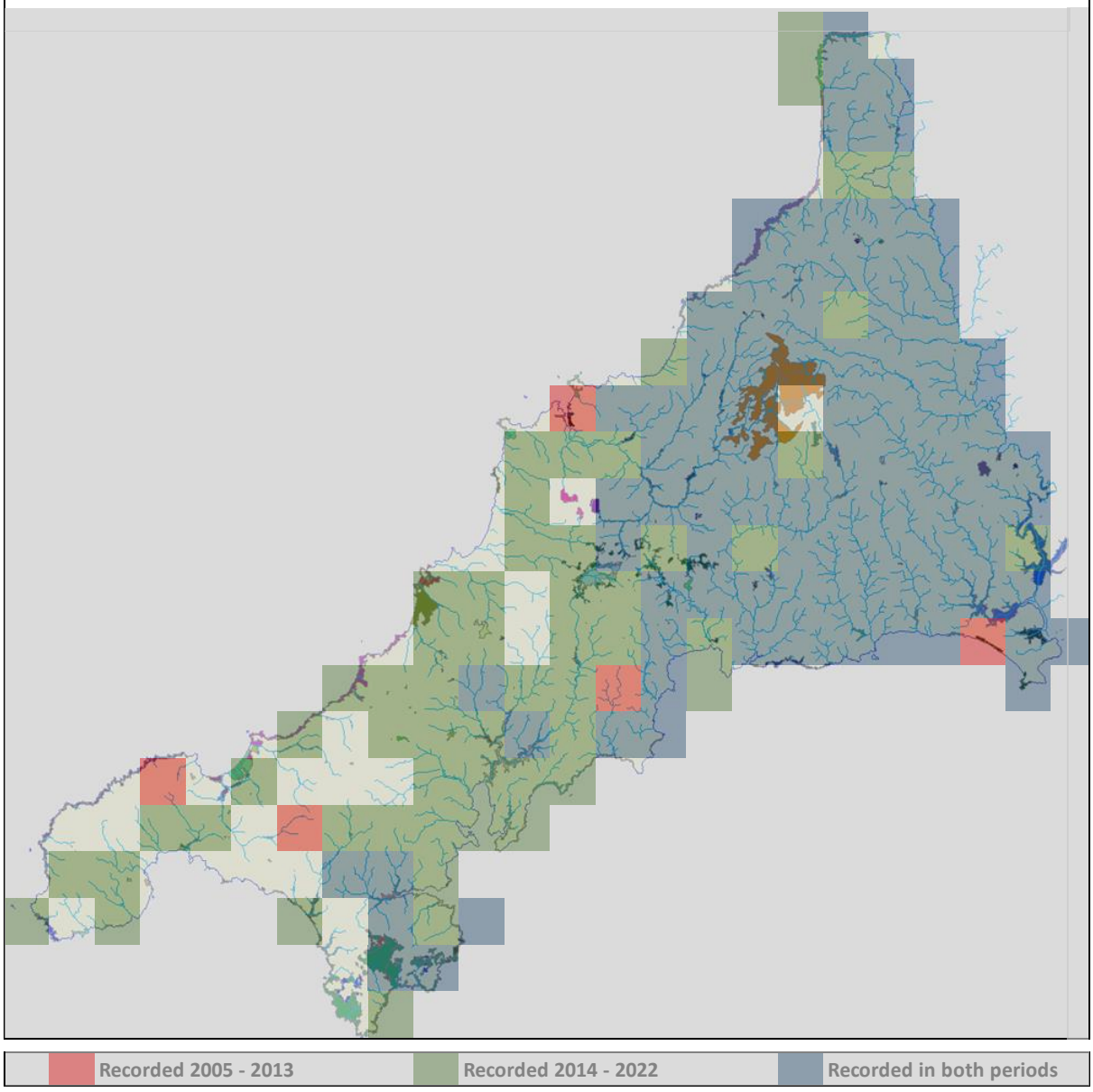
It is easy to identify and it has the widest distribution of any fritillary species in Cornwall.

<u>Recorded locations</u>



The 1km squares (556) with records in the last ten years are highlighted. There are extensive sites in east Cornwall in areas of mature woodland.

Distribution trend 2005 - 2022 Silver-washed Fritillary

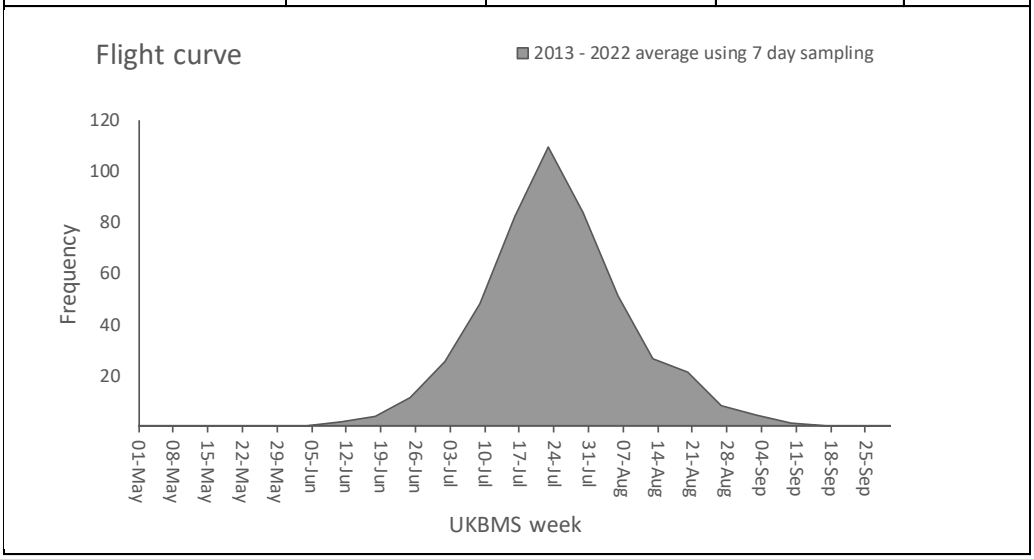


Data for years since 2005 shows sightings in most 5km squares in Cornwall. Core area is in the east of the county. Data after 2013 shows that sightings are being made in more westerly locations. Recent analysis of 20-year occurrence trends for Cornish butterfly species concludes that the Silver-washed Fritillary has expanded its range significantly, more than 30%, in this timeframe.

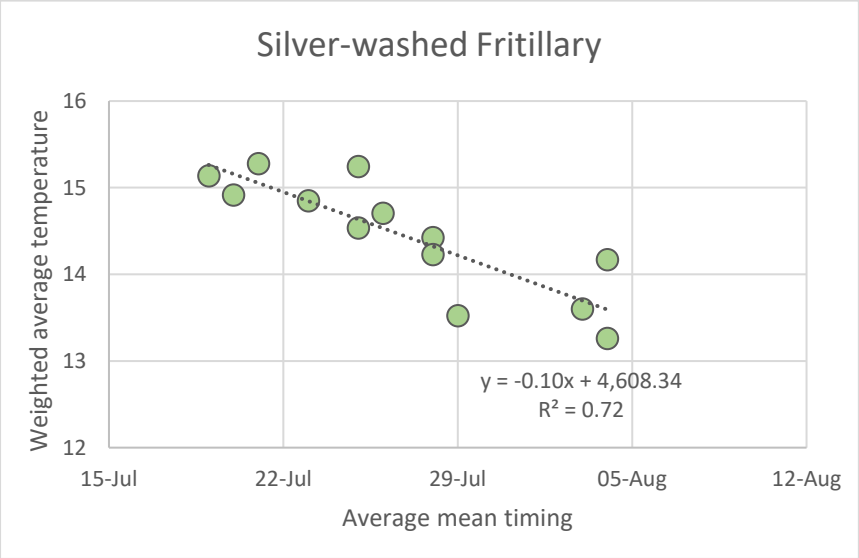
Flight period and phenology

Average weekly totals for years 2008 to 2022 are shown graphically. Yearly data has been migrated to align yearly median timings to the average median timing and then averaged, producing a regular triangular distribution. The single brood peaks in late July.

Silver-washed Fritillary	Median: 24-Jul	P_5 to P_{95}: 46 days	Mode: 26-Jul	All areas



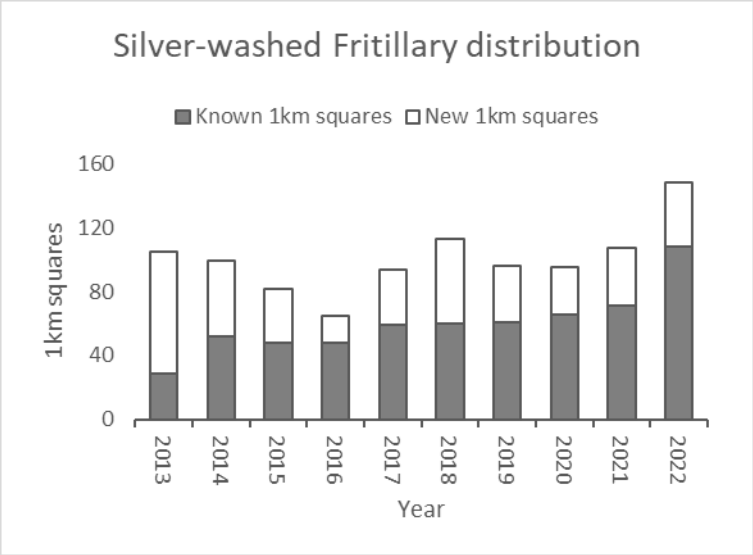
Analysis of data for years 2008 to 2022 shows a reasonable correlation between mean brood timing and weighted average temperatures for April to July in each year. Warmer averages in these months correlate with earlier mean brood timings.



Top Cornish sites, 2018-2022

Location	2018	2019	2020	2021	2022	5-year total
Fowey area	82	109	63	19	238	511
Cabilla and Redrice Woods	127	37	62	52	104	382
Tidna Valley	45	31	49	52	47	224
Valency Valley	38	19		12	32	101
Antony House	72	18				90
Seaton Valley	34	33	15	6		88
Crackington Haven	54	1	10	12		77
Lower Lewdon		18	8	13	26	65
Nare Head	20	16	12	11	6	65
Greenscombe Wood	14	15	11	4		44

The top sites tabulated are based solely on numbers recorded in the last five years. Most of these locations are monitored in part by UKBMS transects - Tidna Valley, Valency Valley, Antony House, Nare Head, Lower Lewdon and Greenscombe Wood.



The butterfly is seen in new 1km squares each year as summarised above. This is one of the highest percentages for Cornish species – averaging 40% new 1km squares per year in the last decade. This reflects the roaming behaviour of the butterfly where it is seen in many open countryside places and the increase in its distribution in the last 20 years.

A prolific site not surveyed in the last five years is Hard Hills (Gooseham Wood, SS2316) at Marsland. This was and likely still is one of the best locations in the county.