# **GRAYLING REPORT 2023 Butterfly Conservation Upper Thames Branch**

Des Sussex - UTB Grayling species champion

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<u>https://www.upperthames-butterflies.org.uk/specieschamps</u>



The Grayling butterfly *Hipparchia* semele is one of our rarest and most threatened species and is listed under Section 41 (S41) of the 2006 Natural Environment and Rural Communities (NERC) Act as a 'priority for conservation action'. At a national level, in 2022 the Grayling was moved from Vulnerable to Endangered on the butterfly 'Red List'.

## The Grayling in Berkshire in 2023

In 2023 there were 450 individual Grayling butterflies reported from the UTB area. All sightings were from the core areas of south Berkshire and along the Hampshire and Surrey borders. This total was by far the highest in the last few years, helped in large part by three very high counts from Mortimer (Hundred Acre Piece and Fifty Acre Piece) which contributed 244.

There were 68 separate records submitted by 26 different recorders, both of which were very similar totals to last year. It was seen in 25 separate 1km grid squares (11 tetrads), most of which are 'core sites' where the species has its strongholds. The recorded flight season in Berkshire during 2023 was 69 days running from 30<sup>th</sup> June to 7<sup>th</sup> September. Once again most records were of singles (32) or low counts in the 2-5 range (25). 11 counts of 6 or more were made, and by far the highest was 129 at Hundred Acre Piece on 7<sup>th</sup> August.

2 records were of more notable interest. A single Grayling was seen at **Moor Green Lakes Nature Reserve** in the **Blackwater Valley**. There have been occasional records from the valley between Moor Green and Finchampstead in recent years. There are extensive areas of disturbed gravelly soil and ground with sparse vegetation that may suit the species, but most of that habitat is not readily accessible to naturalists. So it is unclear if the records have been from a colony in the valley, or of wanderers who have visited the valley from further afield.

The species was also seen on open habitat within woodland in **Swinley Park** near Bracknell. The Park lies adjacent to a private golf club which supports

suitable heathland habitat for the Grayling, so it is perhaps to be expected that the species would be seen in open areas of Swinley Park.

For those wishing to see the species in 2024 the best/more reliable sites to visit include **Buckler's Forest**, **Swinley Forest** (especially around **Caesar's Camp** and **Hut Hill**), **Greenham & Crookham Common**, and Fifty Acre Piece & Hundred Acre Piece. For those wishing to check outlier sites it would be good to get some survey effort at sites like **Englemere Pond**, BBOWT's **Broadmoor Bottom NR**, and **Gorrick Plantation**, all of which could/should have small colonies.

The species clearly benefits from targeted heathland habitat management such as grazing, vegetation mowing, scrub control, bracken control and bare ground creation. In addition the more industrial scale operations at some forestry sites and gravel quarrying can also provide the bare sand and sparsely vegetated conditions that it needs. As a fairly mobile species, it is able to disperse to newly created habitat patches within its local range and make use of them, which is a beneficial strategy as many habitat patches are transitional and may only be suitable for the Grayling for a few years, especially where bracken and scrub are quick to establish.

Many thanks to all who look out for this species and submit records, or help with site and habitat management.

Des Sussex 18 Feb 2024



Habitat in Swinley Park, between Bracknell and Ascot. Some of the woodland paths and tracks have wide heathy verges where there is suitable habitat for Grayling and other heathland insects, with bare ground, larval food plants, and suitable nectar sources – especially when the 3 types of heather are in flower. Plenty of Bell Heather and some Ling here.

## **Appendices**

Table 1. Recent trends in Grayling recording in the UTB area

Table 2. Distribution trends

Table 3. Tetrads occupied since 1997 and in 2023

Figure 1 Map of 2023 data at a tetrad resolution

Habitat information

Table 1. Recent trends in recording in UTB area

Year	Number of records	Number of recorders	Total Grayling butterflies counted	Highest count	Number of Occupied Monads (1km square)	Number of occupied tetrads ( 2x2 km square)	First date	Last date
2016	28	13	135	28		9	14/07	30/08
2017	33	14	257	60		11	04/07	15/09
2018	19	15	92	32		11	29/06	16/09
2019	44	25	230	67		15	08/07	08/09
2020	47	18	384	136	21	13	22/06	15/09
2021	68*	28	180	35	23	14	10/07	21/09
2022	61	25	141	11	25	14	24/06	17/09
2023	68	26	450	129	25	11	30/06	07/09

<sup>\*24</sup> of the 68 records were from a single group survey visit.

**Table 2. Distribution trends for 5 year recording periods** (does not include 'dubious' outlier records)

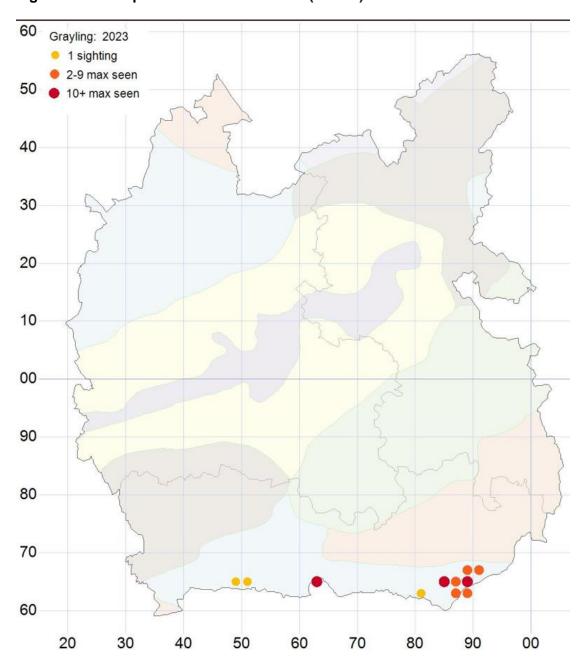
5 year	Total	
recording	Number of	
period	occupied	
	tetrads	
	(2x2 km)	
	squares	
1997-2001	23	
2002-2006	15	
2007-2011	16	
2012-2016	20	
2017-2021	25	
2022-	15	

Table 3. Tetrads occupied since 1997
Green shading = 2023 records

	Tetrad	Tetrad location & potential sites in that tetrad	Most recent record	Recorded 2023
1	SU4264	Crockham Heath to Hamstead Park	1997-2001	
2	SU4864	Greenham	2023	YES
3	SU5064	Greenham Common to Crookham Common	2023	YES
4	SU5264	Crookham Common	2007-2011	
5	SU5268	Bucklebury Common	1997-2001	
6	SU5662	Brimpton Common to Wasing	2012-16	
7	SU5862	Paices Wood	2017-21	
8	SU5864	Paices Wood to Aldermaston	2017-21	
9	SU6060	Pamber Forest/Heath (Hants)	1997-2001	
10	SU6062	Silchester Common & Decoy Heath Nature Reserve (part Hants)	2012-16	
11	SU6064	Padworth Common	2017-21	
12	SU6262	Silchester Common & Beynons Inclosure	1997-2001	
13	SU6264	Padworth/Burnt Common, Fifty Acre Piece, Hundred Acre Piece,	2023	YES
14	SU6464	Holden Firs	2022	
15	SU7262	Wellington Country Park (Hants)	2002-06	
16	SU7462	Bramshill (Hants)	1997-2001	
17	SU7862	Blackwater Valley- Fleethill to Moor Green 'new workings' west	2022	
18	SU8062	Moor Green NR and 'new workings'	2023	YES
19	SU8064	Simons Wood, Gorrick Plantation	2021	
20	SU8066	Gorrick Plantation	2017-21	
21	SU8262	Wellington College Heath	2022	
22	SU8264	Gorrick Plantation, Heathlake	1997-2001	
23	SU8462	Wildmoor Heath NR, Broadmoor Bottom NR	2022	
24	SU8464	Crowthorne Woods, Buckler's Forest, Swinley Forest (Hut Hill)	2023	YES
25	SU8466	Beaufort Park, Downshire Golf	2007-11	

		Course		
26	SU8660	Royal Military Academy Sandhurst	2002-06	
27	SU8662	Barossa: Broadmoor Bottom to Wishmoor Bottom. Poppy Hills to Swinley Forest Lower Star Post	2023	YES
28	SU8664	Swinley Forest: Caesar's Camp & The Look Out to Upper Star Post & Lower Star Post	2023	YES
29	SU8862	Swinley Forest: Lower Star Post SE	2023	YES
30	SU8864	Swinley Forest: Pudding Hill and Penny Hill to Rapley	2023	YES
31	SU8866	Swinley Park, The Berkshire GC	2023	YES
32	SU8868	Whitmoor Bog	2012-16	
33	SU9064	Buttersteep Forest: Dukes Hill. The Berkshire GC, Swinley Forest GC	2017-21	
34	SU9066	Buttersteep Forest, Swinley Brick Pits, The Berkshire GC	2023	YES
35	SU9068	Englemere Pond LNR	2021	
36	SU9466	Sunningdale GC, Chobham Common (Surrey)	1997-2001	
37	SU9468	Silwood Park	2012-2016	
38	SU9666	Chobham Common N (Surrey)	1997-2001	

Figure 1 Map of 2023 data at a tetrad (2x2km) resolution



#### Habitat requirements and management guidance

The butterfly depends on early successional habitats with plenty of bare and sparsely vegetated ground. In our local area it is restricted to sandy and gravelly soils. Even within nature reserves and protected sites it is at risk of the loss of suitable 'open' habitat if there is a lack of management. Without adequate management natural succession tends to make heathland, grassland and open forestry areas too overgrown for the Grayling to complete its lifecycle. Management activities such as rotational mowing, grazing, or even surface 'scraping' is required to create some form of 'disturbance' to provide suitable open conditions, with a supply of the short fine-leaved grasses that the caterpillar feeds on, and flowering nectar plants such as heathers which the adults feed from. The Grayling appears to be quite mobile and able to find newly restored or created patches of habitat within a few km of its local range.

#### **Useful weblinks**

https://butterfly-conservation.org/butterflies/grayling

https://www.upperthames-butterflies.org.uk/specieschamps

#### **Grayling Species Factsheet**

https://butterfly-conservation.org/sites/default/files/1grayling-species-factsheet.pdf

**Bare Ground for Butterflies and Moths** 

https://butterfly-conservation.org/sites/default/files/2021-12/BareGround\_WalesLeaflet\_2.pdf