

GRAYLING REPORT 2019 - Butterfly Conservation Upper Thames Branch

Des Sussex - Upper Thames Branch Grayling species champion

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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'. The species has previously declined due to loss of habitat as a result of development and changes in land use.

Even within nature reserves and protected sites it is still at risk of the loss of suitable habitat due to lack of management. Natural succession tends to make heathland, grassland and open forestry areas too overgrown for the Grayling to complete its lifecycle. Management is required to create some form of 'disturbance' to provide significant patches of bare and sparsely vegetated sandy ground, with a supply of the short fine-leaved grasses that the caterpillar feeds on, and flowering nectar plants such as heathers which the adults can 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.



Grayling on ragwort. ©Robert Godden

In 2019 there were approximately 230 individual Grayling butterflies reported from the UTB area – almost all were from south Berkshire. There were at least 44* separate records submitted by 25 different recorders. This is a welcome increase from the last few years so many thanks to all who have looked for Grayling and taken the time to submit their records. Our populations are on the northern edge of the wider 'Surrey/Hants/Berks' heathlands. As a comparison with our UTB recording, there were 209 records from Surrey, and 137 from North Hampshire for 2019 on iRecord. Surrey and North Hampshire both have much more extensive heathlands with suitable habitat and public access.

Records were from 3 main sources - entered directly onto iRecord, or as part of the UKBMS, or submitted direct to UTB. The recorded flight season in Berkshire during 2019 was from 8th July to 8th September (61 days). 13 records were of singles, 21 records were counts of 2-9, and 8 records were of more than 10, including five counts of 20+. That was a significant increase in 10+ counts from 2018.

Regular sites

There was reasonably good reporting from the known core sites. These include 100 Acre Piece (Mortimer), Greenham & Crookham Commons, Swinley Forest to Barossa and Crowthorne Woods, and open forestry areas at Buttersteep and Dukes Hill (between Bracknell and Ascot). There were also records from BBOWT nature reserves at Decoy Heath & Broadmoor Bottom, and locations at Brimpton and Aldermaston.



Swinley Forest south of Bracknell. An area of clear felled / replanted plantation with plenty of bare ground, heathers and fine grasses of value to Grayling.

'New' sites

It was very good news to get records from some new locations outside of the usual 'core sites'. At least 2 Grayling were seen on current and restored gravel workings in the **Blackwater Valley** west of Moor Green Lakes nature reserve. At the areas where they were seen there is still a lot of bare sand and gravel, with sparse vegetation. However, the habitats on the reserve itself are now mostly unsuitable for Grayling. The 2019 records appear to be the first from the valley since 2014. Prior to that there were occasional records of single Grayling in some years. This is intriguing as the sites are regularly visited by many naturalists. So it seems that there is either a very small population of Grayling in the valley, or regular visits by wandering individuals which have dispersed - perhaps from the nearest 'heathland'

sites such as Crowthorne Woods, Yateley Common, or Blackbushe - all of which are about 1km away. The restored gravel workings initially have a lot of bare sand & gravel, but as this gets colonised by dense vegetation the habitat will become less suitable for Grayling.

There is a large new public open space at **Buckler's Forest**, Crowthorne that has been created through the planning system – it is on the site of the former Transport Research Laboratory. The site has been landscaped with creation of semi-natural habitats of value to wildlife, as well as to provide a public open space for dog walkers. At present it has quite a lot of 'open habitat' with sandy flowery grassland and plenty of bare ground suitable for the Grayling. As the site is just over the road from Crowthorne Woods, it was hoped that this site might be inhabited or colonised by Grayling. It was pleasing that at least 2 recorders saw a few here at either end of the flight season. Well worth a look in 2020 to get a better count. Green Hairstreak was also seen at the site.



Bucklers Forest 'SANG', Crowthorne. This site has been 'created' as a public open space as mitigation for the large housing estate (see new houses at top right of image). The habitats include dry open grassland with bare sandy patches on poor soils. These are likely to be attractive to Grayling for a number of years - possibly longer depending on the management.

The 2019 records came from the following sites

- Greenham Common
- Swinley Forest*
- Barossa MoD Ranges (includes Wishmoor Bottom, Poppy Hills and Broadmoor Bottom) *
- Crowthorne Woods
- Buttersteep /Dukes Hill

- Blackwater Valley
- Buckler's Forest
- Mortimer: Hundred Acre Piece/Holden Fir's
- Decoy Heath N.R.
- Broadmoor Bottom N.R.
- Brimpton/Aldermaston

* Note that Swinley Forest and Barossa Ranges, together with Crowthorne Woods are part of an extensive area of plantation forestry and heathland that extends across into Surrey at Old Dean Common and Poors Allotments. Much of that area has public access such as from The Look Out and the 'site' certainly supports many more Grayling than currently get recorded.

The 2019 records came from 15 tetrads (2 x 2 km grid squares) as shown on map 1 below. These included 8 tetrads in east Berkshire, and 7 from mid / west Berkshire, all in the south of the county. Grayling has been recorded in 26 tetrads during the period 2009-2019, and in 23 tetrads during the current recording cycle 2014-2019. The blue circles on map 3 below show that, for the current recording cycle (2015-2019), we have not had records from at least 6 tetrads where the species has been recorded in the 'recent' past.

Unexpected records.

3 records were received of single Graylings at sites a considerable distance from the known range. One was from suburban Reading, one from a restored quarry near Maidenhead, and one from south Buckinghamshire. If these records were correct, it is uncertain if they were of 'wandering' individuals or if there is a colony at those locations. It is perhaps doubtful that these will be from viable colonies and as such I have not included them in my main comments above or in Table 1 below. NB: the Maidenhead record is not shown as a dot on the maps.

Very many thanks to all who look out for this species and submit records, or help with site and habitat management. Thanks to Nick Bowles for helpful comments on my 1st draft. Thanks to Robert Godden for use of his photo of a Grayling butterfly.

Des 28 June 2020

Maps and appendices

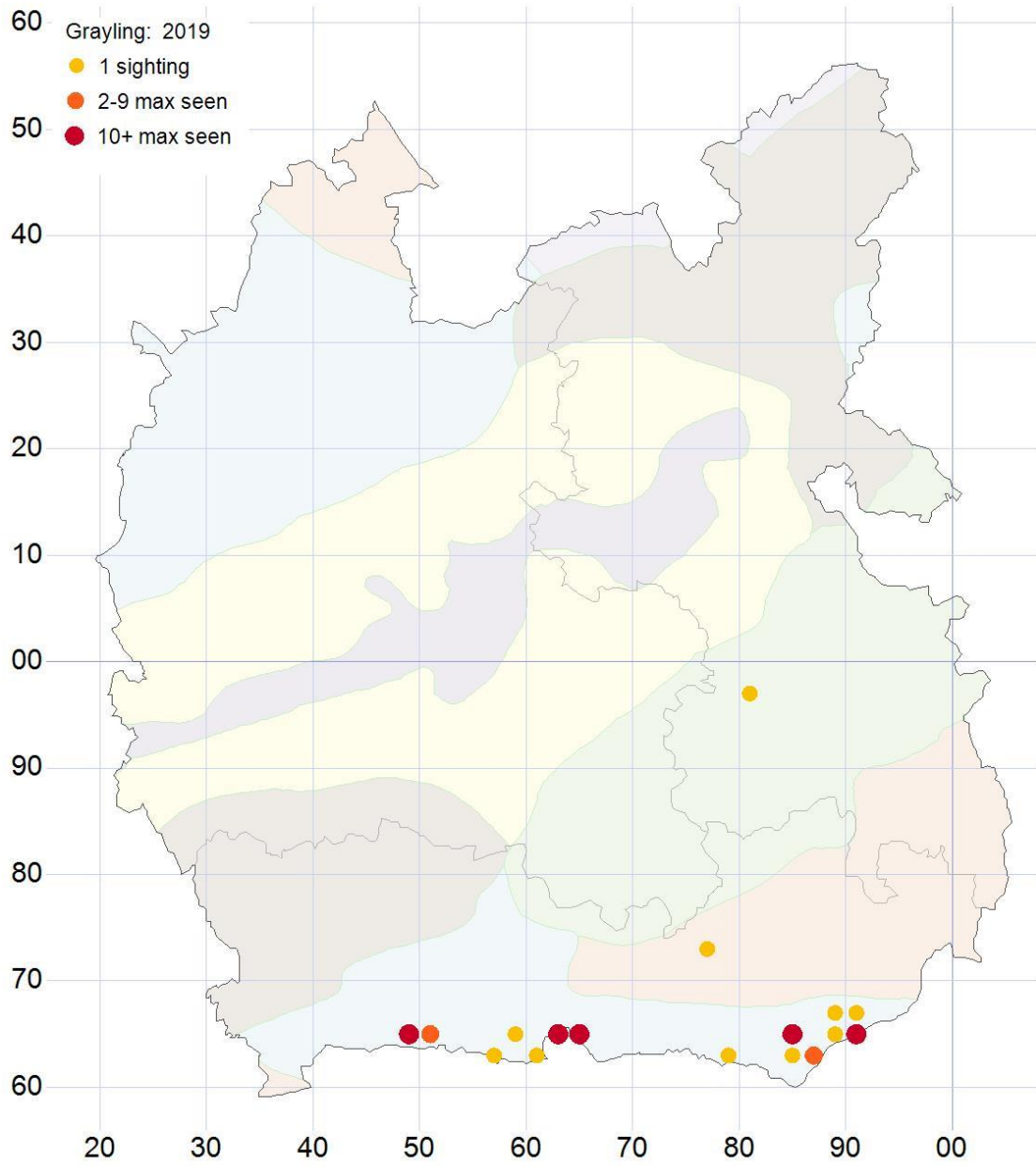
Map 1. 2019 records received tetrad map (minus the Maidenhead record)

Map 2. 2009 - 2019 records tetrad map (three new tetrads from 2019)

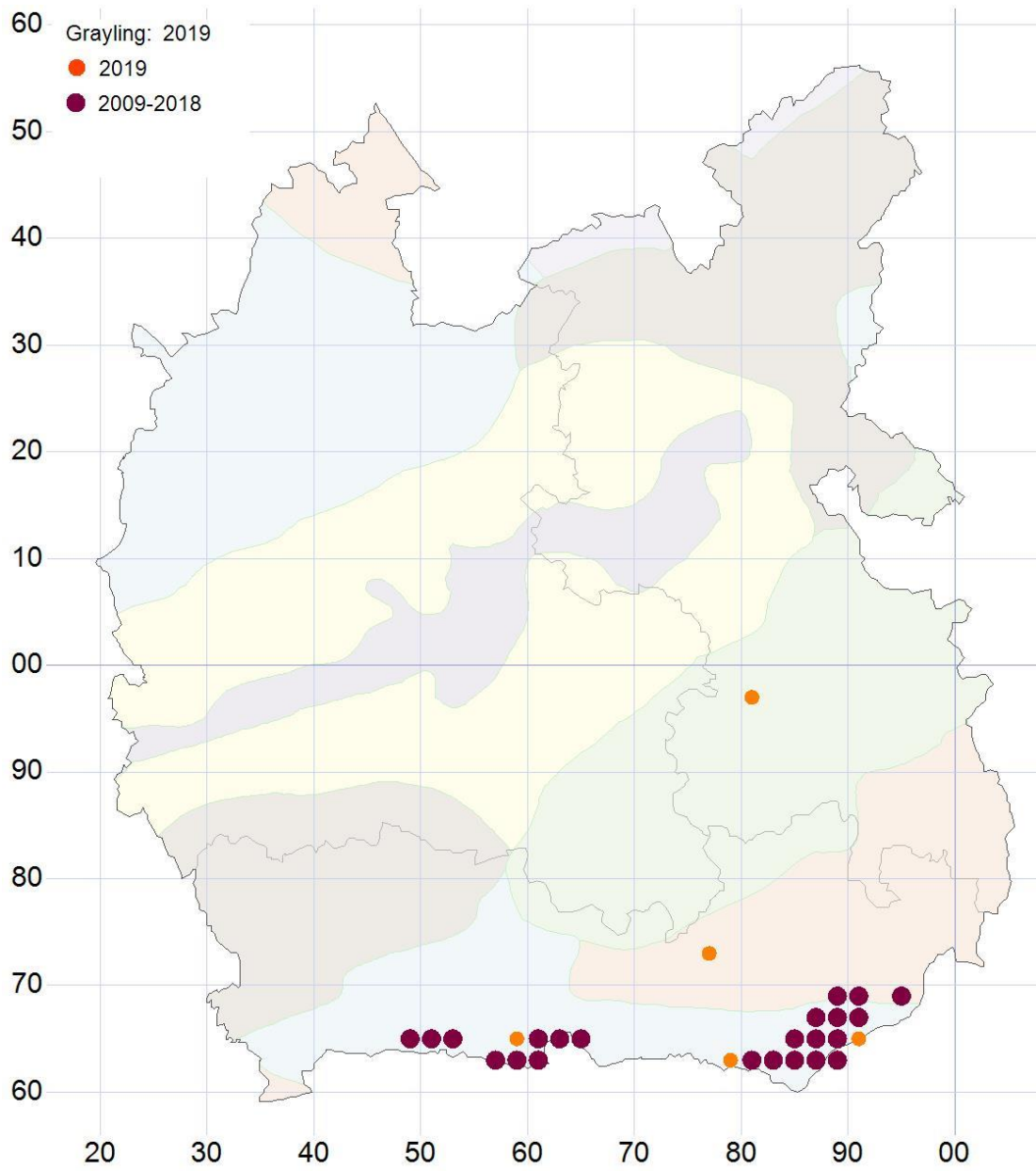
Map 3. 2005 – 2019 records tetrad map
Note - tetrads with no recent (2015-2019) records shown by blue circles

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

Map 1. 2019 records tetrad map



Map 2. 2009-2019 records tetrad map – three new tetrads from 2019



Map 3. 2005 – 2019 records tetrad map
Showing previously occupied tetrads (2005-2014) with no recent (2015-2019)
records shown by blue circles

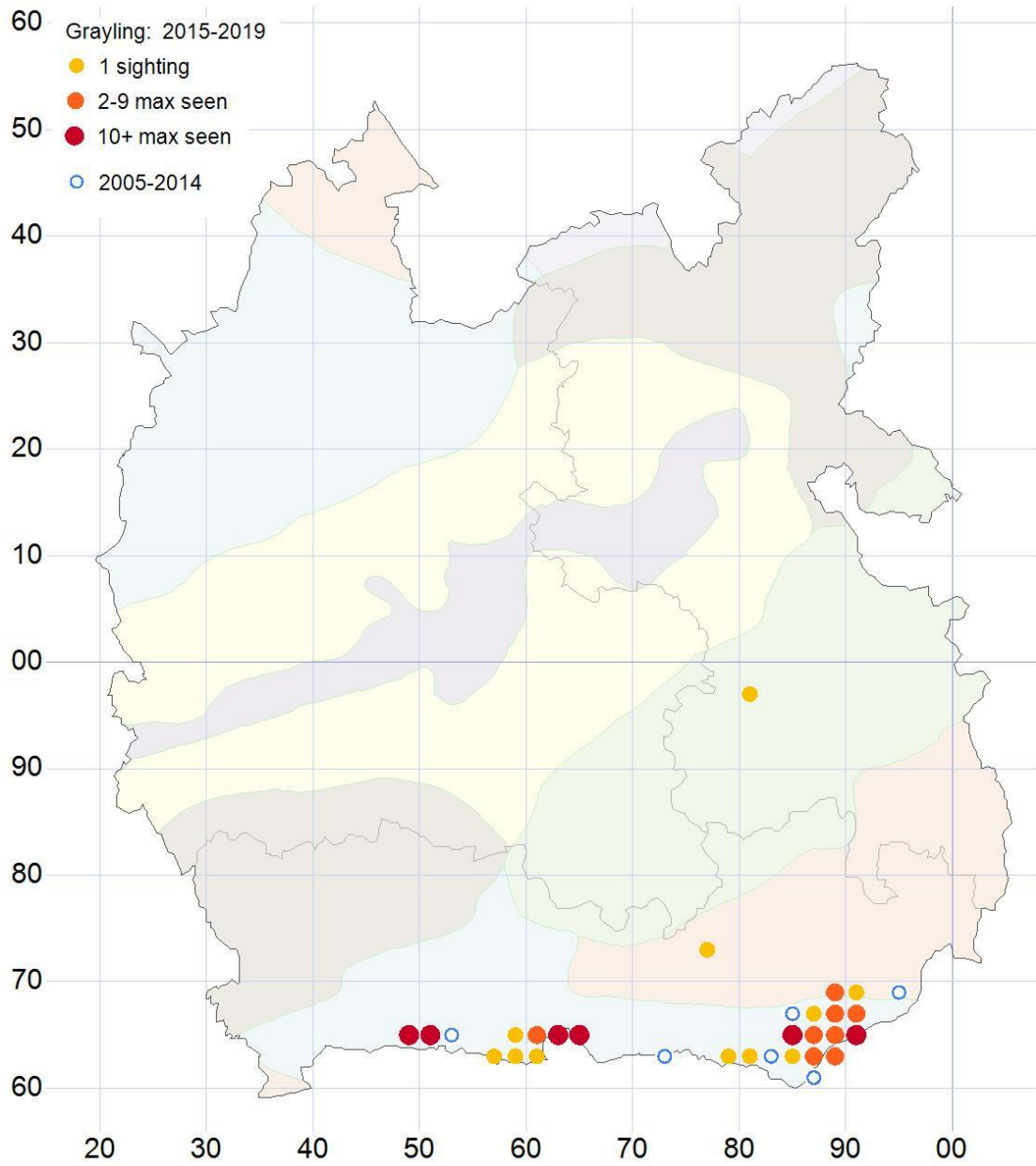


Table 1. Recent trends in recording in UTB area

Year	Number of records	Number of recorders	Total Grayling butterflies counted	Highest count	Number of occupied tetrads	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