

Surrey Botanical Society

Analyses of Records and Taxa by Monad and Date Class, Interactive Google Maps and Taxa Distribution Maps (12 February 2016)

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Analyses of Records and Taxa by Monad and Date Class

The biannual analyses of MapMate records and taxa by Monad and Date Class was undertaken on 12th February, 2016. The number of records of Vascular Plants and Charophytes recorded by the SBS in MapMate stood at 573,026. although 1,685 of these records had been deleted (but their unique IDs retained by MapMate) and 11,214 records had a less precise OS Grid Ref than a 1Km Square (see Table 1).

Surrey covers 2,105 monads, including 1,822 complete monads, 145 with 50% to 99.9% coverage and 138 with 0.1% to 49.9% coverage.

A list of monads and the percentage of each 1km square in Surrey was copied from the [Biological Records Centre](#) and imported into a MS Access table. Duplicate monads which arise where a monad covers three vice counties were excluded. The analyses of records and taxa for each Date Class and all years were carried out in MS Access using queries developed for the purpose (see [Appendix 2](#) for records & [Appendix 3](#) for taxa) using the list of Surrey monads and SBS MapMate data.

Length of OS GridRef	OS GridRef Type	Number of OS GridRefs	Percentage of OS GridRefs
0	Blank	10	0.002
4	Hectads - 10km Square	2,613	0.448
5	Tetrads - 2km Square	8,591	1.474
Subtotal (not mapped)		11,214	1.924
6	Monads - 1km Square	122,284	21.000
8	100m Square	438,001	75.180
10	10m Square	9,327	1.600
12	1m Square	92	0.016
Subtotal (mapped)		569,704	97.796
Deleted records		1,685	0.289
Total records		582,603	

Table 1. Summary of Mapmate records by OS Grid Reference

Records where the Taxon was recorded as 'Not present' (i.e. Quantity = -7) were excluded from the monad maps.

Ten records where the OSGridRef was null; 2,613 hectad records; 8,591 tetrad records; and 1,685 deleted records were not included in the analyses by monad.

The majority of the records (569,704 or 97.796%) are at a sufficient precision to enable analyses at the 1km Square level (Table 1).

[Download Records Analysis Spread Sheet](#) | [Download Taxa Analysis Spread Sheet](#)

The analyses also revealed 45 monads without any records or taxa and an additional 77 monads with fewer than 20 taxa (1666-2019).

Google Interactive Maps of Numbers of Taxa

The data were also used to populate [Interactive Google Maps](#). These were developed by Robin Day expressly for the purpose and enable users to search for a grid reference or place name and select whether to display the number of records or taxa in every Surrey monad by date classes / date range against a Satellite or OS Map background.

Taxa Distribution Maps

[Distribution maps](#) for all Surrey taxa, based on the same MapMate data, have also been updated on the website. Other than the most 30 [widespread taxa](#), these are restricted to SBS Members only so you will be prompted to login if you have not done so this session. These were also developed by Robin Day expressly for the purpose. For any taxon you can select any or all Date Classes to display a map of the distribution in Surrey.

Acknowledgements

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The analyses would not have been possible without the massive input of the original records from SBS members, recorders and MapMate users.