

Butterflies recorded in Benson, 2000-2016, by Richard Soulsby

1. I accessed and analysed all the butterfly records held in the national database *Levana*, created by Butterfly Conservation and held by the UK Biological Records Centre, for a 2km x 2km square centred on Benson village for the years 2000 – 2016.
2. There are 2,511 records, of which 2,321 have Grid References given to at least 6 figures
3. 18 people submitted records of their sightings, at 60 different locations within the 2km square
4. 25 butterfly species have been seen, divided into 10 'Garden' species* and 15 'Wider Countryside' species
5. The Garden species are those that are able to *breed* in gardens, because their larval food-plants are found there. These species are mostly common, because their habitat is plentiful in residential areas. They are:

Small Tortoiseshell; Peacock; Red Admiral; Comma; Painted Lady; Small White; Large White; Orange-tip; Green-veined White; Holly Blue

6. The Wider Countryside species breed in grassland, hedgerows and woodland, and may also stray into nearby gardens. Their breeding habitats are dwindling, partly due to changes in agricultural, woodland and hedge management, but also because residential developments replace the natural habitats with hard cover and gardens. Although the common Garden species might thrive, it is at the expense of the less common Countryside species that are lost. They are:

Brimstone; Brown Argus; Clouded Yellow; Common Blue; Essex Skipper; Gatekeeper; Large Skipper; Marbled White; Meadow Brown; Ringlet; Small Blue; Small Copper; Small Heath; Small Skipper; Speckled Wood

7. The British butterfly species can be categorised* as: *Common & widespread*, *Local*, *Scarce* and *Rare*. Of those seen in Benson: Clouded Yellow, Brown Argus, Painted Lady and Marbled White are *Local*, while Small Blue is *Scarce*, with the others being *Common & widespread*.
8. The scarce Small Blue has been reliably seen at three locations within Benson. It is not clear whether these come from an unknown colony within the parish or from further afield e.g. Swyncombe. They should be encouraged to establish in Benson by creating suitable habitat containing their sole larval food-plant, kidney vetch.
9. I allocated the records to a 100m x 100m grid using the Grid References, and counted the number of species seen at each location. The results have been superimposed on maps of Benson for Total Species, Garden Species and Wider Countryside species. The number of species is shown with a colour-coded symbol at the intersections of the grid:
 10. For Total Species: Blue = 1 – 9; Orange = 10 – 19; Red = 20 – 25
 11. For Garden Species, and Wider Countryside Species: Blue = 1 – 4; Orange = 5 – 9; Red = 10 – 15

* J.A. Thomas, *Guide to Butterflies of Britain & Ireland*, Philip's, 2007.

Notes

A 'record' is a report of one species of butterfly by one observer on one day at one location. The data-set is taken from the *Levana* database, which is the national database for the charity Butterfly Conservation from which atlases of butterfly distributions at national and regional scales are prepared. The national Biological Records Centre also holds these data. Data held by regional record centres (e.g. TVERC, BMERC) tend to be very incomplete.

The 6-figure Grid Refs pinpoint a location only to within $\pm 50\text{m}$, and, since in many cases the Grid Ref will have been estimated visually from a 1:50,000 OS map, they could be less accurate than that. This means that the symbols could be located as much as 100m from the actual observation point, which should be understood when viewing the maps. Plotting of data is not usually done at a finer scale than 1km x 1km squares, for which 6-figure Grid Refs are more than adequate. It is unusual to plot at the 100m resolution used here.

Only data for the 2km x 2km square whose corners are Grid Refs SU610910, SU610930, SU630930, SU630910 are shown, so the outer parts of the maps do not show symbols.

The maps represent the records of butterfly species only where we have looked, i.e. the survey effort is not consistent across the area. This reflects access problems (e.g. on Benson RAF Airfield), as well as limited effort available. In addition, the observations in many cases cover only a few dates in the year, so butterflies whose flight periods occur at other times are not represented. Only a few of the locations are comprehensively recorded - mainly the gardens of keen butterfly recorders and the churchyard – which show up as 'hot-spots'.

The area south-west of St Helen's Avenue, corresponding to potential development site BEN7, is well populated with Wider Countryside species, including some of the 'Local' species. These would be lost if the site is developed. The broad eastern verge of the A4074, between the cycle path and the hedge, is also a good linear habitat for many species.

Moths have not been included here, because they are less comprehensively recorded. But it is noteworthy that larvae of the Nationally Scarce (A) Striped Lychnis moth have been seen in Benson.

The results show that Benson is well populated with butterflies, with a good representation of the Wider Countryside species. While not complete, the coverage is surprisingly thorough for a village, showing a high degree of interest in butterflies and wildlife in general within Benson.

We are grateful to all the volunteer recorders.

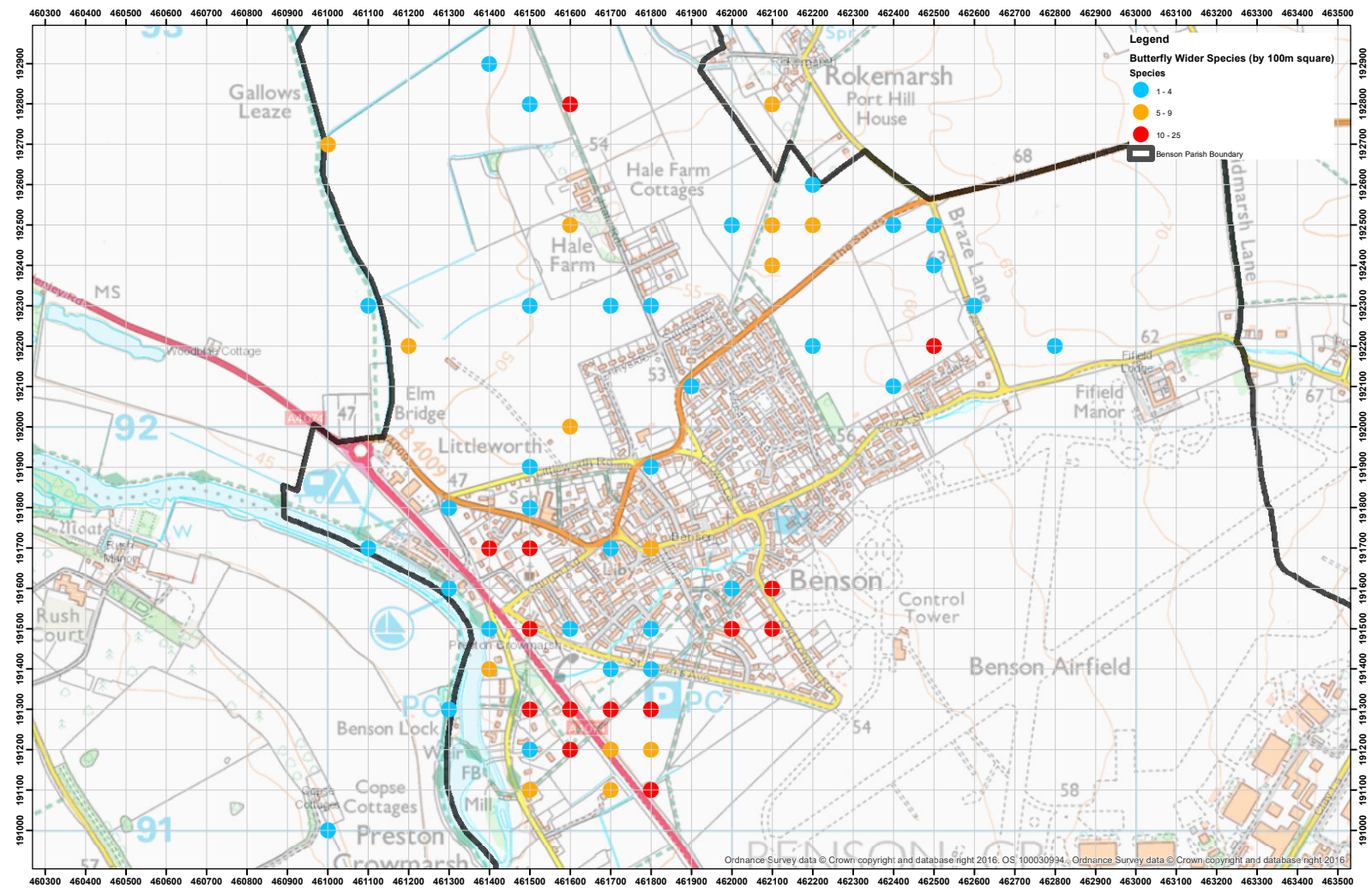
Richard Soulsby (Data analysis and reporting)
Alice Jones-Evans (Mapping)

January 2017

Maps

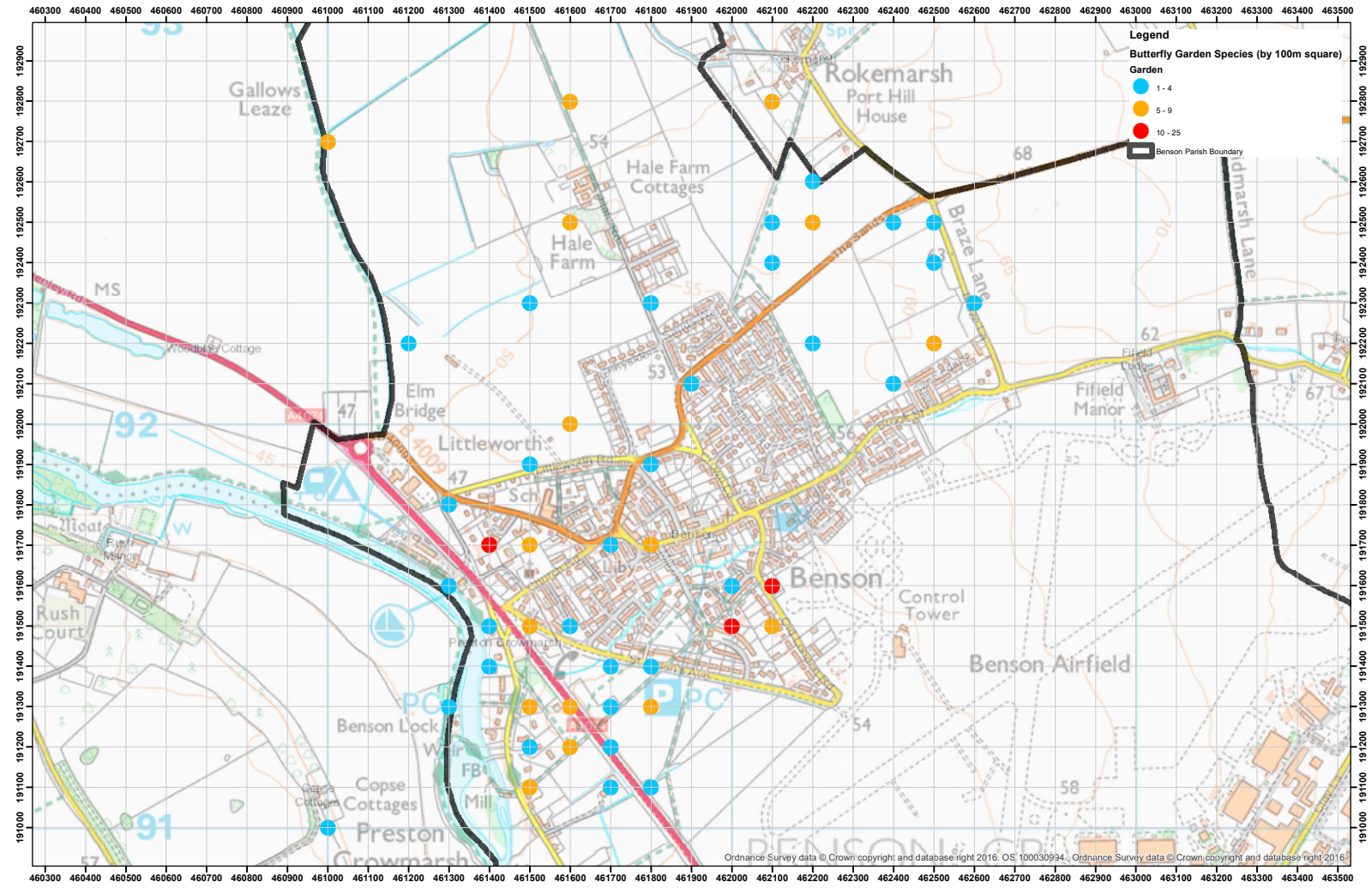
The maps below illustrate the butterfly records in 3 ways: (see para 9 above for key)

- 1. Species associated with wider countryside habitats
- 2. Species associated with garden habitats
- 3. All species on one map.



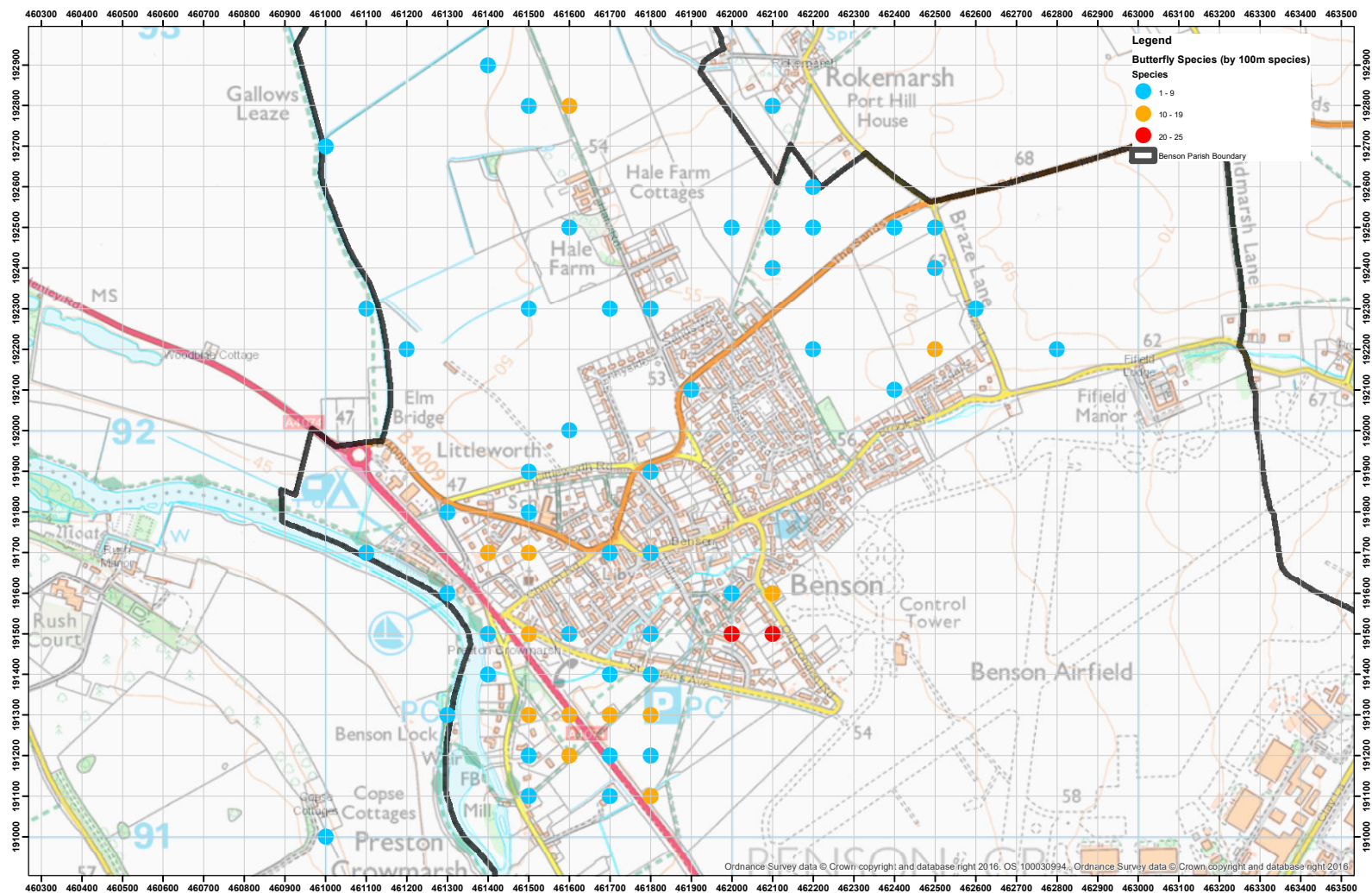
X - Butterfly Wider Species (Number found in each 100m square)

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X - Butterfly Garden Species (Number found in each 100m square)

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X - Butterfly Species (Number found in each 100m square)

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