1   **Supplementary Information:**

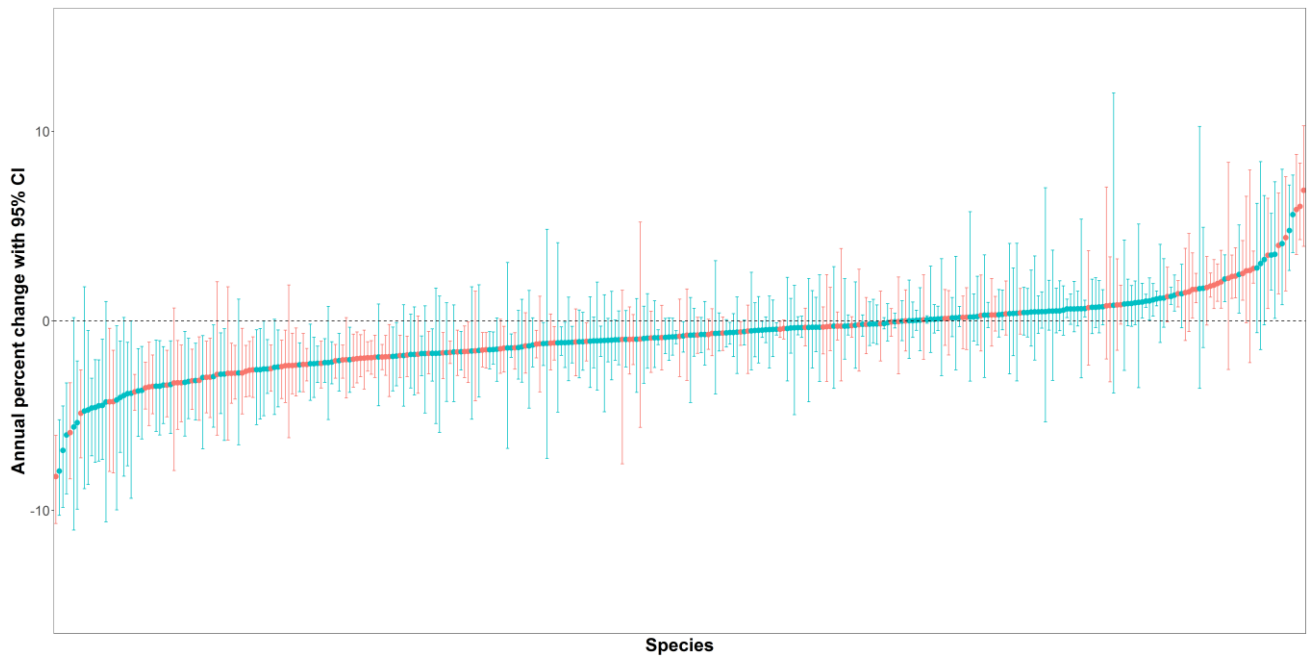2   **Widespread losses of pollinating insects in Britain**

3   Powney et al.

4 **Supplementary Figure 1** The annual growth rate in occupancy between 1980 and 2013 highlights the

5 variation in trend estimates among species (bees – red, hoverflies – blue). Individual species trends

6 were summarised using the median (points) and 95% credible intervals (bars). Species (n = 4) with

7 either exceptionally large uncertainty (95% credible intervals span greater than 20 percent), or with

8 extremely strong trend estimates (annual trend estimate greater than 10%, or less than -10%) were

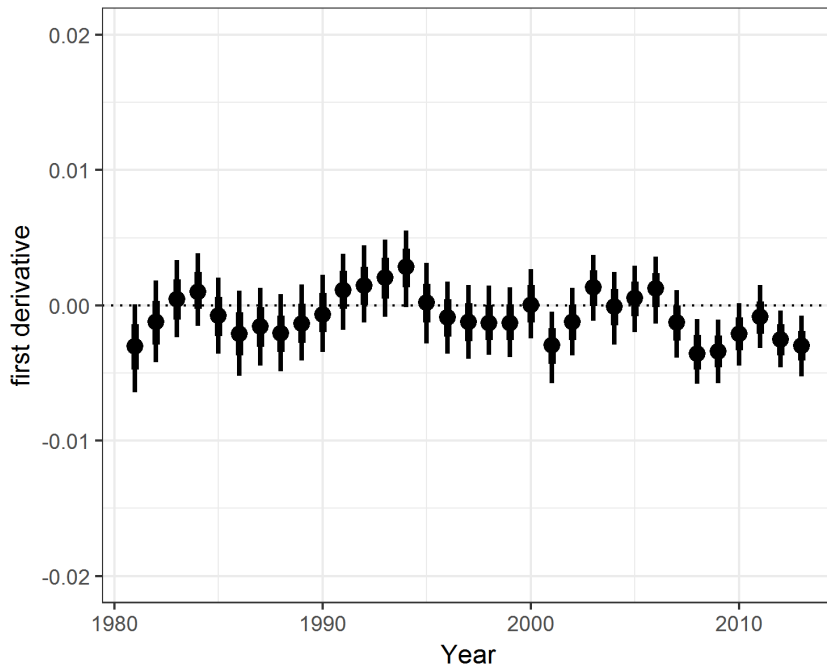9 excluded from this plot.

10

11

12   **Supplementary Figure 2** First derivatives of average occupancy for a) bees and b) hoverflies. Points

13   are the median estimate of the posterior distribution, with uncertainty presented as the limits of the

14   credible intervals (thin = 95% CI, thick = 80% CI).
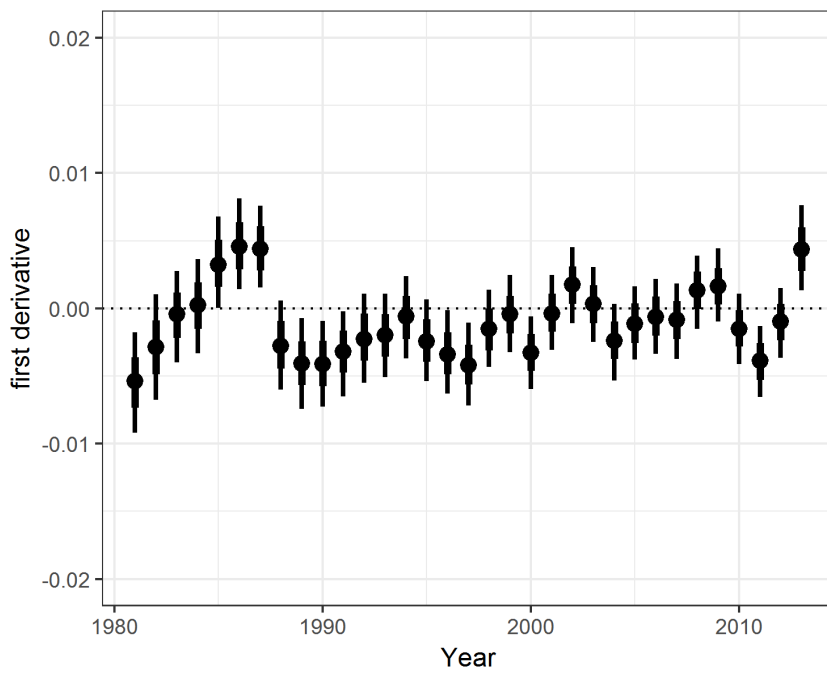
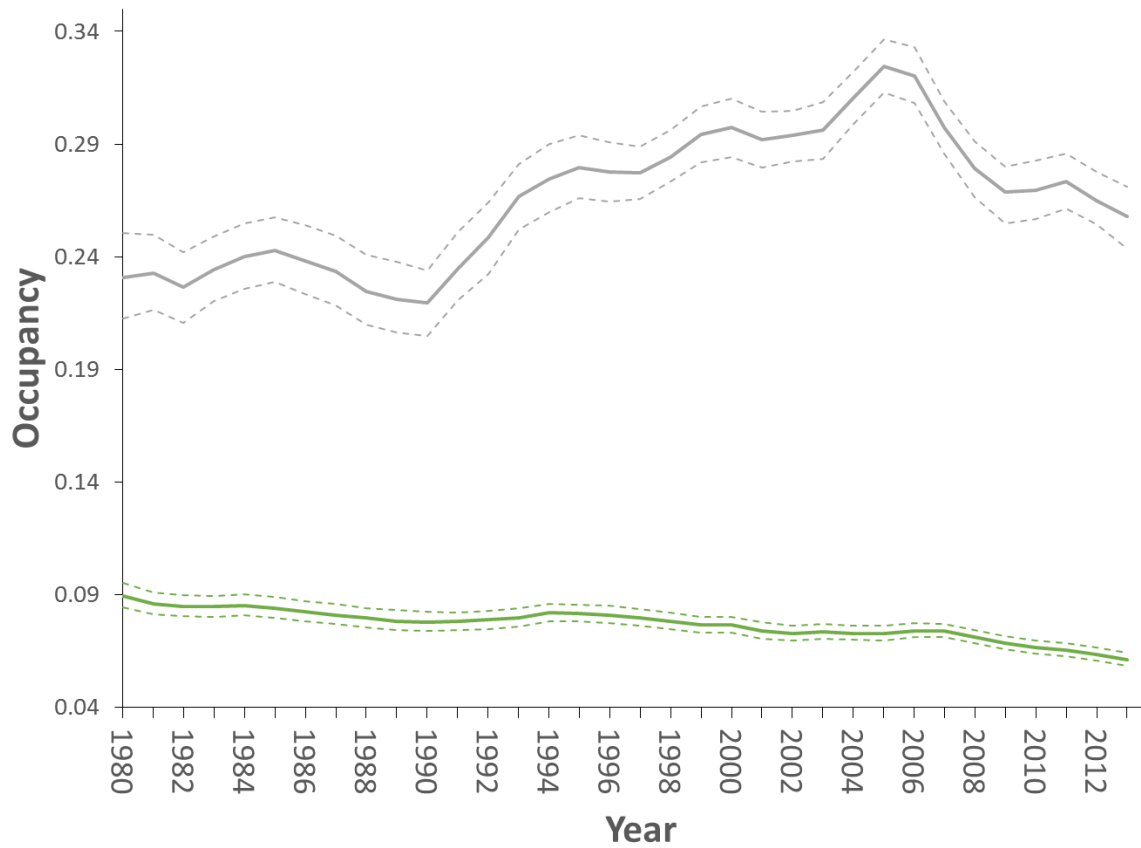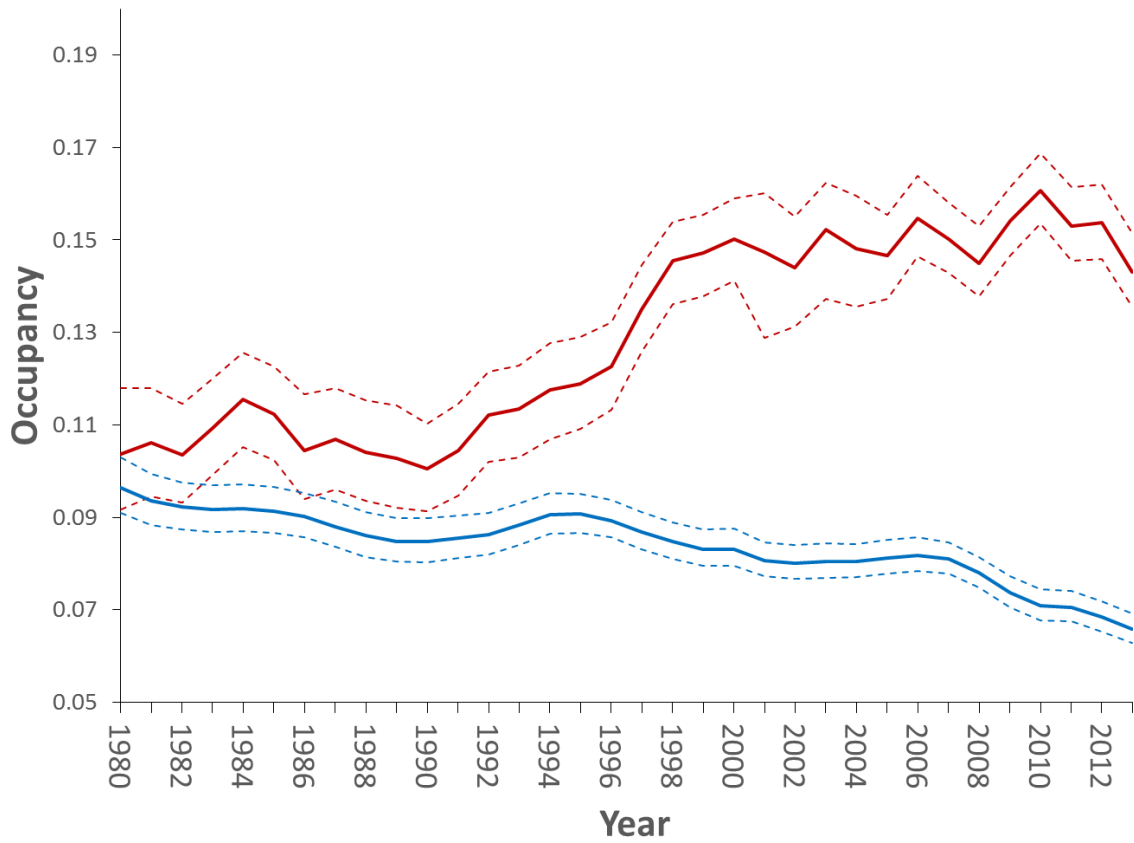15   a)

16

17

18   b)

19

20

21   **Supplementary Figure 3** Contrasting patterns of change among dominant wild bee crop pollinators

22   (n = 22 species, grey) and other bee species (n = 117 species, green). Trend lines show average

23   occupancy across species within each group, calculated as the geometric mean annual occupancy,

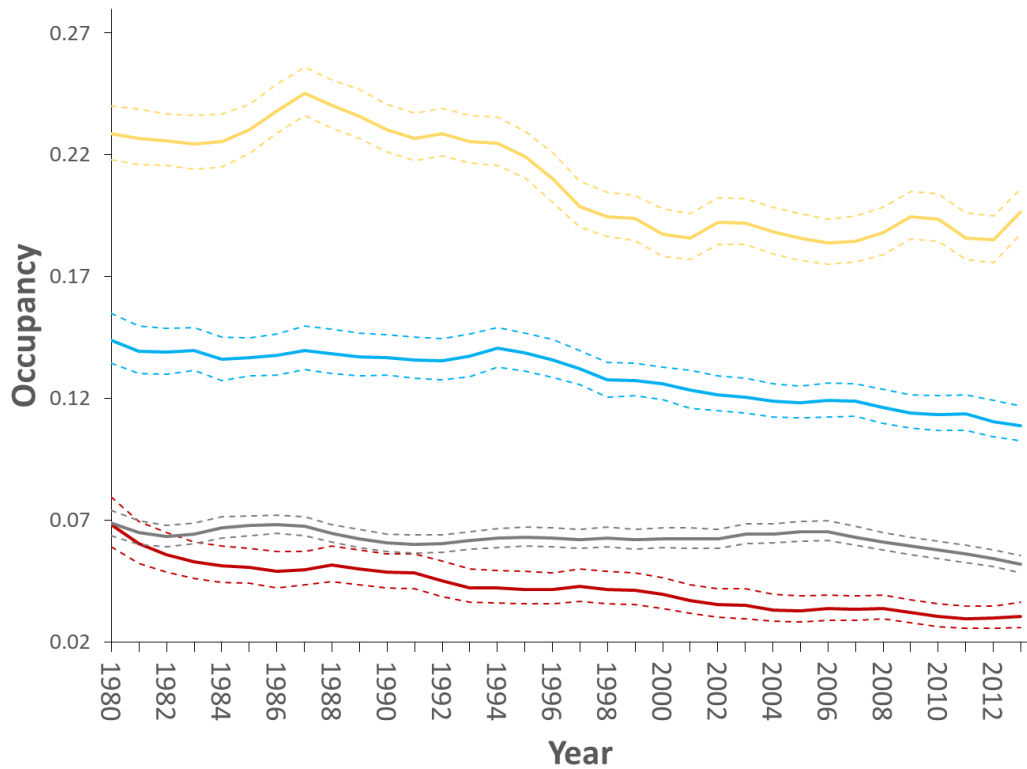24   dashed lines delimit the 95% credible intervals.

25

26

27 **Supplementary Figure 4** Contrasting patterns of change among eusocial (n = 21 species, red) and

28 solitary (n = 112 species, blue) bee species. Trend lines show average occupancy across species

29 within each group, calculated as the geometric mean annual occupancy, dashed lines delimits the

30 95% credible intervals.

31

32

33 **Supplementary Figure 5** Contrasting patterns of change among upland (n = 38 species, red),

34 southern (n = 117 species, grey), widespread southern (n = 107, blue) and widespread pollinators

35 species (n = 149 species, yellow). Trend lines show average occupancy across species within each

36 group, calculated as the geometric mean annual occupancy, dashed lines delimits the 95% credible

37 intervals.

38

39   **Supplementary Figure 6** Species richness maps based on records collected between 1980 and 2013

40   at the 10km grid square scale. Each of the four species clusters derived via CLUSTASPEC are

41   presented: a) upland cluster, b) southern cluster, c) widespread southern cluster, and d) widespread

42   cluster. A list of species within each cluster can be found in Supplementary Table 2

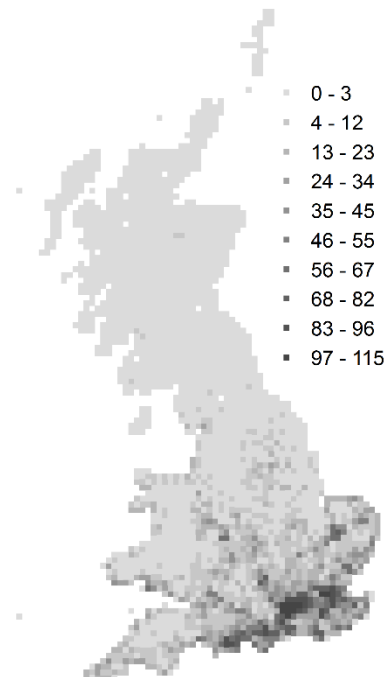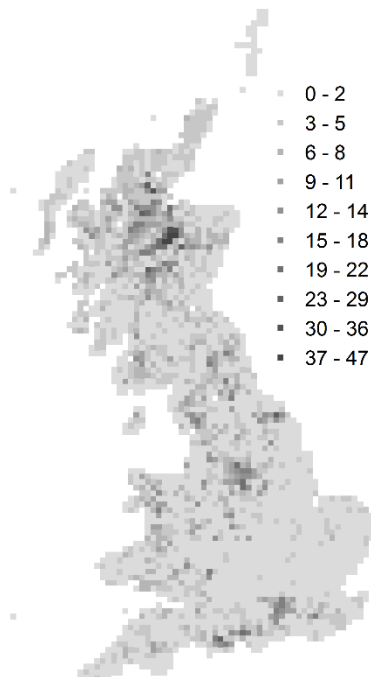43   **a)**   **b)**

a) legend	b) legend
0 - 2	0 - 3
3 - 5	4 - 12
6 - 8	13 - 23
9 - 11	24 - 34
12 - 14	35 - 45
15 - 18	46 - 55
19 - 22	56 - 67
23 - 29	68 - 82
30 - 36	83 - 96
37 - 47	97 - 115

57   **c)**   **d)**

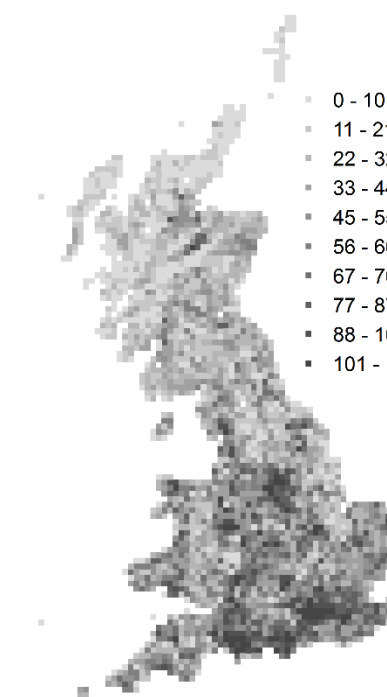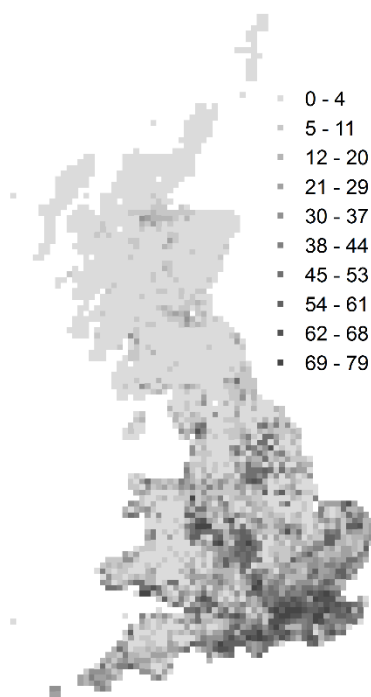| c) legend	d) legend
0 - 4	0 - 10
5 - 11	11 - 21
12 - 20	22 - 32
21 - 29	33 - 44
30 - 37	45 - 55
38 - 44	56 - 66
45 - 53	67 - 76
54 - 61	77 - 87
62 - 68	88 - 100
69 - 79	101 - 120

70   **Supplementary Table 1** The percentage of species in each trend category based on a 95% level of

71   certainty. Species were classified as having no clear trend, if the 95% credible intervals of the trend

72   spanned zero.

	Taxonomic group		
Trend	Pollinator	Bee	Hoverfly
Increasing	11	14	8
No clear trend	56	44	65
Declining	33	42	27

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