

Table 1. Latitude of northern limit (in 1970-86) and total numbers of tetrad records in the northern 100km of each species' range in 1970-86 and 2010-19. 'Spread north' records the number of tetrads where a species was recorded in 2010-19 more than 10km north of the 1970-86 northern limit. The species are arranged in descending order depending on the relative change in tetrad occupancy between 2010-19 and 1970-86.

| Species that increased after 1970-86 | North limit latitude | Total tetrads | | Numbers of Tetrads ¹ | | | Spread north |
|---|----------------------|---------------|-----------|---------------------------------|-----------------|------------------|--------------|
| | | 1970-86 | 2010-19 | Lost | Persist-ed | New | |
| A. Species that increased | | | | | | | |
| <i>Dactylorhiza praetermissa</i> | 54.98 | 4 | 20 | 4 | 0 | 20 | 1 |
| <i>Anacamptis pyramidalis</i> | 57.32 | 8 | 28 | 3 | 5 | 23 | 9 |
| <i>Ophrys apifera</i> | 54.98 | 59 | 173 | 39 | 20 | 153 | 18 |
| <i>Himantoglossum hircinum</i> | 52.70 ² | 6 | 12 | 5 | 1 | 11 | 1 |
| <i>Ophrys sphegodes</i> | 51.83 ³ | 41 | 43 | 16 | 25 | 18 | 0 |
| <i>Cephalanthera damasonium</i> | 52.52 | 116 | 131 | 62 | 54 | 77 | 1 |
| Mean (Percentage of 1970-86)⁴ | | 39 | 68 | 22 (63%) | 18 (37%) | 50 (223%) | |
| B. Species that decreased | | | | | | | |
| <i>Epipactis palustris</i> | 56.19 ² | 7 | 7 | 5 | 2 | 5 | 0 |
| <i>Orchis purpurea</i> | 51.46 | 56 | 51 | 24 | 32 | 19 | 0 |
| <i>Orchis anthropophora</i> | 52.99 | 23 | 17 | 12 | 11 | 6 | 1 |
| <i>Spiranthes spiralis</i> | 54.21 | 22 | 18 | 13 | 9 | 9 | 0 |
| <i>Ophrys fuciflora</i> | 51.30 | 12 | 9 | 5 | 7 | 2 | 0 |
| <i>O. simia</i> | 51.70 | 4 | 3 | 2 | 2 | 1 | 0 |
| <i>E. purpurata</i> | 52.54 | 141 | 74 | 111 | 30 | 44 | 0 |
| <i>O. insectifera</i> | 54.73 | 53 | 35 | 30 | 23 | 12 | 0 |
| <i>O. militaris</i> | 52.40 | 6 | 5 | 4 | 2 | 3 | 0 |
| <i>Herminium monorchis</i> | 51.94 | 66 | 31 | 38 | 28 | 3 | 0 |
| <i>Neotinea ustulata</i> | 54.74 | 21 | 8 | 14 | 7 | 1 | 0 |
| <i>Anacamptis morio</i> | 54.55 ² | 53 | 19 | 43 | 10 | 9 | 0 |
| <i>Cephalanthera rubra</i> | 51.83 | 5 | 3 | 3 | 2 | 1 | 0 |
| <i>Liparis loeselii</i> | 52.80 ³ | 17 | 5 | 13 | 4 | 1 | 0 |
| Mean (Percentage of 1970-86)⁴ | | 29 | 19 | 18 (62%) | 11 (38%) | 8 (26%) | |

¹ See text for an explanation of categories

² Northern outliers ignored when fixing northern limit.

³ Northern band was extended to include all populations

⁴ Means of percentages of 1970-86 tetrad numbers. These means are directly comparable with those in Table 2.