



Record number of wild flowers in bloom at midwinter: did Covid-19 play a part?

The results are in for BSBI's tenth New Year Plant Hunt, when plant-lovers across Britain and Ireland head out to see what is flowering in their local patch. 1,811 people took part this year – more than ever before – but restrictions around Covid-19 had surprising impacts on the wild flowers they spotted in bloom. They hunted for up to three hours over the New Year period¹ and recorded more species in bloom than ever before. Here's what they found:

- 710 different plant species were recorded in bloom across Britain and Ireland compared to 615 last year and 627 in 2019.
- A total of 21,419 records were submitted: almost 50% more than last year.
- 1,195 lists were submitted, compared to 798 in 2020 and 712 in 2019.
- 1,811 people² participated, either individually or as part of small family groups and support bubbles – our usual large group Hunts were all cancelled due to Covid-19.
- Plant hunters joined in from Orkney to Guernsey, from Anglesey to Norfolk, and from Donegal to south west Cork.

As expected, the milder south and west of Britain and Ireland had the highest numbers of species in flower³ – 86 on Jersey. This is less than the 2020 total of 115 species in Swanage and almost half the 2016 top total of 162 species recorded in Berkshire.

Ellen Goddard of BSBI's Events & Communications Committee⁴ has analysed this year's results⁵ and compared them with those from previous years. She said "2021 has been a record-breaking year, with more species recorded in bloom and more lists submitted than ever before, but we are still seeing the same split of native vs non-native plants. We have also seen a change in the way people took part in the Hunt this year: with organised group hunts cancelled due to Covid-19 restrictions, people have been going out on their own or in small family groups and support bubbles. This has led to a small increase (c5%) in the number of participants but a marked increase (45-50%) in total lists and records submitted. This is likely to have played a large part in the higher number of species recorded this year, but there was also a higher temperature anomaly than we saw in 2020. So, the Covid-19 restrictions may have influenced how people took part in the Hunt but the warmer weather in the period leading up to the Hunt could also have influenced the total number of species and the number of records we received."

The main findings from this year's data were:

- 53% of the flowering species reported were of plants which normally flower after midsummer and had managed to carry on flowering. These include 'Autumn Stragglers' such as Yarrow, Ragwort and Hogweed. This proportion is very similar to previous years.
- Only 24% were 'Springtime Specialists' like Primrose and Lesser Celandine, so there is no indication of an early spring. This proportion is similar to previous years.
- 23% of the records submitted were of species we might reasonably expect to flower at New Year, or species which we cannot easily be categorised as either 'early' or 'late'. These include typical 'All Year Rounders' such as Shepherd's-purse as well as 'Winter Specialists' such as Winter Heliotrope.
- The top four most frequently seen species were Daisy, Groundsel, Dandelion and Annual Meadow-grass – this was identical to last year's list and all (native) plants that we would expect to be flowering at this time of year.
- Smooth Sow-thistle moved into fifth position on the Top Twenty list of most frequent plants, replacing Common Chickweed which moved to number 14 on the list.
- Bramble and Nipplewort entered the Top Twenty replacing Winter Heliotrope and Ivy.
- 36% of species recorded were non-natives (aliens). This includes plants from warmer climates that have escaped from gardens or cultivation, become naturalised⁶ in the wild and were able to extend their flowering into the winter months.

As in previous years, urban areas tended to have more non-native species in flower than rural areas, as there are more sheltered and disturbed places with warm microclimates where alien plants can thrive.

Kevin Walker, BSBI Head of Science⁷ said "As Ellen's analysis of the New Year Plant Hunt shows, our plants are responding to changing weather patterns, with more flowers being recorded during the past decade as we experience autumns and winters with warmer temperatures and fewer frosts. We cannot, however, prove conclusively that more species are flowering nowadays in mid-winter compared to in past years. We can't say for sure yet what impacts these changes in flowering times will have on associated wildlife - but we can see that weather patterns are changing and our plants, both native and non-native, are responding."

Daily highlights of people's Hunts across Britain and Ireland were posted on the BSBI News & Views blog⁸ and shared via social media⁹.

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The Botanical Society of Britain & Ireland (BSBI) is the leading society promoting the study, understanding and enjoyment of wild plants in Britain and Ireland. Founded in 1836, we are now one of the world's largest contributors of biological records, many collected by our volunteer members, both amateur and professional botanists, who benefit from our research, training and outreach programmes.

Notes:

1. The 2021 New Year Plant Hunt ran from Friday 1st to Monday 4th January: www.bsbi.org/new-year-plant-hunt

2. 1,811 people registered their participation via our online recording app: www.nyph.bsbi.org/app2021/#records and using these instructions: www.nyph.bsbi.org/sendfinds.php

3. The New Year Plant Hunt website has an interactive map showing where plants were recorded; zoom in and click on the red markers to view individual lists: www.nyph.bsbi.org/results.php

4. Ellen Goddard sits on the BSBI's Events & Communication committee and is completing a PhD at Loughborough University researching an introduced carnivorous plant in Europe. Ellen is available for interview by phone or email on Monday 20th January:

Email: <mailto:e.goddard@lboro.ac.uk> Phone: 07561 361 637

5 Download Ellen's NYPH analysis in full: <https://bsbi.org/download/23913/>

6. An explanation of terms such as 'wild', 'native', 'naturalised' and 'aliens' is available here: <https://bsbi.org/definitions-wild-native-or-alien>

7. Dr Kevin Walker is Head of Science at the Botanical Society of Britain & Ireland: <https://bsbi.org/research>

8. For New Year Plant Hunt 2021 daily summaries, please follow these links:

[Day One](#); [Day Two](#); [Days Three & Four](#).

9. See images and comments on Twitter: [#NewYearPlantHunt](https://twitter.com/NewYearPlantHunt)

Please contact [Louise Marsh](#) to request images at higher resolution.