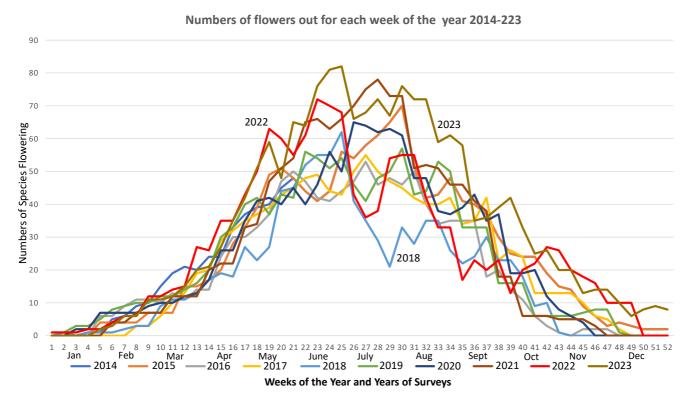
Bealeswood Common Wildlife As reported by Bealeswood Wildlife Recording Group (BWRG), January 2024

Wildflowers (DB)

Flower recording on this Common has been undertaken on a weekly basis since 2009. A record is made of when the different species start flowering and when the flowering ends. A total of just under 200 different species of herbaceous flowers have been identified but this does not include non-flowering plants such as ferns, mosses, lichens etc or shrubs and trees. As expected, there is a close link between weather patterns and flowering periods and the long-term study of this relationship is known as phenology.

Against a background of global warming the Met Office is frequently reporting records being broken, with 2023 being provisionally regarded as the warmest year on record for the UK. We are therefore interested in how our flowers have responded and will there be a knock-on effect for our insect and bird populations?

The graph below shows the number of species of flowers that are in bloom on the Common for each week (numbered 1 to 52) of the year for the last 10 years. Although the lines are very messy and variable (try squinting!) generally the pattern through the seasons is the same with an increase in flowers from winter through to spring, a maximum number of flowers through the summer and then a decrease, as they set seed and die off through the autumn and into the winter. Despite the "noise" in this graph the time of the year when most flowers can be seen on the Common will be late June to early July and is often found to be week 25, the week of Midsummers Day.



With record breaking temperatures in the summer of 2022, the normal vibrant summer flowers on the Common turned brown. Indeed, the annual late summer cut of the Common grasslands was brought forward because of the perceived fire risk from crisp brown foliage. This is reflected in the falling number of flowers out by the red line for year 2022 between weeks 24 to 27. However, when the late winter and spring flowers of 2023 were recorded all our usual flowers not only came into bloom but flowered at about the same time as our previous years' average first flowering date. A similar late summer drop in the number of flowers out was recorded after the hot and dry summer of 2018 (blue line) with just half the normal numbers of flowers recorded late in that July.

The summer of 2023 also broke temperature records but these were interspersed with rainfall and many local gardeners had bumper vegetable crops. The brown line on the graph for 2023 stand out from all the previous 9 years with many record numbers of flowers blooming through June, July and August. Flowers died off during September and October in trend with the previous years but the mild winter (with only minor frosts so far) has meant that we have a record number of 9 flowers out in the last week of the year (Hairy Bittercress, Lesser Spearwort, Lesser Periwinkle, Dandelion, Common Ragwort, Yarrow, Nipplewort, Lesser Celandine and White Dead Nettle). The Lesser Celandine record is the earliest date for this flower in our 15 year records with previous first flowering dates in first or second week of February. It is commonly taken as the first signs of spring. However, this early date was also reflected in a very early flowering date of late October for a Dog Violet on the Common.

Above-Lesser Celandine (photo Alan Cox) Below- Dog Violet (Photo Dan Bosence)



Alien Plants (AB)

Some of the plants on Bealeswood are not native in the locality. How did they get here? Plants can travel in various ways: seeds are carried by birds and animals, and by the wind. Roots can spread below ground, stems can spread and root above ground, all these methods have evolved to help the plant survive. Humans have also played a big part in the spread of plants, often resulting in 'aliens' arriving in the wild, including on our common. These may be plant species from other parts of the country, perhaps carried in accidentally on walking boots, or more likely, spread from local gardens onto the common, often innocently thrown out with leaf-sweepings or weedings. Some of these garden plants are species native in other countries, and if the climate here suits them, they will survive and spread. Some are cultivars, not wild plants at all, but bred to have showy flowers and produce colour in the garden. The chances are that any species plant will still benefit wildlife in some way, attracting butterflies and insects, whereas the cultivars or garden varieties are less likely to be useful for the wellbeing of wildlife on our common. More worryingly, some alien plants take off alarmingly in a new environment (which perhaps lacks their usual predators), overwhelming native plants and becoming hard to eradicate.

An amazing 20% of flowering plants on Bealeswood Common are not native! But putting this in perspective, there are now more non-native than native plants throughout Britain, so perhaps this higher percentage of natives reflects the common's long undisturbed history. We know the Romans brought all sorts of plants into Britain, either as food or for medicinal purposes, and perhaps also accidentally. One notable Roman introduction was Ground Elder, now considered an invasive weed. Some plants were imported so long ago that they have become more or less naturalised and accepted.

More recently, the Victorians were enthusiastic importers of plants, not imagining how the exotic foreigners they thought would decorate our gardens would also escape and cause us problems by invading our countryside. A couple of good examples of these are Japanese knotweed and *Rhododendron ponticum*, both can be found locally but thankfully not on Bealeswood Common.

Botanical classifications list plants imported to Britain before 1500 as archaeophytes, and post-1500 as neophytes. The following plants listed on the common are all considered aliens: Firstly the **archaeophytes**: Greater Celandine, Opium poppy, Cut-leaved Cranesbill, Chamomile, Bristly Oxtongue, Feverfew, Dandelion, Ground Elder, Ivy-leaved Speedwell, White Deadnettle, Red Deadnettle, Lesser Periwinkle, and Forget-me-not.

Secondly, the **neophytes** (post 1500): Montbretia, Snowdrop, Spanish Bluebell, Star of Bethlehem, Dusky Cranesbill, Honesty, Cyclamen, Michaelmas Daisy, Fox-and-cubs, Henry's Honeysuckle, Purple Toadflax, Lemon Balm, Greater Periwinkle, Borage, Alkanet, and Lungwort.

Lastly, some garden escapes we are calling '**recent**': Glory-of-the-snow, Hybrid Bluebell, Grape Hyacinth, Daffodil (hybrids), purple Hyacinth, Oriental Hellebore, Tutson (St John's Wort), Geranium (Wargraves Pink), Sweet Rocket, Dotted Loosestrife, Peppermint, and white Forget-me-not.





left, Left: hybrid Bluebell (native bluebell crossed with Spanish bluebell)

above: Lungwort (Pulmonaria)

For online versions of this and previous monthly notices see www.dockenfieldpc.org.uk/wildlife Dan & Alison Bosence, Alan & Pauline Cox, Philippa & Colin Hall, Alex Potts, Roger & Jill Trout and Anne Tutt. 6th January, 2024.