

## Dorset Flora Group Vice-county Recorder's review of 2021

### General recording

Group activities were severely curtailed during 2021 owing to the continuing Covid-19 pandemic. Nevertheless individuals and small groups did venture out and contribute a substantial number of records during the year; 14 934 up to September, far more than the 3392 records in 2020 (fig....).

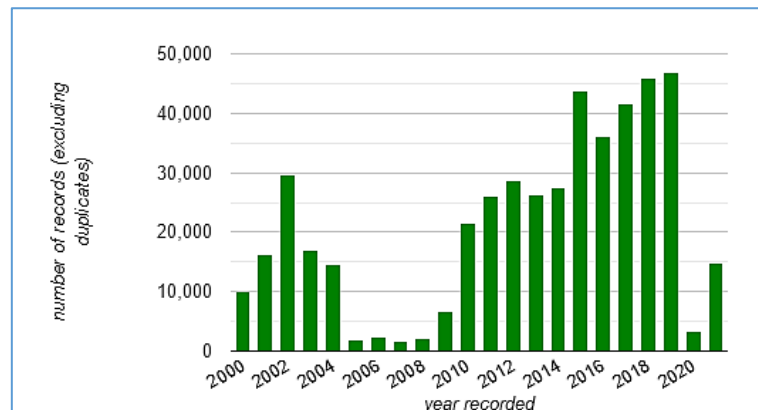


Figure .....Number of records in the BSBI database for each year since 2000  
(downloaded 2nd Jan 2022)

Records have not been collected evenly throughout the vice-county. Nearly all recorders submit data via Living Record so that up-to-date distribution maps are readily available (fig.....). The scatter of new records around Crossways is largely due to the activities of Tom and Jean Smith whilst the Purbeck hotspots are due to the activities of the National Trust's botany group and Durlston Country Park rangers. Other well recorded squares, like Shillingston, are the result of DFG trips and DWT monitoring. There should be a cluster of squares in the SW from the regular meetings of the National Trust volunteers there, but these are not directly available to the county.

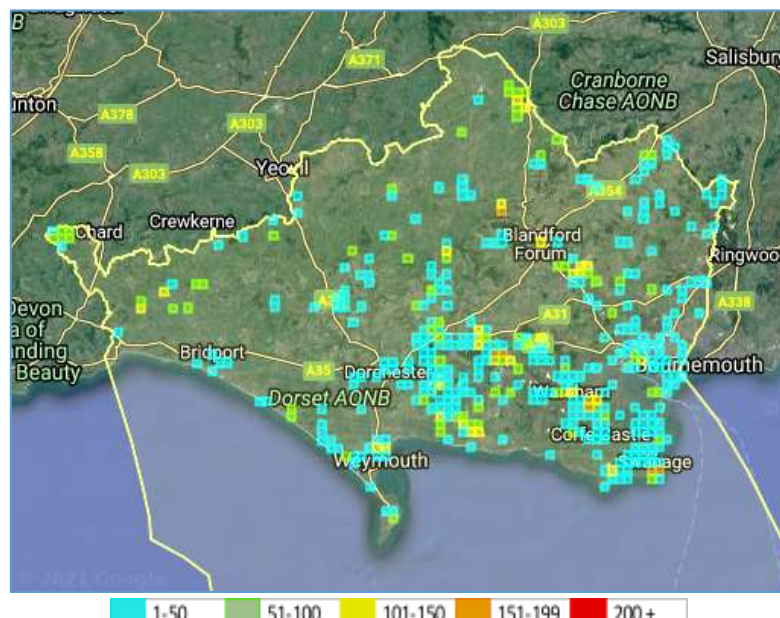


Figure..... Number of records for each 1km squares since 1<sup>st</sup> Jan 2021  
(Living Record, 2nd Jan 2022)

### *Lobelia urens* and *Mentha pulegium*

The Hurst Heath population of *Lobelia urens* the *Molinia* continues to grow vigorously, but we found a reasonable number of flowering spikes in the summer. The working party arranged for February didn't happen, due to Covid

and a key member being stranded in Scotland by the weather. Hopefully the work will be done in 2022. An encouraging sign was a single flowering spike in the area cleared of trees last time.

Brian Chandler, the farmer has handed over management to his son, who joined us on the inspection. He is keen to maintain this site in memory of his grandfather, Mike Chandler, who discovered the population. We discussed a more sustainable management regime than the periodic loan of a JCB and driver by Alaska we are currently relying on.

Silverlake's translocated population flowered well at only one of the three exclosures. Although no plants have been found outside the exclosures it is possible that this protection is no longer needed. The lack of grazing has resulted in shrubs establishing and threatening the survival of smaller plants. Habitat First plan to dig out gorse and birch to leave open ground which may stimulate germination of any seeds.

Pennyroyal, *Mentha pulegium*, looks as though it is now becoming established at Silverlake from the seed scattered two years ago. The strong smell is believed to protect the plant against grazing by mammals and invertebrate pests so there is no need for protection like the heath lobelia.

### **Potamogeton workshop**

In September we were lucky to have Richard Lansdown, a national expert on aquatic plants, to introduce us to pondweeds on the Stoborough Meadows. This is the only British site for a hybrid *Potamogeton x sudermanicus* (= *P. berchtoldii* x *P. acutifolia*). The first of these parents has only been seen once on this site although it is a common species elsewhere. The other parent is abundant in the ditches, and as we found out, not easy to distinguish from the hybrid.

### **Dorset Rare Plant Register** (see p..... for more background)

My intention on completion of the Atlas 2020 recording has been to update the Dorset Rare Plant Register (DRPR). The published version by Bryan Edwards and David Pearman is dated 2004 and a lot has happened since then. Most notably, the value of published volumes on the distribution of species is questionable now that the data are regularly updated and readily available online. A commentary on the species ecology and how well it is coping with climate changes and other pressures may well be a worthwhile venture.

I have maintained a spreadsheet of the latest record for every population of the species covered in the 2004 DRPR, as well as a few taxa that might be rare and some aliens. So far, updating is only by adding records as I hear of them and very little proactive searching to see whether plants are still present in the known sites, or how well they are doing. In 2020 we began targeting species, but of course Covid-19 scuppered plans and things were not much better in 2021.

The only species covered at all comprehensively was the violet helleborine, *Epipactis purpurata*. It turned out that nearly all the sites are in woodland SNCI that were scheduled for a monitoring visit and so Mariko Whyte handled the access permissions for that project. This species is not desperately rare in Britain, but the Dorset sites are the most westerly sites in southern Britain. It is not an easy plant to find in the dim light of woodland, even when in flower but it was refound in six sites – a total of 31 plants. Four sites were not visited and it was not found in one site. But this is complemented by some new records.

### **New sites in Dorset**

The first exciting find of the year was a new species for vc9, *Symphyotrichum squamosum* (saltmarsh aster) growing in the pavement in the centre of Broadmayne. Carolyn Steele and I found it, in flower during a New Year Plant Hunt – the first time we had joined in that bit of fun

The other notable new species was David Leadbetter's collection of *Taraxacum cornubiensis* in Swanage, confirmed by the referee for dandelions. This is much further east than any other record. There are around 60 known dandelion species in Dorset so far; certainly an underestimate. The BSBI published a new field handbook in 2021 that has 239 species! It is a very much better book than the first handbook, but David's find renders the distribution map out of date already!

Crimson clover, *Trifolium incarnatum* ssp. *incarnatum* is a stunning colour, but unfortunately a very rare component of the cornfield flora. Rosalind Bucknall found a large population around a field and in the school at Bishop Caundle – new locations. The pictures look superb and I hope it comes up next year when I might manage a trip to see it.

Marsh clubmoss, *Lycopodiella inundata*, has always been scarce in Dorset, and indeed the British Isles. It is classed as ‘endangered’ in the England red list because of a 65% decrease in extent since the first BSBI atlas. So when Jenny Ashdown, a Kingston Maurward student looking for reptiles, spotted a colony in a small flush on Duddle Heath (Puddletown Forest) in the autumn we excitedly checked it out. Fortunately she had been on one of Dom Price’s identification days and sent him some photos and a grid reference. He tells me that it is the first time any of the hopeful photos he’s received has proved to be anything other than heather seedlings! Importantly this record is much further west than any others and represents the extreme of the Hampshire Basin metapopulation. It has been lost from E.Devon and is very rare on Dartmoor. It has given me new hope that we might find some on Warmwell Heath, but so far I’ve failed.

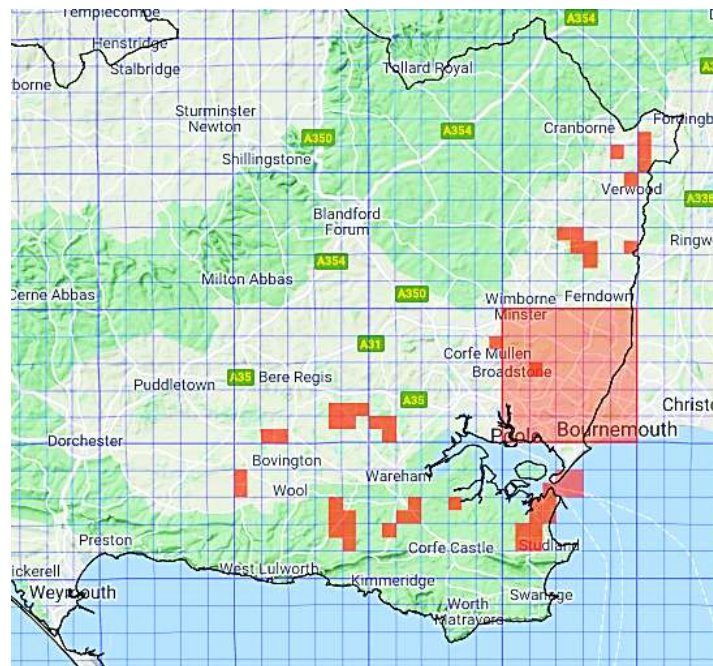


Figure.... the distribution of *Lycopodiella inundata* in Dorset since 2000, prior to the new Duddle Heath find (BSBI database).

A scarce species that looks as though it is declining in Dorset is the frog orchid, *Coeloglossum viride*. The distribution map in figure.... demonstrates the current scarcity in Dorset compared with last century and with much of Wiltshire. In the summer Paul Harris sent me an email reporting how pleased he was to find 15 plants where he had seen them many years ago near the Cerne Giant, but the record was not showing on the published maps.

Knowing Dylan Reisenberger lives nearby and, aided by family, has been finding good populations of autumn gentian and other chalk downland species near his home, I passed on the information. Because he could not go himself he enlisted the help of his wife and daughters. They were delighted to find the population and indeed, counted more than the original finder. Subsequently Dylan’s daughter Rosa found many more plants at new sites, having learnt to spot the right grassy habitat, bring the total to a healthy 76 flowering spikes – the largest population in Dorset.

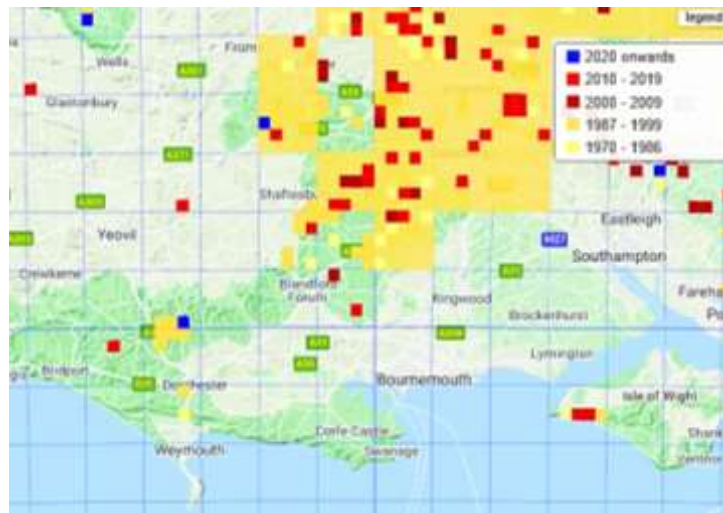


Figure..... *Coeloglossum viride* distribution (BSBI database)

Another scarce species of chalk downland that may be less common than it once was is the burnt-tip orchid, *Neotinea ustulata*. The map (fig.....) is very similar to the frog orchid and indeed to *Carex humilis*, *Thesium humifusum* and several other species, raising an intriguing mystery. What is different about the chalk ridge from the Blandford area to the SW? The geology map has several different chalk formations, laid down 71 – 86 mya, but none of them runs out in the Blandford area.

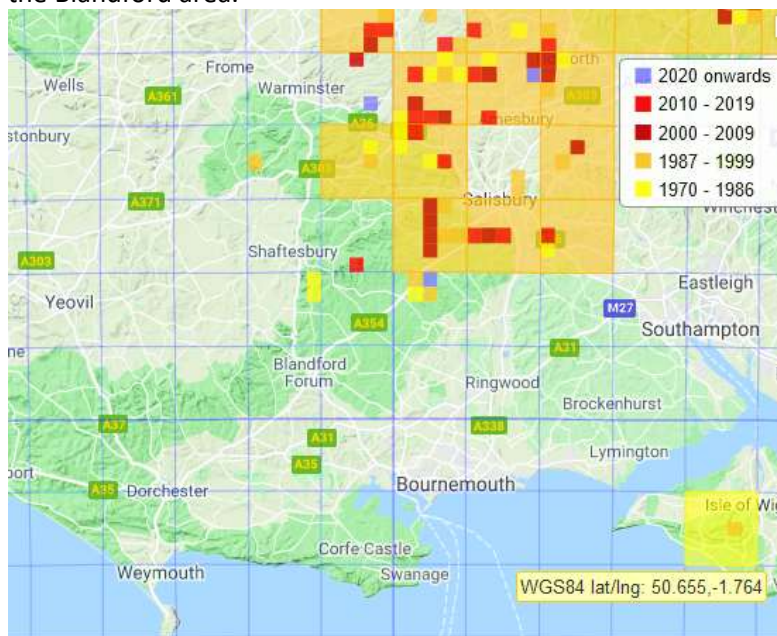


Figure..... *Neotinea ustulata* distribution (BSBI database)

### Urban Flora & Road Verges

Trundling along in the shadows of botanising in the open countryside is observing the unexpected diversity of the built-up areas. The enforced restriction of movement over the last two years has encouraged many botanists to look at their local streets and the reduction in council spraying has given the pavement weeds a break. Those of you who have joined in the BSBI's New Year Plant Hunt will have realised that the longest lists of species in flower are likely to be from urban environments. 'Square-bashing' for the 2020 Atlas amply demonstrated that looking around any village in the square rapidly increases the list because of the low diversity in the farmed countryside.

A friend of mine conducted a street by street survey of her local patch at Hillhead in Hampshire and started to compare the lists in various ways. Direct comparison of the diversity has the obvious limitation that the streets are different lengths and we might expect longer streets to have more species. A simple species per metre index, as I computed for Broadmayne survey, is a crude option because the relationship between length and diversity is unlikely to be linear and I wondered what would be better. Can we compare street diversity by collecting in a standardised way? For instance, recording a sample lengths – say 30m – as we would for a hedgerow survey? I'm sure this will work, but of course, you have to decide this before the survey; it is not applicable to historic lists.

Ideally we need a non-parametric index for comparison unless we can establish a universal function relating the diversity to length. This is sounding like an MSc project at least, but it would pave the way to defining an 'important street or verge' and perhaps influencing spraying regimes.

### **Rewilding**

Rewilding projects are following the bus model: three have popped up this year:

- Wild Woodbury, Bere Regis (DWT)
- Bishop Court Dairy, Kingston Lacy (NT)
- Chettle, (private estate)

All are arable reversions that I and other DFG members have visited to get a list of species and I hope we can continue to follow developments. The arable sites have some interest worth keeping, like *Briza minor* and *Clinopodium vulgare* at Wild Woodbury or *Filago vulgaris* at Bishop Court. How these survive as the open areas reduce and which new plants become established will be fascinating.

R.M.Walls 14<sup>th</sup> Jan 2022