



The Newbiggin *Limonium*.

Despite, or just possibly because of the exigencies of this most extraordinary of years, 2020 has proved something of an *annus mirabilis* for vc 67 botany. Such notables as *Alopecurus aequalis* (Orange Foxtail), *Herniaria glabra* (Smooth Rupture-wort), *Betula x intermedia* and a *Limonium* (Sea-Lavender) have been added to the County Flora, while important extensions of range have been reported for *Bidens tripartita* (Trifid Bur-Marigold), *Myosotis stolonifera* (Pale Forget-me-not), *Verbena officinalis* (Vervain), *Betula nana* (Dwarf Birch), *Saxifraga hypnoides* (Mossy Saxifrage), *Hirschfeldia incana* (Hoary Mustard) and others. To learn more, read on!

The Newbiggin *Limonium*

To start with, what about this *Limonium*, pictured above? This substantial plant, which has spawned a couple of offspring, was discovered in August by Mark Welfare just 100 m north of the point at Newbiggin-on-Sea. The only native site for any sea-lavender in Northumberland is Holy Island, (vc 68) where *L. vulgare* still grows on St Cuthbert's Isle, with occasional records from further north on the island. However, when I came to key out the Newbiggin specimen, the length of the spikelets, low density of flowers in a spikelet and the length of the bract all suggested Lax-flowered Sea-lavender, *L. humile*, the nearest sites for which are in North Yorkshire. This species is self-fertile, unlike *L. vulgare*, and the Newbiggin plant has spawned at least two seedlings, which a solitary *L. vulgare* would be unable to do. Since then I have had my doubts. Both *L. vulgare*, with dense, flat-topped heads, and *L. humile* with sparse erect heads have a characteristic 'jizz', and the Newbiggin plant resembles neither. Further south in England, both species often occur together, and when they do, hybrids are frequent. At present I am inclined to think that our plant, however it arrived from afar to settle at Newbiggin, may in fact be one of these hybrids.

Another dwarf birch site

For several decades, Bucklake Sike was the only known site for *Betula nana* (Dwarf Birch) in the county, and only one of two in England. Then a site was discovered near Spadeadam (vc 70), and in 2014 Gordon Simpson discovered a second Northumberland location in the Wark Forest. Nearly all the Scottish sites for this arctic shrub lie north of the Great Glen, so these locations are of the greatest interest. Remarkably, Duncan Hutt discovered a third Northumberland site this June, and in a far more accessible location than the others. He found a substantial population on Elishaw Moss about a kilometre east of the village of

Ridsdale which lies on the A68. This site lies at only about 300 m altitude, just west of a sparse reed-bed which contains *Pinguicula vulgaris* (Butterwort) and *Salix repens* (Dwarf Willow). *Betula pubescens* (Downy Birch) occurs not far away, so it was no great surprise to find a single individual of *B. x intermedia* at the edge of the dwarf birch colony. This hybrid, commonly found at Scottish sites, is not only new to Northumberland, but to England.



Betula x intermedia (foreground) surrounded by *B. nana* with smaller leaves and a less erect habit. Elishaw Moss.

Orange Foxtail and Trifid Bur-Marigold at Colt Crag Reservoir

Early in September I received an email from Mike Richardson to say that he thought he had discovered Orange Foxtail grass (*Alopecurus aequalis*) on the drawdown at the eastern end of Colt Crag reservoir. There are great areas of a creeping grass here, mostly not flowering, but in the end I found a few inflorescences showing that it was all Orange Foxtail. However, right under the dam/road masses were in full flower, showing the distinctive orange anthers that give the plant this name.



Once again, this is a remarkable extension of native range, not previously having been recorded in natural habitats north of Redcar (there are a few Scottish records as a weed in garden centres and aquaria). The Colt Crag drawdown was very rich with *Eleocharis acicularis* (Needle Spike-rush), *Rorippa palustris* (Marsh Yellow-cress), *Callitriche platycarpa* and *Lythrum portula* (Water Purslane) forming large patches, but I was

most pleased to discover numerous plants of *Bidens tripartita* (Trifid Bur-marigold) in its dwarf variety *integra* in what is only the second site in the county.



Vervain at Oakerlands

While taking a local walk here in Hexham last month, I paused at a field gateway next to the Oakerlands (or, interestingly, Ochrelands, these are alternative handles) and was amazed to see a single plant of *Verbena officinalis* (Vervain) in the compacted entrance. This is a very common weed on the southern chalk from where I hail, but the only recent record in vc 67 was from the Newcastle Moorbank Botanic Garden, now sadly no more. When Jim Bowyer visited a few days later, rabbits had eaten the inflorescences, but the plant flowered again after a few weeks.



Smooth Rupture-wort in Corbridge

Following on from last year's discovery of *Polycarpon tetraphyllum* at North Shields, a related rare southern native annual, *Herniaria glabra*, Smooth Rupture-wort has also been discovered in the county, this time in Corbridge. As a native it is mostly restricted to Breckland in East Anglia, growing in open areas on dry heathland. Its origin in Corbridge is not disputed, as an introduced plant thrives in a nearby garden trough from which it has seeded into the pavement. Despite its garden origin, it vies with the *Polycarpon* in the low charisma stakes, possibly winning by a short capsule.



Herniaria glabra, growing in a Corbridge pavement.

***Crepis mollis* (Soft Hawksbeard) in Allendale and Hexhamshire**

Following on from last year's sensational discoveries of massive populations of this rare plant in Allendale, several new populations were discovered in the same general area, mostly by Lizzie Maddison. Richard Friend has been studying this plant in great detail, to discover how its short and variable flowering season, and its virtual invisibility out of flower have contributed to its apparent demise and rarity. In the course of this, he visited the well known and formerly rich meadow banks at Heatherburn, south of Harwood Shield, together with Monica Haigh. Where Monica and I had previously found exactly one plant there, a fortnight later they logged more than 150, illustrating the above point well. This is the fourth large and thriving population known from the county with in excess of 100 individuals.

***Hirschfeldia incana* (Hoary Mustard)**

Finally, I want to draw attention to one of the rather many yellow crucifers, which is easily overlooked or ignored. *Hirschfeldia* is a recent arrival in our county, all records coming from the present century. Like many new arrivals, it seems to be spreading north rather rapidly, spurred on by climate change. Most sightings have been in greater Newcastle, but this year it has spread north to Morpeth and Newbiggin-on-Sea. This is a tall crucifer with distinctively pale yellow flowers and coarsely hairy, even bristly, lobed leaves. It looks very like *Brassica nigra* (Black Mustard), itself not that common in the county, but is instantly known by its 2-celled pods, constricted in the upper third.

A final note in this Covid-dogged year. Sadly, we are not encouraged to botanise in groups, but many good records have arrived through the Wednesday Botanical Group of the Natural History Society of Northumbria email group, and from other sources. I am always willing to receive queries, records and messages at hightreesgarden@btinternet.com. Please accompany any records or queries with a grid reference, and photographic attachments are always welcome. Many thanks.