

Botanical Group Activities 2020

Introduction

The Botanical Group is a 'project' of the Strettons Area Community Wildlife Group. Our group is coordinated by Shropshire Wildlife Trust to survey Local Wildlife Site or potential LWSs. Each year SWT staff develop a programme of sites for us to visit and correspond with landowners for permission; depending on priority, the aim is to assess LWSs in rotation every 5-10 years. For each survey site we compile a report that includes a list of vascular plant species, where relevant, quadrat data for identifying National Vegetation Classification (NVC) communities, and management observations and suggestions. SWT later gives feedback to landowners and to the County LWS committee; and data is added to the county and national databases.

In addition each year we may visit one or two local sites that we identify, e.g. a churchyard, or where a landowner has contacted us directly.

This year the covid lockdown meant the programme failed to get off the ground; mid April to July is the main survey window and this coincided precisely with lockdown¹. So survey activities this year were limited to what individual members could do locally whilst exercising. This is a summary of some of those activities.

1. Ley Gardens Nature Reserve SO45939419; 12 July 2020

This is a little species-rich gem within Stretton Town itself. It is a small nature reserve of 0.5ha sandwiched between the Ley Gardens housing development and the Shrewsbury to Hereford railway line. It is really part of what is now Coppice Leasowes Nature Reserve cut off by the railway in 1850, Ley Gardens to the west and Coppice Leasowes to the east.

Ley Gardens Reserve is highly engineered for drainage and levelling for the railway and the housing. It includes a steep bank and paths around two connected seasonal ponds and a large culvert that carries storm water away under the railway. The Reserve has open public access and is managed by the Housing Group, Connexus. Management is mainly limited to mowing grass paths and kind provision of a couple of benches.



Figure 1: Ley Gardens Reserve beside the railway line with Hazler Hill in the distance

The flora is very diverse; the survey found 102 species in an afternoon including 7 axiophytes¹:

- i) Sneezewort *Achillea ptarmica*
- ii) Small-fruited Prickly-sedge *Carex muricata* subsp. *pairae*
- iii) Water avens *Geum rivale*
- iv) Water dock *Rumex hydrolapathum*
- v) Grey Willow *Salix cinerea*
- vi) Skullcap *Scutellaria galericulata*
- vi) Small-leaved Lime *Tilia cordata* (probably planted).

The diversity is in part due to some imaginative tree planting (e.g. Whitebeam, Small-leaved lime, Aspen), in part relic species that perhaps have hung on since the advent of the railway (e.g. sneezewort, prickly sedge, water dock, skullcap). It is diverse also because in a very small area there are steep dry mesotrophic grassland banks through to swamp communities. There are problems: a) purple loosestrife has become invasive and is taking over pond beds (which were completely dry when surveyed); b) nettles cover a large area of the site suggesting eutrophication; c) grass clipping piles encourage eutrophication; d) trees (mostly planted) are fine now but will soon shade large areas so need managing and thinning; e) the herb layer is getting taller in the struggle for light, since there is no grazing and cutting of vegetation other than the grass paths.

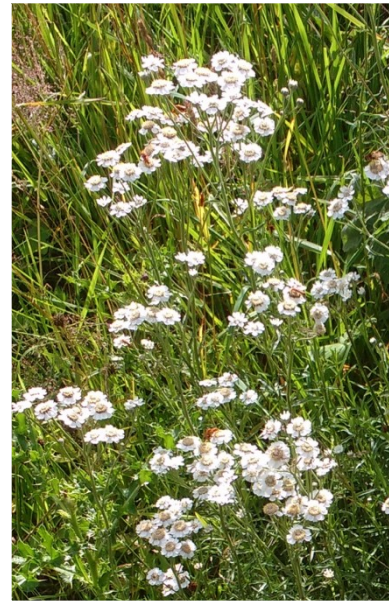


Figure 2: Sneezewort

The survey findings were fed back to Connexus Housing. It would be excellent if some local residents (not all of whom are elderly) would see the value of what they have on their doorstep and form a volunteer group with occasional workparties to manage the site.

2. The Mountain Pansy (*Viola lutea*) hunt

The mountain pansy is not common in the Stretton Hills. On the National Biodiversity Network database there are only 5 records since 2000, all on the west side of the valley at the Golf Course (2 records), Ratlinghope Hill, Ashes Hollow and High Park. Records going back 125 years indicate presence on several other sites including in the eastern hills of Caer Caradoc, Ragleth, and Hope Bowdler.

Extract from the 2015 Shropshire Flora (Lockton A and Whild S)

Viola lutea

Once abundant in fields on all the hills in the west of the county and even on lowland heaths, but now it is rare to find more than a couple of dozen plants in the unimproved fields that remain.

Plants in Shropshire are all yellow-flowered now except at Rhos Fiddle, where there are purple ones (D.M. Young, 2002). In a few places there are still large populations, notably on the summit of Titterstone Clee (J. Bingham, 2008), on the Long Mynd Golf Course (P. Carty, 2008), on the north end of Stapeley Hill (J. Clayfield, 2007) and at Rigmoroak.



Figure 3: Mountain Pansy

¹ Axiophytes are of particular interest to botanists as useful indicator species of habitats; they are not necessarily rare, but they are good to find.

The hunt was sparked off in 2019 by Jane and Peter Howsam who found a patch on the Church Stretton golf course; at the same time Isabel Carter found a single plant on Ashlet. The search resumed during the first lockdown 2020; finds were:

Who	Grid Ref	Where	Notes
Gay Walker	SO 42909720	South of the Portway, Henley Nap (aka Colliersford Gutter), Upper Darnford valley.	An extensive spread of pansies. This find matches records from 1979 and 1963; so it is very good to see it is still there.
Frances and Frank Hay	SO 44649515	Golf course nr 13th tee	About 30 plants. A different patch, 200m from those found in 2019; 2 further patches later found nearby.
Frances and Frank Hay	SO 47849557	North slope of Caer Caradoc	About 15 plants. An excellent find since the last record here was 1979; before that, there were several 19th century records.



Figure 4: Mountain pansy in abundance at Henley Nap

Look out for the Mountain Pansy as you walk the nearby hills. If possible take a photo and grid reference and feedback details to the Botanical Group and *iRecord*.

3. Three churchyards: Leebotwood SO47069867, Smethcott SO44949938 and Woolstaston SO45229847

Caring for God's Acre (CfGA) want all churchyards in the county, indeed country, to be surveyed. These three churchyards were visited three times at monthly intervals over the summer.

All three churchyards included interesting tree species as solitary plantings or along boundaries; many are veteran, some ancient.



Figure 5: Woolstaston churchyard

Woolstaston was the least diverse of the three churchyards with just 32 vascular species, woody and herb. It is regularly mown to billiard table height, so only the toughest species survive.

Leebotwood and Smethcott churchyards were promising when first visited in early May. Unfortunately both had been almost completely mown or strimmed, probably by the same contractor or volunteer, when visited 4 weeks later. 59 vascular species were recorded in total at Smethcott; 55 species at Leebotwood.



Figure 6: Smethcott churchyard

varying heights; paths, meadow areas, bulb patches, winter refugia etc.

None of the herb species found were axiophytes or particularly unusual. Nevertheless churchyards are important wildlife reservoirs for the local area. Persuading churchwardens not to regularly mow has clear benefits for diversity. It is better to avoid mowing all but paths for 3 months May to July and removing mown materials to compost heaps. Best is adopting a Management Plan with areas managed differently with vegetation of

CfGA pass survey findings and management suggestions back to churchwardens. Let's hope they see the potential for increasing biodiversity.

4. **Cudwell Meadow** SO 453937, 7 July 2020

The biosurvey of this wet meadow of just under 1ha is reported separately as a Stretton Wetlands project of SACWG.

In summary, a total of 145 vascular plant species were recorded including 6 axiophytes,

- i) *Carex muricata var pairae* - Prickly sedge; rare
- ii) *Hyacinthoides non-scripta* - Bluebell; occasional
- iii) *Lamiastrum galeobdolon* - Yellow Archangel; occasional
- iv) *Myosotis discolor* - Changing Forget-me-not; rare
- v) *Myosotis secunda* - Creeping Forget-me-not; frequent
- vi) *Veronica scutellata* - Marsh Speedwell; occasional.



Figure 8: Cudwell Meadow in a wet August 2020

Quadrat data were also collected to determine vegetation communities within the meadow using the National Vegetation Classification (NVC) system.



Figure 7: Marsh Speedwell

145 plant species is an encouraging number for a field of less than a hectare. This probably reflects two main factors:

- i) management in recent decades. The field has not, so far as is known, been cultivated or resown or received artificial fertiliser for several decades.
- ii) inundation. Diversity is enhanced by the spectrum in different parts of the field of months under water, from more or less 0-12.

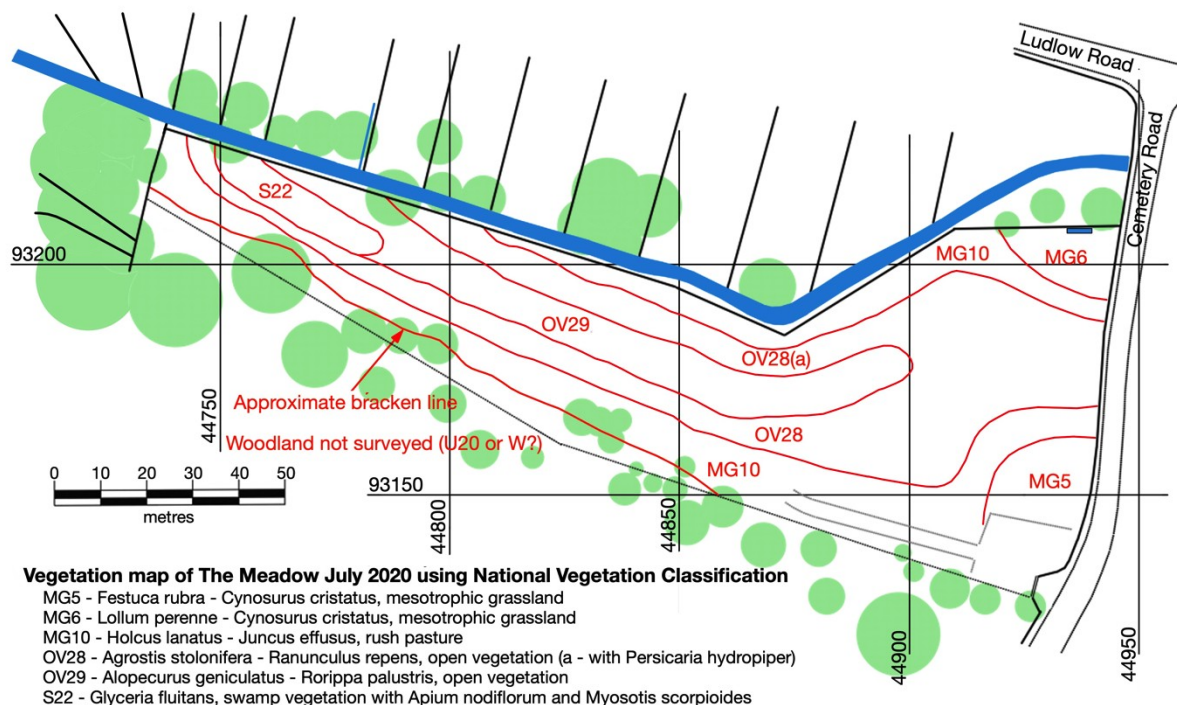


Figure 9: Vegetation zones in Cudwell Meadow

The different vegetation communities reflect the amount and duration of flooding especially in the spring. Some communities, in particular OV28 and OV29 are not common in South Shropshire; they are in effect more akin to the Meres and Mosses communities of North Shropshire. These open vegetation communities can be important as grazing marshes for wintering wildfowl and waders in the spring.

Further details can be found [here](#). The full Vegetation Survey Report can also be found here on the SACWG Wetlands Project website.

5. Chatwall SO 521982

One of our group, Margaret Westhead, surveyed verges and paths close to home near Broome and Lower Chatwall. Over 25 herb species were recorded, not including grasses but including 3 axiophytes (Wood sorrel *Oxalis acetosella*, Yellow rattle *Rhinanthus minor* and Wood speedwell *Veronica montana*), suggesting this an area little known to most of us, that the group should visit in future.

6. The New Year Plant Hunt

The BSBI (Botanical Society of Britain and Ireland) New Year plant hunt took place from 1st to 4th January 2021. It is one of the ways used to find out how our wildflowers are responding to changes in climate. Wild species in flower seen on a walk of up to 3 hours are recorded. The results are then analysed and published on the BSBI website.

Frances and Frank Hay found 15 species on a walk around All Stretton batch, Castle Hill and Inwood.

<i>Campanula trachelium</i>	Nettle-leaved Bellflower	<i>Lamium maculatum</i>	Spotted Dead-nettle
<i>Cymbalaria muralis</i>	Ivy-leaved Toadflax	<i>Pentaglottis sempervirens</i>	Green Alkanet
<i>Cytisus scoparius</i>	Broom	<i>Rubus fruticosus</i> agg.	Bramble
<i>Geranium robertianum</i>	Herb-Robert	<i>Sonchus oleraceus</i>	Smooth Sow-thistle
<i>Geum urbanum</i>	Wood Avens	<i>Tanacetum parthenium</i>	Feverfew
<i>Heracleum sphondylium</i>	Hogweed	<i>Teucrium scorodonia</i>	Wood Sage

Ulex europaeus
Valeriana officinalis

Gorse
Common Valerian

Vinca major

Greater Periwinkle

If you'd like to try next year, go to the BSBI website <https://bsbi.org>. The longest list so far submitted nationally is of 86 spp!

Finally, recording in 2021...

Let's hope 2021 is a better year for surveying. At present (January 2021) it is not clear what will be possible, or whether SWT will be able to put together a programme of visits. Do get in touch if you'd like to join us.

In the meantime..... do report any interesting finds. Much the easiest way to do this is to do it yourself using the *iRecord* app. Your record, ideally with a photo, goes through to the County Recorder and, once verified, onto the National Biodiversity Network database <https://nbn.org.uk>

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