

Lanarkshire Botany

New Year update, January 2018



Happy New Year to all our botanical contacts!

2017 summary

2017 was the first full year of 'Team 77'. Our aim was to get 'boots on the ground', giving an increasing number of people with an interest in botany the opportunity and support to record wild plants in a wide range of habitats throughout the season.

Our fieldwork programme was packed with outings, both at weekends and some weekday evenings, and included rich rural areas, fascinating urban sites and some of our more remote hill country.



Cardamine amara (Large Bittercress) with its distinctive violet anthers

In a most encouraging new development, we worked with three different schools, introducing pupils to botany and finding wild plants in and around their school grounds.

We are also grateful to colleagues from other counties, societies and projects who have visited Lanarkshire and contributed their own data to add to the record.

As a result of all this activity, there has been a steady flow of data - field notes to be checked, pictures to be identified, locations to be revisited for further study, and species to be sent to experts for examination. We are most grateful to a number of experts who have kindly offered advice, commented on photographs, or examined specimens (including several of the BSBI species referees).

Read on for some 2017 statistics, exciting news about our new photo website, an explanation of the BSBI 'Atlas 2020' project, a preview of the 2018 fieldwork programme, and more . . . !

Ferns hunt!

Most ferns die back over the winter, but a prominent winter survivor is the evergreen *Dryopteris affinis* (Scaly Male Fern). Many people baulk at identifying the subspecies, but the main one which remains dark green through the winter is *Dryopteris affinis ssp. affinis*. (Other similar species, *Dryopteris borreeri*, *Dryopteris cambrensis* and *Dryopteris filix-mas*, are much less likely to be found in winter.)



Dryopteris affinis ssp. affinis (close-up showing vein pattern)

So, if you'd like to have a go and hunt for ferns, please drop me an email and I'll send you a detailed Briefing Sheet, with references and photos. Once you've familiarised yourself with the material, get out and hunt for this fern! The advice is to record it if you're very confident that your specimen fits the description, but 'walk on by' if you're not sure. Or make a note of the exact location and someone can come back and have another look.

For smartphone users: there is an excellent app which enables you to pinpoint your GPS position to within a metre or two.

GB Grid Ref Compass

For less common species, it's always a good idea to make a note of the exact GPS location in this way.

Photo Project

Peter Wiggins is co-ordinating an ambitious web project to celebrate the flora of Lanarkshire and to provide valuable identification aids. The key element of this project is gathering the best photographs of wild plants that members of the Team can contribute. (It will take time to pull all this together: we'll keep you updated.)

So, over these winter months, please look out your own best pictures of plants in the wild and forward them to Peter with a note of the exact date and location (the map square in which the plant was photographed - and only those taken in Lanarkshire count!) And in the coming season, when you're out looking at plants, do please consider taking some photos especially for this purpose.

Peter's email address is: pswiggins@gmail.com

ATLAS 2020

The new BSBI Atlas showing the distribution of all plants growing in the wild in the British Isles is to be published (both in print and online) in 2020.

In the past, most 'dot-maps' showing distribution of species have been at a resolution of one dot per hectad (100 sq. km.) Today, the minimum standard of resolution is the tetrad (4 sq. km.) and most recording is now done at monad level (a single map square, or 1 sq. km.) This is up to 100 times more accurate than the former method, but it involves collecting much, much more data!

The thresholds we are all striving to reach are as follows:

- 1. At least 75% of all plant species ever recorded within a hectad should have been found or re-found since January 2000.**
- 2. In every hectad, at least 5 tetrads should each contain over 100 species - at least 75% of which should have been found or re-found since January 2000.**

We have 35 hectads wholly or significantly within Lanarkshire (plus fragments of 4 more). Of these 35, 16 already meet the criteria, and several others are near the qualifying standard. In some areas, the challenge before us is to visit and record in areas never previously recorded; in others the task is to re-find lots of species recorded previously but not seen again so far this century. The latter is particularly true of the many urban squares in Glasgow, where there are large historic lists which need to be brought up to date.

So, for the next two years, our outings programme will target monads and tetrads which will have the greatest positive impact on these statistical requirements. We're hoping to bring the entire vice-county up to the qualifying standard by the end of 2019.



BSBI

The Botanical Society of Britain & Ireland is the national body on whose behalf we gather data, and who will be collating and publishing Atlas 2020 in due course.

Some readers of this newsletter are already members of BSBI, and I would urge others to consider joining. There is a truly excellent website, packed with information and reference material at all levels:

<http://bsbi.org>

Training courses are available, and there are lots of events to consider attending. In particular, I would commend the Scottish Annual Meeting (normally in early November), which offers a great opportunity to experience what's going on in the world of field botany all across Scotland, to meet fellow enthusiasts, and to take part in lectures and practical workshops.

And if you should ever want to find out if a plant you identify has been seen in your area before, here's a really cool map! Just type in the scientific name of any species and zoom the map up:

<http://bsbi.org/maps>

Lactuca serriola

In the late summer, we began to notice a tall weed in lots of waste ground sites in Glasgow. Prior to 2017, *Lactuca serriola* (Prickly Lettuce) had only been recorded 8 times before within Glasgow, and only 18 times in Scotland outside Glasgow.



Lactuca serriola forma *integrifolia*
(with unlobed leaves)



Lactuca serriola forma *serriola*
(with lobed leaves)



Lactuca serriola
(flowerhead)

This species is known to be capable of ‘epidemic spread’ under suitable conditions, and this is just what we have witnessed in 2017. Throughout the autumn we recorded it 53 times, in 23 different map squares, from Braehead out to Cambuslang!

The reason for this sudden proliferation is as yet not fully understood, though a slight but critical rise in urban temperatures may prove to be the most likely explanation.

A report has been compiled and forwarded to leading experts throughout Britain, adding to our general understanding about the species.

Training

Why not treat yourself to a training course this year?

Perhaps this is the year to learn the common ferns . . . or some grasses and sedges . . . or roses, or willows, or aquatic plants?

The Field Studies Council is one of the main providers of such training and there are loads of one-day or residential courses throughout the year:

<http://www.field-studies-council.org>

Closer to home, our own outings are always a great way to learn plants!



Galeopsis speciosa (Large-flowered Hemp-nettle)

Fieldwork outings programme for 2018

As we did last year, we will publish the programme month by month several weeks in advance. This method allows the programme to evolve through the season, responding to opportunities and to the inflow of data by targeting the optimal map squares. We're already beginning to set out plans and you will receive details in due course. Do let us know of any locations you would recommend, near or far.

One project in the pipeline is a very detailed survey of the Glasgow Botanic Gardens site - because the last full list was compiled in 1998. Working closely with the curator, and with the Glasgow Natural History Society, we will visit twice (probably in May and August) and hope to produce a fresh, full list 20 years on.

We will also focus some real effort on the area around Lanark, Carstairs and Carnwath. And visits to the extremities of the county will include: the margins of the River Kelvin at Bishopbriggs (north); some remote corners of the Whitelee Forest Wind Farm (west); some bleak, unrecorded hillsides near the Daer Reservoir (south); and the Peeblesshire border near Dolphinton (east).

The first instalment of the programme (for April and May) will be emailed out in early March.



Platanthera chlorantha
(Greater Butterfly Orchid)

2017 summary

For those who like facts and figures, here is a flavour of the past year's field botany in Lanarkshire.

- 15,106** the number of Lanarkshire records added to the national database
- 804** the number of different species seen in the year
- 22** the number of species never before recorded in Lanarkshire
- 240** the number of map squares (monads) with new finds added
(this includes 68 map squares with over 100 species seen)
- 390** the number of new hectad records (species not previously recorded in that 100 sq. km.)
- 58** the total number of people in the Team 77 network
- 46%** the proportion of Lanarkshire which so far meets criteria for the Atlas 2020 project
(we're hoping to reach 100% by the end of 2019!)

Keep in touch

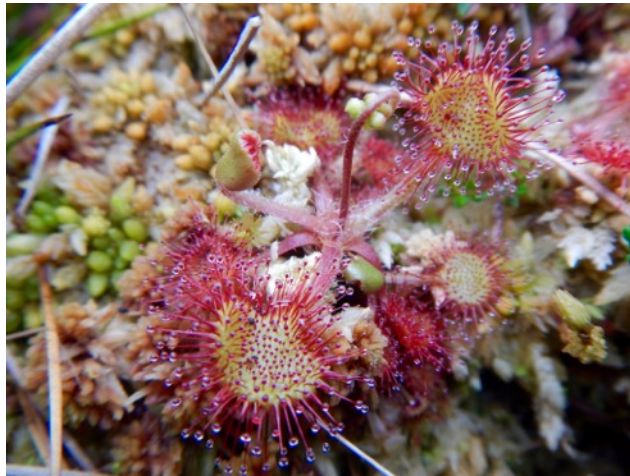
I'm always glad to receive your emails on matters botanical. I may not be able to answer everything myself, but this is a network so there will be an answer!

Also, if you know anyone who would be interested in receiving the programme of events and occasional newsletters, please ask them to get in touch: Team 77 is itself a growing organism!

I look forward to seeing you in the field whenever you can join us - you'll be made most welcome.

Michael Philip (BSBI recorder, VC77)

email: botany@opus44.co.uk



Drosera rotundifolia (Round-leaved Sundew)

Picture credits:

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|---|---|
| <i>Cardamine amara</i> | Peter Wiggins, at Luggiebank (Cumbernauld), 14th May 2017 |
| <i>Dryopteris affinis</i> ssp. <i>affinis</i> | Angus Hannah (from our new <i>Dryopteris</i> Briefing Sheet) |
| <i>Linaria vulgaris</i> | Peter Wiggins, at Kelvin Walkway (Summerston), 13th August 2017 |
| <i>Caltha palustris</i> | Michael Pink, at Gillbank (near Strathaven), 8th May 2007 |
| <i>Melilotus officinalis</i> | Peter Wiggins, at Quarter Fishery (near Hamilton), 17th August 2017 |
| <i>Narthecium ossifragum</i> | Michael Pink, at Sandford (near Strathaven), 25th July 2011 |
| <i>Lactuca serriola</i> forma <i>integrifolia</i> | Peter Wiggins, at Partick (Glasgow), 4th September 2017 |
| <i>Lactuca serriola</i> forma <i>serriola</i> | Peter Wiggins, at Craigton (Glasgow), 30th October 2017 |
| <i>Lactuca serriola</i> (flowerhead) | Peter Wiggins, at Cambuslang, 1st November 2017 |
| <i>Galeopsis speciosa</i> | Michael Pink, at Gartcosh, 23rd July 2016 |
| <i>Platanthera chlorantha</i> | Michael Pink, at Allanton (near Newmains), 8th July 2014 |
| <i>Drosera rotundifolia</i> | Peter Wiggins, at Elvanfoot, 16th June 2016 |