

Welcome to the sixth newsletter for those interested in plants and botanical recording in South Aberdeenshire. They are produced occasionally, to stimulate botanical work and seek help for BSBI recording projects. Please contact me (details below) with queries and especially any plant records!

Plant recording in South Aberdeenshire, 2019

This year is the final chance to gain records for the **UK plant atlas 2020**, covering the period 2000-2019. I would very much appreciate your help in this as there remain a number of areas which require survey. The map overleaf shows where we are with coverage to the end of 2018. There has been some good recent recording progress in the last two years but the remaining gaps are clear and your help in filling them is needed. There is a lot of focus in this newsletter about coverage, so please study the maps below. There are some challenging areas to visit, but these include some of our most spectacular and iconic scenery and natural habitats.

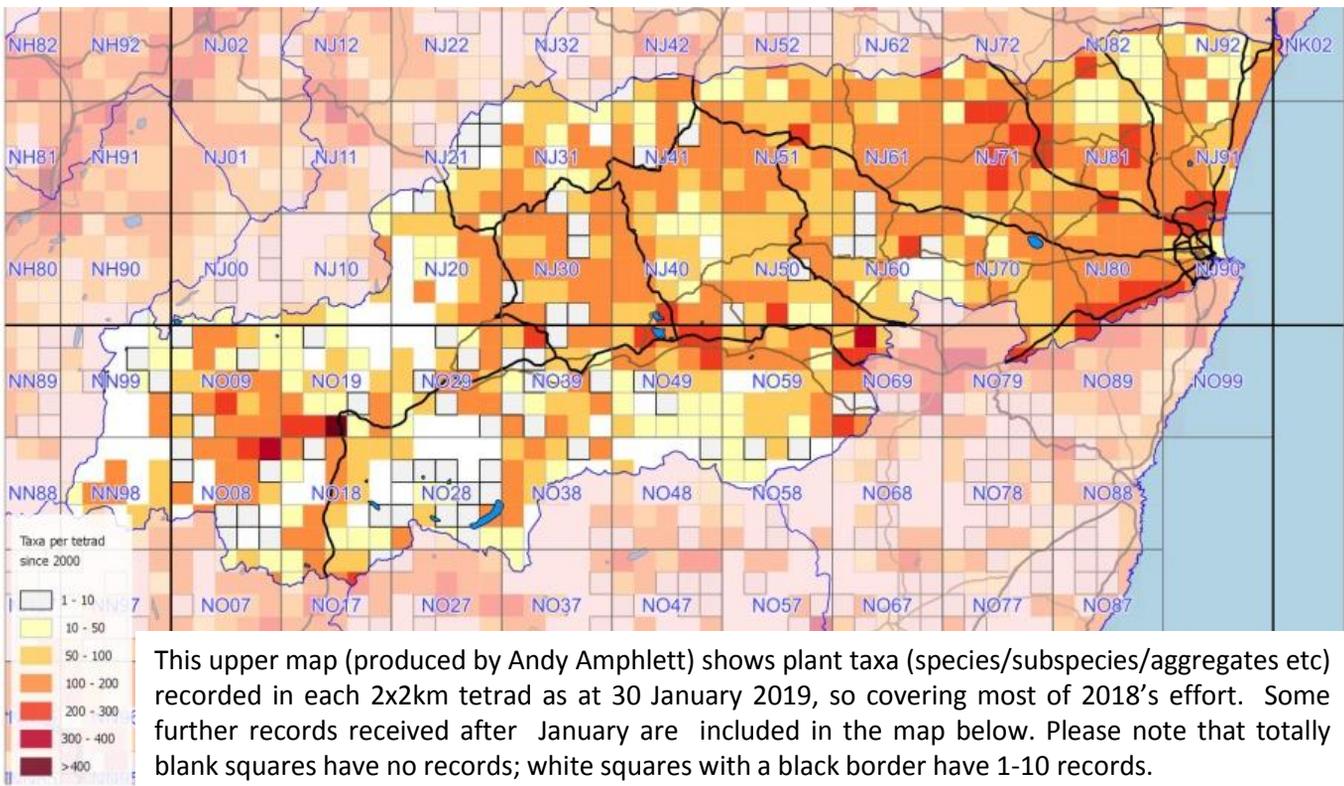
There are also some species to look for which have not been seen recently, and so recording can be done anywhere in the vice-county – either ‘square-bashing’ or ‘plant hunting’. I hope there is something to suit everyone, so please get in touch and help with this during 2019!



Above: *Saxifraga stellaris*, Starry Saxifrage, Glen Callater, 2018, Ian Francis. Left: *Vaccinium uliginosum*, Bog Blaeberry, Ben Avon, 2018, Ian Francis. Some of the remaining coverage gaps offer the chance to find some very nice mountain plants!

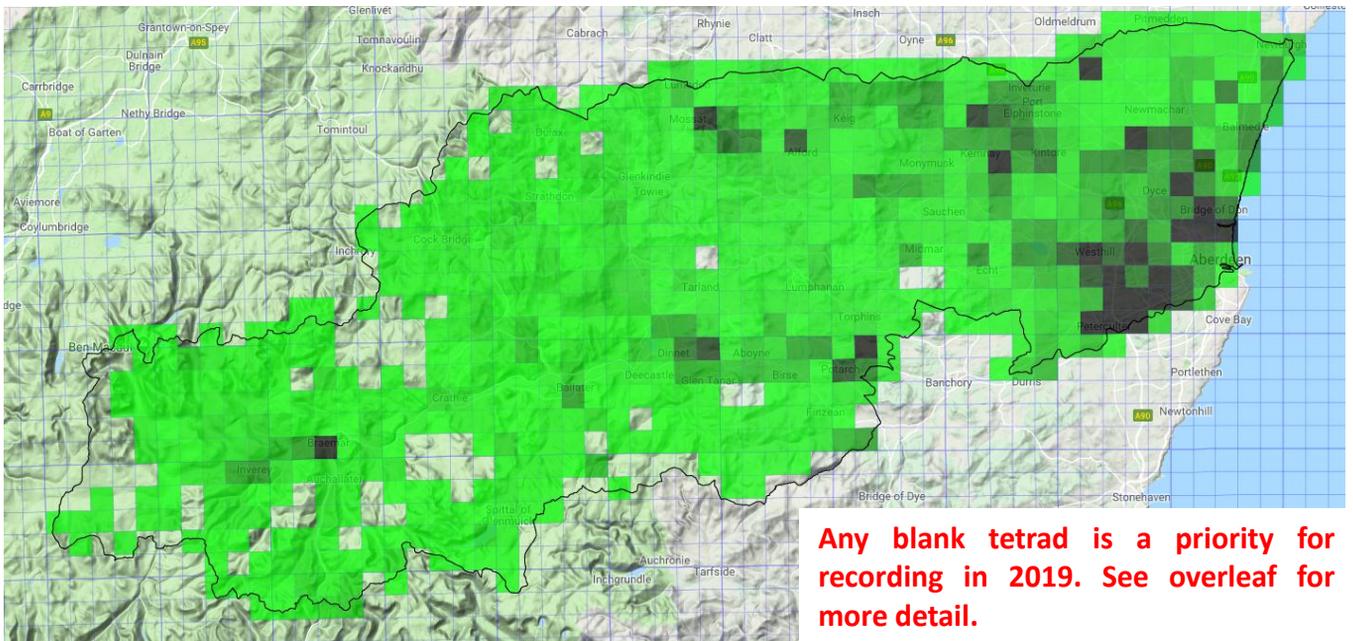


Linnaea borealis, Twinflower, Bunzeach Forest, 2013



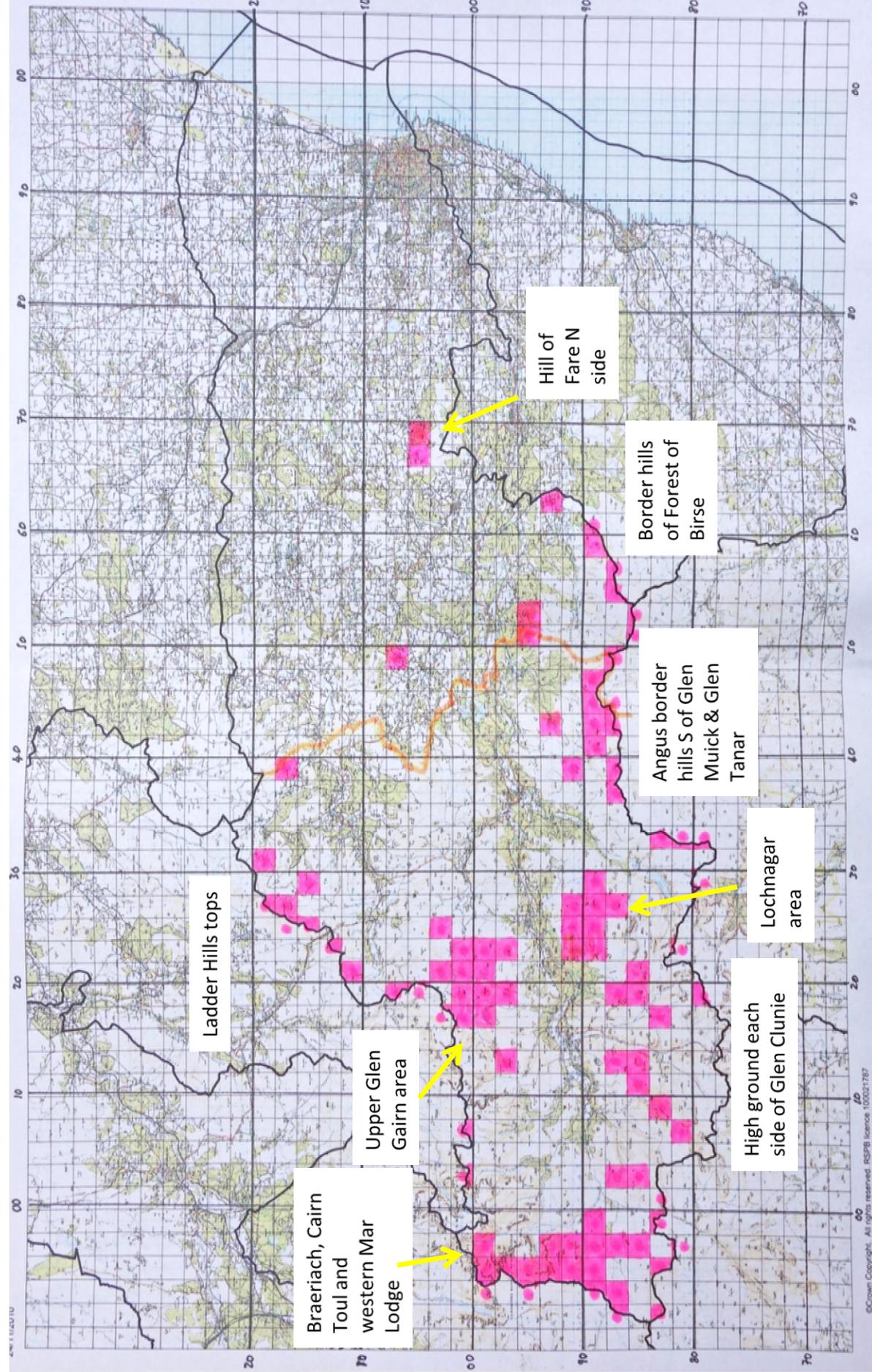
This upper map (produced by Andy Amphlett) shows plant taxa (species/subspecies/aggregates etc) recorded in each 2x2km tetrad as at 30 January 2019, so covering most of 2018's effort. Some further records received after January are included in the map below. Please note that totally blank squares have no records; white squares with a black border have 1-10 records.

This lower map shows a similar map, but updates coverage in each 2x2km tetrad as at 5 April 2019, so it includes all records from 2018. The tetrads with no records are clearer in this map and the map overleaf shows these in a different way, with an indication of geographic features.



Any blank tetrad is a priority for recording in 2019. See overleaf for more detail.

Within each 2x2km tetrad I would prefer to receive records based on a 1x1km square within it, rather than for the whole tetrad. Within a 1x1km square, try to range widely over varying habitats, to help make up a composite list for the square. If you find interesting species or habitats, please use a GPS to record these accurately and note any details. Any extra species for the tetrad outwith the 1x1km square can be added without starting a completely new list.



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Tetrads with no records, VC92, as at April 2019. There are 96 in total (11 outside the Cairngorms NP, 85 inside). Of the 96, 29 are very peripheral, with only small areas of land within the vice county. Thus, 67 tetrads could be considered as primary targets. The main zones are annotated on the map.

2018 update

We are still making good progress to the end of 2018 and we are in quite a good place for the final season of the atlas. The nature of the eventual coverage will differ from the previous atlas; for instance, there will probably be more wide-scale general survey effort, but some groups such as aquatic plants may not be as well recorded (due to some SNH survey projects in the 1990s) and some rarer or more elusive species may end up not being re-found in this atlas period.

Nevertheless, in 2018, over 3,500 records for VC92 were submitted by 35 botanists. With a few records still to be confirmed, some nationally rare or threatened species were recorded, principally by Ian Green, including *Crassula tillaea* Mossy Stonecrop, *Genista anglica* Petty Whin, *Hippophae rhamnoides* Sea Buckthorn, *Rorippa islandica* s.s. Northern Yellow-cress, *Rumex alpinus* Monk's Rhubarb, *Salsola kali* ssp. *kali* Prickly Saltwort, and *Viola tricolor* ssp. *tricolor* Wild Pansy – the last three, plus Petty Whin, considered near-threatened or vulnerable. There were also some other notable records of species including *Linnaea borealis* Twinflower, *Lycopodium annotinum* Interrupted Club-moss, *Gnaphalium sylvaticum* Heath Cudweed, *Asplenium septentrionale* Forked Spleenwort, *Cryptogramma crispa* Parsley Fern, *Drosera anglica* Great Sundew, *Equisetum hyemale* Rough Horsetail, *Juncus inflexus* Hard Rush and *Neottia nidus-avis* Bird's Nest Orchid.

The most intriguing botanical news of the year relates to a species new to Britain – *Botrychium nordicum* Nordic Moonwort, as reported in the January 2019 BSBI News. Although found in 2017 at the Glen Shee ski lift, just inside the VC92 boundary, the presence of this species has only just been publicised more widely, as initially its determination was based on molecular work. However, it does seem possible to identify it in the field, though a sample will be needed for analysis. It is suspected that the plant is much more widespread, so it is worth paying attention to any Moonworts you find. There have been 43 records of the familiar *Botrychium lunaria* in VC92 since 2000, mainly west of Braemar, but it is easily overlooked; most years only manage one record, which was true of 2018!



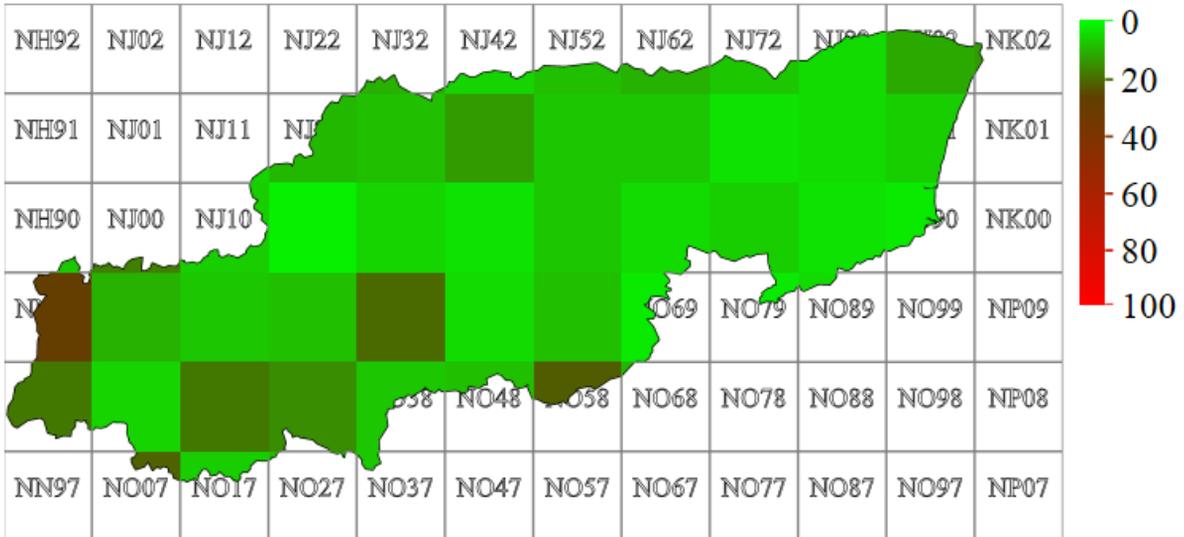
Sparganium natans, Least bur-reed, Glen Tanar, *Eleocharis palustris*, Common Spike-rush, Aboyne Loch; and *Nymphaea alba*, White Water-lily, Aboyne Loch, 2018, Ian Francis. Aquatic plants remain severely under-recorded in VC92 and unfortunately this is unlikely to be adequately remedied in the time remaining. If you are able to spend any time focusing on this group, or even able to collect some specimens, this would be very much appreciated. There are local botanists who are more specialised in aquatic plants and who may be able to offer advice – please contact me first.

Plants not re-found in the current atlas

Another very valid activity this year is looking for species that have not yet been rediscovered in this atlas period, but which were present in the last atlas. The general picture is shown in the map below; there is obviously some relation to the coverage gaps shown in the earlier maps. David Elston has also produced lists of species which still need to be looked for in this atlas period in all the three 'Aberdeenshire' vice counties (91, 92, 93) and these can be supplied on request. In VC92, there are around 174 such species. Some are probably genuinely now absent (e.g. *Blysmus rufus* Saltmarsh Flat Sedge), and some lack enough detailed locational information to make the task almost impossible (e.g. resolution only to hectad/10km square). Some may even have been identification errors. But some undoubtedly remain to be relocated! The list includes *Carex limosa* Bog Sedge, *Deschampsia setacea* Bog Hair-grass, *Elatine hexandra* Six-stamened Waterwort, *Ranunculus aquatilis* Common Water-crowfoot, *Saxifraga nivalis* Alpine Saxifrage and *Sedum anglicum* English Stonecrop. Plenty to look out for, and again, visiting the remaining atlas gaps may yield some of these species.

Taxa not refound since 2000 (at hectad scale)

Comparing taxa found between 1987 and 2000, with the period since 2000. Map shows the % of taxa not refound in the recent period - which may indicate loss of diversity; recent surveying deficits or earlier misrecording.



Left: *Drosera rotundifolia*, Round-leaved Sundew. A robust specimen in Glen Callater, 2018, Ian Francis;
 Right: *Conopodium majus*, Pig-nut, near Inverurie, 2018, Ian Francis



How to submit records in 2019

To help with field recording and submission, a customised recording card is available on the BSBI website at: <http://www.bsbi.org.uk/VC92.pdf>. I am happy to receive these and will enter the data. Another useful way is to send me an Excel spreadsheet (or similar). Please make sure there is one species per row, and the columns include date, location, grid ref and comments as a minimum. Andy Amphlett has developed an Excel spreadsheet which automatically checks species names and formats records accordingly. This can be downloaded from the BSBI website – please contact me for details. Otherwise, any emails with lists of records would be fine. I receive so few that converting these into a more useable format will not be a chore. I hope in this way to make sending in records as easy as possible!



Doronicum pardalianches, Leopard's Bane, Kildrummy; *Hesperis matronalis*, Dame's Violet, Brux and *Heracleum mantegazzianum*, Giant Hogweed, Brux, all 2018, Ian Francis. All alien and exotic species are fair game for recording, as long as they are 'in the wild' and not in gardens!

Many thanks to all below for records and help in 2018 (with sincere apologies for any omissions): Andy Amphlett, Felicity Anderson, David Bale, Bert Barnett, Ewen Cameron, Claire Carrigan, Karen Comerford, Rod Corner, Judith Cox, Jackie Cumberbirch, Kathy Dale, D. Davidson, David Elston, Michael Fletcher, Don French, Ian Green, Tom Humphrey, Glyn Jones, F. Katzer, Anne Marquiss, Mick Marquiss, Richard Marriott, Jill Matthews, Heather McHaffie, Jim McIntosh, Aileen Meek, Belinda Miller, NESBReC, Nicky Penford, David Plant, Shaila Rao, Tim Rich, Glenn Roberts, Andy Scobie, Paul Sharp, Peter Stroh, Stewart Taylor, Petra Vergunst, Dan Watson, David Welch.



Eriophorum angustifolium, Common Cotton-grass, 2018, Ian Francis