

### **2019 Scottish Vice-County Reports**

This is a collation of the Annual Reports submitted by Scottish Vice-counties for 2019 by April 2020. It is fascinating to read how different VCs tackled the final year of Atlas 2020 and about some of their most notable highlights. However, it is the great variety of other botanical activities carried out by Recorders and members that is most impressive. A huge thank you to all involved.

### Dumfriesshire (vc72)

### Chris Miles

David Hawker

The main focus was to ensure as many species as possible were recorded for each hectad ahead of the Atlas deadline. The target was to get all hectads to 75% or better for all species ever recorded also recorded post 2000. In January 22 Hectads were below this level but by December all 40 Hectads were at 76% or better. In total 9200 records were entered via Mapmate. The Dumfries Botany Group continued with 10 meetings in the county in 2019. This included a training day on an introduction to identifying grasses attended by 15 people. The Botany Group generated 1,712 records. One of the meetings was a joint meeting with the Botanical Society of Scotland (BSS) Urban team over 4 days which generated a fantastic 1,913 records. Accounts of all of these meetings can be seen on the blog. Botanical highlights from Dumfriesshire Group and the Urban meetings included refinding Botrychium lunaria (Moonwort) at Wanlockhead and seeing the first, Glaucium flavum (Yellow-horned Poppy) recorded for over a 100 years at Powfoot, Lamium amplexicaule (Henbit Dead-nettle) not seen in Dumfries for over 100 years, and Galium boreale (Northern Bedstraw) on the river wall, not seen in the Dumfries square since 1936. Elsewhere the refinding of Blysmus compressus (Flat-sedge) in a hectad after more than 100 years, the first refind of Pseudorchis albida (Small-white Orchid) since 1988 and the new VCR for Geranium pusillum (Smallflowered Crane's-bill) in an arable field near Dumfries were particular highlights.

### Kirkcudbrightshire (vc73)

### A busy season: a weekend upland meeting (see Yearbook) - targeted northern hills incomplete due Thanks to all contributors. Involved with 4

to restricted vehicle access, and a BSBI grass training day; 13 KBG meetings. 11,800+ records submitted, twice the annual average total. private/community re-wilding projects and MoD Conservation Group. Highlights: NCRs: Acanthus mollis (Bear's-breeches) long-established garden discard, Viola cornuta (Horned Violet), Vulpia myuros (Rat's-tail Fescue), Euphorbia cyparissias (Cypress Spurge), E. amygdaloides (Wood Spurge), Malus spectabilis (Chinese Crab) long-established, Salix x forbyiana, Cordyline australis (Cabbage Palm). 2nd VCRs for Neottia nidus-avis (Bird's-nest Orchid), last seen 1848, belatedly another reported elsewhere from 2017/2018, Lagarosiphon majus (Curly Pondweed), Phormium tenax (New Zealand Flax), Datura stramonium (Thorn-apple), Pulmonaria angustifolia (Narrow-leaved Lungwort), Primula elatior (Oxlip) and P. veris x elatior, Anemone ranunculoides (Yellow Anemone), Ceratophyllum demersum (Rigid Hornwort), Cortaderia selloana (Pampas-grass) in forestry far from housing. Others: Viola reichenbachiana (Early Dog-violet), 5th site; Coeloglossum viride (Frog Orchid) less numerous than previously; Gentianella campestris (Field Gentian), Calamagrostis canescens (Purple Small-reed), Drymochloa sylvatica (Wood Fescue), Persicaria vivipara (Alpine Bistort) and a belated 1985 second record; Carex elongata (Elongated Sedge); Rubus chamaemorus (Cloudberry) at its only VC site; new sites for Saxifraga hypnoides (Mossy Saxifrage), Myosotis ramosissima (Early Forget-me-not); Trifolium striatum (Knotted Clover) 2nd-5th recent sites. Some coastal Elytrigia specimens submitted and determined as Elytrigia x obtusiusculus and E. x drucei. Unfortunately, we said goodbye to Nick Stewart which is Somerset's gain, but we welcomed Michael Jeeves (ex-VCR Leicestershire).

### Wigtownshire (vc74)

Alan Silverside, the Recorder for Wigtownshire for the past 42 years resigned at the end of the year. Despite Alan being unable to do fieldwork over the past year we managed to add some 4,000 records to the DDb – thanks to local and visiting members including Jim McCleary, Michael Jeeves, Alan Wake and Sue Jury. More impressively we added 22,000 records to the DDb from a variety of sources during the year – largely from Mark Pollit at South West Scotland Environmental Information Centre – but a significant number were also digitised by Marion Moir and me. Together with the records from the Recording Week at Lagafater Lodge in 2018, Atlas 2020 coverage is now pleasingly good. Most notable NCRs were a group of Orache taxa *Atriplex praecox* (Early Orache), Atriplex glabriuscula x longipes = A. x taschereaui and Atriplex longipes x prostrata = A. x gustafssoniana by John Richards. The first two at Auchenmalg and the last at Port Logan. The most notable rediscovery was that of Hammarbya paludosa (Bog-orchid) at Loch Derry by Jim McCleary – first record since 1882 in the VC. Jim also made notable refinds of Anthriscus caucalis (Bur Chervil) at Claymoddie - last recorded in 1892 and Utricularia minor (Lesser Bladderwort) at Peat Loch - last recorded 1989. Many thanks to him and all the other contributors.

### Ayrshire (vc75)

### Dave Lang

Over the final year of recording for Atlas 2020 our small team in Ayrshire attempted to double up on scheduled field survey trips to two per month. As we are generally only able to meet at weekends, due to work and other commitments, this was a more significant undertaking than it may at first appear. I am pleased to say however that at least two of us were able to attend almost all scheduled field days, meaning that our attempted extent of recording coverage was met. Although we generally fell a little short of the project's targets for both tetrads recorded per hectad and pre-2000 refinds, the Ayrshire data for Atlas 2020 is consequently in much better shape than it was only a few years ago. And we now have up-to-date records for many of our County Rare and Scarce species. The most interesting record of the year was probably *Carduus tenuiflorus* (Slender Thistle) on Horse Island. This species is only known from this and one other offshore island in the County – Ailsa Craig. The only County first of the year (possibly pending a confirmatory site visit next year) was *Salix triandra* (Almond Willow) at Stevenston Beach Local Nature Reserve in the north. A great deal of time has subsequently been spent verifying records, and trying to weed out as many of the innumerable duplicates that creep in with centrally imported datasets as is possible, ahead of the deadline for the final Atlas 2020 analysis.

### (Jim McIntosh)

### Lanarkshire (vc77)

### Michael Philip

Our aim for 2019 was to complete the Atlas 2020 task of accounting, in the period 2000-2019, for 75% of the all-time lists for every hectad in the vice-county. We decided to regard this as a 'hard target', although we accepted that the enormous botanical diversity and detail recorded in the 'Flora of Lanarkshire' (Macpherson, 2016) and 'The Changing Flora of Glasgow' (Dickson *et al*, 2000) - coupled with the loss of the Garden Festival site and other key urban sites - made the challenge all the harder. However, due to excellent, carefully-targeted and intense fieldwork by our Team the seemingly-impossible task was completed by the end of October! There is no space here to go into details, but we recorded over 1,000 distinct taxa in a single season for the first time. This included, within a couple of weeks of each other, our first ever record for *Ophrys apifera* (Bee Orchid) and our second-ever for *Hypopitys monotropa* (Yellow Bird's-nest). Digitisation of the Lanarkshire record is complete and up-to-date, and data validation is on course to be completed shortly. 'Team 77' (as we have become known) comprises 62 correspondent members, of whom 18 were active in fieldwork in 2019. Because of the need for detailed recording skills, we have seen a big jump in individual skill levels. We held 31 official outings and added nearly 13,000 records to the database. Our occasional newsletter can be viewed on the Lanarkshire page.

### Peeblesshire (vc78)

# In this, the last year of recording for Atlas 2020, I have concentrated mainly on surveying monads to fill in gaps in the less accessible south-west of Peeblesshire. This has been quite rewarding with 5,032 records added and digitised with many re-finds and some new county records. These include *Juncus filiformis*, (Thread Rush), and *Viola x scabra*, (*V. odorata x V. hirta*), both of which were exhibited at the Scottish autumn meeting. While I have not prioritised updating the better-known sites, I have made some exceptions so as to include rare plants for the new Atlas. For example, I surveyed Little Cramalt Craig's arctic-alpines and re-located *Carex vaginata* (Sheathed Sedge), last seen in 1978. Recording full species lists in monads has greatly increased the overall number of records and species with 60,500 plus Atlas 2020 entries in the DDb post 2010, compared to 20,000 pre-2010. A large number of new species have been found, although, not surprisingly many of these are casuals and aliens. In addition, I have been helping with recording in neighbouring counties and continue to teach plant ID and field skills at Edinburgh Napier University. I have also provided assistance by reviewing new native tree planting schemes in the Peeblesshire uplands.

### Berwickshire (vc81)

A huge thank you to Michael Braithwaite and Jeff Waddell who input this year's sightings and cleaned up the county records for 2020. 725 records were added to the database by eight Recorders. The new species were added to the county this year including *Erigeron acris* (Blue Fleabane) close to the A1, *Allium triquetrum* (Three-cornered Garlic) on the edge of the caravan park at Eyemouth. Berwickshire natives also got a look in with a new 10K for *Dianthus deltoides* (Maiden Pink) and two new sites for *Scleranthus annuus* (Annual Knawel). Old records for *Gymnadenia conopsea* have been reclassified to *Gymnadenia densiflora* (Marsh Fragrant-orchid) and *Gymnadenia borealis* (Heath Fragrant-orchid) on the coast with the help of Prof R.M Bateman. Michael also published an <u>update to the Berwickshire site register</u> taking in recent records in the county and bringing it up to 2020.

### Robin Cowe

Luke Gaskell

### East Lothian (vc82)

### Helen Jackson & Marion Moir

Marion has joined Helen officially as Joint Recorder, giving East Lothian, vc82, a much-needed contact email address at last. More than 40,000 records were added to the Ddb for the vice-county, of which 20,000 were 2019 field records and the rest were from record cards and notebooks that Marion digitised. Helen worked extraordinarily hard to prepare her records for digitisation. As in 2018, a three-day meeting was based in Haddington, this time in May, with about 20 people attending, giving a great boost to Atlas 2020 recording. There was an emphasis on collecting aquatics and we recorded Ceratophyllum demersum (Rigid Hornwort), Potamogeton berchtoldii (Small Pondweed), P. pectinatus (Fennel Pondweed) and P. crispus (Curled Pondweed) (amongst others). Following this, Marion continued to organise recording and training with the local botany group. Sue Jury and Sandra Goodswen should be acknowledged for their enormous help in recording. The grass Festuca heterophylla (Various-leaved Fescue) was found on Winton estate. Chara (Stoneworts) taxa were reconfirmed at Aberlady and several new finds were made along the coast. The under-recorded Lammermuirs were visited finding Viola lutea in several places and we have been helped enormously by Matt Parratt in the remoter areas. We would like to thank everyone who has contributed in any way to East Lothian recording, and in particular Jim McIntosh for his unstinting support.

### Midlothian (vc83)

### Barbara Sumner

9,222 records were entered into MapMate in 2019, gathered from 220 monads in 17 hectads by 43 recorders, surveying as individuals, pairs or groups. Grateful thanks to all recorders and determiners. Verifications and validations are progressing. Allium tuberosum (Chinese Chives) was found on the pavement at the north-east side of Rodney Street (NT25487496) on 10th September by Richard Milne, and determined by Paul Green. This late-flowering Allium was a New Record for Scotland, the second year in a row that Richard has added to the Scottish flora. Another first for Scotland, Eryngium agavifolium (Agave-leaved Sea-holly), discovered by David Merrick, was displayed on a poster at the Scottish Botanists' Conference at RBGE in November (see Abstract, also the image in the SBC virtual exhibition). At the disused Monktonhall Bing, the new site for Silene viscaria (Sticky Catchfly) (see poster), the plants looked naturally integrated among broom and other vegetation beside an ashy path, but a niggling question remains. Did they arrive there naturally or were they planted? If you know the answer, please communicate. NCRs reported in 2019 included Cotoneaster rehderi (Bullate Cotoneaster), Petunia x hybrida (Petunia), Polystichum x bicknellii (P. aculeatum x setiferum) and Tripleurospermum maritimum x inodorum. Rarities re-found included Epilobium x erroneum (E. hirsutum x montanum), Erythranthe x maculosa (Scottish Monkeyflower), Lepidium ruderale (Narrow-leaved Pepperwort), Medicago sativa nothosubsp. varia (Sand Lucerne) and Verbascum nigrum (Dark Mullein). The VC recorder represented the BSBI on steering groups for Local Biodiversity Sites, and for the Edinburgh LBAP. BSBI and TWIC conferences were attended.

### Fife (vc85)

### Sandy Edwards

The year started with the annual New Year Plant Hunt which this year was a walk around the Castle golf courses above the cliffs east of St. Andrews. A total of 19 species were found, slightly less than last year. I occasionally help with the monthly plant recording that is done here for the golf course. *Vicia tetrasperma* (Smooth Tare), rare in vc85 was found here. Also, in the winter months a few of us go and practice using the Vegatative Key, a useful exercise. I helped tutor at Faith Anstey's Grass

identification workshop at Stirling. This really shows the best way to get into plant id is by wellplanned practical sessions. I had four students for the online Identiplant course which also works well but I try to see if they can also have a field session which they find very useful. I am on the Fife Wildlife Sites Steering Committee as the botanical recorder. They are updating the records for these sites, reviewing the boundaries and also recording the surrounding habitats to show how these sites interact with them. Much recording was done this year to try and fill the "gaps". The BSBI field meeting in the Dunfermline area, arranged by Jim McIntosh, was particularly valuable. (Report for this is on the BSBI field meetings.) Species of interest this year are Galanthus elwesii (Greater Snowdrop), Scandix pecten-veneris (Shepherd's-needle), Fumaria capreolata (White Rampingfumitory), Helleborus foetidus (Green Hellebore) and Equisetum telmatiea (Giant Horsetail). The *Reseda lutea* (Wild Mignonette) is still at Kinghorn as is the *Tanacetum macrophyllum* (Rayed Tansy) on the coastal path. These and the Salvia verticillata (Whorled Sage) at Ardross are the only know sites in vc 85. An area by the old flooded part of the St. Fort sand pits revealed a fine colony of Parentucellia viscosa (Yellow Bartsia), which is one of two sites recorded in N. Fife by George Ballantyne. But as an extra icing-on-the-cake a lot of Erigeron acris (Blue Fleabane), also rare in vc 85 and a small patch of the locally rare Conyza canadensis (Canadian Fleabane)! A good recording day with Jim McIntosh in the NE corner of vc85 found a few interesting species: Ceratocapnos claviculata (Climbing Corydalis), Nitella flexilis and Chara virgata (Stoneworts), Hypericum maculatum (Imperforate St. John's Wort), Nymphaea alba (White Water-lily), Rosa multiflora (Manyflowered Rose) which is very rare in vc85, Phegopteris connectilis Beech-fern), Gymnocarpium dryopteris (Oak-fern) and Cardamine amara (Large Bitter-cress). Last, but not least, many thanks for all the help and records from various people, many of whom made some very interesting finds.

### Stirlingshire (vc86)

### Matt Harding

A push was made to fill in Atlas gaps both in new recording and adding older datasets. 2019 generated more records than any year since before 2000. We feel most wholly vc86 hectads are now adequately, if not perfectly, covered. Luckily areas of weakness around the edges will be offset by the excellent coverage in vcc 77, 84 & 87. 20,474 records were added to the database including 11,137 2019 records, and 24 taxa added to the county flora. Thank you to all those who contributed records and enthusiasm! The year began with a focus on recording early spring flowers, many of which were under-recorded. An excursion around Muiravonside in May yielded interesting records such as Equisetum pratense (Shady Horsetail) and Ribes alpinum (Mountain Currant), but things really got going with a trip up Glen Gyle in July, with a NCR for Salix arbuscula (Mountain Willow) amongst a good variety of mountain plants. Despite challenging weather, an August recording weekend in the Fintry Hills targeting 'strategic tetrads' produced around 1,500 useful records including large, previously unknown populations of Carex aquatilis (Water Sedge) around Carron Valley Reservoir and re-finds of Potamogeton perfoliatus (Perfoliate Pondweed) and P. berchtoldii (Small Pondweed) at Loch Walton. Other Stirlingshire events included meetings with the Glasgow Natural History Society, a bioblitz at Cashell Glen, and Faith Anstey's popular grass identification workshop at the University of Stirling. Post-atlas, work will begin on an RPR, with excursions planned for the fledgling Stirlingshire Botanical Group. To get involved email matt@hardingecology.com.

### West Perthshire (vc87)

In 2019 both Liz and Jane concentrated on recording for Atlas 2020. Between us we entered 8,591 records into MapMate which were forwarded to the BSBI Distribution Database (DDb). We would like to thank everyone who helped by sending us records, in particular from remote parts of our vice-county. VC87 now has more than 50,000 records on the DDb for the Atlas recording period 2000 – 2019.

### Mid-Perthshire (vc88)

Never have so many records been collected in one year in Mid-Perthshire! A total of 15,588 records were made in 2019 – with particularly large and important contributions from local BSBI members Neale Taylor, Matt Harding and Alison Wilson and significant contributions from our friends at Ben Lawers National Trust for Scotland, BSS Urban Flora project volunteers and Perthshire Society of Natural Science (PSNS) members. We also digitised records from an excellent JMT Habitat Survey of Schiehallion by Ben & Alison Averis. We are immensely grateful to all these and other contributors. With their help and that of others over the past 20 years we managed to get the re-recording rate over 70% in all but one of our 54 hectads. New County Records in 2019 included Juncus compressus (Round-fruited Rush) near Crianlarich and Juncus gerardii (Saltmarsh Rush) on a road verge near Killin both by Mike Wilcox, Carex x limula (C. aquatilis x bigelowii) beside the lochan at 945m on Meall nan Tarmachan by Dan Watson & Jim McIntosh. Sarah Watts recorded C. x biharica (Carex echinata x canescens) on Ben Lawers, which was last seen there by Druce in 1899. In total we made 7,500 new post 2000 species-hectad records (i.e. new Atlas dots) in the year. Vice-county Recorders in Perthshire and neighbouring vice-counties are members of the <u>PSNS Botanical Section</u>. Reports on excursions for 2019 and other articles are provided in the PSNS Bulletin which can be downloaded from the link.

### East Perthshire (vc89)

# The biggest annual recording effort so far resulted in 8,049 records being made in 67 tetrads, nearly all at monad level. All, bar a handful, had been digitised by the year's end. There was rather more attention paid to lowland sites than in recent years and many gaps were filled. Further sites on Fealar Estate were searched for *Saxifraga hirculus* (Marsh Saxifrage) to no avail. Unfortunately, some appalling weather in August put paid to a Rough Squad trip to the remote Ring of Tarf - an area that remains largely unrecorded. Three species were NCRs, of which the most surprising was *Erigeron acris* (Blue Fleabane) – the second-most northerly UK record. Two Perthshire Society of Natural Science outings I was to have led were rained off, but we had one successful joint recording session with BSS at Moncrieffe Island in Perth. A <u>4th edition of the RPR</u> was published on-line in April, including 291 taxa. Now that relatively common species are dropping off the bottom of the list the RPR is beginning to be a valuable record of the true status of the VC's plants. Three species fell out and two were added: *Euphrasia ostenfeldii* (Ostenfeld's Eyebright) and *Saxifraga hirculus*. Plans are afoot to produce a new Checklist of Perthshire's plants, together with VCs 87 and 88.

### Angus (vc90)

Despite an enthusiastic start, the season was marred by health and work issues. However, we managed a reasonable number of recording days and were assisted by various other contributors.

### Liz Lavery & Jane Jones

### Alistair Godfrey & Jim McIntosh

Mark Tulley

Martin Robinson

One of the highlights was the confirmation of *Alchemilla monticola* (Velvet Lady's-mantle) in Glen Isla by Barbara Hogarth, a new Scottish Record. We were also delighted to receive many record cards dating back to 2008, which swelled our data input remarkably.

### Kincardineshire (vc91)

### David Welch & David Elston

We concentrated this year on adding extra monads or tetrads in hectads that fell short of them, and hunting for species not recorded since 2000. For the DDb, 1,832 records excluding duplicates were added this year via DW's Mapmate, with more added for the vice-county from other sources. Roughly two-thirds of the species are now validated. The usual one-day field meeting for the local SWT branch visited the NTS policies at Crathes Castle and the nearby former railway station and sand-pit; it attracted 20 participants. The outing and planning visits added 28 species to the NTS Rangers' site list, including Chaerophyllum temulum (Rough Chervil) not recorded in VC91 since 1959. Notable species found at the sand-pit included Clinopodium vulgare (Wild Basil), Potentilla argentea (Hoary Cinquefoil) and Teesdalia nudicaulis (Shepherd's Cress). A long cycle and walk to Mount Battock by DE in search of Gnaphalium supinum (Dwarf Cudweed) yielded instead the NCR Epilobium anagallidifolium (Alpine Willowherb). Other NCRs this year were Carex oederi (Smallfruited Yellow-sedge) (found by Theo Loizou on the Nigg coast), Luzula luzuloides (White Wood-rush) (Marykirk) and Raphanus sativus (Fodder Radish) (Fettercairn). A notable 2nd record was Symphytum officinale x asperum x tuberosum (hybrid of Russian Comfrey) (Muchalls). Rediscoveries included Carex riparia (Greater Pond-sedge) and Milium effusum (Wood Millet), with last records respectively pre-1845 and pre-1960. For DW, refereeing Myosotis (forget-me-nots) had the extra task of checking whether the sub-species of Myosotis discolor (Changing Forget-me-not) are worthy of species status, as suggested by recent studies.

### Aberdeenshire south (vc92)

### Ian Francis

2019 saw a substantial flurry of activity in South Aberdeenshire in terms of Atlas 2020 fieldwork. Much effort was made to target blank areas and seek out key missing species. In total, almost 24,000 records were submitted from around 38 botanists, with a major input from the North-East Scotland Biological Records Centre (NESBReC), whose ongoing habitat survey work yielded around 60% of the year's records. One satisfactory feature of 2019 was that we were able to complete recording (over the 20-year period) in every one of the complete tetrads within the vice-county. Another useful exercise was a survey of a large atlas gap in the westernmost and highest parts of the vice-county. Over one weekend in July, six botanists visited the remote central parts of the Cairngorms. Fifteen tetrads here had no Atlas records since 2000, stretching from Braeriach, the UK's third highest mountain, south to the river Geldie in upper Deeside, yet past records showed the presence of many rare and interesting plants. Despite much rain, low cloud and seriously bad midges, 18 monads spread across 10 tetrads were visited in 38km of walking, generating around 900 records. Many interesting and noteworthy species were found, some new, many relocated, as well numerous commoner plants filling many distribution blanks. Noteworthy records included Carex lachenalii (Hare's-foot Sedge), Alopecurus magellanicus (Alpine Foxtail), Phleum alpinum (Alpine Cat's-tail) and Veronica alpina (Alpine Speedwell), as well as montane willows and some contenders for altitudinal records for some species.

### Aberdeenshire north (vc93)

### David Welch & David Elston

We concentrated this year on adding extra monads or tetrads in hectads that fell short of them, and hunting for species not recorded since 2000. For the DDb, 4019 records excluding duplicates were added in the year via DW's Mapmate, with more added for the vice-county from other sources. Most species are now validated. Searches of former sites for species not seen since 1999 proved successful for Callitriche hermaphroditica (Autumnal Water-starwort), Nuphar lutea (Yellow Waterlily), Anagallis tenella (Bog Pimpernel) and Bromopsis ramosa (Hairy Brome). Another rediscovery of note was Silene vulgaris (Bladder Campion), which had been recorded previously in seven hectads but not seen since 1991; it was found near Rosehearty in a new hectad. NCRs include the hybrid Buckler-fern Dryopteris carthusiana x dilatata = D. x deweveri, recorded from a single site but suspected elsewhere, along with neophytes Spiraea alba (Pale Bridewort), Amsinckia micrantha (Common Fiddleneck) and the crop-derived Trifolium incarnatum subsp. incarnatum L. (Crimson Clover) and Raphanus sativus (Fodder Radish). Other good finds were Salix aurita x myrsinifolia = S. x coriacea on a verge near Glass from which Dr Meikle identified many willow species decades ago, and Ulmus minor (Small-leaved Elm) in a hedgerow near Freefield House, both being furthest North UK records. A hill-top search on The Buck indicated the colony of Salix herbacea (Dwarf Willow) covers more ground than previously recognised, with shoots found up to 100m apart. For Saxifraga hirculus (Marsh Saxifrage), flowering was below average at the single site monitored.

### Moray (vc95)

### lan Green

Adam Fraser & Andy Amphlett

I took a year out of work to get as much recording done in the final year for the Atlas 2020. This meant there was plenty of recording done throughout the year across vc95 by me and several other recorders. A total of 32,162 records were made. The aim was to visit as many monads without any records as possible, plus trying to update as many species as possible for each hectad. Digitisation and validation for Atlas 2020 is going very well for vc95. The plan is to produce a monad Atlas for vc95, but there is still plenty of work to be done, with many monads still not yet visited and other monads that need more work. The goal is to have all the recording done by 2025. A few local group botany walks were arranged by me across vc95, mainly aiming to record and to track down old records of rare or interesting species.

### East Inverness (vc96)

18,234 records were collected in 2019, including 11,615 records during a very successful BSBI Recording Week based at Dell Lodge, Whitebridge, involving 21 recorders. Over the year, 459 new hectad, 6,928 new tetrad and 12,259 new monad records were made. The most intriguing NCR was a large population of *Sibthorpia europaea* (Cornish Moneywort) growing in the rocky surround to a burn, 300m from the nearest house. Verification and validation of records is complete. Post 1999, there has been some recording in 64% of tetrads in the vc, and for all years combined, from 77% of vc tetrads. Vc96 is the largest vc in Britain and Ireland, and has a very small pool of regular recorders. There remains a backlog of pre-2000 records, some historic, to enter, but that was not possible for Atlas 2020.

### West Inverness (vc97)

### Ian Strachan

Over 9,000 records were collected from 41 hectads in 2019, with many contributors, notably Liz McDonald, Jim McIntosh and Marion Moir, as well as the VC recorders. Ardnamurchan and Loch Leven had many records but significant Atlas gaps were also filled in Moidart, the Arisaig-Mallaig area and the far east of the vice-county, including Loch Pattack and Geal Charn. Highlights included *Schoenus ferrugineus* (Brown Bog-rush) in Coire na Coichille (new VCR), *Galium sterneri* (Limestone Bedstraw) in Glen Roy, *Phleum alpinum* (Alpine Cat's-tail) on Geall Charn and *Ranunculus bulbosus* (Bulbous Buttercup) at Kinlochlaggan. All records were digitised and validated, along with another 17,000 from 2018 and earlier. Despite all our efforts, some gaps in Atlas coverage inevitably remain in remote corners for future expeditions. Limited further progress was made on a checklist/RPR but this will be a major task for 2020. An exhibit at the SBC featured *Najas flexilis* (Slender Naiad) and *Potamogeton x griffithii*, and I gave a talk on the North Face project following publication by the Nevis Landscape Partnership of a booklet, partly written by me and Dan Watson. I also represent BSBI on the Lochaber Biodiversity Group and helped with projects on grasslands, road verges and invasive species.

### Main Argyll (vc98)

### Gordon Rothero

Over 15,000 records were made during 2019, many being made during the field meeting based in Dalmally but also with significant input from Carl Farmer and the Lorne Natural History group, Dan Watson in Glencoe and Jeff Waddell who visited several areas where coverage was poor. There are still significant areas with poor coverage at the tetrad level as will always be the case in a county with remote montane areas and very few local botanists. There were no outstanding additions to the flora during the year, but the addition of *Crassula tillaea* (Mossy Stonecrop), found during the field meeting, confirms its relentless spread in Scotland and (also during the meeting) records of *Ranunculus x levenensis* and *Meum athamanticum* (Spignel) were welcome. Jeff Waddell's trips into the hills confirmed the interesting flora on Beinn Bhuidhe with updates for *Woodsia alpina* (Alpine Woodsia), *Cerastium alpinum* (Alpine Mouse-ear) and *Juncus biglumis* (Two-flowered Rush), and also confirmed what hard work it is in the granite hills around Loch Etive. Dan Watson has updated records of the rarities like *Saxifraga cernua* (Drooping Saxifrage) and *Cystopteris montana* (Mountain Bladder-fern) in Coire nam Beitheach in Glencoe along with other more mundane species. The task of validating records proceeds.......

### Clyde Isles (vc100)

### Angus Hannah

Bute and Cumbrae are very well covered for the Atlas, and Arran acceptably so, with a couple of hectads marginally below the 75% refind target. Circumstances conspired to prevent these being revisited. In April my <u>Isle of Bute Flora</u> was published. The first for any part of VC100, it has been well received, and was awarded the Presidents' Prize at SBC in November. This brought an end to general recording on Bute (updates are added regularly to a linked webpage), and consequently fewer records were made in the vc than in any previous year of my tenure. On the positive side I had more time to record elsewhere, and was able to help regularly with Atlas coverage in Ayrshire and occasionally in Renfrewshire, where I found a new *Sedum villosum* (hairy stonecrop) site, and in Lanarkshire, where I led a three-day bramble workshop at Chatelherault in July. I organised a weeklong field meeting in Dalmally (vc98) in June, reported in the Yearbook. A fully revised Arran Checklist was published in the spring; thanks to Tony Church. Tony's work also led to the publication

in November of a new diploid fern taxon (see the <u>2020 Scottish Newsletter</u>), *Dryopteris affinis ssp. cluthensis*, known so far only from Arran. The Bute dandelion, *T. chrysoglossum*, which I originally found on Bute in 2013 was published earlier in the year, and in May I found it on Arran. In Rothesay in September I found *Rubus echinatus*, a bramble new to Scotland.

### Kintyre (vc101)

### Plans for the final year of recording were modified due to a long family illness. However, by the end of the year we had visited all hectads during the Atlas survey period the necessary number of times and during different seasons. By the end of 2019 all records up to that date had been digitised and entered into the database. In addition, good progress was made with the validation of records. There was one outstanding NCR for *Ophrys apifera* (Bee Orchid) from Machrihanish. It was photographed by a local, eventually identified and the record sent in. Thanks again are due to the Kintyre Botany Group who have recorded many areas, principally in the Campbeltown area, over the Atlas recording period and made many interesting finds.

### South Ebudes (vc102)

### Malcolm Ogilvie & Simon Smart

Recording on Islay by Oli Pescott yielded 731 records of 268 taxa. No new taxa for the vice-county were recorded. Two species that had not been reported for the v.c. since the start of 2002 New Atlas recording were refound; the native *Pulicaria dysenterica* (Common Fleabane) (rare in Scotland) and the non-native *Inula helenium* (Elecampane). Other notable records included *Calystegia soldanella* (Sea Bindweed), *Dryopteris cambrensis* (a Scaly Male-fern), *Epilobium tetragonum* (Square-stalked Willowherb), *Eryngium maritimum* (Sea Holly) and *Festuca arenaria* (Rush-leaved Fescue). The Euphrasia hybrid *E. arctica x nemorosa* was also tentatively identified as new to the island based on descriptions in the recently published BSBI Handbook (Metherell & Rumsey, 2018). Although this has not been reported before for v.c. 102, it is scattered throughout Scotland (at least according to BSBI data), and is likely to be under-recorded.

Intensive recording of Colonsay and Oronsay drew to a close in 2019 with a further 2,100 records added by Kevin Walker and friends. This brings the total number of records collected to 20,000 over the past 5 years. Malcolm's annual orchid monitoring on Islay had mixed results, with more *Plantanthera chlorantha* (Greater Butterfly-orchid) but fewer *P. bifolia* (Lesser Butterfly-orchid) at the regularly monitored sites. The *Cephalanthera longifolia* (Narrow-leaved Helleborine) site was not visited, but 224 flowering spikes of *Epipactis palustris* (Marsh Helleborine) at their main site was one of the highest counts in the last 30 years. Notable records from Jura in 2019 included a second population of *Isolepis cernua* (Slender Club-rush) – first recorded from Jura in 2017 – small populations of *Ophioglossum azoricum* (Small Adder's-tongue) and *Botrychium lunaria* (Moonwort); the former new to Jura and the latter possibly new. *Saxifraga stellaris* (Starry Saxifrage) and *Alchemilla alpina* (Alpine Lady's-mantle) were also refound for the Atlas 2020 period, along with *Salix herbacea* (Least Willow). The latter was found by Simon Smart in two new locations on Beinn Shiantaidh while competing in the Jura Fell race! Some new localities for the gametophyte of *Trichomanes speciosum* (Killarney Fern) were found on the west and south coast of Jura. It is felt that further searches would turn up more new sites.

### Pat & Dave Batty

### Mid-Ebudes (vc103)

Lynne Farrell

All tetrads updated to post 2000 for Atlas 2020. Advice given on practical management of the alien, species *Allium triquetrum* (Three-cornered Garlic) on Iona, which is being eradicated by local volunteers. Ash splash plots revisited and photographed. Input to Ulva community plan and botanical advice. All data entered into MapMate by Dec 2019. Now writing captions for Mull rare species for Atlas. New vice-county and records of note for VC 103 confirmed in 2019 include: *Asplenium ceterach* (Rustyback Fern) on Coll - photo sent by a visitor. *Euphrasia x venusta* (*E. arctica subsp. borealis x scottica*) on Erraid- determined by Chris Metherell. *Hieracium rubicundiforme* – 2nd VCR on Mull. *Hieracium chloranthum* on Mull. *Sorbus croceocarpa* (Orange Whitebeam) on Mull, confirmed by Tim Rich. *Schoenodorus giganteus* (Giant Fescue) on Ulva, found by Matt Harding during his surveys for the Iona community, and confirmed by myself and Arthur Copping. *Equisetum x rothmaleri* (*E. arvense x palustre*) Lochbuie West, Mull. Found by Heather McHaffie. *Epilobium x schmidtianum* (*E. obscurum x palustre*) on Mull. Specimen collected by me in 2018 and identified by Geoffrey Kitchener 2019.

### North Ebudes (vc104)

### Stephen Bungard

A record 15,000 vascular plant records were made in VC104 in 2019 including over 200 new hectad records. Skye Botany Group met six times including a visit to Ulfhart Point on Skye (opposite Soay) where the last two tetrads with any significant land but no plant records were finally covered. Ulfhart means roar or howl and we had to postpone our boat trip from Elgol twice before the seas were calm enough and even then, getting back to the boat at the end of the day was slightly hair-raising. There is now no tetrad in VC104 with more than 2% land and no post-1999 records. Six partial tetrads have been checked and have no vascular plants and the three remaining with no records are likely to be the same, as they appear to comprise only bare rock above HWMS. However, quite a few tetrads remain far from thoroughly surveyed. An issue over which species of *Agrimonia* is or are present in VC104 was largely resolved, in that all specimens examined closely once fruiting are *A. procera* (Fragrant Agrimony). *Hieracium subcrinellum* (previously *H. crinellum*) (Blunt-leaved Hawkweed), *Lemna gibba* (Fat Duckweed) and *Polygonum boreale* (Northern Knotgrass) were new to the vice-county as were quite a considerable number of aliens, notably *Spiraea hypericifolia* (Iberian Spirea), the first record on the BSBI Distribution Database and *Euphorbia sikkimensis* (Sikkim spurge), the second record on the DDb.

### Wester Ross (vc105)

### Duncan Donald

Occasionally it is local residents who provide the exciting records, this year's highlight being a new *Cephalanthera longifolia* (Narrow-leaved Helleborine) site in the south (NG82); I myself added alien NCRs *Erythranthe × burnetii* (Coppery Monkeyflower) and *Tasmannia lanceolata* (Tasmanian Pepperberry). However, as usual, most new records have come from visitors. Stephen Bungard's extensive survey around Toscaig (SW Applecross) added hawkweed NCR *Hieracium subcrinellum* and a new square for *Melica nutans* (Mountain Melick). Stuart Gray updated many old records around Achnahaird (NC01), including locally-rare *Catabrosa aquatica* (Whorl-grass). Matt Harding recorded extensively across Torridon and Applecross, adding several new sites for Liathach rarities, such as *Luzula arcuata* (Curved Wood-rush), by ascending from the south-west. Peter Wortham continued his invaluable long-walk-ins to remote boundaries, finding *Hammarbya paludosa* (Bog Orchid) near

Bendronaig (NH03). The Inverness Botany Group's annual visit, this year to Strath More, was a particularly good day for grasses: a second VCR for *Melica uniflora* (Wood Melick); and the first update for *Schedonorus giganteus* (Giant Fescue) since Druce's 1929 Flora, growing with equally locally-rare *Elymus caninus* (Bearded Couch). As the Atlas 2020 fieldwork draws to a close, it's a good time to thank all those who have helped out over the past two decades.

### East Ross (vc106)

### Brian Ballinger

We have continued recording and were able to reach the target of 75% of species ever recorded refound in all but 10 of the 58 hectads. The remaining 8 hectads were either shared, remote or had very few previous records. Peter Wortham and others made major contributions to recording over the year. All recent field records have been entered and the majority validated. I sent an updated VC106 checklist to the BSBI last year and produced a printed version. A successful field meeting joint with the Botanical Society of Scotland (BSS) was held at Conon Bridge (co-led by Mary Dean). I also led several other field meetings in various parts of Scotland. As part of the <u>Botanical Society of Scotland 's Urban Flora Project</u> I carried out two comparative surveys of urban and rural flora in 25 pairs of sites. The number of species recorded was similar but the particular species found differed considerably. Recording for the Urban Flora project continues and records are shared with the BSBI. I have drafted a checklist of the urban flora of Scotland on behalf of the BSS and I am grateful for the BSBI contributions to this. There have been some useful new records including a fifth new site for *Linnaea borealis* (Twinflower) at Alladale. This species was formerly thought to be extinct in VC106.

### West Sutherland (vc108)

### lan Evans

Fieldwork during 2019 focused on improving the representative coverage of hectads across the eastern part of the vice-county. In three weeks based at Tongue, on the north coast, Gwen Richards and I, aided by Gordon Rothero and Ro Scott, made some 3,300 records in 30 monads, ranging from Strath Vagastie (NC5429) and Friesgill (NC4865) in the west to Forsinard (NC9041) to Strath Halladale (NC9060) in the east. Particularly memorable were boat trips to two islands off Skerray, Neave Island (NC6664) and Eilean nan Ron (NC6365/6465) and another to two remote monads on the eastern shore of Loch Eriboll (NC4865/4965). Records of particular interest included *Logfia minima* (Small Cudweed), a NCR, from the Strathy Forest (NC85) and Melvich (NC86) and *Eupatorium cannabinum* (Hemp Agrimony) near Bettyhill (NC76), where it has not been seen since 1833. We should like to thank the Blodwen Lloyd Binns Bequest Fund (Glasgow NHS) and the Finnis Scott Foundation (BSBI) for grants towards the expenses of the three weeks at Tongue. We also made 1,200+ records in 12 monads in the better-worked western part of the vice-county, notably in two remote monads alongside Loch Dionard (NC3548/3549). With the essential help of Avril Haines and Andy Amphlett, all records were digitised and validated by the end of December.

### Caithness (vc109)

### Francis and Margaret Higgins

In August we spent the weekend at a hotel in Thurso so we could concentrate on more remote, unrecorded monads in the north of our county. Although we started recording later than in previous years, we recorded nearly as many species in that weekend as we did in the whole of June. On one afternoon we found several rare plants, including *Drosera intermedia* (Intermediate Sundew), last recorded in 2001, plenty of *Radiola linoides* (Allseed), last recorded in 1997, and also *Pinguicula* 

*lusitanica* (Pale Butterwort), last seen in 1956, which mainly grows on the west coast; when inputting the cards via MapMate when we got home, both the *Radiola* and *Pinguicula* came up with "1<sup>st</sup> for 109". MapMate came up with another "1<sup>st</sup> for 109", in July, when we found *Arabis hirsuta* (Hairy Rockcress) but we see on the BSBI database that this had been found in 1999, 1972 and before that, in the 1920s. These "firsts" were post 2000, but our best was a 1<sup>st</sup> for the North of Scotland, let alone for Caithness, was *Cyperus longus* (Galingale), confirmed by David Simpson, of Kew. Finds like this make all the traipsing through the bogs more worthwhile!

### Western Isles (vc110)

## The main recording activity was three-weeks of targeted recording by the VCR in central Lewis and North Uist. In central Lewis this particularly covered areas that were challenging to access, but was rewarded by refinds and new records in several hectads. There were some surprises, such as the frequency of finds of *Vulpia bromoides* (Squirreltail Fescue), and a second VC record for *Armoracia rusticana* (Horse-radish). This essentially completed the coverage of underworked areas for the Atlas. A planned trip with Outer Hebrides Biological Recording to a site in North Harris was stymied by the ferries, but there was a successful excursion on North Uist which resulted in a refind of *Pilularia globulifera* (Pillwort). OHBR continue to make useful records. Other visitors have also sent on records, and I am very grateful for these inputs, which are helpful for ongoing recording activity for a new flora as well as filling in gaps for the Atlas.

### Orkney (vc111)

### John Crossley

With another 5,000+ records collected mainly in 65 monads and tetrads, Atlas 2020 coverage is as complete as hoped for in this VC. Most tetrads have had a visit, with the exception of the some of the small uninhabited islands, others with little land area and, I confess, a very few unattractively dull ones. Many people have contributed, this year as in previous ones, and many thanks are due; I cannot mention all by name, but I would particularly thank Tim Harrison and Andrew Upton, visiting and resident BSBI members respectively, for their many records from the islands of Westray, Eday and Stronsay. Weather in 2019 was often not kind either. We had a BSBI Field meeting here, visiting the islands of Sanday, Westray and uninhabited Copinsay; recording was productive and interesting (see the meeting report in the Year Book) and we had fun. The local Flora group met three times. Some special records for 2019 were:

A new site for Primula scotica (Scottish Primrose) in Hoy, found by Fraser Milne;

*Brassica oleracea* (Wild Cabbage), new VCR, on the island of Sanday at what looks like a 'natural' site, unlikely as it may seem;

Rediscovery of Ononis repens (Common Restharrow) after 50 years;

Rediscovery of Vicia sativa ssp. sativa (Narrow-leaved Vetch), after 40 years.

Some mini-projects were started including investigations of hybridity in *Tripleurospermum* (Mayweed) species, into subspecies of *Betula pubescens* (Downy Birch) in the islands, and analysis of vegetation communities associated with *Primula scotica*. Good progress has been made with verification of records. There is a lot of interest in botany in the county and the outlook post-Atlas 2020 is heartening!

### Paul Smith