

Ecology in Somerset

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ECOLOGY IN SOMERSET 2021

EDITORIAL

It was another year dominated, in one way or another, by the COVID-19 pandemic. At various times, regulations and restrictions would be tightened or loosened, and it was sometimes hard to know from one week to the next exactly what activities were permitted, or prohibited. Was it okay, or not okay, to meet in each other's houses? Outside, could we meet just one person, or two, or maybe any number as long as they came from no more than two households? Did children count as people? What were the rules on self-isolating? Under what circumstances were masks to be worn? A few months on, and to be honest it's all become a bit of a blur.

Following the second (or was it third?) lockdown in early 2021, restrictions were lifted such that small gatherings were again permitted, at least in the open air. With a huge sigh of relief, and not a little trepidation, some specialist groups, like the Somerset Rare Plants Group, began holding outdoor meetings in April. Others, including the Natural History Section of SANHS, were inclined to take a more cautious approach. During 2021 we continued to hold meetings on Zoom, including a series of six evening talks on fungi by Steve Parker in February-March; but it wasn't until November that we finally held our first (and only) field meeting of the year – a 'fungus foray' in Loxley Wood, a Woodland Trust nature reserve near Shapwick.

In early 2022, with COVID-19 seemingly on the wane, we held our first indoor meeting in March—an amusing and informative talk on Somerset bats by Ed Wells—while the Natural History Section also put together a full programme of field meetings for the spring and summer. At the time of writing, we have held the first two of these, with visits to Thurlbear Wood in April and Shapwick Heath in May—our first spring meetings since 2019. At Thurlbear we were lucky enough to see a single tiny plant of Early Gentian (*Gentianella amarella* subsp. *anglica*), the first time this gentian had been found anywhere in vice-county 5 (S. Somerset) for at least 18 years. It felt like a good omen.

So, things are starting to return to normal; but this has brought its own set of challenges. We had become used to our diaries being relatively empty, but now the pages are filling up at an alarming rate. It is as if a

log-jam has suddenly burst. Everyone's terribly busy again. If you want to listen to birdsong, you'll have to contend with a lot more extraneous noise than you did two years ago: the background rumble of aircraft passing overhead, the roar of traffic hurtling up and down the motorway.

Of course, things haven't returned to normal at all. It was on 19 February this year, the day that the last COVID-19 restrictions were lifted in England, that Russia invaded Ukraine. And it seems inevitable that rising fuel and food prices, and inflation generally, will have a huge impact on our daily lives for the foreseeable future. Against this grim backdrop, it is hard to imagine—despite the fine words cobbled together at COP26 in Glasgow in November 2021—how the UK and the rest of the world will be able to make significant and rapid progress in tackling the causes of climate change and the loss of biodiversity. As usual, there seems to be a huge gulf between words and deeds. But the science is clearer now than it's ever been, and the urgency of the situation is becoming simply impossible to ignore. So we remain hopeful, with this week's international meeting organised by the UN in Stockholm and the COP27 to be held in Egypt later this year, that agreement will be reached on the global actions needed—with each country clear about the carbon-emission reductions it needs to make, and the date by which these reductions have to be achieved.

Closer to home, SANHS members will have noted the announcement earlier this month of exciting plans to create a 'super nature reserve' stretching between Glastonbury and Bridgwater Bay, to be called the Somerset Wetlands National Nature Reserve. This ambitious project will knit together six existing protected sites, from Ham Wall and Shapwick Heath in the east to Steart Marshes in the west, via a network of new wetland areas being managed for nature conservation. The 'super reserve' will seek to protect one of the largest surviving areas of lowland peat in the UK, so will also act as an important carbon store. As Tony Juniper, chair of Natural England, said at the launch: 'These wonderful places are needed now more than ever, as we face the challenges of global warming, wildlife decline and reconnecting people with the natural world.'

Pulling together this year's reports for *Ecology in Somerset* has been more difficult than usual. Some

specialist groups were unable to do much active recording in 2021, so perhaps felt they had little to report, while other contributors have simply been too busy following the lifting of COVID-19 restrictions to find the necessary time to put pen to paper. Several hoped-for reports or short articles are currently very much works in progress, and so will appear in a future issue. These include a final report of the geological work being part-funded by SANHS through a grant from the Pat Hill-Cottingham Fund (see *SANH* 162, 126-9). Talking of which, we have awarded two grants for the coming year: one to support visits by specialists to carry out biological recording on Steep

Holm; the other to provide funds towards a detailed survey of the rich lichen communities existing on veteran trees in Piddle Wood, near Staple Fitzpaine. We expect that results of both these projects will eventually appear in this journal.

Our thanks to all the authors who kindly contributed material for this edition of *Ecology in Somerset*, and to those who assisted in an editorial capacity. As always, your input is much appreciated.

The Natural History Committee
31 May 2022

SOMERSET DANDELIONS (*TARAXACUM*) – 2021 UPDATE

S. J. LEACH, G. E. LAVENDER, J. WEBB AND A. J. RICHARDS

Our studies of the Somerset *Taraxacum* were hampered somewhat in 2020 by the impact of COVID-19 restrictions, but we were fortunate in 2021 that the third lockdown began to ease by the time the dandelion-hunting season was properly up and running.

In 2021 it was without doubt *T. lambinonii* – never before recorded in Britain and Ireland – that was especially noteworthy (Fig.). Apart from the two Somerset records this member of section *Erythrosperma* was also recorded in Sussex by T. C. G. Rich, but the species is missing from the new ‘Field Handbook’ (Richards 2021) as its

presence in Britain only came to light after the book had gone to press – a prime example of something being already out of date by the time it is published! *T. lambinonii* is a mainly French/Italian/Spanish species, and could easily be a previously-overlooked native in this country. It was originally described in 1961 from Switzerland and named for the highly respected Belgian botanist and lichenologist Jacques Lambinon (1936-2015).

In 2021 we found, between us, ten species new to Somerset, plus one new to VC5 (S. Somerset) and another new to VC6 (N. Somerset). As usual, all identifications have been determined or confirmed by

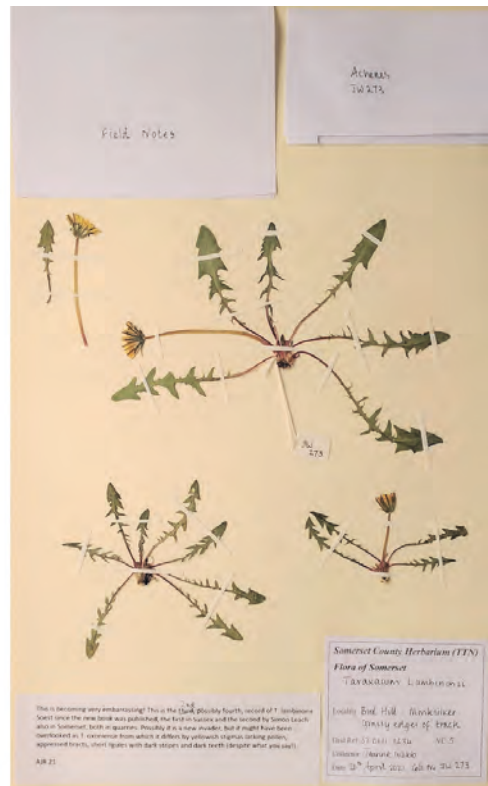


Fig. *Taraxacum lambinonii*, a species recorded for the first time in Britain in 2021
(Photos: Simon Leach, with kind permission of SANHS and South West Heritage Trust)

the national referee for *Taraxacum*, John Richards (AJR), with voucher specimens being lodged in the SANHS/Somerset County Herbarium (TTN) housed at the Somerset Heritage Centre. This increasingly important reference collection continues to be under the care of the South West Heritage Trust and a small team of volunteers including members of the Somerset Rare Plants Group and SANHS (see *SANH* 160, 214-16). The new county/vice-county records are listed below, with recorders abbreviated as follows: GEL = Graham Lavender; SJL = Simon Leach; JW = Jeanne Webb.

Taraxacum acutifidum – Minehead, Seaward Way (SS 9837 4519), on grass verge, 7 Mar, GEL, det. AJR; first record for VC5 and Somerset.

Taraxacum cambricum – Ashton Court (ST 54 71), in woodland beside footpath, several plants, 8 Apr, SJL, conf. AJR; first record for VC6. A British and Irish endemic with a predominantly westerly distribution.

Taraxacum exsertum – Minehead industrial estate (SS 9750 4615), on grass verge, 16 Mar, GEL, det. AJR; first record for VC5 and Somerset. [The dot for ST04 on the map in Richards (2021) is an error (AJR pers. comm.)].

Taraxacum inopinatum – Hurlstone Point (SS 8998 4824), in coastal clifftop grassland, 25 Mar, GEL, det. AJR; first record for VC5 and Somerset.

Taraxacum lambinonii – Thurlbear Quarrylands (ST 272 209), in short rabbit-grazed calcareous grassland, 2 Apr, SJL, det. AJR, having been provisionally identified by SJL as *T. fulviforme*; Colton, Bird Hill (ST 0611 3624), probably hundreds of plants, with *T. argutum*, on grass verge of forest track surfaced with limestone chippings, 20 Apr, JW, det. AJR, having been provisionally identified by JW as *T. parnassicum*; first and second records for VC5, Somerset and Britain (Fig. 1).

Taraxacum ochrochlorum – Dunster Station (SS 9955 4475), on grass verge, 13 Mar, GEL, det. AJR; first record for VC5.

Taraxacum pachymerum – Cleeve Hill, Watchet (ST 0566 4261), in calcareous grassland, 2 May, JW, conf. AJR; first record for VC5 and Somerset.

Taraxacum severum – Dunster (SS 9945 4404), on grass verge of roundabout, 22 Mar, GEL, det. AJR; first record for VC5 and Somerset.

Taraxacum speciosiflorum – Taunton, Obridge (ST

2365 2526), on partly shaded raised verge and bank beside cycle-path, with *T. britannicum*, 2 Apr, SJL, conf. AJR; first record for VC5 and Somerset. A seemingly rare species in Britain, this is the first record for SW England.

Taraxacum spiculatum – Honeymead Two Gates (SS 8048 3929), on grassy road verge next to open moorland, 30 Mar, GEL, det. AJR; first record for VC5 and Somerset.

Taraxacum subnaevosum – Drybridge Combe (SS 7609 3850), on verge of open moorland, 12 May, GEL, det. AJR; first record for VC5 and Somerset. A GB endemic with a northern, often upland, range centred on N England and Scotland; this appears to be the first record for SW England.

Taraxacum wallonicum – Colton, Bird Hill (ST 0578 3618), several plants in a field with plenty of *T. britannicum*, 8 Apr, JW, conf. AJR; first record for VC5 and Somerset. Only the second record away from its stronghold in SE England where it is thought to be ‘probably native’ (Richards 2021). Its native/alien status in Somerset is unclear.

With the new species added in 2021, the *Taraxacum* flora of Somerset stands at 170 species: 157 in VC5 and 93 in VC6. There are now specimens of more than 150 of these species in the SANHS/Somerset County Herbarium. An updated checklist of the county’s *Taraxacum* species is available as a pdf on the Somerset Rare Plants Group website.¹

REFERENCE

Richards, A. J., 2021. *Field Handbook to British and Irish Dandelions*, Durham: Botanical Society of Britain and Ireland Handbook 23.

¹ https://www.somsetrareplantsgroup.org.uk/wp-content/uploads/2021/12/Somerset-Dandelion-checklist-Nov_-2021_FINAL.pdf

NATURAL HISTORY REPORTS

VASCULAR PLANT REPORT 2021

With the current focus on the world's climate emergency and biodiversity losses, it has never been so important to record and document the changing fortunes and distributions of species. The arrival or loss of plant species will affect the biodiversity of any area; moreover, data on changes in plant distributions can inform research into climate change. Plant distributions are influenced by edaphic conditions, aspect, altitude, seed recruitment, herbivory, disease, allelopathy, and other factors; changes in distributions of plant species have many causes in addition to climate change, including agricultural intensification, drainage, development, plant succession, eutrophication and weather events. Our understanding of the reasons for changing plant distributions thus depends on the analysis of large amounts of data: the database of the Botanical Society of Britain & Ireland (BSBI) now contains over 50 million plant records. In Somerset, more than 71,000 records were made for vascular plants during 2021, and added to the BSBI's database, contributing data for various areas of research.

One project which members of Somerset Rare Plants Group have been working on for many years is the production of a Rare Plant Register (RPR) for Somerset. The complete list of qualifying 'rare' or threatened plants of Somerset (currently 644 taxa) is kept updated on the SRPG website (see <http://www.somersetrareplantsgroup.org.uk/>) and over 250 species accounts have now been written and are available to download. Whilst many of these accounts describe the loss of species from former sites, some records made in 2021 were for RPR species in apparently new localities. Perhaps most exciting was the discovery of Variegated Horsetail (*Equisetum variegatum*), new to South Somerset (VC5), in a wet area of a disused quarry on the Quantocks. This slender, scarce horsetail is found in a wide variety of open damp or wet calcareous habitats. Its only other current site in Somerset is in damp dune grassland at Berrow, but it is known from similar seasonally flooded depressions in disused quarries elsewhere, e.g. in Co. Fermanagh (Forbes and Northridge 2012). It presumably arrived at the newly found site by long-distance spore dispersal.

Two new taxa were added to the Somerset RPR, both newly discovered in Somerset in 2021. Although Cat's-ear (*Hypochaeris radicata*) is common and widespread, plants growing on maritime shingle or

sand are recognised as a separate subspecies, recorded in Somerset for the first time in 2021, as was *Sagina x micrantha*, the hybrid between the ubiquitous Procumbent Pearlwort (*S. procumbens*) and scarce Heath Pearlwort (*S. subulata*). Hybrids are generally under-recorded, so often appear to be rarer than they really are; however, we do include a hybrid in the RPR if one of its parents already qualifies for inclusion in its own right.

Several taxa feared lost from Somerset were recorded in 2021. Night-flowering Catchfly (*Silene noctiflora*) is one of a suite of plants of arable fields which has declined due to changes in agricultural practices. It appeared in a garden border within the area designated by Plantlife as the Mid-Somerset Hills Important Arable Plant Area, where it may have arisen from long-buried seed, over 30 years after the last record in that area. A group of species for which conditions are only suitable in certain years are plants which inhabit mud exposed when water levels are low, particularly on the drawdown zones of reservoirs. Mudwort (*Limosella aquatica*), a Nationally Scarce ephemeral annual, is erratic in its appearance and was found at Chew Valley Lake for the first time in ten years.

Some plants remain unrecorded for decades for other reasons. The dune ecotype of Thyme-leaved Sandwort (*Arenaria serpyllifolia* subsp. *lloydii*), although recognised by Perring and Sell (1968), was omitted from identification guides until recently: its inclusion in recent works has alerted botanists to its existence and prompted searches. It was discovered in 2021 at Wall Common and is likely to be found in other suitable coastal sites in the county. Other species found in 2021 had not been recorded for many years due to the simple fact that they tend to grow in places that are difficult to access. For example, the scarce endemic Balloon-leaved Hawkweed (*Hieracium subamplifolium*) grows on a railway bank at Charlton Mackrell, where it had not been seen for 20 years, but its continuing presence was confirmed in 2021. Similarly, Bristol Channel Hawkweed (*H. eustomon*) clings to inaccessible cliffs at Culbone, where there had been no confirmed records since 1908 due to the nature of the site: it was recorded there in 2021 by intrepid botanists.

Even when included in standard identification guides, some species are notoriously difficult to separate, their distinction often depending on

microscopic characters. The Spike-rushes (*Eleocharis* species) are one such group: Slender Spike-rush (*Eleocharis uniglumis*) was recorded in the Gordano Valley for the first time since 2009, but it is likely that it had merely been overlooked in the intervening years. On the other hand, it would be difficult to overlook a plant of Milk Parsley (*Thysselinum palustre*), found for the first time in the Gordano Valley in 2020, the identification confirmed in 2021. This species was thought to be confined to a small area of the Peat Moors: it is not known how or when it reached the North Somerset Levels, but this represents an encouraging expansion of range of a Nationally Scarce species assessed as Vulnerable on the GB and England Red Lists.

Another RPR species which was found in a completely new area in 2021 was Rough Mallow (*Malva setigera*), at Rodney Stoke NNR – the first record for the Mendip Hills. Although a Schedule 8 species and formerly included in the vascular plant Red Data Book, the status of Rough Mallow is controversial. Many botanists in Somerset and Kent believe it to be native in their counties, but nationally the consensus seems to be that it is a neophyte (i.e. a post-AD 1500 introduction). Nevertheless, it is retained on the Somerset RPR list because of its historical connection to Somerset.

As always, in 2021 several alien species were found newly escaped into the wild in Somerset: the lists of new Somerset or vice-county records are dominated by these. Most neophytes are not detrimental to the biodiversity of an area; indeed, they often add to it by providing nectar, food, shelter and nest-sites for other organisms, or by being a host species for pathogens or even parasitic plants. A measure of the ‘biodiversity’ of an area may thus not give a true impression of the losses of native species and good habitat which are causing concern amongst naturalists. The monitoring of our rare and declining native species is more important than ever.

The records below were, unless otherwise stated, made during 2021. They fall into one of the following categories:

- A taxon recorded for the first time in the wild in Somerset (Watsonian vice-counties 5 (South Somerset) and 6 (North Somerset)), i.e. *a new county record*
- A taxon recorded for the first time in the wild in one of the Somerset vice-counties, either VC5 or VC6, i.e. *a new vice-county record*
- Other records of particular interest, for example second or third vice-county record, species re-found after a long absence, or newly discovered populations of Nationally Rare, Scarce or

threatened species (a Nationally Rare species is one found in 15 or fewer hectads in GB; a Nationally Scarce species is one found in 16-100 hectads in GB).

Within each category, records are listed alphabetically by ‘taxon’, which may be a species, microspecies, subspecies, variety or cultivar. Both native and introduced taxa are included, with neophytes being distinguished by an asterisk before the name. The third category is divided into two sections, to give prominence to records of *native* taxa; archaeophytes (long-established species introduced before AD 1500) are included with natives. Nomenclature follows Stace (2019) for all taxa included in that work, except for *Dryopteris* which follows Sell and Murrell (2018). The vice-county is given for each record; the boundary between VC5 and VC6 follows the River Parrett/River Yeo/A303. As in previous years, new county/vice-county records of *Taraxacum* (Dandelion) species are reported separately (pp. 288-9).

Recorders and referees whose names appear more than once have been abbreviated as follows: Helena Crouch (HJC), Ro FitzGerald (RFitzG), Dave Gibbs (DG), Ian Green (IPG), David Hawkins (DH), Rupert Higgins (RJH), Richard Lansdown (RVL), Graham Lavender (GEL), Simon Leach (SIL), David Leadbetter (DCL), Alex Lockton (AJL), David McCosh (DJMc), Liz McDonnell (EJMcD), Stephen Parker (SJP), John Poingdestre (JP), Fred Rumsey (FJR), Pat Steele (PAS), Nick Stewart (NFS), Margaret Webster (MAW), Somerset Rare Plants Group (SRPG), Wild Flower Society (WFS).

Where mentioned in the following list, *The Atlas Flora of Somerset* (Green *et al.* 1997) is abbreviated as *AFS*.

New Somerset records

**Agapanthus praecox* (African Lily) – Porlock Weir (SS 8666 4771), 30 Jul, two plants growing in shingle on road verge, GEL, VC5 (see also VC6 record below).

**Dicksonia antarctica* (Australian Tree-fern) – The Parks (SS 8763 4681), 24 Mar, 12 plants to around 1.5m tall scattered along 30-40m of earth bank above footpath, presumably self-sown from nearby Greencombe garden, GEL & N. Ramsay, VC5.

**Eryngium variifolium* (Variable-leaved Sea-holly) – Weston-super-Mare, Knightstone (ST 3124 6181, ST 3125 6183), 30 Oct, one vegetative plant in paving and one fruiting plant beneath a boat against low sea wall, SRPG, VC6. (Fig. 1)

**Gilia capitata* (Blue-thimble-flower) – Coxley Wick



Fig. 1 *Eryngium variifolium* (Variable-leaved Sea-holly) in Weston-super-Mare. One of several species of *Eryngium* which are increasingly grown in gardens and readily escaping (Photo: © Helena Crouch)

(ST 530 441), 2 Jul, on soil heaps deposited in a field by Mill Lane, PAS, VC6.

Hypochaeris radicata subsp. *ericetorum* (Cat's-ear) – Dunster Beach (SS 9993 4508), 30 May, on seaward side of chalets, GEL, det. John Parker, VC5.

****Lepidium virginicum*** (Least Pepperwort) – Yeovil (ST 5556 1599), 27 Jul 2020, several plants around a drain in Princes Street, IPG, VC5.

****Lithodora diffusa*** 'Heavenly Blue' (Gromwell) – North Petherton (ST 2890 3302), 22 Apr, on outside of garden wall, SJP, VC5.

****Miscanthus*** x ***giganteus*** (Giant Silver-grass, Elephant-grass) – Cheddar Head (ST 5109 5199), 24 Jun, one huge clump in rough grassland near scrub, EJMCD, VC6.

Sagina x ***micrantha*** (*S. procumbens* x *subulata*) – Minehead, North Hill (SS 9281 4765), 6 Jun, at base of quarry to left of entrance, GEL, RFitzG & WFS (found by Steven Little), VC5.

****Tanacetum macrophyllum*** (Rayed Tansy) – Frome (ST 7771 4786), 28 Jun, on waste ground below boundary wall at S edge of St John's Churchyard, HJC & Val Graham, VC6.

****Trachycarpus fortunei*** (Chusan Palm) – Tyntesfield (ST 4990 7164), 14 Dec, one young plant in Truckle Wood, presumably bird-sown from plants in the gardens over 400m away, DG, VC6.

****Wolffia columbiana*** (Columbian Water-meal) – Rooks Bridge (ST 3645 5216), 14 Oct, a very large population, RVL, VC6.

*X ***Triticosecale rimpaii*** (Triticale) – Hawk Combe (SS 88 46), 23 Jun, road verges in village, GEL, VC5.

New vice-county records

****Agapanthus praecox*** (African Lily) – Weston-super-Mare (ST 3186 6190), 30 Oct, one plant self-sown in paving by pond in Grove Park, SRPG, VC6.

Carex x ***boeninghausiana*** (*C. paniculata* x *remota*) – Bath (ST 7574 6446), 25 Jul, one clump in stonework on N side of Kennet & Avon Canal, AJL, conf. Mike Porter, VC6.

Equisetum variegatum (Variegated Horsetail) – Staple Quarry (ST 1132 4156), 23 Dec 2020, 500-1000 shoots in disused quarry, growing through moss on quarry floor, over area of c. 7 x 2.5m in wet broadleaved woodland of mostly *Salix* and *Betula*, James McGill, det. Patrick Acock, VC5.

****Eryngium bourgatii*** (Mediterranean Sea-holly) – Hawkcombe View (SS 8891 4661), 7 Jul, on road verge against wall, GEL, VC5.

****Eryngium planum*** (Blue Eryngo) – Bath (ST 7526 6586), 16 Jul, one plant on paving in Thomas Street, Kevan Horne, VC6.

****Eucalyptus gunnii*** (Cider Gum) – Weston-super-Mare (ST 3146 6193), 30 Oct, one sapling on W side of Greenfield Place, self-sown from trees nearby, SRPG, VC6.

Heracleum mantegazzianum x ***sphondylium*** – Minehead (SS 9853 4630), 16 Jun, one confirmed plant and possibly others on waste/disturbed ground between golf club and Butlins, on narrow strip of land between two ditches, GEL, conf. RVL, VC5.

****Hieracium scotostictum*** (Dappled Hawkweed) – Rowden Farm (ST 0817 3806), 29 Aug 2017, escaped from garden into lane, GEL & Jeanne Webb, VC5. NB record reported as first for VC5 in 2020 (see SANH 164, 325) was in fact second.

****Nonea lutea*** (Yellow Nonea) – Isle Brewers (ST 3647 2129), 5 Apr, in some quantity over 2 sq m, S. Musgrove, VC5.

****Oxalis tetraphylla*** (Four-leaved Pink-sorrel) – Lower Ansford (ST 6368 3315), 2 Sep, several escaping from garden, DCL, VC6.

****Perovskia atriplicifolia*** (Russian Sage) – Clevedon, Conygar Quarry (ST 42 72), 10 Oct, one plant in flower on pile of spoil in disused quarry, DH, VC6.

****Sorghum bicolor*** (Great Millet) – Sutton Bingham (ST 54 11), Oct, one plant in stonework of causeway across the reservoir, Liz Downey, det. Gordon Hanson, VC5.

Other interesting records – native species

Allium ampeloprasum (Wild Leek) – Nailsea Moor (ST 449 705), 25 Jul, one plant in flower by drove, DH & Bristol Naturalists' Society, VC6. New hectad record for this Nationally Scarce species, although probably not native at this locality as it is now widely grown as 'Elephant Garlic'.

Alopecurus aequalis (Orange Foxtail) – Chew Valley Lake, Herons Green Bay (ST 557 591), 31 Aug, RJH, VC6. Fifth site for VC6 and first for the hectad.

Arenaria serpyllifolia subsp. *lloydii* – Wall Common (ST 2613 4530), 4 Jun, on sandy bank at back end of car park, GEL & Linda Everton, det. Geoffrey Halliday, VC5. First record for VC5 and Somerset since mapped in Perring and Sell (1968).

Arum italicum x *maculatum* – Thurlbear Wood (ST 2731 2132), 4 Mar, two plants growing with *A. maculatum*, close to entrance at N end of wood, SJL, conf. IPG, VC5. Third site for VC5. (Fig. 2)

Carex x *pseudoaxillaris* (*C. otrubae* x *remota*) – Clevedon, Conygar Quarry (ST 4208 7211), 9 Jun, DH, VC6. Second post-2000 record for VC6.

Dryopteris paleaceolobata – Stockhill (ST 5568 5169, ST 5569 5169), six plants under trees N of track to turning circle in NE part of wood, 19 Aug 2017, HJC & FJR, VC6. Second record for VC6. Originally recorded as *D. cambrensis*, but re-det. in 2021, conf. Roger Golding. Records reported as second and third in 2020 (SANH 164, 325) were thus third and fourth.

Eleocharis uniglumis (Slender Spike-rush) – Walton Moor (ST 424 726), 31 May, DH, VC6. First record for VC6 since 2009.

Elymus athericus (Sea Couch) – Winscombe (ST 4204 5768), 16 Aug, one clump at N edge of car park, EJMCD, VC6. First inland record for Somerset.

Gaudinia fragilis (French Oat-grass) – Porlock (SS 8858 4623), 23 Jun, one tufted patch at edge of road/stream by small bridge near watermill, GEL, det. Clive Lovatt, VC5. New hectad record for Nationally Scarce species.

Groenlandia densa (Opposite-leaved Pondweed) – Haskey Moor (ST 3270 2425), 18 Jun, large vigorous colony in rhyme, JP, VC5. Second record for VC5 since AFS for this Vulnerable species.

Hieracium acuminatum (Tall Hawkweed) – Norton Down (ST 6616 5241), 9 Jul, one huge plant with 12 flowering shoots on N side of Tunnel Lane, HJC, conf. DJMcC, VC6. Second record for VC6 and Somerset.

Hieracium eustomon (Bristol Channel Hawkweed) – Culbone Rocks (SS 8466 4852, SS 8468 4853, SS



Fig. 2 *Arum italicum* x *maculatum* in Thurlbear Wood. This hybrid between the alien subspecies of Italian Lords-and-Ladies (subsp. *italicum*) and our native Lords-and-Ladies is likely to be found more frequently since its alien parent is increasingly escaping from cultivation (Photo: © Simon Leach)

8479 4853, SS 8488 4854), 2 Jun, more than 125 plants on cliffs above shingle, GEL & DG, conf. DJMcC, VC5. First confirmed records at this site since 1908.

Hieracium subamplifolium (Balloon-leaved Hawkweed) – Charlton Mackrell (ST 5357 2910), 23 Jul, dense patch 20 x 5m along lower part of S bank of railway, NFS, conf. DJMcC, VC6. First record for VC6 and Somerset since 1991.

Hypochaeris radicata subsp. *ericetorum* (Cat's-ear) – Minehead Warren (SS 9859 4647, SS 9901 4642), 18 Jun, along sandy coastal path and on sand adjacent to fairway, GEL, VC5. Second site for VC5 and Somerset.

Limosella aquatica (Mudwort) – Chew Valley Lake (ST 559 599), 22 Aug, many plants attractively surrounded by *Riccia cavernosa*, in corner of Villice Bay, RJH, VC6. Second record for VC6 since 2000 and a new monad at its only current location in VC6.

Logfia minima (Small Cudweed) – Clevedon, Conygar Quarry (ST 4201 7210), 9 Jun, two plants on top level of quarry, DH, VC6. New hectad for

this Near Threatened species which is scarce in VC6.

Medicago polymorpha (Toothed Medick) – Wedmore (ST 437 481), 30 May, one large spreading plant in the car park at gateway entrance to Worthington Woods Food Forest project, EJMCD, VC6. New hectad for this Nationally Scarce species.

Sagina x micrantha (*S. procumbens x subulata*) – Minehead, North Hill (SS 9098 4768), 6 Jun, GEL, RFitzG & WFS, VC5. Second record for VC5 and Somerset.

Salicornia pusilla (One-flowered Glasswort) – Bossington (SS 8885 4812), 22 Aug, in saltmarsh; Porlock Marsh (SS 8876 4794), 25 Aug, growing with *S. europaea* but at slightly higher elevation; Porlock Saltmarsh (SS 8767 4768), 29 Aug, one plant at edge of main channel in lower saltmarsh, GEL, VC5. Second, third and fourth sites for VC5 and Somerset.

Salicornia pusilla x ramosissima (Hybrid Glasswort) – Porlock Weir (SS 8639 4799), 21 Aug, in boat mooring area in front of Turk Island; Porlock Marsh (SS 8843 4795), 25 Aug, on bare mud adjacent to board walk, with both parents; Porlock Saltmarsh (SS 8754 4779, SS 8767 4770), 29 Aug, on middle to lower saltmarsh and on edge of vast mudflat adjacent to main channel; Porlock Weir (SS 8614 4836), 5 Oct, in centre of saltmarsh, GEL, VC5. Second, third and fourth sites for VC5 and Somerset and first record for original site since AFS.

Scutellaria minor (Lesser Skullcap) – Street Heath (ST 4642 3939), 20 Jul, many plants along path beside ditch at E end of clearing, HJC & Somerset Botany Group, VC6. First record for the Peat Moors since 1822.

Silene noctiflora (Night-flowering Catchfly) – Langport, Newtown (ST 423 276), 12 Jun, two plants appeared in garden, no evidence of it having been deliberately introduced, John Bebbington, VC6. First record for this Vulnerable species in VC6 and Somerset since 1991. (Fig. 3)

Silene vulgaris x uniflora (Hybrid Champion) – Charterhouse, Blackmoor Reserve (ST 5066 5603), 8 Jul, few plants on N-facing side of slag heap by flues, amongst *S. uniflora*, with *S. vulgaris* nearby, HJC & MAW; (ST 5070 5601, ST 5070 5603), 14 Jul, few plants on S edge and N edge of slag heap near flues with both parents, HJC & FJR, VC6. First records for VC6 and Somerset since 1993.

Thysselinum palustre (Milk-parsley) – Walton Moor (ST 4379 7314, ST 4386 7312), 22 Jul, one flowering plant and a few non-flowering plants nearby, in mostly *Molinia*-dominated fen, Iain Diack, VC6. First record for Gordano Valley



Fig. 3 *Silene noctiflora* (Night-flowering Catchfly) in a garden border in Langport. Now very rarely found in arable habitats, being highly susceptible to herbicides. It is strongly scented, being pollinated by nocturnal insects which benefit from the nectar it provides. The decline of this species will have affected the associated pollinating insects (Photo: © John Bebbington)

NNR, found by Natural England staff in Sep 2020, identification confirmed in Jul 2021.

Thymus pulegioides (Large Thyme) – Cucklington (ST 7553 2788), 26 May, few plants on closely grazed W-facing slope; Crewkerne Station (ST 4406 0824), 13 Sep, dry S-facing slope; Milbourne Port (ST 6637 1906), 23 Oct, a few plants at N end of Vartenham Hill, JP, VC5. Second, third and fourth records for VC5 since AFS.

Urtica dioica subsp. *galeopsifolia* (Stingless Nettle) – Poundisford (ST 2185 2089), 18 Jun, beside public footpath and M5, in planted damp woodland, a few plants adjoining dense stands of normal *Urtica dioica*, SJL, VC5. Fourth record for VC5 and first since AFS.

Viola x bavarica (*V. reichenbachiana x riviniana*) – Allerford Plantation (SS 9039 4730), 9 Apr, with both parents on 30m bank of violets alongside stream, GEL; The Quants (ST 1891 1769), 18 Apr, at woodland edge with both parents seen nearby, SRPG, det. GEL; Horridge Wood (SS 90 46), 26

Apr, GEL, VC5. Third, fourth and fifth records for VC5.

Other interesting records – alien species

**Bidens frondosa* (Beggarticks) – Bath, Widcombe (ST 7566 6433), 26 Jul, many plants along stonework of Kennet & Avon Canal, HJC & AJL, VC6. Third record for VC6 and Somerset.

**Cardamine occulta* – Whitchurch, Whitehall Garden Centre (ST 614 664), 20 May 2020, few in flower in pots of *Clematis*; Bath, Hillier Garden Centre (ST 7225 6332), 13 Oct, few in pots of conifers, HJC, VC6. Fourth and fifth records for VC6 and Somerset.

**Chenopodium giganteum* (Tree Spinach) – Taunton (ST 2304 2499), 26 Sep, one plant in road gutter, W side of St Augustine Street, SJL, VC5. Second record for VC5.

**Euphorbia corallioides* (Coral Spurge) – Minehead, Seaward Way (SS 9838 4520), 9 Jan, many plants looking long-established along 8m of bramble hedge running to N side of two adjoining field gates, RFitzG, VC5. Second record for VC5.

**Galactites tomentosus* (Mediterranean Thistle) – Porlock (SS 88 46), 12 Jan, on verge of Villes Lane; Porlock (SS 88 47), 19 Feb, c. 20 plants as weed at edge of Furzeland Road, GEL, VC5. Fourth and fifth records for VC5.

**Geranium palmatum* (Canary Island Crane's-bill) – Pitminster (ST 2214 1933), 6 Jul, one plant self-sown in drain, near two planted ones, SJL, VC5. Second record for VC5 and Somerset.

**Hieracium scotostictum* (Dappled Hawkweed) – Norton Sub Hamdon, Higher Street (ST 4674 1571), 17 Jul, at base of garden wall, NFS, conf. DJMcC, VC5; Glastonbury, The Roman Way (ST 489 379), 10 May, several plants on garden wall on N side of road; Somerton, Pestors Lane (ST 4921 2831), 20 May, good colony on garden wall on N side of road; Wells, Bath Road (ST 5569 4623), 18 Jul, four plants on garden steps; West Lydford (ST 5665 3148), 23 Jul, two clumps at base of garden wall on E side of main street, NFS, conf. DJMcC, VC6. Third record for VC5 and second and subsequent records for VC6.

**Lathyrus grandiflorus* (Two-flowered Everlasting-pea) – Pitminster (ST 2216 1936), 18 Jun, two plants, at least, clambering over lane-side hedgerow, escaped from adjoining garden, SJL, VC5. Third site for VC5 and fourth for Somerset. (Fig. 4)

**Lepidium virginicum* (Least Pepperwort) – Yeovil (ST 555 160), 15 Jun, one plant growing in pavement crack in Princes Street, IPG; Bath (ST



Fig. 4 *Lathyrus grandiflorus* (Two-flowered Everlasting-pea) scrambling up a hedgerow at Pitminster, having escaped from an adjoining garden. (Photo: © Simon Leach)

750 652), 7 Aug, in stonework by doorstep in Fountain Buildings, Rob Randall, VC6. Second record for VC5 and first record for VC6 since 1938.

**Malva alcea* (Greater Musk-mallow) – Castle Cary (ST 6376 3296), 2 Sep, one or two plants below garden steps on bank in Tuckers Lane, DCL, VC6. Second record for VC6 and third for Somerset.

**Malva setigera* (Rough Marsh-mallow) – Rodney Stoke NNR (ST 4974 5049), 26 Jun, 50+ plants flowering at top of field just below scrub edge with *Helianthemum nummularium*, Georgina Shuckburgh & Andrew Robinson, VC6. First record for Mendip hills and a new hectad record for this ‘Schedule 8’ species.

**Mentha x smithiana* (Tall Mint) – Taunton (ST 246 257), 2 Sep, one patch about 1m across, on N bank of River Tone, with *Stachys palustris*, *Phalaris arundinacea* and *Mentha aquatica*, SJL, conf. IPG, VC5. Second record for VC5 and Somerset since AFS. (Fig. 5)



Fig. 5 *Mentha x smithiana* (Tall Mint) beside the River Tone near Creech Castle, Taunton
(Photo: © Simon Leach)

- **Nonea lutea* (Yellow Nonea) – Holcombe (ST 6705 4937), 17 Apr, large population extending 2m along a footpath and another single plant 20m further along, Dave Green, VC6. Second record for VC6 and third for Somerset.
- **Physalis alkekengi* (Japanese-lantern) – Porlock (SS 8915 4693), 28 Nov, on disturbed verge, escaped from adjacent garden, GEL, VC5. Fourth site for VC5.
- **Salvia hispanica* (Chia) – Chew Valley Lake (ST 572 615), 27 Oct, four plants by fence of picnic area, where people feed the birds, MAW, VC6. Third site for VC6 and Somerset.
- **Sisymbrium strictissimum* (Perennial Rocket) – Stockwood Open Space (ST 627 693), 17 Jun, one clump by path, RJH, VC6. Second record for VC6 and Somerset.
- **Sorghum bicolor* (Great Millet) – Copplesham Cross

(SS 9269 3411), 23 Oct, in game cover area, unclear if planted or remnant from previous years, GEL, VC5; Taunton (ST 2209 2465), 31 Oct, three plants on side of foot bridge, SRPG, det. SJP, VC5; Taunton (ST 2345 2447), 2 Nov, one plant in pavement crack in Queen Street, SJL, VC5; Nailsea, (ST 466 703), 24 Oct 2019, on verge of Whitesfield Road separated by roads from houses, Dee Holladay & Pam Millman, VC6. Second and subsequent records for VC5, third record for VC6.

**Trifolium resupinatum* (Reversed Clover) – Pitney (ST 4444 2909), 5 Jul, amongst vegetable rows of organic farm, JP, VC6. Second record for VC6 since 1956.

**Vaccaria hispanica* (Cowherb) – Coxley Wick (ST 530 441), 2 Jul, on soil heaps deposited in a field by Mill Lane, PAS, VC6. First record for VC6 and Somerset since 1980.

The BSBI vice-county recorders in Somerset are: Stephen Parker and Simon Leach in VC5, and Helena Crouch and Liz McDonnell in VC6. There is also an active recording group, the Somerset Rare Plants Group (SRPG), which holds an annual programme of field meetings, winter talks and identification workshops. Further information on the SRPG and the list of taxa included in the Somerset Rare Plant Register can be found at www.somersetrareplantsgroup.org.uk.

We would be delighted to receive records for possible inclusion in future reports; these should be submitted to one of the ‘receiving recorders’, as follows:

VC5 Stephen Parker, The Old Coach House, Newton Road, North Petherton, Bridgwater, TA6 6SN
VC6 Helena Crouch, Bronwen, Farrington Road, Paulton, Bristol, BS39 7LP

REFERENCES

- Forbes, R. S. and Northridge, R. H., 2012. *The Flora of County Fermanagh*, Holywood: National Museums Northern Ireland.
- Green, P. R., Green, I. P. and Crouch, G. A., 1997. *The Atlas Flora of Somerset*, Wayford and Yeovil: privately published.
- Perring, F. H. and Sell, P. D. (eds), 1968. *Critical Supplement to the Atlas of the British Flora*, London: Thomas Nelson & Sons.
- Sell, P. and Murrell, G., 2018. *Flora of Great Britain and Ireland*, Cambridge: Cambridge University Press.
- Stace, C., 2019. *New Flora of the British Isles*, 4th edn, Middlewood Green: C & M Floristics.

HELENA J. CROUCH

FIRST FLOWERING DATES 2021 – A RETURN TO NORMALITY?

In 2021 I again kept a record of first flowering dates (FFDs), this time for 333 of the 339 species recorded each year of the decade 2008-2017. Of these, 326 had also been recorded during the extraordinarily early spring of 2020. This continues an obsession that began in 2008 and, despite one or two lapses along the way, still shows no sign of abating – despite curses from the rest of the family and the usual New Year’s resolution to have a break to maybe do something different for a year or two. Recording methods in 2021 were much the same as in previous years (Leach 2011 et seq.), apart from in 2020 when, due to COVID-19 constraints, my own FFDs were to some extent supplemented by the observations of other botanists in the county (Leach 2021).

A summary is given here of FFDs recorded, along with notable features of the weather in meteorological winter (December-February), spring (March-May) and summer (July-August), based on my own observations and regional (S.W. England and S. Wales) values available on the Met Office website (<https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-and-regional-series>). Records of snowfall, snow lying and air and ground frosts were from my back garden in Taunton.

The weather

2021, in contrast to the lockdown spring of 2020, proved to be a topsy-turvy but generally much more ‘normal’ late-winter and spring weather-wise. There were more frosts in January 2021 alone than in the first three months of 2020 put together; then, in the second week of February, we caught the western edge of storm ‘Darcy’—another ‘beast from the east’—with sleet, hail and even snow on several days. In 2020 I recorded a total of just 27 air or ground frosts between December and May. In 2021 there were 53: six in December, 15 in January, eleven in February, eight in March, twelve in April and one in May. Sleet or snow was observed falling, but never settling, on seven days—one in December, three in January and three in February. There were three named storms: ‘Bella’ in December, ‘Christoph’ in January and ‘Darcy’ in February. A wet and windy period in the second week of March passed through without a name, despite producing, in S.W. England at least, probably the wildest weather of the year.

In terms of regional mean temperatures, it was the coldest spring since the start of this project in 2008; yet while April and May were both the coldest

recorded over that time period, March was actually the fifth-warmest. Nationally it included the warmest March day since 1968 on the 30th, the temperature peaking at 23°C on our back-garden thermometer. But the generally chilly spring was sandwiched between the sixth-warmest winter and fourth-warmest summer of the last 14 years. Remarkably, for the eighth year in a row the regional annual mean temperature exceeded 10°C.

January, February and May were notably wet (with the last being the wettest May since 2008), but it was also the driest April over that time period, and very nearly as dry as it was during the memorably halcyon May of 2020. This pattern was, unsurprisingly, mirrored in the sunshine records, with April being particularly sunny, and January, February and May for the most part dull and dreary. Nationally, April 2021 was noteworthy in being both the sunniest and frostiest ‘on record’ (since at least 1960).

First flowering dates

Given the contrast in the weather between 2021 and 2020, let’s begin by comparing FFDs for these two years (Fig. 1). In the graph, those species coming into flower later in 2021 than in 2020 are represented by dots above the diagonal line, while those with earlier FFDs have dots below the line. The vast majority of dots sit above the line, with FFDs in 2021 being (on average) 11 days later than in 2020. This is exemplified by Common Spotted-orchid (*Dactylorhiza fuchsii*) (Fig. 2), which started flowering on 11 May in 2020, and 22 May in 2021. As always, though, the range of variation between species was considerable: for example, amongst those typically starting to flower in about the third week of May, Hemlock (*Conium maculatum*) was 50 days later in 2021 than in 2020, while White Bryony (*Bryonia dioica*) was actually one day earlier.

In addition, the 2021 FFDs can be compared with average FFDs recorded for the decade 2008-17 (Fig. 3). Note that the dots are now clustered more closely to the diagonal line, indicating that dates for most species in 2021 were fairly close to their decadal averages: overall, they were (on average) 4 days earlier.

For sake of completeness, and perhaps to give a more meaningful perspective, we can also make our usual comparison between the current year’s FFDs and Walter Watson’s dates in the early 20th century (Watson 1949). This produces a strikingly different

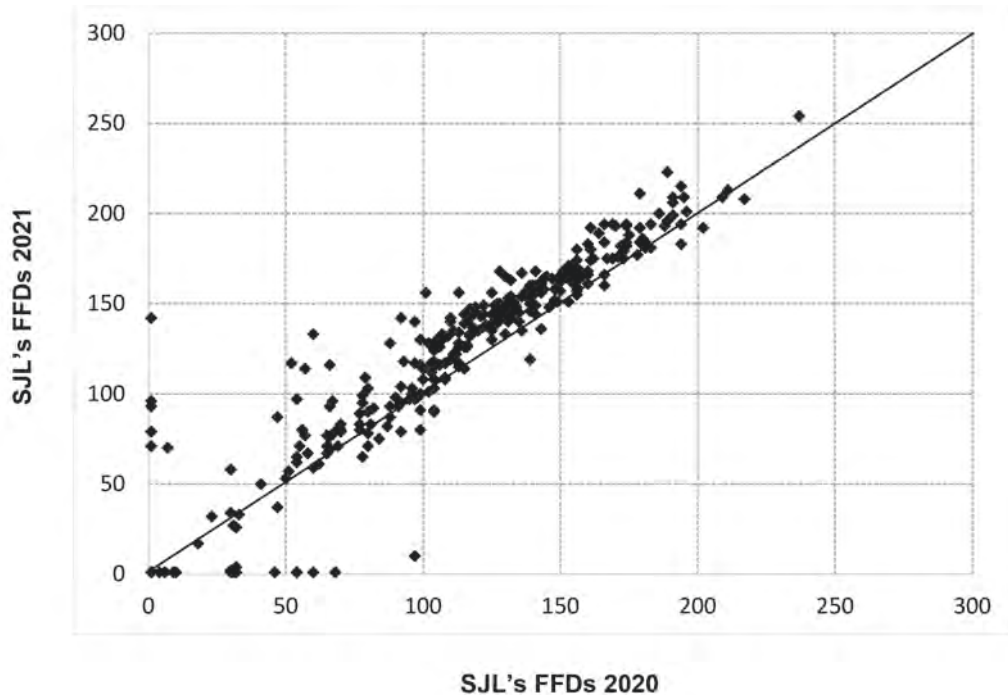


Fig. 1 FFDs for 326 species in 2021, plotted against their FFDs in 2020. Dates are shown as day no. (1 January = day 1). The diagonal line marks the line along which the data-points would lie if 2021 FFDs were identical to those recorded in 2020

picture (Fig. 4), with a clear majority of the data-points falling well below the line. Indeed, for the 333 species recorded, FFDs in 2021 were (on average) a not-inconsiderable 18 days earlier than they would have been in Watson's day. One suspects that, yet again, our FFDs would have had him raising his eyebrows and chuckling in disbelief. Not that it's a laughing matter, of course.

These comparisons demonstrate nicely how our perception of the relative 'earliness' or 'lateness' of any given spring depends on the baseline that we are assessing it against. Thus, when compared with the previous year, FFDs in 2021 were really rather late, whereas alongside Watson's dates nearly a century ago we become aware that spring 2021—like so many other recent springs—was exceptionally early.



Fig. 2 Common Spotted-orchid (*Dactylorhiza fuchsii*) at Orchard Wood, Netherclay. One of many species having a markedly later FFD in 2021 than in the lockdown spring of 2020 (Photo © Simon Leach)

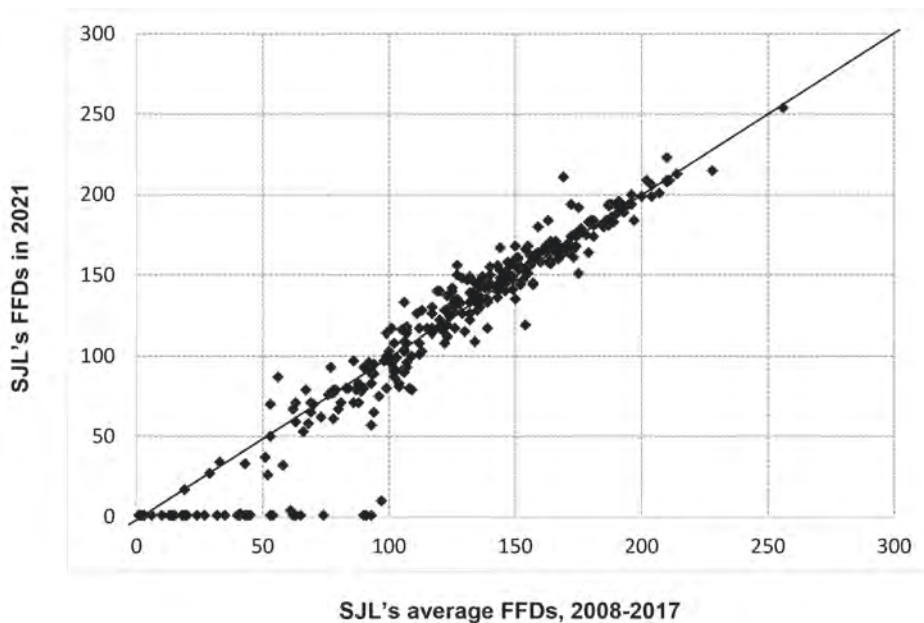


Fig. 3 FFDs for 333 species in 2021, plotted against their average FFDs for the decade 2008-2017. Dates are shown as day no. (1 January = day 1). The diagonal line marks the line along which the data-points would lie if 2021 FFDs were identical to the decadal averages

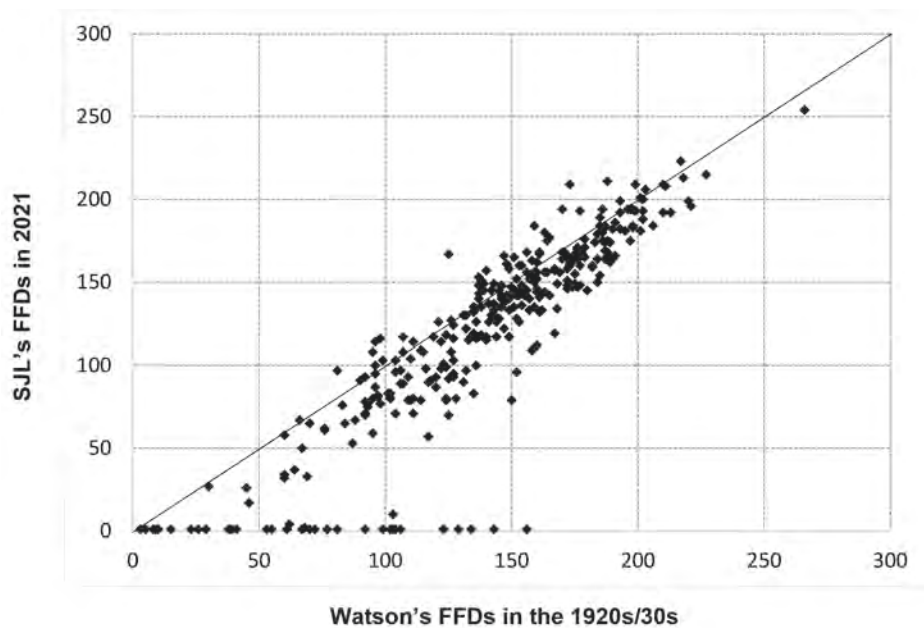


Fig. 4 FFDs for 333 species in 2021, plotted against 'average first flowering times' given by Watson. Dates are shown as day no. (1 January = day 1). The diagonal line marks the line along which the data-points would lie if 2021 FFDs were identical to Watson's

The findings of this ongoing project are very much in line with recent research nationally which indicates that, as a result of recent climate warming, FFDs have advanced by almost one month, on average, when comparing observations made before and after 1986 (Büntgen *et al.* 2022).

REFERENCES

- Büntgen, U., Piermattei, A., Krusic, P. J., Esper, J., Sparks, T. and Crivellaro, A., 2022. 'Plants in the UK flower a month earlier under recent warming', *Proc. R. Soc. B* 289, 20212456 (doi.org/10.1098/rspb.2021.2456).
- Leach, S. J., 2011. 'How do first flowering dates today compare with those recorded by Walter Watson in the first half of the 20th century?', *SANH* 154, 259-70 [and annual reports published in *SANH* in subsequent years].
- , 2021. 'First flowering dates in 2020 – was it really such an exceptional year?', *SANH* 164, 329-32.
- Watson, W., 1949. 'The average times of first flowering of Somerset's plants', *SANH* 93 (1947), 108-28.

SIMON J. LEACH

ARACHNIDS IN SOMERSET 2021

Once again I have been very grateful to James McGill for continuing to record arachnids in Somerset though, as he put it to me, it looks as if the law of diminishing returns is in full effect. You will see this if you compare the species list at the end of this report with those from the last three years (*SANH* 162, 121-2; 163, 287-90; 164, 339-40). Among the new county and vice-county records listed below, *Mioxena blanda* is Nationally Rare (in 15 or fewer 10km squares in Britain), while *Argenna patula*, *Asthenargus paganus*, *Kochiura aulica* and *Saloca diceros* are all Nationally Scarce (16-100 10km squares).

In early October, after a few aborted trips, James made the journey to Steep Holm. The last visit made to the island specifically to look for spiders was a trip I went on in 1995 with members of the (now defunct) Somerset Invertebrates Group. One particular reason for the visit in 2021 was to see if the island had a population of *Kryptonesticus eremita*. This species was found on neighbouring Flat Holm in 2017, the first and still the only place in Britain where this species has been recorded. We only have one other member of the Family Nesticidae, *Nesticus cellulanus*, and both species are only found in dark, damp places. *N. cellulanus* is widely distributed across Britain and had been recorded from Steep Holm. Since the two can only be distinguished under the microscope there was a possibility that *K. eremita* might be there, but sadly James was only able to confirm the presence of *N. cellulanus*. He did, however, find 18 species of spider and one species of harvestman new to Steep Holm. Much of his sampling was done with a modified garden vacuum, so this was probably the first time that Steep Holm had ever been hoovered! It is not surprising that fourteen of the species new to the island were tiny money spiders, but there were also two larger species, *Pachygnatha degeeri* and *Pisaura mirabilis*. Both are very common British spiders, so the lack of previous records on Steep Holm



Fig. 1 A male Pursweb Spider, *Atypus affinis*
(Photo © P. R. Harvey)

is surprising, especially in the case of *Pisaura* which is a large conspicuous species and one of the few spiders that can be identified as a juvenile. James also encountered the Pursweb Spider *Atypus affinis* (Fig. 1) on Steep Holm. It was first recorded there in 1971 and it is good to know that it's still present. *Atypus* is the only British representative of the spider sub-order Orthognatha (which includes the tarantulas). It lives virtually all its life in a sealed silken tube partly buried in the ground with the aerial part covered in soil (Fig. 2). Any unsuspecting prey that attempts to cross the tube is likely to be impaled, since the spider rushes up the inside and bites through the silken wall with its huge chelicerae. The only time one is likely to see the spider is when males (as in Fig. 1) emerge and go in search of a female, typically in autumn. The pair can apparently cohabit and surviving males may emerge in February/March when again they may be seen wandering!



Fig. 2 A Pursweb Spider's silken tube, the arrows indicating the soil-covered aerial portion of the tube (Photo © J. A. McGill)

For my part, I have done very little recording apart from a couple of churchyard visits. At Brent Knoll they had a special project running over and above the 'Wilder Churches' scheme initiated by the Dioceses of Bath and Wells and Somerset Wildlife Trust in 2021. Here I found the pseudoscorpion *Chthonius tetrachelatus* which has a scattered UK distribution. This is not one of the two pseudoscorpion species which are very common and if I encounter anything different I'm pleased! Our local churchyard at St Andrew's, Burnham, was once a sand dune but as yet I haven't turned up anything specific to that habitat. The nearest I've got to date is the money spider *Troxochrus scabriculus* which is very common on dunes but also occurs in all sorts of other dry grassy habitats.

Aside from recording I am busy on behalf of the British Arachnological Society (BAS) producing a number of sheets in a common format to aid identification of over 50 species of spider. These are all species added to the British list since publication of the definitive work on British spiders by Michael Roberts in 1985-93. Much of the text and many of the illustrations for these sheets have been pulled together from BAS publications over the last 20-plus years. Some drawings, however, have been contributed especially for this project by some excellent illustrators.

Records of new spider species for Somerset found in 2021 are summarised below. Unless otherwise stated the recorder was J. A. McGill. With four new species found in 2021 there are now 443 spider species recorded in Somerset (the two vice-counties VC5 and VC6). VC5 has 411 species (five new in 2021) and VC6 has 386 (four new in 2021).

- Agyneta decora* – Charterhouse (ST 505 560), 11 Jul; first record for VC6.
- Argenna patula* – Brean Saltings (ST 304 585), 11 Apr; first record for VC6 and Somerset. Also Wall Common (ST 258 453), 16 May; first record for VC5.
- Asthenargus paganus* – Great Wood (ST 166 363), 13 Mar; first record for VC5 and Somerset.
- Kochiura aulica* – Hurlstone Point (SS 900 491), 12 Jun; first record for VC5.
- Mioxena blanda* – Great Wood (ST 164 371), 30 Aug; first record for VC5 and Somerset.
- Nigma walckenaeri* – Bath City Farm (ST 724 643), 19 Nov, M. Williams; first record for VC6.
- Saloca diceros* – Walton Moor (ST 440 731), 22 Dec; first record for VC6 and Somerset.
- Walckenaeria cucullata* – Great Wood (ST 174 357), 14 Mar; first record for VC5.

FRANCIS FARR-COX
Somerset County Recorder
British Arachnological Society

PLANT GALLS IN SOMERSET 2021

We list below records of plant galls that, for the most part, are believed to be ‘firsts’ for VC5 (S. Somerset) and/or VC6 (N. Somerset), being caused by species for which there appear to be no records for our area in either the British Plant Gall Society (BPGS) database or datasets accessible online through the NBN Atlas.

Species are arranged alphabetically, with brief details of each record’s significance, and notes on host plants, location, date, recorder, etc. Species names follow Redfern and Shirley (2011) throughout.

Thanks to all those submitting records during the year, and to those who helped to determine or confirm the identity of several gall-causers. Thanks also to Janet Boyd for checking the BPGS database for us. In the list below, records made or confirmed by us are denoted by initials SJL and/or SJP; dates refer to 2021 unless otherwise stated.

Aceria angustifoliae (gall-mite causing leaves of ELAEAGNUS, *Elaeagnus* spp, to curl and crumple) – Taunton (ST 236 241), Holway Road, opposite end of Holway Avenue, in large specimen of *Elaeagnus* x *submacrophylla* beside fence at edge of Hollies Nursery, 21 Aug, SJL, conf. Margaret Redfern and others (from photos); first record for VC5, Somerset and Britain. The usual host of this gall-mite is *Elaeagnus angustifolia*, and there remains some uncertainty as to whether the galls on *E. x submacrophylla* are caused by *A. angustifoliae* or possibly by another, as yet undescribed, species (see entry for *A. angustifoliae* at <https://bladmineerders.nl>). (Fig. 1)

Aceria euaspis (gall-mite inducing conspicuously hairy, yellow or reddish leaf-roll and inflorescence galls on BIRD’S-FOOT-TREFOILS, *Lotus* spp) – Thurlbear Quarrylands (ST 272 209), on *Lotus corniculatus*, 9 Aug, SJL; probably a first record for VC5 and Somerset.

Aceria pilosellae (gall-mite causing tight leaf rolls on MOUSE-EAR-HAWKWEED, *Pilosella officinarum*) – Thurlbear Quarrylands (ST 272 209), many plants affected, 9 Aug, SJL; first record for VC5 and Somerset, although likely to have been previously overlooked.

Aceria tenuis (gall-mite causing enlarged spikelets in various grass species, Poaceae) – Corfe (ST 292 202 & ST 230 195), galling inflorescences of COCK’S-FOOT, *Dactylis glomerata*, in field hedgerows, several plants affected, 15 Sep, SJL. Previously recorded on *Bromopsis erecta* in VC6 (SANH 163, 290), this appears to be the first record for VC5, and the first on *Dactylis* for Somerset. A



Fig. 1 Leaves of *Elaeagnus* galled by *Aceria angustifoliae* (All photos: © Simon Leach)



Fig. 2 Two ‘crater’ galls on the underside of an Artists’ Bracket Fungus, caused by the fly *Agathomyia wankowiczii*

generally inconspicuous gall, so easily overlooked and under-recorded.

Agathomyia wankowiczii (a fly of the family Platypezidae that induces strange ‘crater’ or ‘nipple’ galls on ARTISTS’ BRACKET FUNGUS, *Ganoderma applanatum*) – Kingscliff Wood (ST 270 230), 18 Oct, SJP; first record for VC5 and Somerset. Loxley Wood (ST 40 37), 7 Nov, SJP & SANHS, during SANHS Fungus Foray; first

record for VC6 and second record for Somerset. A rare example of a gall-midge that causes galls on a fungus rather than a vascular plant. (Fig. 2)

Aphalara polygona (a psyllid bug galling the leaves and/or inflorescences of AMPHIBIOUS BISTORT, *Persicaria amphibia*) – Shapwick Heath (ST 44 39), 10 Sep 2016, SJP, SJL & SANHS; seemingly the first (and currently only) record for VC6 and Somerset.

Aphis sambuci (aphid causing bunching and downward curling of ELDER, *Sambucus nigra*, leaves) – Taunton (ST 231 253), Firepool Weir, in canal-side scrub, 27 Aug, SJL; possibly first record for VC5, but almost certainly widespread and overlooked. Previously ignored by us as not listed as a galling species in Redfern and Shirley (2011) but included in Roskam (2019).

Aphis umbrella (aphid causing leaves of MALLOW, *Malva* spp, to crumple and droop, so that they resemble a partially retracted pocket umbrella) – Gordano, Walton Moor (ST 429 730), on *Malva sylvestris*, 31 May, D.E. Hawkins; first record for VC6 and Somerset. Taunton, junction of St Augustine Street and Duke Street (ST 232 247), 1 Sep, SJL; first record for VC5. Another aphid gall not listed in Redfern and Shirley (2011) but included in Roskam (2019).

Aphis urticata (aphid causing leaves of COMMON NETTLE, *Urtica dioica*) to bunch together into a loose ‘mop head’) – Poundisford (ST 221 210), on nettles in patch of wet woodland, several plants affected, 6 Jul, SJL & V. J. Fairfax-Ross; first record for VC5 and Somerset.

Bauhinus cordae (a smut causing swollen flower buds in *Persicaria* spp) – Trull (ST 219 223), on *Persicaria maculosa*, at edge of tiny pond by footpath N of Haygrove Farm, 17 Oct, SJL; first record for VC5 and Somerset. Listed as *B. cordae* in Redfern and Shirley (2011); given under the name *Ustilago persicariae* in Roskam (2019), with *Microbotryum cordae* (= *B. cordae*) considered to be a different species restricted to *Persicaria* spp having thinner flowering spikes, i.e. *P. hydropiper*, *P. minus* and *P. mite*.

Contarinia barbichei (a gall-midge causing leaflets of BIRD’S-FOOT-TREFOIL, *Lotus corniculatus*, to become bunched and thickened into pod-like galls) – Orchard Wood (ST 250 199), in open grassy area on SE side of herepath, 24 Aug, SJL & V. J. Fairfax-Ross; first record for VC5, third for Somerset. This species induces superficially similar galls to those caused by *Jaapiella loticola* (see below), but in *C. barbichei* each gall contains several white midge larvae, whereas in *J. loticola* the larvae are bright orange; *C. barbichei* galls are



Fig. 3 The petiole of a Lime leaf galled by *Contarinia tiliarum*

also usually rather bigger than those of *J. loticola*. ***Contarinia scrophulariae*** (gall-midge causing usually unopened flowers of FIGWORTS, *Scrophularia* spp, to become swollen and globular) – Fyne Court, Broomfield (ST 221 319), in hedge beside National Trust ‘overspill’ car park near bin storage area, on *Scrophularia nodosa*, 26 Jun, SJL & V. J. Fairfax-Ross; first record for VC5.

Contarinia tiliarum (gall-midge causing globular swellings on young shoots, leaves, petioles and inflorescences of LIME, *Tilia* spp) – Pitminster (ST 226 197), Poundisford Lane, beside track to Barton Grange, on young shoots/suckers of *Tilia x europaea*, 23 Jun, SJL; also Taunton, Victoria Park (ST 233 247), on at least three *T. x europaea* trees at western entrance to park near children’s play area, abundant galls on young shoots around base of trees, 24 Jun, SJL; first and second records for VC5 and Somerset. (Fig. 3)

Contarinia tremulae (gall-midge inducing leaf-roll galls on ASPEN, *Populus tremula*) – Taunton (ST 235 254), on planted Aspens beside River Tone, 2 Sep, SJL; first record for VC5 and Somerset.

Dasineura ranunculi (gall-midge causing leaf thickening and leaf rolls on BUTTERCUPS, *Ranunculus* spp) – Curry Rivel (ST 385 237), in meadow near junction of Currymead Lane and Holden’s Way, on *R. acris*, 16 Jul, SJL & SJP. Also Poundisford Park (ST 222 200), 22 Aug, SJL & V. J. Fairfax-Ross, and Taunton, Longrun Meadow (ST 217 249), 1 Sep, SJL, both records on *R. acris*. First and subsequent records for VC5, probably widespread but under-recorded.

Dasineura spadicea (gall-midge causing leaflets of *Vicia* spp to fold upwards into pod-like galls) – Honeygar Farm (ST 420 428), on *Vicia cracca*, 17 Aug, SJP; first record for VC6.



Fig. 4 A Dandelion leaf with swollen midrib caused by the fungus *Protomyces pachydermus*

Gymnosporangium confusum (rust causing yellow-orange leaf bulges on a range of tree species) – Trull (ST 216 222), on MEDLAR, *Mespilus germanica*, 1 Aug, SJL; probably the first record of this species on Medlar in Somerset, the only other records being on *Crataegus monogyna*.

Jaapiella genisticola (midge causing tufted shoot-tip galls on DYER'S GREENWEED, *Genista tinctoria*) – Dundry (ST 57 67), 23 Jun 2015, SJP; this was a first record for VC6, the only other known site in Somerset being Thurlbear Quarrylands (ST 27 20) in VC5. A conspicuous gall and seemingly a real rarity in the county.

Jaapiella loticola (gall-midge causing leaflets of BIRD'S-FOOT-TREFOIL, *Lotus corniculatus*, to become bunched and thickened into little pod-like galls) – The Quants (ST 18 17), 20 Aug, SJL. Also Thurlbear Quarrylands (ST 272 209), 23 Aug; these are the first and second records for VC5 and Somerset.

Kuehneola uredinis (rust causing pale yellow or orange spots on leaves of BRAMBLES, *Rubus fruticosus* agg.) – Ash Priors Common (ST 152 289), 20 Sep, SJL. Also Quarts Moor (ST 15 16), 24 Sep, SJL & SJP; these appear to be the first and second records for VC5, but abundant at both



Fig. 5 Hedgerow Crane's-bill leaf galled by the rust *Uromyces geranii*

localities so presumably under-recorded.

Macrolabis heraclei (gall-midge causing leaf 'bunching' on HOGWEED, *Heracleum sphondylium*) – Westonzoyland, Lake Wall, road verge (ST 343 337), 3 Sep, SJL & V. J. Fairfax-Ross; second record for VC6 and the first since 2011 when SJP recorded it on a BPGS meeting at Shapwick.

Protomyces pachydermus (fungal gall causing swellings to midrib and main veins of DANDELION, *Taraxacum* spp, leaves) – Wellington, Beech Grove (ST 133 207), on roadside Dandelions, 29 Aug, SJL, V. J. Fairfax-Ross & L. Roy. Also Taunton, Longrun Meadow (ST 217 249), 1 Sep, SJL. First and second records for VC5 and Somerset, but easily overlooked. (Fig. 4)

Puccinia hysteriorum (fungal gall on GOAT'S-BEARD, *Tragopogon pratensis*) – Walk Farm (ST 71 32), 4 Jun 2018, SJP; first record for VC6.

Puccinia menthae (rust gall on various species in the DEAD-NETTLE family, Lamiaceae) – Southlake Moor (ST 36 30), on WATER MINT *Mentha aquatica*, SJL, 17 Sep; a second record for VC6 and Somerset, and the first on *M. aquatica* (only other Somerset record was one by SJP in 2012 on COMMON CALAMINT, *Clinopodium ascendens*).

Uromyces geranii (fungal leaf-spot galls on CRANE'S-BILLS, *Geranium* spp) – Trull, verge of Kibbear Lane (ST 221 219), on *G. pyrenaicum*, 6 May, SJL; probably the first record for VC5. (Fig. 5)

Uromyces lineolatus (fungal gall on leaves of LESSER WATER-PARSNIP, *Berula erecta*) –

West Sedgemoor (ST 35 24), 5 Jul 2016, SJP; not previously reported, this was a first record for VC6 and Somerset.

Correction: the record of *Livia juncorum* for VC6 given in last year's report (SANH 164, 342) was **not** a first record for VC6. In fact there have been several previous records, mainly in the Shapwick Heath area.

REFERENCES

- Redfern, M. and Shirley, P. 2011. *British Plant Galls*, Shrewsbury: Field Studies Council.
- Roskam, J. C., 2019. *Plant Galls of Europe*, Zeist: KNNV Publishing.

SIMON J. LEACH and STEPHEN J. PARKER

SOMERSET BIRDS 2020

In sharp contrast to recent years, there were records of several rare species in 2020 that had to be submitted to, and accepted by, the British Birds Rarity Committee (BBRC). For the second consecutive year a Baillon's Crake (*Porzana pusilla*) was heard on a RSPB reserve during survey work aimed at Spotted Crake (*P. porzana*). Both species are most elusive and undoubtedly under-recorded. The Kentish Plover (*Charadrius alexandrinus*), present on the coast at Burnham and Berrow the previous winter, returned for a second year. Even rarer was the Black-winged Pratincole (*Glareola nordmanni*) found on the RSPB West Sedgemoor reserve on 4 June. This was the first record for the county since 1968 and only the third ever. A mobile first-winter Laughing Gull (*Leucophaeus atricilla*), initially discovered at Chew Valley Lake in Avon, was present at Cheddar Reservoir during the period 16-22 March, before moving on to Dorset. On 20 November an Eastern Yellow Wagtail (*Motacilla tschutschensis*) was photographed at Steart Marshes. A county first, it was seen daily in the same small territory into late December. Recently accorded full species status within the Yellow Wagtail group, high quality photographs and sound recordings greatly eased its passage through the BBRC.

Despite restrictions imposed during the COVID-19 lockdown, a number of 'lesser' rarities and scarce species were also found. A Tundra Bean Goose (*Anser serrirostris*) and two White-fronted Geese (*A. albifrons*) joined the feral Greylag Goose (*A. anser*) flock at Apex Burnham in late autumn (Fig. 1), remaining into 2021. These wild geese, all juveniles, became as confiding as the Greylag flock, leading to suspicions, voiced by the sceptical, that they were escapes from captivity. However, such behaviour is regularly observed among genuinely wild birds. Two individual Pink-footed Geese (*A. brachyrhynchus*) were recorded elsewhere. Good numbers of Brent Geese (*Branta bernicla*) wintered in Bridgwater Bay and numbers of the Pale-bellied form (*B. bernicla* subsp. *hrota*) reached a record 82



Fig. 1 Tundra Bean Goose (top) and White-fronted Goose (bottom) at Apex Burnham
(Photo: © Brian Hill)

in March. This Greenland subspecies significantly outnumbered its Dark-bellied Russian relative (subsp. *bernicla*) in Somerset.

Wintering Bewick's Swans (*Cygnus columbianus*) continue to decline and nowadays are consistently outnumbered by their larger cousin the Whooper Swan (*C. cygnus*), small family parties of which return annually to Curry and Hay Moors, which are now becoming traditional sites. Other scarce wildfowl included a drake American Wigeon (*Mareca americana*) on Noah's Lake, Shapwick, in January – only the 14th Somerset record – two Ring-necked Ducks (*Aythya collaris*), now almost annual visitors, two Scaup (*A. marila*), an Eider (*Somateria mollissima*), and a Velvet Scoter (*Melanitta fusca*). Goldeneye (*Bucephala clangula*) is a species in steep decline, and this was reflected in a poor showing in 2020 with only a handful of records. There was an unusual inland record of Long-tailed Duck (*Clangula hyemalis*), at Ham Wall on 8 March, and the wintering Smew from 2019 remained at Chard Reservoir until 1 April.



Fig. 2 Red-footed Falcon at Cothelstone Hill; compare the splendid plumage of this first-summer male with the bird observed at Isle Brewers in 2018 (SANH 163, 292) (Photo: © Brian Hill)

Among raptors, three White-tailed Eagles (*Haliaeetus albicilla*) from the Isle of Wight re-introduction scheme toured the county at various times. Goshawks (*Accipiter gentilis*) continue to slowly increase while Honey Buzzards (*Pernis apivorus*) probably bred at one site. Two Red-footed Falcons (*Falco vespertinus*) visited in spring, the first a first-summer female on King's Moor in May. This was followed by a splendid and most obliging first-summer male on Cothelstone Hill between 19 and 22 June (Fig. 2).

A good variety of migrants passed through, including a Dotterel (*Charadrius morinellus*), a typically tame juvenile Red-necked Phalarope (*Phalaropus lobatus*) on flooded fields within the Holnicote Estate in October, five Grey Phalaropes (*Phalaropus fulicarius*), a Hoopoe (*Upupa epops*), two Wrynecks (*Jynx torquilla*), two spring Woodchat Shrikes (*Lanius senator*), a Woodlark (*Lullula arborea*), at least one Marsh Warbler (*Acrocephalus palustris*), and a singing Savi's Warbler (*Locustella luscinioides*) in breeding territory. There were two Rose-coloured Starlings (*Pastor roseus*), including a smart adult at Drayton in June (Fig. 3). A wintering Richard's Pipit (*Anthus richardii*) spent several days at Steart in January. Autumn brought a Twite (*Linaria flavirostris*), and typically small numbers of Lapland Buntings (*Calcarius lapponicus*) and Snow Buntings

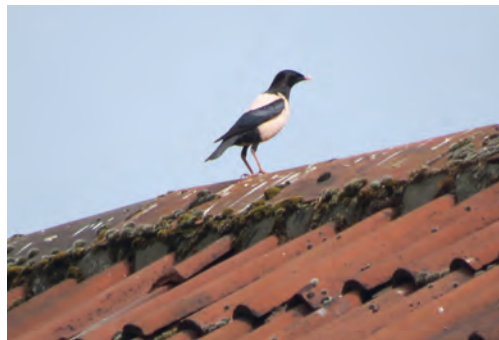


Fig. 3 Rose-coloured Starling at Drayton (Photo: © Brian Hill)

(*Plectrophenax nivalis*), but perhaps the most popular visitors were a party of four Penduline Tits (*Remiz pendulinus*) that delighted the crowds at Stockland Marsh from 6 to 8 December.

Corn Bunting (*Emberiza calandra*) has been lost to the county for several years, so a singing bird in prime breeding territory near Somerton from 28 May to 25 June raised false hopes. Another was seen on a single day in June near the site of the last colony at Westonzoyland. The species still breeds just outside our borders, but these were the first Somerset sightings since 2011.

The most exciting breeding record came in the form of a pair of Black-winged Stilts (*Himantopus himantopus*). These arrived on Stockland Marsh in mid-June and quickly settled down. This elegant wader experiences more breeding failure than success in Britain, so it was pleasing to see three juveniles eventually fledge despite the many hazards they faced. Happily, visitors to the site were easily accommodated and good, if generally distant, views were obtained by most.

This short account is inevitably very selective and a comprehensive analysis of 2020 can be found in the annual report, *Somerset Birds*. Visit www.somersetbirding.co.uk for details.

Readers should be aware that, unlike other natural history reports which cover the whole of vice-counties 5 and 6 (more or less equivalent to the old historical county of Somerset), in this report – as in previous recent bird reports – the terms ‘Somerset’ and ‘county’ here refer to the modern administrative county of Somerset only.

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