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NATURAL HISTORY REPORTS 2020

VASCULAR PLANT REPORT

After the stupendous effort in the previous few years to achieve maximum recording coverage of Somerset for the Botanical Society of Britain and Ireland's new Atlas, botanists across the county were looking forward to a relaxed year, perhaps visiting favourite sites, or exploring further afield. Instead, as lockdowns hit and all botanical meetings were cancelled, it seemed that there would be few records made in 2020. In the absence of meetings, though, naturalists across Somerset took to exploring their local patches alone, and recording plants became the solace of many. Indeed, nobody could have predicted the importance that studying wildlife would assume during lockdowns, with many people taking an interest in Britain's wildflowers and sending in records of plants for the first time. As a result, over 48,000 records of vascular plants were made in Somerset in 2020.

Another feature of lockdown was the increased interest in gardening, particularly growing crops: most of the alien plants recorded for the first time in the wild in Somerset in 2020 were species of garden origin, perhaps being seen as a result of wider cultivation and/or the fact that so much botanical recording had to take place close to people's homes. These included several bedding plants, for example *Lamprocapnos spectabilis* (Asian Bleeding-heart), *Nemesia denticulata* (Toothed Aloha) and *Scabiosa atropurpurea* (Sweet Scabious). Other rarely recorded garden escapees found in 2020 included *Ipomoea purpurea* (Common Morning-glory), *Impatiens sultanii* (Busy-Lizzie), *Lathyrus odoratus* (Sweet Pea), *Beta vulgaris* subsp. *cicla* var. *flavescens* (Swiss Chard) and *Coriandrum sativum* (Coriander). Such annuals probably make short-lived appearances outside gardens every year, but are usually ignored or missed when botanists are inclined (and able) to venture further afield.

It is always thrilling when a new native taxon is added to the Somerset list. In 1840 the hybrid fern *Asplenium* x *alternifolium* was found on Exmoor, at Oare and Culbone. One parent of this hybrid, the rare *A. septentrionale* (Forked Spleenwort), was also found at both these sites (although, like the hybrid, is now lost), yet the other parent, *A. trichomanes* subsp. *trichomanes* (a subspecies of Maidenhair Spleenwort), had never been recorded in Somerset. In 2020 it was finally found by Graham Lavender at Birchanger Bridge, 2km SW of Culbone. Two other fern taxa, *Dryopteris lacunosa* (Pitted Male-fern) and *Dryopteris paleaceolobata* (Greater Scaly Male-fern) (Fig. 1), were found in 2020 new to VC5 (South Somerset): both these members of the *Dryopteris affinis* complex (Scaly Male-ferns) had previously been reported for VC6 (Crouch 2017; 2020). In Somerset, there is much interest in plant groups like these which are challenging to distinguish (so-called 'critical' taxa). The hawkweeds are one such difficult group. In 2020 a statuesque hawkweed which had been known for some years on a railway bridge was collected, pressed and identified by the referee as *Hieracium acuminatum* (Tall Hawkweed), new to Somerset. *H. trichocaulon* (Hairy-stemmed Hawkweed) was recorded in Somerset for the first time since before 2000; meanwhile plants were collected from two sites where that species had published records, but were found to be the closely related *H. calcaricola* (Toothed Hawkweed). Our understanding of these difficult groups, and the available literature to aid identification, improves constantly, in tandem with the increased interest being taken in them. Many critical species have extremely limited habitat requirements and suitable habitats have been lost in many areas of Britain and Ireland recently: some therefore have very restricted distributions. All of the above-mentioned native species are included in the Somerset Rare Plant Register which can be found on the Somerset Rare Plants Group website (http://www.somersetrareplantsgroup.org.uk/new-rare-plant-register/).

In 2020 many excellent records were made for Rare Plant Register species, including some declining arable 'weeds'. *Fumaria bastardii* (Tall Ramping-fumitory) was seen on a roadside in Nailsea, only the second record for VC6 since before 2000; the distinctive *Oxybasis glauca* (Oak-leaved Goosefoot) was found at the edge of a road in Highbury (Fig. 2); but most thrilling was the discovery of forty plants of *Oxybasis urbica* (Upright Goosefoot) on a dung heap, the first record for Somerset since 1940. Fumitories and goosefoots are often overlooked or dismissed as difficult because they are phenotypically variable and often grow in insalubrious locations.

An interesting suite of coastal species was discovered on a roadside in Taunton, including *Sagina maritima* (Sea Pearlwort) at its first inland site in VC5, *Trifolium ornithopodioides* (Bird's-foot Clover) and *Catapodium marinum* (Sea Fern-grass), a species which has recently spread inland along salted road verges quite dramatically. There were good records for rare species of more 'special' habitats too. *Baldellia ranunculoides* (Lesser Water-plantain) was found at Shapwick Heath for the first time

since 1992, and *Huperzia selago* (Fir Clubmoss) was re-discovered at a site on Exmoor where it had not been seen since 1990. The changing fortunes of the rarer plants of Somerset are being documented in the Rare Plant Register mentioned above, which continues to be an ongoing project.

The records below were, unless otherwise stated, made during 2020. 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 those more recently introduced ('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. 321-22).

Recorders and referees whose names appear more than once have been abbreviated as follows: Damon Bridge (DB), Helena Crouch (HJC), Ro FitzGerald (RFitzG), Roger Golding (RG), Dave Green (DEG), Ian Green (IPG), Graham Lavender (GEL), Simon Leach (SJL), Clive Lovatt (CML), Liz McDonnell (EJMcD), Stephen Parker (SJP), Sharon Pilkington (SP), Rob Randall (RDR), Gill Read (GHR), Andrew Robinson (APR), Fred Rumsey (FJR), Mike Shaw (MMS), Jeanne Webb (JW), Margaret Webster (MAW).

Where mentioned in the following list, *The Atlas Flora of Somerset* (Green *et al.* 1997) is abbreviated as *AFS*; *The Flora of the Bristol Region* (Green *et al.* 2000) is abbreviated as *FBR.*

New Somerset records

Allium cristophii (Star of Persia) – Somerton, Polham Lane (ST 484 282), 2 May, 78 flowering heads in shady spot beneath hedgerow tree, a garden throw-out, David Robins, VC6.

Asplenium trichomanes subsp. ***trichomanes*** (Maidenhair Spleenwort) – Birchanger Bridge (SS 8631 4680), 21 Feb, on mossy wall of bridge at exit of tunnel, GEL (conf. FJR), VC5.

Eleocharis palustris x ***uniglumis*** – Minehead, Lower Marsh Farm (SS 9934 4607), 29 May, in large 50 x 20m depression in marsh/grazing land just behind golf course, GEL, VC5.

Guizotia scabra – Old Cleeve (ST 0416 4178), 26 Dec, one large plant appearing as 'weed' in garden, probably from birdseed, JW (det. Stefano Doglio), VC5.

Hieracium acuminatum (Tall Hawkweed) – Clutton, Kings Lane (ST 6260 6007), 3 Jun 2015, four plants on stonework of bridge over railway, N side of road, HJC & Peter Watson (specimen collected 1 Jul 2020 conf. MMS), VC6.

Lamprocapnos spectabilis (Asian Bleeding-heart) – Hawkcombe (SS 8758 4577), 26 Apr, escaped from garden of 'The Stables' onto bridleway, GEL (det. RFitzG), VC5.

Nemesia denticulata (Toothed Aloha) – Clevedon, Sunnyside Road (ST 406 713), 5 Apr, Dee Holladay (det. CML), VC6.

Poa infirma x ***annua*** – Taunton, Silver Street (ST 2315 2442), 29 Mar, on small traffic island opposite Sainsbury's, GEL (det. CML), VC5.

Scabiosa atropurpurea (Sweet Scabious) – Midsomer Norton, West Road (ST 6624 5500), 22 Jul, one plant in flower at base of garden wall, on pavement, possibly the cultivar 'Black Knight', HJC, VC6.

Solanum chenopodioides (Tall Nightshade) – Bath, Pierrepont Street (ST 752 646), 30 Sep, one well-established plant on basement retaining wall, RDR (det. Richard Pooley), VC6.

Spergularia bocconei (Greek Sea-spurrey), Holnicote Estate (SS 9113 4624), 2 Jul, 40+ plants in corner of National Trust car park, SP, VC5.

New vice-county records

Camassia leichtlinii (Great Camas) – Trull (ST 2170 2189), 25 Apr, single patch at edge of field in rough grassland close to woodland, presumably garden cast-out, SJL & Vicki Fairfax-Ross (det. HJC), VC5.

Cotoneaster dammeri (Bearberry Cotoneaster) – Porlock (SS 88 46), 6 Dec, on wall at bottom of Porlock Hill, GEL, VC5.

Cotoneaster hjelmqvistii (Hjelmqvist's Cotoneaster) – Yeovil (ST 55 16), 27 Jul, on walls, IPG, VC5.

Cotula coronopifolia (Buttonweed) –West Sedgemoor SSSI, (ST 3513 2550, ST 3532 2549), 17 Jul, *c.* 500 plants in a shallow gutter, also on bare ground in gateway, SJP & DB (first found by DB on 9 Jul), VC5.

Dryopteris lacunosa (Pitted Male-fern) – Hawkcombe Woods (SS 8741 4576), 29 Sep, one plant on opposite side of footpath to stream, GEL (det. RG), VC5.

Dryopteris paleaceolobata (Greater Scaly Male-fern) – Ley Combe, Hawkcombe Woods (SS 8847 4562), 6 Oct, in damp humid combe (Fig. 1), GEL, VC5.

Hieracium scotostictum (Dappled Hawkweed) – Doverhay (SS 8889 4637), 18 Apr, seven plants on stone wall on R side of road going uphill, just before wood, GEL (det. MMS), VC5.

Impatiens sultanii (Busy-Lizzie) – Pensford, Church Street (ST 6186 6372), 25 Sep, one plant with bright pink flowers on W bank of River Chew, beneath bridge, HJC & DEG, VC6.

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

Phalaris minor (Lesser Canary-grass) – Woodspring (ST 347 661, ST 347 662), 22 May, *c.* 80 clumps around National Trust car park nr Woodspring Priory, MAW, VC6.

Sedum kimnachii – Porlock (SS 88 46), 1 May, very common on outside garden walls and verges around village, GEL (det. RFitzG), VC5.

Fig. 1 Detail of Dryopteris paleaceolobata *(Greater Scaly Male-fern), showing 'crimped' appearance which makes this such a beautiful fern, with edges of each pinnule turned under and pinnules slightly twisted. (Photo: © Helena Crouch)*

Other interesting records – native species and archaeophytes

Asplenium trichomanes subsp. ***trichomanes*** (Maidenhair Spleenwort) – Putham Lane (SS 9382 3856), 10 Oct, one plant on very dark and damp vertical section of rock edge to footpath, GEL (conf. FJR), VC5. Second record for VC5 and Somerset.

Baldellia ranunculoides (Lesser Water-plantain) – Shapwick Heath (ST 4233 4083), 28 Jul, four plants on N edge of ditch across Cottongrass Fields, HJC & FJR, VC6. First record for this Near Threatened species in this hectad (or the Avalon Marshes) since 1992.

Dryopteris paleaceolobata (Greater Scaly Male-fern) (Fig. 1) – Portishead, East Wood (ST 4713 7754), 2 Jan, one plant on bank on S side of road along N edge of wood, HJC & FJR (conf. RG); Lower Woods, Longleat Estate (ST 7968 4351), 25 Jun, one plant at W side of road through woods, just N of large lime tree, HJC & GHR (conf. RG), VC6; Putham Lane (SS 9379 3887), 10 Oct, sunken lane, on left verge going downhill, in very damp humid conditions; Doverhay Woods (SS 8889 4561, SS 8890 4562), 11 Oct, one in damp woodland adjacent to small stream, the other in ditch beside footpath in very damp humid location; Birchhanger Bridge (SS 8670 4689), 23 Oct, one on section of bridleway cutting across Toll Road, in very damp spot under trees adjacent to low wall; East Lucott Wood (SS 8633 4552), 1 Nov, one opposite side of stream from footpath, nr top of bank 60cm from stream, GEL, VC5. Second and third records for VC6 and Somerset, and second and subsequent records for VC5.

Dryopteris lacunosa (Pitted Male-fern) – Hawkcombe Woods (SS 8735 4573), 30 Sep, one plant 1m from stream between stream and footpath, GEL; Hawkcombe Woods (SS 8705 4556), 3 Oct, one plant on bank of stream, GEL (det. RG); East Lucott Wood (SS 8655 4545), 6 Oct, one plant in woodland at edge of stream, GEL; Chilly Bridge (SS 9249 3047), 20 Oct, one plant at bottom of steep rock face under canopy of trees, beside car pull-in, GEL, VC5. Second and subsequent records for VC5.

Elytrigia x ***drucei*** (*E. atherica* x *repens*) – Porlock Weir (SS 8626 4815), 9 Jul, 2m square patch in centre of saltmarsh; Bossington beach (SS 8943 4855), 10 Jul, possibly vast majority of *Elytrigia* at this location is this hybrid; Bossington Marsh (SS 8894 4811), 25 Jul; Porlock Marsh (SS 8791 4748), 26 Jul, GEL, VC5. Second and subsequent records for VC5.

Elytrigia x ***laxa*** (*E. juncea* x *repens*) – Minehead Warren (SS 9850 4649), 13 Jul, on dunes, GEL, VC5. Second record for VC5 and Somerset.

Fumaria bastardii var. ***bastardii*** (Tall Ramping Fumitory) – Nailsea, Bucklands Batch (ST 479 696),

7 Oct, several plants on E side of road, EJMcD & CML, VC6. Second record for VC6 since *AFS*/*FBR*.

Gaudinia fragilis (French Oat-grass) – Freshford, Dunkirk Mill (ST 7854 5953), 19 Jun, one clump by side of track nr Dunkirk Mill, DEG, VC6. New hectad record for this Nationally Scarce species.

Hieracium calcaricola (Toothed Hawkweed) – Witham Friary, Dark Lane (ST 7534 3885, ST 7535 3884, ST 7535 3885), 6 Aug, 44 plants in flower on SW-facing bank of Dark Lane, S of large oak, by small lay-by, HJC & GHR (det. MMS); Harptree Combe SSSI (ST 5616 5595, ST 5616 5597, ST 5618 5601), 7 Aug, 23 plants on top of stone buttress wall at end of aerial water pipe, 30 plants on N-facing side of buttress wall and pier support of water pipe, 30+ plants on N-facing side of stone pillar supporting water pipe, HJC & FJR (det. MMS), VC6. First recorded in Somerset at Harptree Combe in 1917 as *H. calcaricola*, but plants at both these sites were recorded in *AFS* and *FBR* as *H. trichocaulon*.

Hieracium trichocaulon (Hairy-stemmed Hawkweed) – Bourton Combe, Flax Bourton (ST 5081 6846), 13 Jul, *c*. 30 tall specimens on limestone rock outcrops in small remnant of open rocks, surrounded by trees and scrub, EJMcD & MAW (det. MMS), VC6. Fourth record for VC6 (although one now dubious) and first record for VC6 and Somerset since *AFS*/*FBR*.

Huperzia selago (Fir Clubmoss) – The Warren (SS 7864 4096), 16 Oct, several plants on damp rock-face on slope, Andrew Branson & SP, VC5. First record for this site since 1990.

Lemna turionifera (Red Duckweed) – Kewstoke, Sand Road (ST 3362 6439), 8 Sep, frequent in ditch on S side of Sand Road, HJC & FJR, VC6. Fourth site for VC6.

Medicago polymorpha (Toothed Medick) – Portishead Dock (ST 4708 7681), 2 Jan, one plant in flower on verge by dock, HJC & FJR, VC6. New hectad record for this Nationally Scarce species.

Oxybasis glauca (Oak-leaved Goosefoot) – Highbury (ST 6927 4927, ST 6931 4926), 8 Jul, several plants in blocked drain on N side of Highbury Street and one plant at edge of kerb, W end of bus stop (Fig. 2), HJC & DEG, VC6. Third record for VC6 and Somerset since 1938.

Oxybasis urbica (Upright Goosefoot) – Piles Mill (SS 9046 4646), 14 Jul, 40 plants on dung heap in arable field just off footpath, GEL (conf. John Akeroyd), VC5. First record for VC5 and Somerset since 1940.

Pilosella officinarum subsp. ***micradenia*** – Selworthy Sands (SS 9079 4908), 19 May, GEL, VC5. Fifth record for VC5.

Sagina maritima (Sea Pearlwort) – Taunton (ST 2225 2423), 22 Apr, several plants on verge of A38 at top of Compass Hill, with *Trifolium ornithopodioides* and *Catapodium marinum*, SJL, VC5. First inland record for VC5.

Wolffia arrhiza (Rootless Duckweed) – Ashton Court Estate (ST 560 721), 29 Aug, in dew pond nearest the house, David Hawkins, VC6. New hectad record for this Nationally Scarce species.

Fig. 2 Oxybasis glauca *(Oak-leaved Goosefoot) growing with other 'weeds' around a drain at the edge of the road in Highbury. (Photo: © Helena Crouch)*

Other interesting records – alien species

Allium cristophii (Star of Persia) – Brent Knoll, Middle Street (ST 3281 5174), 9 May, one large open flower-head beside rhyne, APR, VC6. Second record for VC6 and Somerset.

Anthemis punctata subsp. ***cupaniana*** (Sicilian Chamomile) – Porlock (SS 88 46), 1 May, at bottom of New Road opposite village hall, escaping over garden wall, GEL (det. RFitzG), VC5. Third record for VC5.

Avena sterilis (Wild Winter-oat) – Huntworth Business Park (ST 30 34), 17 May, SJP, VC5. Fifth record for VC5.

Berberis thunbergii (Thunberg's Barberry) – Glenthorne estate (SS 79 49), 15 Jul, on cliffs below house, presumably garden escape, GEL, VC5. Second record for VC5.

Bergenia crassifolia (Elephant-ears) – Porlock (SS 88 46), 14 Feb, several plants up Porlock Toll Road past entrance to Village Hall car park, growing on outside of wall, GEL, VC5. Fifth record for VC5.

Beta vulgaris subsp. ***cicla*** var. ***flavescens*** (Swiss Chard) - Coxley Wick, Mill Lane (ST 530 441), 22 Aug, on soil heaps in field on E side of Mill Lane, nr old railway line, Pat Steele, VC6. First record for this variety and second for the subspecies in VC6 and Somerset.

****Brachyglottis*** x ***jubar*** (Shrub Ragwort) – Porlock, Parson's Street (SS 88 46), 21 Nov, garden escape, GEL, VC5. Third record for VC5.

****Cardamine occulta*** – Paulton, Farrington Road (ST 6463 5639), 22 Apr, one plant in container with small Olive tree, HJC, VC6. Third record for VC6 and Somerset.

****Carpobrotus edulis*** (Hottentot-fig) – Sand Bay (ST 332 651), 29 May, two yellow-flowered patches (>1m square) on dunes, APR; Sand Bay (ST 3317 6524), 14 Jul, large patch 3-4 x 2-3m on dunes, MAW, VC6. Third site for VC6 and Somerset. Natural England and Environment Agency alerted and plants removed, although scraps of plant were found at ST 3317 6514 on 8 Sep by HJC & FJR, all collected and destroyed.

****Chenopodium giganteum*** (Tree Spinach) – Bath, Alfred Street (ST 749 652), 19 Oct, on basement steps, RDR, VC6. Fifth record for VC6.

****Coincya monensis*** subsp. ***cheiranthos*** (Wallflower Cabbage) – Glastonbury, Morlands Enterprise Park (ST 4873 3827), 20 Jun, several plants in flower/fruit, on site of former sheepskin factory, John Poingdestre, VC6. Third record for VC6 and Somerset.

****Coriandrum sativum*** (Coriander) – Allerford (SS 9069 4687), 20 Jul, on gravel between lane and wall, between Allerford and Brandish Street, GEL, VC5. Third record for VC5 and first since *AFS.*

****Cotoneaster hjelmqvistii*** (Hjelmqvist's Cotoneaster) – Perry's Cider Mills, Dawlish Wake (ST 375 127), 28 Jul, self-sown on wall, IPG, VC5. Second record for VC5 and fifth for Somerset.

****Cotula coronopifolia*** (Buttonweed) – Tyning Wood (ST 7782 3904), 23 Jun, one plant in flower on W shore of pond to E of track, HJC & FJR, VC6. Second record for VC6 and Somerset.

****Cynodon dactylon*** (Bermuda-grass) – Bridgwater (ST 296 375), 24 May, *c*. 20 plants growing in pavement, SJP, VC5. Second site for VC5.

****Digitalis lutea*** (Straw Foxglove) – Milverton Bypass (ST 1257 2623, ST 1257 2624), Jun, at roundabout, thought to have been originally planted, Christine Loudon & Linda Everton, VC5. Second record for VC5.

****Euphorbia maculata*** (Spotted Spurge) – Pensford, Church Street (ST 6185 6373), 25 Sep, few plants on pavement outside cottage on N side of street, HJC & DEG, VC6. Third record for VC6 and Somerset, and first not as garden centre 'weed'. [Fig. 3]

****Euphorbia mellifera*** (Canary Spurge) – Portishead, Beach Road West (ST 4620 7700), 2 Jan, five plants self-sown at edge of road, at base of garden wall, HJC & FJR, VC6. Second record for VC6 and Somerset.

****Geranium*** x ***magnificum*** (Purple Crane's-bill) – Nailsea & Backwell (ST 47 69), 7 Oct, EJMcD & CML, VC6. Fourth record for VC6.

Fig. 3 Euphorbia maculata *(Spotted Spurge), a North American annual increasingly found as a weed in UK garden centres, here growing in a pavement in Pensford (Photo: © Helena Crouch)*

****Helianthus*** x ***laetiflorus*** (*H. rigidus* x *tuberosus*) – Rudge Lane (ST 8249 5110), 6 Oct, large patch in flower on W verge of lane, HJC & DEG, VC6. First record for VC6 since *AFS*/*FBR.*

****Iberis sempervirens*** (Perennial Candytuft) – Yeovil (ST 55 16), 28 Jul, on wall, E side of Mudford Road A359, IPG, VC5. Fourth record for VC5.

****Ipomoea purpurea*** (Common Morning-glory) – Stolford (ST 2310 4601), 10 Sep, one plant in flower bottom of wall on landward side of path to Hinkley Point, RFitzG, GEL, Ian Salmon & JW, VC5. Third record for VC5 and Somerset.

****Lathyrus hirsutus*** (Hairy Vetchling) – Alhampton, Haddon Wood (ST 630 343), 1 Aug, five plants flowering and fruiting on an excavated bank of a wildlife pond, which had been sown with wildflower seeds from various sources in 2014, Daphne Osmond, VC6. First record for VC6 and Somerset since 1971.

****Lathyrus odoratus*** (Sweet Pea) – Taunton, Canal Road (ST 2283 2527), 15 May, a single sprawling patch with beautiful flowers, probably just one plant, on waste ground on N side of road, SJL (det. HJC), VC5. Second record for VC5 and fourth for Somerset.

****Linaria maroccana*** (Annual Toadflax) – Taunton (ST 2275 2521), 17 Apr, several plants in tarmac and waste ground by Canal Road on edge of old market site, SJL (det. HJC), VC5. Fifth record for VC5.

****Malva*** x ***clementii*** (Garden Tree-mallow) – Blue Anchor (ST 0347 4344), 26 Sep, large patch on waste ground behind pub, GEL & RFitzG, VC5. Fifth record for VC5.

****Nicotiana sylvestris*** (Woodland Tobacco) – Bath, Hedgemead Park (ST 750 656), 6 Jul, five plants at base of retaining wall and on roadside kerb, RDR,

VC6. Second record for VC6 and Somerset.

***Oxalis dillenii** (Sussex Yellow-sorrel) – South Horrington (ST 5704 4620), 4 Nov, small patch at edge of pavement, HJC & FJR, VC6. Fourth record for VC6.

***Phormium cookianum** (Lesser New Zealand Flax) – Uphill (ST 3214 5902), 15 Jun, small clump on edge of playing fields, APR, VC6. Second record for VC6 and Somerset.

***Phuopsis stylosa** (Caucasian Crosswort) – Huntworth (ST 318 343), 20 Jun, small patch at base of garden wall on canal towpath, SJP, VC5. Fifth record for VC5.

***Pleioblastus humilis** – Porlock (SS 8858 4656), 17 Oct, on edge of footpath, escaped from nearby garden, GEL, VC5. Second record for VC5 and Somerset.

***Polystichum tsus-simense** (Korean Rock-fern) – Bath, Abbey Green (ST 751 645), 21 Oct, stonework of basement, RDR (det. HJC), VC6. Second record for VC6 and Somerset.

***Salix elaeagnos** (Olive Willow) – West Lynch (SS 9005 4772), 21 Apr, one medium-sized tree on bank of stream, probably escaped from nearby garden, GEL (det. JW), VC5. Fourth record for VC5.

***Salvia hispanica** (Chia) – Frome, Clink Road (ST 7973 4880), 14 Oct, one plant on N edge of road, on bridge over A361, HJC & DEG; Chew Valley Lake (ST 554 593), 16 Oct, one plant at Heron's Green, opposite N end of pool on other side of road, MAW, VC6. Second and third records for VC6 and Somerset.

***Spergularia bocconei** (Greek Sea-spurrey) – Porlock Weir (SS 8635 4801), 9 Jul, a 30 x 40cm patch on R side of path from weir to saltmarsh, at end of small step-over railing, GEL, VC5. Second site for VC5 and Somerset.

***Stachys annua** (Annual Yellow-woundwort) – Radstock (ST 6908 5470), 12 Jul, one plant on waste ground on former disused railway sidings, now edge of housing estate (Fig. 4), HJC, VC6. Second record for VC6 and first for VC6 and Somerset since 1908.

***Trifolium tomentosum** (Woolly Clover) – Huntworth Business Park (ST 3042 3436), 17 May, large population on roadside bank by Bridgwater Services, SJP, VC5. Second record for VC5.

***Verbascum densiflorum** (Dense-flowered Mullein) – Tadwick (ST 745 706), 3 Aug, one large plant beside an unkempt hedge on waste ground by the A46, RDR, VC6. Third record for VC6.

***Zantedeschia aethiopica** (Altar-lily) – Hawkcombe (SS 8828 4585), 20 Apr, on S bank of stream very close to water's edge, GEL, VC5. Fourth record for VC5.

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.

Fig. 4 Stachys annua *(Annual Yellow-woundwort) on waste ground in Radstock, the site of former railway sidings. It was last seen in Somerset in 1908, at Portishead Station-yard. (Photo: © Helena Crouch)*

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:

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VC6 Helena Crouch, Bronwen, Farrington Road, Paulton, Bristol, BS39 7LP

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HELENA J. CROUCH

FIRST FLOWERING DATES IN 2020 – WAS IT *REALLY* SUCH AN EXCEPTIONAL YEAR?

This account differs somewhat from those of previous years, chiefly for virus-related reasons. The first coronavirus lockdown, which began on 24 March, coincided with what turned out to be the sunniest spring on record (since at least 1929). While the need to keep a good record of first flowering dates (FFDs) in such an unusual spring wasn't lost on me, the guidance/rules around travel made it impossible to visit many of my usual haunts. It was obvious by mid-March that my usual approach to recording FFDs wouldn't work, and that I would need to find another way. Opening up the project to other botanists across the county seemed like the best option in the circumstances—my own need to 'stay at home' being compensated for, to some extent, by others living elsewhere who might be able to visit a different range of habitats (and see different species) to those found on my own home patch in Taunton. It would also be one way to help counter the grimness of the situation we found ourselves in.

Thus, a new project was born, under the title 'First Flowerings', to be run principally through the co-operation and encouragement of the Somerset Rare Plants Group (SRPG), along with a few of those involved with the Somerset Botany Group and botanically-minded members of SANHS. The plan was simple enough: weekly lists of species to look out for would be produced for circulation amongst the county's botanists, who would send in their records to be collated into a blog-like report on the SRPG website summarising the species that we had seen starting to flower in the previous seven days.

As the project gained momentum, more and more people chose to get involved; in all, more than 50 contributed records during the year. And so a project that began as a short-term solution to a (hopefully) fairly brief period of lockdown 'morphed' into something that continued to run until the end of August. The weekly write-ups were later collected together into a single account of the year's first flowerings which appeared in the SRPG 2020 Newsletter (Leach *et al.* 2021). The following summary of FFDs is based on this project and those write-ups.

First, though, a quick recap to explain the context of the project, and a special mention for Walter Watson who, in the early decades of the last century, kept detailed records of FFDs in Somerset. His paper, published in the SANHS *Proceedings* for 1947, included a 19-page Table of average FFDs and 'flowering periods' for no fewer than 843 species (Watson 1949). Watson lived in Taunton, and much of the fieldwork he did was in the south and west of the county. For the bulk of species his average FFDs were based on at least ten years' records, which we believe were made in the 1920s and early 1930s (although unfortunately the original data upon which they were based has never been found). Watson's energy was boundless: somehow he combined his recording of FFDs with a full-time job teaching Biology at Taunton School, while at the same time being an internationally-renowned lichenologist and more-than-competent bryologist and mycologist. He was an active member of SANHS and for many years was both county botanical recorder and president of the Society's 'Botanical Section'.

With Walter Watson as inspiration, in the decade 2008-17 I recorded each year the FFDs for (a relatively paltry) 339 of his 843 species; annual reports summarising these observations can be found in recent volumes of the Society's *Proceedings* (Leach 2011 *et seq*.). In 2018 and 2019 the project continued in more subdued fashion, with FFDs recorded for 309 and 323 species respectively. Despite travel constraints, and with thanks to the considerable input of SRPG members and others, we managed to record FFDs for 526 species in 2020. So, what do these dates tell us about the progress of last year's spring? Was it really as unusual as it seemed to us at the time?

Let's start by plotting our earliest FFDs in 2020 against Watson's FFDs (Fig. 1). There are 526 dots, each dot being a species. You can see immediately that the dots lie mainly *below* the diagonal line, indicating that FFDs in 2020 were, on the whole, *earlier* than those recorded by Watson. Indeed, only 19 species (3.6%) had later dates than Watson's, and some of these were probably only 'late' because during lockdown the places in which we might find them were hard for us to visit. Overall our FFDs were, on average, ***31 days earlier*** than the dates listed in Watson's big Table.

It should be borne in mind, however, that Watson's dates were *average* FFDs over more than a decade, so obviously in some years his dates would have been earlier than average while in others they would have been later. But a *whole month* earlier? He would doubtless protest that his FFDs were based on one pair of eyes operating across a fairly restricted geographical area, whereas ours in 2020 had the benefit of many pairs of eyes scattered across the entire county—and he'd surely be right to insist that the latter would produce an earlier crop of first dates than the former. In essence, then, he could claim that we had an unfair advantage.

Perhaps a fairer comparison would be to compare our dates against his by restricting the analysis to just *one* person's FFDs. Let's do that using my own dates, since not only does this provide the largest pool of species across the greatest span of months (including, crucially, the pre-lockdown period between January and mid-March), it also comprises a set of records drawn from a similar geographical area to Watson's. The first

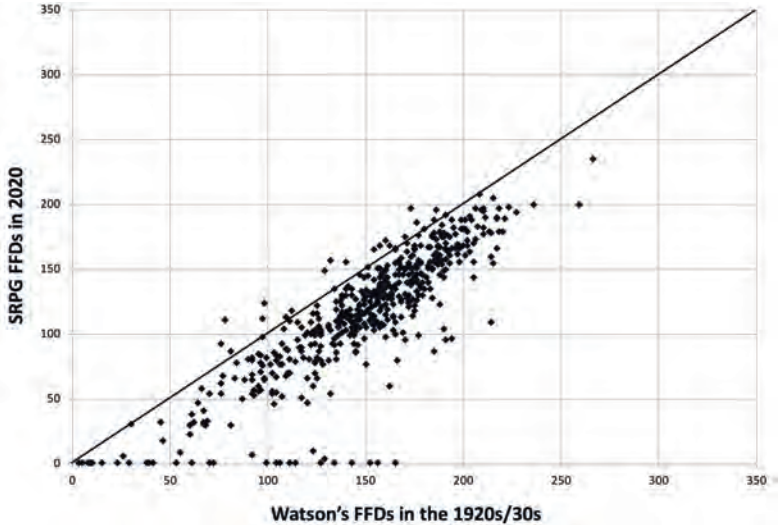

Fig. 1 Earliest FFDs for 529 species in 2020, plotted against 'average first flowering times' given by Watson. Dates are shown as day no. (1 January = day 1). The diagonal line marks the line along which the data-points would lie if 2020 FFDs were identical to Watson's; above the line is later than Watson's date, below the line is earlier

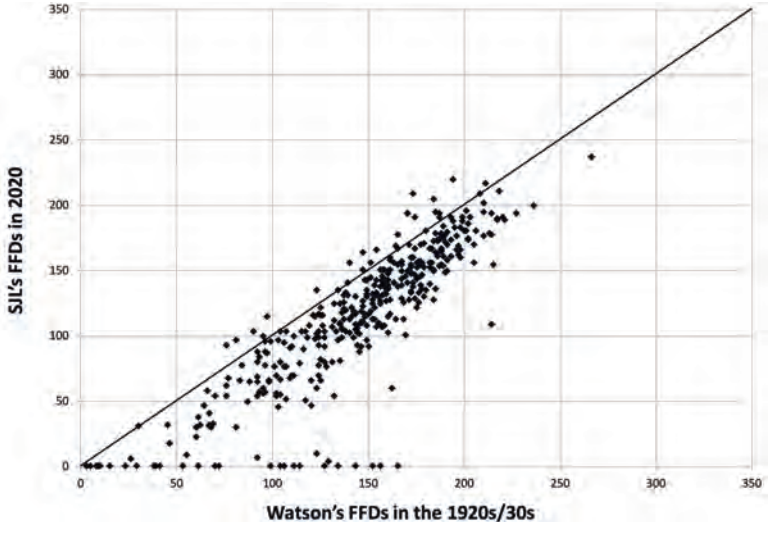

Fig. 2 My own FFDs for 406 or the 526 species recorded in 2020, plotted against 'average first flowering times' given by Watson. As in Fig. 1, the diagonal line marks the line along which the data-points would lie if 2020 FFDs were identical to Watson's; above the line the 2020 date is later than Watson's date, below the line is earlier

thing to be said, though, is that as soon as you use only one person's records you lose an awful lot of information, since the pool of species becomes substantially reduced: my own records were for just 406 of our combined list of 526 species; the results for these are shown in Fig. 2.

As already implied, I am not altogether happy with my own FFDs, especially those in late March and April, when there were places I couldn't visit, either because they were beyond the limits of daily permitted exercise or because I didn't have access to a car. I suspect that some dates may actually have been a little *later* than they would have been had we not been in lockdown. Even so,

it is clearly the case that my own FFDs for 2020 were still strikingly early—below the line—in comparison with Watson's. My FFDs for these 406 species were, on average, ***28 days earlier*** than those given by Watson. Interestingly, if we do the calculation for those 406 species again, but this time using everyone's records for these species rather than just my own, the figure is ***34 days earlier***. This illustrates well the added value of having many pairs of eyes, with our 'combined' FFDs being earlier, on average, than my own dates by almost a week. The difference would doubtless have been even greater had other recorders been involved from the outset rather than only from mid-March onwards.

The results, then, do seem to indicate that FFDs in 2020 were markedly early in comparison with the sorts of dates that Watson was getting about a century ago. But this is hardly surprising: climate change is happening, the evidence is all around us, and frankly it would have been astonishing had our dates *not* been much earlier than Watson's. However, many of us felt—especially during the first lockdown—that the spring and early summer of 2020 was unusual even in comparison with what one might call today's 'new normal'. Was this feeling rooted in reality, or was it, perhaps, due to the fact that the season's advancement seemed to accelerate just when our own movements were suddenly curtailed? In which case, could our perception of 'extreme earliness' have been partly an artefact of lockdown?

It should be emphasised at this point that the weather in 2020 was certainly unusual. It was, as already said, one of the sunniest (and driest) springs on record. Also, it followed an exceptionally mild and relatively frost-free winter. Nationally, it was the fifth-warmest winter on record. The sixth-warmest January on record (since 1884), which was also the warmest in the 13 years that I have been recording FFDs, was followed by the second-warmest February since 2008 (only 2019 was warmer). It was also the wettest February on record (since 1862) with two named storms, 'Ciara' and 'Dennis', in quick succession, followed by a third, 'Jorge', at the end of the month. March was not especially mild, but it was the ninth-sunniest March on record (since 1929) and was followed by the second-warmest April and May of the last decade. The summer months were marked by prolonged periods of mainly dull weather; yet while June and July were relatively cool by today's standards, August was, nationally, the warmest on record. In SW England, seven of the nine months from December to August had mean daily temperatures at least 1°C warmer than the long term (1961-90) average.

Given the weather, then, one might anticipate that spring 2020 would have felt unusually 'early' even in comparison with other recent springs. We can test this by looking at my own FFDs of species in 2020 against their 2008-17 'decadal average' FFDs. This reduces the pool of species still further, since there are only 339 species for which we have a decade's-worth of values. In 2020 I failed to record FFDs for ten of these, but results for the other 329 are shown in Fig. 3.

Again, the data-points generally lie *below* the line, indicating that for most species FFDs in 2020 were earlier than their decadal average. Look closely, though,

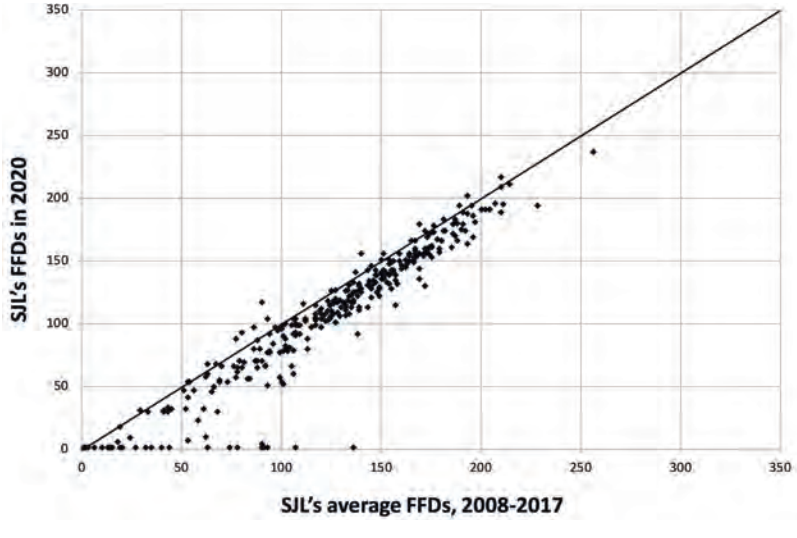

Fig. 3 My own FFDs for 329 species in 2020, plotted against their 2008-17 decadal average FFDs in the Taunton area. The diagonal line marks the line along which the data-points would lie if 2020 FFDs were identical to the decadal average; above the line the 2020 date is later than the decadal average, below the line is earlier

and you can see a little group of dots sitting well *above* the line around day 100 on the y-axis; these relatively 'late' FFDs were at the end of March/beginning of April when constraints on travel and rules around daily permitted exercise brought me to a temporary standstill, with some of my usual sites, like Thurlbear and Orchard Woods, suddenly becoming off limits. Nevertheless, taking all species combined, FFDs in 2020 were, on average, ***15 days earlier*** than the 2008-17 decadal average and, tellingly, ***4 days earlier*** than even the *earliest* set of dates during that decade.

As much as anything, the purpose of the 'first flowerings' project in 2020 had been to keep people's spirits up (not least my own) during a uniquely difficult and challenging time. It provided a focus for our daily walks, something that anyone could take part in, whatever their circumstances, and however tied to home they needed to be. Nevertheless, thanks to the diligent recording of so many botanical colleagues and friends, it also produced an answer to the question posed in the title of this note: yes, it really *was* an exceptional year.

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SIMON J. LEACH

SOMERSET LICHENS AND LICHENICOLOUS FUNGI 2018-21

This contribution enumerates additional county and vice-county records since the publication of Wolseley *et al.* (2018), as well as a few corrections arising from the examination of earlier collections. Species are presented in alphabetical order and their nomenclature follows the current names in the Taxon Dictionary on the British Lichen Society's website (www.britishlichensociety.org.uk/).

The additions below increase the number of accepted taxa (including infraspecific taxa) known in Somerset from 1,003 to 1,022. The number of **species** is increased from 984 to 1,003, of which 872 are lichenized fungi, 111 are lichenicolous fungi, and 20 are non-lichenized fungi that are traditionally treated with the lichens. Apart from the records cited below, there have been 238 new hectad records in the county, i.e. in addition to those published in Wolseley *et al*. (2018). All these records have been entered into the British Lichen Society's Database. Anyone wishing to have details of these records should contact myself (lichensel@btinternet) or the BLS Data Manager (records@britishlichensociety.org.uk).

New to Somerset

Abrothallus parmeliarum – VC5, Mount Fancy (ST 25 15), Sept 1985, P. Diederich; lichenicolous on *Parmelia saxatilis* on Oak (*Quercus* sp.).

Acarospora cervina – VC5, Montacute House garden (ST 499 172), Apr 1990, D. J. Hill; on the limestone surround of the round water tank in the middle of the garden [previously recorded in Wolseley *et al*. (2018) as *A. glaucocarpa*]. Also, from VC5: Bradford-on-Tone churchyard (ST 173 229), May 2016, D. J. Hill; on asbestos cement roof tile.

Bacidia subturgidula – VC5, Hawkcombe Woods NNR, near the Peep-out (SS 8752 4582), Nov 2019, D. Lamacraft; on lignum of snag of veteran Oak (*Quercus* sp.) pollard (Fig. 1). A Critically Endangered species whose specialist niche is the dry lignum of old holly and oak.

Didymocyrtis ramalinae – VC5, Crowcombe village car park (ST 140 366), Nov 2018, A. M. & B. J. Coppins; lichenicolous on thallus of *Ramalina fastigiata*.

Intralichen christiansenii – VC5, Bridgwater (ST 298 365), Jun 2018, N. Bacciu; in apothecia of *Lecania cyrtella*. VC6. Brent Knoll churchyard (ST 335 507), Jun 2020, D. J. Hill; in apothecia of *Caloplaca dalmatica*.

Lepraria sylvicola – VC5, Pixton Park surrounds (SS 92 27, SS 93 26, SS 93 27), Mar 2018, A. Orange; on Oak (*Quercus* sp.) trunks. These finds confirm the suspected presence of this species in Somerset (see Wolseley *et al*. 2018, 282, entry for *Lepraria jackii* s. lat.).

Lichenochora physciicola – VC6, Rodney Stoke Woods (ST 488 510), Feb 2019, N. Bacciu; lichenicolous on thallus of *Physcia adscendens*.

Montanelia disjuncta – VC6, West Harptree, at top of Harptree Combe (ST 556 554), Apr 2012, D. J. Hill; on siliceous boulder. A very rare species in SW England, with only four records in Devon and none so far in Cornwall.

Nectriopsis physciicola – VC5, Ashbrittle village green (ST 051 214), Nov 2019, A. M. & B. J. Coppins

Fig. 1 Habitat for Bacidia subturgidula *near the Peep-out in Hawkcombe Woods NNR. This inconspicuous lichen was found on the veteran oak in the top right of the picture (Photo: © D. Lamacraft)*

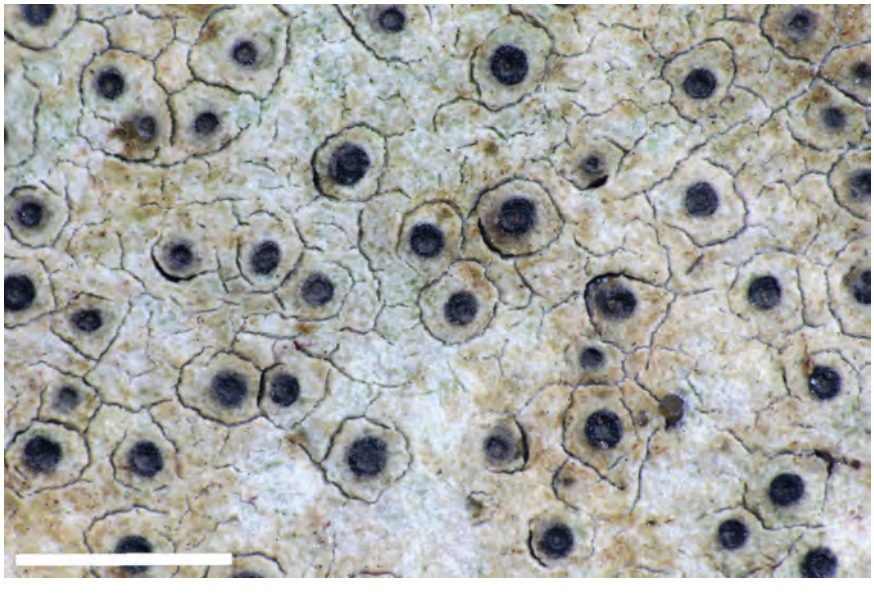

Fig. 2 Close-up of Verrucaria policensis *recently discovered as new to Britain on shaded limestone in Cheddar Gorge. The circular cracks in the thallus around, but distant from, each of the black perithecia is one of its diagnostic features. White scale bar = 1mm (Photo: © A. Orange)*

and B. Benfield; lichenicolous on thallus of *Physcia tenella* on Apple (*Malus* sp.) branch.

Pyrenidium actinellum – VC5, Ashbrittle churchyard (ST 052 213), Nov 2019, A. M. & B. J. Coppins and B. Benfield; lichenicolous on thallus of *Caloplaca teicholyta* on windowsill on south wall of church.

Rhymbocarpus cruciatus – VC6, Folly Farm (ST 60 60), Aug 2020, N. Bacciu & D. J. Hill; lichenicolous on thallus of *Diploicia canescens* on mature Pedunculate Oak (*Quercus robur*).

Stereocaulon evolutum – VC5, Triscombe Stone (ST 164 356), Jan 2019, N. Bacciu; on stone in cairn.

Verrucaria ochrostoma – VC5, Ashbrittle churchyard (ST 052 213), Nov 2019, A. M. & B. J. Coppins and B. Benfield; on windowsill on south wall of church.

Verrucaria policensis – VC6, Cheddar Gorge (ST 476 547), Jan 2021, A. Orange; on small limestone rock in woodland. First British record. (Fig. 2)

Verrucaria rosula – VC5, East Water, Stoke Pero Common (SS 876 423), Mansley Combe, Wheddon Cross (SS 900 403) and Wilmersham Common (SS 859 426), all Oct 1993, A. Orange, on stones or rocks in streams. Also collected by Walter Watson at Cold Harbour, Treborough (ST 01 35), Apr 1916 (specimen in **BM**), previously named *Verrucaria margacea* and re-determined as *V. rosula* by A. Orange.

Verrucaria sublobulata – VC5, Mansley Combe, Wheddon Cross (SS 900 403), Oct 1993, A. Orange; on upper edge of unshaded rock in stream, with *Ionaspis lacustris* and *Racomitrium aciculare*.

Xanthoriicola physciae – VC5 and VC6. A common lichenicolous fungus on *Xanthoria parietina*, giving its apothecia a dark 'smutty' appearance. First recorded in the county in 1985 but mistakenly omitted from Wolseley *et al*. (2018).

Zwackhiomyces dispersus – VC6, Fry's Hill (ST 45), Mar 1997, B. J. Coppins; lichenicolous on thallus of *Protoblastenia rupestris*.

Zwackhiomyces lithoiceae – VC5, Durleigh chuchyard (ST 274 361), Nov 2018, B. J. Coppins; lichenicolous on thallus of *Placopyrenium fuscellum*.

New vice-county records

Bacidia fuscoviridis – VC5, Ashbrittle churchyard (ST 052 213), Nov 2019, A. M. & B. J. Coppins and B. Benfield; at base of a retaining wall.

Gyalecta flotowii – VC6, Leigh Woods (ST 57), 1865, C. Larbalestier (**BM**; det. B. J. Coppins); on Elm (*Ulmus* sp.) bark.

Lecidea diducens – VC6, Berrow churchyard (ST 293 524), Oct 2018, A. M. & B. J. Coppins; on top of granite headstone.

Micarea coppinsii – VC6, Stockhill FC plantation (ST 55 51), Oct 2019, A. M. & B. J. Coppins; on Whitebeam (*Sorbus* sp.) twigs.

Paranectria oropensis subsp. ***oropensis*** – VC5, Triscombe Stone (ST 16 36), Jan 2019, N. Bacciu; lichenicolous on *Lepraria* sp.

Corrections

Acarospora glaucocarpa – the specimen from Montacute House has been re-determined as *A. cervina* (see above).

Ramalina calicaris – the record 'ST 26 Steep Holm 1980 OLG' (Wolseley *et al.* 2018, 298) refers to *Ramalina canariensis*.

Verrucaria margacea – the old record for ST 03 has been re-determined as *Verrucara rosula* (see above).

ACKNOWLEDGEMENTS

I am much indebted to those who have contributed to the records cited above: Nicola Bacciu, Barbara Benfield, Sandy Coppins, Paul Diederich, David Hill, Dave Lamacraft, Alan Orange and Pat Wolseley. Also, I thank all the other folk who have sent in records from the county and participated in arranged field meetings, although sadly there have been very few of these over the past year.

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BRIAN J. COPPINS
British Lichen Society

ADDITIONS TO THE LIST OF SOMERSET BEETLES - 2020 UPDATE

The following records of beetles new to Somerset were made by Bob Fleetwood (BF) or James McGill (JM) during 2020. The records are unchecked, unless explicitly determined or confirmed by a relevant expert. The format of the list is the same as that adopted by Duff (1993), Duff and Boyce (2010), and the reports periodically appearing in these pages from *SANH* 154 onwards. For each record I give hectad (10-km square),

site name, date/s (month/s and year, with month/s shown in roman numerals as was the convention in Duff (1993) and subsequent updates), and recorder's initials.

Order COLEOPTERA

Dromius angustus Brullé
ST 23: Barford Park, vi 2020 (JM)

Eubria palustris Germar
ST 02: Holme Moor, vi 2020 (JM)
Nationally Rare, in fewer than 15 hectads in GB (Hyman and Parsons 1992)

Rhizophagus cribratus Gyllenhal
ST 57: Summerhouse Wood, vi 2020 (BF)

Stephostethus alternans (Mannerheim)
ST 57: Summerhouse Wood, vii 2020 (BF)
First recorded in Britain in 1997, and known to be spreading (Hammond 2007)

Mycetoporus longulus Mannerheim
ST 57: Summerhouse Wood, vi 2020 (BF)

Margarinotus marginatus (Erichson)
ST 57: Summerhouse Wood, iv-v 2020 (BF, det. JM)
Nationally Scarce, so in fewer than 100 hectads in GB (Lane 2017)

Stenichnus scutellaris (Müller and Kunze)
ST 35: Crook Peak, vii 2020 (BF)

Leiodes rugosa Stephens
ST 57: Summerhouse Wood, xi 2020 (BF, conf. Jon Cooter)
A 'Notable' species, estimated to occur in fewer than 100 hectads in GB (Hyman and Parsons 1994)

In addition, the following species was listed by Duff (1993) on the strength of subfossil records only, but is now known to be extant in the county:

Bembidion obliquum Sturm
ST 03: Clatworthy Reservoir, iii 2020 (JM)
Nationally Scarce, so in fewer than 100 hectads in GB (Telfer 2016)

With the above additions, the list of Somerset beetles now stands at 2,513 species of Coleoptera and three species of Strepsiptera recorded in the last two centuries, plus 69 species of Coleoptera only recorded in the county as subfossils.

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Lane, S. A., 2017. *A review of the status of the beetles of Great Britain – the clown beetles and false clown beetles – Histeridae and Sphaeritidae,* Natural England Commissioned Reports 235.

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JAMES A. McGILL

SOMERSET BUTTERFLIES IN 2020 – THE YEAR OF THE CORONAVIRUS

The coronavirus pandemic in 2020 affected the monitoring and recording of butterflies in Somerset, making it more difficult to assess how butterfly populations fared in what was another warm summer. May was particularly hot and dry, while June and July were cooler and wetter. The records show that in terms of numbers of butterflies recorded on monitoring transects, 2020 was comparable with 2018, but slightly lower than 2019. This report focuses on two transects at Carymoor Environmental Centre, near Castle Cary. The records there are not untypical of results across Somerset, but Carymoor doesn't hold so many species – 25 at Carymoor in 2020 as opposed to 42 across the county as a whole.

2020 was an extraordinary year for our butterflies. Whilst Butterfly Conservation's national Big Butterfly Count (BBC) recorded a fall in the average number of butterflies per count of 34% compared with 2019—and the lowest average number of butterflies overall since the BBC began eleven years ago—Carymoor had the

TABLE 1 TRANSECT COUNTS AT CARYMOOR IN 2020,
WITH DATA FROM SAME WEEKS IN OTHER YEARS FOR COMPARISON

Week No.	8	9	13	14	15	16	17	18	19	21	22	24	25	26	Total	Average
Year																
2013	27	19	68	110	320	577	439	371	180	280	257	105	-	31	2784	214
2014	58	22	501	495	655	760	609	497	615	403	-	62	58	24	4759	366
2015	61	35	206	297	387	432	318	344	283	214	-	136	55	24	2737	211
2016	46	60	82	237	111	230	183	266	204	140	115	72	39	35	1820	130
2017	41	41	-	213	-	223	222	-	138	116	203	68	61	30	1356	123
2018	82	-	238	283	294	265	-	185	184	98	89	68	-	54	1840	167
2019	69	52	131	334	295	350	266	236	-	178	173	109	69	-	2262	189
2020	61	87	346	310	363	325	305	282	240	123	106	78	97	101	2824	202

highest average number of butterflies since 2015 for those weeks when it was possible to walk the transects (Week 1 being at the start of April and Week 26 at the end of September). Table 1 shows the counts at Carymoor for weeks in which transects were walked in 2020, and compares these with the numbers of butterflies counted in those same weeks in other years since the start of transect monitoring there in 2013. It reminds us what a good year 2014 was, and how much numbers can vary for a given week in different years, depending not only on conditions during the flight period but also, to some extent, on weather conditions in the previous winter and early spring which may affect when butterflies emerge. It also shows that, since a trough in 2017, numbers have been climbing back steadily. Interestingly, the total count for the limited season of 2020 was higher than for those in the full seasons of each of the four preceding years.

Of course, the BBC is restricted to those butterflies found in the wider countryside and does not include habitat specialists such as Grizzled Skipper (*Pyrgus malvae*) and Dingy Skipper (*Erynnis tages*) which are included in the Carymoor figures. Yet despite the high total count of butterflies in 2020, of the 25 species recorded (one fewer than in 2019) twelve actually declined in abundance in comparison with 2019, while one was stable and eleven increased—the hard-to-separate Essex Skipper (*Thymelicus lineola*) and Small Skipper (*T. sylvestris*) being counted as a species pair.

Perhaps the most extraordinary thing about 2020 was the absence of Painted Ladies (*Vanessa cardui*). Influxes of Painted Ladies occur roughly every ten years (the most recent 'Painted Lady years' being 2019 and 2009); in 2019 there were 92 sightings of these migrants from the continent on the Carymoor transects, whereas in 2020 not a single one was recorded, and there was a real scarcity of them throughout the county—but we can expect them back in force at the end of decade! Of the other two common migrants, four Clouded Yellows (*Colias croceus*) were recorded, more than in the previous year but nothing like 2013 and 2014 when 60 and 45 were recorded, respectively. Red Admirals (*Vanessa atalanta*), some of which may be home-grown, did well, increasing by 36% over the previous year.

The first count was on 20th May (Week 8), by which time the Orange Tip (*Anthocharis cardamines*) flight season was virtually over and only one was recorded, so we don't know how they fared this year, but up to 64 have been recorded in the past. Similarly, the beginning of the flight period for Grizzled and Dingy Skippers was missed, but while the Grizzled Skipper recorded its second highest numbers with an increase of 66%, the Dingy Skipper was down by 45%, although there was a small second brood, which suggests that some in the early flight period were missed and overall numbers may well have been higher.

The most abundant butterfly was the Meadow Brown (*Maniola jurtina*) with 802 records (an increase of 36%), a position it has held every year except one; but the 'winner' in terms of percentage increase from the previous year was the Large White (*Pieris brassicae*) at 136%, putting it in eighth place in terms of abundance. In the national BBC the Large White was first in abundance with an increase of 44% and the Meadow Brown was fifth, down just 2%. It is also interesting that at Carymoor the Peacock (*Inachis io*) had a very good year, up 91% on 2019 and ninth in abundance, whereas in the BBC it was down 42% but in fourth place in terms of abundance. The Holly Blue (*Celastrina argiolus*) also had a good year at Carymoor, and it was very pleasing to see the Brown Hairstreak (*Thecla betulae*) back on the list with five records, following an absence last year.

On the debit side, too many species suffered a

*Fig. 1 Brimstone (*Gonepteryx rhamni*) (Photo: © Julian Rawlins)*

decline, in three cases by more than 50% on the previous year. Brimstone (*Gonepteryx rhamni*) (Fig. 1) was down by 57%, but this was undoubtedly due in part to missing the early part of the flight season, when the Brimstone is one of the first butterflies to emerge from hibernation in the spring. Common Blue (*Polyommatus icarus*) (Fig. 2) numbers fluctuate wildly from year to year, and in 2020 they were down by 65% on 2019, their second-lowest level since 2013 due partly to them having a very disappointing second brood; hopefully they will bounce back again in 2021. Small Copper (*Lycaena phlaeas*) numbers also vary considerably—from a 'low' of just one sighting in 2016 to a record 'high' of 43 in 2017—and in 2020 they were down by 51% on 2019, to just 15 records. Speckled Woods (*Pararge aegeria*) were down by 24% but again this may be partly due to missing the early weeks of the season. The Small Tortoiseshell (*Aglais urticae*) has caused concern for some time but this year it just about held its own, with 43 recorded; but the overall downward trend for this species, once one of our commonest butterflies, has been maintained and it is hard to believe that in 2014 there were 973 recorded, more than any other species (apart from the combined Small/Essex Skipper tally of 1,286, which is the highest total in any year since 2013). Finally, it is sad to record that no Small Blue (*Cupido minimus*) has been seen since eight were recorded in 2016.

Numbers of each species vary from year to year, but it is longer term trends that are the important indicator of the state of our butterflies—and indeed other wildlife, too. There is still a long way to go to get back to the numbers of even a few years ago: in the 2014 season 5,784 butterflies were recorded and the 2020 figure, admittedly for a curtailed season, was less than half that total. But it is very pleasing to note that numbers have risen over the last four years (reflected in the 'total' and 'average' columns in Table 1) and it is very much to be hoped that this trend continues. The need to manage our environment for the benefit of wildlife is as important now as ever.

Visit our website http://www.somersetbutterflies.org.

*Fig. 2 Common Blue (*Polyommatus icarus*) (Photo: © Julian Rawlins)*

uk/ for further information about butterflies in Somerset or follow us on Facebook 'Somerset Butterflies and Moths' or on Twitter @BCSomerset.

JULIAN RAWLINS
Somerset and Bristol Branch, Butterfly Conservation

SOMERSET DRAGONFLY REPORT 2020

Since the last report on Somerset's dragonflies in *SANH* was for 2017 (Iles 2018), the report below includes short summaries for the last three years.

2018

This was the best of the three years for dragonflies. There were some good records for both migrant and rare resident species. A new species to the county, Southern Migrant Hawker (*Aeshna affinis*) (Fig. 1), was found at Priddy on 15th July, with the insect being seen in the area for about a week; a further example was seen at Berrow on 4th August. Lesser Emperor (*Anax parthenope*) and Red-veined Darter (*Sympetrum fonscolombii*) also put in an appearance, the latter surprisingly being only the second record for VC5 (S. Somerset).

The highlight of the year amongst resident species was the discovery of a second site for Downy Emerald (*Cordulia aenea*), at Gare Hill on the Somerset/Wiltshire border, close to known Wiltshire populations but distant from the only previously known Somerset colony at Priddy. The Gare Hill site also held Keeled Skimmer (*Orthetrum coerulescens*), which is generally a species of the western uplands in Somerset, although, as with the Downy Emerald, it too occurs in the Priddy area.

*Fig. 1 A male Southern Migrant Hawker (*Aeshna affinis*) (Photo: © Keith Gould)*

2019

A much quieter year, apart from a Vagrant Emperor (*Anax ephippiger*) seen at Brean (a second record for Somerset), another Red-veined Darter in VC5, this time at Porlock Marsh, and a further Southern Migrant Hawker at Westhay. A Golden-ringed Dragonfly (*Cordulegaster boltonii*) (Fig. 2) at Shipham was the first seen on Mendip for some years and suggests that the little resident population in the area continues to survive—the species abounds in the south and west of the county, where online recording has given us a much better knowledge of its distribution. An isolated population of White-legged Damselfly (*Platycnemis pennipes*) was found in a small patch of suitable habitat on the coast at East Quantoxhead, well to the west of its previously known sites.

2020

The coronavirus lockdown resulted in a fall in the number of dragonfly records of about two-thirds on 2019, and those records that were received were mainly from gardens rather than from prime dragonfly sites or the wider countryside. Records of early-emerging

*Fig. 2 Golden-ringed Dragonfly (*Cordulegaster boltonii*) (Photo: © Keith Gould)*

species were most seriously impacted—there were very few records of Blue-tailed Damselflies (*Ischnura elegans*), just two of Red-eyed Damselfly (*Erythromma najas*) and Hairy Dragonfly (*Brachytron pratense*), and, amazingly, none at all of Variable Damselfly (*Coenagrion pulchellum*) or Small Red-eyed Damselfly (*Erythromma viridulum*).

Two species bucked this trend: Scarce Chaser (*Libellula fulva*) has been spreading through the centre of the county for over a decade and was seen far and wide in 2020. In common with many species expanding their range from south-east England, it entered Somerset via the Avon valley in the north-east of the county and from there has spread southwards and westwards. This year it made further 10km jumps to East Quantoxhead on the west Somerset coast, and to Chard in the far south of the county. White-legged Damselflies were also recorded right across the county, including sightings from most areas where it was already known to occur; it was seen again at East Quantoxhead, at the site where it was discovered in 2019. The only historic area from which it has not been recorded recently is the N. Somerset levels around Nailsea and Clevedon—it would be great to know if it still occurs there.

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CHRISTOPHER ILES
British Dragonfly Society

ARACHNIDS IN SOMERSET 2020

How do you maintain social distancing? Tell people you are looking for spiders! On a serious note, though, one of the plusses of 2020—and into 2021 as I write—has been that those lucky enough to have a garden have, perhaps, been enabled to see and find things in it that they never realised were there. For those that haven't got a garden of their own their nearest green space has in many instances leapt in value. Spiders and some other arachnids readily find a niche in gardens and a limited number of species will share our homes so that even those without a garden have a chance to come across arachnids. One of those typically only found indoors is the Spitting Spider (*Scytodes thoracica*) which my goddaughter has just spotted in her house. This extraordinary spider can fire two sticky strands from the fangs at the front of its head, gluing insect victims to the ground.

The British Arachnological Society set up a few 'lockdown' projects, and one that I signed up to join was the 'Lockdown Lawn Survey' which involved anyone with a modified garden vacuum hoovering for two minutes on a Saturday or Sunday within a period of nine weeks between the end of March and mid-May. The survey concentrated on lawns but did extend into the ground of nearby flowerbeds. The results were then written up in the Society's Newsletter by the survey's coordinator Richard Wilson. There were eight participants spread between Cornwall and Clackmannanshire and together we recorded 85 species of spider. This didn't claim to be a structured survey and notes weren't collated on whether lawns were or had been cut, soil types, etc. It was intended as something to do in lockdown but does show the diversity of spiders that can be found just beyond people's doorsteps. Doing this project enabled me to record several new species for our garden. I have to confess that in spite of the lockdown opportunities I haven't followed through with much more targeted recording but I did find a county 'first', *Ero aphana*, under an upturned dustbin lid in our back garden.

It is very easy to notice the unfamiliar and fail to record the common species and I have to admit that there are at least three really common spiders not recorded from our address that will be properly recorded next time I see them! In her book *Wildlife of a Garden* (2010), Jennifer Owen recorded 80 species of spider, eleven harvestmen and one pseudoscorpion in her Leicestershire garden. The list for our garden isn't that impressive, but we do have species that are not on Owen's list and, given our more southerly position, I think we ought to have as many species as Owen did, if not more.

When conditions allowed, James McGill has been recording enthusiastically and has again found several new species for the county. These include two species shown in the accompanying photographs (Figs 1 and 2, below) – very few spiders are sufficiently distinctive to be identified from photographs but these are two that readily can be. (Note, however, that the illustrations here are from photographs not taken in Somerset; I am grateful to the photographers for allowing me to include them with this report.) Amongst the new records you will see *Pelecopsis radicicola.* This linyphiid money spider was recorded on the Mendips in VC6 in 1999 and is Nationally Rare, so it is particularly interesting to see that it has now appeared on the Quantocks in VC5.

A species that doesn't feature in the list of new county records, because it was recorded nearly 50 years ago, is *Karita paludosa.* This is another linyphiid money spider which is Nationally Rare (occurring in 15 or fewer 10-km squares in GB). Apart from a few East Anglian sites it was only known from Westhay Moor in Somerset where it was recorded in 1973 but not since, until re-found there by James McGill in August 2020.

Records of new spider species are listed below, in alphabetical order. Unless otherwise stated the recorder was J. A. McGill. With 17 new species found in 2020 there are now 439 spider species recorded in Somerset (VC5 and VC 6). VC5 has 406 species (22 new in 2020), and VC 6 has 382 species (19 new in 2020).

Ballus chalybeius – Orchard Wood (ST 248 200), 19 May; first record for VC5.

Baryphyma trifrons – Roosthitchen (SS 724 402), 12 Jul; first record for VC5 and Somerset.

Bathyphantes setiger – Priddy Mineries (ST 546 514), 16 Jul; first record for VC6 and Somerset.

Calositticus caricis – Holme Moor (ST 094 261), 22 Jul; first record for VC5 and Somerset.

Centromerus serratus – Great Breach Wood (ST 501 319), 30 Oct; first record for VC6.

Cercidia prominens – Callow Rocks (ST 443 555), 25 May; first record for VC6.

Episinus maculipes – King's Hedge Coppice (SS 983 422), 21 Jun; first record for VC5 and Somerset. Also Summerhouse Wood (ST 515 743), 31 Jul-20 Aug, B. Fleetwood; first record for VC6.

Ero aphana – Burnham-on-Sea (ST 311 493), 7 May; F. Farr-Cox; first record for VC6 and Somerset. Also Staplegrove (ST 214 260), 15 May; first record for VC5.

Hypomma fulvum – Brue Pill (ST 311 473), 7 Jun; first record for VC6.

Kochiura aulica – Wavering Down (ST 406 553), 17 May; first record for VC6 and Somerset.

Lasaeola prona – Wavering Down (ST 407 554), 17 May; first record for VC6 and Somerset.

Fig. 1 Marpissa nivoyi – *body length (not including legs) is 4-6mm (Photo: © P. R. Harvey)*

Marpissa nivoyi – Berrow Dunes (ST 290 535), 21 May; first record for VC6 and Somerset. (Fig. 1)
Marpissa radiata – Holme Moor (ST 094 261), 26 Jun; first record for VC5.
Micaria micans – Bartlett's Quarry (ST 724 457), 22 Apr; first record for VC6.
Micaria pulicaria sens. str. - Priddy Mineries (ST 547 510), 14 Mar; first record for VC6 and Somerset.
Neoscona adianta – Porlock Marsh (SS 889 482), 19 Jul; first record for VC5 and Somerset. (Fig. 2)

Fig. 2 Neoscona adianta – *body length (not including legs) is 5-12mm (Photo: © J. Bebbington)*

Nigma walckenaeri – Staplegrove (ST 215 263), 2 July; first record for VC5 and Somerset.
Ozyptila claveata – Cleeve Hill (ST 053 429), 23 May; first record for VC5.
Parapelecopsis nemoralis – Priddy Mineries (ST 547 510), 14 Mar; first record for VC6.
Pelecopsis radicicola – Weacombe Combe (ST 121 405), 1 Aug; first record for VC5.
Philodromus collinus – King's Cliff Wood (ST 267 320), 31 May; first record for VC5 and Somerset. Also Stockhill Wood (ST 547 516), 4 Jun; first record for VC6.
Platnickina tincta – Staplegrove (ST 212 264), 15 May; first record for VC5.
Porrhomma oblitum – Shapwick Heath (ST 420 409), 2 Jan; first record for VC6 and Somerset. Also Boomer Wood (ST 269 320), 21 Mar; first record for VC5.
Saaristoa firma – Boomer Wood (ST 269 320), 1 Jan; first record for VC5.
Silometopus reussi – Cloford Quarry (ST 716 443), 28 Nov; first record for VC6.
Tetragnatha obtusa – Netherclay, between Corfe and Thurlbear (ST 249 198), 19 May; first record for VC5.
Tetragnatha pinicola – Cheddar Wood (ST 445 552), 25 May; first record for VC6.
Thanatus striatus – Shapwick Heath (ST 418 411), 20 Sep; first record for VC6 and Somerset.
Theridiosoma gemmosum – Boomer Wood (ST 268 319), 31 May; first record for VC5.
Thyreosthenius biovatus – Dowsborough (ST 162 389), 6 Jun; first record for VC5 and Somerset.
Troxochrus scabriculus – Staplegrove (ST 215 263), 5 Dec; first record for VC5.
Walckenaeria furcillata – Weacombe Combe (ST 120 407), 1 Aug; first record for VC5 and Somerset.
Walckenaeria incisa – Summerhouse Wood (ST 514 742), 20 Jun-1 Jul, B. Fleetwood; First record for VC6 and Somerset.
Xysticus audax – Wavering Down (ST 406 553), 17 May; first record for VC6.

James McGill also recorded a new vice-county record for a harvestman:

Opilio canestrinii – Staplegrove (ST 215 261), 16 Nov; first record for VC5.

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FRANCIS FARR-COX
Somerset County Recorder
British Arachnological Society

PLANT GALLS IN SOMERSET 2020

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 (BPGS) database or datasets accessible online through the NBN Atlas.

Species are arranged alphabetically, with brief details of each record's significance, notes on host plants, location, date, recorder, etc. For those featured in Michael Chinery's photographic guide (Chinery 2011) we give page numbers on which they are illustrated. With one exception, species names follow Redfern and Shirley (2011).

Thanks to all those submitting records during the year, especially to David Hawkins in the north of VC6 for whom 'lockdown' was an opportunity to investigate the plant galls on his local patch; thanks also to Simon Haarder and Keith Harris for help in determining or confirming the identity of several gall-causers, and 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 2020 throughout.

Aceria nervisequa (gall mite causing felt-like galls on the underside of BEECH, *Fagus sylvatica*, leaves; Chinery 2011, 35) – Ashton Hill Plantation (ST 52 70), 19 Jun, D. E. Hawkins; possibly first record for VC6 as there appear to be no VC6 records on BPGS database (previously recorded in VC5, see *SANH* 160, 231).

Fig. 1 Garden Fuchsia leaves heavily galled by Aculops fuchsiae *(Photo: © Dee Holladay)*

Aculops fuchsiae (gall mite on FUCHSIA spp and cultivars, causing leaves and flowers to become grossly distorted and thickened) – Clevedon (ST 408 713), on garden Fuchsias (Fig. 1), 7 Aug, D. J. Holladay; first record for VC6, known to be spreading in Somerset with numerous records for VC5 since first recorded in the county in 2010 (see *SANH* 161, 334).

Contarinia scrophulariae (gall midge producing swollen, globular, usually unopened flowers in COMMON FIGWORT, *Scrophularia nodosa*) – West Tanpit Woods (ST 522 727), 21 Jun, D. E. Hawkins, conf. SJL (from photo); first record for VC6 and Somerset.

Cryptomyzus ribis (aphid causing leaf deformation in CURRANT, *Ribes* spp and cultivars; Chinery 2011, 40) – Saltford (ST 692 679), 19 Jul, D. E. Hawkins; Trull Allotments (ST 217 223), 18 Aug, SJL. Seemingly first records for VC6, VC5 and Somerset, there being no records on BPGS database, but likely to have been overlooked.

Dasineura sisymbrii (gall midge causing 'cuckoo-spit' gall in inflorescence of WATER-CRESS, *Rorippa nasturtium-aquaticum* and other *Rorippa* spp) – Black Smock Pond (ST 3797 2824), on *Rorippa palustris*, 23 Aug, J. A. McGill; second record for VC6, and third for Somerset, of this apparently scarce species (see *SANH* 158, 263 for an illustration of the gall).

Eriophyes torminalis (gall mite causing yellowish-green pustules on leaves of WILD SERVICE-TREE, *Sorbus torminalis*) – Leigh Woods (ST 55 74), on *S. torminalis* saplings beside towpath, 19 May, D. E. Hawkins; possibly first record for VC6, as there are no records on BPGS database.

Fig. 2 Janetiella lemeei *galls on leaves of Wych Elm (Photo: © David Hawkins)*

Janetiella lemeei (gall midge inducing 'turret' galls on leaf veins of WYCH ELM, *Ulmus glabra*; Chinery 2011, 242; Fig. 2) – Ashton Hill Plantation (ST 52 70), 19 Jun; West Tanpit Woods (ST 52 73), 21 Jun; Leigh Woods (ST 56 73), 23 Jun; Fish Pond Wood (ST 538 731), 6 Jul; all D. E. Hawkins, det. SJL, Simon Haarder & Keith Harris. First and subsequent records for VC6 and Somerset.

Livia juncorum (causing 'tassel' galls on RUSHES, *Juncus* spp; Chinery 2011, 84) – Pensford (ST 614 640), in damp field N of River Chew, on *J. acutiflorus*, 25 Sep, H. J. Crouch & D. Green, conf. SJL (from photo); possibly first record for VC6, likely to be widespread but overlooked or under-recorded in our area.

Microbotryum silenes-dioicae (smut fungus galling anthers of flowers of RED CAMPION, *Silene dioica*) – Nettlebridge (ST 64 48), 23 May, A. Avery, conf. SJL and others; first record for VC6 and Somerset. The correct name for this anther-smut is far from clear: Redfern and Shirley (2011) have it as ***M. lychnidis-dioicae***, while Roskam (2019) appears to include *M. silenes-dioicae* under ***M. silenes-inflatae,*** itself one of several micro-species within the more widely-circumscribed ***M. violaceum*** 'species complex'.

Sackenomyia reaumurii (gall midge causing red pustules on WAYFARING-TREE, *Viburnum lantana*) – Leigh Woods (ST 552 735), in small quarry nearest to Nightingale Valley (Fig. 3), 19 May, D. E. Hawkins; first record for VC6 and Somerset of a species that appears to be a real rarity in GB—the only records on BPGS database are from Surrey and Oxfordshire (Janet Boyd pers. comm.).

Fig. 3 Sackenomyia reaumurii *galls on leaves of Wayfaring-tree; leaf upperside (top), underside (bottom) (Photos: © David Hawkins)*

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SIMON J. LEACH and STEPHEN J. PARKER

BIOLOGICAL RECORDING ON THE AVALON MARSHES – A FEW HIGHLIGHTS FROM RECENT SURVEYS

I have been volunteering at Shapwick NNR since 2009. As my age has progressed and my ability to carry out the hard manual labour that many conservation tasks demand has decreased, I have moved over to do more species monitoring work. A few years ago, a small band of volunteers started a group called 'Recorders of the Avalon Marshes', or 'RoAM' for short. Our main aim has been to build up a species list for the area that covers all taxonomic groups. If we could do that, then the managers of the various organisations responsible for these peatland areas—in effect fantastically biodiverse 'brownfield industrial sites'—would (at the very least) have a better appreciation of what they were trying to conserve. Over the last five or so years, we have been involved in many different survey-and-monitoring activities, from 24-hour monitoring of the first Great

White Egret (*Ardea alba*) nesting attempts, to counting booming Bitterns (*Botaurus stellaris*) and surveillance of rare invertebrates such as Lesser Silver Water Beetle (*Hydrochara caraboides*) and Shining Ramshorn Snail (*Segmentina nitida*).

We have devised a range of monitoring techniques for different invertebrate groups from direct and painstaking observation, to the use of moth traps, aquatic beetle traps and malaise traps to sample populations of different groups for identification and addition to the list of species in the area. Direct observations have resulted in the discovery of new beetles such as Water-Lily Reed Beetle (*Donacia crassipes*), a species which spends its time on the lily pads that develop on the South Drain in the summer months. This large and obvious beetle had escaped detection by many coleopterists who visited the area until a RoAM volunteer looking out for damselflies on the lily pads spotted one walking across the surface of a pad. Luckily, it proved to be fairly common and eventually one was caught, enabling a definitive identification to be made.

In 2018, a malaise trap was utilised in one of the woodland rides, to give some indication of what was flying around. The contents of this trap were sorted into large categories such as 'beetles', 'flies', 'ichneumon wasps', etc., and these are now being worked through to identify the species involved. There have been some surprising early results. One of the best was more by happy accident than design. A friend of a RoAM member was starting to try to identify ichneumon wasps, a tricky group for which not much exists in the way of definitive keys and which includes a lot of species that look superficially the same until you really start to look at tiny morphological differences through a microscope. As we had a lot of material on these from the malaise trap, it was agreed that some could be sent to this person to get him started on his identification journey. He made good progress but was still struggling with one or two specimens; so in 2019 he took them all along to a course at the Natural History Museum run by Gavin Broad, one of the museum's ichneumon experts. Gavin was able to confirm or correct many of the specimens, but then he came to the one that had been causing most problems. On seeing it, Gavin went a bit quiet, then disappeared to find an obscure paper that he had. On his return, they took the specimen through the key in this paper and found that it was indeed the species that Gavin had initially suspected, *Megaplectes monticola*. The best news was yet to come: it proved to be just the second record for the UK, and the only other specimen, residing in the collection at the Natural History Museum, lacked any supporting data—making our new record the first in the UK with full details such as date and place of capture. *M. monticola* is associated with Wild Angelica (*Angelica sylvestris*), of which we are fortunate in having plenty growing in the Avalon Marshes.

The discovery of *M. monticola* emphasises the value of running traps to add to one's knowledge of the species present in an area. So far, we have also had a tephritid fly, *Cryptaciura rotundiventris* (Fig. 1), new to the county, and an inconspicuous ladybird, *Scymnus haemorrhoidalis*, for which the only previous Somerset record was from remains found in Mesolithic peat cores taken when the Sweet Track was being excavated. The ladybird record is particularly satisfying in that this species may well have been present on the Avalon Marshes for thousands of years, through all the upheavals of the peat industry—a survival from the distant past every bit as significant, in its own way, as the Sweet Track itself.

Fig. 1 The tephritid fly Cryptaciura rotundiventris, *discovered new to the county on the Avalon Marshes (Photo: © Bill Urwin)*

One of RoAM's activities is to visit various small plots of land owned by Natural England and managed by local farmers under stewardship schemes. Again, our aim is to build up a list of the species on these sites to inform future management plans. To that end, in May 2019 we visited some fields along one of the droves near Westhay Moor NNR. Our main aim was to look at aquatic beetles in the ditches and we had set out some traps prior to our visit. While looking into one of the ditches, the warden Julie Merrett noticed an interesting-looking fly, perched up on the vegetation. She didn't have a pot with her but was able to catch it very deftly in her hand. She then shouted to my wife to bring her a pot and they managed

to transfer it safely. As soon as I saw it, I could see it was a soldierfly, but not one I immediately recognised; I took it back to identify and photograph, later returning it to the field for release. It turned out to be the Silver Colonel Soldierfly (*Odontomyia argentata*) (Fig. 2). Further research revealed that it was just the third record for Somerset, the first having been taken in exactly the same field in 1927, and the second being from just a few fields away in 1949. This shows the value of monitoring areas to see how species are faring.

*Fig. 2 Silver Colonel Soldierfly (*Odontomyia argentata*), recorded for just the third time in Somerset in 2019 (Photo: © Bill Urwin)*

On another outing to some fields at Tealham and Tadham Moors SSSI in summer 2019, I was again looking in ditches for aquatic beetles when there was a shout from Fred Giles, one of the other volunteers. I went over to him and he handed me a net, saying, "Is this what I think it is?" There in the net was a Large Marsh Grasshopper (*Stethophyma grossum*) (Fig. 3). We quickly stopped everyone from their other activities and began a systematic sweep of the area, soon finding a few more specimens which we managed to photograph. In recent years the Large Marsh Grasshopper had become an almost mythical beast, confined to a few Dorset heaths and a scatter of quaking bogs in the New Forest. In the 1960s there was a population on Westhay Moor NNR but that gradually dwindled until the species was declared extinct in Somerset in the 1990s (Cropper 2011). It may be, of course, that the rumours of its demise were somewhat exaggerated; an in-depth survey of the extent of this 'new' population suggests that it may be quite widespread across several areas in suitable habitat, including on Shapwick Heath NNR where it had not been seen since 1989 (Cropper 2011). A report of the discovery, including further observations in 2020, appeared in *British Wildlife* (Sutton and Beckman 2020), the authors concluding that '… it [is] now clear that well-established colonies [exist] across a significant area of the Somerset Levels NNR'.

*Fig. 3 Large Marsh Grasshopper (*Stethophyma grossum*), refound in Somerset in 2019 after having been declared extinct in the 1990s (Photo: © Bill Urwin)*

The story doesn't end there, though. DNA analysis is now being carried out on a specimen of the grasshopper in an effort to determine its origins, essentially to see if we can establish whether it arrived here from the Dorset/Hampshire area, or possibly even 'direct' from mainland Europe—very much a case of 'watch this space'! Research on the Continent has highlighted a recent expansion in the range of the Large Marsh Grasshopper (Sutton 2008), and it is clearly capable of dispersal over long distances under suitable wind and weather conditions.

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BILL URWIN
Recorders of the Avalon Marshes

SOMERSET BIRDS 2019

The last Baillon's Crake (*Porzana pusilla*) was recorded in Somerset in 1912 so one identified from a sound recording at Greylake RSPB reserve on 12th June was significant. Remarkable though this was, this secretive member of a secretive family is surely overlooked at times, especially since its voice closely resembles that of an amphibian. Other rarities in 2019 were an American Golden Plover (*Pluvius dominica*) at Steart Marshes, two Roseate Terns (*Sterna dougalli*) at Burnham, and a White-winged Black Tern (*Chlidonias leucopterus*) at Cheddar Reservoir. An Alpine Swift (*Tachymarptis melba*) spent most of 25th April at Ham Wall, while an Aquatic Warbler (*Acrocephalus paludicola*) was trapped at a ringing session at Steart on 26th August. On 19th December a Kentish Plover (*Charadrius alexandrinus*) was found on Stert Island and subsequently wintered there. Cirl Bunting (*Emberiza cirlus*) has long been lost as a breeding species in the county and, since the Devon and Cornish birds are supposedly sedentary, the discovery of six wintering birds in west Somerset in February was a surprise. Sadly, although singing was heard in spring, there was no evidence of breeding. The last bird was seen on 24th July.

Other notable records included a long-staying Glossy Ibis (*Plegadis falcinellus*) on the Avalon Marshes in spring, three Spoonbills (*Platalea leucorodia*), also long-stayers, at Steart and a disorientated Stone Curlew (*Burhinus oedicnemus*) in fog at Lilstock on 29th March. A Caspian Gull (*Larus cachinnans*) that had been ringed in Poland was located in May at Torr Reservoir; this species is easily missed in large gull flocks. There was the usual small passage of Ospreys (*Pandion haliaetus*) in both spring and autumn and at least one spent some days at Shapwick Heath in late August. Autumn wader passage was generally unexceptional but good numbers of Wood Sandpipers (*Tringa glareola*) were seen at widely scattered sites. Autumn gales brought six Grey Phalaropes (*Phalaropus fulicarius*) close inshore, but a bird seen off Dunster Beach in January was more unusual. Autumn sea-watching yielded two Long-tailed Skuas (*Stercorarius longicaudus*) but only one Sabine's Gull (*Xema sabini*).

Three Spotted Crakes (*Porzana porzana*) were calling in suitable breeding habitat in June, and a juvenile bird showed exceptionally well at Greylake for several days in autumn. A 'redhead' Smew (*Mergus albellus*) found at Chard Reservoir on 23rd November remained until the end of the year. Scarce autumn passerines included three Woodlarks (*Lullula arborea*), two of which were seen at former breeding sites, and two Great Grey Shrikes (*Lanius excubitor*), although neither stayed long. Yellow-browed Warbler (*Phylloscopus inornatus*) (Fig. 1) is now an expected autumn migrant and increasing numbers are wintering. Around five did so this year at inland sites, and nine passed through in September and October.

*Fig. 1 Yellow-browed Warbler (*Phylloscopus inornatus*), a scarce autumn migrant now increasingly being seen in winter in Somerset (Photo: © Brian Gibbs)*

2019 saw the first confirmed breeding of Wigeon (*Mareca penelope*) in the county, while Mandarin Duck (*Aix galericulata*) bred for the first time on Hawkridge Reservoir. Garganey (*Spatula querquedula*) were present in at least two sites but no broods were seen. Quail (*Coturnix coturnix*), an erratic migrant breeder, were heard calling at eight sites. In general breeding heron species are doing well, but neither Night Heron (*Nycticorax nycticorax*) nor Little Bittern (*Ixobrychus minutus*) appear to have bred, although the latter may have attempted to. Great White Egrets (*Ardea alba*) raised 27 young from 14 nests. Six juvenile Cattle Egrets (*Bubulcus ibis*) were noted on the Avalon Marshes and Little Egrets (*Egretta garzetta*) are now widespread.

Long-eared Owls (*Asio otus*) raised fledged young at a coastal site; other pairs are surely being overlooked. Marsh Harriers (*Circus aeruginosus*) also did well, particularly on the Avalon Marshes where 20 juveniles were raised. Avocets (*Recurvirostra avosetta*) continue to increase at Steart where 31 pairs were counted, and large flocks now winter in the Parrett Estuary. Turtle Dove (*Streptopelia turtur*) appears to be extinct as a breeding species, with only one record from an Aller garden on two days in June. A Savi's Warbler (*Locustella luscinioides*) sang at Ham Wall for several weeks in spring: this is another difficult bird to prove breeding. Our small population of Nightingales (*Luscinia megarhynchos*) remain vulnerable, although numbers presently appear stable at their regular sites.

Dartford Warblers (*Sylvia undata*) continue to maintain their precarious existence on available heathland.

This short account is inevitably selective and a comprehensive analysis of 2019 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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