

Recorders' reports

Recording of higher plants 2020 *Ian Denholm, Alla Mashanova and Astrid Biddle*

Two events had a profound impact on botany in Hertfordshire in 2020. First, in June, the death of Trevor James after a long illness robbed the county of one of its most influential and knowledgeable naturalists and the author of our most recent county Flora (James, 2009). Moving tributes to Trevor by David Utting, Michael Clark and June Crew were published in last year's *Hertfordshire Naturalist*, and Ian Denholm wrote an obituary for the newsletter of the Botanical Society of Britain and Ireland (BSBI). Moving forward, it is essential that we continue Trevor's legacy and provide botanical data to support research and conservation work in the county. Accordingly, Alla Mashanova and Astrid Biddle have been appointed joint botanical recorders for Hertfordshire alongside Ian Denholm, serving both the BSBI and HNHS.

Second, legislation to combat the COVID outbreak put paid to nearly all communal history events and outings and, for an appreciable part of the season, even restricted the movement of individuals. It is therefore unsurprising that recording activity was reduced, although there were some significant highlights, as summarised below. Nomenclature now conforms to that in the fourth edition of Clive Stace's *New Flora of the British Isles* (Stace, 2019). Localities are followed either by a monad reference or an abbreviated tetrad reference using the DINTY scheme (James, 2009, p. 3).

Ranunculaceae (Buttercup family)

Staphysagria (= *Delphinium*) *requienii* (Requien's or 'Orchid' Delphinium). Casual records of garden plants are generally not especially significant but the occurrence of this plant in quantity on an artificial bank close to Baldock (TL2336) is worthy of note



Staphysagria requienii, Baldock (photo Ian Denholm).



Salix lambertiana, Redbournbury (photo Ian Denholm).

Euphorbiaceae (Spurge family)

Euphorbia platyphyllos (Broad-leaved Spurge). This scarce and declining arable weed was found at the edge of a field west of High Cross (TL3518) (Margaret Carrier, conf. ID). Most previous Hertfordshire records have been from fields on calcareous Boulder Clay in the east of the county (James, 2009) and new sites may well remain since arable field edges in this part of the county are not the most alluring places to botanise!

Apocynaceae (Periwinkle family)

Vincetoxicum nigrum (Black Swallow-wort, Black Dog-Strangling Vine). This wonderfully named plant is popular with horticulturalists and considered highly invasive in parts of the north-eastern USA. Surprisingly it appears to be unknown outside gardens in the UK other than an enigmatic record from Bayfordbury (TL31) in 2009 (James, 2009, p.

because it is visually very striking, appears to be something of a rarity in the horticultural trade, and this appears to be its first occurrence in a wild setting in the UK (Diane Weston, confirmed Neil Acheson and ID). Origin is unknown but abundant associates were *Helminthotheca echioides* (Prickly Oxtongue), *Conium maculatum* (Hemlock) and *Cirsium arvense* (Creeping Thistle).

Salicaceae (Willow family)

Salix lambertiana (a willow). A small willow tree found by ID at Redbournbury (TL1111) with affinities to *Salix purpurea* (Purple Willow) but with unusually oblong-obovate leaves has been determined by the BSBI's Salix referee, Irina Belyeava, as *S. lambertiana* (new to Hertfordshire and very rare in the UK as a whole). It is currently the subject of a multinational research project and Irina is unable to provide further details of this taxon prior to formal publication of her findings.



Vincetoxicum nigrum, Bayfordbury (photo Ian Denholm). 288). It was found again at Bayfordbury in 2018 in a grassy area between two derelict glasshouses (TL3110) (AM) and in 2020 there was a mature flowering plant surrounded by several younger ones that may represent suckering via rhizomes and/or an element of self-seeding (AM/ID).

Scrophulariaceae (Figwort family)

Verbascum × *angulosum* (*V. nigrum* × *V. speciosum*)



Verbascum × *angulosum*, Bayfordbury (photo Ian Denholm).

(a hybrid Mullein). There is only one previous UK record of this hybrid between *V. nigrum* (Dark Mullein) and *V. speciosum* (Hungarian Mullein) from Cambridgeshire in 2001. Two flowering clumps were found alongside both parents in derelict land at Bayfordbury (TL1310) showing almost complete intermediacy in appearance (ID/AM, conf. Fred Rumsey). *V. speciosum* is a spectacular ‘candelabra’ Mullein that is widely planted in gardens and seems increasingly able to naturalise in wild settings.

Orobanchaceae (Broomrape family)

Melampyrum cristatum (Crested Cow-wheat). James (2009) documented the decline in Hertfordshire of this iconic native as a consequence of mismanagement of woodlands and roadside verges. The one remaining site reported in Trevor’s Flora was in a conservation strip between woodland and an arable field on the



Melampyrum cristatum, Nuthampstead (photo Ian Denholm).

outskirts of Nuthampstead (TL4035). This is still extant but struggling due to encroachment of, and shading by, competitive vegetation (Andrew Palmer and ID). More assertive management of the site should benefit this important species.

Asteraceae (Daisy family)

Laphangium luteoalbum (Jersey Cudweed). This plant is very questionably native in Kent and Norfolk but is unquestionably a rapidly spreading alien elsewhere. It now carpets huge areas of waste ground in the

London Docklands and it is therefore surprising that there seems to be no record for Hertfordshire prior to 2020. The new records are both from St Albans, first as a spontaneous garden weed (TL1406) (AM) and subsequently as pavement weed (TL 1507) (Jason Reynolds, conf. ID). It is predicted to increase and spread substantially.

Apiaceae (Carrot family)

Sison segetum (Corn Parsley). This scarce and somewhat inconspicuous plant of calcareous turf and roadsides in northeastern Hertfordshire was astonishingly and inexplicably found to be the dominant weed in a front garden in Batford, Harpenden (TL1415) (Darin Stanley, conf. ID). It was also newly found at a path side near Knebworth (TL22F) (AM).

Orchidaceae (Orchid family)

A survey of Hertfordshire’s scarcer orchids was continued in 2020 and yielded the following observations to supplement those reported by Denholm and Mashanova (2019).

Epipactis leptochila (Narrow-lipped Helleborine). A rare species confined to beechwoods on the Chiltern escarpment that was last seen at its known sites in Tring Park and Stubbings Wood in 1980 (James, 2009). Its reoccurrence in Stubbings Wood was suspected, but could not be confirmed, from the discovery of a bitten-off stem and basal leaves in 2019



Epipactis leptochila, Tring (photo Ian Denholm).

(Denholm & Mashanova, 2019). In 2020, its presence was confirmed by a single flowering plant in one part of the wood and a group of 30 individuals elsewhere (SP9110) (ID and Darin Stanley). The latter plants were morphologically identical and no doubt the product of a single autogamous parent.

Spiranthes spiralis (Autumn Lady’s-tresses). Like *E. leptochila* (above), this has had a 40-year absence from Hertfordshire and unfortunately retains the status of ‘possibly extinct’. Regular searches of its former haunt on Therfield Heath have been unsuccessful (despite the habitat still looking eminently suitable) and in 2020 the hunt was extended (again unsuccessfully) to chalk downland sites around Tingley Wood, within easy reach of seed blown in from the substantial colony on Knocking Hoe National Nature Reserve in Bedfordshire. It is late-flowering (September) and often minute, so easy to overlook. We encourage anyone visiting grassland sites on chalk at the correct time of year to keep their eyes open!

Himantoglossum hircinum (Lizard Orchid). This spectacular species, with long-standing and much-visited colonies in Somerset, Cambridgeshire, Sussex and Kent, is increasingly turning up (often as



Himantoglossum hircinum, near Puckeridge (photo Ian Denholm).

singletons) at new locations in response to a warming climate. One flowering plant appeared in 2020 on private land near Puckeridge (TL32/X) amid a large colony of Bee Orchids *Ophrys apifera* (ID). The only other Hertfordshire record is of a single plant near

Benington in 1931 that was uprooted and moved to a garden (James, 2009). Fortunately the new plant is well protected.

Dactylorhiza maculata (Heath Spotted-Orchid). Barring a questionable record from Blagrove Common, *D. maculata* has only two recent locations. At the Herts and Middlesex Wildlife Trust reserve at Frogmore Meadows (TL09/J) it has only ever occurred in very small numbers in an extremely restricted area, even though large patches of seemingly suitable heathland are available in the immediate vicinity. In mid-June 2020 ID failed to locate any plants, although one had been seen earlier in the season (Laura Baker, personal communication). This may reflect increasing pressure from grazing deer. At Bricketwood Common the plant is now rare and erratic in its former haunts within the Site of Special Scientific Interest but occurs in quantity in a small clearing further north (TL1301)



Dactylorhiza maculata, Bricketwood Common (photo Ian Denholm).

where it is threatened by the encroachment of gorse. Selective clearance of scrub here could benefit the orchid considerably.

Dactylorhiza incarnata (Early Marsh-orchid). The status of this species is complicated by the desirability of distinguishing between the native subspecies *D. incarnata* subsp. *incarnata* of base-rich fens and marshes and non-native (in Hertfordshire) forms introduced with calcareous fuel ash to sites near Cheshunt and at Rye Meads Power Station, some of which have been transplanted to Amwell Quarry.

The native plant survives in small numbers at Blagrove Common (TL33/G) and in larger quantity in Sawbridgeworth Marsh (TL41/X) very close to the Essex border (ID). No plants could be found in 2020 at Bury Mead, Ardeley (TL32/I) but this was following an exceptionally dry spring and it may reappear.

Acknowledgements

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Dactylorhiza incarnata subsp. *incarnata*, Blagrove (photo Ian Denholm).

Bryophytes 2019–2021 Agneta Burton

Members of the Bryophyte group met monthly from October 2019 until March 2020, the final meeting being just before the first COVID-19 national lockdown. We then managed three meetings, between the further national lockdowns, once in October and twice in early December 2020.

Heartwort Forest in Sandridge was the focus of three separate visits in November 2019 and January and February 2020. This was a planned follow-up five years after the initial visit in 2014. The areas planted with trees since 2009 were mainly undersown with grasses and thus have very limited bryophyte habitats; the trees are still young and yet to be colonized by epiphytic bryophytes. The main recording was carried out in the old woodlands, with more time spent in each in order to record over a larger area compared with 2014. Of the 62 total species recorded, 7 of which were liverworts, 12 were found in all the woodlands, with Round Wood being the most diverse. Exposed parts of the clay bank of the lane leading to Langley Wood were almost covered by *Encalypta vulgaris* which had not previously been recorded at the site and this was confirmed when its 'forest' of capsules appeared. In Round Wood, *Neckera complanata*, found at the base of an old Ash tree, and *Porella platyphylla*, which was on an Ash bole, were new records for the site. A few species, such as *Tortula truncata* and *Riccardia chamaedrifolia*, in disturbed parts of the natural regeneration area will disappear as

the canopy develops.

Three other sites were visited: the Bayfordbury campus of the University of Hertfordshire; Harpenden Common; and the woodland and orchard at Highfield Oval, also in Harpenden. In addition, recording on nine Local Wildlife Sites (LWS) was carried out in conjunction with local wildlife site surveys organized by Carol Lodge from the Herts and Middlesex Wildlife Trust.

In general, at most sites visited, we have increasingly recorded several epiphytes that were formerly uncommon in VC20 – in particular, *Cryphaea heteromalla* and *Orthotrichum lyelli*, but there were also more records of *Ulota phyllantha* and the liverwort *Cololejeunea minutissima*, the latter of which was first recorded for Hertfordshire by Chris Tipper in 2009. Some of the old apple trees in the Highfield Oval Orchard supported colonies of *Syntrichia papillosa*, another species that has been increasing in recent decades, with prolific gemmae (Figure 1).

In January 2020 several of us joined a meeting of the Cambridge group of the British Bryological Society for a visit to Panshanger Park (Figures 2-4). There were previous records there from Graeme Smith (1992) and George Bloom (1977). Although many species were not re-found, in the time available for exploring such a large site there were 18 additions, 12 of which were epiphytes.



Figure 1. *Syntrichia papillosa* (with the lichen *Parmelia sulcata*) on apple tree at Highfield Oval (photo Alla Mashanova).



Figure 2. *Drepanocladus aduncus* at Panshanger (photo Jeff Scott).



Figure 3. Lunch break by the Panshanger oak (photo Jeff Scott).



Figure 4. The liverwort *Metzgeria violacea* at Panshanger (photo Jeff Scott).

Other bryological investigations in Hertfordshire during this period include Des Callaghan's re-discovery of *Physcomitrium eurystomum* at Wilstone Reservoir. It had last been recorded there (and at Startop's End Reservoir) in 1969. Classed as endangered, it was located at only five sites in a Natural England-funded study of its status in Britain, four of which were in Norfolk and at the other at Wilstone (Callaghan *et al.*, 2020).

In March 2019 another Natural England study on the conservation status of *Leptodontium gemmascens*, Thatch Moss, included surveys at three sites in Hertfordshire – Barley Mo Farm, Nomansland Common and Patmore Heath; at the Herts and Middlesex Wildlife Trust reserve Fir and Pond Woods in Middlesex and in Suffolk and South West Yorkshire

(Lansdown, 2019). As its name suggests it colonizes thatched roofs. However, it is rarely recorded in semi-natural habitats, where it is found mainly on the decaying stems of grasses on acidic substrates. We had searched, unsuccessfully, at Barley Mo Farm in 2015 and 2016. The 2019 surveys by Lansdown located small amounts only at Barley Mo in Hertfordshire and one colony at Fir and Pond Woods.

There will be new challenges to familiarize ourselves with changes to the names of a number of genera following completion of the revised checklist to be published in 2021 and available on the website of the British Bryological Society (www.britishbryologicalsociety.org.uk).

Astrid Biddle, Margaret Harris, Andrew Harris, Wendy Knowles, Alla Mashanova, Clare Smith and

Stephen Waters have all helped to record bryophytes in the past two years. We are grateful to the landowners and managers who have given permission to record their sites.

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