## Worcestershire Dragonfly Roundup 2022

## Mike Averill

2,200 records received so far, for 27 species from 128 recorders. Two New species for the county.

People often ask if the year has been good for dragonflies and as with all invertebrates the reply is so often related to the weather. 2022 was very warm; the summer months of April to September had 176 days which were above average temperatures. Long dry spells meant that by the end of August we had received only 72% of the average rainfall (Averill 2022), a drought had been declared and many shallow water bodies were drying out. Not only feeling warmer, April, May, June & August were sunnier than average so overall the summer presented plenty of opportunity to look for dragonflies and there were long spells when insects would have been active. Sunny, warm weather certainly helps to boost dragonfly records and there was plenty to search for this year with two new species appearing for the first time taking the county total to 33. All our regular species were seen this year but like last year the Common Hawker Aeshna juncea and Red-veined Darter Sympetrum fonscolombii didn't show. This was despite there being several occasions when continental winds could have brought the latter across the Channel.

Gaining two new species is pretty unusual in one year and although Keeled Skimmer Orthetrum coerulescens was a surprise, the second, the Willow Emerald Chalcolestes viridis has been tracked and predicted over the last few years as it moved westwards from the south-east of England. The Keeled Skimmer was only seen in one location, at Ryall near Upton, a site which is an active gravel extraction site but which because of its unique position below river level has a wonderful supply of water through the summer. This was critical this summer at a time when everywhere else was suffering the effects of a drought. The Keeled Skimmer was first seen on the 6<sup>th</sup> August by Mike Averill in one of those brief fly past moments that you get when a camera isn't at the ready, luckily Andy Warr was able to get the first shots for the county (01) of a few males that were around for about a week. This species does seem to be more common across the country than it was but up to now it has treated Worcestershire very cautiously with the nearest sites being 40 miles away. Its normal habitat is wet heathland, wet flushes and seepages.



01. Keeled Skimmer male at Ryall Court Gravel Pits 07.08.22. Andy Warr.

An account of the first sightings of the Willow Emerald in Worcestershire by Des Jennings can be found elsewhere in this issue (Jennings 2022). After those early records in September Spetchley Park appeared to be a favourite for the new arrival. Fortunately Roger Mason was visiting the site regularly and was able to observe the species in good numbers there from 9<sup>th</sup> to the 24<sup>th</sup> September. He observed pairing and egg laying in various plants (02). Andy Warr even noted egg laying in Viburnum tinus (03 & 04), illustrating that Willow Emerald doesn't rely exclusively on willow. Another location for the species was Feckenham Wylde Moor where small numbers were seen in late September. Altogether the species was recorded at five locations including Grafton Wood and two locations in Birmingham. This is the second species of emerald damselfly now found in Worcestershire, the other being the common and widespread Emerald Lestes sponsa. Willow Emerald can be seen quite late in the year given reasonable weather and it was still present at Fox Hollies Pool, Hall Green on the 30<sup>th</sup> October this year. It is never too late to track this damselfly as the distinctive scars left where the females lay their eggs in to plants are easy to spot (03), making this the only British dragonfly species that can be recorded from evidence of egg laying.



02. Willow Emerald at Spetchley Park September 2022. Roger Mason.



03. Egg-laying scars of Willow Emerald, Spetchley Gardens Lake 18.09.22. Andy Warr.



04. Willow Emerald egg-laying pair at Spetchley Gardens Lake 18.09.22. Andy Warr.

A species that was new to the county two years ago, the Scarce-bluetailed Damselfly *Ischnura pumilio* (Warr 2021) had a quiet year last year but it was Ryall Court Gravel Pits again that proved popular with the species as there is ideal habitat for this early coloniser, preferring bare early succession sites as it does. Ryall gravel pit with its flowing water channels is a bit like a braided stream system running freshwater in to a pool and is quite unusual for Worcestershire. This ideal dragonfly habitat has provided a valuable opportunity to see how the species competes with other species in that sort of environment (Warr 2022).

2022 was the third year running for the Hairy Dragonfly *Brachytron pratense* in the south of the county where this early hawker was seen at Ryall, Ripple and Croome Park. most sightings have only been of males patrolling (05) so the finding of an exuviae (06) on the Croome River, Croome Park, by Andy Warr is much needed proof of breeding. The most noticeable thing about the exuviae is the unmarked case, lack of lateral spines and the small eyes compared to other Hawkers (06).



05. Hairy Dragonfly, Croome River 07.06.22. Jill Orme.



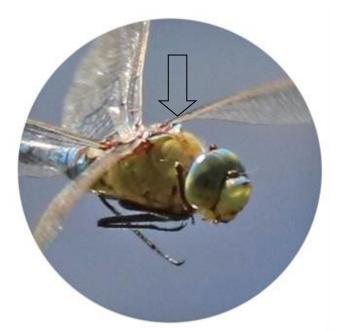
06. Hairy Dragonfly exuviae found at Croome River 21.05.22. Andy Warr.

This year there were just three records for the Lesser Emperor *Anax parthenope*, two at Ripple and one at Grimley, but there could have been a fourth and it highlighted the need for care when trying to identify emperors in flight.



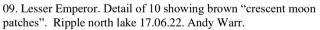
07. Suspected Lesser Emperor at Spetchley 11.08.22. Roger Mason.

The photo (07) was taken at Spetchley by Roger Mason and looked like a blue male Lesser Emperor but close examination (08) showed this not to be the case. The eyes are too blue and also on the top of the thorax (arrowed on 08), just in front of where the fore-wings join, there is a pair of contrasting blue crescent moon patches and these are always brown or yellowish-green on Lesser Emperor, but never blue as in this instance. So this is a just a male Emperor *Anax imperator* with a rather dark thorax and not a Lesser Emperor. Meanwhile Andy Warr photographed a Lesser Emperor at Ripple north lake in June this year (09 & 10).



08. Detail of 07 showing blue eyes and "blue crescent moon patches" (arrowed), making this an Emperor *Anax imperator* and not a Lesser Emperor *A. parthenope*. Spetchley 11.08.22. Roger Mason.







10. Lesser Emperor at Ripple north lake 17.06.22. Andy Warr.

The Scarce Chaser Libellula fulva, always gets a mention as a nationally important species and has been present in Worcestershire for a few years now. This year as well as being recorded at its stronghold, the river Avon, it was seen at Ripple and on the Croome River. It was seen emerging at Hillditch Pool again, for the eleventh year running and one was even seen out at Mathon, west of the Malvern Hills. The Mathon record was interesting as it is the furthest location west in the vice county of Worcestershire but it also made the Herefordshire recorders happy as that area is now in modern Herefordshire, giving them a new county species. The other nationally important species the Club-tailed Dragonfly Gomphus *vulgatissimus* had a poor year at Bewdley with the lowest totals emerging since 2007. There is no obvious explanation for the low count as both the weather and river conditions were good for surveying. It was quite a low count three years ago so perhaps this year's individuals are the offspring of those, having a three-year life cycle.

At the time of writing this article Common Darters *Sympetrum striolatum* are still active and egg laying making the most of the mild spell in mid-November. This is exactly the sort of weather that suits the Common Darter, late warm weather when rainwater has returned to watercourses giving a good chance of successful breeding.

## References

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## Images

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09. Lesser Emperor. Detail of 10 showing brown "crescent moon patches". Ripple north lake 17.06.22. Andy Warr.

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