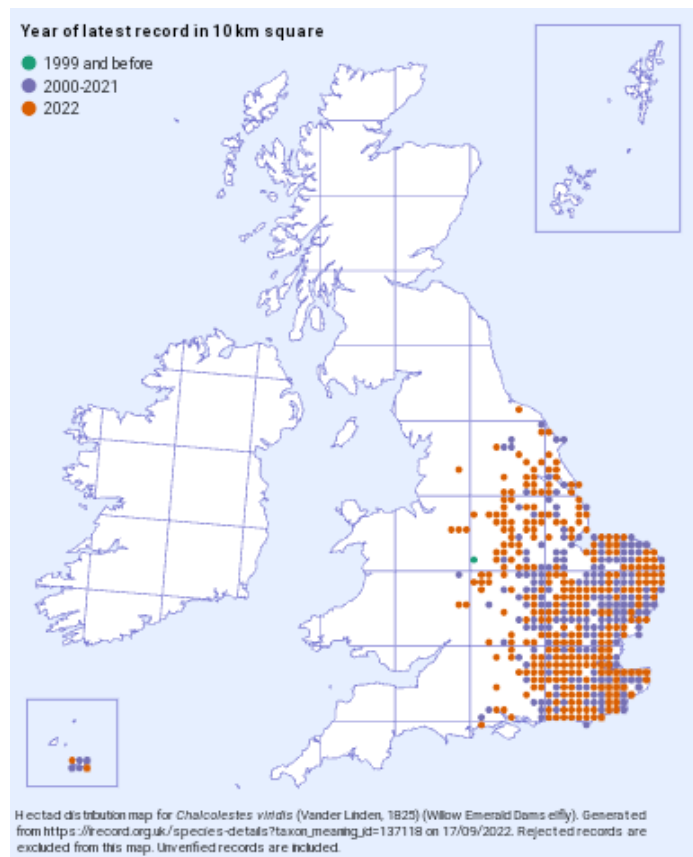


## Willow Emerald *Chalcolestes viridis*, the first recorded sighting in VC37

Des Jennings

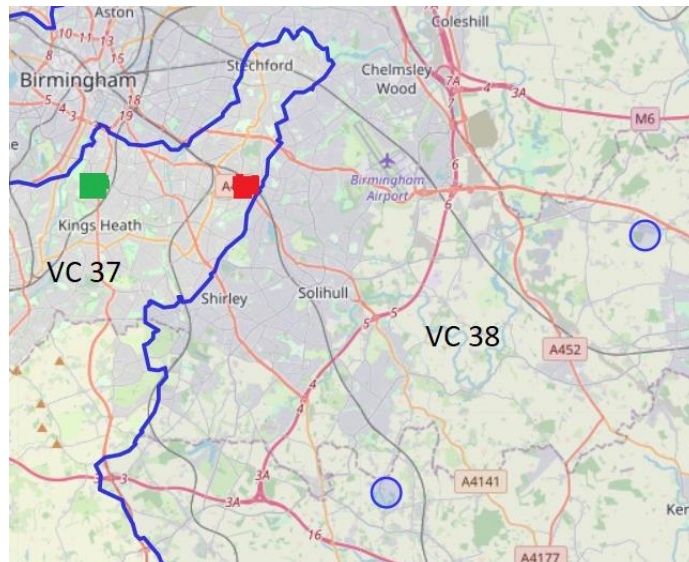
On the morning of Saturday 3<sup>rd</sup> September 2022, I decided to visit one of my local patches; Fox Hollies Pool in Acocks Green, Birmingham, Grid Ref. SP123 822, with the express intention of looking for, and hopefully finding, the elusive Willow Emerald *Chalcolestes viridis* damselfly. Since a large number (c 400) were seen in south-east. Suffolk/north-east Essex in 2009, this species has spread as far as North-east Yorkshire, the Hampshire coast and Cheshire (Map 01). Willow Emerald was first encountered in the counties of VC38 Warwickshire in 2019 and VC39 Staffordshire in 2021. There have been a handful of VC38 records since 2019 but Worcestershire appeared to have remained a Willow Emerald free zone, until this year.



Map 01. UK distribution of Willow Emerald 23.09.2022. Reproduced with permission from iRecord.

Geographically, I felt that I was well situated to take advantage of the VC38 presence of Willow Emerald. Sightings had been made in the west of VC38 and on a similar latitude to suitable sites close to me, so logic dictated that somewhere east and north in VC37 would be worth surveying (Map 02).

Fox Hollies Pool (01) is a relatively small pool set in a large park and containing plenty of fish and a number of terrapins, so Odonata have a battle on their hands to survive. However, the pool does not disappoint in the variety of dragonflies seen each year and to date 15 species have been recorded at this urban site, including Lesser Emperor *Anax parthenope*, Small Red Eyed Damselfly *Erythromma viridulum* and now Willow Emerald.



Map 02. VC37 and VC38 Willow Emerald sites 23.09.22. iRecord website. Blue circles - VC38 sites. Red square - Fox Hollies pool. Green square - Highbury Park. Reproduced with permission from iRecord.



01. Fox Hollies Pool. 03.09.2022. Des Jennings.



02. Waterside vegetation containing Willow Emerald. Fox Hollies Pool. 03.09.2022. Des Jennings.

The pool is surrounded by an outer ring of trees, a path and then scattered trees of willow *Salix* and oak *Quercus* close to the water. However, to me the most important factor guiding my search was poolside vegetation in the form of reeds etc. Trees are important at the breeding stage of a Willow Emerald's life but it is often low-lying vegetation that throws up individual sightings, particularly when there is movement between alighting points, as I found in late October 2021 when discovering my first UK Willow Emerald in Warwickshire. Conditions very similar to these led to my sighting of a solitary male Willow Emerald at Fox Hollies Pool. On what was to be my third tour of the pool I was drawn to a flying damselfly in a small area of low waterside vegetation, mainly Sweet Flag *Acorus calamus* (02). The individual sat on a stem and I immediately realised that it was a *Lestes* damselfly by the way the wings were held at about 45 degrees (03). It was important to get some images quickly in case it flew off, never to be seen again. Fortunately, the damselfly remained in situ on the vegetation and I had time to assess the images and watch the damselfly engage in disputes with a male Blue-tailed Damselfly *Ischnura elegans*. It was necessary to eliminate other *Lestes* species and a side-on view of the damselfly's thorax would be needed to show critical features. I was looking for a long green spur (04) - other *Lestes* species may show a very short spur but not as obviously as Willow Emerald.

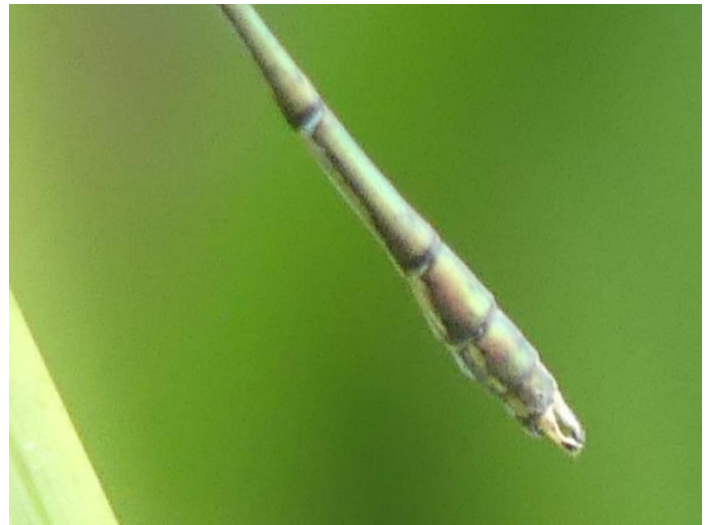
Additional features noted were the sandy coloured pterostigma, bordered in black (05) and the white upper anal appendages with black tips (06), denoting a male. Needless to say, I alerted other Odonata enthusiasts to my discovery.



03. Willow Emerald showing typical *Lestes* wing posture. Fox Hollies Pool. 03.09.2022. Des Jennings.



05. Willow Emerald wing pterostigma - sandy coloured with black borders. 03.09.2022. Des Jennings.



06. Willow Emerald white anal appendages with black tips. Fox Hollies Pool. 03.09.2022. Des Jennings.



04. Willow Emerald thorax showing diagnostic long green spur. Fox Hollies Pool 03.09.2022. Des Jennings.



07. Scars on Goat Willow indicating egg laying Willow Emerald. Fox Hollies Pool. 17.09.2022. Des Jennings.

Five days later during a walk in Highbury Park, Moseley, Grid Ref. SP070 822 (Map 2), I found another male at a very small secluded pond, just 2km from my home and approximately 6km west of the Fox Hollies Pool sighting. Once again vegetation close to water proved to be the attraction for the damselfly

Fourteen days after the sighting at Fox Hollies Pool I revisited the site in search of adults or for evidence of breeding. Naturally, I made a beeline to the area that held the male on September 3<sup>rd</sup> but despite patient searching I drew a blank - other potential areas of the pool were also fruitless. However, approximately two metres away from my original sighting was a Goat Willow *Salix caprea*. I scanned the overhanging branches with my binoculars and, to my surprise, almost immediately located a branch with the tell-tale scars associated with an egg laying Willow Emerald (07).

It would appear that colonisation by Willow Emerald continues throughout much of England and as a consequence, a number of records have been noted in VC37 Worcestershire in 2022.

### Acknowledgments

Thanks to iRecord for giving permission to use their maps.

### References

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iRecord website. Available at: <https://irecord.org.uk/> [Accessed 30.10.22].

### Images

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