



WILLOW EMERALD DAMSELFLY *CHALCOLESTES VIRIDIS* (VANDER LINDEN) OVIPOSITING INTO BRAMBLE

by Derek Longe

In the last few years Willow Emerald Damselfly *Chalcolestes viridis* has colonised Thorpe Marshes, a Norfolk Wildlife Trust urban reserve in Norwich. Uniquely this species overwinters as an egg laid into branches of certain tree species overhanging water, with willow *Salix* spp, Ash *Fraxinus excelsior*, Alder *Alnus glutinosa* and, to a lesser extent, Hawthorn *Crataegus monogyna* and Elder *Sambucus nigra* being the most popular.

On a visit to this site on 21 September 2016 I encountered a pair of Willow Emerald Damselfly ovipositing into a stem of bramble *Rubus fruticosus* agg. A couple of photographs were taken, along with a wide location shot to hopefully pinpoint that exact spot again in the future. Restoration of the dyke here, next to the railway line, was carried out over the previous winter period as part of a programme of enhancement works on the reserve. There is no closer access to the oviposition location available than the viewpoint from across the dyke.

On 24 October 2016, at Chris Durdin's monthly guided walk around the reserve, that bramble stem was relocated with the aid of the location shot on my smartphone. The exact point of oviposition that I witnessed was only visible side on, so it was hard to notice



Willow Emerald Damselfly *Chalcolestes viridis* ovipositing into bramble *Rubus fruticosus* agg. Thorpe Marshes NWT Reserve, Norfolk, 21 September 2016 (Photo: D. Longe).



Willow Emerald Damselfly *Chalcolestes viridis* ovipositing into bramble *Rubus fruticosus* agg. Upper Colne Marshes SSSI, near Wivenhoe, Essex, September 2013 (Photo: C. Gibson).



Oviposition scars of Willow Emerald Damselfly *Chalcolestes viridis* on bramble *Rubus fruticosus* agg. Thorpe Marshes NWT Reserve, Norfolk, 24 October 2016 (Photo: D. Longe).



Location of oviposition observed on 21 September 2016 (Photo: D. Longe).

any resulting marks. Further down along that stem I thought I could see some oviposition marks through my Pentax Papilio 8.5 × 21 binoculars. A few telephoto shots were taken with my Canon SX60 HS bridge camera to examine back at home. Some parallel, evenly spaced subtle markings were revealed upon enlarging the image. These were highly suggestive of being Willow Emerald Damselfly egg-laying holes.

Due to the colouration, the bramble stem was presumed to be dead and as such it would not form the characteristic gall swellings that make these egg-laying sites easier to spot. Whether a live bramble does so is yet to be discovered. Just a very short distance away from the bramble stem in question, Chris Durdin had previously discovered on 12 September 2016 numerous Willow Emerald



Oviposition scars of **Willow Emerald Damselfly** *Chalcolestes viridis* in willow *Salix* sp. Thorpe Marshes NWT Reserve, Norfolk, 21 September 2016 (Photo: D. Longe).

Damselfly oviposition scars on some willow *Salix* spp (pers. comm.), a photo of which is included here for comparison.

The use of bramble here is unlikely to represent limited availability of the more usual host species, willow, which is widespread throughout the reserve. Chris remembered that Chris Gibson from Essex had mentioned in the past about bramble being used by this species, so he kindly put me in contact. Chris Gibson confirmed that he had indeed photographed a pair of Willow Emerald Damselfly ovipositing into a live bramble stem at Upper Colne Marshes SSSI, near Wivenhoe, Essex, back in September 2013.

If this bramble usage is not just an occasional happening then with all the numerous areas that must have brambles overhanging water bodies could this provide a greater range of breeding sites for Willow Emerald Damselfly than was previously thought?

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