

# Eye D

## Emerald damselfs

### Emerald Damsel (*Lestes sponsa*)

The Emerald damselfly is locally common in Britain and Ireland in still waters with plenty of aquatic and marginal vegetation, including acid heathland bogs, canals, pondside rushes or reeds. It can also tolerate brackish water. In Sussex, this damselfly is only found in scattered populations, usually associated with more acid waters. There are good populations on Pevensey levels as well as Romney marsh and Ashdown forest. Their patchy distribution across Sussex can be partially explained by the loss of and lack of good marginal habitats for egg laying and mating, the presence of fish in ponds and the varying geology and habitats across the County.

The Emerald damsel generally flies between June and late September, although this is very weather dependent. It has the uncharacteristic damselfly habit of resting with its wings outstretched in a half open position (more like a dragonfly). A rich metallic green colour, the male develops a blue pruinescence on segments 1, 2, 9 and 10 as it matures. The female is thicker bodied than the male with no blue pruinescence and a metallic and almost plain coloration. The ovipositor just reaches the tip of segment 10.

The pterostigma is present in both sexes and is well over twice but no more than five times as long as it is wide. It is brown (in the male), or yellow (in the female) but can be dark brown to black. There are antenodal veins in the forewings. The abdomen is linear from base to tip from a conspicuously swollen base, or swollen both basally and distally and markedly constricted in between (the basal swelling and slight median constriction more apparent in the male). Both sexes have very narrow yellow bands between the segments; without mid-dorsal spots.



# Emerald Damsel Eye-D Corner cont ...

The Emerald damsel can be confused with the Scarce Emerald (*Lestes dryas*) and less so with Southern Emerald (*Lestes barbarus*). The Scarce emerald is currently thought extinct in Sussex, although both Scarce and Southern Emeralds have been noted (once each) in the County in the last ten years. Although we might expect to see some increases in their numbers with climate change, at the moment there are no reported colonies in Sussex.

The Scarce emerald damselfly is a medium sized metallic green insect that usually rests with its wings half open. Adult males have blue eyes and have powder blue pruinescence on the thorax between the wings and on the segments at the top and bottom of the abdomen. In comparison, the females tend to be much duller green. It can be distinguished from the commoner *L. sponsa* by the less extensive pruinescence on the mature male, and the curved rather than straight anal appendages. The female has square dark spots on segment I rather than rounded as in *sponsa* (difficult to see in the field). The ovipositor extends just beyond the end of Segment 10.



Curved anal appendages on male *L. dryas* © J Luck

Scarce emerald female (left) and male (right) © D Sadler



Southern emerald damselfly male images © J Luck

