

Dragonflies of the Ottawa-Gatineau Region

Article and photos by Chris Traynor, unless otherwise noted

Species Profile 23

The Racket-tailed Emerald (*Dorocordulia libera*)

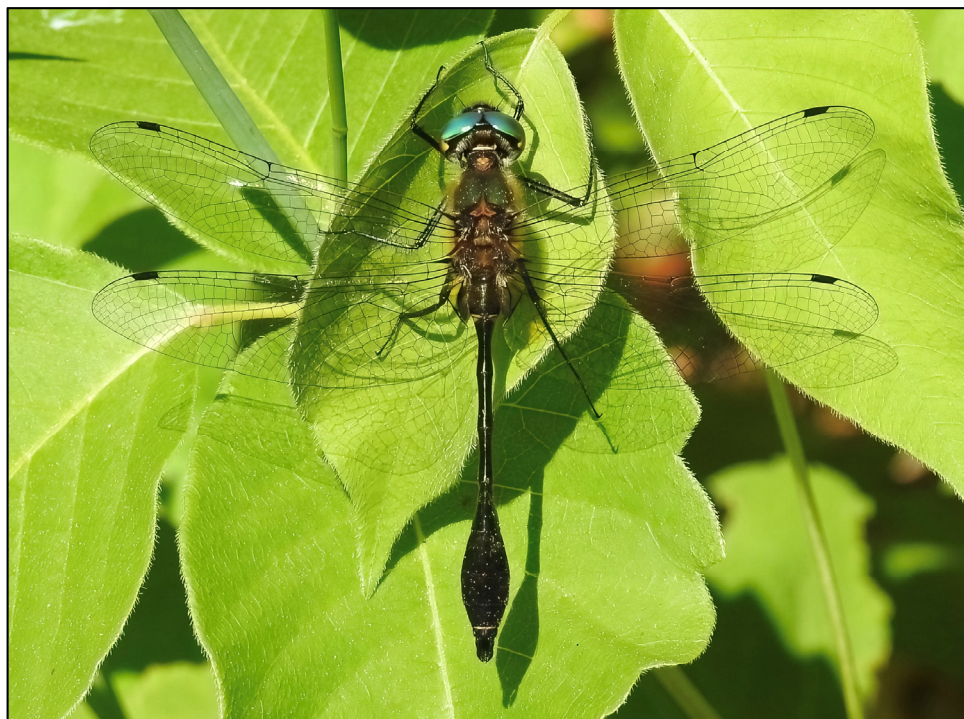
Family: Corduliidae



*A mature female **Racket-tailed Emerald** with the bright green eyes that give emeralds their name.*

Earlier in this dragonfly series, Gillian Mastromatteo profiled a rather rare member of the Corduliidae family, the Kennedy's Emerald (T&L 58(3)). In this profile, we will be looking at a much more common member of the same family, the Racket-tailed Emerald. Even though it is in the same family as Kennedy's Emerald, the Racket-tailed Emerald belongs to a different genus, and a rather small one at that: the *Dorocordulia*, or "Little Emeralds". This genus consists of a mere two members, the other being the Petite Emerald, which has not been recorded in our region. They are both species of Eastern North America.

Though it belongs to a large dragonfly family, it's lucky for us that the Racket-tailed Emerald is arguably the easiest of them all to identify. Most emeralds are dark and have straight and often skinny abdomens, but *D. libera* is well named. The last few segments of the abdomen flare out dramatically in both sexes, even more so in the male. It has a club that would make members of the Gomphidae family envious and it's no surprise that many people mistakenly call this species a clubtail.



Racket-tailed Emerald, an impressive male not quite mature.
His eyes will green up even more with age. Photo by Gillian Mastromatteo.

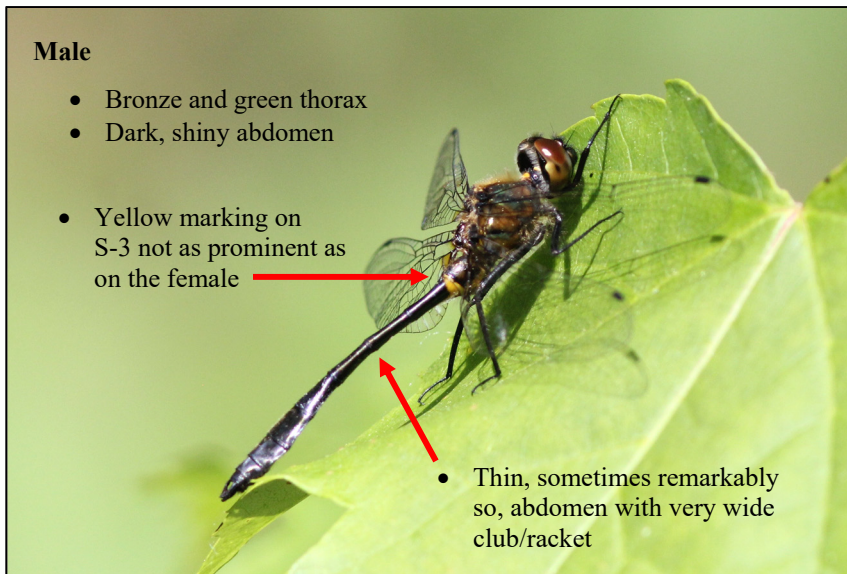
One of my favourite things about these little emeralds is that they are quite adapted to being in the shaded forest, unlike so many species that seem to vanish when not out in the sunshine. Racket-tailed Emeralds are quite happy to follow you in your travels along forested trails, picking off the harvest of insects that are attracted to our presence in the woods. When hunting along wooded trails, they often appear to have no set pattern and seem to come and go in any direction, unlike the Stream Cruiser or some darners, who predictably will fly out some distance and then return along the same path as if in a defined territory. As with many species, they will sometimes use humans as handy perches from which to do their hunting. When you are being pestered by mosquitoes, a few emeralds can come in handy! These emeralds are often found near conifers, sometimes at the top. However, they also like to fly reasonably low and you will frequently see them perched at waist level or lower, and now and then on the ground. Though they sometimes hang up like other odonates, they seem to show a preference for perching on leaves. Of note as well, the Racket-tailed Emerald is fairly easy to identify in flight as it often flies with a noticeable bow in its abdomen.

ID Hints

Male

- Bronze and green thorax
- Dark, shiny abdomen

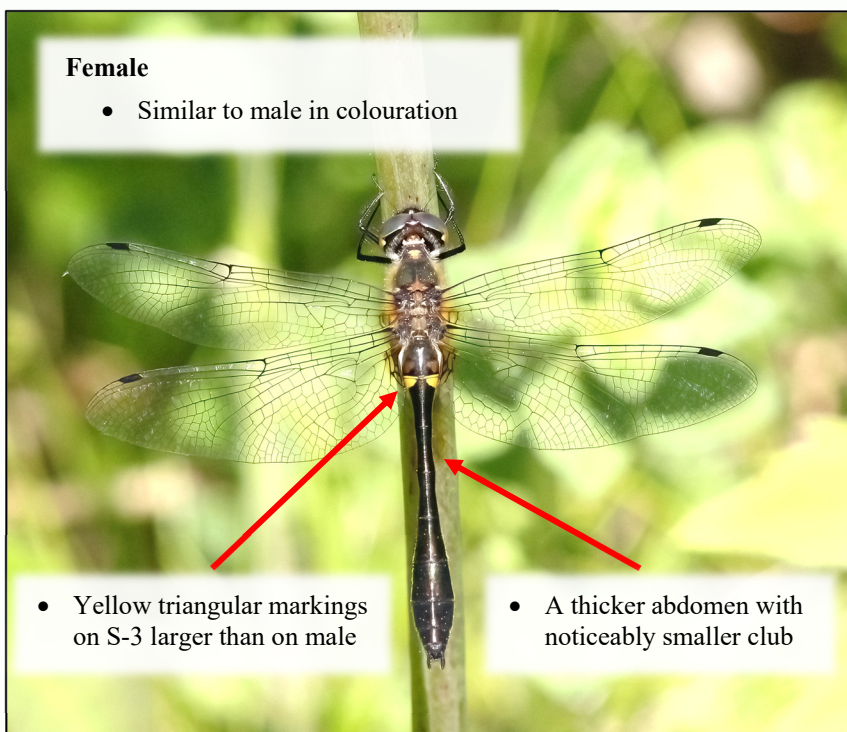
- Yellow marking on S-3 not as prominent as on the female



- Thin, sometimes remarkably so, abdomen with very wide club/racket

Female

- Similar to male in colouration



- Yellow triangular markings on S-3 larger than on male

- A thicker abdomen with noticeably smaller club

Possible Confusables

Many species in the emerald family, especially of the genus *Somatochlora*, are extremely challenging to identify, as we saw in Gillian's profile of the Kennedy's Emerald. However, as I noted earlier, the Racket-tailed Emerald is probably the easiest of our emeralds to identify. Like most emeralds, it has a mostly dark body and green eyes. However, the large club/racket is unique in the family, with only one other species having any kind of flaring at the abdomen tip – that would be the American Emerald (*Cordulia shurtleffii*).

The American Emerald is often the first non-migratory species I see each season, and it does bear a resemblance to our featured species. It is often found in the same areas and at the same times; it also behaves in a similar manner, though it does not fly with its abdomen in a bow shape like the Racket-tailed frequently does.



American Emerald,
male. Note the white
ring between S-2 and
S-3 and decent-sized
club.

The American Emerald is a noticeably larger dragonfly (when both are at hand) and more robust in build. It has a white ring between the S-2 and S-3 segments of its abdomen. This easily distinguishes it from the Racket-tailed Emerald, though not from other members of the emerald family. As well, though the male does have a club, it is not as drastic as that of the Racket-tailed Emerald. The female has no club to speak of.

Possible Confusables - continued



American Emerald, female.

Note her thick abdomen and lack of any club.

When and Where to Look for Racket-tailed Emeralds

The Racket-tailed Emerald is one of our earlier emerging dragonflies and it tends to show up sometime in late May. Normally, in our region, it is the third emerald out of the gates after the Ebony Boghaunter and the American Emerald. Though it is found in both May and August, it is a true summer species, as it can mostly be seen in June and July. It is considered common in our region (Bracken & Lewis 2008).

I've had no trouble finding Racket-tailed Emeralds when I've been out early on a sunny morning or in the late afternoon. Like many species, if the sun is shining, they will be flying. They do seem particularly fond of conifers and often sun themselves on them, so it is always worth checking out conifers that are adjacent to meadows. The meadow beside Roger's Pond at Marlborough Forest is a good example, and they can easily be seen here. Generally, though, they can be found in most natural areas where there is a good mix of wetland and forest habitat.

References

- Bracken, B., and C. Lewis. 2008. A Checklist of the Dragonflies and Damselflies of Ottawa-Gatineau. *Trail & Landscape* 42(3): 115-131.
- Mastromatteo, Gillian. 2024. Dragonflies of the Ottawa-Gatineau Region. Species Profile 21: Kennedy's Emerald (*Somatochlora kennedyi*). *Trail & Landscape* 58(3): 165-173.

Chris's and Gillian's Dragonfly Profiles are available on the OFNC website, ofnc.ca: go to Publications, then to *Trail & Landscape*; the list of profiles is under "Online access".

<https://ofnc.ca/publications/trail-landscape>