Dragonflies of the Ottawa-Gatineau Region

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Species Profile 1

The Zebra Clubtail (Stylurus scudderi)

Family: Gomphidae



I took this photo almost at the moment of lift-off. In this profile view you can see the heavily ringed abdomen that makes this dragonfly really stand out in flight, like a flying tiger. Also note the distinctive black lines on the face.

This will be the first in a series of species profiles of dragonflies and damselflies in the OFNC study area that I hope will help stimulate some interest in this fascinating group of insects. I will try and add a personal touch to each profile, as it is not my intent to do this in a field guide fashion. I will start this profile series with a member of the family Gomphidae (the Clubtails). This family is my personal favourite. Ranging from the very small to the very large, they are a family of dragonflies that impress with their often bold markings and mysterious habits. Many members of this family are quite rare in our region and are seldom seen, even by those who know where and what to look for. I imagine this elusiveness is one of the reasons I find them so appealing.

One such member of this family is Stylurus scudderi, the Zebra Clubtail.



Zebra Clubtail habitat in Gatineau Park, Quebec.

The first time I heard of this dragonfly was while perusing my copy of The Dragonflies and Damselflies of Algonquin *Park.* My interest in the odonates was somewhat new at the time so most species were exciting to me, but when I turned to page 161 in the book, a brilliantly marked dragonfly with a massive club at the end of its abdomen jumped off the page at me. I had no idea dragonflies like this existed. I knew then that I would have to make a quest to find one for myself. However, personal communications with a handful of odonate enthusiasts would reveal that it was not going to be an easy dragonfly to find, with Algonquin Park being suggested as the best place to find one. Undaunted, I started my search by looking at maps on Google Earth and searching for suitable habitat closer to home. Armed with some armchair knowledge, I then ventured into the more northerly reaches of Gatineau Park in search of this lovely creature. Finally, in August 2015, after having traversed a rocky creek bed for several kilometres, I managed to catch a glimpse of one and take a poor photo. I was happy that my research had enabled me to find this rare species, and I hoped to improve upon my photo at a future date.

A little more reading and research afterwards revealed that the genus *Stylurus* was known to be a particularly difficult genus both to find and photograph. Known for their rapid, low flight over water as well as high altitude flights in the tree canopy, it's easy to understand how one can miss them. I also discovered that they like to sit on leaves overlooking the water, where their camouflage blends in very well with the vegetation. All that to say it took me four more years of searching before I encountered one again. And what an encounter it would be!

In late July 2019, I searched the same creek, this time from a different direction, and found some habitat that looked even more favourable than where I had found this dragonfly four years before. Zebra Clubtails are particular in their habitat preference. They need clean, almost pristine creeks running over rocky to sandy substrate with riparian vegetation. This place ticked all the boxes. As an added bonus, it was both remote and difficult to access, two of my favourite things in nature.

Though I was looking for the Zebra Clubtail, I was also interested in the other dragonflies in the creek, and there were quite a few exciting species including the Dragonhunter (*Hagenius brevistylus*) and Swift River Cruiser (*Macromia illinoiensis*). Either of these species would gild a day of dragon hunting.

Of note were large numbers of Fawn Darners. The Fawn Darner, *Boyeria vinosa*, is a modestly coloured brownish dragonfly that has the interesting habit of searching every nook and cranny along the creek side. In and out of sticks and over and under logs, they are looking for good places to lay their eggs, find a mate and perhaps pick up a snack or two. As I was watching them, I noticed a mid-size dragonfly, boldly striped, in flight at top speed, only inches above the water, heading right towards several of these darners. In very short order it chased them all away from near where I was standing. I was impressed with how aggressive it was. I was even more impressed when it then flew directly towards me and circled me repeatedly. I recognized it immediately as my quarry, *Stylurus scudderi*, and its vivid markings lived up to my expectations. It even landed on my camera lens! I was just hoping to get a good view of one and instead I was treated to an up close and personal performance. For over an hour, I observed this one male Zebra chase any other dragonfly that entered its space, including at least two other male Zebras. It also paid much more attention to me than any dragonfly species has before.



Zebra Clubtail profile.

It has been my experience that dragonflies react to people in two different ways. The first, obviously, is avoidance. When we move through nature, no matter how quietly we try, we will always flush some animals along our path. Dragonflies are no exception to this. Some species of odonates are very skittish and will not allow you to approach closely, while others can be quite blasé about our presence. I'm sure we've all been used as a dragonfly perch at one time or another by those species that see us as part of nature's furniture. However, this chap was paying an unusual amount of attention to me. If I left my spot in the creek, he would venture off and go about his business of hunting and chasing other dragonflies, but when I returned to the same spot in the water (where I had my tripod stationed) he would zoom back, circle me, and then take a perch facing me directly. I found this odd. I know that tiny jumping spiders will often turn to face us. It has been suggested this is to get a better view of us. Do dragonflies do this?

And then, even stranger, while looking right at me, he would start to vibrate his wings. I had never seen anything like this before. I discussed this with several people including Dennis Paulson, author of Dragonflies and Damselflies of the East, the definitive guide to North American odonates, and he said that all he had were the "standard possible explanations". Warming up by vibrating or possibly some way of attracting female attention were suggested. However, there were no



Note the blurred wings; the male is vibrating his wings while facing directly at me. Note also the huge flared club at the end of the abdomen. The Zebra has one of the largest clubs in relation to its body of any dragonfly.

females present at the time (that I could see) and the temperature was in the mid-thirties so it seems more likely to have been the former, if either. Perhaps it was fanning itself on a hot day? None of those I contacted personally or in various online forums had observed this behaviour before and it will likely require further study on my part. I must say that spending time in beautiful, clean, cool water on a hot day is not a bad way to do a little research. For anyone interested in the study of odonates, I highly recommend the following titles:

Jones, C., A. Kingsley, P. Burke, and M. Holder. *The Dragonflies and Damselflies of Algonquin Provincial Park and the Surrounding Area*. The Friends of Algonquin Park, Whitney, Ontario, 2013.

Paulson, D. *Dragonflies and Damselflies of the East*. Princeton University Press, Princeton, New Jersey, 2011.

Lam, E. Damselflies of the Northeast. Biodiversity Books, Forest Hills, New York, 2004.

Mead, K. *Dragonflies of the North Woods*. Kollath + Stensaas Publishing, Duluth, Minnesota, 2009. ▶

