

Dragonflies of the Ottawa-Gatineau Region

Article and photos by Gillian Mastromatteo, unless otherwise noted

Species Profile 24

The Dot-tailed Whiteface (*Leucorrhinia intacta*)

Family: Libellulidae



A male Dot-tailed Whiteface showing the eponymous white face and yellow spot on segment 7 (aka S7). In this individual, the yellow spot has a thin black line running down the centre.

The first dragonfly that ever caught my attention, as far as I can remember, was a Dot-tailed Whiteface that landed on the ground in front of me. I was at the Giroux Ponds in the east end with a friend, scanning the shorebirds and ducks in the pond below me, when the movement drew my eye. I looked down and there it was: a small, pristine, velvety-black dragonfly with a yellow spot about two-thirds down the length of the abdomen. This was in May 2007, several months before the groundbreaking *Field Guide to the Dragonflies and Damselflies of Algonquin Provincial Park and the Surrounding Area* by Colin D. Jones et al. came out, and the only resource I had to identify anything unfamiliar was Google. I didn't see the white face that would have made identification a slam dunk, but when I asked which black dragonfly in Ottawa has a yellow spot on the abdomen, one of the first results to pop up was the Dot-tailed Whiteface, known scientifically as *Leucorrhinia intacta*.

Although this wasn't the "spark" dragonfly that hooked me on the wonderful world of odonates, it is the first one I identified on my own – it got much tougher after that, once I learned there were six different families of dragonflies and over 120 species in the Ottawa-Gatineau area alone! As the Dot-tailed Whiteface wasn't particularly colourful or rare, it took me another year before another member of the skimmer family, the Four-spotted Skimmer, landed in front of me – it completely fascinated me with its brilliant golden colours and ignited my interest in odes. The next time I saw a Dot-tailed Whiteface, I was able to recognize what it was!



Male Dot-tailed Whiteface.
In dragonfly terminology, the "face"
is known as the "frons".

Dragonfly names are usually descriptive – see, for example, the Black-shouldered Spinyleg or Brush-tipped Emerald. However, this wasn't always the case. Prior to the standardization of odonate names by the Dragonfly Society of the Americas in the 1990s or early 2000s, *Leucorrhinia intacta* was known as the "Johnny Whiteface" – at least in Cape Cod! My mentor, Chris Lewis, has always referred to individuals of this species as



Maturing female Dot-tailed Whiteface. All the brown spots in the middle of the abdomen will darken over time. Some females may retain a faint pattern of spots at maturity, while others may not show any. In both cases only the bright yellow spot on S7 will remain.

"Johnnies", and when I asked her about the origins of the name, she told me that back in 1996, when she and her partner, Bob Bracken, were first learning about odonates, there were few references available. They did, however, have a 1991 natural history field guide from Cape Cod in which *L. intacta* is referred to as "Johnny Whiteface," which she thought suited them.

Although this handsome dragonfly is on the smaller side, if you've spent any time watching odes at a pond or wetland in early summer, you have probably seen a Dot-tailed Whiteface. This species is very common and widespread across its range, which extends from coast to coast in a thick band across the middle of North America. As the mature adult is quite distinctive and easy to identify, even using Google, it is probably one of the first dragonfly species beginners see and learn to recognize – particularly since, as it is a skimmer, it spends most of its time perching and is thus easy to spot resting on a boardwalk or a lily pad.

ID Hints

Mature Male

- Small, with an entirely black body except for a yellow dorsal spot on the seventh segment of the abdomen. This spot may have a fine black line in the middle, dividing it in two.
- Clear wings except for a very small dark triangle at the base of each hindwing, and a dark stigma on the leading edge of each wing.
- Brownish-black eyes and a pristine white face below the eyes.

Immatures

- Immature Dot-tailed Whitefaces have elongated yellow spots on top of segments 2 through 6, with a squared-off spot on segment 7 that is wider than it is long (and is usually wider than the one above it).
- Females and immatures also have yellow spots on the sides of segments 4 and 5.
- The eyes of immatures are brown.
- Immatures have a bright, thin yellow line (called the carina) running down the middle of the top of the thorax.
- Some females may show an amber wash at the base of the wings.

Older Females

- While the spots on top of segments 2-6 usually fade with age, females usually do not become as dark as the male. Most females retain a faint pattern of spots on the middle segments of the abdomen, with the spot on S7 being noticeably brighter than the others. A few females may darken as much as the males, provided they live long enough.
- The yellow spots on the sides of the abdomen often remain after the dorsal spots have darkened.

ID Hints - continued



Immature Female Dot-tailed Whiteface.

Note that the bottom edge of the spot on S7 is squared off.



*The thin yellow line, called the carina, on the top of the thorax distinguishes **immature Dot-tailed Whitefaces** from most other common whiteface species in our area.*

ID Hints - continued



The yellow spots on the sides of the first couple of segments of the abdomen are a useful field mark in separating this species from other whitefaces in our area.



A mature female Dot-tailed Whiteface.

ID Hints - continued



About 15% of females have an amber patch at the base of each wing. This patch is larger in the hindwing than the forewing and extends to the nodus at the centre of the wing.

When and Where to Look for Dot-tailed Whitefaces

One of our early-season species, the Dot-tailed Whiteface has a flight season from mid-May to mid-August, with peak abundance occurring during June. This is not a difficult species to find: look for the Dot-tailed Whiteface around well-vegetated and slow-moving or still water bodies, including lakes, ponds, bogs, sloughs and marshes, as well as in the vegetation near slow streams. Adult males often perch on lily pads or in vegetation above the water, and on the ground or on boardwalks. Females and immatures often hunt away from water, so you may see them in meadows and along trails, perching on the broad leaves of shrubs or directly on the ground. They are very common and widespread across Ottawa, less so on the Gatineau side; you can find them at Mud Lake, Andrew Haydon Park, Bruce Pit, Mer Bleue, Stony Swamp, the South March Highlands, Marlborough Forest, stormwater ponds and sewage lagoons. As members of the skimmer family, they are often approachable; if flushed they tend to return to the same area.

Possible Confusables

While the adult male Dot-tailed Whiteface is unique and unlikely to be mistaken for anything else, there are three other common *Leucorrhinia* (whiteface) species in our area that may be mistaken for immature or female Dot-tailed Whitefaces, as they all bear a strong resemblance to one another.

Yellow-form female and immature Hudsonian Whitefaces are the most similar dragonflies to the immature or female Dot-tailed Whiteface. They have wide yellow spots running down the length of the abdomen, and unlike the Dot-tailed Whiteface, the final spot on S7 is not wider than the spot on S6, and is pointed rather than squared off. Some immature Hudsonian Whitefaces may have a pale carina, but those in our area also have pale yellow veins within these black triangular spots at the base of the hindwings, something that no other whiteface in our area has.



*The yellow veins within the black basal spots on the hindwing are clearly visible on most **Hudsonian Whitefaces**. Note also that the final abdominal spot is triangular in shape and about the same width as the spot on S6.*

While immature male Belted Whitefaces have a solid black abdomen, heteromorph females have thin yellow streaks terminating in a yellow triangle on S7. The top of the thorax is black, lacking the bright yellow carina of the Dot-tailed Whiteface. They are more likely to be confused with immature Frosted Whitefaces than Dot-tailed Whitefaces.

Possible Confusables - continued



This immature female Belted Whiteface has much narrower yellow spots on segments 4-6, with a wider one on S7.

Immature Frosted Whitefaces also have fine yellow streaks running down the abdomen from S4 to S6, occasionally to S7. The side of the thorax is plainer, lacking the heavy black markings of other whitefaces.

The top of the thorax is black, without the bright yellow carina of the Dot-tailed Whiteface.

Immature Frosted Whiteface: the yellow abdominal spots are short and narrow, and normally extend only to S6.

However, everything in nature is variable, and some individuals cannot be identified unless examined in the hand.



References

- Dunkle, Sidney W. 2000. *Dragonflies through Binoculars: A field guide to the dragonflies of North America*. Oxford University Press, New York, NY, 266 pp.
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