

BLACK-LIPPED ANTLION FROM THE GREAT SAND HILLS OF SASKATCHEWAN: A NEW SPECIES FOR CANADA

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On a recent summer adventure with my youngest children, Kael and Calliopee, we visited the awe-inspiring entomological oasis, the Great Sand Hills of Saskatchewan (Figure 1). It is a mandatory stop anytime I

travel through the area.

During our August 2022 adventure, I had an opportunity to conduct some sampling for moths for the Lepidoptera of Saskatchewan project that myself and a few other enthusiasts are working on. Though my primary interest is moths, I'm always fascinated with everything that walks and crawls, so I snapped a photo

of an adult antlion from one of my traps (Figure 2). Not thinking much of it, but always curious, I decided to upload the photo to iNaturalist. To my amazement, one of the world experts on the antlion family Myrmeliontidae, Leon Tavares (a PHD student in Brazil) identified it as the Black-lipped Antlion (*Scotoleon nigrilabris*) with the comment "It's incredible that this species can really reach this far north, amazing."

Being really curious, my colleague Greg Pohl and I reached out to Canadian expert David Blades of the Royal British Columbia Museum, who recently published the *Neuroptera of Canada* in 2019. Though he agreed with the identification, he thought we'd better check with another expert, John D. Oswald with the University of Texas. John asked for a few more photos, so luckily I had the specimen and was able to take shots of the head and of the labrum (the upper lip). He wanted to see if the labrum was black, because as the species name suggests, this is a key feature that distinguishes it from other similar antlions. Sure enough it was black and thus the specimen was confirmed as a Black-lipped Antlion, a new species for Canada.

Finding this new species further emphasizes how little we know about Canadian fauna and how many new discoveries are still out there. In fact, online tools and phone apps like iNaturalist are proving their weight in gold as they connect folks like myself, and others, with global experts who can help identify new and interesting finds.

To learn more about this specimen, or the Lepidoptera of Saskatchewan project, visit the following webpages:

<https://www.inaturalist.org/observations/131972222>

<https://www.inaturalist.org/projects/lepidoptera-of-saskatchewan>


1. Blades DCA (2019) *Neuroptera of Canada*. In: Langor DW, Sheffield CS (Eds) *The Biota of Canada – A Biodiversity Assessment. Part 1: The Terrestrial Arthropods*. ZooKeys 819: 387-392. <https://doi.org/10.3897/zookeys.819.26683> 



FIGURE 1. Kael and Calliopee Macaulay exploring the Great Sandhills of Saskatchewan. Photo credit: Doug Macaulay.



FIGURE 2. Black-lipped Antlion (*Scotoleon nigrilabris*). Photo credit: Doug Macaulay.