

What is the fencing for along Highway 60?



Anyone driving along the Park's Highway 60 corridor will notice the black drift-fencing that has been temporarily installed in various places by both Park staff and construction contractors working on the highway. It is intended to keep Snapping and Painted Turtles off of the roadway in an attempt to reduce their mortality. These turtles prefer soft ditches and banks of roads for nesting.



Painted Turtle: Note the brilliant colours!



Snapping Turtle: Be careful to avoid its jaws as it will feel threatened and may snap!



Be careful with Snapping Turtles — you should not try to pick one up!
Avoid its jaws as it will feel threatened and may snap!
And, always remember, watch out for other traffic!

Help Protect Us!

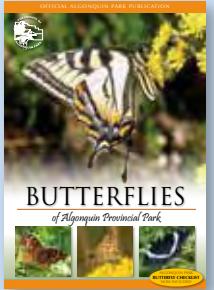
If you see a turtle on the road, slow down!
If possible, you may want to try to assist the turtle by moving it in the direction it was heading.

Publications

The Best of The Raven Volume 2

This is the second book in this series which includes 80 articles reprinted from the popular and informative Algonquin Provincial Park's Natural and Human History Newsletter, *The Raven*, from 1993 to 2000.

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algonquinpark.on.ca

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BEING BUGGED?

This can be a challenging time to be outdoors with both blackflies and mosquitoes being present. Here are some tips to help you cope:

- **Wear light-coloured clothing** (white, tan, khaki, etc.)—blackflies are attracted to dark colours.
- **Cover up.** Wear long-sleeved shirts with cuffs and collars that can be buttoned tight, as well as long pants with elastic cuffs (or tuck your pants into your socks).
- **Use insect repellent** when outdoors—something with DEET works best. The concentration of DEET should be no greater than 30% for adults and no greater than 10% for children.
- If you cannot, or prefer not to, use insect repellent, try some type of netting (**a bug hat or bug jacket**), available at most outdoor stores. When camping, you can try a bug tarp shelter to avoid biting insects.



Blackfly (top) and mosquito (bottom).



The Visitor Centre offers free WiFi internet access
...and while there, don't forget to check out The Friends of Algonquin Park Bookstore and Nature Shop, or the Sunday Creek Café.

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Algonquin

The **Raven**
A Natural and Cultural History Digest

Vol. 57, No. 2 • July 1, 2016

Tiger Tales

by David LeGros

While walking the shores of lakes or hiking a trail, you may notice insects flying away very quickly but staying close to the ground. These really do look like house flies, and we usually don't give them much thought. If we watch them, we might observe them flying to where the vegetation meets the edge of the path. If you are really observant or watching through binoculars, you might even see that the insect in question has flown in an upside down "J" pattern, and has hooked back around to look at you! Surely, this is no house fly – it's a tiger!

Bronzed Tiger Beetle



Species	May	June	July	August	September
Twelve-spotted Tiger Beetle	●	●		●	●
Common Claybank Tiger Beetle	●	●		●	●
Boreal Long-lipped Tiger Beetle	●			●	
Punctured Tiger Beetle			●	●	
Cow Path Tiger Beetle	●				●
Bronzed Tiger Beetle	●	●		●	●
Festive Tiger Beetle	●			●	●
Six-spotted Tiger Beetle	●	●	●		
Oblique-lined Tiger Beetle	●				●
Hairy-necked Tiger Beetle	●	●		●	●
Big Sand Tiger Beetle		●	●	●	

digest the prey before it is even swallowed. Apart from being amazing predators, they are also strikingly patterned, having dark elytra (the wing covers on the back) and white or ivory coloured markings unique to each species. The combination of their ferocious appetites and appearance, and beautiful patterns is how they got the name Tiger Beetle.



Festive Tiger Beetles usually have a distinctive triangular shaped mark on the side of the body (middle marking).

While few visitors to Algonquin may notice Tiger Beetles, most of us have surely visited the places where they live. The narrow, sandy beaches that we enjoy are home to many Tiger Beetles, as are small forest paths and rock barrens. Open, sunny habitats are needed by these highly active and visual predators. Insects are cold-blooded (ectothermic) which means their metabolism is regulated by the temperature of the environment around them; cold temperatures would mean a slow metabolism and warm, fast. The temperatures which Tiger Beetles tolerate are quite remarkable – they like it hot! Tiger Beetles are so active and fast-moving, they prefer to

maintain high body temperatures, nearing their limits, up to 39°C (human body temperature is 37°C). Tiger Beetles have a few interesting body postures they use to help warm up on cool mornings, such as crouching down so their abdomen is in direct contact with the warm sand. As the ground warms and a layer of warm air rises just above the surface of the sand, they stretch out their legs and raise their body, in a position called stilting. If it gets too warm, they must try other positions to cool off. The beetle may continue stilting, but orient itself towards the sun, minimizing the portion of its body exposed to it, known as sunfacing. If temperatures get hotter still, the beetle may head for damp soil, some shade under plants or even dig a shallow burrow to escape the heat.



Six-spotted Tiger Beetle with prey.

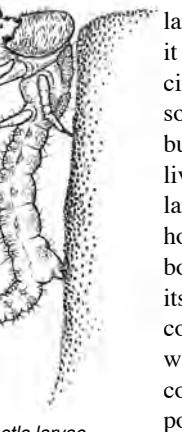
Algonquin Park is home to many species of Tiger Beetles, 11 in fact have been recorded from the Park, and 15 species from all of Ontario. While many of these

species use similar habitats, insects have ways of avoiding direct competition with each other. Many have seasonal activity, meaning they emerge at particular times of year, and sometimes are present in that life stage for only a few weeks. Tiger Beetles are active during the warm season, but depending on the species we do see some patterns emerge. Many species are active as adults at the height of summer only and over-winter as larvae in a burrow. The remainder are active both spring and fall, but with different generations of larvae reaching adulthood in either season (see table). Those spring and fall active species usually over-winter as adults or larvae and many species require a year, and sometimes two or more years, to complete development.



Oblique-lined Tiger Beetles mating.

As adults, humans can look back and compare how different they are to how they were as kids. Our bodies have grown considerably, and maybe their personalities and outlook on life have changed quite a bit too. In comparison to the simple growth and maturation of a human, the life cycle of the Tiger Beetle is rather fascinating. As with many other insects, the lifestyle of the larvae is often quite different than the adults and the transformation rather dramatic. Larval Tiger Beetles begin their lives not as fast-paced chasers, but as ambush predators, tucked away in the soil. Instead of being big-eyed and long-legged, larval Tiger Beetles have an elongated, grub-like body, short legs, and a massive head fully equipped with heavy jaws. The head of the



Tiger Beetle larva

larvae is particularly interesting; it is hardened, flat and nearly circular. All these features do sound like a curious assortment, but they are amazingly adapted to living in a hole. The Tiger Beetle larva makes a narrow, vertical hole in the soil, and wedges its body against the sides, while its enormous, round, flat head covers the top of the hole flush with the soil, like a man hole cover for a sewer. From this position, the larva lies in wait for an unsuspecting invertebrate

to cross its path, then WHAM! The powerful jaws fling back to grasp the prey, which is quickly consumed.

If you are interested in observing Tiger Beetles in the wild, we have a few tips for you. Firstly, find a sunny, open area such as a beach, sandy trail, or even a rock face. Next, try to get there early in the day – before it gets too hot, the beetles will be a bit sluggish (well, sluggish for a Tiger Beetle!). As you search for



The sandy shores of an Algonquin river – a fine spot to enjoy a picnic, for both humans and Tiger Beetles alike.

the beetles, you will inevitably flush one from its resting spot. Watch for the characteristic “J” flight, and pay attention to where it lands. Stay back; you don’t want it to fly off again. Now, raise your binoculars and have a look at this tiny tiger on the edge of the path! The next time you are walking the shore of a lake and happen to see an insect quickly take off, follow its path to watch it turn to look at you – it might just be a tiger!



Cow Path Tiger Beetle.

WHERE HAVE THEY BEEN?



PATRICK MOLDAWAN

A note from the Algonquin Turtle Researchers

Matt Keevil, PhD Candidate, Laurentian University

The close of 2015 marked the successful completion of the 44th field season of the long-term turtle life history project at the Algonquin Wildlife Research Station (WRS). We collected 866 observations of 496 individual Painted Turtles and 196 observations of 141 individual Snapping Turtles. That’s a lot of turtles, but some observations stand out. We headed up the North Madawaska River to the heart of the Wildlife Research Area to survey where the river widens into a boggy expanse called Amyoa Swamp. This remote area has not been searched for turtles since the late 1980s. Early telemetry work at that time had revealed that many female Snapping Turtles travelled several kilometres from Amyoa every spring to nest on the Sasajewun Dam at the WRS. Amazingly, we found K14.

Although she nests annually at the dam (and has since 1981) we didn’t know where she spent her time during the rest of the year. On our last day of searching, we captured

R13 a male Snapping Turtle that was last observed in 1988! Fortunately he still had his old tag! R13’s 27-year hiatus from the study is hardly surprising, given his remote haunt. More surprising was Y16, another male who was captured at the WRS (right under our noses!) for the first time in 17 years. Y16 has been in the study since 1976, so perhaps he was due for a sabbatical.

Serendipity often comes into play in research, and that was the case for the final example of this year’s theme of “haven’t seen you in a while!”. While presenting at the 2015 Meet the Researchers event, we were fortunate to meet a park visitor who had taken a photograph of a Snapping Turtle resting in the shallows of Lake of Two Rivers. Her tag was clearly visible and revealed her identity as D19 — who was captured only once in 1990, when she nested along Highway 60. We’re glad she found a safer place to nest; we only wish we knew where that was!