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Thank you

We're off Fish Oil...

The Buzz About Sand Wasps



The abdominal bands on many sand wasp species have a slightly greenish tint.

For the second consecutive summer there is a special “attraction” at the play structure in Williamston’s McCormick Park, situated on the south bank of the Red Cedar. It appears dangerous at first, but offers a terrific opportunity for kids and adults alike to marvel at one more of the countless ways that, as Ian Malcolm in Jurassic Park says, “life finds a way.”

A few times each summer we take the kids in our small nature-oriented day camp on a field trip to the park to eat lunch, watch and identify turtles on the river through our spotting scope, catch insects and crayfish in nets along the bank, and, of course let them enjoy the play structure.

On a visit last summer we encountered a busy aggregation of wasps in the two adjacent sand pits just inside the entrance to the structure. While children of all ages were active throughout the structure, everyone steered clear of the swirling “bees” over the sand. A paper sign had been stapled to a post in front of it warning users about them and announcing that an exterminator would soon be hired to eliminate the problem.

I immediately recognized them as sand wasps, closely-related to familiarly testy hornets and paper wasps, but not aggressive toward humans in the least. Sand wasps are considered “solitary,” meaning they do not live within a colony or hive with queens, drones and a host of expendable, highly defensive workers. Each female is on her own. She is solely responsible in providing for her offspring. Therefore, she cannot afford to be aggressive with a large mammal that enters her nesting area. If she gets killed in defense of her nest, she fails in her contribution to the next generation.

I entered the pit surrounded by at least fifty zigzagging sand wasps, and encouraged my students to join me. We observed how they seemed to completely ignore us but merely paid attention to the other wasps around them in brief bursts of territoriality. Males, a bit smaller than the females, chased after them in order to mate. Females all around us were digging burrows in the sand. I explained that individual females would then fly off, away from the other wasps and far beyond the play structure to find a small insect, which would be stung and paralyzed, then carried back to the sand pit, stuffed down the burrow, and an egg then laid on it. The sand wasp larva would soon hatch and begin to devour the insect under the sand.

I encouraged the kids to get their eyes closer to see how the little wasps use their front legs to toss the sand grains under their bodies and behind them exactly like a dog digs. We caught one in a net and carefully steered it into a jar so we could observe it even closer.



Nature Discovery camp kids observe the sand wasp behavior closely and fearlessly.

The following weekend I saw a column in *The Williamston Enterprise* by mayor, Tammy Gilroy, assuring residents with children at the park that the city was aware of the “bee problem” in the sand pits and that they were consulting with an exterminator to deal with it. I called her to explain that this wasn’t necessary for the above reasons. To my knowledge an exterminator was never contracted.

This summer the next generation of sand wasps are back. Groups of our camp kids and I have been there to observe them the past three Tuesdays. On the first visit we stepped into the midst of the buzzy activity while other kids, parents and grandparents tentatively watched. As we walked among the wasps I explained their dispositions to the adults. Can

they sting? Yes. Will they sting? Absolutely not, unless you physically grab one or step on it with a bare foot. They were fascinated by the information as they watched their children of various ages joining our camp kids, and indeed, stepping among the swirling wasps completely unharmed, up-close and without fear. One little girl started digging with a sand shovel and seemed as oblivious to the sand wasps buzzing around as they were toward her.

We were excited to see another much larger solitary wasp show up among the smaller ones – a two-inch-long cicada killer – Michigan’s largest wasp! Formidable and impressive but just as docile toward people as the sand wasps.

Last Tuesday we arrived on the heels of a late-morning rain. The sand in the pit was wet. Not a single wasp flew over it in the cool, overcast air. However, within an hour the sky had brightened, the temperature rose, the sand began to dry, and the wasp activity returned.

We immediately found a wasp digging a hole next to which lay an unconscious stink bug nymph. Shortly thereafter another wasp flew into the airspace over the pit with yet another stink bug nymph. The students gathered on hands and knees and marveled at how quickly and efficiently it stuffed the nymph down its burrow. It soon emerged and began to flick sand grains at the entrance. In less than a minute it was gone, leaving no outward sign where the burrow existed. Over the course of the following hour we saw still other wasps carrying, then burying, stink bug nymphs.



This alien Brown Marmorated Stink Bug nymph was incapacitated by way of a sand wasp sting.

As we walked around the park we spotted an occasional sand wasp buzzing in and out among the foliage, apparently hunting for them. We found several nymphs on our own, too, clinging to willow and dogwood leaves. I picked one up, lightly pinched it and smelled... Yup. I let the kids take a whiff. The odor confirmed that these were the nymphs of the alien, invasive Brown Marmorated Stink Bug that has become an increasing nuisance around area gardens and houses the past



Here is the real insect threat to play structure users. The many nooks and crannies are a magnet to paper wasps that won't hesitate to sting if disturbed.

few years. We had just discovered still another reason to tolerate the sand wasps within the play structure! From our observation they appeared to be preying almost exclusively on the nymphs of this insect pest.

In a cursory walk around the play structure I did find an active *paper wasp* nest under one of the landings only two feet away from a slide. With all the nooks and crannies high and low perfect for them to begin building – and aggressively defending against disturbance – this is where adults caring for the safety of the children should focus eradication efforts. I'd suggest that weekly throughout the summer a designated adult carefully walk through the structure peering under railings, hidden ceilings and overhangs for start-up paper wasp nests in order to keep playing children safe.

As far as the sand wasps go, how about a different sign than the one stapled to the post last summer? One that - like the permanent one depicting viewable wildlife along the river walkway - shows color photos and explains the docile nature, life history and highly-observable, interesting, and *helpful* behavior of these needlessly-feared insects.

-Jim McGrath

Around the State in August

- ❖ ***Friday, August 10: 7:30pm. MI Turtles Presentation; Hartwick Pines SP, Grayling.***
- ❖ ***Saturday, August 11: 1:30pm. MI Forest Herps; Presentation; Hartwick Pines SP, Grayling.***
- ❖ ***Thursday, August 16: 10:30am. MI Wildlife Presentation; Robert Parks Library, Oscoda.***
- ❖ ***2pm. MI Wildlife Presentation, AuGres Library.***
- ❖ ***Saturday, August 18: 10:30am. Caterpillars Presentation; Huron Co Nature Center***
- ❖ ***Saturday, September 1: 2-5pm & 7pm. MI Reptiles & Amphibians Exhibit & Presentation; Ludington SP.***



Coffee Break *Friday, August 17*

Carol is scheduled to appear on Friday, August 17 at 9:45am, discussing giant swallowtails and more. The show airs weekdays from 9 to 10am on 89.7 FM. Listen live online at lcc.edu/radio/onair/ or watch it live (or later in the day at 6pm) online at lcc.edu/tv/watch. We will post a reminder on Facebook prior to the evening airing.



*Giant
Swallowtails
Up Close
Sunday, August 19*

Doors open from 1 to 5pm. Admission \$5/person.

What is the largest butterfly in Michigan and on the continent? Not the Monarch. The superlative belongs to the impressive, but inexplicably, little-known Giant Swallowtail! At 2pm sit in on the presentation, *Giant Swallowtails Up Close*. Beautiful Powerpoint images and live specimens are used to familiarize participants with the life history, larval food plants and behavior of this lepidopteran beauty that is most common in our area throughout the month of August. See live caterpillars in various stages of growth, learn how to identify their two most common larval food plants – hop-tree and prickly-ash, learn where to find them growing, and receive tips on how to rear the caterpillars in captivity. At the presentation's conclusion participants will step outside (weather-permitting) to view various butterflies, and, hopefully, some giant swallowtails, nectaring on our thistles and butterfly bushes. We will also inspect low branches and leaves of some hop-trees on the property for eggs and larvae.

As always, before, during or after the presentation visit our Michigan reptiles & amphibians zoo. Hold a rat snake, help feed turtles in the outside pools, catch insects to feed frogs, and more. Check out large munching caterpillars of a number of giant silk moths and butterflies. Our knowledgeable staff can help visitors of any age make the most of your visit. Photo ops, galore!



A young giant swallowtail larva mimics a wet bird dropping on top of a leaf

Thank you!

To JOHN McCOY for his generous donation to Huron County Nature Center specifically to help fund Nature Discovery's programs there this summer, and to the DAVID MEYER FAMILY for their generous donation to Nature Discovery.

***Thank you, as well, to the following teen volunteers who have been assisting us this summer with animal care, maintenance, day camps and other aspects of our nature center operations:
KATHERINE ALSTROM, ELISABETH BAUMANN and JULIA CHENAULT.***

We're Off Fish Oil Supplements! Here's Why...

Our parents taught us never to trust a habitual liar. However, we believe in listening to the conclusions of serious experts in their fields of specialty; then, when necessary, taking the knowledge gained to heart and adjusting our behavior to at least personally begin to rectify the negative influence of our past habits. Broad social movements cannot begin without individual ones.

Here are a couple of links to ocean-related broadcasts recently aired on NPR's program, *Fresh Air*, that we recommend...



Humpback whales feed at the Stellawagon Bank Marine Sanctuary near Provincetown, MA, in July, 2014. – J. Scott Applewhite/AP

Author of *The Omega Principle*, Paul Greenberg, says the harvesting of tiny fish for omega-3 supplements is having a ripple effect, leading to less healthy and bountiful oceans.

<https://www.npr.org/2018/07/14/628808587/fresh-air-weekend-trump-and-fox-news-the-science-behind-fish-oil-supplements>

The substance of this interview with Nick Pyenson, author of *Spying on Whales*, gives us awe-inspiring reasons to embrace the stewardship of our living and life-giving oceans.

<https://www.npr.org/2018/08/01/634456181/scientists-are-spying-on-whales-to-learn-how-they-eat-talk-and-walked>

-JM

The next generation would be justified in looking back at us and asking, "What were you thinking? Couldn't you hear what the scientists were saying? Couldn't you hear what Mother Nature was screaming at you?" -Al Gore

**Union of
Concerned Scientists**
Science for a healthy planet and safer world

350.org

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