



Letters to Nature Kids

September, 2023 ➦ Number 12

Dragonflies at Sheri Capehart Nature Preserve

Dear Nature Kids,

All through a long, very hot and dry summer, the dragonflies kept flying. They soared and flitted around the ponds on afternoons that would make any of us sick from the heat. The high temperature in Arlington reached 110°F on a few days, and nearly that hot on others. But the dragonflies never disappeared.

You've seen dragonflies, right? Even if you didn't watch them for long, you saw a long insect with four paddle-shaped wings that glisten in the sunlight. They perch on low branches or tall grasses. Some of them hunt that way, waiting to ambush a small insect. A lot of them hunt while flying, and their excellent eyesight and amazing flying skills make them very successful predators. If you were a mosquito or some other flying insect and a dragonfly targeted you, there's at least a 90% chance that it would get you.

Lucky for us, dragonflies don't hurt people. They have no sting and no venom. If you caught one and put its mouth to your skin, it would probably bite to try to get away. They have impressive jaws if you are the size of a flying insect, but humans would only get a pinch from those jaws.

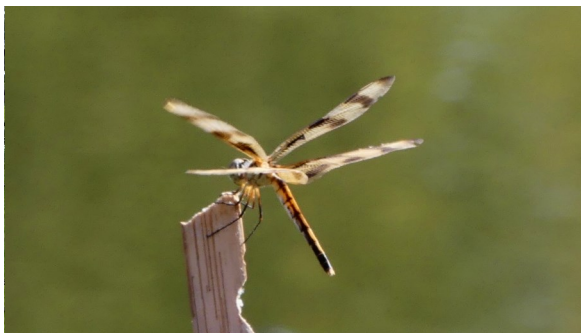
Go back 275 million years ago (a period of time before the dinosaurs) and the situation would be different. The largest insect that we know of was a dragonfly with a wingspan of nearly 30 inches. I'm guessing that its bite would have been bad – but we would still have been too big to eat, so I expect that huge dragonfly would have left us alone.

Now back to the present. How did the dragonflies at Sheri Capehart Nature Preserve survive the heat? It turns out they kind of like some heat. Being "cold-blooded," they do things like basking in morning sunshine to warm up. But if it's too hot, they position their bodies so that they don't absorb so much of the sun's heat. They get in the "obelisk" position with head down and that long, skinny abdomen pointing upward so that the sun is hitting less of their bodies.



A "Widow Skimmer" dragonfly at the preserve

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A "Halloween pennant" dragonfly



The north pond on June 12th, with lots of water primrose

When you walk around the preserve, it's not at all unusual to see a dragonfly perched on a tall grass stalk or flying around. They don't have to be at a pond, but ponds are great places to find things to eat. Also, dragonflies breed by laying eggs in water, making ponds or streams very important for them. What hatches from the egg is not the dragonfly that we would recognize, with wings and big eyes. Instead, the egg hatches into a "nymph" that lives in the water. The nymph is a fearsome predator of small things in the pond or stream. Eventually, when it is ready, it sheds its skin for the last time and climbs above the water as an adult dragonfly.

There are four ponds at the preserve, including a very big one, a very small one, and two that are "in-between" sized. They started the summer with plenty of water and plants growing tall and green. Except for a plant called "water primrose" that grows in the mud at the water's edge. Instead of growing tall, it sends stems and new leaves all around it, making a green mat with pretty yellow flowers.

As the days grew hotter and no rain fell, the ponds started to shrink. The smallest one became an empty shallow bowl with dry, cracked mud a while back. With each new day, the bright sun heated the water and the ground, making water evaporate. The ground became dry and cracked, and there was less water in the ponds. But as long as there was some water, dragonflies were there, hovering and then suddenly diving or darting somewhere. They chased food, they chased mates, and kept laying eggs in the ponds that still had water in them.



An "eastern pondhawk" dragonfly

The same pond on September 5th



A "common whitetail" dragonfly

In a few days it will be autumn, and some dragonflies are flying south in a migration that will help them avoid winter's cold. Others will stick around – chances are you can see a few dragonflies all the way through winter (on warmer days). That makes any day a good day to look for dragonflies and watch their amazing flight.

They come in a variety of colors and some have handsome black-and-white patterns. You might need to get a field guide or use iNaturalist to learn the different kinds. To make it even more tricky, young ones may have different colors and in several species the males and females look quite different. That just means there are more colors and patterns to see. I hope you can get out there and see some!

For more information, you might have a look at the article I wrote for Green Source DFW called "Mosquito-eating Dragonflies Seen Hotdogging at Local Pond" (<https://www.greensourcedfw.org/articles/mosquito-eating-dragonflies-hotdog-it-local-ponds>). Be safe and happy, and do some exploring this autumn!

✍ Michael



A "roseate skimmer" from south Texas

© 2023 by Michael Smith. **Letters to Nature Kids** is really a letter to anyone with a connection to nature, regardless of age. I know lots of adults who haven't lost touch with that child that they used to be—and Letters to Nature Kids is for them, too. You can download it from <https://MSmith-info.page>. It is free, but your contribution in any amount is gratefully accepted (via www.PayPal.me/MSmithLPA). I welcome questions, suggestions and feedback. Please contact me at livesinnature@outlook.com.