January 2022 🌳 No. 3



The creek on January 18th

Dear Nature Kids,

My friend Elijah and I were looking forward to this day, January 18, when it would be warm enough for us to visit the creek. We have been going to the creek since he was six, and now he is almost eight. And it was warm today! The National Weather Service said that the temperature in Fort Worth reached 75° and the sun was out. I picked him up from school and we headed straight for the creek.

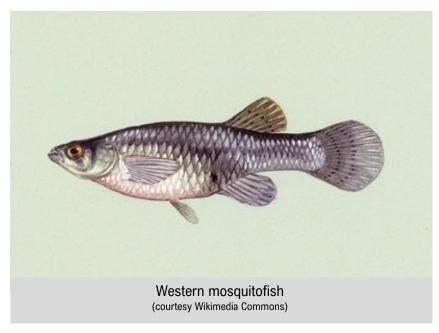
We have found all kinds of things at this creek. Elijah remembers some of the fish, cricket frogs, a turtle we found in August of 2020, and the fossils of sea creatures called "ammonites." Today, we wanted to find a small kind of fish called the western mosquitofish and maybe see one of those ammonites.

You might wonder if the fish got that name because they are so tiny that they're no bigger than a mosquito. Nope, they are definitely bigger than that, and are named because they eat mosquitoes. A mosquito starts out in life as



The turtle we found in August 2020

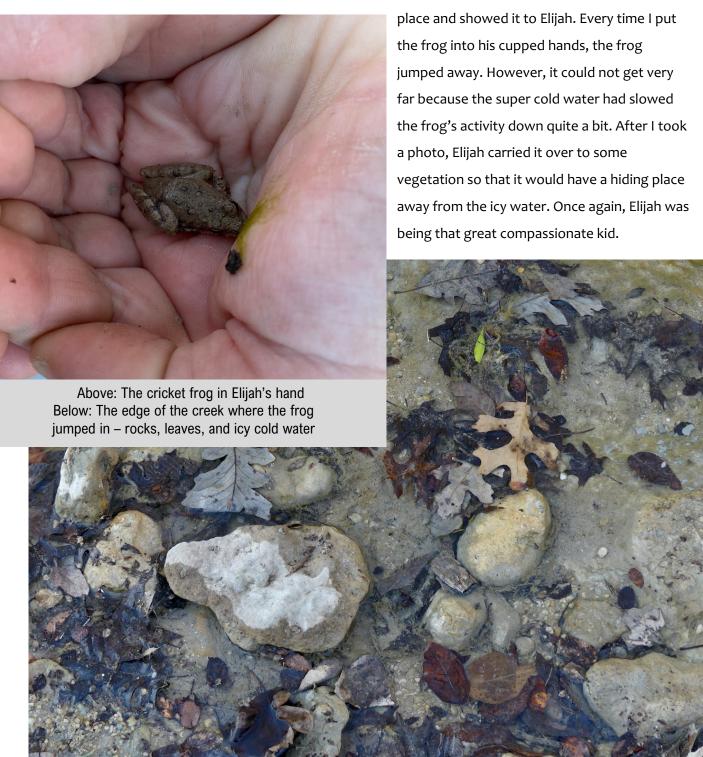
a little wiggling larva that lives in water, and that's what this fish eats. (They eat other things, too, not just mosquito larvae.) The mosquitofish is designed to eat small things at the surface of the water – if you look at one, you'll see that its mouth is near the top of its head. As the fish swims just beneath the surface of a creek or pond, its mouth is at the perfect place to eat something right where the water meets the air.



On our drive, Elijah thought of several strategies for catching fish. He understood that when a fish is caught in a net and pulled out into the air, it cannot breathe. He wanted to catch one without hurting it. That compassion for everything around him, people and animals, is one of the wonderful things about Elijah. And so he thought perhaps we could put the container in the water and scare the fish into it, or maybe pull the dip net toward the container and trap the fish that way.

We didn't try those strategies, because being pulled out of the water for only a few moments does not hurt the fish. It's kind of like if you or I dive into the water and hold our breath for a short time.

The creek had water flowing in it but the water was not deep where we were. That was a good thing because the water was very cold. We walked along the white limestone rocks of the creek bottom and waded into the water that flowed downstream. At first it felt very cold and then our feet became more and more numb. Somewhere along the way I saw a cricket frog jump into the water, and I dug it out of its hiding





How the creek looks in the spring

Soon I was netting a couple of small mosquitofish out of the creek, and along with them, a tiny rounded thing about the size of a pea. Looking closely, I could see the two sides of a tiny clam sealed shut. There are many freshwater clams living in Texas waters, and as adults they are much bigger than this little one in my net. They help filter the water and make it clearer.



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Spiders were also on our list of things we might find, even though it's the middle of winter. On a warm day like this, a spider might be moving around. Sure enough, near the edge of the creek I spotted a little wolf spider prowling around the rocks. Wolf spiders usually stay on the ground, just like this one was today. People always wonder if a spider could hurt us, but there was no reason for us to worry about this one. The rule to follow about anything we find is: watch it,



The wolf spider

photograph it, but don't pick it up unless you have the right knowledge and experience.



We were doing very well on our winter walk at the creek, seeing a cricket frog, mosquitofish, a little mussel, and a spider. I remembered that we also wanted to find a fossil ammonite. Just about that time Elijah said, "uh, Michael," giving me a look as if to say, "you missed it!" He had picked up a fossilized part of an ammonite shell. It was right there in front of me!

Ammonites were a little like a prehistoric octopus living in a big coiled shell. The fossils found around here have a spiral shell that is ribbed. Often the fossil that we find is just a part of the shell, but we can tell what it is because of those wavy ribs. If you look up ammonites (maybe here:

https://www.amnh.org/exhibitions/permanent/grand-gallery/ammonite) you'll find that they swam in the ancient seas even before the dinosaurs lived. They disappeared at about the same time as the dinosaurs.



Despite the numb, cold feet, we had a great time on this walk. Elijah already knows so much about the natural world, and I'll bet he keeps on "leveling up" until he is an expert. I hope you get to do some winter exploring, too – but be careful around ponds and creeks in winter. Never do it by yourself and be careful not to fall in.

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