

# In My Backyard: Hellgrammites and Dobsonflies

By C. W. (Bill) Smith

When I was a boy at Marathon and the weather warmed up in February we began making almost weekly fishing trips to the Rio Grande at Lajitas and occasionally to the mouth of the Maravillas where my brother-in-law and his parents ranched, and down into Black Gap, all through the spring, summer and fall. They were some of the best times of my life, and many of those trips stand out in my memory.

There were still some big catfish in the river then, as well as monster gar and snapping turtles. We even saw beaver tracks along the banks, an animal I didn't think wandered this far south. We set up camp on a high spot near the river and set out rods and reels, cane poles and trotlines. We would even launch our homemade boat and throw out lines attached to bottles to float downriver, collecting them some miles away to harvest the fish.

My dad regularly made stink bait from the most awful ingredients and buried it in the backyard to ripen, some of his best fishing concoctions. My brother and I would dig it up frequently to gag at the smell. It was great! We also had an open sewer ditch that ran along the south side of US 90 across from our house on Main Street where we could dig earthworms, and we also seined minnows for live bait when we got to the river.

But the topic of this article is the one thing I refused to handle, after only one time of trying to catch them...hellgrammites. This aptly named monstrosity scared the life out of me. My only encounter was when we went to Lajitas and stopped at Rex Ivy's store for supplies. Lajitas sits at a shallow crossing into Mexico and we could wade out into very shallow, clear water, only inches deep, to turn over rocks and collect the hellgrammites. Some of the best catfish bait you could use, along with stink bait and kidney and liver meat, or so my dad thought.

I had never even seen a hellgrammite and my dad goaded me into the water to help collect them, my first time. I thought, "Sure, Dad, this will be fun." Was I ever wrong! The first rock I turned over there was a huge hellgrammite, no mistaking it. When I reached down into the clear water to grab it, he reached up and grabbed my finger and pinched the hell out of it. I almost had a heart attack!

From that moment on, I never wanted to touch another one, not even see one. And I didn't!

The hellgrammite is the larval form of a very serious fly called the Dobsonfly. We don't see Dobsonflies at Sanderson because they need moving water to lay their eggs and hatch their babies and moving water at Sanderson is non-existent.

But along the Rio Grande and the Pecos, as well as spring-fed streams that pour into those waterways, Dobsonflies and their Hell-spawned hellgrammites are quite common.

There are 9 different types or genera of Dobsonflies found in the Americas, South Africa and Asia. They are surpassed in wingspan only by certain butterflies and are the largest flies in the world. In the US, they approach 7 inches in wingspan, but a species in China is reported to have been over 8 inches in wingspan. This is a very big fly.



The photo with this article shows an adult Dobsonfly found in South Brewster County and appeared on Facebook not long ago. The jaws on the front are very pronounced in males, a distinguishing sexual characteristic, but too large to inflict much of a bite or pinch. The females, however, have shorter jaws and can pinch the heck out of you, as can the larvae, the hellgrammite. For the male, size matters, and the bigger the "pinchers" the more attractive to the female. Males also have extremely long antennae, sometimes longer than the 1.5-inch jaws in a fully mature specimen.



Dobsonflies, like most insects, breathe through holes in their abdomen called spiracles. The hellgrammites have spiracles as well, but also have gill structures to allow them to breathe under water. So, they can survive on land as well as water, but prefer to stay in water until they mature into adults.

Hellgrammites feed usually at night along areas of the river or stream known as riffles, where the water is shallow, turbulent and running quickly. This stirs up the bottom and brings prey within ambushing distance to the hellgrammite. They usually feed on the larvae of aquatically-spawned insects, such as midges, stoneflies, caddisflies or mayflies. The larvae can live up to five years before they pupate and become adults. As adults, they only live about a week, feeding occasionally on nectar, but sometimes not eating at all.

The male and female hook up after a very complicated mating ritual and the act of life is completed. The female lays her eggs along rocky walls of streams, up to one thousand eggs in a clutch, then covers the egg mass with a chalky covering for protection. After one or two weeks, the eggs hatch and the larvae drop into the water or seek it out. When they are ready to pupate, they leave the water and construct a chamber in which metamorphosis takes place after about a week. They emerge as adults and begin the search for a mate.

We don't see adult Dobsonflies very often because of their short adult life span and the fact that they only come out at night. Most folks see them on the wall by the porch light, which seems to attract most insects at night. Sanderson folks don't see them very often because there is no running water around here. But since hellgrammites are the stuff of nightmares, that is perfectly fine with me!

And, what's in your backyard?