

## Nature Notes

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Here in coastal Texas, if you step outside into your garden or flower bed, you may find an unusual looking critter known as an assassin bug. When I visited the Gulf Coast Bird Observatory's native plant nursery a few weeks ago, I found something that, to me, looked like an unusual stink bug. Turns out, it wasn't a stink bug at all, but a different bug that I had never seen or noticed before. This bug is called a wheel bug.

I was quite surprised to learn that the wheel bug is a type of assassin bug. Assassin bugs, as their name implies, are predatory insects. They are members of the family Reduviidae, which also includes the ambush and thread-legged bugs. Many of us might be familiar with assassin bugs for noticing their preference for eating crop insects. Because of their keen interest in eating other critters, many gardeners find them beneficial to their flower beds.

There are at least 160 different species of assassin bugs in North America. The wheel bug is the largest of them all and are just over an inch long. They are easily identified by their round, crescent-like "wheel" on the top of their thorax or middle section. When you look closely, you will also notice their long mouthparts, which they use for attacking and consuming their prey.

Like other assassin bugs, the wheel bug feeds on a variety of insects. By using their long mouthparts they attack their prey by impaling them and delivering a dosage of toxins, which causes their prey to quickly become paralyzed. During their attack, they also deliver a bit of saliva that's made up of a mixture of chemicals that helps breakdown and dissolve the prey item's tissues. The wheel bug then uses their mouthparts like a built-in straw mechanism to slurp up and consume their newly conquered prey. It's almost like they're digesting their food outside of their body before they eat it. A bit gory, if you ask me.

That day I stumbled upon the wheel bug in the nursery, the bug-loving child in me wanted very badly to pick it up and admire it. But something inside me felt a bit intimidated by those large mouthparts, so I settled for a picture instead. And I'm very glad that I went with my instinct. I later learned that these unique critters are best admired at a distance and shouldn't be handled. Since they are naturally adapted to bite and be defensive, if handle them, you are putting yourself at risk for accidentally being mislabeled a threat or a new food item. Their bites are known to be intense and immediately painful, and can even cause swelling.

Although bites are generally not something to be concerned about, if you do happen to get bitten, pain relievers and antihistamines may be beneficial for your symptoms. However, in the rare event that a more severe allergic reaction does occur, please seek out immediate medical attention.

I hope you find the chance to get outside and find this very unique and pretty intense predatory bug killer! And just like all wildlife, once we learn a bit more about them, we can appreciate their differences and interesting habits, and even learn to admire them.

Photo by Rebekah Snyder: Wheel Bug at Gulf Coast Bird Observatory