

Ambush!

A patient hunter, the crab spider sits motionless – until...

Text and photos by Chris Helzer

Crab spiders don't spin elaborate webs like those made by big, yellow and black garden spiders. They're not big, fast, hairy hunters like wolf spiders either. In fact, crab spiders mostly just sit around on flowers, but they have a charm of their own and they're worth getting to know.

Named for their similarity in appearance to crabs, crab spiders have short, wide, flat bodies, and their first two or three pairs of legs are much longer than the rest and are often held away from their bodies, much like a crab's claws. These spiders are a diverse group, with more than 2,000 species

worldwide. In North America there are about 200 species of crab spiders, at least 50 of which are found in Nebraska.

I frequently see crab spiders in prairies, but only if I remember to look closely enough. They're small enough (most are less than a centimeter in length) and sit so still that they're easy to miss – which, of course, is the idea. Because of their camouflage and patience, crab spiders are excellent at ambushing prey. Most sit quietly on leaves or flowers, waiting for an unsuspecting insect to wander within reach.



A small insect searches for nectar on a black-eyed Susan, likely unaware of the camouflaged crab spider with posed legs waiting for its chance to strike on the other side of the flower head.

Of those that hunt on flowers, many have the ability to change color, mainly between yellow and white. They are not quick-change artists like octopi or chameleons – it can take several days for a crab spider to complete its transformation – but the ability to match the flower color they're hunting on adds to their effectiveness as predators.

Unlike jumping spiders, wolf spiders and other free-living (non web-spinning) spiders, which have large eyes and keen eyesight, all eight of a crab spider's eyes are small and probably function more like motion detectors than true eyes. Their hunting method, however, is such that their poor eyesight is not a disadvantage. Most crab spiders in Nebraska hunt by taking up a position on a flower and waiting for small prey to come within range of their long front legs. When a small insect comes to gather pollen, nectar or just to rest, it's not likely to notice the silently waiting spider. If the unsuspecting insect ventures too close, the spider's front legs snap together like a trap and the spider gives its prey a quick, paralyzing bite. The venom used by the spider is extremely effective on insects, but fortunately crab spiders are not a threat to humans.

As I was walking through one of The Nature Conservancy's prairies along the Central Platte River last summer, I stopped to examine a black-eyed Susan flower. Kneeling down to get a better look, I noticed a small crab spider sitting at the edge of the dark flower center. I decided to grab my camera and wait to see if anything happened. It turned out to be a good decision.

After shooting a couple photos of the spider, a small fly arrived in search of some nectar. It seemed to be staying on the opposite side of the flower from the spider, which was sitting perfectly still, its front legs poised to snap shut if the fly came close enough. A minute or so later, the fly flew away as a larger one arrived. The new arrival wasn't as cautious or lucky as its smaller counterpart – I didn't actually see the spider move, but the next thing I knew the fly was connected to it. I assume the spider bit the fly immediately, because the fly never moved once it was in the spider's grasp.

The spider sat perfectly still for a half minute or so, and then retreated underneath the lip of the flower with its prey, probably looking for a safe place to sit and suck out the now liquefied insides of its prey. I was impressed with how easily the spider carried the fly, which looked about twice as heavy as its captor. Not long after the spider disappeared, the first



Faster than the blink of an eye, the crab spider grabbed this unlucky visitor to the flower head and quickly gave it a paralyzing bite.



Its much larger prey neutralized, the crab spider enjoys its lunch beneath a flower petal while an insect above can once again search for nectar in safety.

fly I'd seen, or one just like it, came back. I was reminded of movies where the customers in a bar sort of melt away when they see an impending fight, and then sidle back when it's over.

I had read about crab spiders and had even seen them holding prey before, but I had never had the chance to be present at the moment of capture. It was an impressive display of hunting prowess. I was glad to have seen the event, but I also found myself grateful that crab spiders are less than an inch in size. ■

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