



Phantom crane fly clings to leaf. Picture credit J. Morton Galetto

## Phantom On the Trail

When my younger daughter was five I got the bright idea that she might like to play kiddy soccer. I packed up my sports chair and prepared for the first game, with sunglasses, a sun visor, oranges, suntan lotion etc. I got settled in and began to watch the children all crowd around the ball in one spot on the field. At that age I guess positions are simply suggestions. Then I noticed that my daughter wasn't in the crowd. I realized she was at the opposite end of the field squatting and talking to, well, the ground. All manner of bugs, flowers, in fact almost anything captured her attention but the ball.

It took me a while to catch on that some children simply aren't interested in athletics. My daughter preferred nature. Praise the lord. Because needless to say, at 30-something she is not playing in the Woman's World Cup this week. Okay, know I'm crazy for the US Women's Soccer Team.

This weekend I was reminded of children's fascination with small creatures, especially bugs. One of the participants on our CU Saturday walk this month was a five-year old regular, Vera. She is the daughter of our Program Manager and she gets to hang out with a host of folks who are equally fascinated by all sorts of things. Because of her enthusiasm she often manages to acquire a group of people around her in the same kneeling position that my daughter assumed during her soccer match. Although they were not talking to bugs they sure were talking a lot about them. Seeing them all crowded on the edge of the Maurice River Bicycling and Walking Trail boardwalk, I once again felt like I was on the sidelines of the soccer field, but this time the crowd was around the pond fauna and flora. Today, children are so plugged in that they often don't really get to appreciate the world around them. I enjoyed seeing everyone soaking in nature's little pleasures.

The conversation changed to, "There it is, sort of a sparkler." "No, it's kind of like a daddy-long- legs." "I'm seeing a floating sphere." And then to the leaders, "Well, what is it, Jane?" Uh oh, that's my cue. "I'm not sure, jeez, I can't even make it out! It's like a tiny lion fish with no body, a ghost in and out of the shadows." Okay, time for smart phone googling. "It's a Phantom Crane Fly."

What a lot of stir this one little creature caused. So it was time for me to brush up on some entomology. Here is what I found out, and brace yourself because it is cool. It turns out this little diptera (fly) has been around since 56 to 34 million years ago, in the Eocene Period. And in all that time I hadn't paid much attention. A member of the crane fly family, tipulidea, its scientific name is ptychopteridae. Most fly species have hundreds of kin, but in contrast the phantom crane fly has only a handful. The one we saw on the trail is primarily found in states that border either side of the Mississippi River and eastward, and also in Canada.

It looks a tad like a male mosquito with heavier legs and a tiny set of clear wings with dark veins. It turns out that each leg has at least three distinctive white stripes, so 18 visible spots. In the shade you see only the white bands on their black and white legs, so that in flight or float mode their legs go helter-skelter giving a

sparkler impression. In the intermittent light created by foliage around a wetland, stream, or pond this is almost strobe-like. They are akin to a mirage - now you see me, now you don't – thus the name “phantom.”

Did I say float? Yes, here is the most amazing part. Some of the segments of their legs are expanded and filled with breathing tubes or tracheae. Twentieth century entomologist C.P. Alexander described it like this, “One of the most conspicuous and interesting of all Nearctic Diptera. The first tarsomere of the legs is dilated and filled with tracheae, a characteristic which enables the flies to drift in the wind with their long legs extended to catch the breeze.” To confuse the eye further they often latch together, making it impossible from a short distance to distinguish one from another.

In close-up videos you can see that at the end of the first tarsomere they have a pincer or claw that allows them to grab onto things like foliage. They walk on their lowest leg segments on top of foliage as well.

The fly is the adult stage of the insect. The female deposits eggs from the tip of her abdomen into the water. In the larval stage the young thrive on bits of decaying vegetation and algae. They are scavengers - insect world vultures. After they

overwinter in the larval stage they transform to pupae for 5-12 days, and are adults for only a brief few days, when their purpose is simply reproduction.

Here is the good news: they don't bite and they are great fun to watch. So why not take your child, athletic or not, out to try and catch a glimpse of this fascinating insect in action. You may even wish to take a grownup child-at-heart.

Credits – University of Wisconsin Milwaukee and [www.bugguide.net](http://www.bugguide.net)