



**A deerfly waits to attack me from the dash of my SUV**



**A female Lone Star Tick fresh from my fridge. This dangerous species is a major vector for Rocky Mountain Spotter Fever**

### **Brunswick Wildlife Sweat the Small Stuff**

Everyone has their list of least favorite biting pests or blood suckers. I'm talking here of invertebrates and definitely not any humans...especially any profession having to do with the financial markets. Either way, there are so many species I would have had to limit my field.

For many folks, no-see-ums, better known as "flying jaws", are on their top-five list. These guys seem to get under your baseball cap's headband and just keep chewing away at your scalp. They are low on my list.

Most folks including me have mosquitoes near the top of their list. After many years of painful research, using myself as the "lab rat", I developed Ennis' theorem: "there is always one more mosquito in the tent." Turn off the lantern and within nanoseconds, there is a whine in your ear. Am I right?

Now let's get serious. There is still a danger of contacting West Nile Virus spread by infected mosquitoes. The virus may cause conditions that range in severity from mild to serious and life-altering to fatal. Fortunately, the incidence of West Nile virus disease among humans is declining; however, we are still at risk.

According to the CDC's Division of Vector-borne Infectious Diseases the nationwide total of reported human cases in 2008 for all severity levels was 1356 including 44 fatalities. In

2009, total cases dropped to 720 with 32 deaths. North Carolina had no reported cases in 2009 compared to three reports and no fatalities in 2008.

Using insect repellent, wearing long sleeves and long pants, and other precautions noted below for the other bad guys with help protect you from the virus as well from the bites themselves.

Ticks definitely make my top five. On a recent field trip with the NC Native Plant Society, I asked the others to save their ticks for me to photograph for this article. I put them in a plastic bag and we started throwing them back after I had six. This time of year, most any walk in a thick wiregrass savanna or forest is like trolling for ticks so stay on paths and roads as much as possible.

Wearing light colored clothing and watching each other's back and legs is good method to combat ticks. Also recommended is to spray your socks, pant legs, and exposed skin with an insect repellent that contains DEET. Then tuck your pant legs into your socks and tape the seam with Duct Tape. Closely follow directions of insect repellent, especially for use on children.

After returning, I practiced my usual ritual of undressing in the garage and immediately taking a shower. Unfortunately, I found four more ticks on me in the shower...plus one more the next morning on my kakis on the garage floor where I dropped them.

I had eleven ticks in plastic bags which I placed in my fridge to slow them down for photography. On taking a bag out to prepare for macro photography, I found the ticks started moving around at room temperature so soon that I photographed them through the bag. Everything was fine until I saw a piece of pepper on my potato salad moving.

Fortunately, we have a low risk catching of Lyme's disease in our region but high risk of Rocky Mountain spotted fever. These diseases cause flu-like symptoms at first and are easily treated with antibiotics if caught early. If left untreated, these diseases can become serious and even fatal in some cases.

It may take up to six hours after a tick attaches itself for a pathogen to get into your blood stream so it is important to remove the tick quickly and properly. Grab the tick using tweezers (or tissue paper if tweezers are not available) as close to the skin as possible and slowly pull the tick straight out until it lets go. If mouth parts remain in the wound, use a sterilized needle like you would a splinter. Finally, wash your hands and the bite area with soap and water and then clean the bite with disinfectant.

Like me, you can save the tick in a plastic baggie with rubbing alcohol in it (not potato salad). If symptoms develop, take the pickled tick to you physician for identification.

Anytime you have been bitten by a tick, circle the bite with a magic marker so that you remember its location in case the bite totally goes away, and then mark the date of the tick bite on a calendar.

Closely watch the affected area for up to six weeks. Flu-like symptoms occurring within 14 days may indicate Rocky Mountain spotted fever. A red ring around the bite within 30 days may indicate Lyme disease. Report these unusual symptoms to your physician.

Vicious, painful biters, deer flies feed on the blood of cattle, horses, hogs, deer, humans, pets, and other mammals. They cut through skin using razor-sharp mouthparts, sucking blood up from the wound for several minutes. After the fly leaves, the open wound becomes feed sites for other nuisance insects.

Deer flies hang out and attack humans along beaches, streams, ponds, lakes and around woods and roads near water. Though generally considered just nuisance pests they are potential vectors of several diseases and some people have severe allergic reactions to the saliva, which is poured into the wound to prevent clotting while the fly is supping. Unfortunately, this reaction may increase in sensitivity over time with repeated bites.

Repellants are not effective in keeping away deer flies. While repellants containing DEET do not stop deer flies from landing, they may stop them from biting.

Most deer fly activity occurs on warm, sunny days when there is little or no wind. To reduce exposure to bites, it is best to wear light-colored clothing, including a light baseball cap, to reduce their chance of spotting you.

Fire ants can be identified by their mounds which are composed of fluffy, worked soil and have no opening like other ant mounds. Fire ants access their mound's interior via underground tunnels. Undisturbed mounds on roadsides or in pastures may reach over a foot in height; however, most mounds in yards are usually only a few inches tall.

A colony's first worker ants produced are small; however, as a colony grows larger so do the size of new workers, resulting in the variation in the size of workers. This variation is key in identification of imported fire ants since many other species' workers are the same size.

When you disturb the mound, hundreds of reddish-brown worker ants may exit and crawl up grasses, legs, and other vertical objects on and around the mound. Native ants generally go out but not up.

Finally, worker fire ants aggressively and repeatedly bite and sting, passing on their unique venom. Getting stung feels like getting burned. Usually within 24 hours, the venom forms a pustule or blister at the sting.

What causes fire ants to sting simultaneously is not understood. They may wait twenty seconds or more after climbing up on an individual to begin stinging. Because a large number of worker ants rush out to protect the mound, victims usually receive multiple stings. The best defensive move is to rub them off quickly by hand, brush, or cloth.

Multiple stings can lead to severe medical reactions presenting a high risk, especially in folks like infants, geezers like me, people who are immobile, and those who are unaware of their

surroundings and possible dangers. These folks should not be left alone in fire ant infested areas.

People vary greatly in their sensitivity to fire ant stings. Some are very sensitive to the venom and others may have medical conditions that, when combined, may result in serious medical consequences and even death from a single sting.

While most people can tolerate many stings, anaphylactic shock may occur in folks stung by fire ants, leading to death. If a victim has chest pain, nausea, sweating, shortness of breath, serious swelling, or slurred speech, they need immediate emergency medical treatment.

The pustules usually last for several days; however, they may become infected and require medical attention. For most people, the pustules dry up in several weeks. If the symptoms are limited to pain and the development of pustules, stings can be treated with non-prescriptions relieve pain, relieve itching, and prevent infection. For more information on treatment, always consult your pharmacist or physician.

Oh, I was just kidding about the potato salad thing...

John Ennis

*All kidding aside, this is a very serious subject, especially for us who prowl the fields and ditches. I encourage you to do additional web research on biting pests and disease transmission. You need more information on methods of prevention and disease symptoms that I can squeeze into this article. If in doubt, contact your physician and county health department.*

*Remember you are also responsible for protecting your pets from the small stuff you might bring home.*



My worst nightmare, the Red Imported Fire Ant, tends to climb up when disturbed by “Big Foot”.

Variation in size is key in identification of imported fire ants since many other ant species are uniformly the same size.