

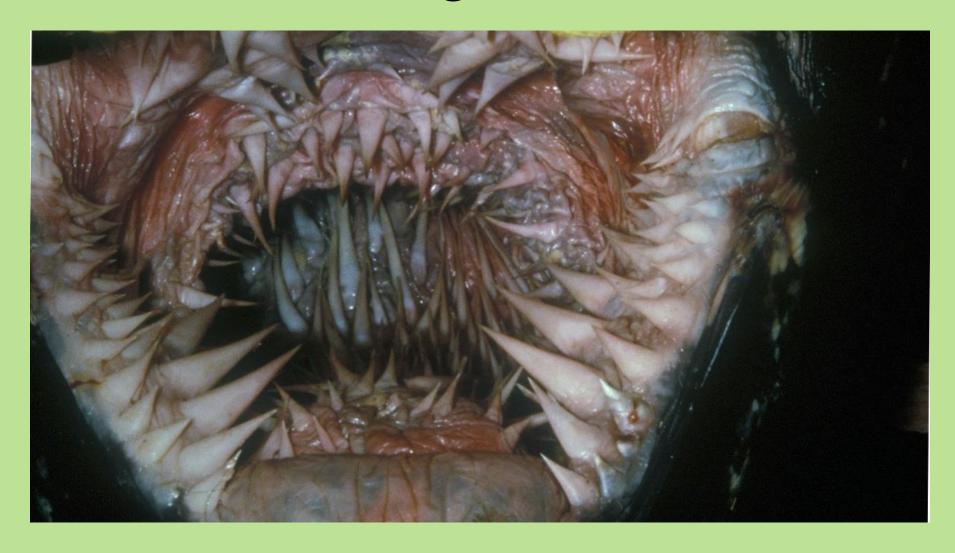
Reasons not to go outside?

What are you, nuts?

Spiders, chiggers, and ticks...

We all just need to calm down and listen to science!

You're afraid of being bitten?



Leatherback sea turtle



Chiggers are the WORST!! And they don't even carry disease!

- Chiggers, such as *Trombicula alfreddugesi* in our area, do not transmit any known pathogens to people, but they can cause irritating bites, dermatitis and severe itching when they feed on the unsuspecting host.
- Since they occur in small groups with high numbers, it's very common for someone to get several dozen or even several hundred bites at a time!
- Easily avoided by staying out of tall grass areas! Tuck pants into socks and use deet based insect repellant on your pants and socks. Use it on your shirt if you're in tall grass environments!
- Wearing shorts into tall grass prairie is essentially suicidal!

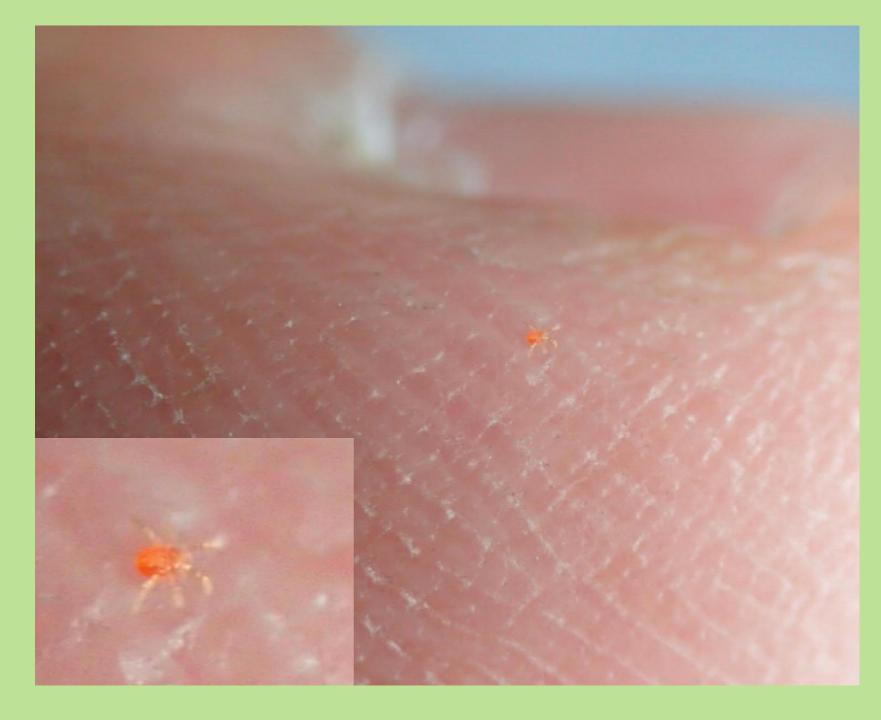
This photo was taken by our very own Russ Jones! Russ suffers worse than anyone I've seen.



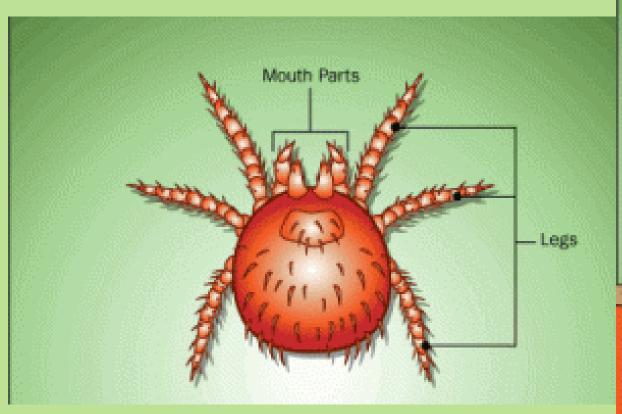
This photo was taken by our very own Paul Pratt! Paul astounds me when we're herping by not getting bitten by chiggers, while I got hundreds of bites! What on Earth was his secret??

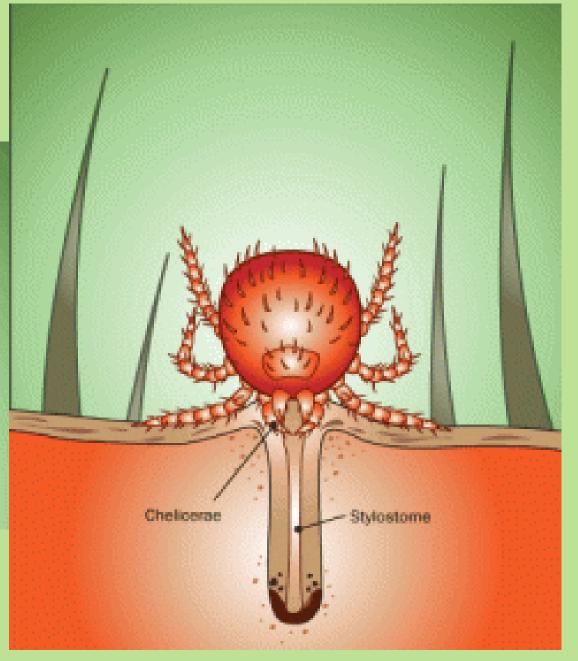


This started a competition of sorts – to see who could get the best pic of this miniscule lil bugger! Russ's photos...









Spiders...

- There are more than 45,700 spider species in the world
- A spider is a member of the order Araneae, one of many orders within the class arachnida, meaning it has a body consisting of two segments, a cephalothorax and an abdomen, as well as eight legs.
- All spiders are predators that feed off insects, and some larger species have been known to catch small reptiles, birds, and amphibians



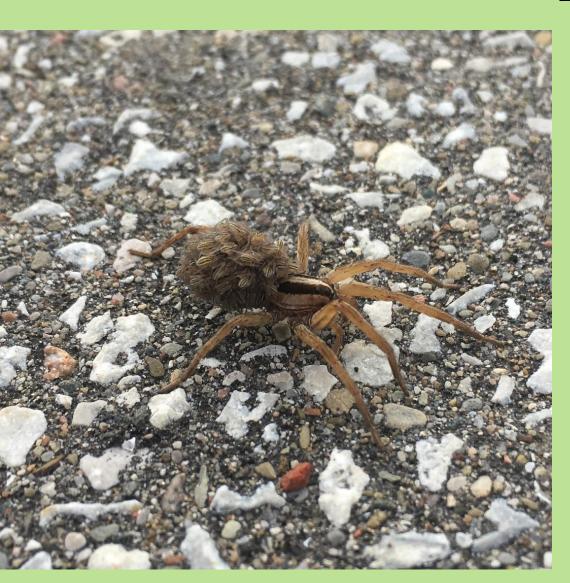
A male Dimorphic Jumping Spider, *Maevia inclemens*, at Ojibway Park Photo by Brad Hamel.

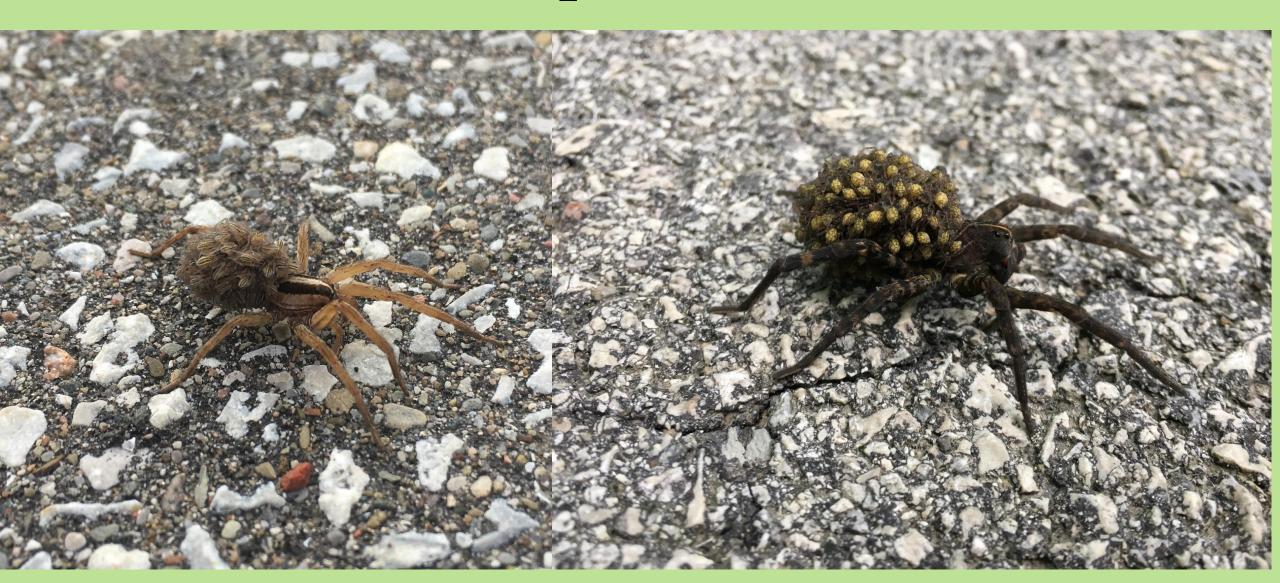


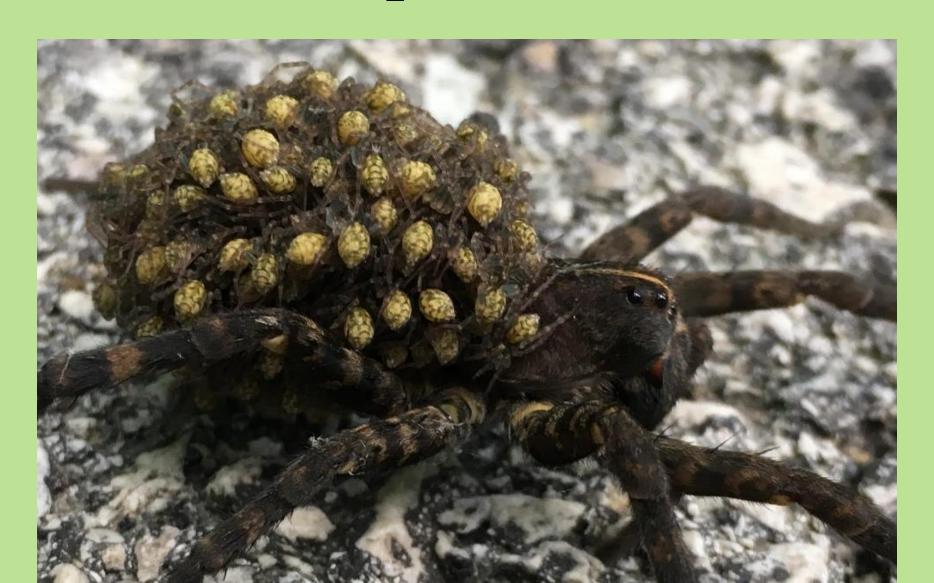
A male Dimorphic Jumping Spider, *Maevia inclemens*, at Ojibway Park Photo by Brad Hamel.

A female zebra spider, *Salticus scenicus*, LaSalle. Jumping spiders have the best eyesight of all spiders and can be identified by the pair of prominent "headlight" eyes Photo by Paul Pratt









Q. Why is this handsome gentleman so calm?

A. He truly understands that she doesn't want to bite him, and in fact can't at the moment because her mouth is full of an extremely precious cargo... her future babies!

Spiders are truly amazing moms!



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Spider bite: the great myth!

- Doctors will tell you it might be a spider bite... but they don't actually know *they've never seen one!*
- They're feeding off the same myths and old wives' tales as the rest of us!
- Truth is... they aren't taught what spider bites look like, because they're not a common occurrence so they're *guessing!*
- Bites from North American spiders are **extremely rare** and most actual bites are **completely inconsequential**

Spider bite: the great myth!

FACTS

- Spiders don't want to bite humans
- A great many of our spiders CAN'T bite humans
- Even if they did, there's no reaction
- Only medically significant spider in Ontario is the northern widow

LIES

- Spiders bite in 3's
- Spiders hide and wait to pounce
- You're never more than 10 feet (or 3 feet) from a spider
- Daddy Longlegs are spiders
- Brown recluse spiders kill people... Canadian people.
- Likely most everything else you've been told about spiders!

Brown recluse spider FACTS – for a change!



- 1. They don't live in or anywhere near Canada!
- 2. They aren't aggressive at all. In fact, a family in their home in Kansas removed more than 4000 BRS in 2 years *without a single bite* to the parents, two children, or 2 dogs!
- 3. Spider researchers (arachnologists) constantly handle live wild spiders their entire careers without a single bite.
- 4. Nearly all brown recluse spider bites are symptom free.

Spider bite: the great myth!

There are numerous documented infectious and non-infectious conditions that produce wounds that have been initially misdiagnosed as recluse bites Bites or stings from any by medical professionals, including: Chemical burns type of insect *Toxicodendron* dermatitis Staphylococcus infection *Pyoderma gangrenosum* Syphilis Diabetic ulcers Toxic epidermal necrolysis Pricks from various plant species MRSA Localized vasculitis You get Herpes
Lyme disease Streptococcus infection Sporotrichosis the idea Fungal infection Squamous cell carcinoma







Woman Dies After Bite From Rare Brown Recluse Spider In Michigan

July 18, 2014 at 9:04 am Filed Under: Brown Recluse Spider, spider bite, Spiders



MBNA True Line Mastercard O% interest for 10 months on balance transfers.

Since there's nothing to fear from spiders at all, take the opportunity to get closer than you would before – perhaps in a controlled situation with someone that knows spiders, and try to get more comfortable with them! The Ojibway Nature Centre occasionally offers such opportunities!



So then let's talk about the one we DO have to worry about...



Or do we...???



Prepare to be amazed by facts!

- Due to the presence of latrotoxin in their venom, black widow bites are potentially dangerous and may result in systemic effects including severe muscle pain, abdominal cramps, and muscle spasms. Symptoms usually last for 3–7 days, but may persist for several weeks.
- In the United States each year, about 2,200 people report being bitten by a black widow, but most do not need medical treatment, and in fact aren't even spider bites. Some bites have no venom injected, a "dry" bite. Black widows are not especially aggressive spiders, and they rarely bite humans unless startled or otherwise threatened. They don't hide in gloves or boots like in the movies.
- Fatalities were reported as high as 10% of cases in the early-20th century but deaths have not been reported in the United States for decades and only 0.5% of those bitten have had major medical complications. There's never been a fatality in Canada
- Since the venom is not likely to be life-threatening, antivenom has been used to provide pain relief and not to save lives. However, a recent study demonstrated that standardized pain medication, when combined with either antivenom or a placebo, had similar improvements in pain and resolution of symptoms

My black widow story

- I caught 3 northern black widows in central Ontario one time while working on a reptile project.
- They were all females developing egg sacs. I hatched out somewhere between 600-750 babies in my living room (contained) and donated the spiderlings to Toronto Zoo.
- Lydia (the head spider person there) is still caring for descendants of those spiders!
- They're pretty cool, inoffensive animals to have around, if folks' tolerance could just raise a wee bit.

Tick talk... Tick tock... climate change

(See what I did there?)

We have always had several species of ticks in this area, but now there's more of them – and more species...



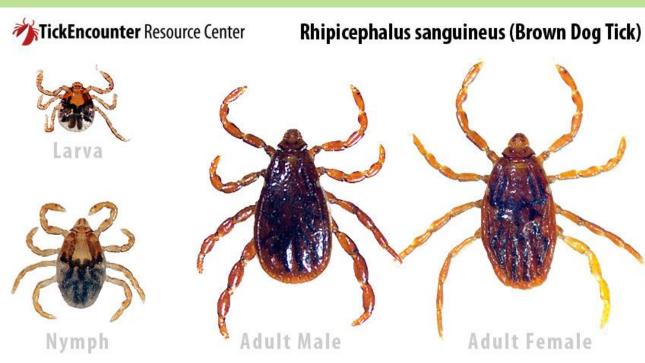
Ticks, just like all other naturally occurring species, are an importance part of nature





Brown dog tick (Rhipicephalus sanguineus)

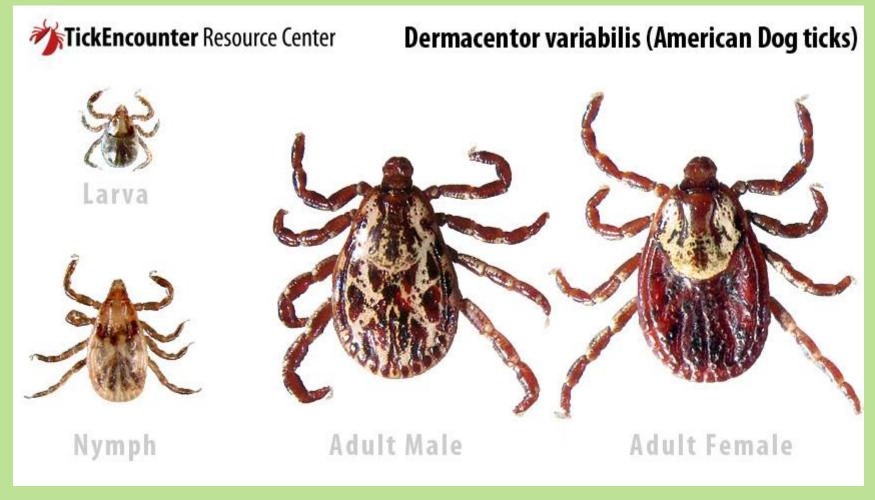
- Brown dog tick is one of the most important vectors of diseases in dogs worldwide. In North America, it's a vector of canine ehrlichiosis, and canine babesiosis.
- In dogs, symptoms of canine ehrlichiosis include lameness and fever; those for babesiosis include fever, anorexia, and anemia.
- You should consult your veterinarian about ticks and your pet.





American wood tick (also called American dog tick)

•American dog tick and wood tick (*Dermacentor variabilis*) – found throughout the US. and transmits agents of Rocky Mountain spotted fever (doesn't occur here) and tularemia (since 2005 only 6 recorded cases in Ontario!)





Lone Star tick

• Lone Star Tick (Amblyomma Americanum)- Found throughout the United States and transmits agents of human monocytic ehrlichiosis, Lyme and Tularemia



Black-legged tick (also called deer tick)

Deer tick (*Ixodes scapularis*) – potentially transmits agents of Lyme, babesiosis, human granulocytic ehrlichiosis (anaplasmosis) and powassen encephalitis



From Left: adult female, adult male, nymph and larvae Deer Tick (cm scale)





Borreliosis: The most common sign of infection is an expanding area of redness on the skin, known as *erythema migrans*, that appears at the site of the tick bite within about a

week.



1975: Lyme, Connecticut

- Borrelia bacteria is the carrier of Lyme disease
- The largest pool of Borrelia is in mice. (That's a great example of why fox snakes, owls, hawks, coyotes and foxes are so important for our personal health!)
- The transmission of Borrelia bacteria takes several hours
- So the plain truth is this... find ticks on you after a few hours in their habitat, take them off and you're fine.
- Usually, they're just crawling around on you just pull them off and squish 'em!

My favourite method of tick removal!



The use of Permethrin is being discussed by Health Canada. Stay tuned!



