

# Natural Resource Protection News

## ***From the Town of Canandaigua Environmental Conservation Board***

The Environmental Conservation Board has been talking about **TICKS**. We wondered if you've been curious about how to protect yourselves, family and pets from the potential illnesses these little critters can carry. Therefore, we've partnered with three organizations that offer information to help us understand our relationship to these...

### **...Nasty Little Things**

By Jacqueline Stuhmiller

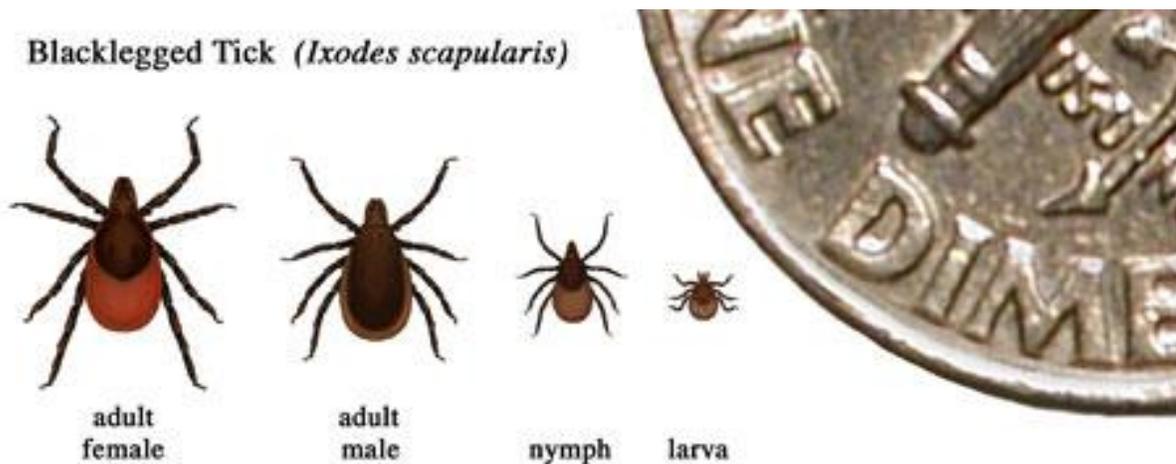
#### **Deer Tick (*Ixodes scapularis*)**

The black-legged or deer ticks were already sucking the blood of, and transmitting pathogens to, dinosaurs in the Cretaceous Period. Although it is best known for carrying Lyme disease, it is also a vector for several other viral, bacterial, and parasitic illnesses.



For such a primitive animal, the black-legged tick has a very complex life cycle. After the egg hatches in spring, the larva attaches to its first host, a bird or small mammal and very often a white-footed mouse, which appears to be the main reservoir for Lyme disease. Unlike other animals, such as opossums, mice do not effectively remove ticks by grooming; furthermore, since their reproductive strategy is to breed early and die young, their immune systems have not evolved to be particularly robust and they cannot rid themselves of the Lyme pathogens. After three to five days of feeding, the larva drops to the ground, where it overwinters.

The next spring, it molts into a nymph and attaches to a second host, which may be a wild or domesticated mammal or a human being. It is at this stage that it is most dangerous because not only is it likely to be infected with pathogens, but it is also tiny enough to escape all but the most careful inspection. The blood-engorged nymph then drops to the forest floor and molts once again. In autumn, the adult feeds on a third and final host, usually a white-tailed deer. The fully-fed female drops to the ground a final time, overwinters, and lays eggs the next spring.



The tick seems to be moving into new areas and its population seems to be increasing, though the reasons for these changes are complex and poorly understood. Upstate New York is becoming ideal tick habitat as farmland reverts back to forest and new subdivisions carve into the countryside. A more fragmented landscape has fewer small predators and more mice. In addition small mammals such as skunks and raccoons, along with white-tailed deer, are attracted to so-called edge habitat, places where forests intersect with meadows, fields, or lawns.

The arachnid favors moist, shady areas, dries out easily, and becomes inactive when the temperature drops below freezing (though it is unaffected by subzero temperatures, thanks to antifreeze-like proteins). As our region becomes warmer

and wetter, both the tick and its preferred hosts will thrive.

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**And our friends at Ontario County Public Health Urge the Public to:**

**'Take a Hike'**

By: Christy Richards RN, MPH

The warm weather has finally arrived! Hiking is good for your mind and your body. Remember, before you head down the hiking trail, protect yourself and your loved ones from ticks that often lurk in tall grass, thick brush, and wooded areas. Many ticks carry disease. Prevention of tick-borne illness is important.

**To prevent tick bites and tick-borne diseases:**

- Help keep ticks off your skin by wearing long sleeves, long pants, and long socks.
- Ward off ticks by using an insect repellent that contains at least 20% DEET (for the skin) or permethrin (for clothes).
- Avoid ticks by walking in the center of trails and steer clear of tall vegetation.
- If you've been in an area where ticks are common, bathe or shower as soon as possible, and wash or tumble your clothes in a dryer on high heat.
- Check your body carefully for ticks. They dig and burrow into the skin before they bite and feed.
- Removing ticks right away can help prevent disease.
- If you develop a rash or fever, see your doctor.

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**[FREE TICK REMOVAL KITS AT TOWN CLERK'S OFFICE](#)**

***The Environmental Conservation Board has partnered with Ontario County***

***Public Health to provide “Tick Removal Kits” and other educational materials to our Town residents. Beginning today you can pick up a kit at the Town Clerk’s office. Supplies are limited.***

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