

Preparing for Tick Season

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Deer or Black-legged Tick,

Ixodes scapularis

Description:

Nymphs and adults : 3–7 mm (1/8–1/4 in.); eight legs; dark brown to black; engorged females appear to have an orange/yellow colored abdomen.

Distribution:

Ontario, Quebec, Atlantic Provinces. Found across Nova Scotia in various concentrations.

Season and Hosts:

Particular tick species peak at certain times of the year. However, all species of ticks can be found at various life stages throughout the year, in appropriate habitats.

Ticks and Lyme disease

Last summer Nova Scotia recorded its first known, human case of Lyme Disease. In July a Lyme-positive deer tick was discovered in Antigonish County.

First recognized in 1975 in Lyme, Connecticut, the disease has since been detected in most of North America, Asia, and Europe. In Nova Scotia, the deer tick is the primary carrier of *Borrelia burgdorferi*, the agent that causes Lyme Disease. Deer ticks have been found throughout the province.

The deer tick is a three-host tick and takes two years to complete its life cycle. Eggs are laid in early spring amongst vegetation on the forest floor. Tiny, six-legged larvae emerge in early summer with larval activity at its highest in August. The larvae feed on a variety of hosts, including birds and small mammals. In the fall the engorged larvae drop off their hosts.

The following spring the larvae molt into the larger nymph stage. Throughout the summer the nymphs feed on birds and larger mammals such as deer, dogs, and people. This is the stage at which they are most likely to be transported to new regions via migrating birds and animals. In the fall, the engorged nymph drops off its host to the forest floor and transforms into the adult stage. Adults remain active into the mild days of winter, feeding primarily on deer and larger mammals. Engorged ticks overwinter in the forest floor litter.

For transmission of Lyme disease to occur, the tick must feed on the host for at least 48 hours. This is not unusual due to the tick's small size and painless bite. The first symptom is generally a red "bull's eye" shaped rash, which occurs a few weeks later in the area of the bite. The extent of the rash can vary from the size of a dime to a large portion of the patient's body. Other symptoms may include head and body aches, fever, stiff neck, and fatigue which may persist and occur sporadically. If symptoms occur, consult a doctor immediately. Collection of the tick is very helpful in diagnoses.

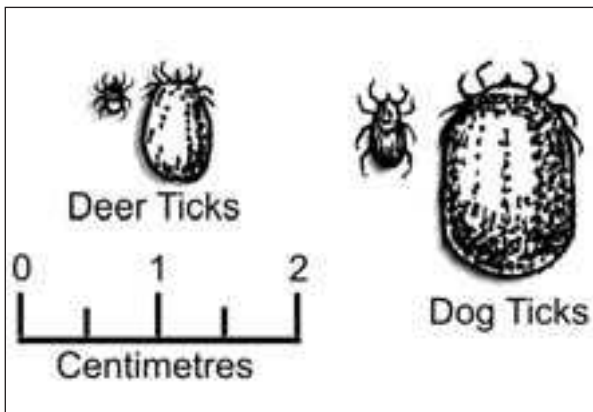
DNR, in conjunction with the Department of Health, is conducting a province-wide tick survey. Both departments are interested in receiving ticks collected off people and pets.



Dog Tick



Wood Tick



Ticks Engorged

Protect Yourself and Pets:

- Avoid tick habitats such as tall grass and shrubby areas. Keep lawns mowed.
- Wear long pants tucked into socks, long sleeve shirts and hats. Repellents containing DEET may be sprayed on outer clothing.
- Carefully examine pets and yourself following exposure to potential tick habitat. Use a flea comb on pets to remove any unattached ticks.
- Discourage deer and other wild animals from your yard.

Tick removal:

1. Use tweezers to carefully grasp the body of the tick as close to the skin as possible. Pull slowly to allow the tick to release its mouthparts without breaking within the host's skin. Avoid twisting or turning as this could cause mouth parts to break off. Loss of the head or mouth parts makes identification more difficult and increases the risk of infection.
2. Never use matches, pins, or gasoline. These may cause the tick to release the contents of its stomach into the host. Applying Vaseline or other oil products is not recommended, as it may take hours to suffocate the tick.
3. Following removal, wash the area thoroughly and apply an antiseptic, such as alcohol. If infection occurs contact your doctor.

Tick collection:

1. Place tick in a water tight container and preserve with 70% alcohol.
2. Label the container with permanent marker and record information about the location, date, host, and collector. Also indicate whether the host has been travelling, and if so, where.
3. Wash hands and tweezers thoroughly after handling ticks.
4. Forward specimens to any DNR office or the Museum of Natural History in Halifax.