

The Ticks of Newfoundland



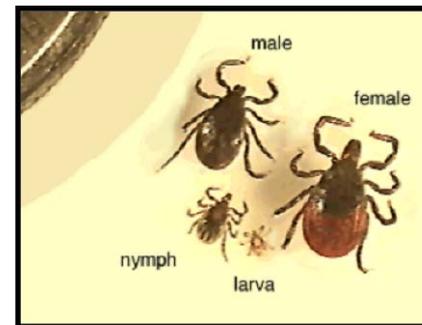
Introduction

Ticks are small, wingless arthropods (bugs) that are related to spiders, mites and scorpions. In most cases in this province, they are of no known direct concern to humans, as they are only occasionally found on domestic animals or wildlife. The exception is the black-legged tick, which is able to transmit Lyme disease. Details on the biology and importance of ticks in this province are detailed in this pamphlet. A more specific pamphlet, “*Lyme Disease in Newfoundland,*” is also available.



Bottom view of *Ixodes scapularis*
Background

Ticks are common external parasites of certain types of animals across North America. There are two general types; the hard ticks and the soft ticks.



Tick lifecycle stages (egg not shown)

As this province has no reported soft ticks, they will not be discussed any further. Ticks have four stages in their life; the egg, larva, nymph and adult (see image). With the exception of the egg stage, all stages require a blood meal to allow larvae to grow into nymphs, and for nymphs to grow into adults. A blood meal consumed by the adult female gives her the energy to lay eggs. The adult male may not feed; but if it does, only a small blood meal is required for survival.

Ticks that are attached to the same animal for all of the feeding stages are called one-host ticks. Those that feed, drop onto the ground between stages, and then feed on a new host are called three-host ticks. Ticks commonly reside in tall grass or shrubs waiting to attach onto new hosts as they brush by (termed *questing*).

Ticks can cause problems by 1) feeding on blood, 2) spreading diseases such as Lyme disease, Q-fever and tularemia, 3) irritating their host when they pierce the skin, 4) causing tick paralysis (occurs when female ticks release a toxin into the host while feeding), 5) causing an allergic reaction from saliva and, 6) creating a wound that becomes infected.

Forestry and Agrifoods Agency
Animal Health Division
P.O. Box 7400
St. John's, NL
A1E 3Y5

t 709.729.6879
f 709.729.0055

animalhealthdivision@gov.nl.ca

Ticks in Newfoundland and Labrador

Ticks that have established stable populations in this province are termed *permanent species*. Ticks that have arrived on an animal that has been elsewhere and are unlikely to establish a permanent population are termed *transient species*. The following table identifies ticks that have been found in Newfoundland as well as some of their characteristics.

In the Maritime provinces, the winter tick (*Dermacentor albipictus*) is common on moose but has not been reported in this province.

Many people are familiar with the rabbit tick, as they are often seen in high numbers on wild rabbits (hare) when the rabbit population is high. It is not uncommon to see large numbers feeding along the edges of the rabbit's ears.

The Government of Newfoundland and Labrador, in cooperation with Memorial University and the Public Health Agency of Canada, is currently studying ticks that are present in the province.

When is a tick not a tick?

In many areas you can find small, wingless insects living on the skin of sheep. These are called the sheep ked (*Melophagus ovinus*) or sheep tick. This insect is not a member of the tick family and is actually a modified fly.



Sheep Ked

Common Name	Latin Name	Hosts	Permanent or Transient
Rabbit tick	<i>Haemaphysalis leporis-palustris</i>	Rabbits, cats, lynx, mice, foxes, squirrels, chipmunks	P
Seabird tick	<i>Ixodes uriae</i>	Seabirds	P
Squirrel tick	<i>Ixodes marxi</i>	Squirrels, dogs	P
Mouse tick	<i>Ixodes muris</i>	Mice, shrews, rabbits, rats, voles, muskrats, dogs, cats	P
Vole tick	<i>Ixodes angustus</i>	Voles, mice, squirrels, chipmunks, shrews, dogs, cats, little brown bats, people	P
Black-legged tick	<i>Ixodes scapularis</i>	Mice, squirrels, foxes, wolves, rats, rabbits, coyotes, domestic animals, people	T
American dog tick	<i>Dermacentor variabilis</i>	Mice, voles, rabbits, coyotes, foxes, muskrats, rats, shrews, woodchucks, wolves, bears, weasels, domestic animals, people	T
Brown dog tick	<i>Rhipicephalus sanguineus</i>	Coyotes, rabbits, dogs, cattle, people (rarely)	T
Lonestar tick	<i>Amblyomma americanum</i>	Small birds, rodents, cattle, deer, people	T

Ticks reported in Newfoundland

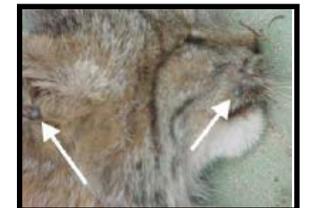


What to do if you find a tick?

If a tick is found on an animal or person, it should be removed by grasping the mouthparts with tweezers, as close to the skin as possible, and carefully detaching from the skin. It should then be preserved alive (if possible) in a small container with slightly damp cotton. The tick can either be taken to a local public health office (if found on a person), a veterinary clinic (if found on a pet), a Conservation Officer (if found on a wild animal) or to the Animal Health Laboratory (709.729.0230) in St. John's. Further advice can be given once the tick is identified. Follow-up advice on health related matters will be provided by the public health or veterinary clinic involved.



Ixodes scapularis, the black-legged tick



Rabbit ticks on snowshoe hare and lynx