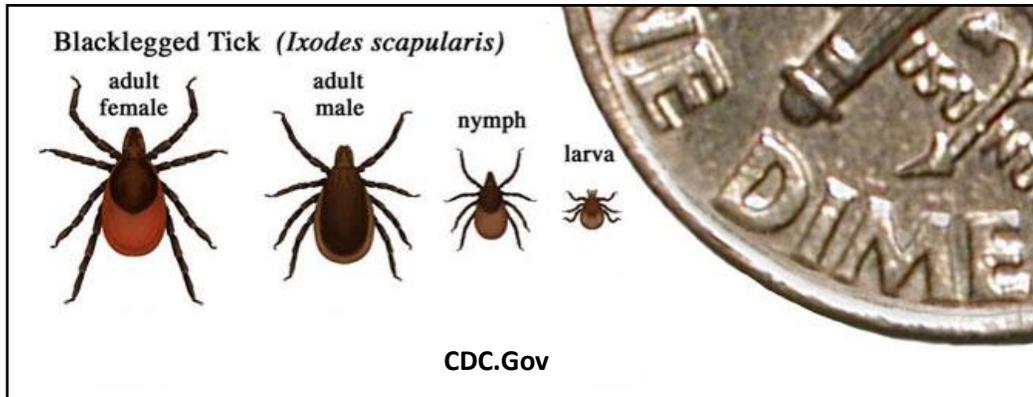


## Best Management Practices: Deer Tick



### Description

1. The deer tick (*Ixodes scapularis*) also known as the black-legged tick is found throughout the Northeast, Southeast, Midwest, and some areas of the Southwest.
2. Deer ticks are the primary vector for a variety of diseases including Lyme disease, babesiosis, and anaplasmosis.
3. Over the past 10 years 100,000+ cases of disease transmitted by deer ticks have been reported. Deer tick populations continue to increase leading to increased risk of contracting a tick-borne disease. As a consequence, there is an increased demand for effective deer tick control programs in both residential and recreational areas.

Deer ticks are parasites and must feed on blood to survive and reproduce. They begin their life as tiny eggs, which hatch into sexually immature larvae about the size of a grain of sand. The mobile stages of this pest climb onto foliage or structures such as fences or buildings where they wait for potential hosts to pass by. The larval ticks infest small animals, such as mice or birds. Over several days they take a blood meal until engorged and drop off the host, usually into leaf litter or thatch. The engorged larvae molt into sexually immature, eight-legged nymphs about the size of a poppy seed. These nymphs then take a blood meal, on a larger host such as a squirrel or rabbit, feeding for four or five days. The nymphs drop off their host and eventually molt into a sexually mature eight-legged adult. The adult ticks latch onto a large mammal such as a deer where they mate. The females subsequently attach and feed for about a week, drop off and lay eggs. This cycle can take two years with peak activity occurring in different seasons. **From a public health perspective, it is most important to control the nymph stage since 90% of all Lyme disease cases are due to bites from this life stage.**



**Management:** Ticks require a moist environment to survive and thus are most often found in wooded areas. Ticks can frequently be abundant in suburban edge habitats, in stone walls, fences, and even in lawns, so treatment for deer ticks involves treating broad areas.

Some simple steps can be taken to reduce the potential for tick bites.

1. Keep vegetation cut low
2. Apply tick repellents to clothing,
3. Wear long pants and long sleeved shirts when frequenting places where ticks may hide.
4. Wear light colored clothing to make personal inspection for ticks easier.

Timing is critical when treating for ticks, as nymphs are most abundant from June to August. This is the time when people are more frequently outdoors enjoying their yards. Focus on targeting larvae and nymphs in the spring and summer with granular treatments. Treat using Talstar® Xtra Granular Insecticide Featuring Verge™ Granule Technology at 2.3lbs per 1,000 ft.<sup>2</sup> From September through October use liquids such as Triple Crown™ T&O Insecticide applied at 0.46 – 0.8 fl. oz. per 1,000 ft<sup>2</sup> to target adult ticks. Make treatments to areas where ticks are seen or harbor including; on foliage, fencing, tall grasses, overgrown areas, perimeter of homes where ticks may overwinter (under siding or landscaping). Remember adult ticks climb up to more easily attach to a host passing by.

If adult ticks have already been found on the property, it is best to treat the entire yard with a liquid application to knock down the infestation. Triple Crown™ T&O Insecticide applied at 0.46 – 0.8 fl. oz. per 1,000 ft<sup>2</sup> or Talstar® Professional applied at 0.5 – 1.0 fl. oz. per 1,000 ft<sup>2</sup> will knock down tick infestations. Be sure to treat buffer areas adjacent to wooded areas, and spray fences and building siding where ticks are known to hide. A follow up application can be made with Talstar® Xtra Verge granular insecticide at a rate of 2.3 lbs per 1,000 ft.<sup>2</sup> (100 pounds per acre) to further control the current infestation and prevent re-infestation.

A good reference for deer ticks is the “Tick Management Handbook” developed by the The Centers for Disease Control and Prevention and The Connecticut Agricultural Experiment Station, which can be found at the link below.

[http://www.ct.gov/caes/lib/caes/documents/special\\_features/tickhandbook.pdf](http://www.ct.gov/caes/lib/caes/documents/special_features/tickhandbook.pdf)

#### References

Photo Courtesy: CDC.Gov <http://www.cdc.gov/lyme/transmission/index.html>

**Always read and follow label directions  
Do not exceed more than 0.4lbs of Bifenthrin per acre per year**

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