

*Introducing*

**TICK BOX™**



**CONTROL**

**SYSTEM**

*Take back your yard from ticks and tick-borne diseases.*

TICK BOX TICK CONTROL SYSTEM  
IS AN ALTERNATE BRAND NAME OF SELECT TCS





# Tick-borne disease: A serious and growing threat, right in your own yard.

**T**ick-borne disease is on the rise in the United States — Lyme Disease in particular. If you live in the northeastern part of the country, you probably know that. In fact, you probably know people who have had Lyme Disease. You may have had it yourself. If so, you probably contracted it at home, because in the northeastern United States, people are most likely to contract Lyme Disease on their own property. Your odds of contracting the disease are directly related to the number of ticks on your property that carry the disease-causing bacteria. Lyme Disease is not an illness to be taken lightly. It can be difficult to diagnose, and if it goes undiagnosed and untreated, it can result in serious, permanent damage to the victim's joints and heart. Animals can be affected, too. Dogs, cats, and horses, are all subject to Lyme Disease.



Areas of risk for Lyme Disease transmission

- High risk
- Moderate risk
- Low risk
- Minimal or no risk

**August 19th, 2013- CDC announces Lyme disease infects 300,000 annually.**

More than 300,000 cases of Lyme disease are reported to the CDC every year, making it the most commonly reported tick-borne illness in the United States, the CDC says. But some reports have suggested it is far more common than that.

Health officials believe that over

# 75%

of reported cases of Lyme Disease are contracted from a tick found on a person's property.

Source: CT Department of Agriculture



Lyme Disease is now the most commonly reported vector-borne illness in the United States.

Source: CDC

## Deer, ticks, and mammals.



**A**s most people know, the deer tick is the culprit that infects people and animals with Lyme Disease. Naturally then, when most people think of the disease, they think of deer and deer ticks.

Deer do serve as hosts to the deer tick, but they are passive hosts. The most important players in the spread of Lyme Disease is the white-footed mouse and chipmunk. These rodents primarily harbor the bacteria that cause Lyme Disease. Ticks pick up the bacteria when they feed on the blood of infected animals.



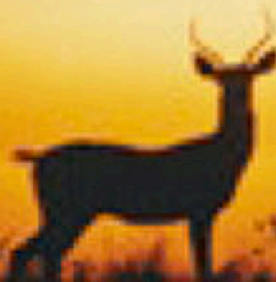
The risk of Lyme Disease is at its peak in

**JULY**

when deer ticks are in the nymph stage and people are often outdoors.



While in the immature stages, deer ticks pass the Lyme Disease bacteria to and from the mice and chipmunks they typically feed on. During the tick's nymph stage, they might also feed on humans and pets. At this point, the ticks are light in color and no bigger than pinheads, so they're hard to see and can easily go undetected.





## Lyme Disease and the deer tick life cycle.

The chart below illustrates the deer tick's life cycle and how Lyme Disease is transmitted to humans. Note that in the chart, the deer ticks are shown actual size in each of their stages.

	Season	Stage	Deer Tick Activity and How Lyme Disease is Transmitted to Humans
Y E A R  O N E	Spring	Egg	Disease-free deer tick EGGS hatch and develop into LARVAE.
	Summer	Larva	Deer tick LARVAE primarily feed on rodents (mainly the white-footed mouse and chipmunk), other small mammals, and birds.
	Fall		
	Winter		
Y E A R  T W O	Spring	Nymph	Lyme Disease infected deer tick NYMPHS feed on humans and pets, as well as rodents and deer. Because of their coloring and small size, nymphs easily escape detection. This is the time when humans are most likely to become infected with Lyme Disease.
	Summer		
	Fall	Adult	Deer tick ADULTS mainly feed on deer and other mammals. Because the adult ticks are more easily seen, and since it takes 36 hours for the disease to be transmitted, these ticks are usually detected before they can spread the disease. Therefore, they do not pose as big a risk in transmitting Lyme Disease as the nymphs do. After feeding, they drop from the deer to lay their eggs.
	Winter		

From left to right, the larva, nymph, male adult, female adult and replete female deer ticks shown measured against a ruler. The photo has been enlarged 400% to show detail.



Each female deer tick lays up to approximately

**3,000**  
eggs each Spring.



## The Tick Box Tick Control System makes sense.

**T**here are measures you can take to reduce the risk of Lyme Disease on your property. Basically, these involve making your landscape less attractive to mice and deer and less hospitable to ticks:

- \* Keep piles of firewood and bird feeders away from your home.
- \* Remove leaf litter as much as possible.
- \* Trim trees and bushes to allow more light to enter shady landscapes.

And, when locating children's playsets, choose areas that are sunny where the grass can be kept short. Keep in mind, though, that these measures are not going to rid your property of mice, and a single mouse might well be carrying more than 100 deer ticks. Attempting to control the outdoor population of mice is futile, but you can control the ticks. There is, in fact, an easy-to-use, low-maintenance, highly effective means of ridding your yard of ticks and reducing your chances of contracting Lyme Disease . The Tick Box Tick Control System interrupts the Lyme Disease cycle without harming wildlife, damaging the environment, or threatening the health of your family with high-dose pesticides.

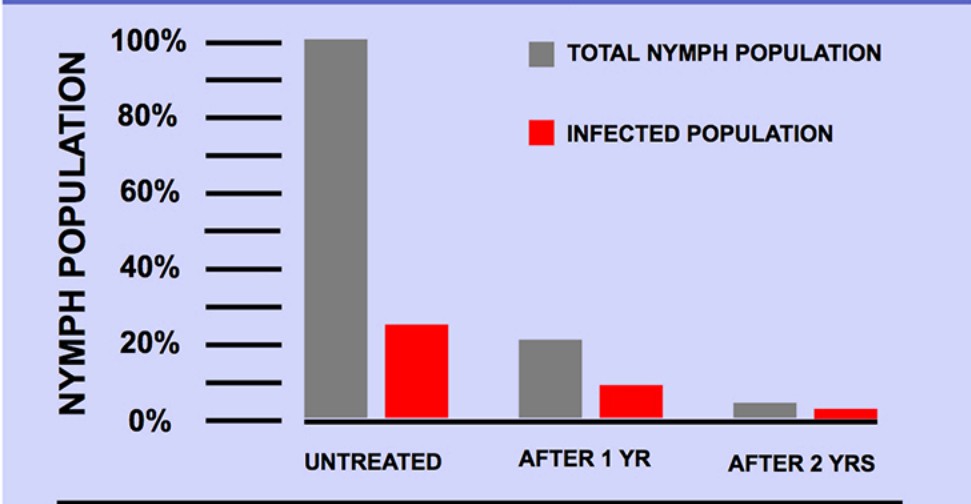


# The Tick Box Tick Control System makes a difference.

Developed by the Centers for Disease Control (CDC) and Prevention with commercial application development consultants from the Connecticut Tick Control Company, the Tick Box Tick Control System has been proven effective in significantly reducing the number of ticks present in the landscape. In field trials, the Tick Box Tick Control System reduced tick populations by as much as 88%\* after just one year, as the chart below illustrates. The rate of infection in ticks that remain in the landscape also decreases: While 25% of nymph ticks present commonly carry the disease, the System reduces the percentage of infected ticks to just 7% of the total population after the first year. Both the total number of ticks and the Lyme Disease infection rate in the ticks present continue to decrease during the second year of treatment. Most impressive, the total number of ticks present in the landscape was reduced by 97.3% by the end of the second year of treatment, based on field trials.

Reduces tick populations by nearly after **88%\*** just one year.  
Source: CDC data Monmouth County, New Jersey 2015

The Tick Box Tick Control System Reduces Ticks and Lyme Disease.



As an example, a square yard of grass shelters 100 ticks before the Tick Box Tick Control System is installed. A quarter of them (25) carry the bacteria for Lyme Disease. After the System has been in place for a year, the nymph population will have been reduced to 21, and only 2 ticks (or 7%) will carry the Lyme Disease bacteria. At the end of the second year of treatment, only 4 tick nymphs will be present in the square yard of grass, and it will be difficult to find any that still carry Lyme Disease.



*"Due to the high incidence of ticks in our yard, we thought it was risky to let our children play outside. After using the Tick Box Tick Control System, it's rare to see a tick in our yard."*

Homeowner, Mason's Island, CT



## How the Tick Box Tick Control System works.

The key to the Tick Box Tick Control System is a small, plastic box which holds an insecticide that's effective against ticks, and a bait that's attractive to mice. Your pest management professional or lawn care operator determines how many boxes you need to protect your property and places them in the interface between landscaped and wooded areas.

The bait will attract mice living on and around your property to the system boxes.

As a mouse moves through a box, it will pass under a small applicator wick containing a low-dose insecticide. The wick will lightly brush its head or shoulders, gently applying traces of

the insecticide. The insecticide won't harm the mice or any other animal that might touch or even eat them, but it will kill the ticks that the mice are carrying. A single dose will protect mice for up to 40 days against any new ticks. As they return to the system,

they will receive additional protection. Keep in mind that the system boxes are self-contained, and the insecticide they use is not a threat to any animal other than ticks on small rodents. The system is effective for approximately 90 days as installed, with two 90-day

installations that take care of ticks for a full season.

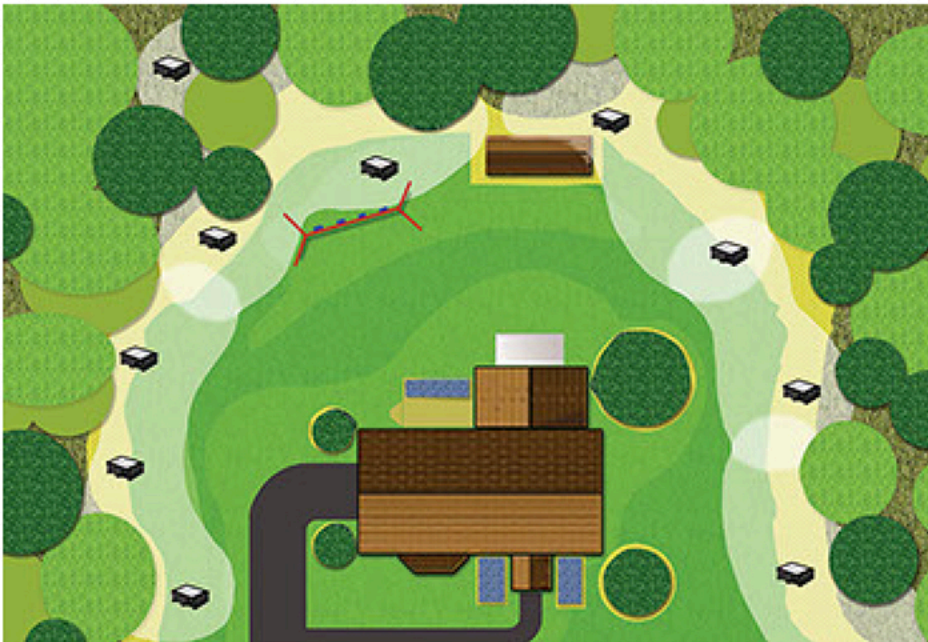




**T**his Illustration shows a typical installation of the Tick Box Tick Control System. Your authorized applicator determines how many boxes you need to protect your property and installs them in the "tick zone" (the interface between landscaping and the woods where ticks and rodents are abundant). The shaded areas illustrate the typical rodent territory in your yard.

Ticks do not travel more than a few feet on their own, so by treating the rodents that have developed territories around your property, you can have a dramatic effect on reducing the tick population that is present each season.

## A Typical System Installation



It's Fipronil, one of the world's best insecticides, and the choice of the CDC.

**T**he insecticide used in the Tick Box Tick Control System is Fipronil, an extremely low-dose insecticide with an amazing track record for performance. Fipronil is the active ingredient in the popular flea and tick treatment veterinarians commonly prescribe for household pets. And, it is used around the world in a variety of products designed to protect crops from destructive insects. Just a trace amount of Fipronil applied on a mouse is sufficient to kill ticks for days, yet it will not harm the mouse or any other animal it contacts. The Centers for Disease Control and Prevention tested several chemical compounds before deciding on Fipronil for the Tick Box Tick Control System. Fipronil's winning characteristics included extremely high efficacy and long residual.



## Questions & Answers



### What if my cat eats mice that have been in contact with the System?

It takes very little insecticide to control ticks on a small rodent, and the insecticide used in the Tick

Box Tick Control System is an extremely low-dose insecticide. Studies showed that a cat would have to eat approximately 600,000 mice in a day's time to suffer any ill effects.

### Why not kill the rodent hosts?

Eliminating the hosts is not practical. During a study in Dutchess County, New York, all rodents were removed from a one-acre plot, but it was an enormous task. And, after the study was concluded, the rodent population rebounded within two months.

### What about all the other rodents present, squirrels, etc?

The white-footed mouse is by far the most important host for the Lyme Disease bacterium. The eastern chipmunk is a secondary host, and the meadow vole may also be a factor. These animals can be handled by the System. Squirrels are too large, but they don't appear to play a significant role in Lyme Disease risk for humans.

### Do deer carry the disease, too?

While deer are not carriers of the disease, they are involved in its spread. They range over very large areas and can deposit in your lawn deer ticks that they picked up elsewhere. Where deer populations are high, so are deer tick numbers and the possibility of tick and deer mouse interactions. Deer fencing and localized deer reduction programs will help to reduce the risk of Lyme Disease.

### How much will the System cost?

The price will vary depending on your property and the number of boxes needed. A Tick Box Certified installer will need to do an estimate for you; however, consider the service as being comparable to a thorough pesticide application.

## Secure your property with Tick Box.

Keep in mind that the Tick Box Tick Control System is available only through a select number of professionals who have been specially trained and certified to offer it. To put the System to work in your yard, look for an authorized installer in your area.

*"I have deer on my property, some of my neighbors have Lyme disease, and I have a young child, so I had the Tick Box Tick Control System installed. It totally wiped out the tick population. I feel safe when my child goes out now."*

*Ron Contino  
Wilton, CT*

**TICK BOX™**  
**TICK**   
**CONTROL**  
**SYSTEM**

TICK BOX TICK CONTROL SYSTEM  
IS AN ALTERNATE BRAND NAME OF SELECT TCS

A product of  
Tick Box Technology Corporation

