

## ADDITIONAL INFORMATION

Many groups in the Northeast are working toward a common goal - reduce deer ticks and the incidence of tick infections in humans and pets. Some of these are listed below and they can provide additional information for the homeowner. The Tick Management Handbook prepared by Dr. Kirby Stafford III and staff at the CT Agricultural Experiment Station has much information, as does the interactive site by the University of Rhode Island (see links below). The Cape Cod Cooperative Extension Lyme Disease Program offers many educational materials, including posters, trail signs, rack cards, etc., that are all free of charge. Please call us!

### LOCAL TELEPHONE NUMBERS

508.375.6642 (CC Extension Lyme Disease Program)  
508.375.6613 (Department of Health/Environment)  
617.983.6800 (MA Department of Public Health)

There are also many Internet sites devoted to providing current information on ticks, the diseases they spread and ways to protect yourself. A selection of these sites is listed below.

### INTERNET SITES

[www.capecodextension.org](http://www.capecodextension.org) (CC Coop. Extension)  
[www.cdc.gov](http://www.cdc.gov) (Centers for Disease Control)  
[www.tickencounter.org](http://www.tickencounter.org) (University of Rhode Island)  
[www.ct.gov/caes](http://www.ct.gov/caes) (see Tick Management Handbook)  
[www.state.ma.us/dph](http://www.state.ma.us/dph) (MA Dept. of Public Health)  
[www.acponline.org/lyme](http://www.acponline.org/lyme) (Physician's Lyme Site)  
[www.tickinfo.com](http://www.tickinfo.com) (Tick Control Products)  
[www.aldf.com](http://www.aldf.com) (American Lyme Disease Foundation)  
[www.online-pets-supply.com](http://www.online-pets-supply.com) (Pet Products)

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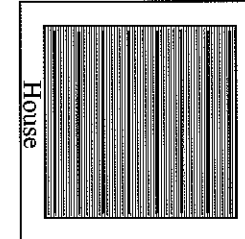
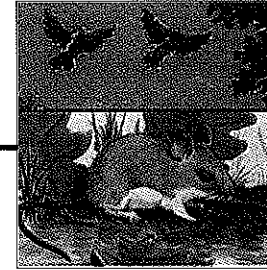


# TICK-PROOF YOUR YARD!

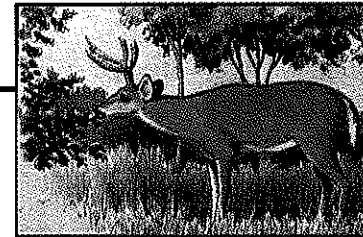
Create a safer yard zone by adding a three-foot wide row of wood chips or gravel around the yard edge. Move sand boxes and swingsets into the yard, away from this edge.



Exclude mice by raking up seed around the bird feeder. If possible, move the feeder away from the house. Cut brush away from a stone wall.



Trim excess brush and remove understory plants to permit more sunlight. Widen trails and paths.



Exclude deer by planting distasteful types of annuals, perennials and shrubs into your landscape. Avoid invasive plant species.

## PROPERTY MANAGEMENT TO PREVENT DEER TICKS



The deer tick (also called the blacklegged tick), *Ixodes scapularis*, can be infected with pathogens that cause human diseases, including Lyme disease, babesiosis and anaplasmosis.

Decreasing the number of ticks around your yard may also decrease the risk of a tick bite and thus, the spread of a tick-borne illness.

This pamphlet describes ways to curtail deer ticks on your property. When working in your yard, be sure to use safety precautions, such as wearing light-colored clothing, using a repellent, conducting frequent tick checks, and placing clothing for at least 15 minutes in a dryer on high heat after your outdoor work. Shower with soap and hot water after being outside.

Since deer ticks require a moist environment, drying the area by increasing the sunlight in and around a yard can be a simple and effective means to help decrease tick numbers. Careful and proper pruning can accomplish this task.

Cape Cod Cooperative Extension: Barnstable County, UMass Extension and the USDA cooperating.

## DEER TICK BIOLOGY

The deer tick is a three-host tick; that is, it feeds on three different animals during its life. The immature ticks, known as larvae and nymphs, each feed on a small mammal or bird, and eventually develop into adult ticks. The white-footed (field) mouse and the eastern chipmunk are typical hosts for immature ticks. Adult ticks feed upon a larger mammal (usually a white-tailed deer), mate, and deposit eggs to complete their life cycle. Any of these stages of ticks can feed on people, as well.

### LIMITING THE DEER TICK

The typical deer tick habitat is wooded and shady. Ticks may frequent the edge between yard and woods, in the leaf litter. By moving the zone of family activity away from this edge, disease risk is reduced.

Move the swing set, picnic table or hammock away from the wood's edge, into shade, dappled or full sunlight. Move bird feeders away from the house, and only provide birdseed from December through April.

### YARD MODIFICATION



Removing the woody undergrowth by mowing or brush cutting at least 10 feet into surrounding

woods will change the microclimate and make the ground less likely to shelter deer ticks.

A 5-7 foot wide barrier of wood chips, gravel, mulch, shells, etc. around the yard perimeter, between the lawn and woods, will have several functions. It will create an obstacle to tick passage into your yard, and will serve as a reminder for your family to stay in the tick safe zone.

### YARD MANAGEMENT

Create a yard environment unsuitable for ticks. Remove leaf litter and brush around your house, trim the lawn to 2", and keep shrubs, bushes and plants trimmed.

### PESTICIDES

Several pesticides are available to the homeowner or landscaper for tick control. Be sure to check the label to determine dosage and proper use. Application should be made in mid-May and again in mid-June for best results against larval and nymph ticks. A spray in October can reduce adult ticks in the surrounding brush.

If you hire a landscape company to apply the treatment, be sure they are licensed, will provide information about the pesticide they use, and have local references.

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## Yard Management and Pesticides

## TO DECREASE TICKS IN A YARD

The abundance of deer ticks in a yard can be decreased by modifying the area to make it less attractive for ticks, and by discouraging mice and deer, through a variety of techniques. If you live in a tick-infested area, consider these tactics to create a safer zone in your yard.

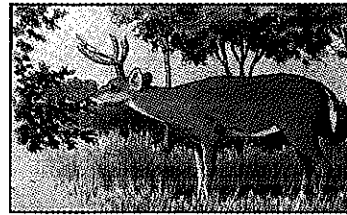
While you won't eliminate ticks, you can decrease their numbers around you and your family.

### INFECTION AND REPRODUCTION

An infected field mouse or chipmunk can transmit the Lyme disease organism to a feeding tick, which is generally the larva or nymph stage.

The white-tailed deer provides the blood meal required by a female adult tick to lay eggs. Humans are at risk from adult female ticks, but are not the usual, or preferred, hosts.

### LIMITING THE WHITE-TAILED DEER



Various materials have been developed to repel hungry deer. The compounds include materials

with a rancid odor such as eggs, urine and other objectionable scents. Apply or spray these compounds to food plants, as directed on the label. Generally, several applications are required for effectiveness.

Deer fencing is also an option. You can surround your area with a fence intended to exclude deer, or just surround your garden

or patio as desired. Check with your local hardware store about the availability of a fence designed to exclude deer.

Discouraging deer from browsing around your property will decrease ticks. Designing and planting a deer-resistant landscape can help.

**Replace favored food plants with annual plants such as:**

- alyssum, marigold, nasturtium, pansy, sage, spider flower and verbena.

**Other distasteful plants are:**

- Perennials including beebalm, bleeding heart, columbine, foxglove, lily of the valley, poppy, silvermound and yarrow.
- Shrubs and vines including andromeda, boxwood, butterfly bush, leucothoe, wisteria and weigela.
- Bulbs and corms including daffodil, hyacinth, iris and snowdrops.

### LIMITING THE FIELD MOUSE

Rodents, rabbits and other small mammals can be hosts for immature ticks, but the white-footed mouse and chipmunks are the primary sources of Lyme disease.

You cannot eliminate the rodent population around your yard, but you can discourage them from living there. By limiting the mouse and rodent population around a property, the number of infected ticks will also be reduced. Changes in your yard that will affect rodents include moving the woodpile away from the house, screening below a porch or shed, removing brush piles and cleaning away bird seed or other rodent food.