

Create an Unfriendly Yard for Ticks & Their Hosts with Landscaping

Tick-borne diseases, such as [Lyme disease](#) and [Anaplasmosis](#), are on the rise in Vermont vectored by black-legged tick (*Ixodes scapularis*). These diseases are preventable by increasing awareness about ticks and adopting protection tactics. People who work and play around tick habitats are at high risk for tick bites. Residential backyards are common places to encounter ticks, especially when yards border wooded areas—prime areas for their hosts, such as mice and deer.¹ Gardening and landscaping are often done in spring and fall when ticks are most active, which is when people should be particularly careful to avoid them.



Blacklegged tick, *Ixodes scapularis*, adult, female questing (seeking a host) on a flower.

Ticks and tick bites are best managed using a combination of strategies, to reduce tick density and risk of encounters.² This is **‘Integrated Tick Management’ (ITM)**. The best way to lower your risk for tick-borne diseases is to **avoid** getting bitten by ticks or shortening the time they feed on you. That means doing daily tick checks on yourself, your children and pets; wearing protective clothing and repellents; tucking your socks into your pants; placing clothes in the dryer after use; and [several other tactics](#). It may seem like ticks ‘thrive’ everywhere, but after you protect yourself, there are things you can do in your yard to make it less attractive to ticks and their hosts.¹⁻⁴

The first line of defense against ticks and tick-borne diseases is to **PREVENT** tick bites.

The key principles for reducing ticks through landscaping are (a) **reducing favorable tick habitat** by proper maintenance of plants and property, and (b) **minimizing the attractiveness of the yard to tick hosts** (deer, rodents, racoons, etc.). Ticks prefer places with high humidity, so to make the yard less “tick friendly”, design it so moisture levels are lower at the soil surface. This can be done by lessening the density of plantings, selecting plants that tolerate dry conditions, irrigating less often, and mowing the lawn regularly. Tall grasses, weeds and brush should be cleared away from the home, lawn edges and stone walls. Establishing a wood chip/gravel barrier between lawns and wooded areas, walkways, around patios and play equipment, may discourage tick migration into traveled areas. Tree branches and shrubs around the lawn edge should be pruned to let in sunlight and air where ticks might occur. It is best to remove leaf litter and other plant debris, within the yard perimeter as this is an ideal moist refuge for ticks. These tactics create inhospitable environments for ticks and help reduce their populations.

Creating conditions less favorable for tick hosts may reduce tick populations and the diseases they vector. After ticks feed on their host, they drop off in areas where the hosts frequent (e.g., in gardens where animals feed or in rodent burrows and hiding places such as stone walls or wood piles). Making yards unattractive to

tick hosts reduces both ticks and their hosts. For example, it is wise to remove old furniture, trash or debris around the yard and seal up holes in stone walls. It is recommended to keep bird feeders away from the house or remove them during peak tick activity periods. Ideally, deer-resistant plants should be selected and invasive species (i.e., barberry, non-native honeysuckle, multiflora rose) removed as they create host habitats.

Principles of Integrated Tick Management:

- (a) Reduce favorable tick habitat with proper vegetation and property maintenance.
- (b) Minimize attractiveness of the yard to tick hosts (deer, rodents, racoons, etc.).



Tick infected with a fungus *M. brunneum* (formerly *M. anisopliae*).

Installing a fence around the yard can deter tick hosts so they are less likely to visit or reside around the home. Leaves and yard waste should be raked up and disposed of in the fall to destroy potential tick overwintering sites.

Pesticide applications can be part of an ITM plan too. Several products are available with synthetic, natural or microbial ingredients (i.e., synthetic pyrethroids, carbaryl, *Metarhizium brunneum* [a fungus], etc.) for use by professional applicators and/or homeowners. Before using any pesticide, check the label to be sure it is registered for ticks in the state in which it is applied, and follow guidelines for its safe use.

Applications are typically made in late-spring or early summer during peak activity of immatures or in **fall** to target adults. Treatments are usually made where ticks are most abundant, such as where the lawn meets the woodland, around stone walls or in shady spaces.^{2,5} [Tick Tubes](#) and [Tick Box Systems](#) are also available. These contain pesticide-treated material that tick hosts take back to their nests. Ticks are killed when exposed to the pesticide, but **NOT** the rodents and other non-target organisms. There are unregulated minimum risk products, such as botanical oils, that are exempt from registration. Reports of their effectiveness to kill and/or repel ticks vary greatly.^{6,7}



Stone walls are tick hotspots and a target feature for management.

Don't Forget to Check Yourself for Ticks!

For more information about managing ticks in residential backyards, how to protect yourself against tick bites and the numbers and distribution of ticks in Vermont, check out the following links:

- ❖ [Preventing Ticks in the Yard](#) (Centers for Disease Control and Prevention)
- ❖ [Prevent Tick Bites & Tick Bite Illnesses](#) (VT Department of Health)
- ❖ [Ticks in Vermont](#) (VT Agency of Agriculture: Plant Health and Pest Management)
- ❖ [Tick Management Handbook](#) (CT Agric. Experiment Station)

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Supporting References:

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