• ALTERNATIVES

AVOIDING TICK PROBLEMS WITHOUT USING PESTICIDES

By Samantha McClanahan

Ticks bite, feed on blood, and sometimes carry debilitating diseases; it's more than enough to make most of us dislike them. This doesn't mean you need to panic or reach for a spray can if you spend time in a tick-infested area, however. Instead, try some of the effective pesticide-free techniques for dealing with ticks.

Recognizing Ticks

Ticks are not insects. They are actually arthropods that are more closely related to mites and spiders. Ticks require host animals in order to survive and reproduce.¹

Ticks' life cycles include four stages: egg, larvae, nymph, and adult.¹ Nymphs are small, between 1/25 and 1/8 of an inch long, and can be hard to see.^{2,3}

In the Pacific Northwest, ticks are most active in the spring and early summer. $^{2\mbox{-}4}$

Ticks cannot fly or jump, but only crawl slowly, so they like to climb up onto low vegetation and wait for hosts to brush up against them.¹

There are 80 species of ticks in the U.S., but only a dozen have important health concerns.¹ Ticks are hard to tell apart, so get help from a specialist² (for example, your county extension agent) if you need to identify a tick.

Diseases Carried by Ticks

Disease transmission by ticks is serious. However, not all ticks carry disease organisms,⁵ so the danger of ticks should not be exaggerated.

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Lyme disease is a bacterial infection which is transmitted through the bite of a number of ticks. The blacklegged tick, also known as the deer tick, is the primary vector in the eastern United States and the related western black-legged tick is the primary vector in the west.¹

It takes an infected tick between 36 and 48 hours of attachment to transmit Lyme disease to humans. Not all ticks are infected with the disease.¹

Rocky Mountain spotted fever is also caused by bacteria carried by ticks. The American dog tick (in eastern states) and the Rocky mountain wood tick (in the west) are the species most likely to carry this disease.¹

Despite its name, most cases of Rocky Mountain spotted fever occur in Oklahoma and North Carolina. As with Lyme disease, only a few ticks are actually infected by this disease.¹

Avoid Tick-infested Areas

One simple way to avoid tick problems is to avoid areas where they are common.

Ticks are most common in woodsy or overgrown areas where the ground

is covered with brush, thick weeds, or high grass. Ticks need to be protected from the harsh drying effects of the sun and wind, and these areas not only provide that protection, but they are also areas in which ticks' hosts, such as mice and deer, live.⁵

One way that you can tell if an area is infested with ticks is by flagging. Flagging is done by dragging a white cloth over dense, low-level vegetation. Ticks that are looking for passing hosts will grab onto the cloth thinking that it's a host.⁶

Modify your Landscape

By modifying your landscape, you can create tick-free zones. Consider the following ideas for your yard if ticks are a problem in your area:

- Increase areas of open lawn.⁵
- Keep your lawn mowed to a height of 3 inches or less. This lowers the humidity at ground level, making it difficult for ticks to survive.⁵
- Get rid of brush, weeds, leaf litter, and other debris. This vegetation can attract ticks and their hosts.⁵
- If your yard borders a wooded area, rake up leaf litter and cut down underbrush for several feet into the woods.⁵
- Eliminate densely planted beds near your house.⁵
- Keep picnic tables, lawn furniture, and children's play areas as far away as possible from woods, shrubs, and undergrowth.⁵
- Use wood chips or gravel to create a barrier between wooded areas where ticks are common and your lawn.¹

Dress Appropriately

It is also important to dress appropriately when entering areas that are infested with ticks. Wearing lighter colors will help you to easily spot ticks



that may be on you.³ You should also wear clothes that fit tightly around your wrists, ankles, and waist.⁴ Tuck your shirt into your pants, and your pants in your socks.³ Use a rubber band or tape the area to seal where the socks and pants meet so that ticks can't get under clothing. Wear a hat and longsleeved shirt.⁷ Also, ticks often wait on tall grass and vegetation along trails, so try to stay in the middle of trails to avoid brushing up against the vegetation.⁷

Tick Checks

A tick can be hard to notice, so you should perform tick checks on yourself, your kids, and your pets after you have been in tick habitat. You should examine your entire body, especially in areas in which ticks are most commonly found: under your arms, in and around your ears, inside your belly button, on the back of your knees, in and around your hair, between your legs, and around your waist.⁸ It's always a good idea to take a shower as well.⁷ Drying your clothes in a hot dryer kills ticks.⁹

If you find a tick, it needs to be removed right away.³

Animal-proof Your House and Yard

If you don't encourage animals to come close to your house, you will be less likely to get a tick bite. Move woodpiles, bird feeders, and birdbaths as far from your home as possible. Mice and chipmunks are hosts for ticks. They hide and nest in woodpiles, and eat spilled food from birdfeeders.⁵ Deer are also a host for ticks, so avoid putting plants in your yard that deer love to eat. Instead, plant varieties they don't like. Your county extension agent can recommend plants for your area. Consider fencing to keep out larger animals if necessary, especially deer. Don't feed wild animals in your yard.⁵

Pets and Ticks

Pets that go outside are more likely to return home with guests than pets that stay inside. If you have pets in an area where ticks are common, you should groom them when they come in from being outside. Designate sleeping areas for your pets, and check routinely for ticks that have dropped off of them while they were sleeping. Keep pets off furniture because ticks can hide in upholstery or cushions.⁵

Repellents

Pesticides are often recommended to repel ticks.¹ A commonly recommended repellent, DEET, causes a number of adverse effects to the nervous system. (See pages 10-14 or www.pesticide.org/DEET.pdf.)

An alternative repellent, geraniol, is effective against ticks according to research conducted at the University of Florida.¹⁰ For more information about geraniol, see pages 6-7 of this issue or www.pesticide.org/repellents.pdf.

Conclusion

To reduce tick problems, wear appropriate clothes in tick-infested areas. Check yourself carefully for ticks after you've been in tick habitat. You can also make your yard less attractive to ticks and their hosts.

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HOW TO REMOVE A TICK SAFELY

- 1. Use tweezers or disposable gloves to handle the tick. If fingers must be used shield them with a paper towel or tissue.
- 2. Grasp the tick as close to the skin surface as possible. This reduces the possibility of the head separating from the rest of the body when being removed.
- 3. Pull the tick straight out with steady, even pressure. Do not twist or jerk because you may break the tick, leaving the mouthparts in the skin.
- 4. After removing the tick, thoroughly disinfect the bite site. Do not apply Vaseline, a hot match, or grease to the rear of the tick. These actions can cause the tick to salivate while still in your skin, which can increase the likelihood of contracting a disease.

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