

## Landscaping to Avoid Ticks

Already this year, ticks have been plaguing Kansans who hike, work or play outdoors. Although most of us think of ticks just as “gross” they can also cause serious health issues for humans as well as domestic animals. As a parasite, ticks feed on human and animal blood transmitting diseases as they travel from host to host.

The optimal tick habitat is generally a transition zone between a field or yard and a wooded area. These areas, also called ecozones, are rich in leaf litter, small to medium sized shrubs and grasses. All of these plants help the ticks travel from the ground where they hatch to higher up, where they wait for hosts. Contrary to popular belief, ticks do not jump from trees down to their hosts. Instead, ticks climb up on a leaf, put their heads down and legs up and wait for an animal or person to brush by them. Their legs allow them to latch onto body hair and clothing. From there they will travel to a warm area and begin the process of biting. The second reason ticks prefer these ecozones is moisture. Many type of ticks need substantial amounts of moisture to live. As they wait on leaves for a host, their bodies are losing moisture. Once moisture reaches critical levels, the tick will crawl back down to the ground, under leaf litter and soak up moisture beneath the leaves.

Controlling these ecozones in your yard can dramatically cut down on tick populations. Shade, groundcovers, and brush can all be tick habitat. Raking leaves, and reducing piles of rocks or wood discourages ticks. Often, well-maintained gardens don't have high tick populations. If you're experiencing ticks in your yard, look for unmanaged areas that could be cleaned up.

Deer are also a major issue when trying to control ticks. As a favorite host for most tick species, studies have shown that when deer populations are high, so are populations of ticks and when deer are controlled, tick populations drop. A single deer feeding on a shrub in your yard may not seem like much of an issue. That single deer can carry hundreds of ticks. As the deer moves, engorged ticks will drop off. If those ticks are female, they could be carrying thousands of eggs. A single tick dropped off of a single deer has now laid thousands of tick eggs in your yard. Keeping deer completely out of your yard will reduce the likelihood of a high tick population.

Along with deer; mice, rabbits, groundhogs and raccoons can all carry ticks. Although these animals, along with other small mammals, are typically less of an issue than deer, they are still cause for concern. Mice can be vectors for numerous diseases that ticks transmit to humans. In contrast, snakes and predatory birds can be beneficial by controlling the animals that ticks feed on. If you have pets, make sure to consult your veterinarian on flea and tick control.

Chemical control can be an important part of tick control. Along with host control and habitat modification, spraying acaricides in the ecozones of your yard can provide additional control. When spraying, concentrate only on areas where tick populations are high or in the ecozones described above. Spraying your entire yard is not necessary. Make sure the chemical you select is labeled specifically for ticks. All label directions should be followed. Avoid spraying any plants intended for human consumption. If you have a pollinator area in your garden you should also avoid spraying these areas as acaricides can harm bees and butterflies.

The clothes you wear can also have an impact on tick bites, especially if you're in a habitat you cannot control, like a nature trail. Light colored clothing makes it easier for you or someone you're with to spot

ticks before they reach your skin. Long sleeves, long pants and tall socks all cover your skin making it harder for ticks to bite. To make these clothes even more fashionable, tuck the shirt into your pants and the pants into your socks. Some ticks are small enough to make it through the weave of socks so tape on top of your socks can also help. Products containing DEET applied over these layers of clothing provide good tick control. Depending on the amount of DEET in the products you're using, re-application will be needed at varying intervals. Products not labeled for use against ticks such as Skin So Soft and essential oils have unpredictable results. Although some showed controlled, the length of time for these products was as short as 10 minutes.

In contrast, there is a strong scientific consensus that permethrin treated clothing actually kills ticks on contact. This clothing is available at many outdoors stores. You can also purchase permethrin products to spray on clothes you already have. When label directions are followed (especially drying periods) permethrin clothing can be the most effective way to protect your body from tick bites. Make sure the product you're using is intended for clothing.

If you're in area with ticks and one does get on you, remove it as soon as possible. Ticks like to bite around the head, armpits, groin and the backs of your knees so when you come inside check those areas thoroughly. It can take ticks anywhere from 20 minutes to 2 hours to pierce the skin and secrete a concrete-like substance that keeps their head in place. If you find a tick embedded grasp it with tweezers close to your skin (not on their bodies) and slowly pull. If you yank or jerk the tick, it's body will break off leaving the head embedded. If this happens do not be alarmed, a tick head to your body is not unlike a splinter. It will not transmit diseases after the body has been removed. Hot matches, petroleum jelly, motor oil, nail polish and any other "smothering" products are shown to be ineffective in removing ticks.

If you've been bitten and have removed the tick, keep it in a sealed container for a few weeks. If you develop nausea, fever, dizziness, vomiting, joint pain or other unusual symptoms see your doctor. Tell them when you were bitten and bring the tick with you. Many diseases transmitted by ticks are treatable early on but if left untreated can cause lifelong issues.