



PLANT DISEASE AND INSECT ADVISORY

Entomology and Plant Pathology
Oklahoma State University
127 Noble Research Center
Stillwater, OK 74078



Vol. 7, No. 21

<http://entopl.okstate.edu/Pddl/>

June 11, 2008

Protecting Yourself from Ticks

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Brad Paisley came out with an entertaining song about checking your partner for ticks. He came up with this song one day while sitting with his buddies trying to figure out unique pick-up lines. You would have to wonder if one of his buddies is from Oklahoma to come up with a line that would actually make sense in everyday life. The one thing that he never mentions is what you do after you have found them! Well after getting that catchy tune out of your head you might start thinking about how to protect yourself or your family from ticks.

Ticks can be extremely hard to control in or around your house especially if you have some areas of your property that are adjacent to other areas with native forages or shrubs. Ticks require certain environmental conditions to reproduce and certain habitats provide these specific conditions for ticks to survive. Research has demonstrated that ticks can be found more often in places known as "transition areas". These transition areas are locations that have trees or shrubs that are adjacent to open grass areas. If you think about this - any normal landscapes in Oklahoma, especially for the eastern half of the state, have these transition areas. Some work has been done to demonstrate the usefulness of putting down wood chips (not mulch) along these areas to provide a boundary that limits ticks from coming into your yard

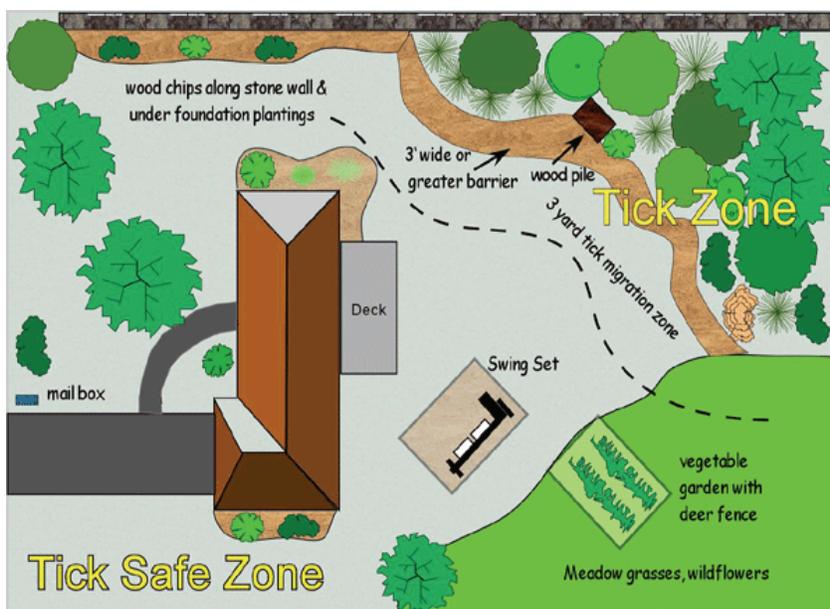


Fig 1. Diagram demonstrating a tick boundary created using wood chips. Credit: www.cdc.gov

(Fig. 1). Basically, the wood chip area decreases the favorability for ticks because it reduces the humidity in their microhabitats. The wood chip area can also be the site for a pesticide application in a more targeted manner. Another good tick suppression tactic is to keep your grass mowed down. A mown lawn allows for temperatures to increase rapidly and it also allows less humidity build-up within the grass canopy. Ticks can thrive in areas of high humidity and consistent temperatures. Something to

consider if your property is bordering pasture or native lands is limiting deer access to areas where you or your family frequent regularly. Deer can have thousands of female ticks on them which can drop off onto your property and lay up to 12,000 eggs. Research has indicated that homeowners that limit deer access had significantly less ticks on their property than those that did not limit access of deer.

There are two tick species abundant during this time of year in Oklahoma. The first is the Lone Star Tick (*Amblyomma americanum*) which is probably the tick most commonly encountered by people during recreational activities in Oklahoma. The female can be easily distinguished from other ticks by the lone white spot on its back (Fig. 2). This is considered a three-host tick, unfortunately all life stages can be found on humans. This tick is active from early spring through late fall in Oklahoma. It is known to transmit human ehrlichiosis, tularemia, and American Q fever. Of these, tularemia is largely vectored by this tick. Another illness that has been recently identified as being transmitted by the Lone Star Tick is Southern Associated Rash Illness (STARl) which is sometimes confused with Lyme disease. If you would like more information on these specific conditions visit the CDC website at www.cdc.gov.



Fig 2. Lone Star Tick, female (left) and male (right).

The second tick that is most commonly encountered in Oklahoma at this time is the American Dog Tick (*Dermacentor variabilis*). This is another three-host tick with mostly adults attacking humans. The immature stages are mostly found on small rodents. This tick is the only proven vector of Rocky Mountain spotted fever in Oklahoma. This tick prefers domestic animals such as dogs but if you share common areas with your pets you can expect to find them on you. The adult American Dog Tick can be identified by their reddish-brown color with silver-white markings on the back and upper body regions (Fig. 3). The silver-white markings are on the scutum (u-shaped area behind the mouthparts) in females and on the male they extend over the whole back.

For more information on RMSF see: <http://www.cdc.gov/ncidod/dvrd/rmsf/index.htm>



Fig 3. American Dog Tick, female (left) and male (right).

Both of the previously mentioned ticks can be found in or around your lawn. Listed below are good practices to take into account when going into a potential tick infested area:

1. Wear a repellent! (For a repellent to work properly against ticks one should look for products with a 20% or higher concentration of DEET).
2. Wear light colored clothing. (Ticks are easier to see on light colored clothing).
3. If ticks are a consistent problem try to target your control efforts along those transition areas.
4. If a tick is found on you the safest manner to remove a tick is to use tweezers and pull slowly (DO NOT YANK A TICK OUT or BURN or TWIST).
5. A mowed or properly kept yard reduces the favorability of your yard for ticks.
6. If you notice a significant rash around a tick bite - which develops 2-10 days after the initial bite - seek immediate medical attention.

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Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Robert E. Whitson, VP, Dean, and Director for Agricultural Programs, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Dean of Agricultural Sciences and Natural Resources.