



## UConn Home & Garden Education Center



### Ticks

The two species of ticks most likely to be encountered in Connecticut are the wood or American dog tick (*Dermacentor variabilis*) and the smaller black-legged tick (*Ixodes scapularis* and *Ixodes pacificus*) often called the deer tick as white-tailed deer are a favored host. Both carry diseases but it is the black-legged one that can transmit Lyme disease, human babesiosis and human granulocytic anaplasmosis. Late spring through summer is typically the time of year for greatest human exposure to Lyme and other tick-borne diseases. They can be active any time the temperature is above 30°F.

### Life Cycle

The life cycle of these ticks consists of 4 stages: eggs, larvae, nymphs and adults. Ticks have 6 legs in the larva stage and 8 in the nymph and adult ones. These parasites can feed on the blood of mammals, birds, reptiles and amphibians. We, of course, are concerned when they feed on us, our pets and any livestock. Ticks usually feed on different hosts during their various life stages. Young larvae will often feed on ground-dwelling rodents while the nymphs and adults search out larger animals including humans.

Ticks cannot jump or fly, instead they have a behavior called questing. The nymphs or adults will climb to the tips of grasses and perennials or out to the ends of shrub or young tree branches and wait in the questing position where they hold on to the plant with their third or fourth leg pair leaving their first pair of legs outstretched and ready to grab on to any bypassing animal. They can detect animal breath and body odors. They can also sense body warmth, moisture, and vibrations from movement.



Once on their host, some ticks attach themselves immediately while others search for parts with thinner skin such as a dog's ears. They first grasp the skin, cut into it and insert their feeding tube. It is often difficult to pull off a tick since some species secrete a cement-like substance that keeps them well attached. They can also secrete saliva with anesthetic properties that numb their bite. They may feed for several days and during this time they may also secrete saliva into the bite that contains pathogenic organisms such as Lyme disease. When full of blood, the tick drops off and prepares for its next life stage.

### Tick Testing

Visit the [Connecticut Veterinary Medical Diagnostic Laboratory](#) for the latest information on tick testing.

### Personal Protective Measures

- When walking in wild areas, keep to the center of paths and avoid brushy or grassy areas.
- Wear a hat and light colored clothing so ticks will be more visible.
- Wear long-sleeved shirts and long pants tucked into boots or socks.
- Consider using a repellent at least around the bottoms of pants.

- The Centers for Disease Control (CDC) recommends the use of repellents containing 20-50% DEET on exposed skin and clothing.
- Additional repellent recommendations may be found at the [CDC's site](#).
- Reapply as needed.
- Permethrin may be used on clothing but not on skin.
- See the Centers for Disease Control's site [Preventing Tick Bites](#) for suggestions.
- Do a thorough tick check after arriving home.
- Wash and dry clothes using hot water.
- Seek medical attention if you develop any symptoms of tick-borne diseases.

## Residential Protective Measures

- When thinking about the home landscape keep in mind that ticks live in woods and fields. They need the humidity provided by natural wild areas to survive. They will desiccate in the middle of a hot, sunny lawn. Up to 70% of ticks on residential lawns are found within 9' of the edge of a wooded area so the key to keeping ticks out of your yard is to provide a buffer zone between these wild areas and gardens or where the kids play.
- Mailboxes, picnic tables, children's swing sets or sandboxes and vegetable garden areas should be located in full sun as much as possible.
- Clear any brush and trim tree branches to let in more light.
- Keep these areas free of weeds, brush and leaf litter.
- Use mulches or gravel wherever possible.
- Keep the area next to woods and fields well-maintained.
- Mow regularly and keep weeds as low as possible.
- For the latest insecticide recommendations visit the Connecticut Agricultural Experiment Station fact sheet: [Tick Management Handbook](#)

## Animal Protective Measures

- Minimize habitats for mice and deer.
- Seal up entry holes in the house, garage and sheds so mice cannot enter.
- Screen areas under porches and decks to keep mice and other animals out.
- Discontinue feeding the birds during the spring and summer or move the feeders to the edge of the property beyond the sunny, tick-free, zone.
- Relegate woodpiles that can harbor mice to the back of the property.
- Plant shrubs and flowers that are not attractive to deer. Contact the [UConn Home & Garden Education Center](#) or call (877) 486-6271 for suggestions.
- Deer fencing will not keep the ticks themselves from a garden area.

## Tick Removal

- Immediately remove ticks using fine-tipped tweezers.
- Grasp the tick firmly as close to the skin as possible.
- Pull the tick's body away from the skin with a steady motion.
- Clean the area with soap and water.

## Asian Longhorned Tick

There is an alert in the eastern United States and Alabama for the Asian longhorned tick, *Haemaphysalis longicornis*. Native to Eastern Asia, it is an invasive species in Australia and New Zealand and was detected in New Jersey in 2017 although it may have been present since 2010. This tick can transmit bovine theileriosis and the parasites that cause babesiosis infection in animals. It can transmit potentially fatal diseases to humans in its native Asia, such as *Anaplasma phagocytophilum*, *Ehrlichia chaffeensis*, *Babesia* species, and Powassan virus. The first three diseases can be tested for at the [Connecticut Veterinary Medical Diagnostic Laboratory](#). It is similar in appearance to the rabbit tick, *Haemaphysalis leporispalustris*, and the bird tick, *Ixodes brunneus*, both of which are an issue to animals but not humans. Further information on this self-cloning tick can be found at the New Jersey government site: [Longhorned Ticks](#).

## Lone Star Ticks

The lone star tick, (*Amblyomma americanum*) transmits several disease including *Francisella tularensis*, the bacterium that causes tularemia (Rabbit fever) and southern tick-associated rash illness (STARI). STARI exhibits a rash that is similar to that of Lyme disease although less severe. Reports of tularemia in Connecticut are not common. The bite of the lone star tick can cause a human to develop an unusual allergic reaction called alpha-gal meat allergy. This allergy can cause life-threatening anaphylaxis shock 3 to 6 hours after meat consumption. The lone star tick can be found in wooded areas with thick underbrush.

Despite good cultural practices, pests and diseases at times may appear. Chemical control should be used only after all other methods have failed. For pesticide information please call UConn Home and Garden Education Center weekdays, in Connecticut call toll free 877-486-6271. Out of state call 860-486-6271 Revised by the UConn Home & Garden Education Center, 2016.

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