

Preventative measures for hunters to help reduce the spread of the exotic longhorned tick in NJ



Background

In late 2017, animal health experts in New Jersey identified *Haemaphysalis longicornis*, commonly known as the “longhorned tick” or “bush tick,” on a sheep in Hunterdon County. As of June 2018, the longhorned tick has been found in four NJ counties: Hunterdon, Union, Middlesex, and Mercer. The tick has also been confirmed in the states of Virginia, West Virginia, and Arkansas. To date, the longhorned tick has been found on the following species: sheep, goats, cattle, horses, dogs, deer, raccoons, and opossums.

The longhorned tick is not native to the United States. However, it is a serious threat to livestock and wildlife in Australia, New Zealand, and countries of eastern Asia. In April 2018, a white-tailed deer from Hunterdon County, NJ, was the first finding of this tick feeding on wildlife.

Finding the longhorned tick in New Jersey is noteworthy because this is the first time it was found in the United States. Animal health authorities are still investigating exactly how the longhorned tick entered the U.S., though this may never be known. Some possible ways it may have been introduced include entering on domestic pets (e.g. dogs), horses, livestock, or humans.

Why Is This Important

Longhorned ticks attach themselves to various warm-blooded animals, including wildlife, to feed. If animals become heavily infested with these ticks, the loss of blood can kill the animal. Ticks can also spread a variety of diseases. These exotic ticks are being collected to test them for disease. Tick-borne diseases, including those from ticks native to the region, pose a hazard to both hunters and their dogs. In addition to the risk of having the tick attach, human traffic can move the tick from one location to another. This may include hunters who often walk through wooded areas, grasses, and shrubs. With the wide host range for this tick, movement of hunter-killed animals to new regions can pose risks to increasing the range of this tick. For example, hunter movement of harvested deer may spread this tick from one region to another.

Recommendations

The following guidelines* are recommended for hunters and their dogs to avoid tick-borne diseases and to prevent the transfer of ticks to new sites.

Use Tick Repellent

- Apply tick repellents to exposed skin and clothing. The Centers for Disease Control and Prevention (CDC) provides guidelines for selecting the appropriate insect repellent. (https://www.cdc.gov/ticks/avoid/on_people.html) Always read the label before using.
- If skin becomes wet from sweat or water, towel off and reapply the repellent to dry skin.

Clothing and Footwear

- Spray permethrin-containing products on outer clothing, including shoes. Permethrin should NOT be used directly on skin. It is important to follow the directions on the product. If chemical odors are a concern, there are unscented and neutral odor products available. Also available are clothes that have insecticide embedded in the fibers and may last through multiple washes.

- Check clothing and exposed body prior to moving from one area to another. If ticks are located they may be submitted for identification. See below.
- Avoid wearing the same clothes on consecutive days without washing them first to remove ticks. Wash clothes immediately after returning home. To kill any ticks that may be on clothes it is recommended to use hot water and dry on high heat.

Cover up

- Wear light colored long-sleeved shirts and long pants.

Perform Tick Checks

- Conduct body checks immediately after returning from outdoor activities in tick-infested areas. Use mirrors if necessary, but check all body areas and remove all ticks found. Especially examine behind the ears, back of the neck, around the waist, and in and along the hairline. Shower as soon as possible to potentially wash away unattached ticks.

Remove Attached Ticks Safely

- Remove attached ticks by using fine-tipped tweezers. If tweezers are not readily available, you can improvise by shielding your fingers with tissue paper, a foil-covered gum wrapper, or plastic sandwich bag and grasping the tick as close to the skin as possible, pulling upward with steady, even pressure. Do not twist the tick as you remove it – this may cause the tick’s mouthparts to remain in the skin, increasing the risk of infection. Do not attempt to suffocate the tick with alcohol-soaked cotton – this will cause the tick to regurgitate while its mouthparts are still in the skin, and can increase the risk of infection.
- Wash the affected area with soap and water, and disinfect the bite site.

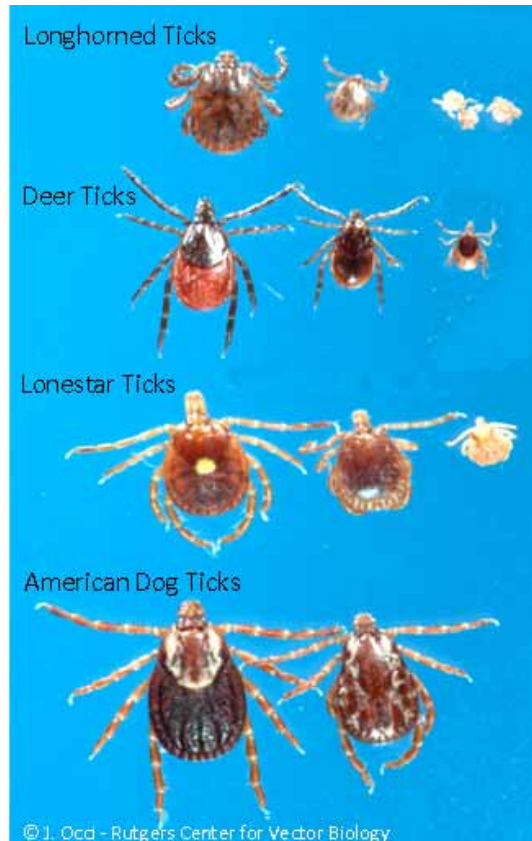
To protect hunting dogs, hunters should consult their veterinarian, but basic guidelines* include:

- Apply topical or systemic tick-control treatments. Consult your veterinarian about the appropriate product for your dog.
- Treat kennels as needed to kill ticks. Consult your veterinarian and/or a pest-control company about the safest and most appropriate alternative.
- Any ticks attached to dogs should be promptly and carefully removed, using the same guidelines as posted above for tick removal from human skin.

To avoid spreading the exotic tick by movement of hunter-killed deer:

- This tick is most active in warm weather, thus the highest risk of moving this tick is during warmer temperatures in September and October of the hunting season.
- After shooting a deer within or near an area known to contain this exotic tick, if you suspect that the deer has this tick present, contact the NJ Division of Fish and Wildlife (Office of Fish and Wildlife Health and Forensics, Jan Lovy, 908 637-4173 ext 120 or Jan.Lovy@dep.nj.gov) to coordinate collection of these ticks.
- After moving the deer, do not let it lay in your yard as ticks may detach and leave the deer after it has been dead.
- Have the deer butchered promptly OR if processing the deer yourself, remove the hide and store it to prevent ticks from getting into the environment. If saving the skin, freeze for a minimum of 2 days; if not, double bag it and dispose of it with your municipal waste.

What To Look For



Enlarged image of Deer ticks (top) and the Longhorned ticks (bottom) compared to poppy seeds (middle).

What You Can Do

If you find a suspected longhorned tick on you, your pets, horses, livestock, or hunter-harvested deer, please collect the tick for animal health officials to identify.

- Place the tick in a snack or sandwich size Ziploc baggie and seal it. Do NOT use tape to secure the tick.
- Call the New Jersey Tick Line at: 1-833-NEW-TICK (833-639-8425)
- For additional information, visit the NJ Dept. of Agriculture, Division of Animal Health webpage at <http://www.nj.gov/agriculture/divisions/ah/>

*Source – American Veterinary Medical Association: [Disease Precautions for Hunters](#)

Other Resources

Centers for Disease Control and Prevention: <https://www.cdc.gov/ticks/index.html>

New Jersey Department of Health:

http://nj.gov/health/cd/documents/avoid_tick_bites_feb2018.pdf

http://nj.gov/health/cd/documents/topics/vectorborne/remove_tick_021518.pdf

http://nj.gov/health/cd/documents/topics/vectorborne/C2471-tick-borne_diseases_brochure.pdf

Rutgers Center for Vector Biology: <http://vectorbio.rutgers.edu/>

Fonseca Lab: [The tick that binds us all: Review of the biology and ecology of Haemaphysalis longicornis](#)

Rhode Island Tick Encounter: <http://www.tickencounter.org/>