



# Managing the Asian Longhorned Tick: Checklist of Best Practices for Equines

*Authored by Theresa A. Dellinger, Diagnostician, and Eric Day, Lab Manager, Insect Identification Lab, Department of Entomology, Virginia Tech*

## Introduction

While primarily a concern on cattle, Asian longhorned tick (ALT, Fig. 1) feeds on a variety of hosts, including horses and other equines. ALT reproduces without mating, allowing tick densities to build quickly, and large numbers of ALT can be found on individual animals. ALT larvae, nymphs, and adults may all be found at the same time on the same animal. Wildlife, such as deer, small mammals, and birds, serve as alternative hosts for ticks, aiding in their spread throughout pastures. Managing ALT can be very difficult because this tick spends most of its life off the host and on the ground. The following recommendations are suggested to help protect your animals.



Figure 1. Asian longhorned ticks (Ansel Oommen, Bugwood.org).

## Inspection

- Regularly check equines for ticks when grooming. Run your fingers over the animal's body and inspect any small bumps closely. Unfed ALT are small (Fig. 2) and may go unnoticed, but they are readily detected by touch. Inspect the flanks and back, the armpits and groin, and around and under the tail dock.

Fully engorged ALT (Fig. 3) look very different than unfed ALT (Fig. 1).



Figure 2. Size comparison of adult Asian longhorned tick and a U.S. penny (Eric Day, Virginia Tech, Bugwood.org).



Figure 3. Engorged adult Asian longhorned ticks (Doug Beckers CC BY-SA 2.0 via Wikimedia Commons).

- Know how to remove a tick properly. Using fine-tipped tweezers or a tick removal tool, grab the tick firmly as close to the animal's skin as possible and slowly pull the tick off at the same angle it is attached. Do not twist or yank the tick as this will leave the mouthparts embedded in the skin. Do not squeeze the tick's body with the tweezers as this may force the tick's gut contents and pathogens into the horse. Do not crush the tick with your fingers as this may release pathogens on your hands. Place the tick

in a container with a small amount of hand sanitizer, rubbing alcohol, or insect repellent to kill it. Clean the tick bite with soap and water.

- Do not burn the tick with a lit match as you may injure the horse. Do not use petroleum jelly, fingernail polish, kerosene, drawing salve, or similar substances to suffocate the tick. While these might kill the tick, it still might feed long enough to transmit disease.
- Horses that are lethargic, have patchy hair, or look unthrifty should always be inspected for ticks and other parasites.
- Submit ticks to your [local Cooperative Extension](#) agent for species confirmation. Once ALT is confirmed on your animals or found on your property, you should assume it is established in the area and that management for this tick will be an on-going process.

## Chemical Control for ALT

- Consider using insecticides on your horses if you don't already. Chemical controls for ALT will also help protect against the deer tick that transmits Lyme disease and other infectious diseases.
- Treat all equines in a herd for ticks at the same time. Not all insect repellents or insecticides are labeled for ticks. Check the product label to ensure the product is approved for use against ticks on equines.
- Pour-ons containing permethrin are a good choice for tick control on horses. Follow all label recommendations. Heavy rain may wash topical insecticides off the animal. Check for flies on an animal several days after a heavy rain, which indicates the need to retreat the animal, as pour-ons also provide fly control.
- Other treatments available for use on horses include topical spot ons, sprays, and wipes. Follow label recommendations for timing and frequency of applications.
- Deworming with ivermectin or moxidectin will kill ticks feeding on a treated animal, but do not persist long enough to control tick populations. Do not rely on dewormers for tick management.
- Home remedies containing essential oils are rarely as effective in repelling or controlling

ticks as commercial preparations containing permethrin or other approved pesticides.

- Chemical treatment of pastures is not recommended except when extremely high tick densities are found. Carbaryl (Sevin) labeled for use on pastures should be restricted to sections of the pasture with the highest number of ticks. Pasture treatments should always be used in conjunction with rather than instead of other treatments.

## Equine Herd Management

- Inspect and treat new horses for ticks before adding them to an established herd.
- Consider having animals tested for tick-borne disease by your vet if ticks are found on them, especially if horses show loss of appetite and/or weight loss; seem stiff and reluctant to move; or otherwise appear unthrifty.
- Mow and keep pastures short as long grass and thick brush enhance tick survival. Simply leaving pastures ungrazed will not control ticks as they can survive about a year without feeding.
- Keep horses out of brushy, wooded areas where ticks are found. If possible, fence fields 20 feet away from wooded areas.
- Mow pastures short before rotating horses back into them, even if they have been treated for ticks.
- Other domesticated animals (e.g., small livestock, poultry, pets) on the property should be examined and treated for ticks.
- People working with livestock, especially tick-infested animals, should inspect themselves for ticks after working with the animals. Consider using insect repellent for personal protection against ticks.

Visit Virginia Cooperative Extension: [ext.vt.edu](http://ext.vt.edu)

Virginia Cooperative Extension is a partnership of Virginia Tech, Virginia State University, the U.S. Department of Agriculture (USDA), and local governments, and is an equal opportunity employer. For the full non-discrimination statement, please visit [ext.vt.edu/accessibility](http://ext.vt.edu/accessibility).

2025

ENTO-348NP (ENTO-619NP)