



## Managing the Asian Longhorned Tick: Checklist of Best Tick Management Practices for Horse Owners

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### Introduction

While primarily a concern on cattle, Asian longhorned tick (ALT, Fig. 1) feeds on a variety of hosts, including horses. ALT may occur in large numbers on a host, reducing host health and possibly spreading diseases. ALT reproduces without mating so tick densities can build quickly. 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 and reduce the impact and spread of ALT.**



Figure 1. Asian longhorn tick, dorsal view. (Eric Day, Virginia Tech)

### Inspection

- Regularly inspect horses for ticks. The ALT is small and may go unnoticed with only a cursory glance. Focus on the head and the neck, but also check the flanks and back, the armpits and groin,

and under the tail. Tick larvae, nymphs, and adults may all be found at the same time on a single animal.

- Grooming is an excellent opportunity to monitor a horse for ticks. Run your fingers over the animal's body and inspect any small bumps closely. Ticks can be detected by touch and this method may find more ticks than just doing a visual inspection.
- Know how to properly remove a tick. Using fine-tipped tweezers or a tick removal tool, grasp the tick firmly as close to the animal's skin as possible and slowly pull the tick off in the same angle it is attached. Do not twist or yank the tick as this will tear off the mouthparts and leave them embedded in the horse's skin. Do not squeeze the tick's body with the tweezers as this may force the tick's gut contents and any disease 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 spray to kill the tick, or place in the freezer for several days. Clean the site of the tick bite with soap and water and monitor that it heals properly.
- Do not use a lit match to burn the tick off as you may injure the horse. Do not use petroleum jelly, fingernail polish, kerosene, drawing salves, liquid soap, or any similar substances to "suffocate" the tick. While this method might kill the tick, the tick might still live long enough to infect the horse with a disease pathogen.
- Horses that are lethargic, have patchy hair, or generally look unthrifty should always be inspected for ticks or other ectoparasites.
- Submit ticks to your local 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

- Consider using chemical controls on your horses if you don't already. Chemical controls for ticks will also help protect your animals against the deer tick that transmits Lyme disease and other infectious diseases.
- 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 horses.
- Pour-ons containing permethrin are a good choice for tick control on horses. Apply in a narrow strip along the horse's topline and down the face. Follow all label precautions. Heavy rain may temporarily wash insecticides off the animal. Check for the presence of flies on the animal several days after a heavy rain. Increased numbers of flies at several days after a heavy rain may indicate the need to retreat the animal. Pour-ons will also provide fly control.
- Deworming with ivermectin or moxidectin will kill ticks as they feed, but not ticks that aren't attached to the animal. Do not rely on dewormers to control ticks on your animals. The treatment will not persist long enough to impact tick populations.
- Sprays or wipe-ons are useful for repelling or killing ticks wandering on the animal's body. Follow label recommendations for timing and frequency of applications.
- Topical spot-on formulations are available for use on horses in Virginia.
- Home remedy products containing essential oils are rarely as effective in repelling or controlling ticks as commercial preparations containing permethrin or other approved pesticides.
- Treat all animals in a herd for ticks at the same time. Apply formulations specifically labeled for tick control. Follow all label recommendations for any pesticide used on an animal.
- Chemical treatment of pastures is not recommended except under severe conditions of high tick densities. 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, and not in place of, other treatments.

## Herd Management

- Inspect new horses for ticks during a quarantine period. Treat animals before adding to the established herd if ticks are found.
- Consider having animals tested by your vet for tick-borne disease 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 brush enhance tick survival. Leaving pastures ungrazed will not control ticks as they can survive about a year without feeding.
- Keep horses out of wooded areas. 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.
- Wildlife, such as deer, small mammals, and birds, serve as alternative hosts for ticks and assist their spread throughout pastures.
- 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 any ticks after working with the animals. Follow all label recommendations for personal protection when handling any pesticides.

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