Asian Longhorned Ticks in Ohio

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Q: What are Asian longhorned ticks?
A: The Asian longhorned tick (*Haemaphysalis longicornis*; ALHT) has been introduced to the United States and was recently reported in Ohio. Female ALHT can reproduce without mating and lay up to 2,000 eggs allowing them to quickly establish large populations. They have been reported on more than two dozen species including sheep, goats, horses, cattle, chickens, dogs, cats, and humans. Among wildlife species, ALHT are most commonly reported on deer and raccoons.

Q: Can they make humans or animals sick?
A: Livestock may become heavily infested with large numbers of ALHT causing distress that can lead to decreased production and growth, aborted or still births, and death. These ticks may also transmit bovine theileriosis causing anemia in cattle, which can be fatal. At this time, no other animal or human pathogens have been reported in ALHT populations in the U.S., but these ticks have demonstrated capability to acquire and transmit several human and animal pathogens in other countries and in the laboratory.

Q: What should I look for?
A: Regularly check your animals for ticks by “scratching” and feeling with your fingers on the ears, shoulders, groin, armpits, and around the anus. ALHT appear small, brown, and plain (lacking color pattern) when unfed but may appear grayish when engorged with blood. Unfed adults are roughly the size of sesame seeds but can swell to the size of a pea when engorged. Juvenile stages (larvae and nymphs) are so small they may go unnoticed or resemble tiny, fast-moving spiders. All three life stages may occur at the same time, but nymphs are most active in the spring followed by adults in the summer and larvae in the fall. ALHT may be active in winter.

Although many ticks can look alike to the naked eye, the following suspicious tick encounters are characteristic of ALHT:

- Observing unusually high numbers (hundreds to thousands) of ticks or little “spiders” on animals or equipment
- Being swarmed by ticks upon entering a field
- Observing clusters of ticks on the tips of vegetation (may look like clumps of seeds)

**ALHT life stages and relative actual size**

Unfed larva •
Unfed nymph •
Engorged nymph •
Unfed female •
Engorged female •

Males are rare. Photo credits: Unfed (CDC), Engorged (J. Occi, Rutgers CVB)
Q: What should I do if I see ticks?
A: If you see ticks that resemble ALHT or experience any suspicious tick encounters, please collect and submit ticks to The Ohio State University for identification. Immediately report large numbers of ticks on livestock to ODA’s Division of Animal Health by calling 614-728-6220.

To submit a sample:
1. Place the tick(s) in a zip-top bag.
2. Put the bag in an appropriately sized mailing envelope with sufficient postage.
3. Include a piece of paper in the envelope with the following information:
   - Your name and phone number
   - Nearest address or intersection where found
   - Date found
   - What it was found on (i.e. cow, dog, veg, etc.)
4. Mail to:
   Pesapane Lab
   A101 Sisson Hall
   1920 Coffey Rd
   Columbus, OH 43210
5. Contact ticks@osu.edu if you have questions about submission or need supplies.

Livestock producers should work with their veterinarian to develop a tick prevention and control program. The American Veterinary Medical Association states that although no products in the U.S. are currently labeled for use against ALHT, several approved isoxazoline-class drugs for small animals and permethrin-class drugs for large animals have demonstrated efficacy against ALHT in other countries. Practitioners and producers are advised that use of these products for ALHT constitutes extra-label use and should be supervised by a veterinarian. When using pesticides, remember the label is the law. Please read, understand, and follow all label guidelines for use of pesticides to control ticks.

Q: How can I prevent ticks?
A: Keep grass and weeds short. Clear brush from feedlots and pastures. Talk with a veterinarian about tick prevention for your animals. Prevent tick bites on yourself by wearing tick repellent, long sleeves and pants, and tucking pants into socks to limit access to your skin. Perform a thorough tick check whenever you return from the outdoors and remove all ticks immediately by grasping the tick close to the skin with tweezers and pulling gently upwards. If bitten, save ticks for identification, mark your calendar, monitor yourself for any signs of illness, and contact your health care provider. For more information on tick safety, visit the Ohio Department of Health website.

More resources:
- USDA APHIS Vector-borne Disease
- ODA Division of Animal Health
- ODNR Recreational Safety-Ticks in Ohio

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