



Cooperative Extension Service Lee County P.O. Box 546 Beattyville, KY 41311 (606) 464-2759 Fax: (606) 464-9908 extension.ca.uky.edu

A monthly newsletter on Extension Service programs and events.

## Extension News —

Agriculture - Family & Consumer Sciences - 4-H Youth Development



Sign Up for Jam Class -June 11, 2024!!



#### In this Issue —

- Lee County 4-H Camping Group
- Homemaker Happenings; FCS Program Highlights & Announcements
- Family & Consumer Science Program Announcements
- How to Stay Safe When A Thunderstorm Threatens;
   Be Prepared for a Thunderstorm, Lightning or Hail
- Preparing for Asian
   Longhorned Tick in Kentucky

Cooperative Extension Service Agriculture and Natural Resources Family and Consumer Sciences 4-H Youth Development Community and Economic Development Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.







Lee County 4-H Youth attending J.M. Feltner 4-H Camp in London, KY.

Meet New Friends | Try New Things | Find Your Spark at 4-H Camp

ACCREDITED

# J.M. Feltner 4-H Camp London, KY

Camp facilities include a dining hall, a multipurpose building, a shelter house, a nature cabin, a deluxe cabin with a storm bunker, a country store for souvenirs and snacks, and a swimming pool with a waterslide & rock wall. A 1 ½ acre lake provides opportunities for fishing, canoeing, paddle boating, and pond studies in nature class. The camp offers facilities for archery, riflery, football, soccer, volleyball, basketball, & hiking. Our playground area includes swings, monkey bars, ga-ga, carpet ball, roof ball, 9-square, and giant chess.



# HAPPENINGS



Homemaker State Meeting was a success.

Participating homemakers learned a wide variety of new skills and information.

Save the date for next year: May 5-8, 2025

Location: Lexington



## Reminder

Log those volunteer hours!
Sheets are due July 1st.

### **Passport Challenge**

Don't forget to turn your Passports in by July 15th.
Log all locations, events, and more in your travel booklet.
Lets explore KY!!



### Family and Consumer Science Program Highlights & Announcements



## Taste Through the Calendar

FCS Agent went to Senior Citizens to let the participants sampled an NEP Calendar recipe," Fruited Coleslaw" They also got an update on programs at the Extension office.





View this link for the Food Preservation Publications at — <a href="http://fcs-hes.ca.uky.edu/publications-list/22">http://fcs-hes.ca.uky.edu/publications-list/22</a>

## Family and Consumer Science Program Announcements



Save the Date

Jam Class

Date: June 11th, 2024

Time: 10:00 AM

Location: Lee County

Extension Office

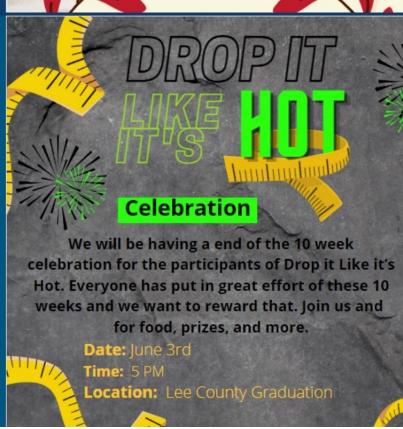
Cost: FREE

Spots are limited.

Call to register:
606-464-2759

BE SURE TO CHECK
OUT OUR FACEBOOK
PAGE AND GIVE US A
"LIKE" SO YOU CAN
BE UPDATED ON
CURRENT
PROGRAMS.





## **HOW TO STAY SAFE**

#### WHEN A THUNDERSTORM THREATENS



Know your area's risk of thunderstorms. They can occur year-round and at any hour.

Sign up for your community's warning system. The Emergency Alert System (EAS) and National Oceanic and Atmospheric Administration (NOAA) Weather Radio also provide emergency alerts.

**Identify sturdy buildings close** to where you live, work, study, and play.

**Cut down or trim trees** that may be in danger of falling on your home.

Consider buying surge protectors, lightning rods, or a lightning protection system to protect your home, appliances, and electronic devices.

Secure outside furniture.



When thunder roars, go indoors. A sturdy building is the safest place to be during a thunderstorm.

Pay attention to weather reports and warnings of thunderstorms. Be ready to change plans, if necessary, to be near shelter.

When you receive a thunderstorm warning or hear thunder, go inside immediately.

If indoors, avoid running water or using landline phones. Electricity can travel through plumbing and phone lines.

**Protect your property.** Unplug appliances and other electric devices.

**If boating or swimming**, get to land and find a sturdy, grounded shelter or vehicle immediately.

If necessary, take shelter in a car with a metal top and sides. Do not touch anything metal.

Avoid flooded roadways. Turn Around Don't Drown®. Just six inches of fast-moving water can knock you down, and one foot of moving water can sweep your vehicle away.





Pay attention to authorities and weather forecasts to know whether it is safe to go outside and to get information regarding potential flash flooding.

Watch for fallen power lines and trees. Report them immediately.

### Take an Active Role in Your Safety

Go to Ready.gov/
thunderstorms-lightning.
Download the FEMA app to
get more information about
preparing for thunderstorm,
lightning or hail.



BE PREPARED FOR A THUNDERSTORM, LIGHTNING OR HAIL

Lightning is a leading cause of injury and death from weather-related hazards.

Thunderstorms are dangerous storms that include lightning.







Create lightning and hail



Cause flash flooding and tornadoes

## IF YOU ARE UNDER A THUNDERSTORM WARNING, FIND SAFE SHELTER RIGHT AWAY

When thunder roars, go indoors.





Pay attention to alerts and warnings.

Move from outdoors into a building or car.





Unplug appliances.



Do not use landline phones.

## Preparing for Asian Longhorned Tick in Kentucky —

**ENTFACT-518: Preparing for Asian Longhorned Tick in Kentucky** 

By Anna Pasternak, Graduate Tick Researcher and Jonathan L. Larson, Extension Entomologist

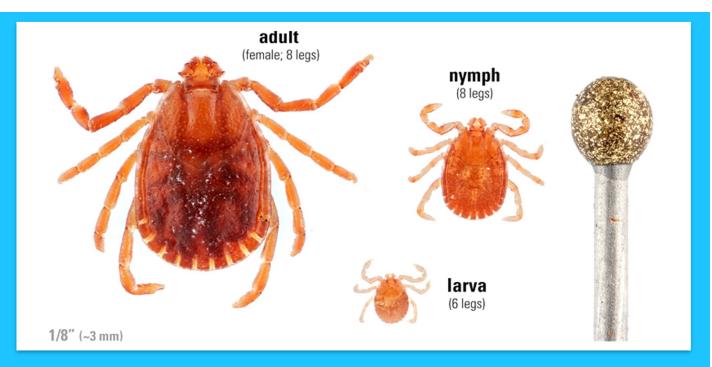
- Asian longhorned tick (ALT) is an invasive species that was first confirmed in the United States in 2013 with further discoveries in 2017.
- This tick species reproduces through parthenogenesis, where the female can produce offspring on her own. This can result in thousands of ticks being found on animals.
- As of this writing, ALT has been found in Floyd, Martin, Metcalfe, Madison, Breathitt,
   Perry, Boone, Garrard, Barren, and Laurel counties.
- ALT can vector Theileria to cattle and can cause extreme blood loss in wildlife and farm animals, careful monitoring of livestock and use of veterinary tick prevention methods is highly recommended.

## Pest Background and Description

Asian longhorned tick (ALT) is an invasive species that is brown in color with little to no distinguishing markings. They are smaller than many of our native ticks. Photo by Centers for Disease Control.



ALT is a simple looking tick. They have a reddish-brown coloration throughout their life. Like native species, they progress from eggs to larva, to nymphs, then to adults. The larval stage only has six legs while nymphs and adults both have eight. As adults, ALT are about .1 inch long (2.5 mm) and are smaller than many of our native tick species. As they feed, their bodies will swell to the proportions of a pea. Unlike native species, such as the American dog tick or Lonestar tick, the Asian longhorned tick has no distinct patterns or markings. So far, all Asian longhorned ticks caught in the United States have been female. The species reproduces here through parthenogenesis, where an adult female can give birth to many clonal female daughters.



Asian longhorned tick go from egg to larva, to nymph, then to adult. They are reddish brown throughout their life and quite small (the gold object is the head of a pin). Photo by Matt Bertone, NC State Entomology.

### Threat Posed By Asian Longhorned Ticks . . .

Asian longhorned tick, like other problematic tick species, is a blood feeding ectoparasite. They will await a host by questing on vegetation (such as long grass). When a potential host wanders by, the tick will climb onto the body and then search for a suitable feeding site. Following this, they will insert their mouthparts into the host and begin to draw blood out. They will feed for multiple days until fully engorged.

So far, ALT has been confirmed on 25 different animal hosts including but not limited to; turkeys, squirrels, rabbits, raccoons, elk, deer, and bear. Domesticated animals such as cattle, sheep, and horses are also under threat. There have been confirmed bites on humans, but the CDC indicates that there is less attraction to humans than to other animals.

This tick is a possible vector for the pathogens responsible for spotted fevers and for anaplasmosis. There are ongoing research projects in the US to find if ALT is going to be a competent vector for Rocky Mountain Spotted Fever and Lyme disease. While the most recent research has demonstrated that ALT is unlikely to be a vector for Lyme disease, this is an ongoing situation that requires continued evaluation. There has been a published report showing that a wild caught tick contained the pathogen, but no confirmed cases of the tick transferring the pathogen to a host have been recorded. As for Rocky Mountain Spotted Fever, one trial demonstrated that ALT can transmit the bacteria responsible, but thus far, no wild caught Asian longhorned ticks have contained the pathogen. This situation will also require careful monitoring in the future.

Despite the lack of pathogen transfer, ALT does pose a threat to wild and domestic animals. As these ticks are capable of reproducing through parthenogenesis, an individual female tick is capable of creating hundreds of more ticks that will feed on an animal. As these populations boom on a host, the animal can suffer from anemia and ultimately exsanguination is possible. Two cases of lambs dying in Tennessee due to blood loss as a result of these ticks has been recorded.

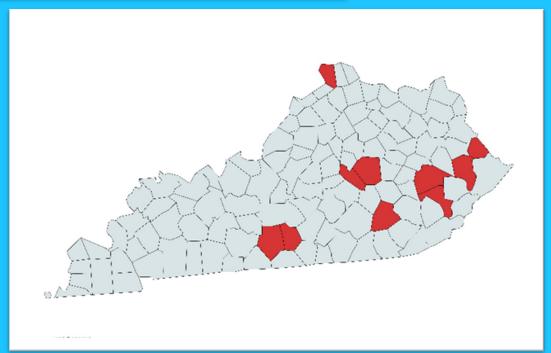
#### What Is The Situation In The US Right Now?

As of the revision of this fact sheet, there have been confirmed finds of ALT in: Arkansas, Connecticut, Delaware, Indiana, Georgia, Kentucky, Massachusetts, Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, and West Virginia.



The known distribution of Asian longhorned tick in the US. This map is taken from the National Haemaphysalis longicornis (Asian longhorned tick) Situation Report as of mid-2023.

In Kentucky specifically, ALT has been found in Floyd, Martin, Metcalfe, Madison, Breathitt, Perry, Boone, Garrard, Barren, and Laurel counties. Instances of Asian longhorned tick in Kentucky tend to be associated with cattle, though there are reports from bear, elk, and humans as well.



In Kentucky, Asian Longhorned Tick has been found in at least 10 Counties—Floyd, Martin, Metcalf, Madison, Breathitt, Perry, Boone, Gabbard, Barren, and Laurel Counties.

View this link for the Kentucky Beef Book http://www2.ca.uky.edu/agcomm/pubs/ID/ID108/ID108.pdf

#### Theileria —

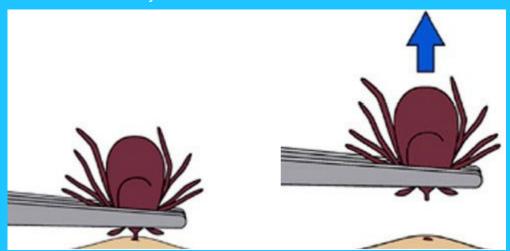
Asian longhorned tick is considered a competent vector for the cattle disease Theileria, more specifically, *Theileria orientalis* Ikeda. Theileria is a protozoon that can infect red and white blood cells, causing anemia in infected cattle. The symptoms include anemia, jaundice, weakness, and increased abortions. Theileria is often mistaken for anaplasmosis. Pregnant heifers and calves are susceptible to infection. Mortality rates from Theileria can vary wildly from herd to herd, but infected individuals that survive can suffer relapses and become lifelong carriers of the pathogen.

In 2022 Theileria was found in both Tennessee and Kentucky. As Asian longhorned tick furthers its range in the two states, it is possible more of them could be infected with the pathogen responsible for Theileria, escalating infections in the state's cattle. Beef producers need to keep a close eye on their herds for Asian longhorned tick and for the symptoms of Theileria and consult with their veterinarian if they are considered their herd is infected. Cattle that live through the infection can still be sold for meat and Theileria will not infect a human.

#### Tick Prevention and Management . . .

As with all ticks, people can take precautionary steps to keep themselves safe from ALT bites. Using repellants for your skin (such as DEET or picaridin) can help but treating your clothing with permethrin will provide the best protection. Permethrin is not to be used on the skin and should only be applied to clothing items. Performing routine tick checks after spending time in tick habitat will also hopefully intercept ticks before they bite.

If you find that a tick (of any species) has attached itself to you, there are steps you should take to remove the tick. Avoid using methods such as fire, alcohol, essential oils, or other topical applications that will kill or agitate the tick while it is attached to you. If you use these, you might induce the tick to "vomit" into you, increasing the possibility of pathogens being transferred to you. Instead, find a pair of fine point tweezers and grip the tick's body as close to your skin as possible. Then, pull steadily out to remove the tick. Do not rip the tick out or twist and wiggle it out, doing this could cause pieces of the tick to break off inside of you.



As for animals, treating your pets with tick preventive medicine will keep them tick-free and help to prevent them from accidentally bringing the little bloodsuckers into your yard and house. Livestock should be inspected thoroughly at regular intervals to hopefully find ticks on animals before populations are able to explode. When they are located on animals, removing them as you would on a human is the best course of action. Habitat management can help suppress tick populations as well. Be sure to cut down on long vegetation near pastures and barns and remove brush piles where possible.

where possible. Keeping an approximately 9-foot wide, open perimeter near pastures can help minimize tick populations in high animal traffic areas. Perimeters can be treated with pyrethroid products (such as bifenthrin) though this should not be done to entire pastures. Products that can be wipe-on or spray repellents as well as shampoos, ear tags, pour on insecticides and dusts can help to repel some ticks for a short while. These treatments may offer protection for four to eight hours and even if they are used, careful monitoring of the animals is still required.

Revised: 7/2023

**CAUTION!** Pesticide recommendations in this publication are registered for use in Kentucky, USA ONLY! The use of some products may not be legal in your state or country. Please check with your local county agent or regulatory official before using any pesticide mentioned in this publication.

Of course, ALWAYS READ AND FOLLOW LABEL DIRECTIONS FOR SAFE USE OF ANY PESTICIDE!

### Categories —

**ENTfact </categories/entfact-0>** 

General Home & Health Topics </categories/general-home-health-topics>
Invasive/Exotic Pests </categories/invasiveexotic-pests>
Livestock Pests </categories/livestock-pests>
Pests of Cattle </categories/pests-cattle>
Stinging or Biting Pests </categories/stinging-or-biting-pests>

#### **Visit Us**

Kentucky Pest News <a href="https://kentuckypestnews.wordpress.com/">https://www.facebook.com/kentucky-bugs-262237810453730/>YouTube <a href="https://www.youtube.com/user/ukentomology">https://www.youtube.com/user/ukentomology</a>
Twitter <a href="https://twitter.com/ukyentclub">https://twitter.com/ukyentclub</a>

For additional questions contact Ted Johnson, CEA for Agriculture!!

