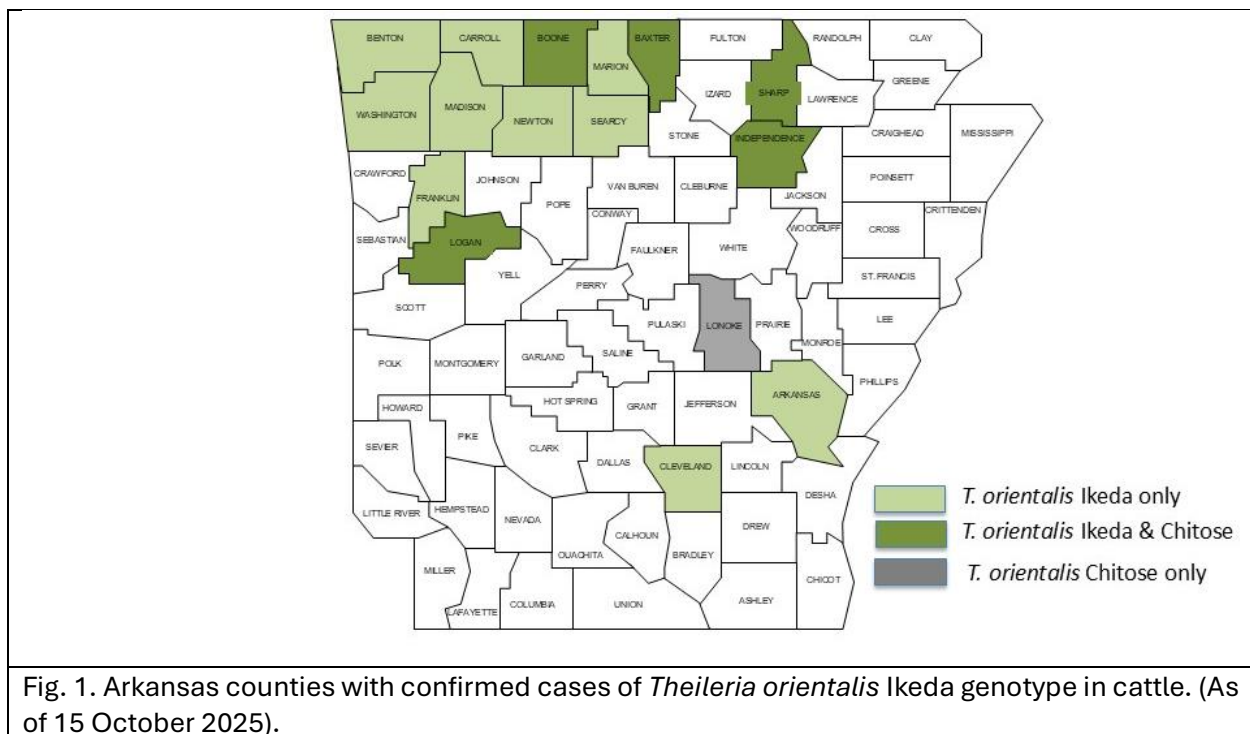
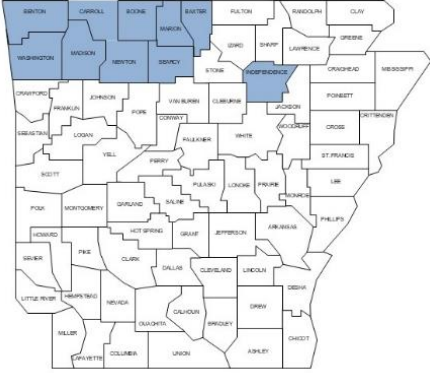


Currently, 15 counties have confirmed cases of theileriosis caused by infection with *Theileria orientalis* Ikeda (Fig 1). This organism is a protozoan pathogen of both red and white blood cells and is transmitted biologically from the bite of an infected Asian longhorned tick, *Haemaphysalis longicornis* and mechanically through the use of contaminated hypodermic needles or surgical equipment (dehorners, scalpels, etc.). Symptoms in cattle are very similar to the symptoms of anaplasmosis which is an infection with the bacteria, *Anaplasma marginale*. Another key difference between anaplasmosis and theileriosis is that theileriosis can cause symptoms in cattle of any age whereas anaplasmosis symptoms and illness occur in older cattle.



We are currently collecting and testing blood from symptomatic cattle as well as random sampling from herds showing few or no symptoms. We observed herd *T. orientalis* Ikeda infection rates ranging from 0 to 100%. From the standpoint of symptomatic (anemic, lethargic, breathing difficulty and jaundiced) cattle, infection rates have been high. And we are seeing more symptomatic cows during periods of stress such as the calving season (later term pregnancies and early lactation). In addition, we have observed high infection rates in cows that have aborted. Particularly during periods of stress, calves are showing the tell-tale symptoms and may be unthrifty and poor weight gainers.

Currently, Asian longhorned ticks have been confirmed in 10 counties and very likely established in other counties (Fig 2). This tick is unique in that it reproduces without mating (parthenogenesis) and basically produces female clones. This allows population to build and establish rapidly. In contrast to some of our common native species, Asian longhorned tick are uniformly brown in color and posses shorter more angular mouthparts (Fig 3).

	
Fig. 2. Arkansas counties with confirmed populations of Asian longhorned ticks, <i>Haemaphysalis longicornis</i>. (As of 5 November 2025).	Fig. 5. ALT adult and nymph – dorsal and ventral views; spur on palp.

Because bovine theileriosis and Asian longhorned ticks are new to the U.S., more research is needed to combat the tick and disease. And currently no approved treatment for theileriosis in the U.S. is available. Below is a listing of best management practices to mitigate theileriosis.

- Test symptomatic cattle for *T. orientalis* Ikeda, including open cows that were presumably bred, cattle that aborted or had a still birth, unthrifty calves and poor-performing bulls
- Use a clean needle for each animal and disinfect surgical equipment between animals
- Maintain a tick control and vegetation (brush hogging) control program
- When treating cattle for ticks, treat all animals in the herd
- Reduce herd stress and closely observe cattle for symptoms during calving
- Treat cattle infected with bacterial diseases promptly to reduce stress (sick and dying animals sometimes are co-infected with bacterial pathogens)
- Contact us or your county agent with questions about the tick, theileriosis and *Theileria* testing.

The University of Arkansas System Division is currently conducting a study funded by a USDA NIFA grant (USDA NIFA Award No. 2024-67016-42397) to determine the prevalence of the Asian longhorned ticks and *Theileria orientalis* Ikeda in Arkansas.

