Tenacious invasive tick survived winter in N.J. Experts are worried

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The East Asian longhorned tick, previously unknown in the United States, is likely now an unwanted permanent resident of New Jersey that concerns federal, state and local officials.

The National Veterinary Services Laboratory confirmed last week that the arachnid, discovered in the state in the fall, has successfully made it through the harsh winter. The state's Department of Agriculture is reporting that the pest "has possibly become established in the state."

Its presence marks another potentially destructive invasive species that officials in both New Jersey and Pennsylvania are watching to see whether the pests cross borders.

The longhorned tick's presence was first suspected in August when a Hunterdon County resident reported finding an unusual tick on a 12-year-old Icelandic sheep. The sheep was kept in a one-acre paddock. Rutgers University, county and state officials were eventually involved in the investigation. In September, the sheep had been treated by its owner and was found to be free of the ticks.

But the tick proved to be tenacious. In October, it was found to have completely infested the paddock. The infestation was so bad that the ticks began crawling on the pants of investigators soon after they were inside the paddock. The ticks numbered in the hundreds and had concentrated "mostly on the sheep's ears and face," according to a paper by Rutgers, the Hunterdon County Department of Health and

Smithsonian Institution.

Investigators found that the critters, in all life stages, had swarmed both the sheep and its paddock. The sheep had never been outside the U.S., so how the tick got there is unknown. The sheep later died, most likely from an unrelated cause.

The Rutgers Center for Vector Biology and Hunterdon County department of health officials identified the pest as Haemaphysalis longicornis. Their finding was confirmed Nov. 9 by the National Veterinary Services Laboratory in Ames, Iowa.

Investigators returned in November after several nights of below-freezing temperatures and found no evidence of ticks. So, it seemed possible that winter might take care of the problem.

Then, this spring, nymphs of the tick were found on the same farm, said Jeff Wolfe, a spokesman for the state agriculture department.

The nymphs of the longhorned tick look like tiny spiders and are so small that they are hard to spot on people or animals. The species is dark brown and grows to about the size of a pea when engorged on blood. Nymphs emerge in spring, and then become adults in the summer.

The tick isn't necessarily a threat to humans. In other parts of the world, it has been associated with rare diseases such as spotted fever rickettsiosis. Scientists say it has the potential to spread pathogens. However, they have no evidence now that it could harm people.

But it is dangerous to animals. Also known as the bush tick, officials say it has the potential to infect deer and livestock such as cattle, horses, goats and sheep. It is a major problem in New Zealand and transmits a disease in animals called theileriosis, which leads to anemia and

sometimes death.

State, federal and local officials are working with Rutgers on a plan to eliminate the pest.

How did it get here? Scientists do not believe that climate change provided a path for the pest to New Jersey. However, they note its survival in the U.S. could be affected by increasingly warm weather. The tick adds to the number of destructive invasive species from Asia that New Jersey and Pennsylvania are already dealing with, including the spotted lanternfly, southern pine beetle and hemlock woolly adelgid, among others.

Pennsylvania's Department of Agriculture is watching the Asian tick's progress in New Jersey, but is gearing up to fight the spotted lanternfly, which has dramatically expanded its destructive behavior. It is not yet present in New Jersey. That pest has attacked vineyards, apple orchards, peach farms and other agricultural products in southeastern Pennsylvania with frightening speed.

The federal government has pitched in $17.5 million to help the Pennsylvania effort. The U.S. Department of Agriculture said the invasive insect has spread from 174 square miles when it was first spotted in 2014 to 3,000 square miles in 2017.

"We don't yet know how spotted lanternfly have overwintered, as the eggs haven't started hatching yet," said Shannon Powers, a spokeswoman for the Pennsylvania agriculture department. "We are gearing up for this year's efforts to combat the insect, along with other state, federal and local agencies, academic institutions and private sector businesses."