

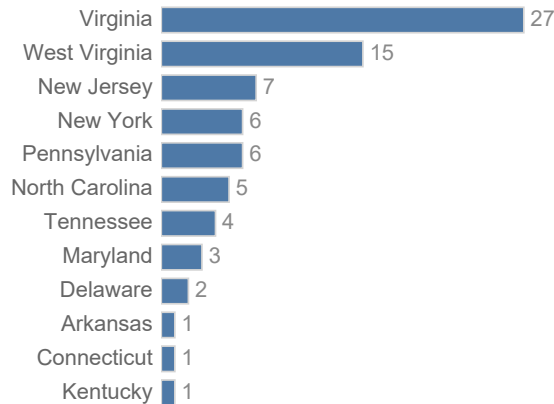
National *Haemaphysalis longicornis* (Asian longhorned tick) Situation Report

As of August 5, 2019

Haemaphysalis longicornis (Asian longhorned tick), an exotic East Asian tick, has never previously established a population in the United States. It is a known serious pest of livestock in the Australasian and Western Pacific Regions where it occurs. It is an aggressive biter and frequently builds intense infestations on domestic hosts causing great stress, reduced growth and production, and severe blood loss.

The tick can reproduce parthenogenetically (without a male); as such, a single fed female tick can create a population. It is also a known/suspected vector of several viral, bacterial, and protozoan agents of livestock and human diseases. This three-host tick can spread pathogens among a diverse host range, on which it feeds side-by-side with other tick species. The detections detailed here are the first reports of this tick out of quarantine in the United States.

States with confirmed local Asian longhorned tick populations with number of counties in each state



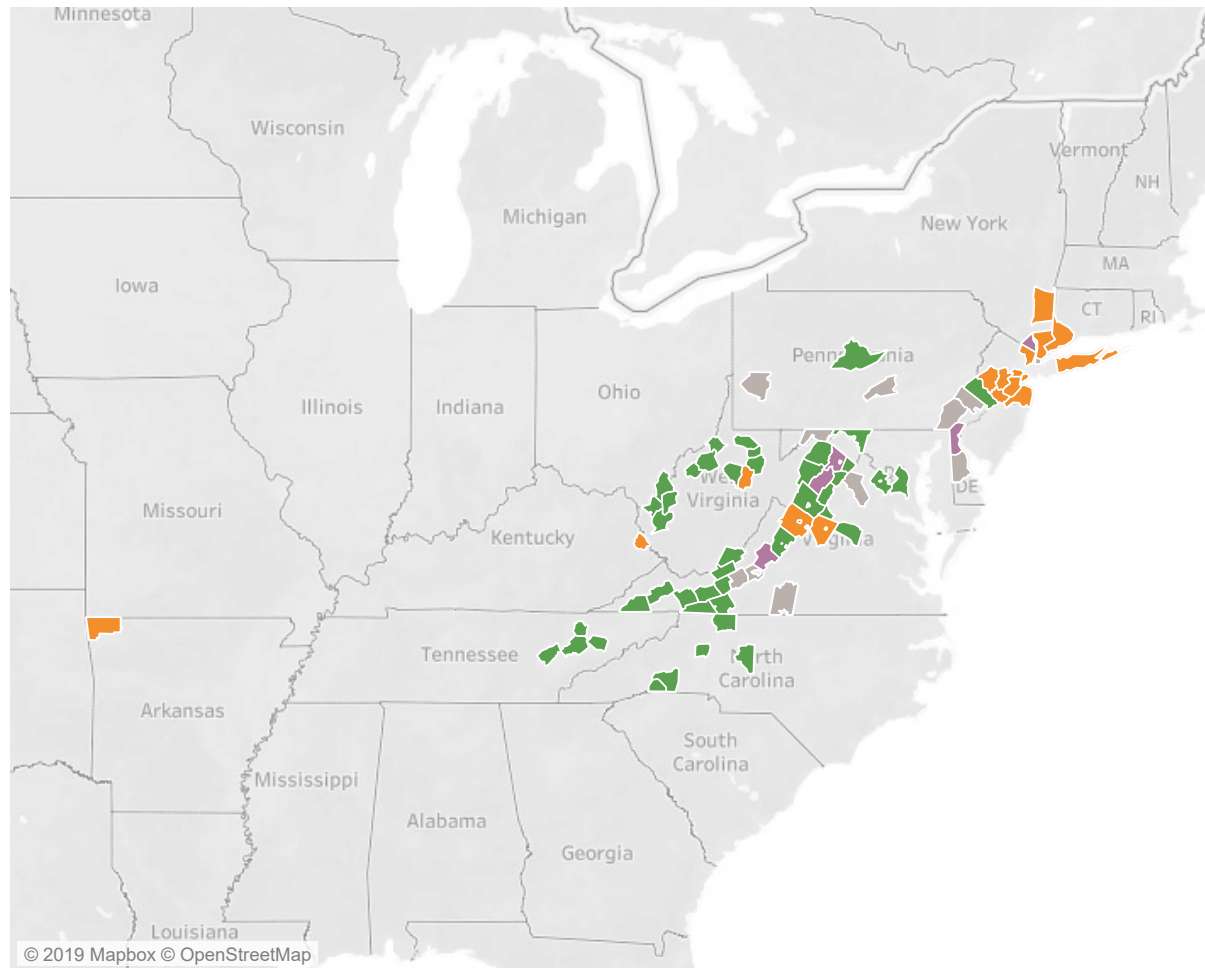
Type of identification*

■ Molecular and NVSL

■ NVSL

■ Molecular

■ Taxonomic



* *H. longicornis* identification: NVSL= USDA, National Veterinary Services Laboratories. NVSL performs taxonomic identifications and is the preferred lab for confirmation of new states, counties, and hosts. Molecular= Confirmation of tick species by polymerase chain reaction (PCR) or other DNA-based technology. Taxonomic= Identification by key tick features at a lab other than NVSL.

These data, and all the information contained therein, have been collected by the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), or by its cooperators on APHIS' behalf, for restricted government purposes only. This information is the sole property of APHIS. See full disclaimer here: aphis.usda.gov/help/map-disclaimer.

First date of Asian longhorned tick detections by state, county, and host

State	County	Host	Earliest collected	Earliest confirmed	
Arkansas	Benton	Dog	5/1/2018	6/5/2018	Molecular
		Environment	4/5/2019	4/10/2019	NVSL
Connecticut	Fairfield	Environment	7/3/2018	8/28/2018	Molecular and NVSL
Delaware	Kent	Environment	7/26/2019		Taxonomic
	New Castle	Environment	6/22/2019		Molecular
Kentucky	Martin	Elk	7/15/2018	3/7/2019	Molecular and NVSL
Maryland	Allegany	Environment	6/12/2019		Taxonomic
	Prince George's	Human	4/7/2019	5/3/2019	NVSL
	Washington	White-tailed Deer	6/25/2018	7/26/2018	NVSL
New Jersey	Bergen	dog	8/25/2017		Molecular
		Environment	7/12/2018	7/16/2018	NVSL
		Human (unattached)	7/5/2018	7/25/2018	Molecular
		Red Fox	7/31/2018		Taxonomic
	Hunterdon	Dog	6/11/2019	7/19/2019	NVSL
		Environment	5/10/2018	6/8/2018	NVSL
		Raccoon	5/3/2018	5/25/2018	NVSL
		Sheep	8/1/2017	11/9/2017	Molecular and NVSL
		Virginia opossum	5/3/2018	5/25/2018	NVSL
		White-tailed Deer	4/19/2018	4/24/2018	Molecular and NVSL
	Mercer	Environment	5/10/2018	6/4/2018	Molecular and NVSL
		Middlesex	Dog	9/6/2018	9/26/2018
	Middlesex	Environment	5/10/2018	5/14/2018	Molecular and NVSL
		Goat	5/24/2018	6/4/2018	NVSL
		Sheep	5/17/2018	5/23/2018	NVSL
		Monmouth	Environment	8/7/2018	8/17/2018
	Somerset	Cat	9/28/2018	10/26/2018	NVSL
		Dog	7/31/2018	9/6/2018	Molecular and NVSL
		Human	6/6/2019	7/9/2019	NVSL
		White-tailed Deer	5/27/2018		Molecular
	Union	Dog	5/30/2013	6/4/2018	Molecular and NVSL
		Environment	5/1/2017	4/23/2018	Molecular and NVSL
		Groundhog	8/4/2018	9/4/2018	NVSL
		Horse	5/1/2018	6/1/2018	NVSL
		Human (unattached)	8/3/2018		Molecular
		Raccoon	5/6/2018		Molecular and NVSL
		Virginia Opossum	8/1/2018		Molecular

First date of Asian longhorned tick detections by state, county, and host

State	County	Host	Earliest collected	Earliest confirmed	
New York	Bronx	Environment	6/18/2018		Taxonomic
	Dutchess	Environment	8/1/2018	3/25/2019	Molecular and NVSL
	Richmond	Environment	6/3/2017	8/14/2018	Molecular and NVSL
		White-tailed Deer	6/3/2018		Molecular
	Rockland	Environment	6/21/2018	8/27/2018	Molecular
	Suffolk	Environment	8/24/2018	10/4/2018	Molecular and NVSL
	Unknown	Canada Goose	5/21/2019	7/19/2019	Molecular and NVSL
	Westchester	Environment	6/2/2017		Taxonomic
Human		6/4/2018	6/28/2018	Molecular and NVSL	
North Carolina	Alexander	dog	7/12/2019	7/25/2019	NVSL
	Davidson	Human	8/1/2018	9/20/2018	NVSL
	Polk	Virginia opossum	9/15/2017	6/25/2018	NVSL
	Rutherford	Dog	8/14/2018	9/14/2018	NVSL
	Surry	Cow	6/20/2019	7/3/2019	NVSL
Pennsylvania	Allegheny	Human	2017		Taxonomic
	Bucks	Environment	5/23/2018	9/4/2018	NVSL
	Centre	White-tailed Deer	7/10/2018	7/26/2018	NVSL
	Chester	Chicken	7/5/2019		Taxonomic
	Montgomery	Human	7/19/2019		Taxonomic
	Perry	Dog	5/12/2019		Taxonomic
Tennessee	Jefferson	Dog	7/19/2019	7/22/2019	NVSL
	Knox	Cow	6/7/2019	6/11/2019	NVSL
	Roane	Cow	5/22/2019	5/24/2019	NVSL
	Union	Dog	5/13/2019	5/21/2019	NVSL

First date of Asian longhorned tick detections by state, county, and host

State	County	Host	Earliest collected	Earliest confirmed	
Virginia	Albemarle	Cow	3/1/2018	5/14/2018	NVSL
		Environment	6/6/2018	7/3/2018	NVSL
		Striped Skunk	6/10/2018	11/30/2018	NVSL
		White-tailed Deer	6/2/2018		Molecular and NVSL
	Augusta	White-tailed Deer	6/10/2018	9/13/2018	Molecular and NVSL
	Botetourt	Environment	10/4/2018		Molecular
	Carroll	Dog	7/1/2018	8/31/2018	NVSL
	Clarke	Red Fox	7/4/2018		NVSL
	Fairfax	Environment	3/27/2017	6/7/2018	NVSL
		Human	9/20/2018	7/18/2019	Taxonomic
	Fauquier	Environment	8/5/2018		Taxonomic
	Frederick	Gray fox	6/21/2018		Molecular
	Galax City	Environment	6/21/2019		Taxonomic
	Giles	Environment	6/23/2018	7/27/2018	NVSL
	Grayson	Environment	5/8/2018	7/27/2018	NVSL
	Greene	Red Fox	7/11/2018		NVSL
	Louisa	Goat	6/12/2018	6/28/2018	NVSL
	Montgomery	Environment	6/24/2019		Taxonomic
	Page	Cow	6/25/2018	6/29/2018	NVSL
		Red-tailed hawk	9/17/2018		NVSL
	Pittsylvania	Environment	6/5/2019		Taxonomic
	Pulaski	Cow	7/5/2018	7/11/2018	NVSL
		Gray Fox	6/13/2018	9/13/2018	NVSL
	Roanoke	Dog	4/10/2019		Taxonomic
	Rockbridge	White-tailed Deer	5/25/2018	9/13/2018	NVSL
	Rockingham	White-tailed Deer	7/25/2018		NVSL
	Russell	Dog	6/1/2018	8/31/2018	NVSL
	Scott	Dog	7/1/2018	8/31/2018	NVSL
	Shenandoah	Eastern cottontail	6/15/2018		Molecular
	Smyth	Environment	6/7/2018	6/28/2018	NVSL
	Staunton City	White-tailed Deer	6/15/2018	9/13/2018	NVSL
	Warren	Horse	5/10/2018	5/25/2018	NVSL
Wythe	Environment	6/23/2018	7/23/2018	NVSL	

First date of Asian longhorned tick detections by state, county, and host

State	County	Host	Earliest collected	Earliest confirmed	
West Virginia	Barbour	Dog	8/31/2018	11/16/2018	NVSL
	Cabell	Dog	7/10/2018	8/7/2018	NVSL
	Hampshire	White-tailed Deer	8/1/2018	5/1/2019	NVSL
		Cat	6/21/2018	7/10/2018	NVSL
	Hardy	Cow	5/18/2018	5/21/2018	NVSL
		Dog	6/21/2018	7/23/2018	NVSL
	Lewis	White-tailed Deer	8/30/2018		NVSL
	Lincoln	Dog	4/19/2018	6/27/2018	NVSL
	Marion	Cat	6/7/2018	7/6/2018	NVSL
	Mason	Dog	7/7/2018	7/11/2018	NVSL
	Monroe	Environment	7/2/2018	7/9/2018	NVSL
	Putnam	Dog	5/2/2018	6/18/2018	NVSL
	Ritchie	cow	6/2/2019	6/11/2019	NVSL
		Dog	5/26/2018	6/19/2018	NVSL
		Environment	7/6/2018	7/23/2018	NVSL
	Taylor	White-tailed Deer	9/1/2017	6/28/2018	NVSL
	Tyler	White-tailed Deer	8/31/2010	6/25/2018	NVSL
	Upshur	Coyote	6/22/2018	8/24/2018	Molecular and NVSL
	Wirt	White-tailed Deer	8/28/2018	5/1/2019	NVSL

Summary of wildlife sampling for Asian longhorned tick

Animal groups	Host	Number of animals			Number confirmed		
		SCWDS	Tufts et al., 2019	USDA, Wildlife Services	SCWDS	Tufts et al., 2019	USDA, Wildlife Services
Bird	American robin	3	11				
	American yellow warbler		1				
	Baltimore oriole	2					
	Brown thrasher	1					
	Brown-headed cowbird	1					
	Canada Goose	1					
	Carolina wren	4					
	Common yellowthroat	1	1				
	Eastern phoebe	1					
	Forster's tern	1					
	Grackle	1					
	Gray catbird	7	20				
	House wren	1	2				
	Indigo Bunting		1				
	Northern cardinal	6	3				
	Ovenbird	1					
	Red-eyed vireo	1					
	Red-tailed Hawk	1			1		
	Warbler	1					
	Wild turkey	40					
Wood thrush	2						
Yellow warbler	2						
Grand Total		78	39		1		

Tufts, D. M., VanAcker, M. C., Fernandez, M. P., DeNicola, A., Egizi, A., & Diuk-Wasser, M. A. (2019). Distribution, Host-Seeking Phenology, and Host and Habitat Associations of Haemaphysalis longicornis Ticks, Staten Island, New York, USA. *Emerging Infectious Diseases*, 25(4), 792-796.

Summary of wildlife sampling for Asian longhorned tick

Animal groups	Host	Number of animals			Number confirmed		
		SCWDS	Tufts et al., 2019	USDA, Wildlife Services	SCWDS	Tufts et al., 2019	USDA, Wildlife Services
Mammal	Black bear	110					
	Bobcat	2					
	Brown rat		1				
	Coyote	7		2			
	Domestic dog	2					
	Eastern chipmunk	1	2				
	Eastern cottontail	16		1			1
	Eastern woodrat	2					
	Elk	13					
	Fox	2					
	Gray fox	3			1		
	Gray squirrel	1					
	Groundhog	26		4	1		4
	Hispid cotton rat	2					
	Hog	1					
	Human	9			1		
	Meadow vole	1					
	Mule Deer	10					
	Northern short-tailed shrew		14				
	Peromyscus leucopus		87				
	Peromyscus sp.	56					
	Raccoon	81		5	16		5
	Red fox	4			1		
	Striped skunk	4		1			1
Virginia Opossum	80		3	5		3	
White-tailed deer	300	16	2	14	16	2	
Grand Total		733	120	16	41	16	16

Tufts, D. M., VanAcker, M. C., Fernandez, M. P., DeNicola, A., Egizi, A., & Diuk-Wasser, M. A. (2019). Distribution, Host-Seeking Phenology, and Host and Habitat Associations of Haemaphysalis longicornis Ticks, Staten Island, New York, USA. *Emerging Infectious Diseases*, 25(4), 792-796.