

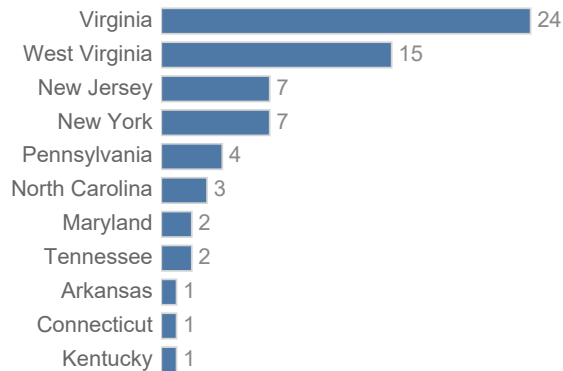
# National *Haemaphysalis longicornis* (Asian longhorned tick) Situation Report

As of June 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



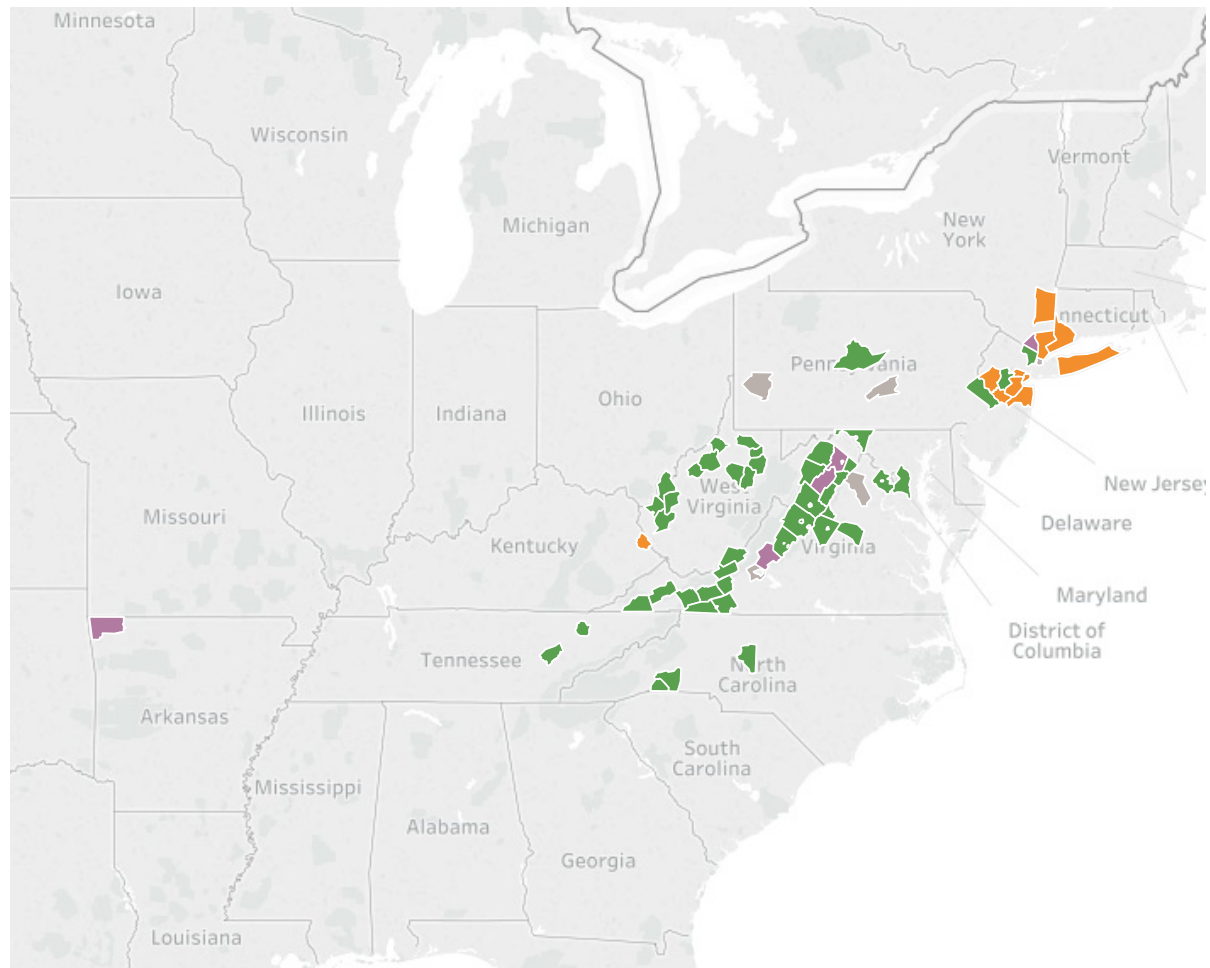
### Type of identification\*

■ Molecular and NVSL

■ NVSL

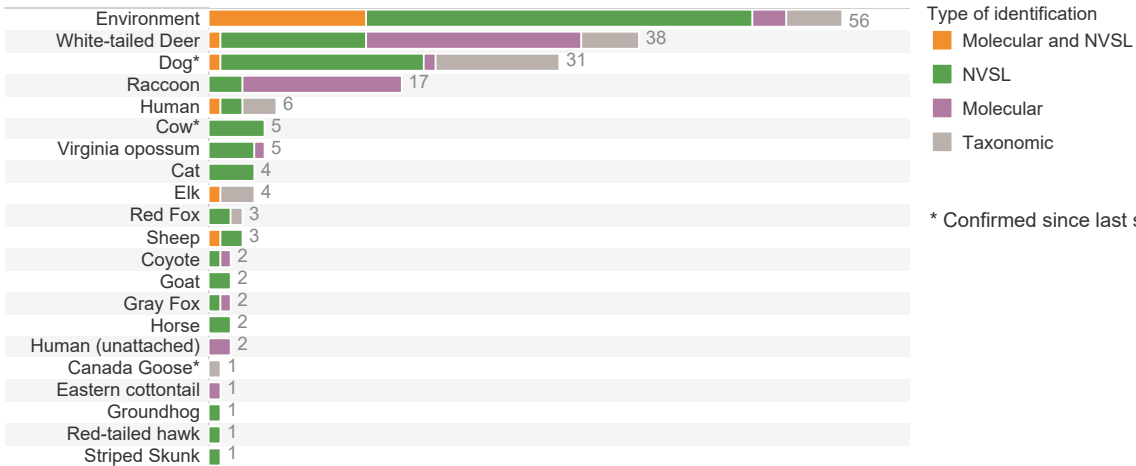
■ Molecular

■ Taxonomic



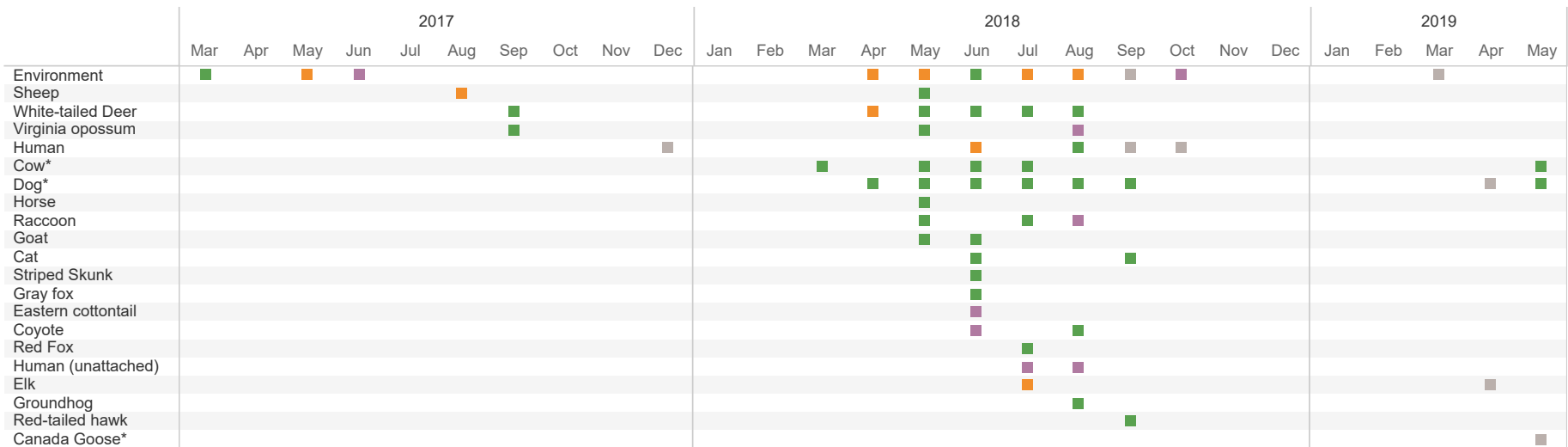
# Asian longhorned tick positive hosts information

## Number of positive hosts



\* Confirmed since last situation report.

## Timeline of Asian longhorned tick host positives



Prior to 2017, ticks were collected from a white-tailed deer in 2010 and a dog in 2013.

## 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
Connecticut	Fairfield	Environment	7/3/2018	8/28/2018	Molecular and NVSL
Kentucky	Martin	Elk	4/1/2019		Taxonomic
			7/15/2018	3/7/2019	Molecular and NVSL
Maryland	Prince George's	Human			NVSL
	Washington	White-tailed Deer	6/25/2018	7/26/2018	NVSL
New Jersey	Bergen	Environment	7/12/2018	7/16/2018	NVSL
		Human (unattached)	7/5/2018	7/25/2018	Molecular
		Red Fox	7/31/2018		Taxonomic
		Environment	5/10/2018	6/8/2018	NVSL
	Hunterdon	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
		Environment	5/10/2018	6/4/2018	Molecular and NVSL
	Mercer	Environment	5/10/2018	6/4/2018	Molecular and NVSL
	Middlesex	Dog	9/6/2018	9/26/2018	NVSL
		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	Molecular and NVSL
	Somerset	Cat	9/28/2018	10/26/2018	NVSL
		Dog	7/31/2018	9/6/2018	NVSL
		White-tailed Deer	5/27/2018		Molecular
	Union	Dog	5/30/2013	6/4/2018	Molecular and NVSL
			6/4/2018	6/15/2018	NVSL
Environment		5/1/2017	4/23/2018	Molecular and NVSL	
		5/6/2018		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		NVSL	
		7/25/2018		Molecular	
		Virginia Opossum	8/1/2018		Molecular
New York	Bronx	Environment	6/18/2018		Taxonomic
	Dutchess	Environment	8/1/2018	3/25/2019	Molecular and NVSL
	Richmond	Environment	3/23/2019		Taxonomic
			5/22/2018	8/14/2018	Molecular and NVSL
			6/3/2017		Molecular
		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		Taxonomic
Westchester	Human	6/4/2018	6/28/2018	Molecular and NVSL	
North Carolina	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

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State	County	Host	Earliest collected	Earliest confirmed		
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	
	Perry	Dog	5/12/2019		Taxonomic	
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	
				8/28/2018		NVSL
	Augusta	White-tailed Deer	6/10/2018	9/13/2018	NVSL	
				6/23/2018		Molecular
	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			Taxonomic
	Fauquier	Environment	8/5/2018			Taxonomic
	Frederick	Gray fox	6/21/2018			Molecular
	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	
	Page	Cow	6/25/2018	6/29/2018	NVSL	
		Red-tailed hawk	9/17/2018			NVSL
	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		
			6/22/2018		Taxonomic	
Warren	Horse	5/10/2018	5/25/2018	NVSL		
Wythe	Environment	6/23/2018	7/23/2018	NVSL		

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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
	Hardy	Cat	6/21/2018	7/10/2018	NVSL
		Cow	5/18/2018	5/21/2018	NVSL
		Dog	6/21/2018	7/23/2018	NVSL
	Lewis	White-tailed Deer	8/30/2018		NVSL Taxonomic
	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	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		Molecular

## 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					
	Warbler	1					
	Wild turkey	40					
Wood thrush	2						
Yellow warbler	2						
<b>Grand Total</b>		<b>78</b>	<b>39</b>				

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.

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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	
<b>Grand Total</b>		<b>733</b>	<b>120</b>	<b>16</b>	<b>41</b>	<b>16</b>	<b>16</b>

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