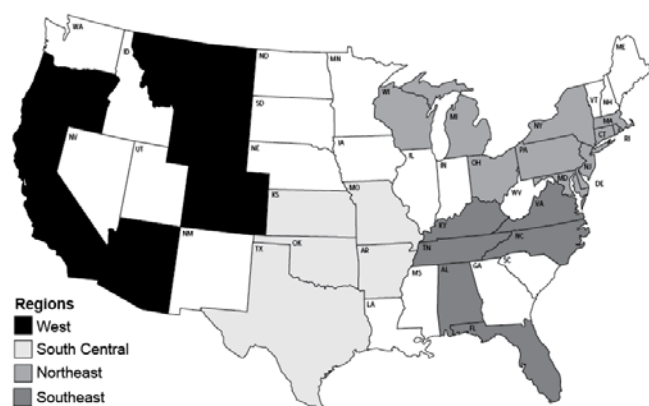


Tick Species Found on Equids in the United States—Results from NAHMS Equine 2015 Study

Ticks are obligate ectoparasites of animals and humans. Ticks transmit a wide variety of infectious diseases and, worldwide, are second only to mosquitoes in their public health and veterinary importance. Tick-transmitted diseases in equids include tularemia, equine piroplasmiasis, equine granulocytic anaplasmosis, and Lyme disease.

Data on the presence of ticks on equids were collected as part of the U.S. Department of Agriculture National Animal Health Monitoring System (NAHMS) Equine 2015 study. This study collected data on equine health and management practices from a representative sample of operations with 5 or more equids in 28 States within 4 regions (see map below; States with no shading were not part of the study). The 28 States represented 71.8 percent of all equids in the United States and 72.1 percent of all U.S. farms with equids. The 28-State target population represented 71.6 percent of all equids on farms with 5 or more equids and 70.9 percent of U.S. farms with 5 or more equids. More detailed information on the study design and sampling methodology is available in NAHMS Equine 2015 tabular summary reports at <http://www.aphis.usda.gov/nahms>.

NAHMS Equine 2015 participating States



As part of the Equine 2015 study, participants had up to 10 resident equids¹ examined for presence of ticks. If ticks were present, a representative sample of ticks

from each location on each equid was identified to species at the National Veterinary Services Laboratories. A total of 1,528 equids on 227 operations were examined for ticks from May 1 through October 15, 2016.

Overall, ticks were found on 15.4 percent of equids and on 29.8 percent of operations (table 1). The percentage of operations in which ticks were found on any equids ranged from 13.6 percent in the Northeast region to 45.4 percent in the South Central region (figure 1). The percentage of equids with any ticks ranged from 4.7 percent in the Northeast region to 25.3 percent in the South Central region (figure 2).

Table 1. Percentage of operations and percentage of equids by species of ticks found on the day of the visit

Tick species	Common name*	Pct. operations	Pct. equids
<i>Amblyomma americanum</i>	Lone Star tick	15.0	8.1
<i>Amblyomma maculatum</i>	Gulf Coast tick	1.3	0.3
<i>Amblyomma mixtum</i>	Cayenne tick	0.8	0.1
<i>Dermacentor albipictus</i>	Winter tick	0.8	0.5
<i>Dermacentor andersoni</i>	Rocky Mountain wood tick	3.0	2.9
<i>Dermacentor variabilis</i>	American dog tick	14.1	3.8
<i>Ixodes scapularis</i>	Black-legged tick	2.2	1.0
Other		0.0	
Any species		29.8	15.4

¹ An equid that spent or was expected to spend more time at the operation than at any other operation, whether or not it was present at the time of the study interview.

Figure 1. Percentage of operations in which ticks were found, by tick species and by region

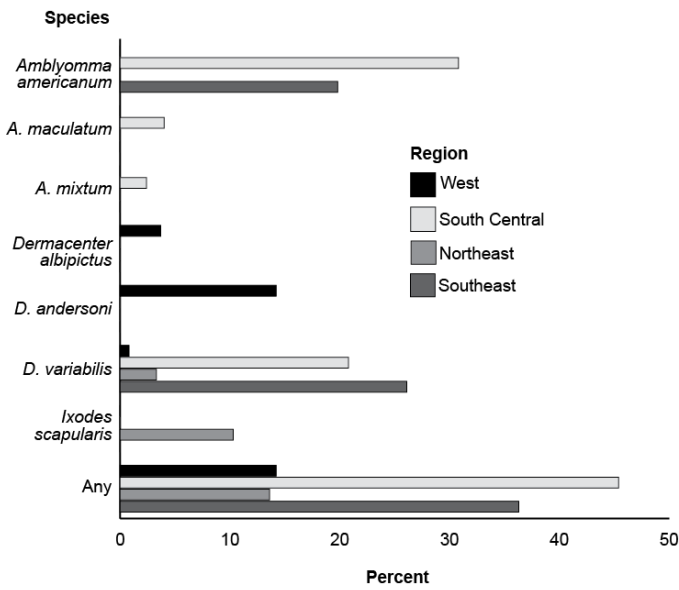
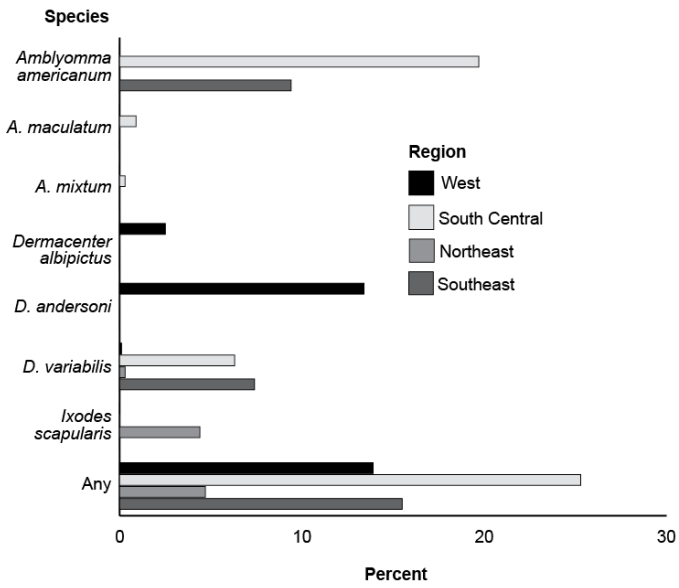


Figure 2. Percentage of equids on which ticks were found, by tick species and by region



The tick species found most frequently were *Amblyomma americanum* (Lone Star tick), found on 15.0 percent of operations and 8.1 percent of equids, and *Dermacentor variabilis* (American dog tick), found on 14.1 percent of operations and 3.8 percent of equids (table 1). The tick species found varied by region. *Ixodes scapularis* (black-legged tick), which is a vector for Lyme disease and equine anaplasmosis, was identified only on equids in the Northeast region, and *Dermacentor andersoni* (Rocky Mountain wood tick) was found only on equids in the West region. Identifying tick species is one factor that can help determine disease risk subsequent to ticks feeding on equids.

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