

Pest Profile



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Common Name: Black-legged Tick, Deer Tick, Bear Tick

Scientific Name: *Ixodes scappularis* Say

Order and Family: Acari: Ixodidae

Size and Appearance: Adults are quite small, dark in color, and have no distinguishing markings. Females do feature a slightly more orange coloration behind the scutum whereas males do not. Hence their namesake, they feature dark black legs that are quite the contrast to their reddish body color.

Size and Appearance:

	Length (mm)	Appearance
Egg	< 1 mm	Dark brown, small eggs laid in clusters of 1-3,000.
Larva/Nymph	1 st Instar- 0.7-0.8 mm 2 nd Instar- 1.1-1.8 mm	1 st Instar- 6 legs, small, brownish red 2 nd Instar- darker, 8 legs present
Adult	Unengorged Female: 2.7 mm Males: 2.0 mm	Flattened body, red/brown color with dark black legs. The Adults do not have eyes.
Pupa (if applicable)		

Type of feeder (Chewing, sucking, etc.): Chelicerate (chewing, sucking)

Host animal/s: *Ixodes scapularis* Say needs three different hosts in order to complete its life cycle. White-footed mice (*Peromyscus leucopus*) are preferred species for the 1st Instar larvae. Nymphs feed on a variety of hosts including squirrels, opossums, dogs, and humans. Once at the adult stage, ticks prefer white-tailed deer (*Odocoileus virginianus*), which is often wrongly associated with spreading the spirochete *Borrelia burgdorferi* that causes Lyme's Disease. *Borrelia burgdorferi*'s primary reservoir is the white-footed mouse, *Peromyscus leucopus*, on the East Coast.

Description of Damage (larvae and adults): Nymphs require a blood meal in order to progress to adults. However, they can overwinter and extend their lifecycle from 2 years to 4 years in times of host sparsity. They use their arachnid mouthparts to attach to a host and proceed to drain blood until they are engorged. Once engorged, ticks mate, lay eggs, and repeat the cycle. Black-legged Ticks are notorious vectors of Lyme's disease, which is caused by a spirochete the arachnid picks up from the white-footed mouse in its larval stage. The Center for Disease Control ranks this tick as medically important due to the fact Lyme's affects thousands of Americans each year.

References:

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