

QUICK REFERENCE TICK GUIDE



K9
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LONE STAR TICK



***Amblyomma americanum* female**



***Amblyomma americanum* male**



Distribution:

The range of *Amblyomma americanum* appears to be increasing across the southern, midwestern and eastern states. Once considered primarily a southern species, its geographic range has expanded. Populations are common in the Southern Plains, midwestern and eastern U.S. The lone star tick may be encountered from Central Texas to Florida, north to New York, New Jersey and Maine, west to Michigan and then south through Central Kansas, Oklahoma and Texas.

Seasonal Occurrence:

Adults are often encountered from late February through early July, and larvae are frequently encountered in mid to late July through October. Larvae may be encountered in large numbers with hundreds or even thousands of larvae from one egg mass all accumulating on a single plant leaf. Nymphs are found from March through September, and peak nymph populations occur during the months of April through June.

It is important to note that peak seasonal activity can vary widely by geographic region, and similar to other 3-host ticks in temperate climates, the lifecycle often can take 2 years to complete, while in warmer costal climates it can be completed within 1 year.

Diseases produced/transmitted:

- Human Monocytic Ehrlichiosis (*Ehrlichia chaffeensis*)
- Canine Granulocytic Ehrlichiosis (*Ehrlichia ewingii*)
- Southern Tick-Associated Rash Illness (*Borrelia lonestari*) — a Lyme disease-like infection
- Tularemia (*Francisella tularensis*)

Attachment times:

- Larvae can take from 3 to 8 days to engorge.
- Nymphs can take from 3 to 9 days to engorge.
- Adult females engorge over 6 to 14 days.



Habitat: Most commonly found in woodland habitats with dense underbrush, but can also be found in grassy meadows and young forests.



Hosts: Larvae and Nymphs—bobwhite quail, cats, coyotes, deer, dogs, humans, rabbits, red fox, squirrels, raccoons, turkey, white-tailed deer, wrens and numerous other mammals
Adults—cats, cattle, coyotes, dogs, horses, humans, raccoons, sheep and white-tailed deer

AMERICAN DOG TICK & ROCKY MOUNTAIN WOOD TICK



***Dermacentor variabilis* female**



***Dermacentor variabilis* male**



Distribution:

- ***Dermacentor variabilis*** (American dog tick) inhabits the eastern U.S. from Florida to Southern New England and from the Atlantic Coast to the Plains States. Populations also inhabit the Pacific Coast. Note that the distribution of a particular tick species can vary regionally due to changes in climate, vegetation and host abundance.
- ***Dermacentor andersoni*** (Rocky Mountain wood tick) is found in the Rocky Mountain states from the eastern slopes of the Cascades to the western edge of the Great Plains and south to New Mexico and Arizona. Both species are similar in appearance.

Seasonal Occurrence:

Most adult ticks are found in late summer after molting, but this also may occur over winter. Adults begin questing the following spring. In the southern U.S., some of the larvae hatching from eggs laid during the early summer will begin questing in late summer. Most larvae enter diapause in the fall and will not seek hosts as early as February and will continue this activity for 2 to 3 months. In northern areas of the U.S. and Canada peak larvae activity may occur until late May or June. Nymphal questing activity quickly follows larval activity.

The entire lifecycle can be completed in as little as 3 months in the southern U.S., but may take up to 2 years in more northern climates. Seasonal tick activity varies widely by geographic region.

Diseases produced/transmitted:

- Cytauxzoonosis (***Cytauxzoon felis***)—an often fatal blood parasite to cats
- Rocky Mountain spotted fever (***Rickettsia rickettsii***)—transmitted to dogs and humans
- Tick paralysis in North America
- Tularemia (***Francisella tularensis***)

Attachment times:

- Larvae can take from 3 to 12 days to engorge.
- Nymphs can take from 3 to 11 days to engorge.
- Adult females engorge over 4 to 10 days.



Habitat: Grassy meadows, young forests, along roadways and trails.



Hosts: Larvae—voles, mice, numerous small mammals
 Nymphs—cats, dogs, opossums, rabbits and raccoons
 Adults—cats, coyotes, dogs, cattle, horses, raccoons and other large mammals, including man

BLACKLEGGED TICK & WESTERN BLACKLEGGED TICK (Deer Tick)



***Ixodes scapularis* female**



***Ixodes scapularis* male**



Distribution:

- ***Ixodes scapularis*** (blacklegged tick) is widely distributed in the eastern and central U.S., being found in at least 35 states. The area of distribution is from Maine, south to Florida, west into Central Texas and then north to Minnesota.
- ▨ ***Ixodes pacificus*** (western blacklegged tick) is found along the Pacific Coast and extends into parts of Arizona, Nevada and Utah. Adults of both species are similar in appearance.

Seasonal Occurrence:

The seasonal activity of *I. scapularis* can vary by geographic region. Adults are seen most commonly from October through December, with those not finding a host questing again the next spring, typically from March to May. Larval activity is generally highest in August and September. Nymphs appear primarily from May through July in northern regions and January through September in the southern U.S.

Adults of *I. pacificus* are active from November through May, and larvae and nymphs are active from late winter to summer.



Habitat: Deciduous forests such as maple and oak woodlands and adjacent brush or grass. The distribution of *Ixodes scapularis* is linked to the distribution and abundance of its primary reproductive host, the white-tailed deer (*O. virginianus*).

Diseases produced/transmitted:

Ixodes scapularis

- Lyme disease (*Borrelia burgdorferi*)—in the central, upper midwestern and northeastern U.S.
- Human Granulocytic Ehrlichiosis (*Anaplasma phagocytophilum*)
- Human Babesiosis (*Babesia microti*)
- Tick paralysis

Ixodes pacificus

- Lyme disease (*Borrelia burgdorferi*)—in the western U.S.
- Human Granulocytic Ehrlichiosis (*Anaplasma phagocytophilum*)

Attachment times:

- Larvae can take from 2 to 4 days to engorge.
- Nymphs can take from 3 to 4 days to engorge.
- Adult females engorge over 5 to 7 days.



Hosts: Larvae—various rodents such as the white-footed mouse and shrews, other small mammals, birds and lizards
Nymphs—birds, cats, chipmunks, mice, opossums, raccoons, rodents, skunks, shrews, squirrels and humans
Adults—bobcats, cattle, coyotes, dogs, foxes, horses, humans, deer, opossums, raccoons and other mammals

BROWN DOG TICK



ACTUAL SIZE



UNFED & ENGORGED

Rhipicephalus sanguineus female



ACTUAL SIZE



UNFED

Rhipicephalus sanguineus male



Distribution:

Rhipicephalus sanguineus can occur throughout North America and Hawaii. It is the only species of tick that infests human dwellings and kennels in North America. It appears to be cold intolerant and only persists in temperate regions within kennels and homes. This species is very common in southeastern states and the West Coast.

Seasonal Occurrence:

In warm coastal regions *Rhipicephalus sanguineus* can occur any time of the year. In temperate climates the brown dog tick usually occurs during the summer. However, infestations can occur in heated buildings anytime of the year.

Diseases produced/transmitted:

- Canine Monocytic Ehrlichiosis (*Ehrlichia canis*)
- Canine Babesiosis (*Babesia canis*)
- Infectious Canine Cyclic Thrombocytopenia (*Anaplasma platys* [formerly *Ehrlichia platys*])
- Babesiosis (*Babesia gibsoni*)



Habitat: Most common in warm subtropical climates, occurring in shaded sandy areas. Found in cracks and crevices in houses, garages and dog runs. Often will crawl up walls in homes and kennels and can be found in false ceilings.

Attachment times:

- Larvae can take from 2 to 7 days to engorge.
- Nymphs can take from 4 to 9 days to engorge.
- Adult females engorge over 6 to 9 days.



Hosts: Larvae and Nymphs—Prefer to feed on dogs, but will also feed on other mammals, including rodents and rabbits
Adults—Prefer to feed on dogs, but will also rarely feed on a variety of other mammals

TICK CONTROL GUIDELINES

Regular monthly application of tick control

Monthly, year-round, application provides the greatest level of protection against the risk of tick infestation and associated tick-borne disease transmission in dogs. Often, pets encounter a very large number of ticks in a short period of time. Even when using a monthly topical product, a few ticks may be seen on the dog.

Use year-round

Tick questing patterns can change based on seasonal temperature fluctuations, and some adult ticks can survive through winter snow.

Use a product that both repels and kills ticks

Preventing attachment and feeding of ticks helps reduce the risk of disease transmission.

Environmental control

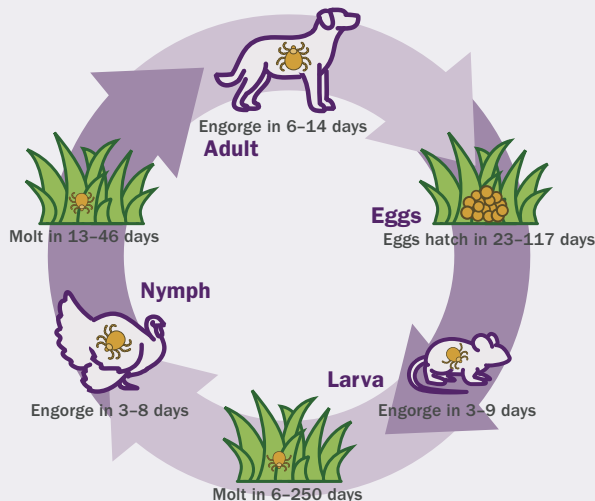
In cases of severe infestations of a yard, environmental control may be a consideration. Use environmental control products according to label directions.



TICK LIFECYCLES

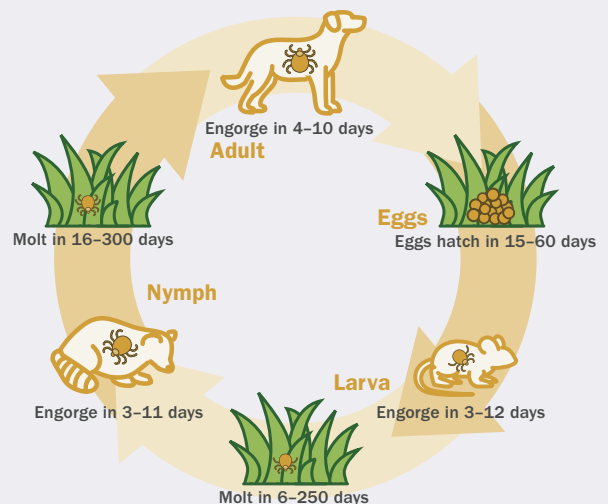
Lone Star Tick *Amblyomma americanum*

Egg to Adult: 1–2 years



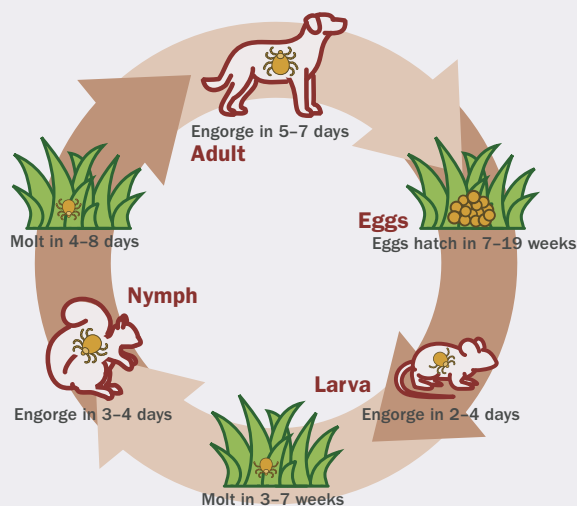
American Dog Tick & Rocky Mountain Wood Tick *Dermacentor variabilis*, *Dermacentor andersoni*

Egg to Adult: 3 months–2 years



Deer Tick *Ixodes scapularis*, *Ixodes pacificus*

Egg to Adult: 2–3 years



Brown Dog Tick *Rhipicephalus sanguineus*

Egg to Adult: 3–6 months

