

TICK INFORMATION SHEET

The Lone Star Tick

Amblyomma americanum (Linnaeus, 1758)

This species receives its common name from the silvery spot on the apex of the scutum of the female.

DISTRIBUTION AND SEASONAL ACTIVITY

Amblyomma americanum is distributed in the United States from central and eastern Texas, north to Iowa, and eastward to the Atlantic coast. It also has been reported in Mexico, Guatemala, Guyana, and French Guiana. The tick is most commonly found on animals and birds in the spring and summer. In the more southern United States, all parasitic stages infest hosts throughout the year.

HOSTS AND LOCATION ON HOST

This tick has a wide host range. Adult ticks commonly are found on large mammals such as cattle, horses, deer, and dogs (Fig. 1). Larvae and nymphs may attach to the same hosts as adults but prefer to feed on birds and small mammals. The adults, larvae, and nymphs may infest humans. All stages of the tick preferentially attach to thin-skinned areas; however, in heavy infestations they may be found on all areas of the body.

LIFE CYCLE SUMMARY

Amblyomma americanum is a three-host tick.

- The female lays up to 8300 eggs.
- The preoviposition period is 5 to 13 days.
- The oviposition period is 7 to 23 days.
- The incubation period is 23 to 117 days.
- Larvae engorge in 3 to 9 days.

- Larvae molt in 8 to 26 days.
- Nymphs engorge in 3 to 8 days.
- Nymphs molt in 13 to 46 days.
- Females engorge in 9 to 24 days.
- Unfed larvae survive up to 279 days.
- Unfed nymphs survive up to 476 days.
- Unfed adults survive up to 430 days.

TICK-BORNE DISEASES

Amblyomma americanum may be a carrier of *Coxiella burnetii*, the rickettsial agent that causes Q fever; infection occurs by tick feeding or by inhalation of contaminated dusts and infected tick feces. The tick also transmits the agents of Rocky Mountain spotted fever, babesiosis, and tularemia to man and dogs; in the eastern and southern United States, this tick has been known to cause tick paralysis. *Amblyomma americanum* recently has been incriminated as a potential vector of the spirochete *Borrelia burgdorferi*, the causative agent of Lyme borreliosis in humans and transient or recurrent arthritis of dogs and possibly of cats.

SELECTED REFERENCES

1. Hooker WA, Bishopp FC, Wood HP: The life history and bionomics of some North American ticks. U.S. Department of Agriculture Bureau of Entomology Bulletin no. 106:1-239, 1912
2. Soulsby EJJ: Helminths, Arthropods and Protozoa of Domesticated Animals, ed 7. Philadelphia, Lea & Febiger, 1982, p 470
3. Strickland RK, Gerrish RR, Hourrigan JL, et al: Ticks of Veterinary Importance, no. 485. Washington, D.C., Animal and Plant Health Inspection Service, U.S. Department of Agriculture, 1976, p 36