Tick Surveillance, Collection, and Submission of Suspected Exotic Ticks

1. Purpose and Background

This document provides Veterinary Services’ (VS) procedures for collecting and submitting ticks for disease testing and analysis. VS personnel must maintain continuous surveillance for exotic ticks whenever possible by obtaining tick specimens from domestic livestock, wildlife, pets, and zoo animals in the continental United States, Hawaii, Puerto Rico, and the U.S. Virgin Islands. Personnel must inspect and collect specimens during all seasons; however, they must make an extra effort in southern States, as these are particularly vulnerable to the establishment of exotic ticks.

VS personnel must encourage cooperation from State governments, the Food Safety and Inspection Service, and extension services to increase tick specimen submissions. VS personnel must also persuade livestock owners, private veterinary practitioners, wildlife officials, and zoo veterinarians to collect and submit tick specimens. Personnel also need to ask U.S. port of entry customs officials, agricultural quarantine inspectors, and public health officials to collect and submit ticks from infested livestock, pets, and zoo animals; animal products such as hides and trophies; and hay and straw at U.S. ports of entry.

This guidance document represents the Agency’s position on this topic. It does not create or confer any rights for or on any person and does not bind the U.S. Department of Agriculture (USDA) or the public. VS may make the information in this document available to the public. While this document provides guidance for users outside VS, VS employees may not deviate from the directions provided herein without appropriate justification and supervisory concurrence.

2. Document Status

A. Review date: 01/31/2021.

B. This document cancels and replaces VS Memorandum No 556.13. VS made only formatting and editorial changes to the content.

3. Reason for Reissuance

Not applicable.

4. Authority and References

A. Authorities (Code of Federal Regulations (CFR) and U.S. Code (U.S.C.)):

7 CFR 371.4
9 CFR part 72
9 CFR 93.220
9 CFR 93.308
9 CFR 93.323
B. References:

- VSG 13407, Testing of Equidae During Import Quarantine
- VS Guidance 13405, Importation of Horses from Mexico using Temporary APHIS Approved and Operated Quarantine Facilities at Land Border Ports

5. Audience

VS employees, other Federal and State agencies, and members of the public.

6. Guidance

A. Collecting and preparing specimens for submission to the National Veterinary Services Laboratories:

1) Personnel must examine the ears, flanks, escutcheon, and other less accessible areas, as well as the more obvious tick attachment sites. Personnel must carefully examine horses’ and other equidae’s nasal diverticula (false nostrils) and base of the tail because *Boophilus spp.* and *Dermacentor nitens* ticks can attach in these areas. Personnel can detect immature ticks by gently rubbing the fingers over the surface of the animal’s body.

2) If possible, personnel should collect at least 10 specimens from several areas of the host’s body (e.g. male ticks, engorged and unengorged female ticks, and ticks in immature stages).

3) Prepare a VS Form 5-38, Parasite Submission Form, to submit with specimens. VS District Offices must ensure field personnel and other animal health personnel preparing and submitting tick specimens have copies of this form.

4) Place the specimens in a brucellosis blood vial or other suitable leak proof container, and cover with 70 percent isopropyl alcohol (rubbing alcohol). Do not mix ticks from different species of hosts in the same container. (For example, do not mix ticks collected from horses with ticks collected from cattle, even if the hosts are on the same premises.)

5) Label each vial or group of ticks collected.

6) Pack specimens carefully to avoid breakage of containers en route.
B. Submitting Specimens to NVSL

Personnel need to send tick specimens and a completed, legible VS Form 5-38 to the following address:

USDA APHIS Veterinary Services
National Veterinary Services Laboratories
1920 Dayton Avenue (packages)
P.O. Box 844 (Letters)
Ames, IA 50010

C. Submission of Ticks Collected Within the Cattle Fever Tick Quarantine Area in Texas

1) Cattle Fever Tick Eradication Program personnel must send ticks collected within the quarantined areas in Texas to the State-Federal laboratory in Austin, Texas, for identification. The State-Federal laboratory supplies the tick vials and mailers for personnel use.

2) Cattle Fever Tick Eradication Program personnel must send tick specimens from the Texas quarantine area with a completed and legible VS Form 5-38 to:

State-Federal laboratory
4501 Springdale Road, Suite B
Austin, TX 78723

7. Inquiries

If there are questions, please contact the Cattle Health Center at 301-851-3584.