



## Biological information about the four major species of ticks considered human health concerns in New York

Long description for the table in the fact sheet, *Understanding and Managing Ticks – A Guide for Schools, Child Care and Camps*, 2020

1. Blacklegged (Deer) tick, *Ixodes scapularis*
  - a. Habitat
    - Deciduous forest
    - Forest-field edge
    - Overgrown or brushy areas
    - Can be found in shady lawns
  - b. Primary Hosts
    - White-footed mice
    - Chipmunks
    - Deer
  - c. Human Disease Pathogens
    - Lyme Disease
    - Anaplasmosis
    - Babesiosis
    - Powassan virus
    - *Borrelia miyamotoi*
    - Ehrlichiosis
  - d. Notes
    - The smallest northeast tick; nymphs, which can transmit disease, are the size of a poppy seed
    - Two-year lifecycle
    - Most active in spring and fall, but can be active year-round depending on weather
    - 3 - 7 days to ingest blood, depending on life stage
    - Require high humidity to survive
2. Dog (Wood) tick, *Dermacentor variabilis*
  - a. Habitat
    - Grassy fields
    - Overgrown or bushy areas
    - Marshy areas
    - Can be found in lawns
  - b. Primary Hosts
    - Small rodents (larvae and nymphs)
    - Dogs
    - Medium to large mammals
  - c. Human Disease Pathogens
    - Rocky Mountain spotted fever
    - Tularemia
    - Tick paralysis



- d. Notes
  - The largest northeast tick
  - Only adults bite humans
  - Most active April through August
  - Each life stage can survive two years without a host
3. Lone Star tick, *Amblyomma americanum*
  - a. Habitat
    - Woodlands
    - Grassy fields
    - Roadsides
    - Can be found in lawns
  - b. Primary Hosts
    - Deer
    - Turkey
    - Pets
    - Livestock
  - c. Human Disease Pathogens
    - Ehrlichiosis
    - Southern Tick Associated Rash Illness
    - Tularemia
    - Tick Bite-Induced Allergy (alpha-gal allergy)
  - d. Notes
    - The long mouthparts can inflict a painful bite
    - Highly attracted to CO<sub>2</sub>
4. Asian Longhorned tick, *Haemaphysalis longicornus*
  - a. Habitat
    - Woods
    - Grassy fields
    - Forest-field edge
    - Can be found in lawns
  - b. Primary Hosts
    - Deer
    - Medium sized wildlife
    - Livestock
  - c. Human Disease Pathogens
    - Research is ongoing
  - d. Notes
    - Invasive species
    - A female can lay viable eggs without a mate
    - Appear to be less attracted to people than the other listed species
    - No male is shown because very few have been found in the U.S.