

## Ticks: 2021 Update on Diseases and Prevention Strategies

### Master Gardener Volunteer/Master Urban Farmer

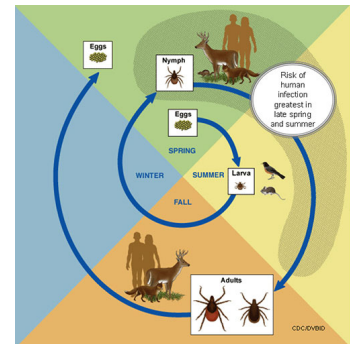
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## Life Cycle: Deer Tick



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- Vector Bacterial, Viral, Allergic Syndromes
- Rapidly developing disease profiles
  - Expanded ranges, species and diseases
- Hard shell vs. Soft shell
- Arachnids
- Hunt via Questing

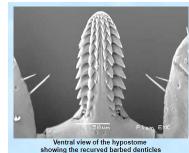
## Ticks – Fast Facts

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## Disease Transmission

- Different attachment times for different diseases
- Length of attachment → disease success
- Anaplasmosis 12-24 hours needed to transmit
- Powassan Virus – Nymphal Deer Ticks transmitted POW to mice in 15 minutes
- Lyme - > 24hrs (CDC)
- RMSF -> IMMEDIATE???



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### Myth #1 – Ticks are only active in summer.

- Ticks take one to three years to complete their life cycle depending on species and are active all year long.

### Myth #2 – Ticks prefer the woods.

- Some tick species such as American Dog Tick and Gulf Coast Tick prefer open habitat such as pasture and field.

### Myth #3 – Takes a day to transmit disease.

- The disease transmission time varies depending on tick species, life cycle stage and what the disease is.

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## Ohio Ticks



Common ticks found in Ohio

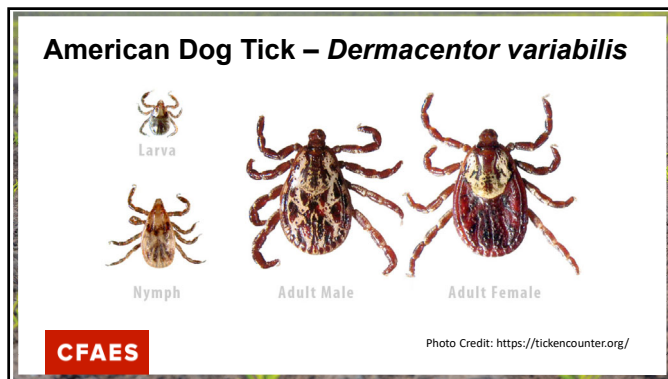
From left to right: blacklegged tick nymph, blacklegged tick female, blacklegged tick male, American dog tick female, American dog tick male, lone star tick female, lone star tick male.

- Brown Dog Tick
- American Dog Tick
- Black Legged Tick
- Lone Star Tick
- Gulf Coast Tick
- Longhorned Tick

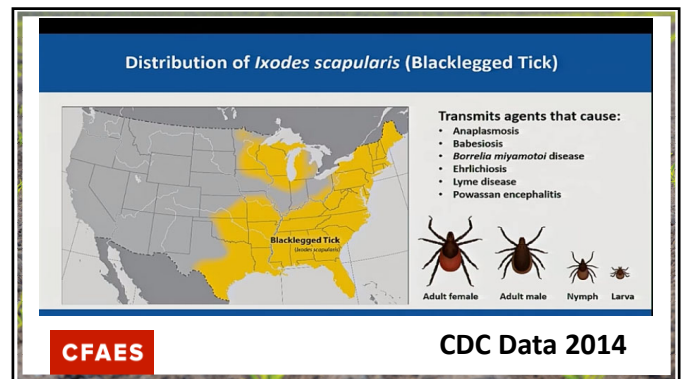
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<https://ohio.osu.edu/extension/ohio-ticks/ohio-ticks-program/ohio-ticks-program/resources/tickborne-diseases>

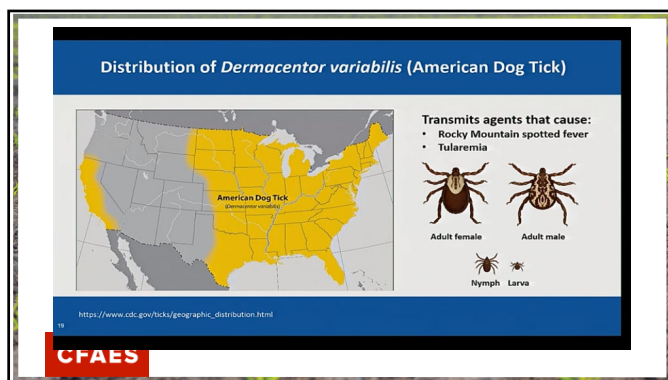
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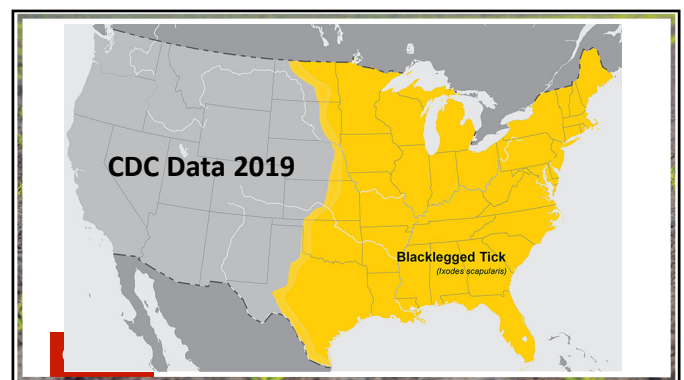
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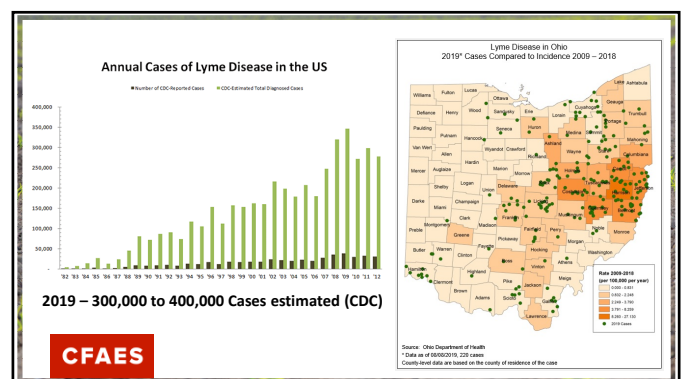
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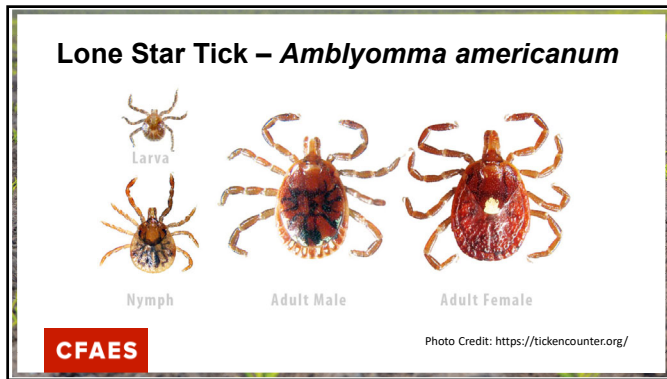


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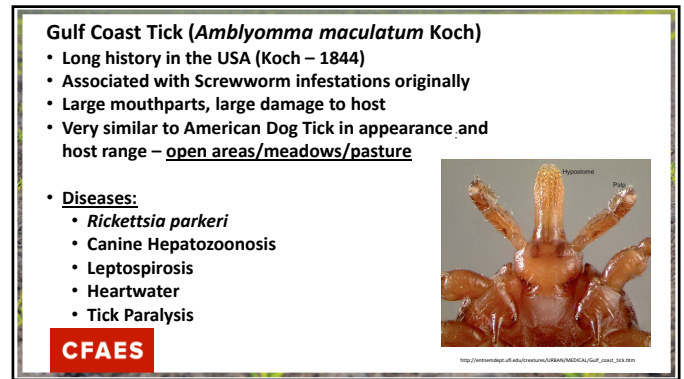


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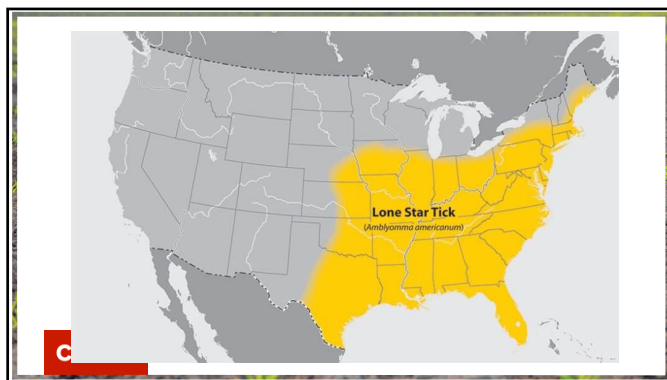




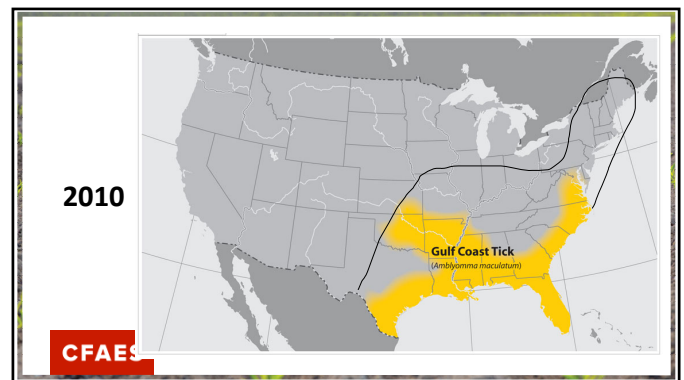
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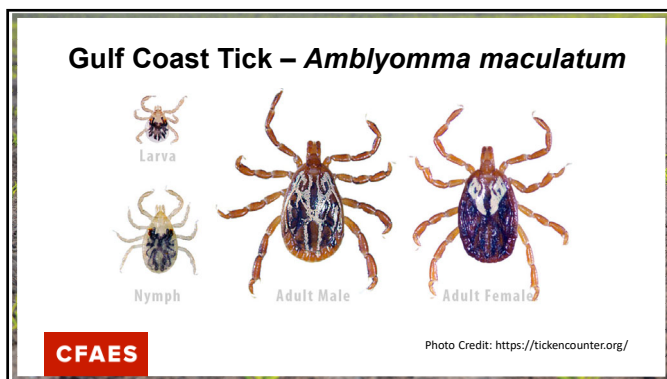
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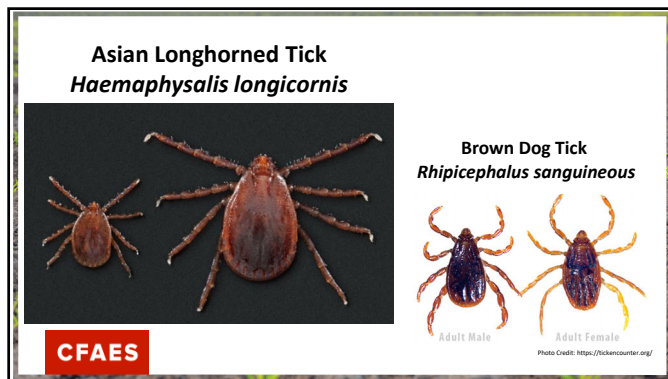
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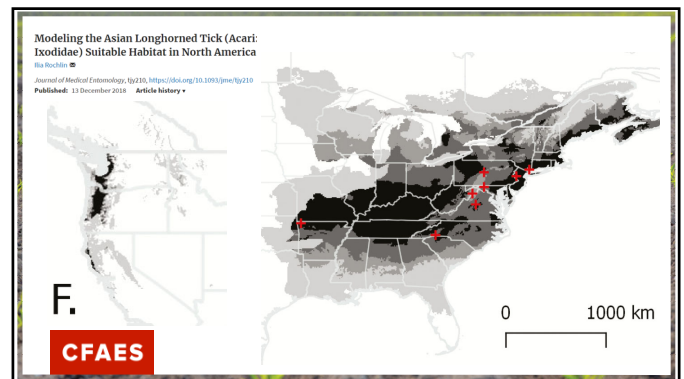
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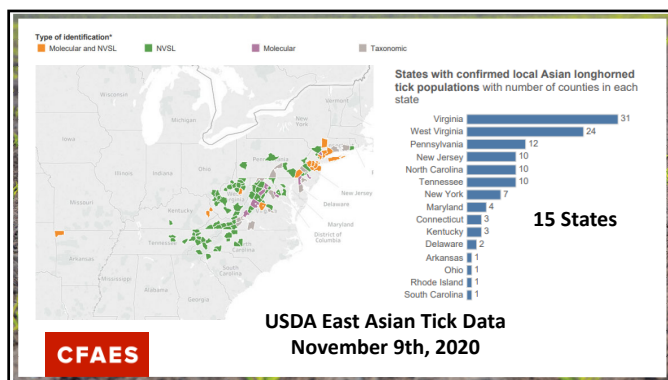
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**Disease Transmission? YES**

**Theileria – similar to Malaria in humans, but affects livestock, primarily cattle.**

**Protozoal parasite in saliva**

**No approved Veterinary acaricides currently**

**WVDA Confirms Theileria in West Virginia**  
Bovine Veterinarian News Source  
January 28, 2020 03:21 PM  
Print

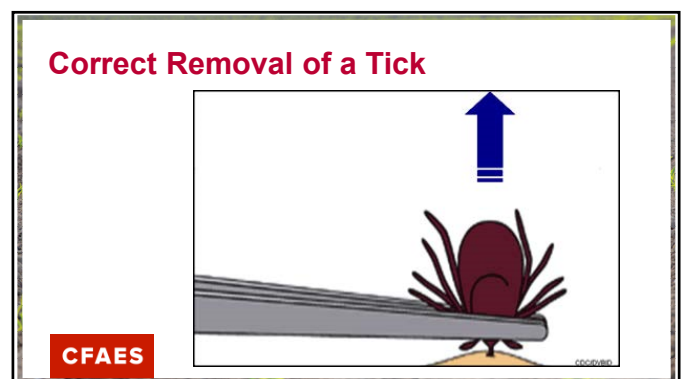


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## Tick Control - Personal

### Permethrin Treated Clothing

- Purchased
- Self Treat

### Repellents – Topical

- DEET
- Picaridin
- IR3535

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### Create a Tick-safe Zone to Reduce Blacklegged Ticks in the Yard

- Remove leaf litter.
- Clear tall grasses and brush around homes and at the edge of lawns.
- Place a 3-ft wide barrier of wood chips or gravel between lawns and wooded areas to restrict tick migration into recreational areas.
- Mow the lawn frequently.
- Stack wood neatly and in a dry area (discourages rodents).
- Keep playground equipment, decks, and patios away from yard edges and trees.
- Discourage unwelcome animals (such as deer, raccoons, and stray dogs) from entering your yard by constructing fences.
- Remove old furniture, mattresses, or trash from the yard that may give ticks a place to hide.

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The Connecticut Agricultural Experiment Station has developed a comprehensive [Tick Management Handbook pdf icon](#)[PDF – 84 pages](#)[external icon](#) for preventing tick bites.

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## Take Homes

- Tick diseases are prevention diseases
- All FOUR Seasons
- New [diseases/species/ranges](#)
- Bacterial, Viral, Allergic
- Need a personal plan for safety
- Permethrin Treated Clothes + Repellants
- Companion Animals can break biosecurity
- Proper Removal
- Submit Tick for Testing

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