

INDIANA LABORATORY SYSTEM MONTHLY PARTNER WEBCAST

Thank you for joining us.
The webcast will begin shortly.

6/19/2025





Indiana
Department
of
Health

INDIANA LABORATORY SYSTEM MONTHLY PARTNER WEBCAST

MARK GLAZIER
DEPUTY LABORATORY DIRECTOR

6/19/2025

Agenda

1. **Welcome and laboratory updates** – Mark Glazier, deputy laboratory director
2. **STAT courier/clinical shipping and measles update** – Brian Pope, Virology and Biological Preparedness Division director
3. **IDOH entomology update** – Lee Green, chief medical entomologist
4. **Q & A** – IDOHL webcast team



Updates and reminders



Indiana
Department
of
Health

IDOH Laboratory

Four ways to stay in the know:

1. Email us at IDOH-Lab-Info@health.in.gov
2. Sign up for IHAN – Indiana Health Alert Network
<https://ihan-in.org/>
3. [Sign up](#) for laboratory communications and updates
4. Update your laboratory's contact information [here](#)



APHL free SAF-T-PAK training

APHL is offering free SAF-T-PAK Packaging and Shipping Trainings

Online self-paced modules, register by 6/30/25

1) Category A – Division 6.2 Infectious Substances – online self-paced modules

- Several modules estimated to take approximately eight hours to complete

2) Category B – online self-paced modules

- Several modules estimated to take approximately five hours to complete

For more information, please email ido-h-lab-pack-ship@health.in.gov.

2025 ILS webcast updates

- ILS webcasts will be held from 10:30-11 a.m. ET on the second **Thursday** each month
- Webcasts will require registration via the links provided:
 - July 10 – [July ILS Webcast Registration Link](#)
 - August 14 – [August ILS Webcast Registration Link](#)
- Recordings will be sent to the email provided during registration following the conclusion of the webcast



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IDOH STAT COURIER/CLINICAL SHIPPING & MEASLES UPDATE

BRIAN POPE

**VIROLOGY & BIOLOGICAL PREPAREDNESS
DIVISION DIRECTOR**

6/19/2025

STAT Courier Reduction of Services

- Current routes will continue to operate until 6/30/25
- Due to funding reductions, STAT Courier will be receiving an 85% reduction in service
- Most sites will be removed from the courier service, sites who will remain on the courier service have already been contacted and notified of their day of service
- Email sent in the AM on 6/10/25 reviewing this information
- Updated regional map can be found at:
<https://www.in.gov/health/laboratories/new!-indiana-courier-system/>

NEW Clinical Shipping Requirements

Centers for Medicare and Medicaid Services (CMS) requires the IDOH Laboratory to enforce method specific temperature and timing restrictions for all incoming clinical samples.

This is to ensure sample integrity from the time of collection through the time of testing.

The IDOHL will begin full enforcement on July 1, 2025.

NEW Clinical Shipping Requirements

The sample timing and temperature requirements are on the IDOHL website:

<https://www.in.gov/health/laboratories/testing/>

Options for shipping samples to IDOHL:

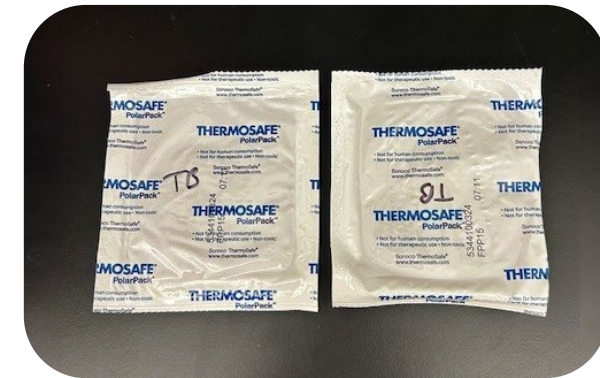
Use STAT Courier, no matter the temperature

- <https://www.in.gov/health/laboratories/new!-indiana-courier-system/>

Refrigerated samples without using STAT Courier in accepted shipper

Refrigerated samples (2-8°C) - Use the following shipping container with **two** of the specific ice packs listed.

If the container is received at the IDOHL within 24 hours of shipping, the temperature will be deemed automatically acceptable.



Refrigerated samples without using STAT Courier in accepted shipper

A shipping container that matches VWR item 15713-700
(Multi-purpose dome style foam container assembled in corrugated carton)

- Interior dimensions: 8L×5⅞W×4¼"H
- Exterior dimensions: 11L×9W×7¼"H
- Thickness = 1.5"



Refrigerated samples without using STAT Courier in accepted shipper

Use **two** frozen ice packs in the shipping container above that match VWR item 89049-980

- External Dimensions:
11.4×10.1×3.8 cm (4½×4×1½")
- Weight: 425 g (15 oz.)
- Interior dimensions: 8L×5⅞W×4¼"H



Refrigerated samples without using STAT Courier in another shipper

Any other method/mode of shipping will require IDOHL personnel to check the temperature of the sample/package upon receipt and reject any samples that are outside of the published requirements (<https://www.in.gov/health/laboratories/testing/>).

Frozen samples without using STAT Courier

Ship the samples on dry ice – the IDOHL will not have to check the temperature validity of the sample as long as dry ice is still in the container.

Ship the samples with ice packs – the IDOHL will check the temperature of the sample/package upon receipt and reject any samples that are outside of the published requirements.

Submitting other temperature samples without using STAT Courier

If a sample is required to be within a particular temperature range, the IDOHL will check the temperature of the sample/package upon receipt and reject any samples that are outside of the published requirements, no matter how the samples are packaged.

If a sample is not required to be within a particular temperature range, then the IDOHL will not reject any samples based on temperature.

Questions on clinical shipping requirements?

Please contact the IDOHL
ido-h-lab-info@health.in.gov

317-921-5500



Measles Update – 6/19/25

- Several large outbreaks of Measles in the United States
 - 750 cases identified in Texas
 - <https://www.dshs.texas.gov/news-alerts/measles-outbreak-2025>
 - 81 cases identified in New Mexico
 - <https://www.nmhealth.org/about/erd/ideb/mog/>
 - 79 cases identified in Kansas
 - <https://www.kdhe.ks.gov/2314/Measles-Data>
 - 36 cases identified in Ohio
 - <https://data.ohio.gov/wps/portal/gov/data/view/summary-of-infectious-diseases-in-ohio>
 - 12 cases identified in Michigan
 - <https://www.michigan.gov/mdhhs/adult-child-serv/childrenfamilies/immunizations/measlesupdates>
- 8 cases have been identified in Indiana – No new cases since our previous meeting
 - <https://www.in.gov/health/idepd/diseases-and-conditions-resource-page/measles/>

Measles Update

- Measles PCR Testing is offered through the IDOH Laboratory <https://www.in.gov/health/laboratories/testing/measles-pcr/>
- Specimens must be pre-approved by IDOH epidemiologists prior to testing
- **Important Change:** Call 317-233-1325 for preauthorization to send to IDOHL
 - IDOH must be consulted on cases where an MMR vaccination was provided within the previous 45 days. Consultations must happen prior to specimen collection

Questions?

Brian Pope

Director, Virology &
Biological Preparedness

(317) 921-5555

bpope1@health.in.gov





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IDOH ENTOMOLOGY UPDATE

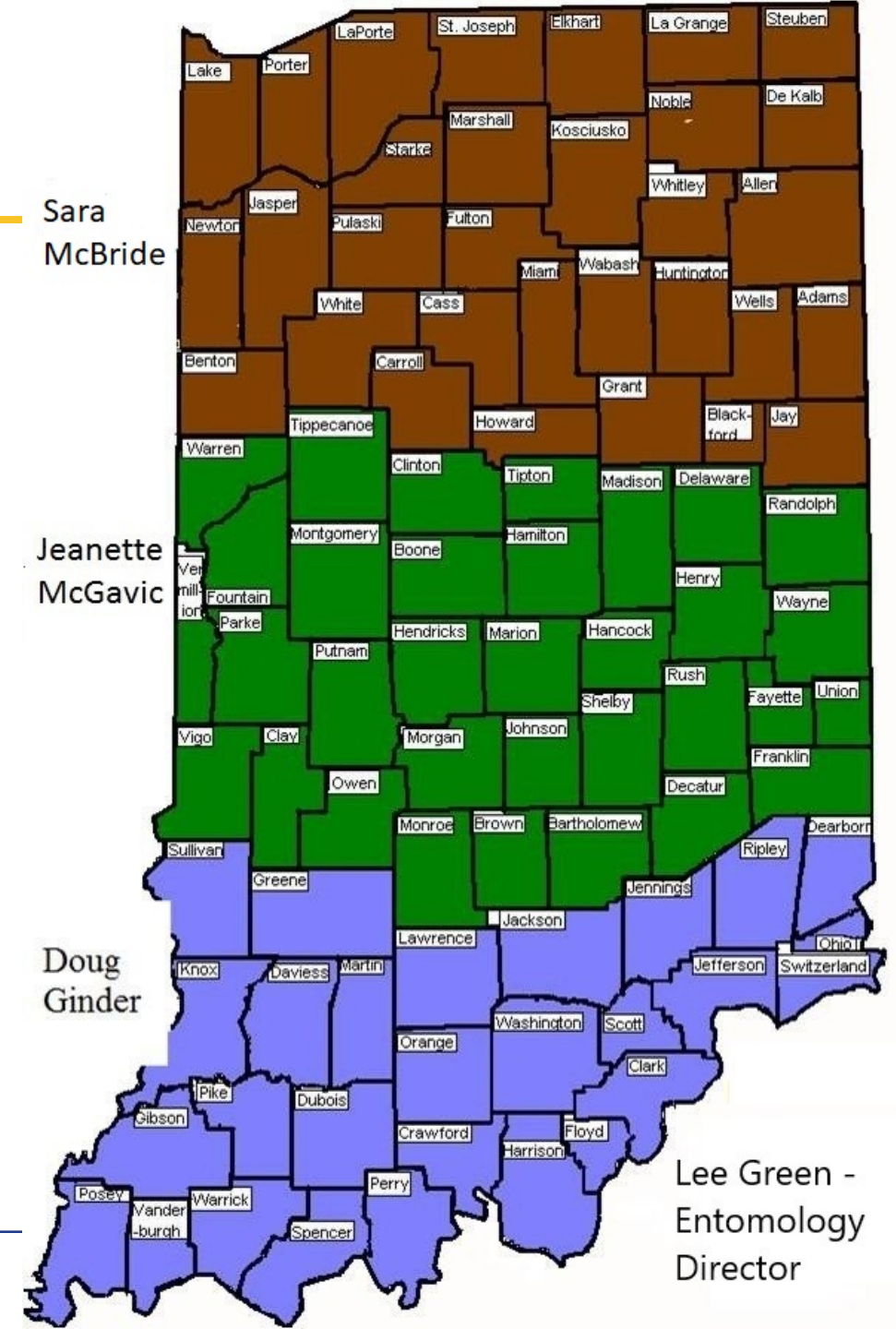
LEE GREEN

SENIOR MEDICAL ENTOMOLOGIST

6/19/2025

Who We Are

- Medical Entomologists (4)
 - Director – Lee Green
 - Northern IN – Sara McBride
 - Central IN – Jeanette McGavic
 - Southern IN – Doug Ginder
- Vector-borne Epi (1)
 - Kira Richardson
- NEW LAB LOCATION in 2023



What We Do

Mosquito-borne Diseases

- West Nile virus
- St. Louis encephalitis
- Eastern equine encephalitis
- LaCrosse encephalitis

- Dengue fever
- Chikungunya
- Malaria
- Zika

Tick-borne Diseases

- Lyme disease
- Spotted Fever Group
Rickettsioses
- Ehrlichiosis
- Anaplasmosis
- Tularemia
- Babesiosis
- Non-Lyme Borrelioses

What We Do

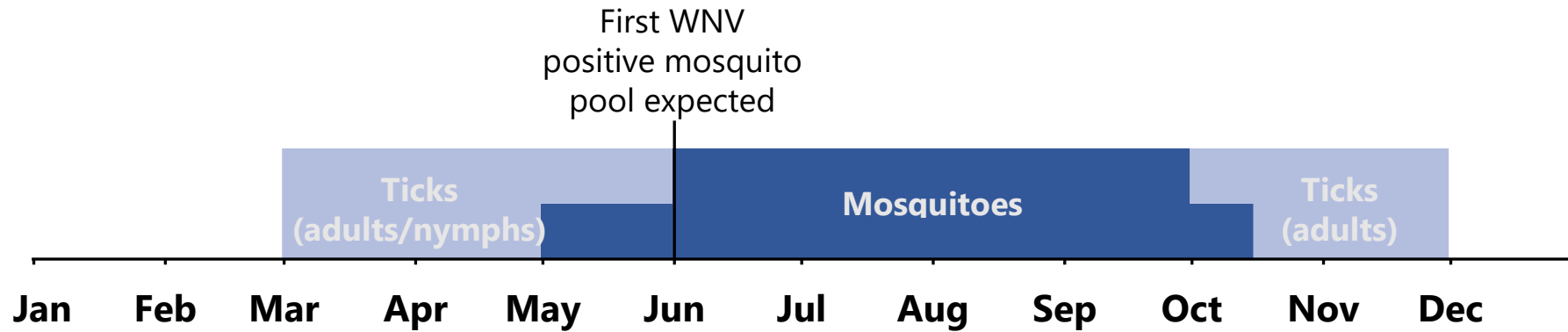
Mosquito-borne Diseases

- West Nile Virus
- ~~St. Louis encephalitis~~
- Eastern equine encephalitis
- LaCrosse encephalitis ????
- Dengue fever
- Chikungunya
- Malaria
- Zika

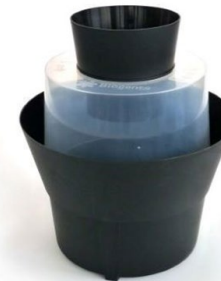
Tick-borne Diseases

- Lyme disease
- Spotted Fever Group
Rickettsioses
- Ehrlichiosis
- Anaplasmosis
- Tularemia
- Babesiosis
- Non-Lyme Borrelioses

Entomology Projects

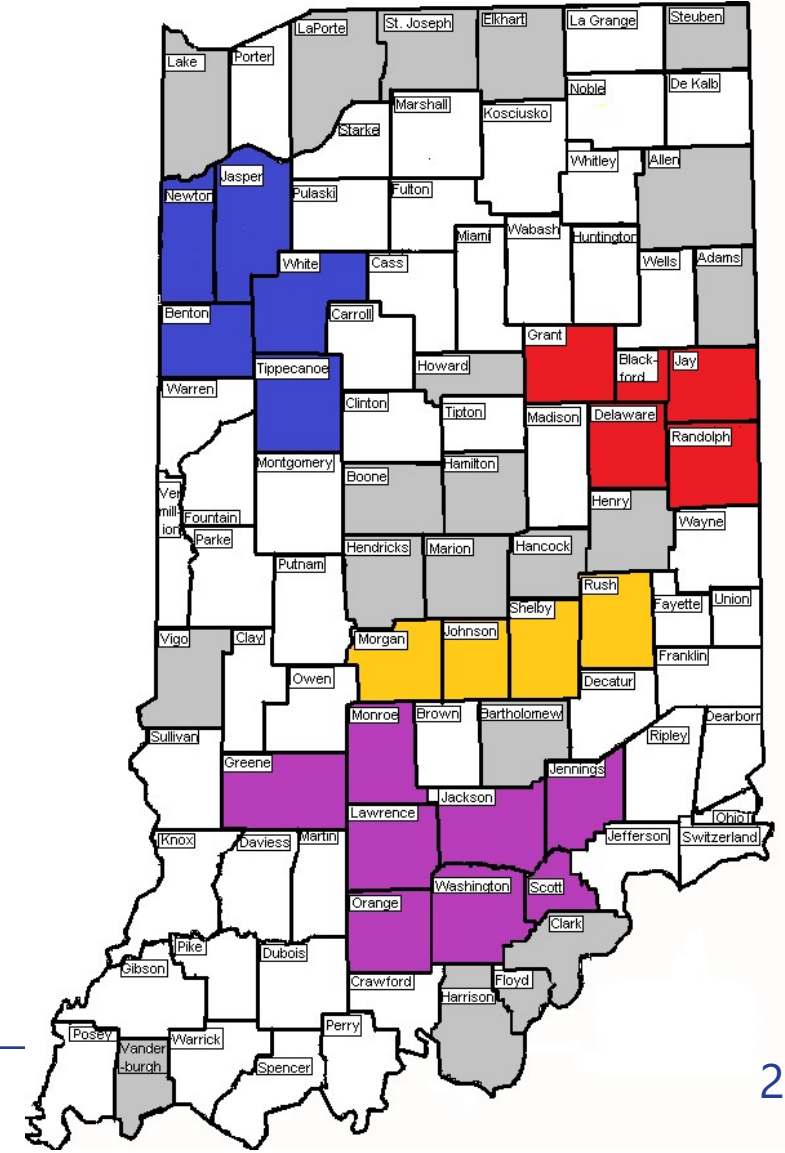
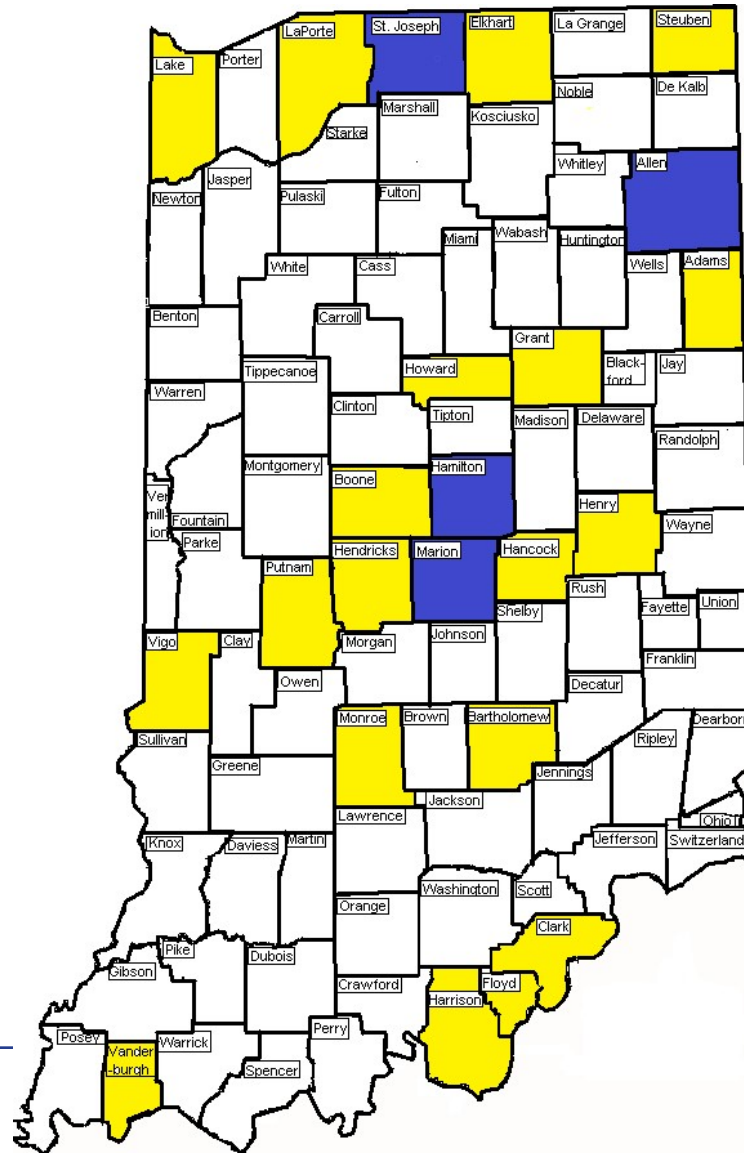


Mosquito Surveillance

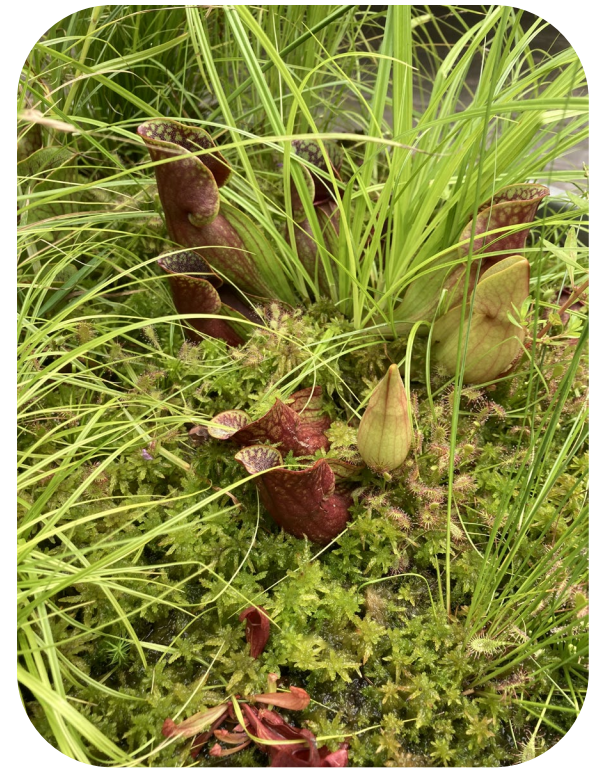
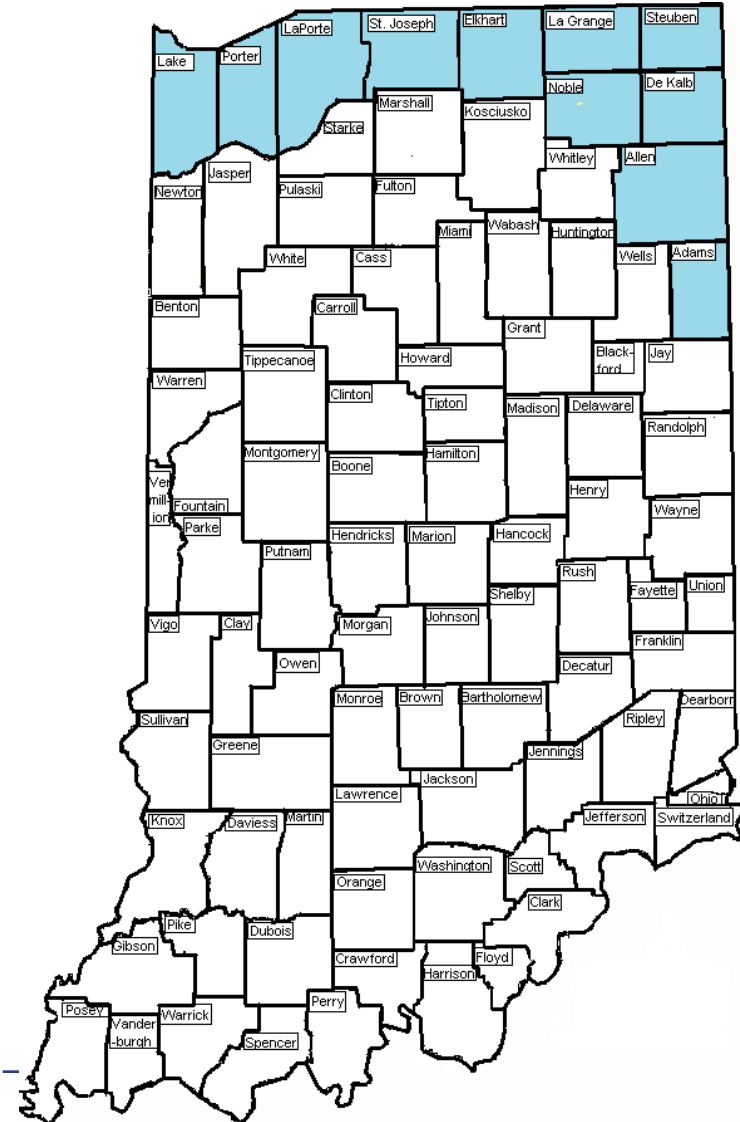


Surveillance Network

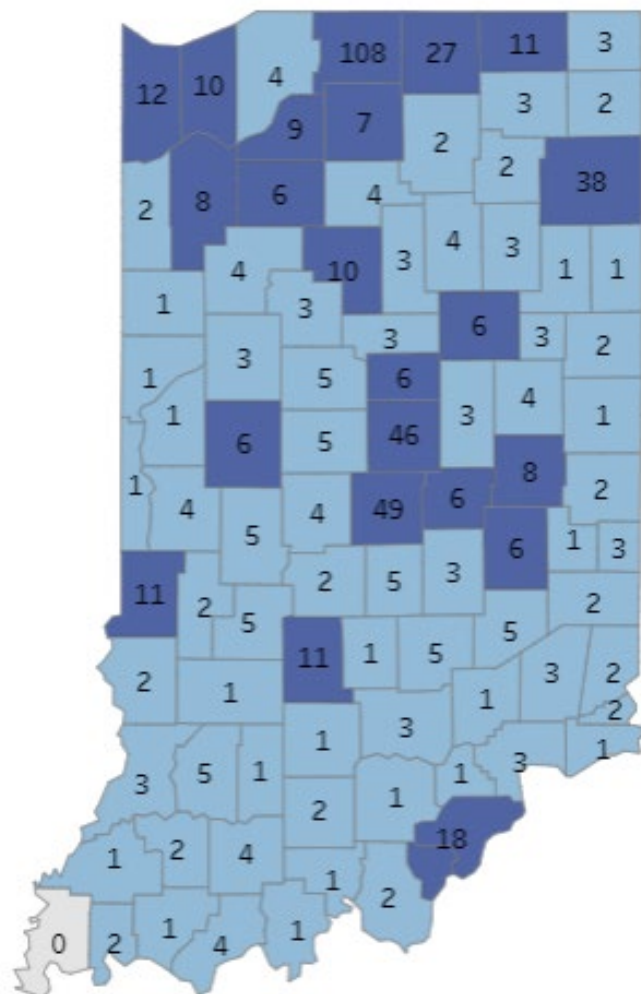
2024 Entomology Interns



Eastern Equine Encephalomyelitis Mosquito Surveillance

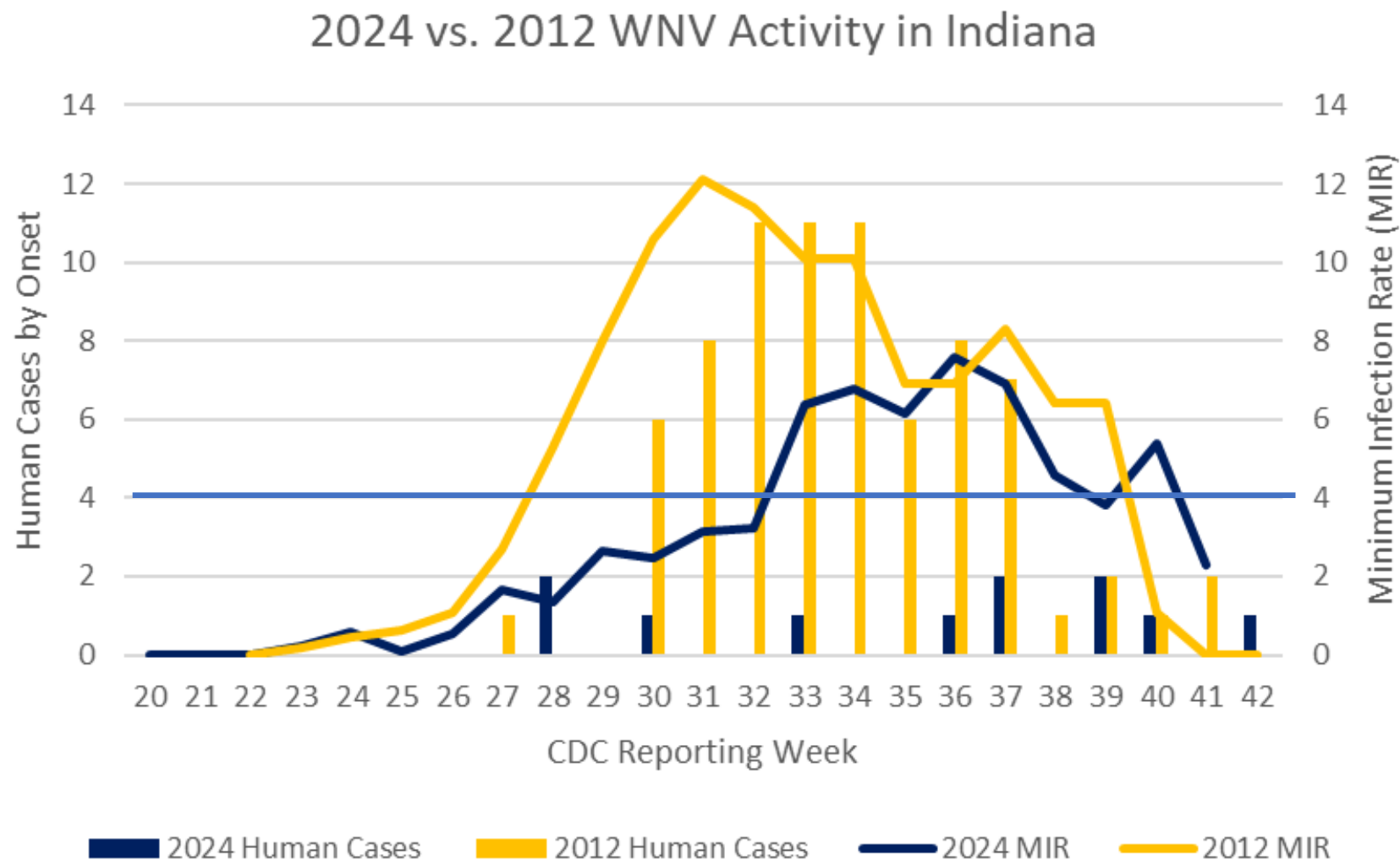


2024 WNV Positive Mosquito Pools



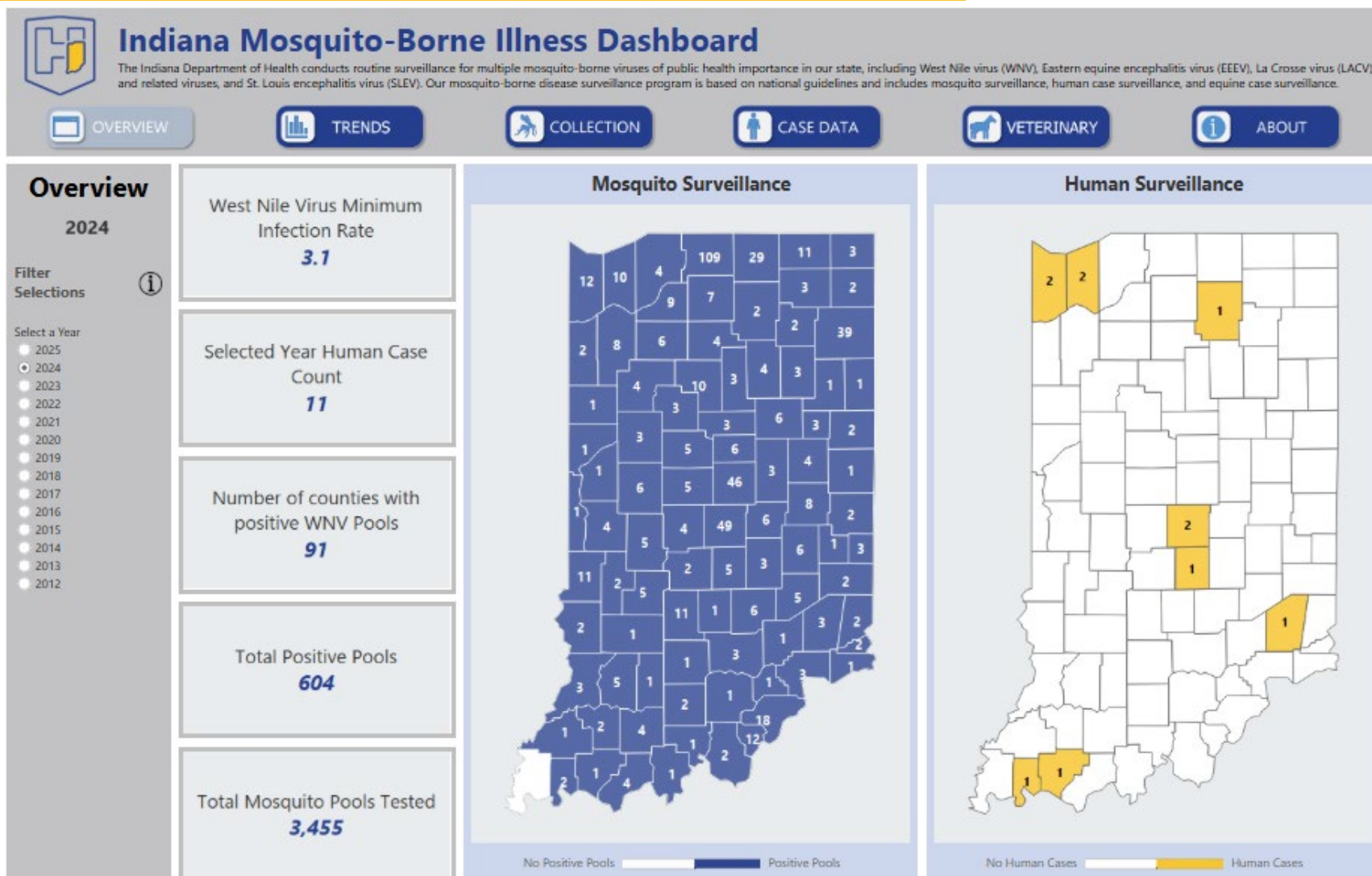
West Nile Virus Positive Pools

■ 6+

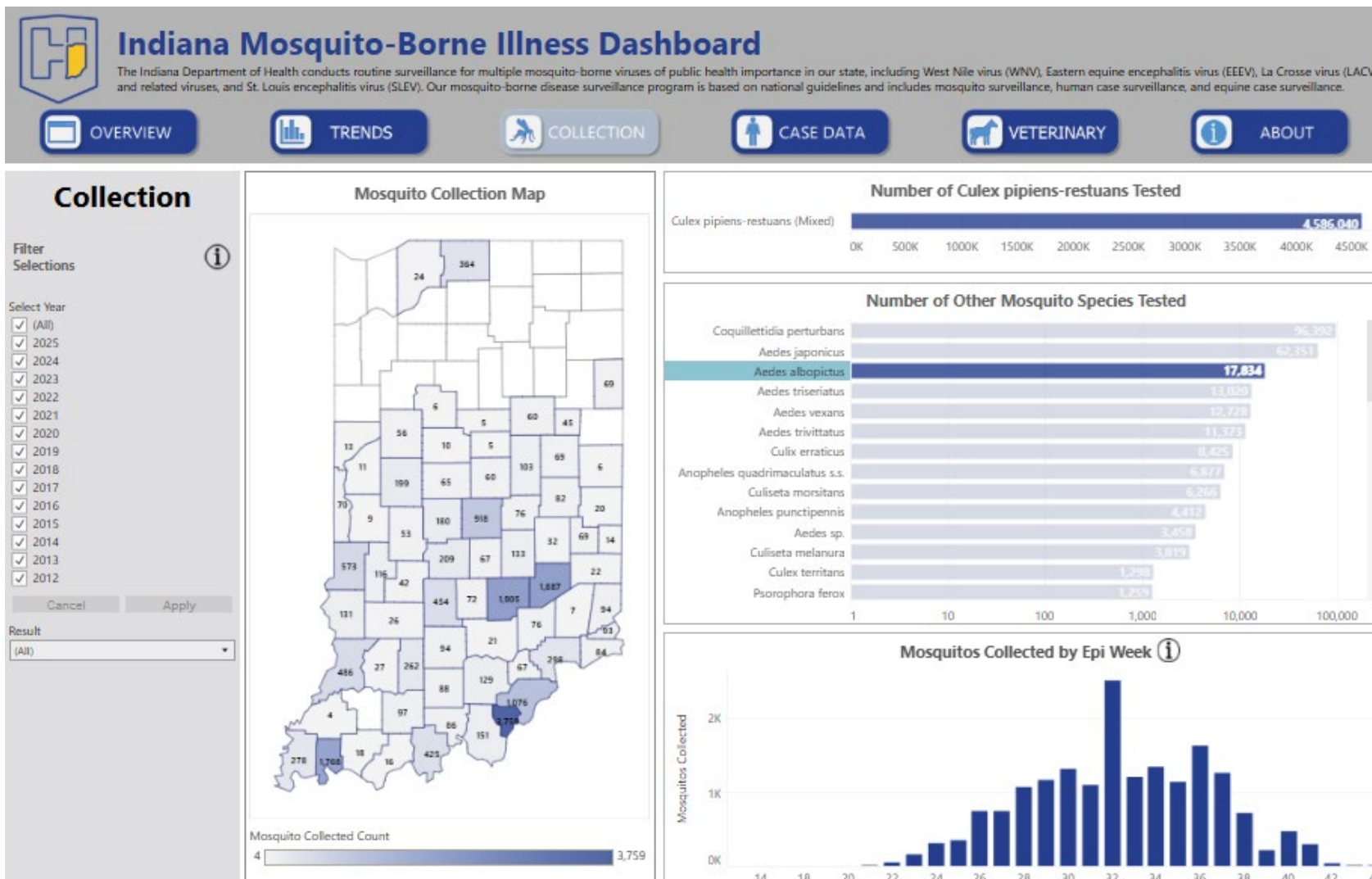


M.I.R. = # + Pools/ # Mosquitoes Tested X 1,000

New Dashboard



New Dashboard



Ticks of Medical Importance in Indiana - 2017



American Dog Tick
Dermacentor variabilis



Brown Dog Tick
Rhipicephalus sanguineus

Blacklegged Tick
Ixodes scapularis



Lone Star Tick
Amblyomma americanum



Ticks of Medical Importance in Indiana - 2023



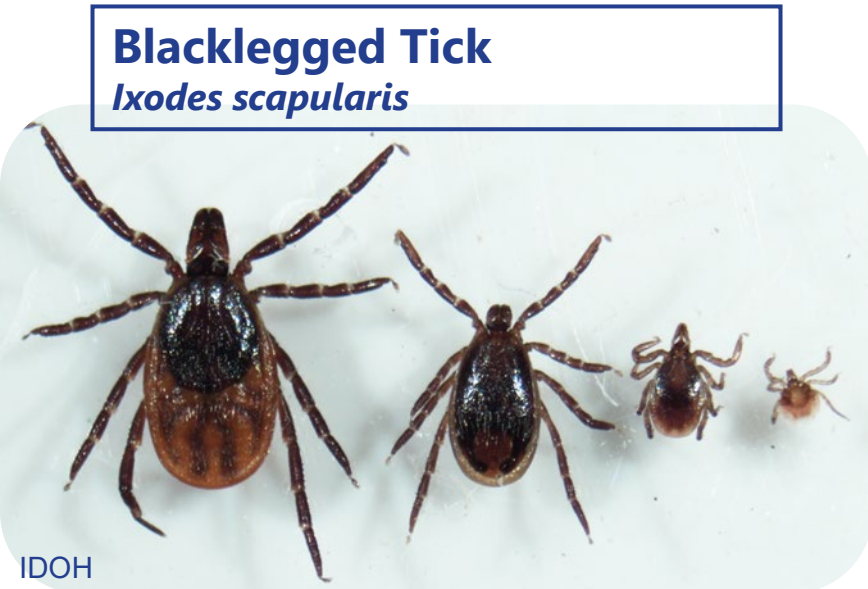
American Dog Tick
Dermacentor variabilis



Gulf Coast Tick
Amblyomma maculatum



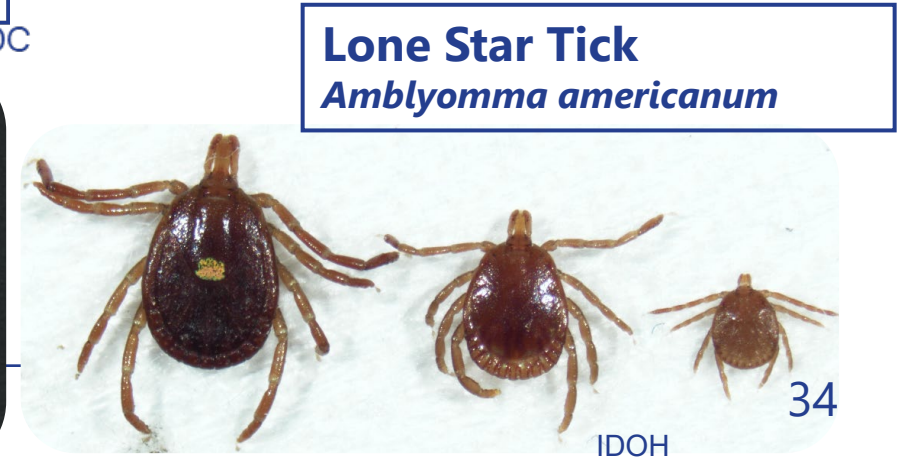
Brown Dog Tick
Rhipicephalus sanguineus



Blacklegged Tick
Ixodes scapularis



Asian Longhorned Tick
Haemaphysalis longicornis



Lone Star Tick
Amblyomma americanum

NEW TICK DASHBOARD!

<https://www.in.gov/health/idepd/zoonotic-and-vectorborne-epidemiology-entomology/vectorborne-diseases/tick-borne-diseases/>



Indiana Tick-borne Disease Surveillance

Tick surveillance data last updated 11/15/2023.

Case surveillance data last updated 3/5/2024.

Start with filter selections below, which apply to everything on this page

For best results, clear all filter selections before selecting a new disease (refresh the webpage or hover over a multi-select filter and find the "Click to Show All Values" option: a funnel icon with a red x)

Select Disease: Select Pathogen(s): Select Tick Type(s):

TICK SURVEILLANCE AND TESTING

Lyme Disease is Selected

Lyme disease is a tick-borne disease caused by the bacteria *Borrelia burgdorferi* and *Borrelia mayonii* and transmitted by the blacklegged tick (*Ixodes scapularis*). Most reported cases are due to *B. burgdorferi*.

TICK SURVEILLANCE

The blacklegged tick life cycle has four stages (egg, larva, nymph, and adult); both nymph and adult ticks can transmit human pathogens.

The "Tick Distribution" map shows where blacklegged ticks are found. "Established" means that 26 ticks of the same life stage or >1 tick life stage have been collected in the county within a calendar year. "Reported" means that no more than 5 ticks of the same life stage have been collected in the county within a calendar year.

The "Infected Nymph Ticks" and "Infected Adult Ticks" statistics and maps show the percentage of blacklegged ticks collected since 2017 that were carrying the bacterium that cause Lyme disease.

The "Tick Activity by Month" chart shows the times of year when blacklegged nymph and adult ticks are expected to be most active.

Counties with Ticks Tested 2017 — Present

91

Infected Nymph Ticks 2017 — Present

12.27%

Total tested: 2,600

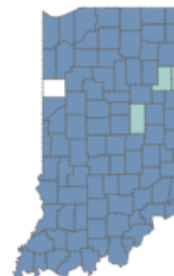
Infected Adult Ticks 2017 — Present

33.72%

Total tested: 4,558

Tick Distribution

Blacklegged Tick



Current County Status

- ☐ Not Detected
- ☐ Reported
- ☐ Established

Infected Nymph Ticks

Infected Nymph Ticks

- ☐ No Tests
- ☐ 0%
- ☐ 0.01—20%
- ☐ 20.01—40%
- ☐ >40%

Infected Adult Ticks

Infected Adult Ticks

- ☐ No Tests
- ☐ 0%
- ☐ 0.01—20%
- ☐ 20.01—40%
- ☐ >40%

Tick Surveillance - *Ixodes scapularis*

2001

2024



Biology of *Ixodes scapularis*

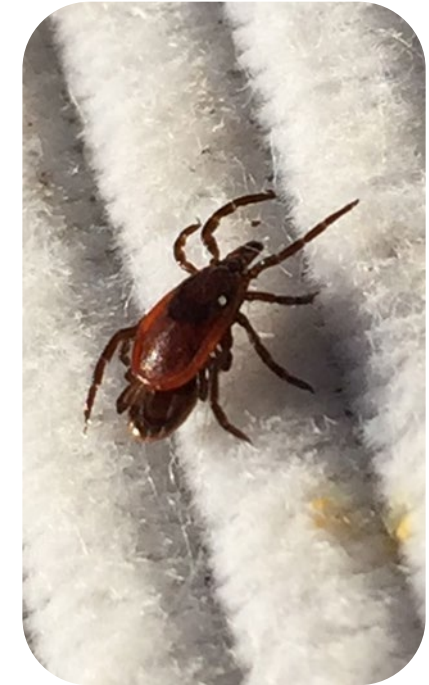
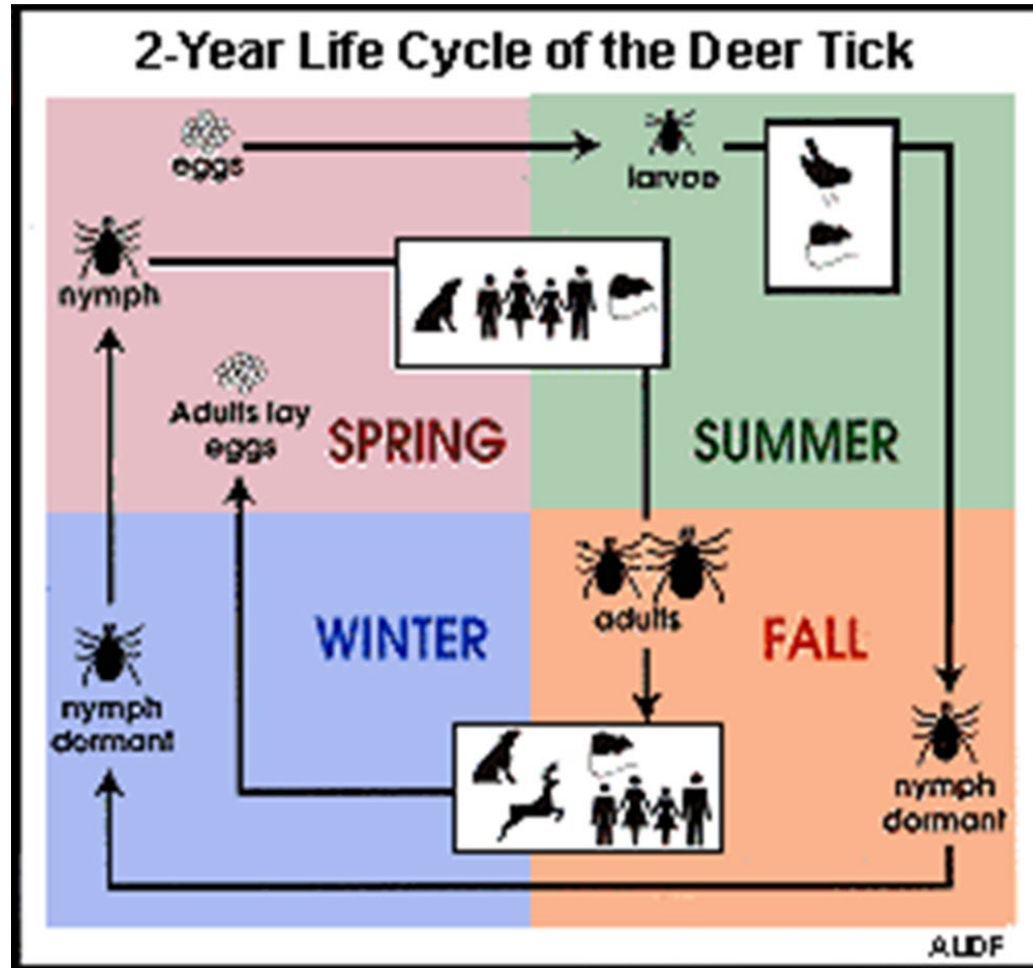
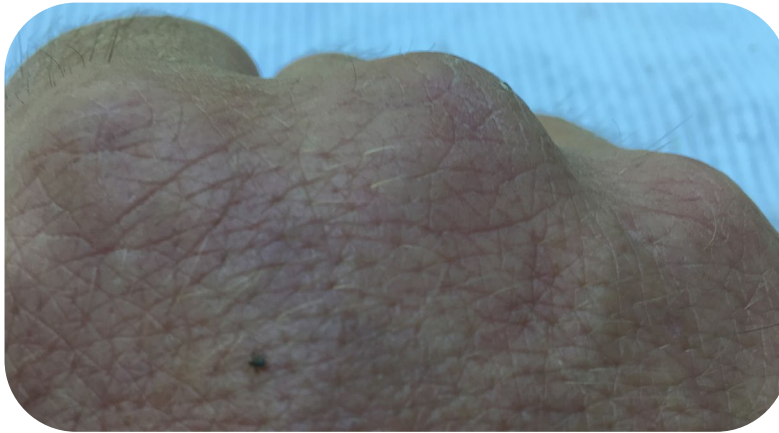
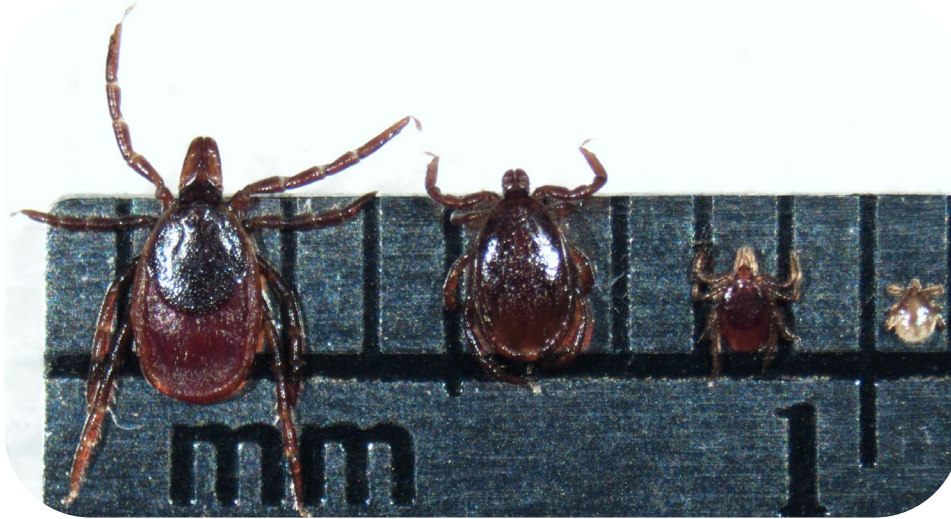
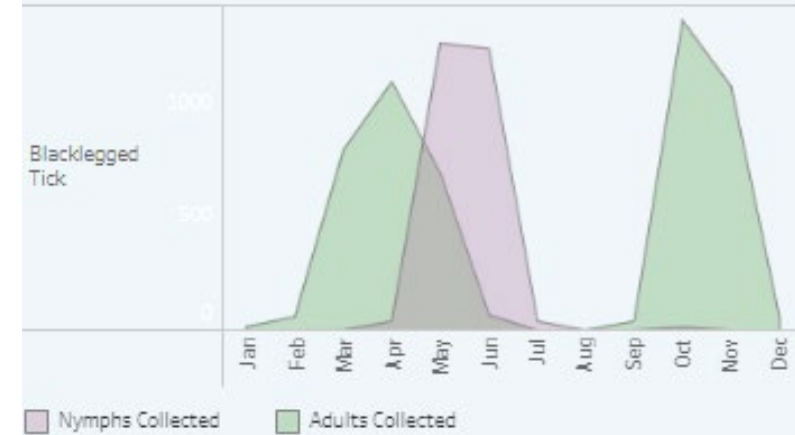


Photo: L. Green IDOH

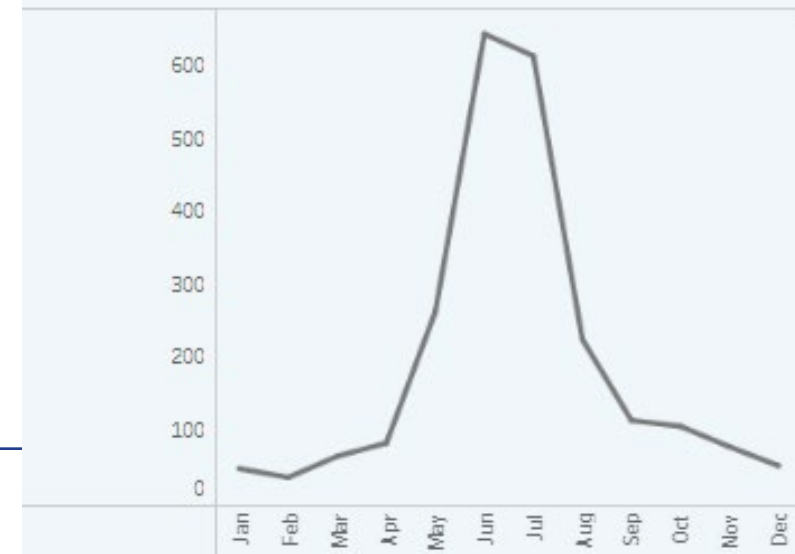
Blacklegged Tick Phenology and Lyme Disease



Tick Activity by Month
2017 – Present

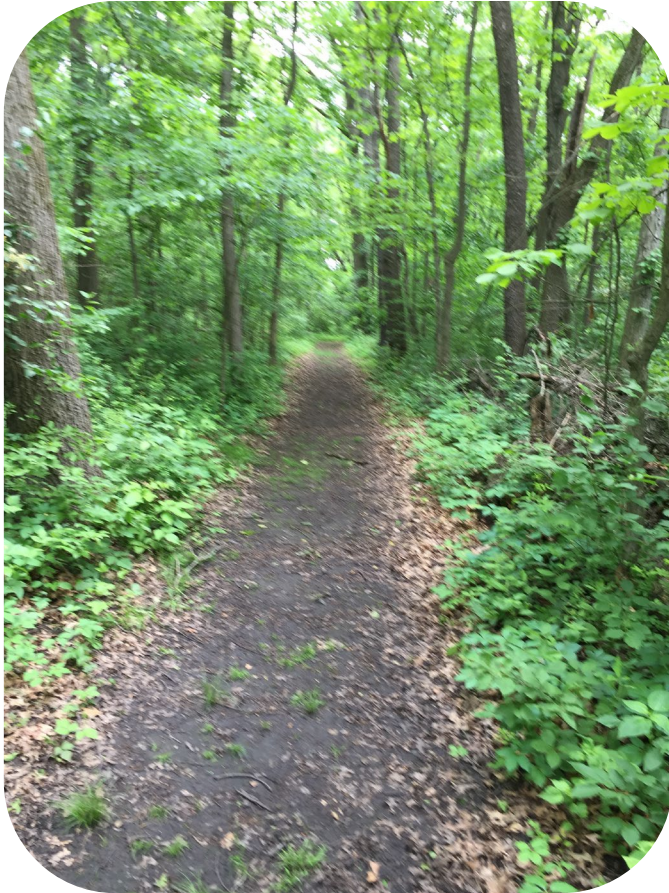


Human Cases by Month

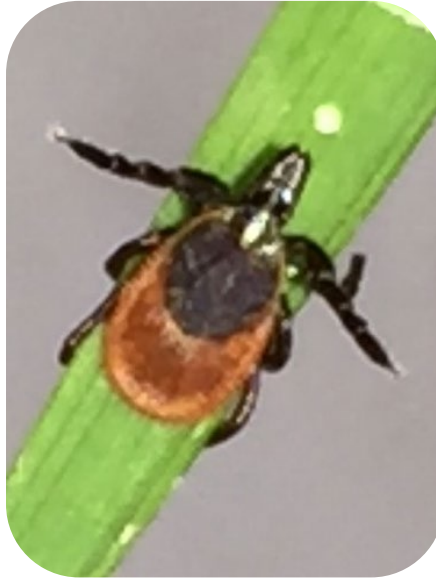


Biology of *Ixodes scapularis*

Habitat

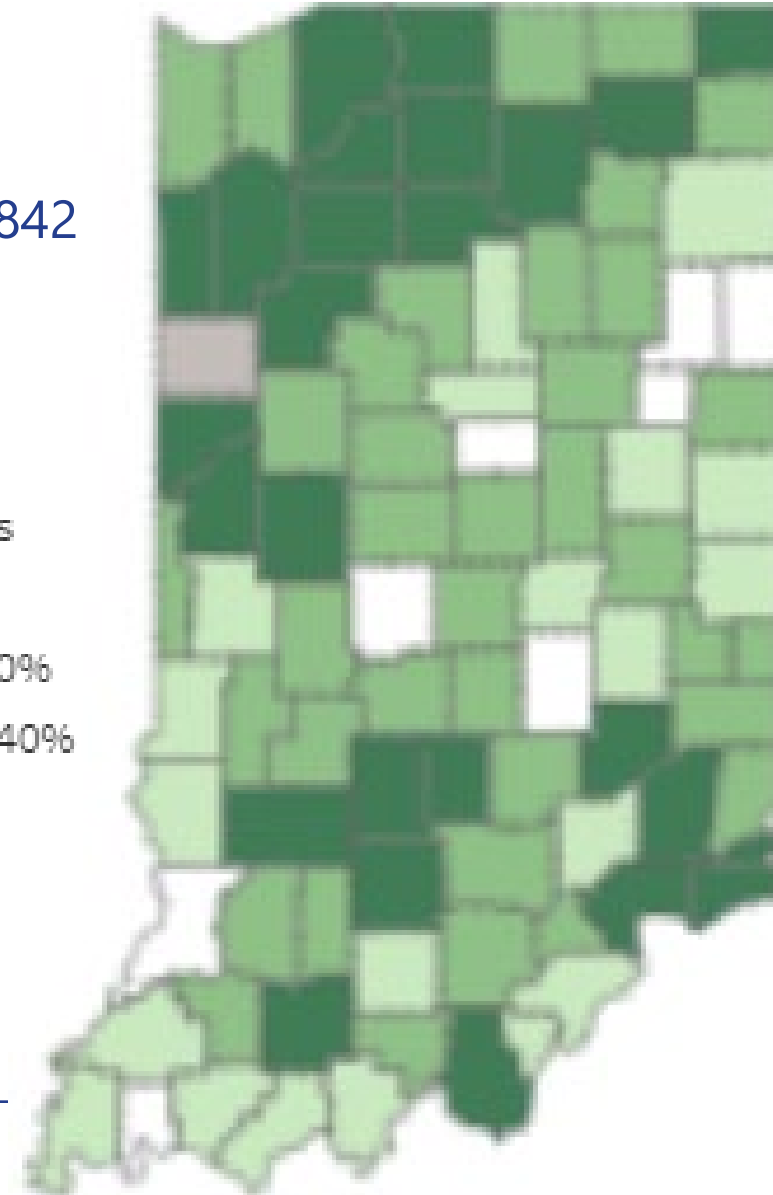
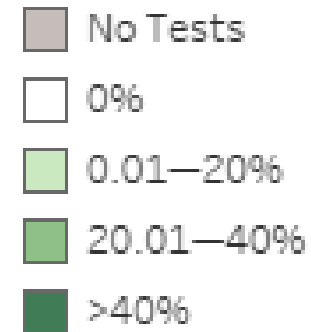


Percentage of adult *Ixodes scapularis* ticks infected with *Borrelia burgdorferi*, 2017-2024



Total Tested: 4,842

Infection rate:
33.06%

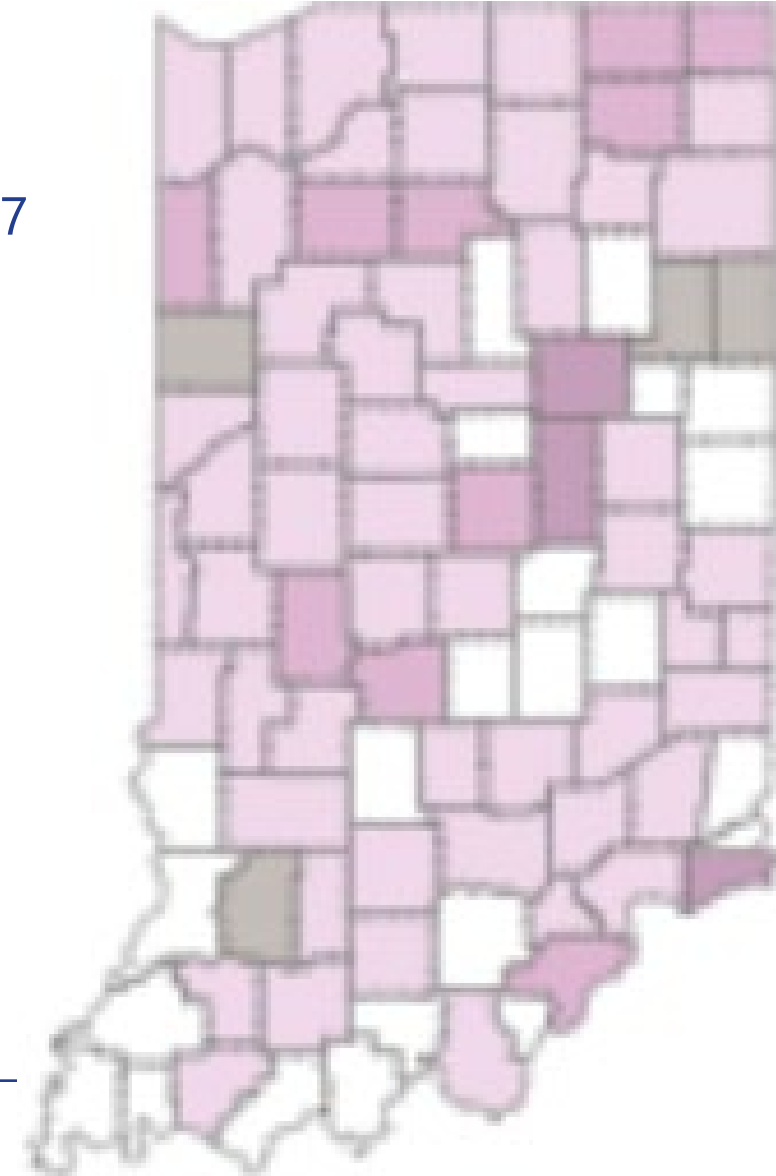
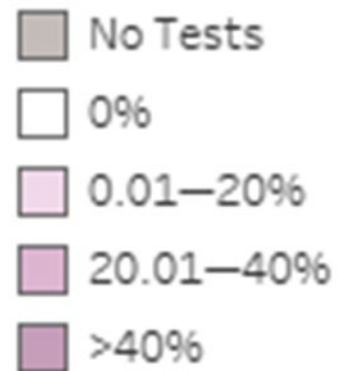


Percentage of nymph *Ixodes scapularis* ticks infected with *Borrelia burgdorferi*, 2017-2024

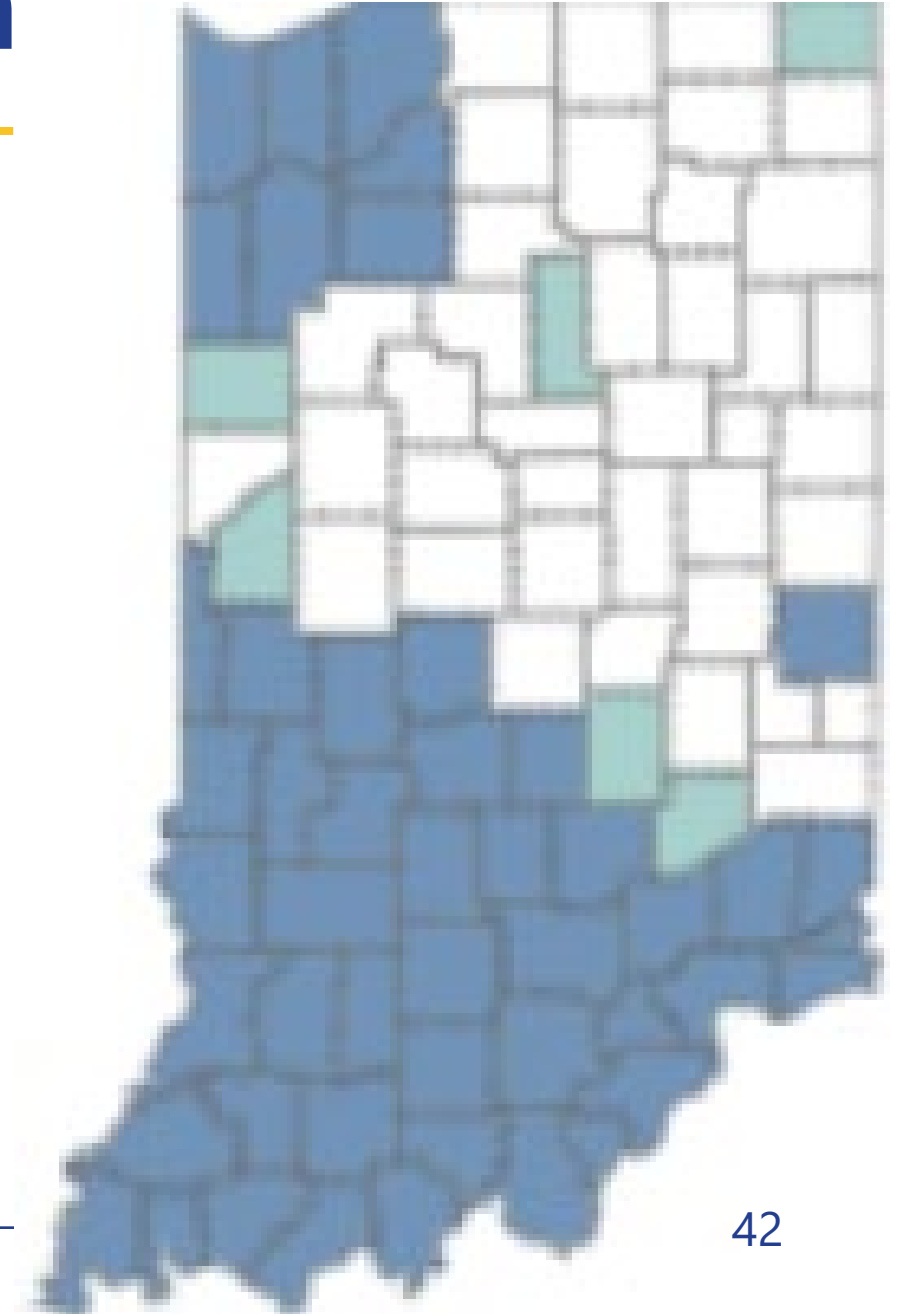


Total Tested: 3,007

Infection rate:
11.77%



Lone Star Tick Distribution



Amblyomma americanum Habitat

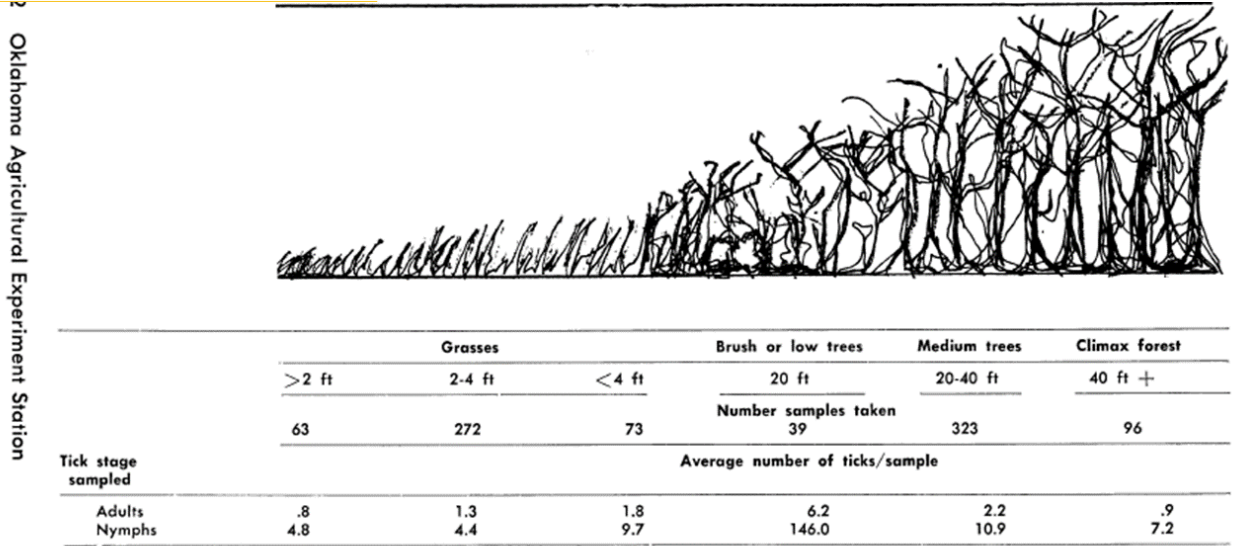
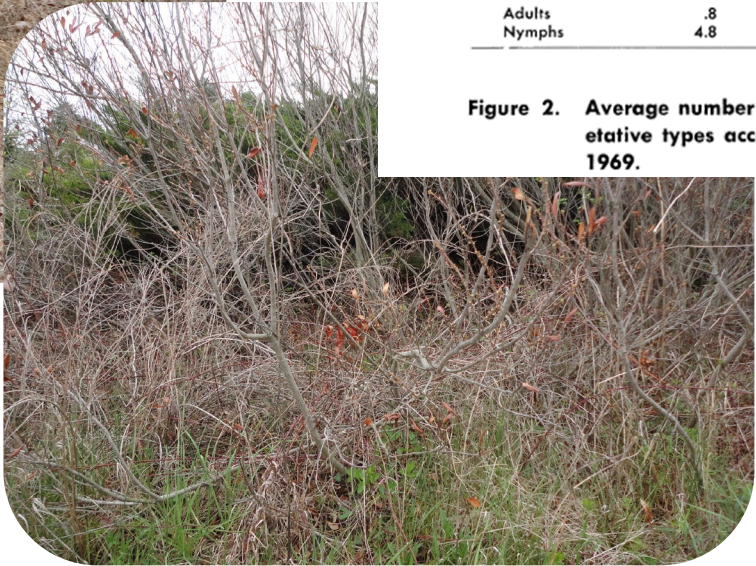


Figure 2. Average number of adult and nymphal ticks collected per sample from within or under different vegetative types according to overstory height in Cookson Hills State Game Refuge during June and July, 1969.

Hair, Jakie A., and Dariel Elza Howell. "Oklahoma Agricultural Experiment Station, Bulletin no. 679, July 1970: Lone star ticks; Their biology and control in Ozark recreation areas." (1970)

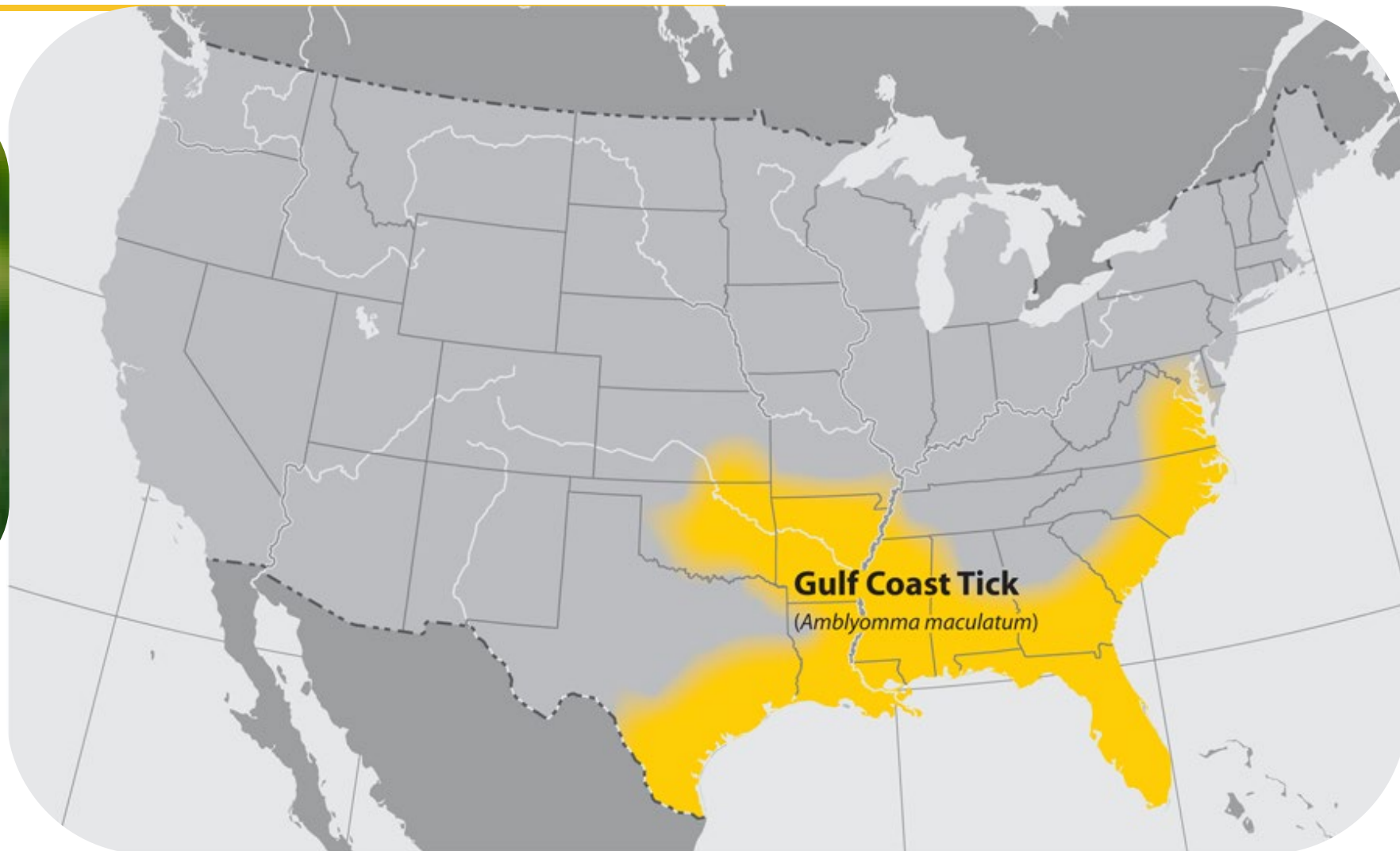
Alpha-gal syndrome

- Alpha-gal (galactose- α -1,3-galactose) is a sugar molecule found in most mammals (except in people, apes, and monkeys)
- Alpha-gal is not normally found in fish, reptiles, or birds
- An alpha-gal allergy is an allergy to the alpha-gal sugar molecule. Allergic reactions typically occur after people eat meat from mammals that have alpha-gal or are exposed to products made from mammals
- Most cases of alpha-gal allergy have been reported in the southeastern and midwestern United States
- Both children and adults can develop alpha-gal allergy; however, most cases of alpha-gal allergy appear to be in people >50 years of age

Amblyomma maculatum – Gulf Coast Tick



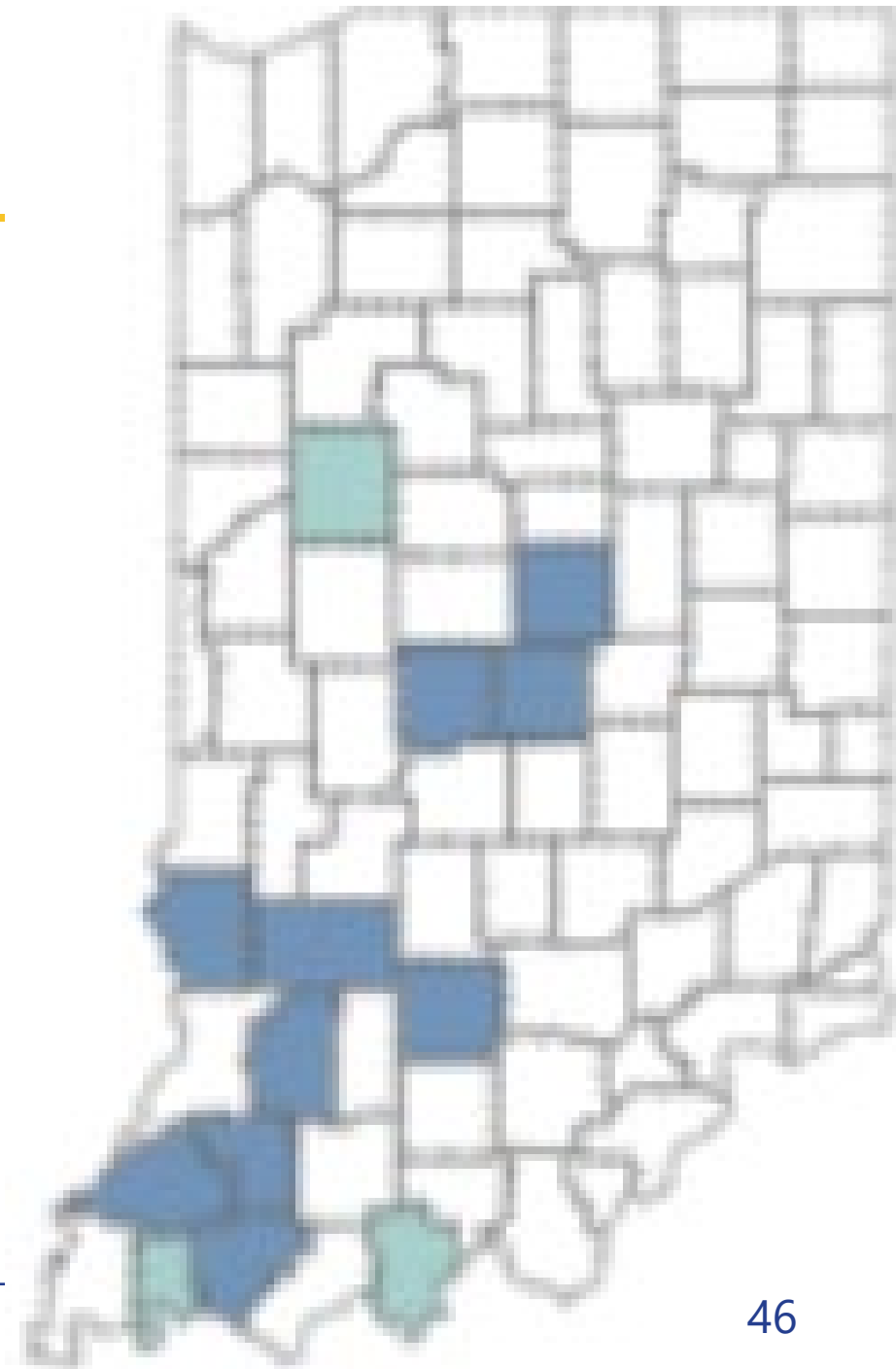
CDC



Gulf Coast Tick Distributio



Photo: U of FL Ento



Amblyomma maculatum Habitat

- Grass/shrub land
- Populations decrease if canopy is allowed to close in (Nadolny and Gaff 2018)
- Xerophilic
- Better adapted to burned habitat than LST (Gleim et al. 2013)
- Immature stages hard to find/ freshly mowed grass fields (Nadolny and Gaff 2018)



IDOH



Haemaphysalis longicornis – Asian Longhorned Tick



L. Beati, Georgia Southern



USDA

Asian Longhorned Ticks

April, 2023

IN is 19th State with confirmed ALHTs.

4/13/2023

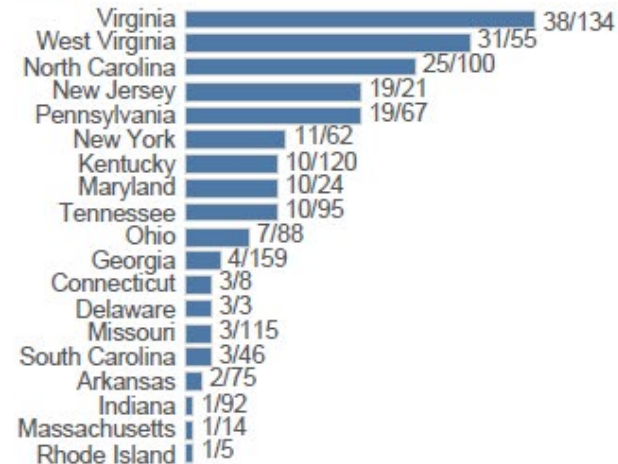
-Environmental collection in Switzerland Co, IN

-Single nymph

Haemaphysalis longicornis (Asian longhorned tick), an exotic East Asian tick, has never previously established a population in the United States. It is a known serious pest of livestock in the Australasian and Western Pacific Regions where it occurs. It is an aggressive biter and frequently builds intense infestations on domestic hosts causing great stress, reduced growth and production, and severe blood loss.

The tick can reproduce parthenogenetically (without a male); as such, a single fed female tick can create a population. It is also a known/suspected vector of several viral, bacterial, and protozoan agents of livestock and human diseases. This three-host tick can spread pathogens among a diverse host range, on which it feeds side-by-side with other tick species. The detections detailed here are the first reports of this tick out of quarantine in the United States.

States with confirmed local Asian longhorned tick populations with number of counties in each state. (# of confirmed counties / total # of counties)



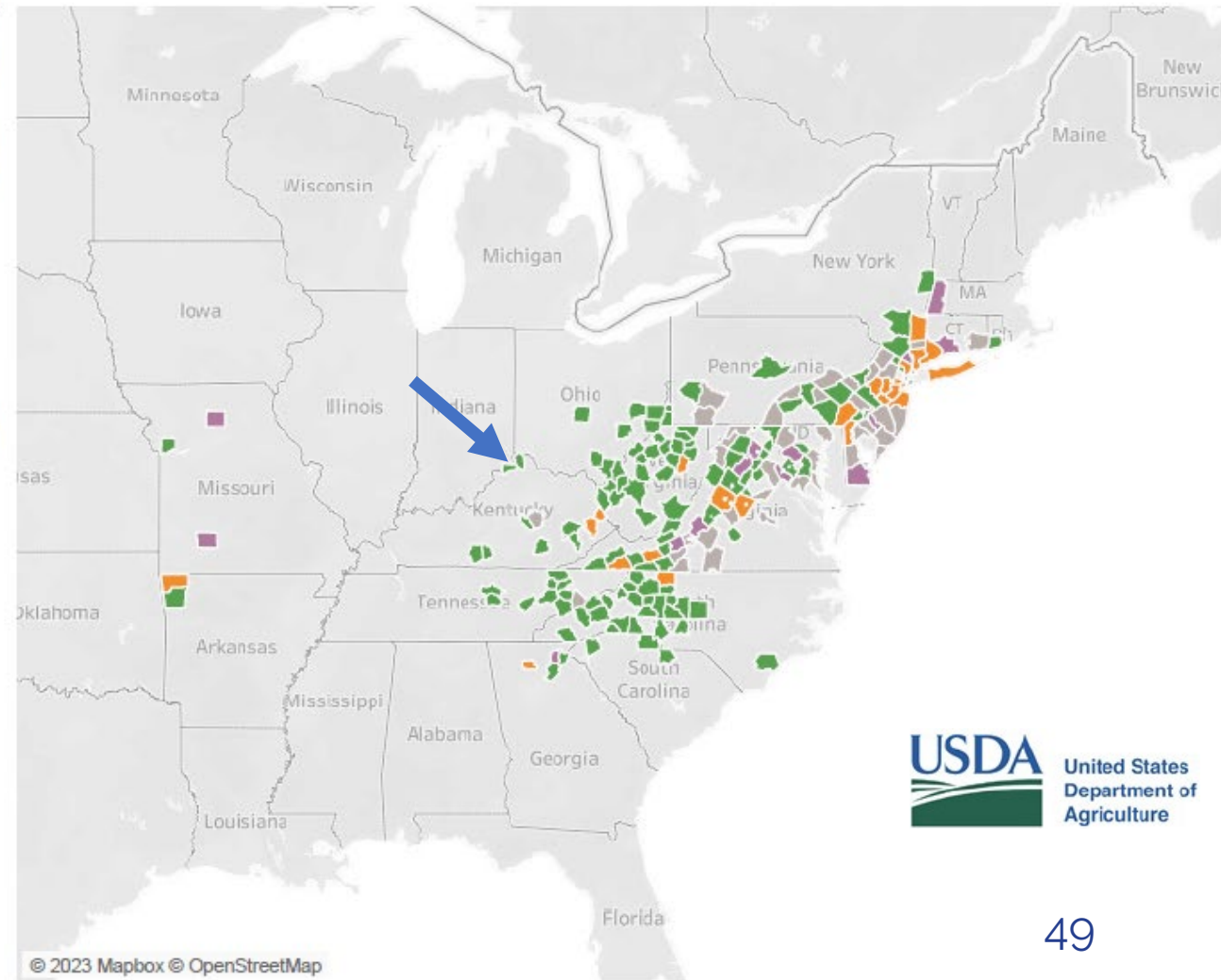
Type of identification*

■ Molecular and NVSL

■ NVSL

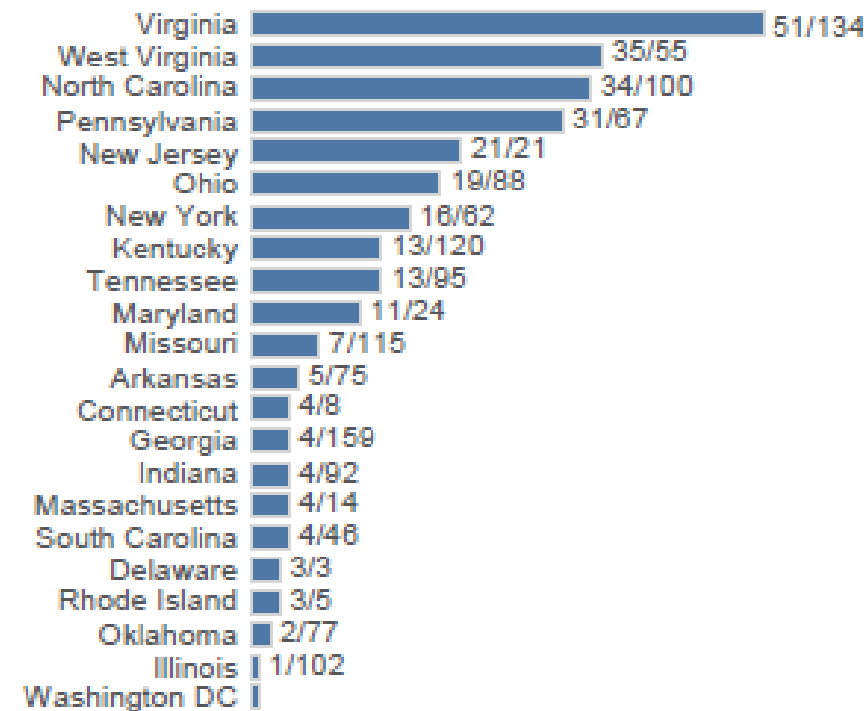
■ Molecular

■ Taxonomic

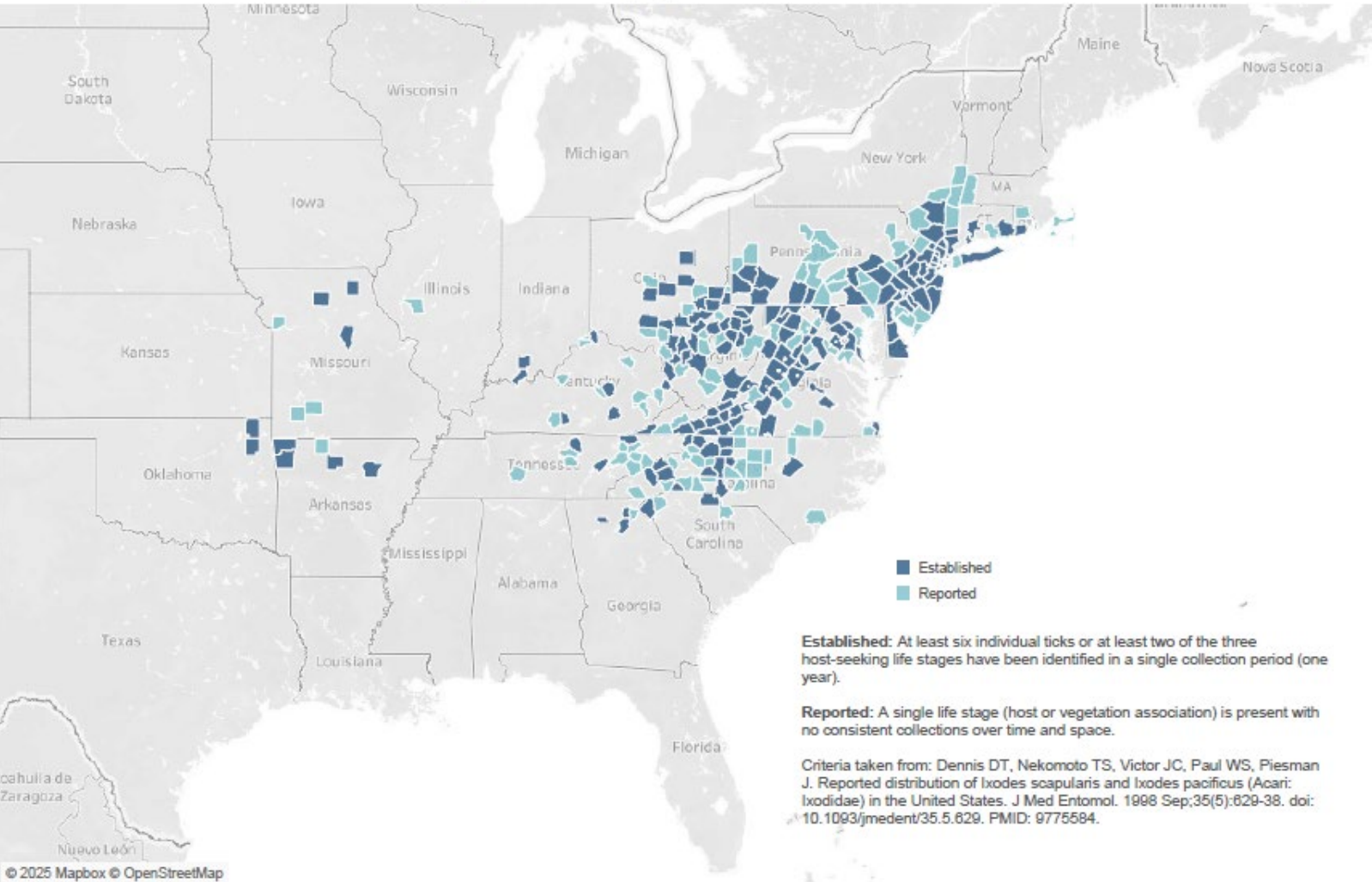


ALT Distribution

States with confirmed local Asian longhorned tick populations with number of counties in each state. (# of confirmed counties / total # of counties)



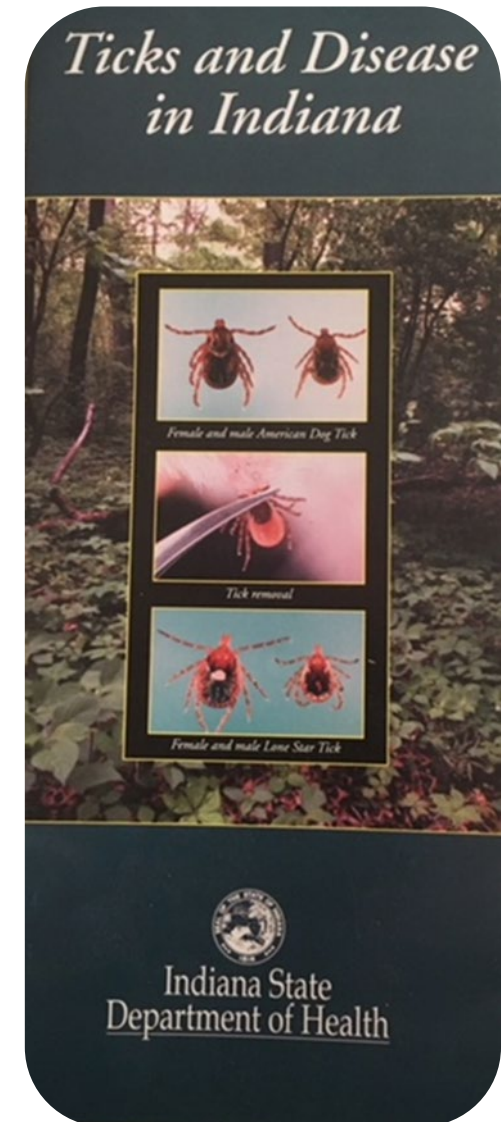
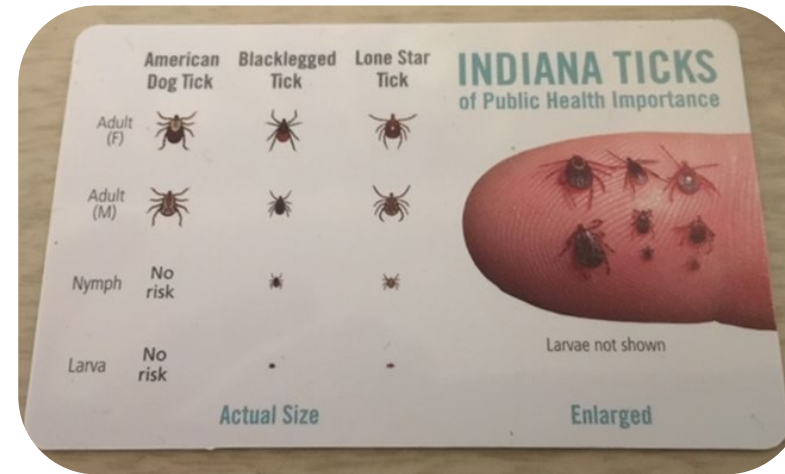
Counties with established Asian longhorned tick populations



These data, and all the information contained therein, have been collected by the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), or by its cooperators on APHIS' behalf, for restricted government purposes only. This information is the sole property of APHIS. See full disclaimer here: aphis.usda.gov/help/map-disclaimer.

Questions?

- Lee Green – legreen@health.in.gov
- Director (317) 517-5843
- Sara McBride – smcbride@health.in.gov
- Central Indiana – (574) 347-5102
- Jeanette McGavic – jmcgavic@health.in.gov
- Central Indiana (317) 995-3121
- Doug Ginder – dginder@health.in.gov
- Southern Indiana (317) 501-6349





Question & Answer Session



Indiana
Department
of
Health

Questions?

IDOH Laboratory

317-921-5500

IDOH-lab-info@health.in.gov



Next webcast

The next Indiana Laboratory System webcast is scheduled for:

Date: Thursday, July 10

Time: 10:30 – 11 a.m. EDT





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**THANK YOU FOR JOINING
THE WEBCAST!**

- IDOH Laboratory Team