Spotted Lanternfly: Where it is, Where it Might be Going, and How to Detect it

Claire Rutledge

Department of Entomology

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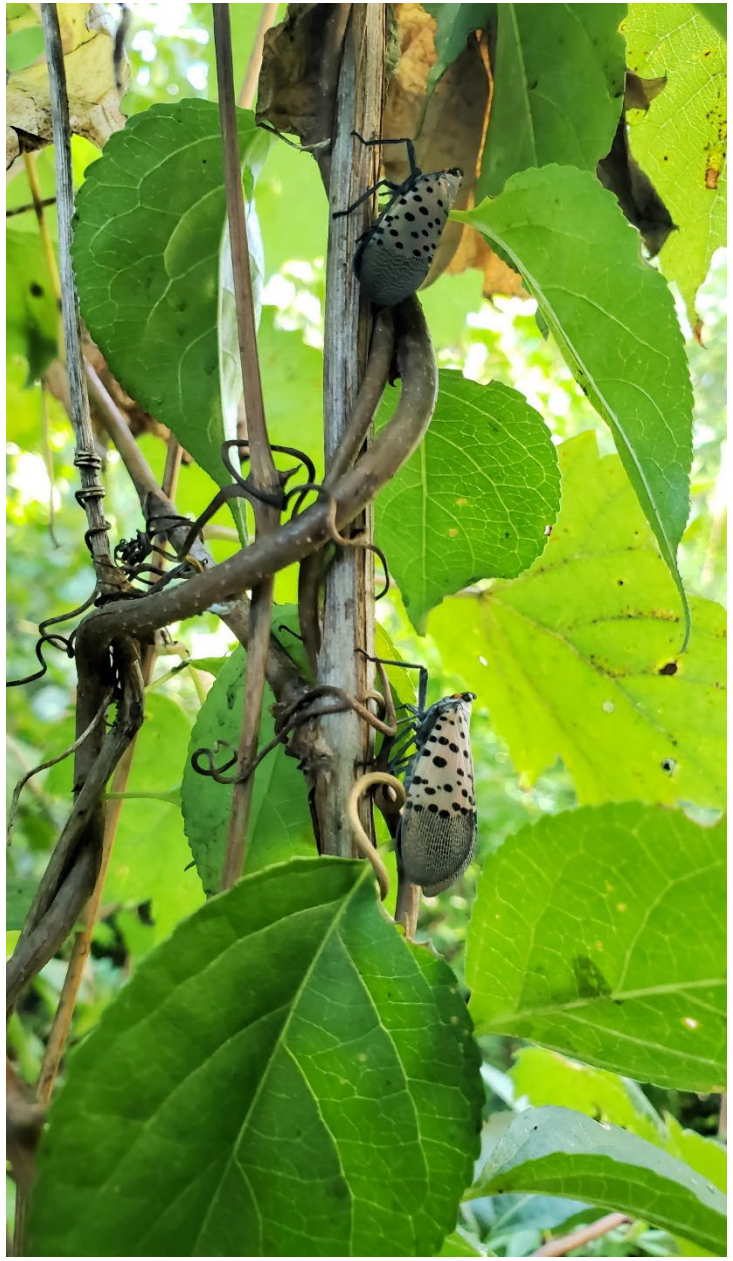
Spotted Lanternfly

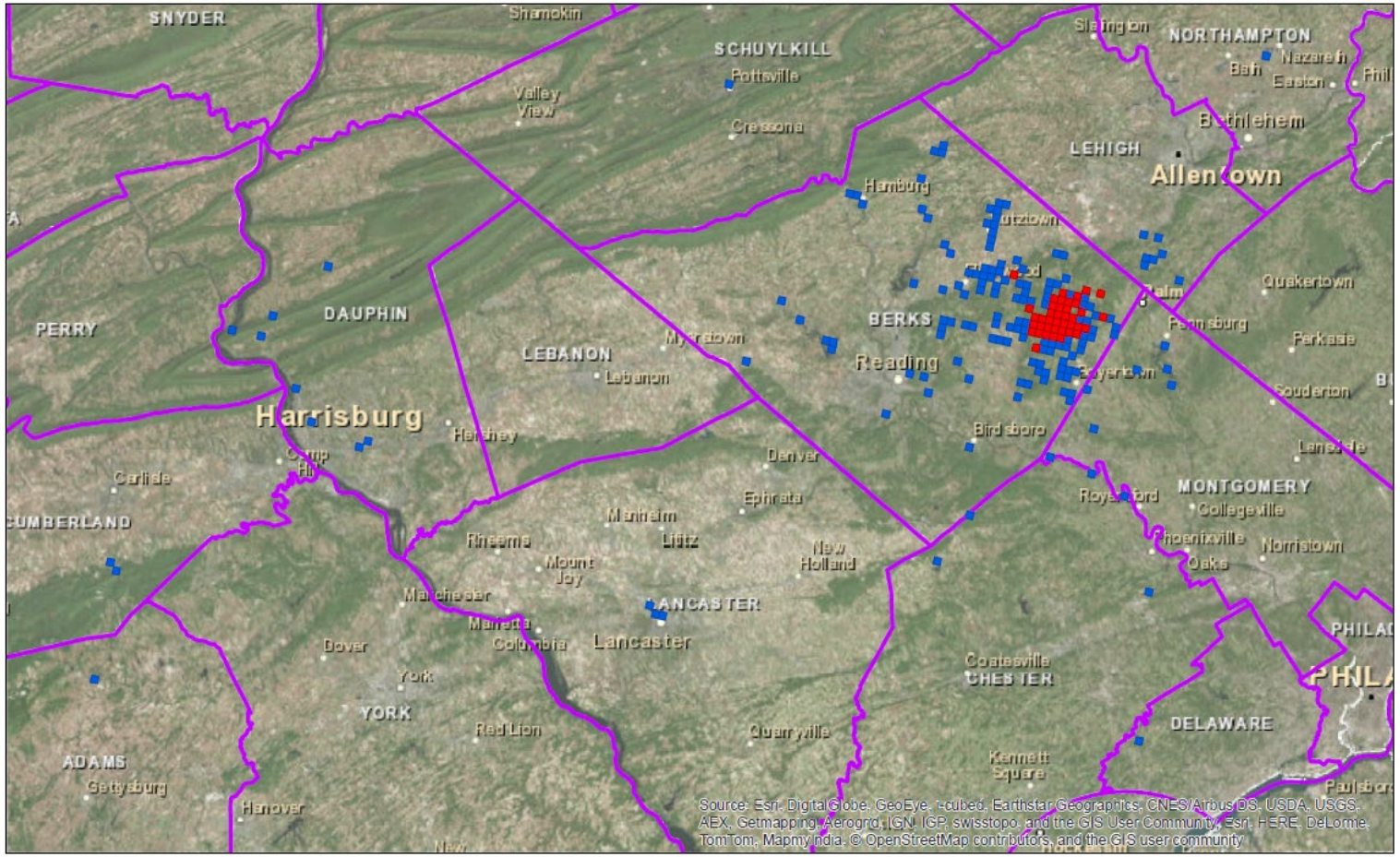
- Invasive species from East Asia
- Detected in Connecticut in 2020
- Loves Tree of Heaven
    - Plant stressor



First Detection of Spotted Lanternfly: Berks County, PA Late 2014

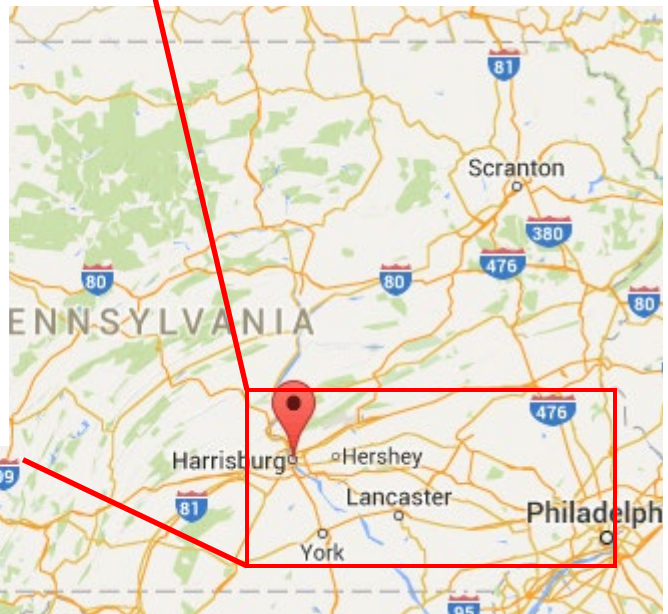
Lycorma Detection Survey

Results Through 15 December 2014



Survey Grids

- Surveyed - Positive
- Surveyed - Not Found



pennsylvania
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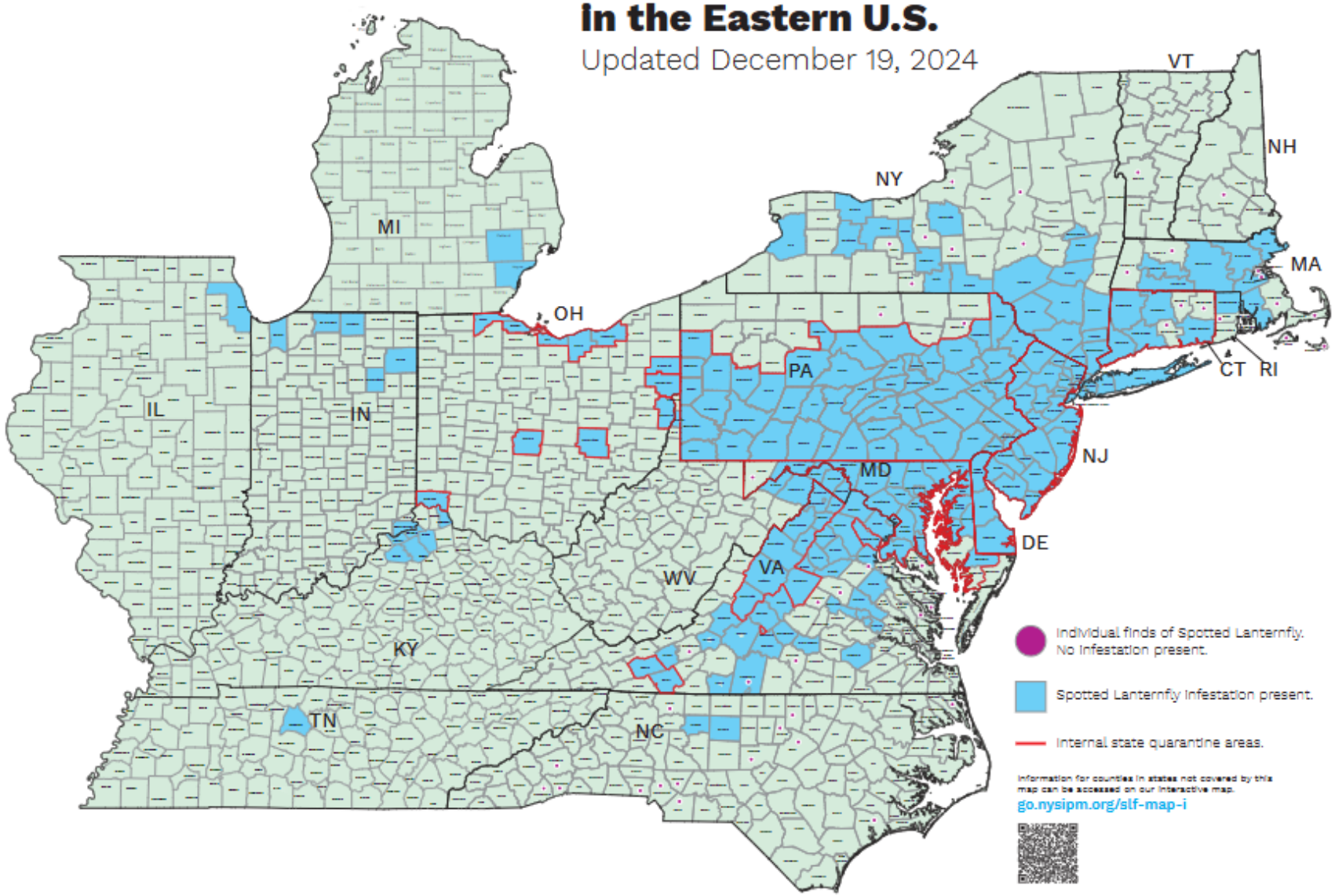
Spotted Lanternfly Reported Distribution in the Eastern U.S.

Updated December 19, 2024



CornellCALS
College of Agriculture and Life Sciences

New York State Integrated Pest Management

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SLF Reporting Portal

- Online portal for citizen reports
- Report address, GIS, life stage, ‘what did you notice them on’, comments
- 2024 – 11,137 reports [94 with no location data]
- Things to keep in mind
  - Density of reports will depend, in part, on population density
  - User error: mistaken identity, incomplete info, incorrect GIS
- What we can tell
  - Where and how many people are noticing SLF
  - Indication of developmental stage
  - Info on interesting details, like SLF washing up on beaches

https://portal.ct.gov/caes/caps/caps/spotted-lanternfly---slf

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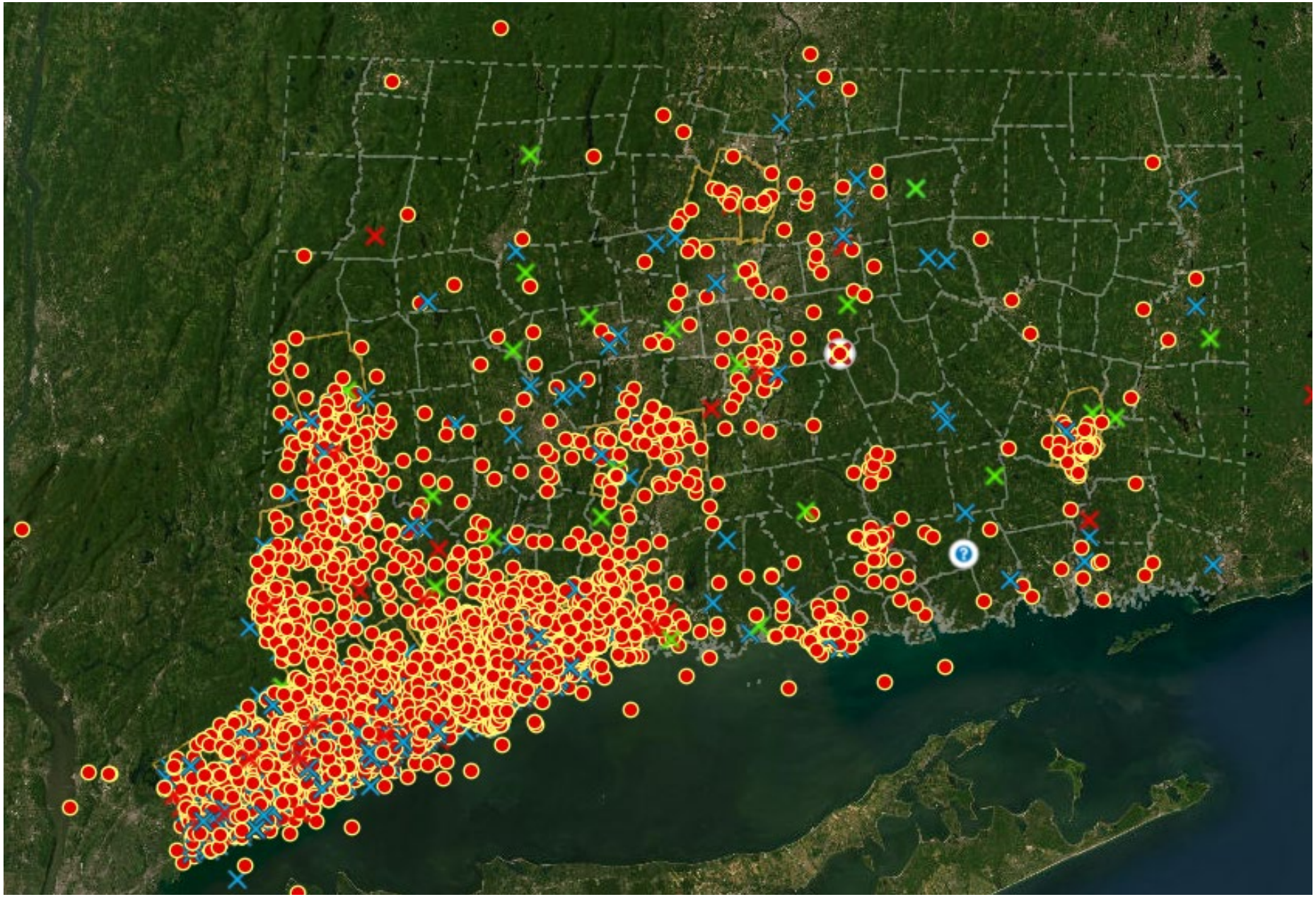
SLF Reports – all years



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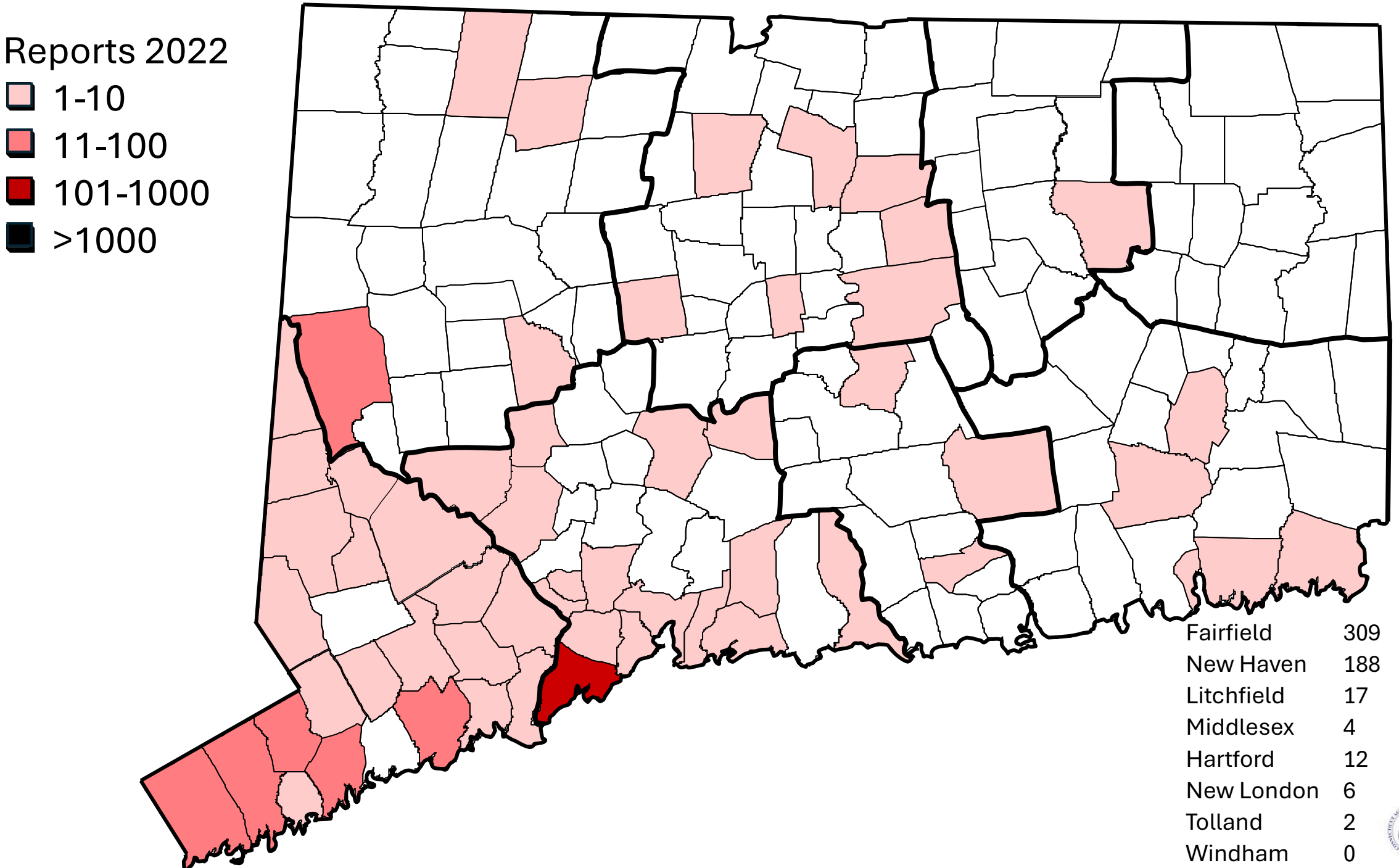

Fairfield	309
New Haven	188
Litchfield	17
Middlesex	4
Hartford	12
New London	6
Tolland	2
Windham	0

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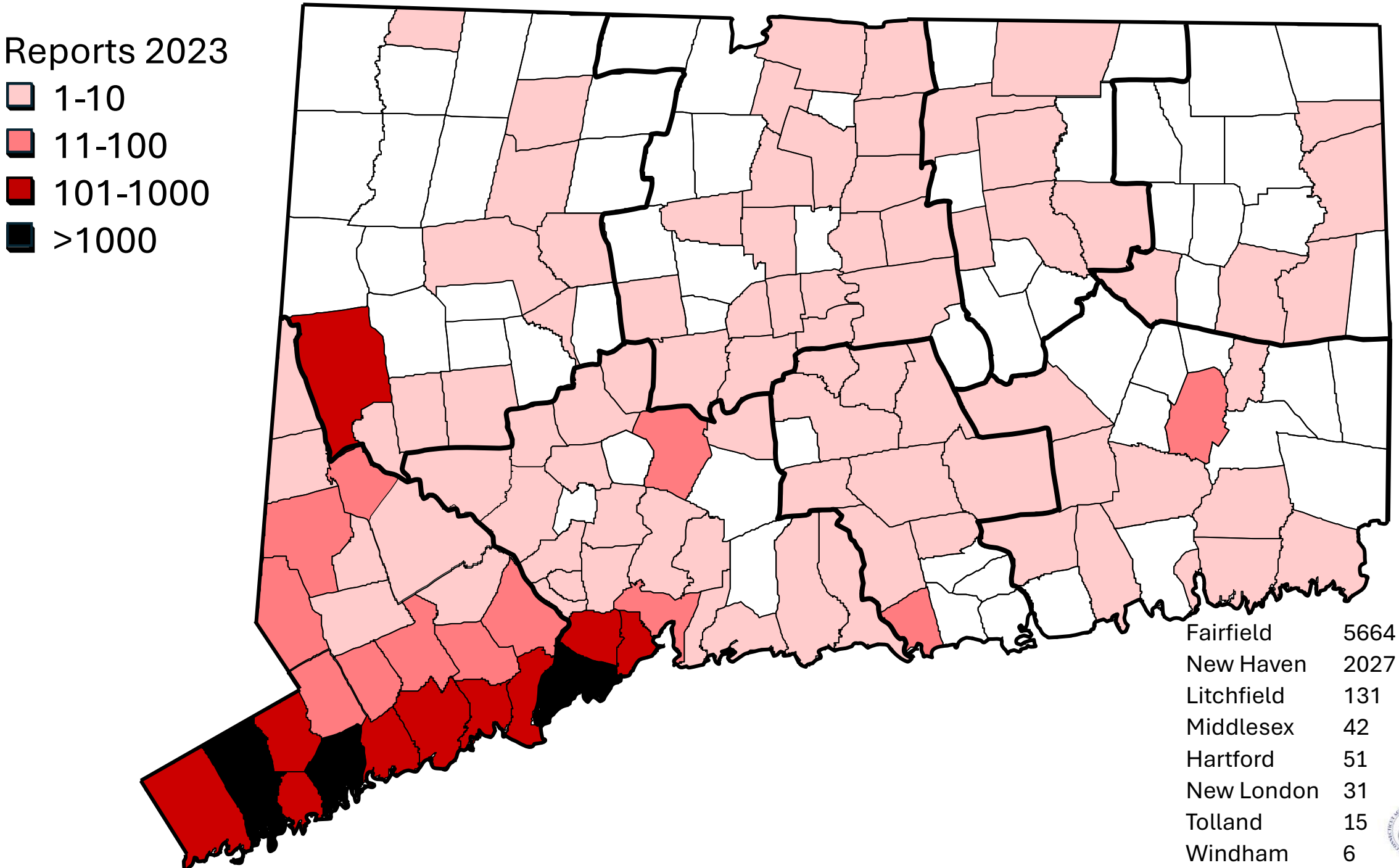

Fairfield	5664
New Haven	2027
Litchfield	131
Middlesex	42
Hartford	51
New London	31
Tolland	15
Windham	6

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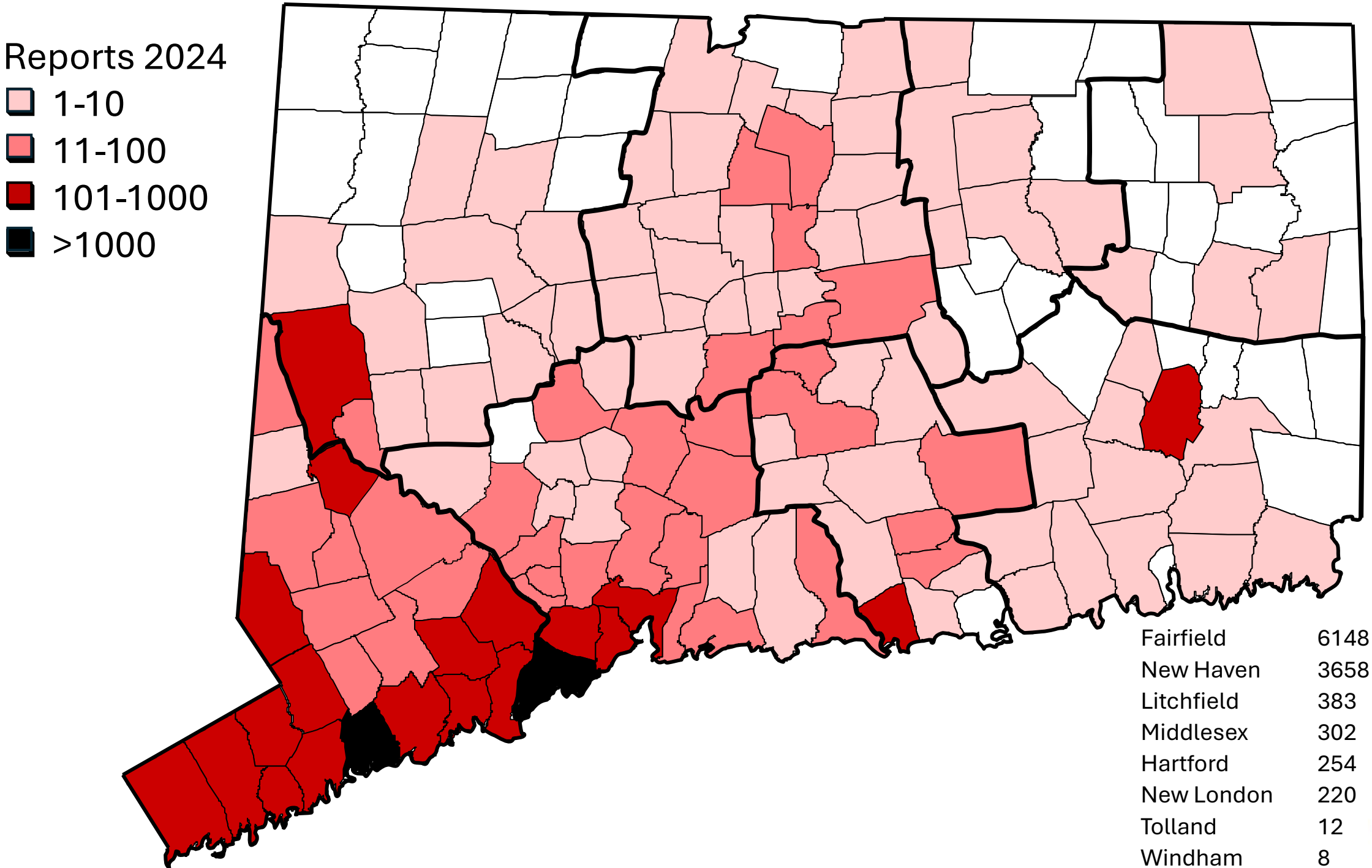

Fairfield	6148
New Haven	3658
Litchfield	383
Middlesex	302
Hartford	254
New London	220
Tolland	12
Windham	8

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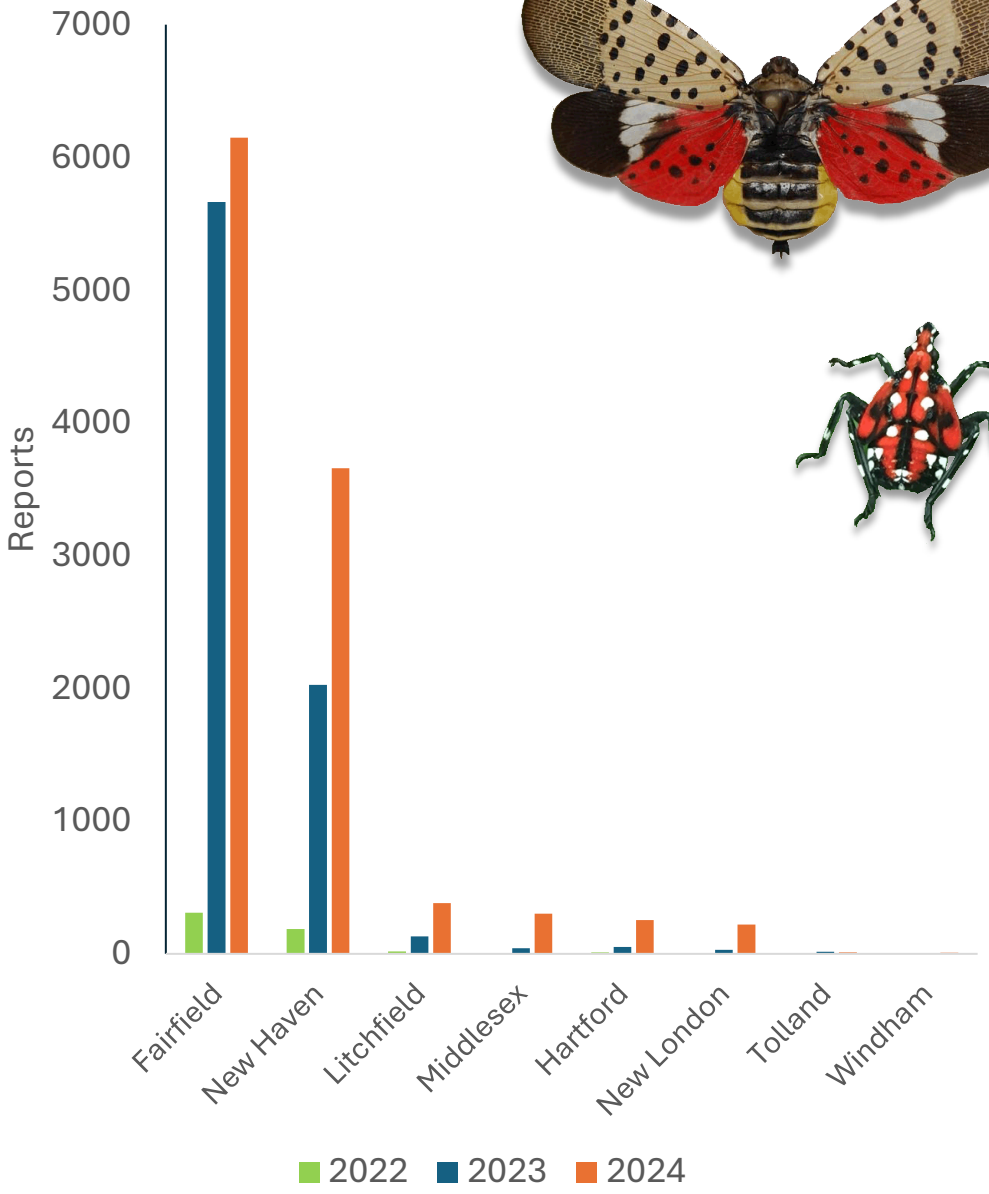

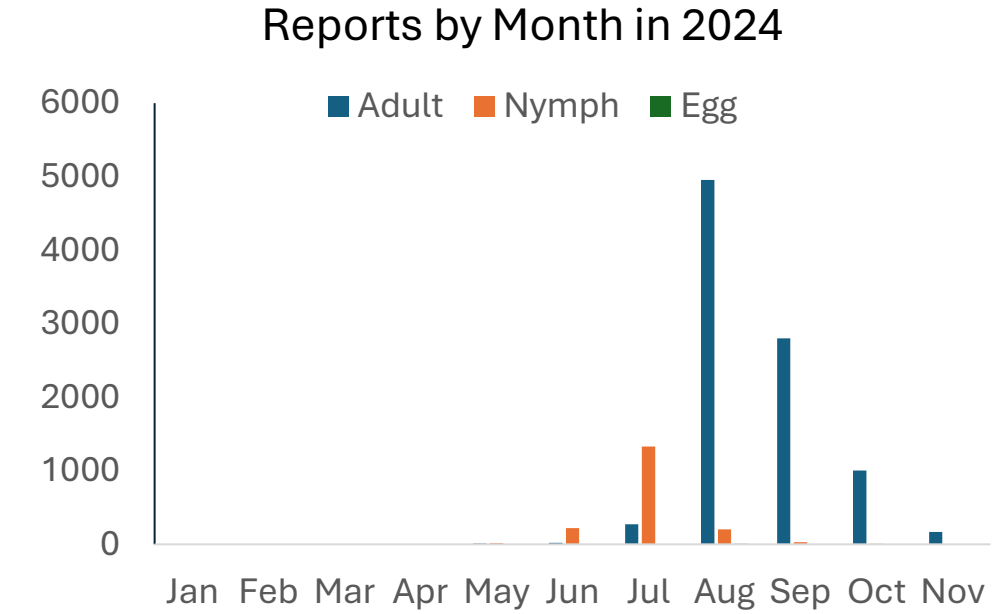

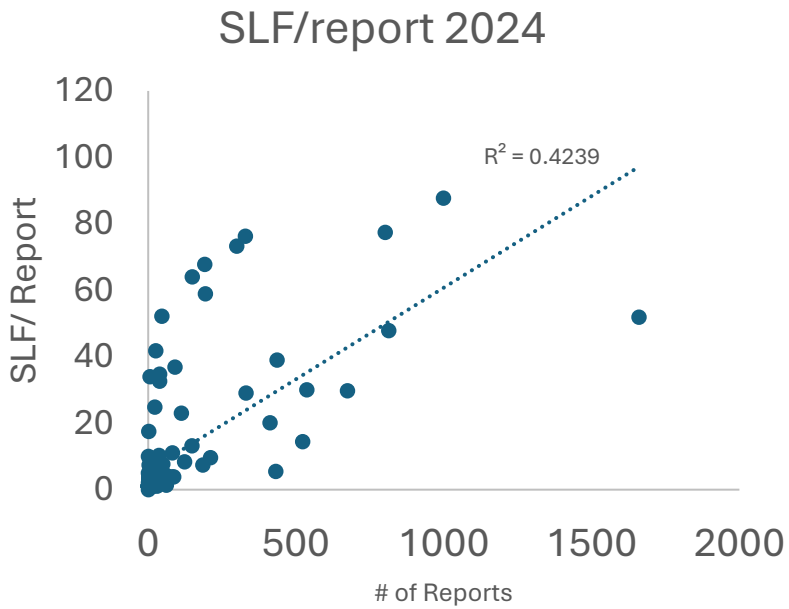

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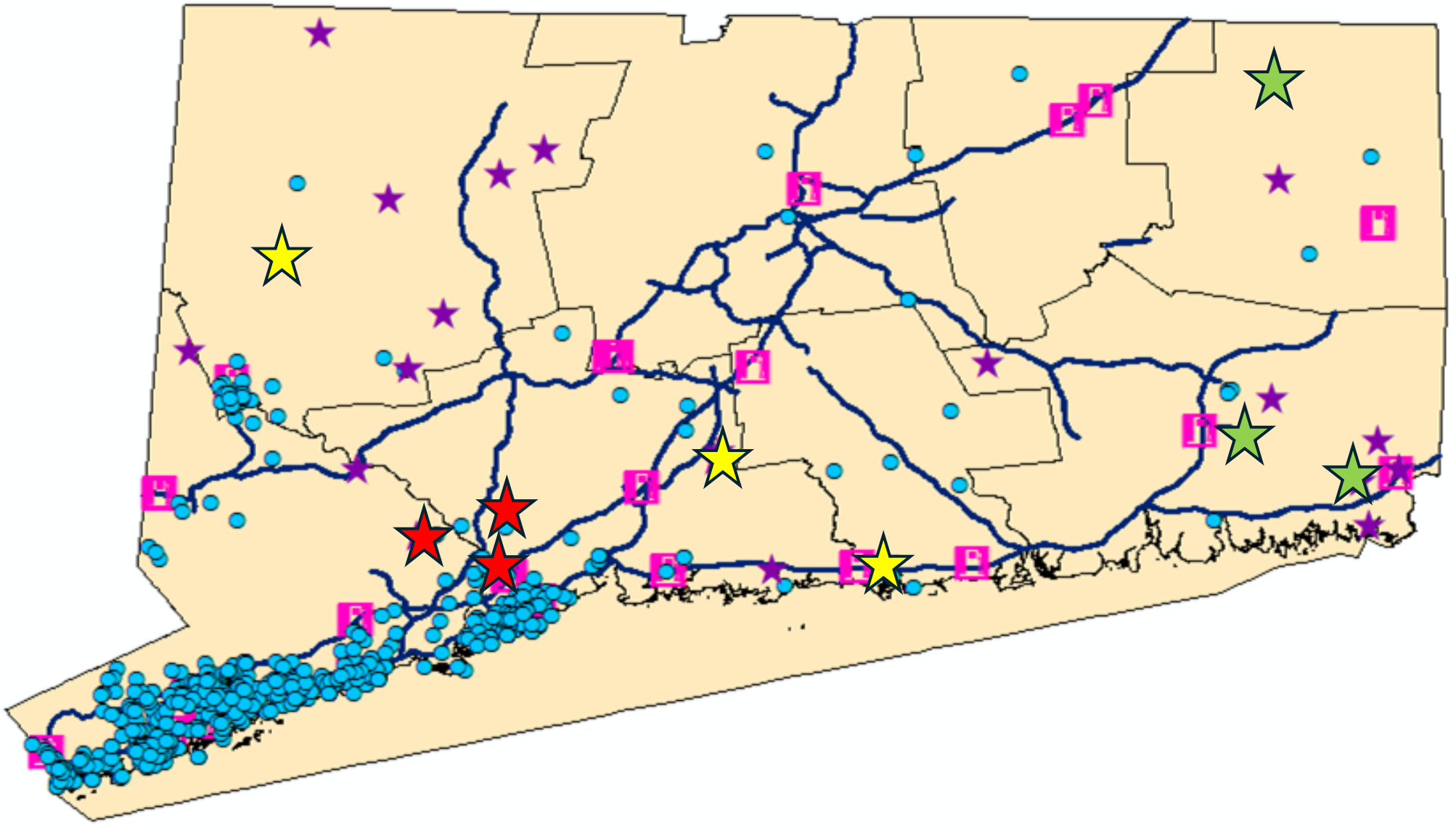
Predicting Risk for Vineyards



Legend

Winery

Gas Stop

2023 SLF Sightings

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Monitoring Tool
The Lamp Shade Trap

- Entirely roofing material
- Provides rough surface for oviposition
- Provides shelter
- Exploits negative geo-taxis of SLF
- Tight juncture at top between material and tree
- Deployed on trellis posts

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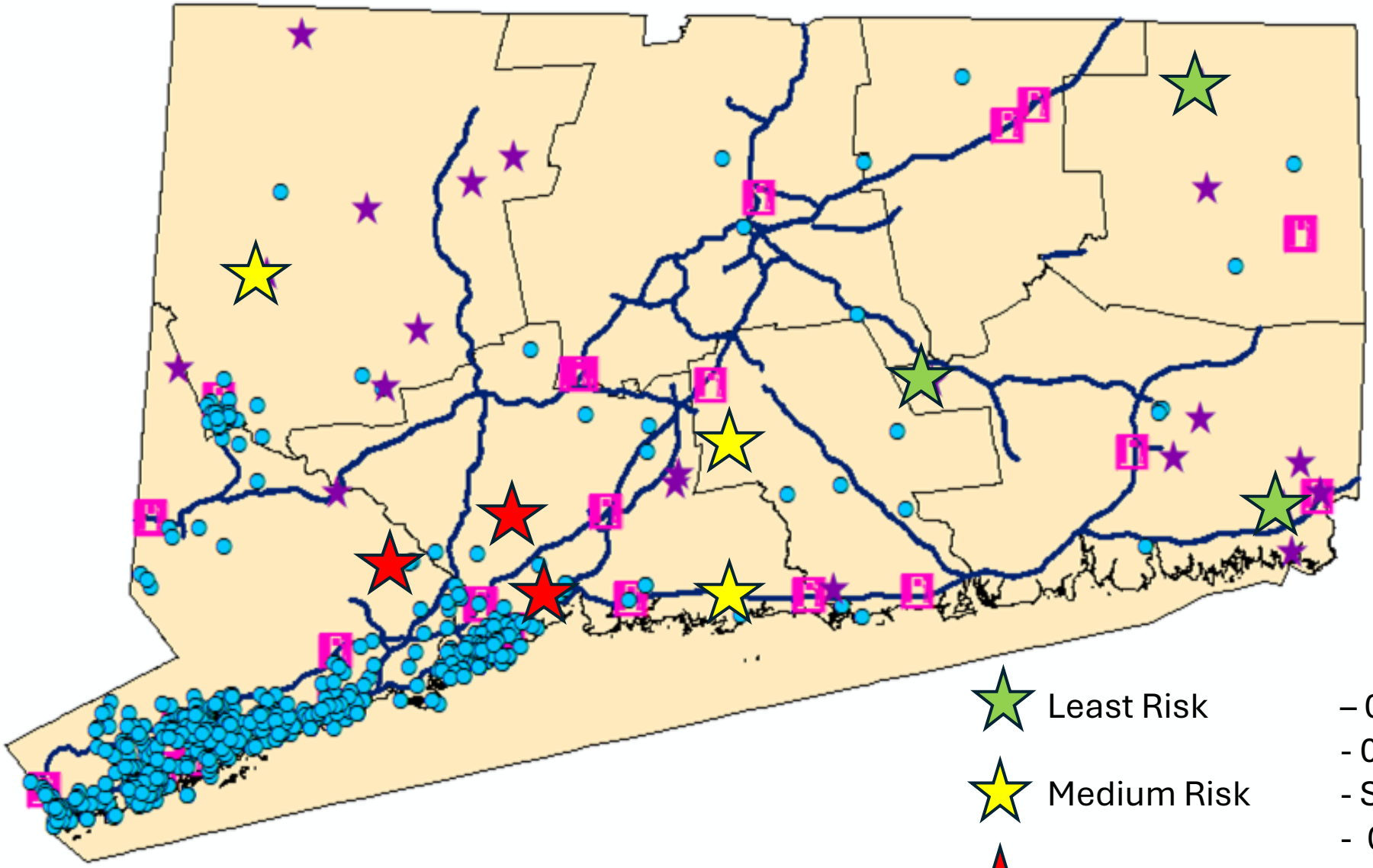
Egg Masses on Trap

Map of 2023 Sightings

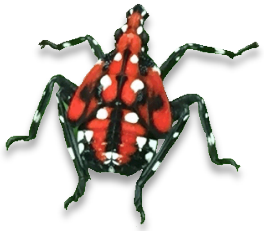


Least Risk – 0 SLF Seen
- 0 Eggs on Traps

Medium Risk - SLF seen at one site
- 0 Eggs on Traps

High Risk - SLF seen at two sites
- 2 Eggs on Traps

Conclusions



- Citizen reporting an important tool in understanding spread
- Showing typical pattern of satellite populations growing and merging
- Coastal Fairfield, Southwestern New Haven merging
- Clinton, Norwich and New Milford are smaller hot spots
- Our predictions based on gas stations and nearest sightings did pretty well, but we failed to predict Clinton
- Egg traps are a great monitoring tool, but not as effective on trellis posts as on trees
- Keep reporting!

Acknowledgements

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PennState

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