United States Department of Agriculture
Animal Plant Health Inspection Service
Plant Protection and Quarantine
USDA APHIS PPQ
Safeguarding American Agriculture

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CT/MA/RI

Overview:
• PPQ Programs and Response
• PPQ Pest Detection Efforts Overview
• PPQ 2020 Survey Results
• PPQ 2021 Survey Plans
• Spotted Lantern Fly
• Pest Reporting & Outreach

PPQ Programs and Response

Responses and Program Highlights in 2020
• Ralstonia race 3 biovar 2
• Asian Giant Hornet (not in New England, but a popular inquiry topic in 2020)
• Unsolicited Seeds from China
• Spotted Lanternfly
• Emerald Ash Borer

Ralstonia race 3 biovar 2
❖ Introduced into greenhouses in April 2020 through infected geraniums
❖ 3 phases in CT, MA, and RI
❖ Pink Flare- 21 locations
❖ Pink Salmon- 8 locations
❖ Final phase- 19 locations
❖ Declared eradicated in June 2020

Unsolicited Seeds from China
❖ eCommerce brushing scam
❖ Over 2000 reports in MA, CT, and RI
❖ Mostly common flower and vegetables seeds
❖ Did find some pests, federal noxious weed seed, and diseases
❖ PPQ is working with eCommerce and partners to close the pathway
Emerald Ash Borer

- Deregulated on 01/14/2021
- 2002-2020: 35 states with infestations
- 2021: Shift to focus on biocontrol
- MA, CT, RI all have active biocontrol release programs

PPQ Pest Detection Efforts

Early Pest Detection Surveys (PPQ, CAPS, PPA 7721)

- Multi-pronged strategy to accomplish goals:
  - Have a structured, transparent assessment process to identify pest threats.
  - Develop scientifically sound pest diagnostics and survey protocols.
  - Provide standardized survey materials (traps, lures, etc.)
  - Ensure that data collected is valid and of high quality.
  - Provide notification of significant pest detections through established protocols.

PPQ 2020 Surveys (CT/MA/RI)

Forest Pest Survey

- Sites: CT-30/ MA-30/ RI-14
- 3 traps per site:
  - Lindgren Funnel Trap baited with UHR Ethanol
  - Crossvane Panel Trap baited with T. campestris lure
  - Crossvane Panel Trap baited with UHR Ethanol

PPQ 2020 Surveys (CT/MA/RI)

Forest Pest Survey

- Target Locations: Importers receiving SWPM, Industrial areas, Distribution centers, ports
- Target Hosts: Oak, Maple, Mixed Deciduous
- Target Pests:
  - Miscellaneous bark beetles & Wood borers (Ethanol)
  - Trichoferus campestris, Velvet Longhorned Beetle
- Survey Period: April 24 – September 30
**PPQ 2020 Surveys (CT/MA/RI) Detections**

**Heteroborips seriatus: SE Asian Ambrosia Beetle**
- Native to China, Russia, SE Asia
- Polyphagous
- 2.5-2.9mm long, dark brown/orange body
- 1st detected in MA in 2005 (1st US Record)

**Scolytus schevyrewi: Banded Elm Bark Beetle**
- Native to China, Russia, SE Asia
- Ulmus, Prunus, Malus
- Vectors Dutch Elm Disease
- 3.2-4.2mm long, reddish brown body, banded

**CT- 1st State Record in Windham Co.**

**MA- New County: Franklin Co.**

**MA- Hampshire, Franklin, Norfolk, Plymouth, Bristol Co. also positive**
PPQ 2020 Surveys (CT/MA/RI) Detections

**Anisandrus maiche: Ambrosia beetle**
- Native to Asia
- Polyphagus
- Approx. 2mm long, dark brown body
- 1st detected in PA in 2005; limited distribution in U.S. 1st detected in CT in 2017; 1st detected in MA in 2019

**Trichoferus campestris: Velvet Longhorned Beetle**
- Native to Asia, Russia
- Polyphagus: Apple, Mulberry, Birch, Willow
- Feeds on both living and dry wood
- 11-20mm long, dark brown to brownish orange body
- 1st detected in UT in 2010; widespread distribution in U.S.

**MA- New Counties: Berkshire, Norfolk**
**CT- New Counties: Windham, New London**
**CT- Litchfield, New Haven, Fairfield Co. also positive**

**CT- 1st State Record in New Haven Co. **CAES CAPS Trap.**
**CT- New County: Fairfield**
**MA- 1st State Record in Hampden Co.**
**MA- New County: Franklin**
**PPQ 2020 Surveys (CT/MA/RI) Detections**

*Xylotrechus pyrrhoderus: Grape Borer*

- Native to China & Japan
- NPAG (New Pest Advisory Group) evaluating: hosts, life cycle, detection methods, pest potential and status in native range, etc.
- PPQ will delimit area of the find to determine if a population exists in 2021
- New U.S. Record- Hampden Co. MA (determined 12/2020)

**Poll Question**

Now this is a story all about how my life got flipped turned upside down and I’d like to take a minute, just sit right there………..(DJ Jazzy Jeff & The Fresh Prince)

- Surveys were delayed 2 weeks due to Covid-19 and didn’t begin until late August, early September.
- PHSS, Eric Chamberlain visually detected an SLF population in Fairfield, Co on September 11, 2020.
- Concurrently, both CT & MA SPROs were dealing with multiple public reports and trace-forwards from shipments from known SLF-infested areas.

**PPQ 2020 Surveys (CT/MA/RI) Spotted Lanternfly Visual Survey**

Sites: CT-500/ MA-500/ RI-250

**Target Locations:** areas near transportation corridors, large railyards, distribution centers, areas within predicted spread

**Target Host:** Ailanthus altissima, Tree of Heaven

**Method:** Visually survey 1 or more trees at each location using binoculars.

**Survey Period:** Aug – October, when Adults would be present.
Spotted Lanternfly Response

- Set up visual delimitation survey around detection location to determine the extent of the population.
- Redistributed limited staff to assist in CT & MA report delimitations.
- Participated in multi-agency SLF Response Groups in CT & MA.
- Deployed SLF Circle Traps near SLF reports.
- Multi-agency operations hampered by Covid-19 protocols.

State # of Visual Surveys

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<th># of Surveys</th>
<th># of Positives</th>
<th># of Negatives</th>
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State # of Circle Traps

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<tr>
<td>MA*</td>
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*MDAR also deployed circle traps.

Spotted Lanternfly Research Trapping

Behavioral Trapping (Joe Francese, CPHST)

Sites: CT-6/MA-4

- Comparison of 3 traps: Bug Barrier, Circle Trap-Jar, Circle Trap-bag
- All baited with Methyl Salicylate lures
- Collect trap contents every 2 weeks.

Survey period: June-October

- All traps were negative
PPQ 2020 Surveys (CT/MA/RI)

**Spotted Lanternfly Research Trapping**

**Behavioral Trapping (Joe Francese, CPHST)**

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**Poll Question**

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**Spotted Lanternfly Research Trapping**

**Behavioral Trapping (Joe Francese, CPHST)**

Sites:

CT-7/MA-3

- Applied Transtect basal spray to single Ailanthus tree trunk up to 5ft.
- Placed a plastic tub around the base of the tree and monitored every 2-3 weeks.

Survey period: June - October

- All traps were negative

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**Poll Question**

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**PPQ 2021 Surveys (CT/MA/RI)**

**Forest Pest Survey**

Sites: CT-25/ MA-25/ RI-15

2-3 traps per site:
- Lindgren Funnel Trap baited with UHR Ethanol, UHR α-pinene, & monochamol
- Crossvane Panel Trap baited with UHR α-pinene, geranyl acetol, & spruce blend lure

**Target Locations:** Importers receiving SWPM, Industrial areas, Distribution centers, ports

**Target Hosts:** Spruce, Pine, Fir, Mixed Conifers

**Survey Period:** April - Sept

**Target Pests:**
- *Hylobius abietis*, *Monochamus alternatus*, *Monochamus urussovii* (Lindgren Funnel Trap)
- *Tetropium fuscum*, *Tetropium castaneum* (Crossvane Panel Trap)

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**Xylotrechus Survey**

Survey Area: Immediate vicinity of detection

**Survey Methods:**
- Crossvane Panel Trap with experimental lures.
- Visual survey around detection point.

**Survey Period:** May-Sept

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**Spotted Lanternfly Visual Survey**

**Sites:** CT-undetermined/ MA-500/ 350

**Target Locations:** areas near transportation corridors, large railyards, distribution centers, areas within predicted spread, previous reports

**Target Hosts:** *Ailanthus altissima*, Tree of Heaven, Black Walnut, Cherry, Maple, Oak, Black Locust

**Method:** Visually survey 1 or more trees at each location using binoculars.

**Survey Period:** Primarily July – October, when late instar nymphs and Adults would be present

Credit: itchydogimages
PPQ 2021 Surveys (CT/MA/RI)
Spotted Lanternfly Visual Survey

Life Cycle:
- Egg Mass
  - Late September – Late May
- Early Nymph (1st-3rd instars)
  - Late May – Late June
- Late Nymph (4th instar)
  - Mid-June – Late July
- Adult
  - Mid-July – Early December
  - Mid-June – Late July

Photos: egg mass, late nymph, and adult courtesy of Penn. Dept. of Ag.; early nymph courtesy of Annemarie Cooper band (USDA-APHIS-PPQ-CPHST).

PPQ 2021 Surveys (CT/MA/RI)
Spotted Lanternfly Visual Survey

Ailanthus Identification: Fast growing, found in disturbed soils

- Bark smooth in young trees
- Mature trees have rough striated bark
- Leaves pinnately compound with 11-41 leaflets
- Leaflets alternate, 1-3 ft. long
- Large "bumps" on leaflet teeth near base

Poll Question

Report Question

Report a pest: firstdetector.org

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Report a pest in RI
http://www.dem.ri.gov/programs/agriculture/pests.php

What can you do?

Early Detection, Outreach and Awareness

PPQ Pest Detection Efforts
Port Inspections Domestic Partnerships Reporting Emergency Programs

Report Suspect Pests
USDA APHIS PPQ
866-702-9938
http://hungrypests.com/what-you-can-do/