

Pest Detection / CAPS Infrastructure Accomplishment Report – FY2021

Year:	2021
State:	Connecticut
Cooperative Agreement Name:	Cooperative
Cooperative Agreement Number:	AP21PPQFO000C139
Project Funding Period:	01/01/2021 – 12/31/2021
Project Report:	PD / CAPS Infrastructure Report
Project Document Date:	02/16/2022
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Quarterly Report	<input type="checkbox"/>
Semi-Annual Accomplishment Report	<input type="checkbox"/>
Annual Accomplishment Report	<input checked="" type="checkbox"/>

Pest Detection / CAPS Infrastructure Accomplishment Report – FY2021

- A. Compare actual accomplishments to objectives established as indicated in the work plan. When the output can be quantified, a computation of cost per unit is required when useful.*
- Activities:
 - *Pest Detection / CAPS Survey Work:*
 - February 2021 – mailed Thank You Letters with results to CAPS 2020 Survey participants.
 - Prepared and submitted CAPS 2020 Infrastructure annual report and CAPS 2021 Infrastructure semi-annual report on EzFedGrants.
 - Prepared and submitted CAPS 2022 Infrastructure and Survey workplans and budgets.
 - November 2, 2021 – Ordered 2022 CAPS Survey supplies.
 - *Other APHIS or State Survey Work:*
 - March 4, 2021 – Retrieved and emailed all data available on NAPIS for Beach Leaf Disease for Dr. Robert Mara, CAES.
 - May 13, 2021 – the SSC responded to pest inquiry from Wakeman’s Nursery in Trumbull about an insect larva in a tree log. The inquiry was forwarded to CAES Insect Information Office, and the larva was identified to be a leafcutter bee larva.
 - May 25, 2021 – added box tree moth new in state record to NAPIS.
 - In May 2021, Dr. Victoria Smith, CAES, and Eric Chamberlain, USDA, participated in Box tree moth, *Cydalima perspectalis*, trace-forward. One business in Connecticut received 70 boxwood plants. 37 were sold and 33 of the plants were still at the nursery during the trace-forward inspection. A caterpillar of the Box tree moth was found, and all 33 plants were destroyed.
 - September 21, 2021 – Rose Hiskes, CAES, inquired if *Paracorsia repandalis* is in NAPIS for Connecticut. No record was found in NAPIS.
 - November 16, 2021 – shipped *P. repandalis* specimen to USDA for official identification.
 - *Committee Service:*
 - Gerda Magana and Dr. Victoria Smith ran the winter statewide CAPS Committee Meeting on January 20th. SSC prepared minutes of winter statewide CAPS committee meeting (13 attendees; see appendix). 2020 CAPS surveys and their results in Connecticut were discussed using APHIS, CAES and state committee member input.
 - Gerda Magana and Dr. Victoria Smith ran the summer statewide CAPS Committee Meeting on July 14th. Updates about 2021 surveys and tentative survey plans for the year of 2022 were discussed (13 attendees).
 - Outreach and Education:
 - Interviews (TV/Radio/Newspaper/Magazines):
 - June 8, 2021 – Dr. Victoria Smith was interviewed by Bob Miller, reporter for the Danbury (CT) News/Times, about box tree moth,

- spotted lanternfly, and emerald ash borer. The article appeared in the 13 June 2021 edition of the newspaper.
- June 9, 2021 – Dr. Kirby Stafford was interviewed by Aaron Kupec, WTIC-radio about ticks, mosquitoes, box tree moth, spotted lanternfly, and other subjects.
 - June 23, 2021 – Dr. Kirby Stafford was interviewed by Jordan Fenster, Hearst Media, about gypsy moth.
 - June 25, 2021 – Dr. Kirby Stafford was interviewed by Dan Corcoran, NBC Connecticut TV, about gypsy moth.
 - June 28, 2021 – Dr. Kirby Stafford was interviewed by Melissa Sheketoff, WICC Radio, about gypsy moth.
 - July 29, 2021 – Dr. Kirby Stafford was interviewed by Katrina Koerting, News Times and by Abigail Broom, Norwalk Hour, about spotted lanternfly.
 - June 29, 2021 – Dr. Kirby Stafford was interviewed by Greg Little, WTIC, by Patrick Skahill, Connecticut Public, by Courtney Luciana, WTNH-TV, and by Brigitte Ruthman, Republic American, about gypsy moth.
 - August 26, 2021 – Dr. Victoria Smith was interviewed by Caren Pinto of News 12, concerning spotted lanternfly.
 - September 21, 2021 – Dr. Kirby Stafford was interviewed on the Ray & Brian show, WTIC, about spotted lanternfly.
- Outreach materials (Pamphlets/ brochures/ posters):
 - March 2021 – Updated CAPS webpage, corrected dead links, uploaded 2020 CAPS Infrastructure and Survey reports and 2021 CAPS work plans.
 - March 17, 2021 – Uploaded updated Asian longhorned beetle fact sheet on Forest Pest Page on CAES website.
 - April 19, 2021 – Updated and turned in CAPS abstract for Plant Science Day 2021.
 - July 2, 2021 – Dr. Victoria Smith recorded a podcast with Brian Scott Smith, discussing spotted lanternfly and other topics.
 - July 22, 2021 – Forwarded Plant Science Day Flyers and invitation to CAPS contacts.
 - November 9, 2021 – Updated CT CAPS Committee Member list on CAES CAPS web page.
 - Publications:
 - March 17, 2021 – Updated Asian longhorned beetle fact sheet.
 - Public Service Announcements (PSA):
 - January 13, 2021 – Emerald Ash Borer No Longer Regulated by the USDA. State Regulations on Movement of Firewood into and Within Connecticut Remain in Place.
 - June 3, 2021 – The CAES Announces the Finding of the Box Tree Moth in Connecticut.
 - June 10, 2021 – Beech Leaf Disease Now Widespread in Connecticut.

- June 29, 2021 – Gypsy Moth 2021 Outbreak in Northwest Connecticut Causes Extensive Defoliation.
- July 19, 2021 – CAES Announces the Finding of a Spotted Lanternfly in Norwalk, Connecticut.
- July 29, 2021 – CAES Announces the Finding of Spotted Lanternfly in Fairfield and Westport, Connecticut.
- October 29, 2021 – CAES Announces the Discovery of a New Non-native Invasive Plant in Connecticut (Goldencreeper, *Thladiantha dubia* Bunge).

- Meetings:
 - Conference calls:
 - January 11, 2021 – Dr. Victoria Smith participated in a Teams call concerning deregulation of emerald ash borer.
 - January 13, 2021 – Participated in CT 2021 CAPS/PPA workplan discussion with Nichole Carrier, Kate Aitkenhead, Charles Bake, USDA, and Dr. Victoria Smith, CAES.
 - February 11, 2021 – Participated in regional SSC Check-in conference call.
 - May 24, 2021 – Organized and participated in CAPS meeting with Nichole Carrier, Kate Aitkenhead, Charles Bake, USDA, and Dr. Victoria Smith, CAES.
 - July 8, 2021 – Participated in CT 2022 CAPS/PPA workplan discussions with Nichole Carrier, USDA and Dr. Victoria Smith, CAES.
 - October 29, 2021 – participated in CAPS 2021 & CAPS 2022 Updates meeting with Nichole Carrier, Kate Aitkenhead, APHIS; Dr. Victoria Smith, and Dr. Kirby Stafford, CAES.
 - Conferences:
 - January 21, 2021 – The Connecticut Tree Protective Association’s 99th Annual Meeting via Zoom.
 - January 27 and 28, 2021 – participated in CNLA 2021 Virtual Winter Symposium.
 - March 4, 2021 – Participated in Forest Health Monitoring Workshop by Dr. Victoria Smith, CAES.
 - March 29 – April 1, 2021 - Dr. Victoria Smith participated in Eastern Plant Board Meeting.
 - July 15, 2021 – Dr. Victoria Smith participated in the summer meeting of the CT Tree Protective Association with a display “BOLO: Spotted Lanternfly and Box Tree Moth”.
 - July 26-29, 2021 – Dr. Victoria Smith participated in the virtual 95TH annual meeting of the National Plant Board, with a presentation “Beech Leaf Disease: Why It’s Important”.
 - November 2-3, 2021 – Dr. Victoria Smith attended the annual meeting of the US Forest Service Cooperators. Information on aerial survey,

gypsy moth egg mass survey, and other forest-related operations were reported.

- Webinars
 - January 19, 2021 – Keeping Peach Trees Healthy and Productive webinar by UMass.
 - April 15, 2021 – 2021 Beech Leaf Disease Workshop by USDA Forest Service.
 - May 12, 2021 – Perspectives on Urban Tree Health Management in Connecticut by Susanna Kerio, CAES
 - May 29, 2021 – Ralstonia Solanacearum r3b2 - GPDN regulatory workshop.
 - July 21, 2021 – The Spotted Lanternfly: Where We Are and Why It Matters by Penn State.
 - July 29, 2021 – Box Tree Moth by HRI.
 - November 4, 2021 – Penn State’s Efforts to Eradicate the Spotted Lanternfly.
 - November 12, 2021 – Participated in Sussex Plant Biology symposium.
- Other
 - May 17, 2021 – organized a zoom meeting with Dr. Rayda Krell (Western Connecticut State University) for CAPS outreach and CAPS trap setup.
- Training:
 - January 15, 2021 - Participated in training called “Research Misconduct and Integrity”.
 - February 3, 2021 - Participated in PPA 7721 Online Work Plants training by Cindy Music.
 - February 19, 2021 – CAPS site selection training with Nichole Carrier, USDA.
 - July 20, 2021 – Gerda Magana trained seasonal employee how to sort moth samples and ship them to identifier.
- Other:
 - Gerda Magana and seasonal employee Sara Carson applied, passed exam, and received pesticide operator certification.
 - November 2021: Dr. Victoria Smith with other CAES staff received Certificates of Appreciation from USDA Associate Deputy Administrator Carlos Martinez, for “Partnership, cooperation, and leadership in safeguarding American Agriculture from Ralstonia Race 3 Biovar 2.

Check if objectives were not met due to the impact(s) of the coronavirus COVID-19. Explain how the impacts affected coordination, planning, surveys, and/or survey operations.

B. Where appropriate, explain any cost overruns or unobligated funds in excess of \$1,000. *

No cost overruns have occurred.

- C. Was all Pest Detection / CAPS survey data entered into the National Agricultural Pest Information System (NAPIS)? If not, please provide a justification.

All Survey data was entered into the National Agricultural Pest Information System (NAPIS).

- D. Supporting Documents

Winter CT CAPS Committee Meeting took place on January 20th, 2021.

CAPS Committee Meeting Minutes:

1. **Welcome and Introductions**

2. **Updates of 2020 CAPS and PPO surveys and outreach programs**

Robert Marra – Beech Leaf Disease (CAES)

- Beech Leaf Disease classic progression: Early- darkened bands on leaves and hypertrophy. Late- banding thickens and hardens. Subsequent Seasons- thinning canopy and mortality within 2-5 years.
- Nematodes can be found in buds except just prior to bud break.
- Leaves are symptomatic when they first emerge.
- Beech Leaf Disease found in Ohio in 2012, and first found in CT in Fairfield County in 2019.
- In 2020 a distribution survey was completed to identify the extent in CT, this survey included some long-term monitoring plots (11 total).
 - Beech Leaf Disease was identified in 7/8 CT Counties, all except Hartford, and was also found in Mass and RI.
- There are no proven control methods for Beech Leaf Disease yet.

Victoria Smith – Spotted Lanternfly (SLF) update (CAES)

- Quick history of CT SLF finds (1 in 2018, 1 in 2019, live populations found in 2020 in Fairfield County).
- Many different pathways for SLF travel have been identified including sheds from Penn, pumpkins, hay, etc.
 - Any commodity that moves can bring SLF.
- This year inspectors were able to find live adults until mid-December.
- It is predicted that there will be many more finds in 2021, and there is currently a plan to map all findings across the state.

Surveys conducted by The Connecticut Agricultural Experiment Station (CAES)

- 2020 Surveys:
 - CAPS: found *T. campestris* in New Haven County, CAES also entered two SLF positive finds in Hartford and New Haven Counties.

- PPA: No target pests were found in orchard traps; visual surveys will be completed in early spring 2021.
- Forest Pest Outreach: As a result of COVID many in person outreach events were not conducted as expected. Door to door outreach was completed during SLF delimiting survey. Social media posts were also made once a month.
- *P. ramorum*: all samples came back negative.

Surveys conducted by USDA APHIS PPQ

- Forest Pest Survey CT:
 - Traps used- Ethanol Cross vane (66 positive), Ethanol Lindgren (58 positive), *T. campestris* (6 positive).
 - “*Heteroborips seriatus*- one site in Windham County, representing a new state record.
 - *Trichoferus campestris*- two sites in Fairfield County, representing a new county record. (CAES detected 1st state record in New Haven County also in 2020)
 - *Scolytus schevyrewi*- one site in Fairfield County.
 - *Anisandrus maiche*- twelve sites in Fairfield County, two sites in New Haven County, four sites in Litchfield county, one site in Windham County, and two sites in New London county.
 - Windham and New London are both new counties for *Anisandrus maiche* this year.
 - *Agilus planipennis*- one site in Fairfield County.”*
 - *quoted from report from N. Carrier.
- Spotted Lanternfly Visual Survey:
 - The first positive detection of SLF was made by a USDA inspector in September 2020. Following this SLF was confirmed to be positive with live populations in 3 different towns. In CT, 1175 visual surveys were conducted, with 19 positive finds.
 - SLF response traps were set up and monitored with 1 positive find, as well as a number of experimental traps. All the experimental traps had negative results.

Claire Rutledge – *Cerceris* bio surveillance update (CAES)

- *Cerceris*:
 - Wasp Watchers- 4787 beetles collected total, 1635 by watchers, 2584 were Emerald Ash Borer (EAB).
 - Continued with parasitoid release (Union was added in 2020). For recoveries; many of the tets were recovered, a smaller number of *S. gal* were caught, and a few Oobius were found. Some parasitoid wasps were also found a fair distance from their release point, which is promising.
- Southern Pine Beetle:
 - Was found in CT in 2015 throughout many Counties, in 5 different species of trees, including the favored Pitch Pines.
 - Trapping in 2020 was completed using Lindgren funnel traps. In 4 Pitch

Pine sites the number of beetles infesting trees increased dramatically. Southern Pine Beetles die at -20 degrees Celsius, and in CT there have not been as cold winters lately as in years past.

Mary Concklin – pest update (UConn)

- In 2020 the number of Brown-Marmorated Stinkbugs decreased, and growers have not had to spray for this pest until later in the season. Typically, this insect has a big push from mid-August to mid-September. In 2021 there are plans to try and find live specimen and look for parasitoids.
- Spotted Wing Drosophila was another pest of interest and shows up late season.
- UConn did not look for SLF in 2020 but may in 2021.

2020 Forest and Agricultural Pest Outreach

- See above: ‘Surveys conducted by The Connecticut Agricultural Experiment Station (CAES)’.

3. 2021 Survey Plans:

- **CAES Surveys:**
 - **CAPS Nursery Pest Survey – 25 sites**
 - 5 total pests planned (3 with traps, 2 visual surveys). No softwood pests in 2021, only hardwood pests.
 - **Vegetable Crops (15 sites) and no Forest Pest Outreach**
 - 8 total pests planned (3 with traps, 5 visual surveys).
- **USDA APHIS PPQ Surveys**
 - For Forest Pest Survey there will be 25 sites in CT with 2 cross vane traps and 1 Lindgren trap per site. Surveys will be conducted for both hardwood and softwood pests.
 - SLF money was requested, delimiting work/extent currently unknown.
 - OTIS connections? Follow up?

4. Other old or new business

- **Next State CAPS Committee meeting will be in summer 2021.**

**indicates information is required per 7 CFR 3016.40 and 7 CFR 3019.51*