CAPS Survey Report

Year:	**2014**
State:	**Connecticut**
Cooperative Agreement Name:	**Cooperative Agricultural Pest Survey**
Cooperative Agreement Number:	**14-8209-0327**
Project Funding Period:	**January 1 – December 31, 2014**
Project Report:	**CAPS Survey Report**
Project Document Date:	**February 28th, 2015**
Cooperators Project Coordinator:	
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Quarterly Report	☐
Semi-Annual Accomplishment Report	☐
Annual Accomplishment Report	☒

A. Write a brief narrative of work accomplished. 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.

Our objective was to conduct a national nursery survey to determine if any of the following pests had entered Connecticut through the nursery trade:

- oak splendor beetle (OSB), *Agrilus bigutattus*
- goldspotted oak borer (GOB), *Agrilus coaxlis*;
- European Hardwood Ambrosia Beetle (EHAB), *Trypodendron domesticum*
- Oak Ambrosia Beetle (OAB), *Platypus quercivorus*
- Jewel Beetle (JB), *Agrilus sulcicollis*
- Brown Spruce Longhorned Beetle (BSLB), *Tetropium fuscum*
- Black Spruce Beetle (BSB), *Tetropium castaneum*
- Light Brown Apple Moth (LBAM), - *Epiphyas postvittana*
- Summer Fruit Tortrix Moth (SFTM), *Adoxophyes orana*

Funding Amount	Total Number of Traps	Cost Per Unit
Proposed = $58,100	Proposed = 100	Proposed= $581
Actual = $58,100	Actual =100	Actual =$581

1. <u>Survey methodology (trapping protocol)</u>:

EAB, OSB, JB and GOB:

The biosurveillance survey using the native ground nesting wasp *Cerceris fumipennis* was conducted by Dr. Claire Rutledge, one summer worker, and a network of 70 volunteers assigned to a total of 106 survey sites. The survey took place beginning in late June, though July and into August, when adult female *Cerceris* wasps were actively hunting Buprestids.

EHAB and OAB:

Lindgren funnel traps following national protocols developed by APHIS for European Hardwood Ambrosia Beetle (EHAB) and Oak Ambrosia Beetle (OAB) were installed in twenty-five high-risk sites (along the boundaries of or in the vicinity of nurseries) in early April and remained up until the end of August. Traps were serviced every two weeks and lures replaced as needed, according to National Exotic Wood Boring and Bark Beetle survey guidelines.

LBAM and SFTM:

Wing traps following national protocols developed by APHIS for Light Brown Apple Moth (LBAM) and Summer Fruit Tortrix Moth (SFTM) were installed at the same twenty-five high risk sites as the EHAB/OAB traps the week of of July 6th. The traps were serviced every two weeks, and lures replaced as needed according to National Oak Commodity survey guidelines. Trapping continued through the week of September 7th.

BSLB and BSB:

UConn scientists, in collaboration with The Connecticut Agricultural Experiment Station (CAES) and the USDA, conducted a survey project during the 2014 summer for two exotic longhorned beetles. The pheromone lure survey was conducted by placing one baited cross-vane intercept panel trap at each of 25 Christmas tree farms in western Connecticut (Fairfield, Hartford, Litchfield, and New Haven Counties). The survey area is outlined by New Milford (northwestern CT) to Broad Brook (northeastern CT) and Guilford (southeastern CT) to Easton (southwestern CT). Traps were checked every two weeks, according to National Exotic Wood Boring and Bark Beetle survey guidelines.

	Common Name	**Scientific Name**
Pest:	Oak splendor beetle	*Agrilus bigutattus*
	Goldspotted Oak Borer	*Agrilus coaxlis*
	European Hardwood Ambrosia Beetle	*Trypodendron domesticum*
	Oak Ambrosia Beetle	*Platypus quercivorus*
	Brown Spruce Longhorned Beetle	*Tetropium fuscum*
	Black Spruce Beetle	*Tetropium castaneum*
	Jewel Beetle	*Agrilus sulcicollis*
	Summer Fruit Tortrix Moth	*Adoxophyes orana*
	Light Brown Apple Moth	*Epiphyas postvittanna*

	Proposed	**Actual**
Sites (Locations):	50	50
Traps:	100	100

Number of Counties:	7
Counties:	Fairfield, Litchfield, Hartford, New Haven, Middlesex, New London, Tolland

2. <u>Survey dates</u>:

	Proposed	**Actual**
Survey Dates:	April - September	April 3 – September 11

3. <u>Benefits and results of survey</u>:

EAB, OSB, JB, and GOB:

Cerceris fumipennis nesting behavior began the week of June 22nd. Collections went from June 23rd until August 29th EAB specimens were collected in 23 more CT towns. 4228 Buprestid beetles were collected from 88 sites during the survey. 497 emerald ash borers were collected; no other suspect *Agrilus* were detected. One thing noted was the proportion of EAB to other captured beetles at previously positive sites, which followed known trends of progression of this pest. Some of the positive sites in New Haven county had upwards of 90% EAB.

Report from Dr. Claire Rutledge: "I had some amazing Watchers this year, overall we had 70 volunteers, plus about 15 from White Memorial working with Jamie Fisher. They ranged in age from about 6 to upwards of 60. As always a wide range of dedication and skill level, but most put in at least the requested three days, and some went way beyond the call of duty. Some standouts, Danny Brass at Sleeping Giant, who collected every weekend the course of the whole season and made some very interesting graphs, Barb and Pete Rzasa who together discovered and collected at 9 new colonies and made initial detections for EAB in 5 towns."

EHAB, OAB:

All 25 trap sites were located along the perimeter of nursery properties. Nine sites were situated at plant yards in a retail setting. Five sites were at locations that deal in wholesale only, and the rest were in growing yards. The site in Rocky Hill/Cromwell coincidentally also bordered the town's transfer station.

The traps were installed the first week of April, and were serviced biweekly by Katherine Dugas and a summer worker, Nicole Gableman. The weather remained cold and wet early in the season, and all trap cups serviced in the morning the week of April 13th contained ice. Scolytids were found in traps beginning with the first 2-week period up until when the trapping concluded in August. Collections were first initially screened for presence of Scolytids. In total, 250 trap collections were screened, from which 8,077 Scolytid beetles have been collected. These were fully identified by Dr. Gale Ridge at the end of the trapping period. No suspect beetles were identified.

LBAM and SFTM:

The traps were deployed at the same 25 sites as established for the EHAB and OAB survey. Overall, 198 traps were screened, and none contained suspect LBAM or SFTM. There was a large occurrence of male gypsy moths (977 overall) in both types of trap during their flight time in July and August. It appeared that the moths were attracted to the glue in the trap rather than the lures. One delta trap collected the week of July 20th contained the skull and remains of a bird.

BSLB and BSB:

Trapping began on June 2nd and continued through the week of August 24th. There are twenty-five sites at Christmas tree farms throughout Fairfield, Litchfield, Hartford, and New Haven counties. A total of 135 collections were sent to CAES, and have been screened for presence of Cerymbicids as well as suspect insects. No suspect insects were identified.

Trap Surveys:

	Number of Traps	Suspects Found	Positives
Trypodendron domesticum	25 (EHAB and OAB use same trap)	0	0
Platypus quercivorus		0	0

Tetropium fuscum	25 (BSLB and BSB use same trap)	0	0
Tetropium castaneum		0	0
Adoxophyes orana	25	0	0
Epiphyas postvittanna	25	0	0
Total	100	0	0

Biosurveillance:

Target	Number of Sites	Number of Samples	Number of Confirmed Negatives	Number of Confirmed Positives
Agrilus bigutattus	88	424	4228	0
Agrilus coaxlis	88	424	4228	0
Agrilus sulcicollis	88	424	4228	0
Agrilus planipennis	88	424	3731	497

4. **Database submissions:**
    - SSC entered records for *Hylurgops palliates* and *Xylosandrus crassiusculus* into NAPIS. Both were new state records.
    - SSC entered a new state record for *Callirhytis ceropteroides* into NAPIS on 10/8/14.
    - SSC entered a new state record for Rose Rosette Disease virus into NAPIS on 10/24/14.
    - SSC entered data into NAPIS for PPQ's woodboring bark beetle and Cerceris surveys on 11/17.
    - SSC entered data into NAPIS for CAES's mile-a-minute vine biocontrol release on 11/18.
    - SSC entered data into NAPIS for CAES's moth survey on 11/19.
    - SSC entered data into NAPIS for CAES's woodboring bark beetle and longhorned beetle surveys on 11/25.
    - SSC entered data into NAPIS for CAES's Cerceris survey on 12/30.

B. If appropriate, explain why objectives were not met.*

- Trapping for SFTM and LBAM began the week of July 6 due to the lures arriving on June 11th and traps arriving on June 27th. This was due to an error in the IPHIS order by the SSC, who mistakenly requested the traps and lures by July 1 instead of June 1.

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

- No cost overruns have occurred.

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

Approved and signed by

Victoria Lynn Smith **Date:** 26 Feb 2015

Cooperator

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