Pest Detection / CAPS Survey Accomplishment Report– FY2019

Year:	**2019**
State:	Connecticut
Cooperative Agreement Name:	Cooperative Agricultural Pest Survey
Cooperative Agreement Number:	USDA-APHIS-10025-PPQFO000-19-0022
Project Funding Period:	January 1 – December 31, 2019
Project Report:	**PD / CAPS Survey Report**
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Quarterly Report	☐
Semi-Annual Accomplishment Report	☐
Annual Accomplishment Report	☒

Pest Detection / CAPS Survey Accomplishment Report – FY2019

A. Write a brief narrative of work accomplished. Compare actual accomplishments to objectives established as indicated in the work plan. If reporting on a combined surveys work plan, report accomplishments by survey. When the output can be quantified, a computation of cost per unit is required when useful.

Our objective was to conduct a nursery survey to determine if any of the following conifer, oak and maple pests had entered Connecticut through the nursery or lumber trade:

- oak processionary moth (OPM), *Thaumetopoea processionea*
- pine processionary moth (PPM), *Thaumetopoea pityocampa*
- green oak tortrix moth (GOTM), *Tortrix viridana*
- large pine weevil (LPW), *Hylobius abeitus*
- Mediterranean pine shoot beetle (MPSB)*, Tomicus destruens*
- sixtoothed bark beetle, *Ips sexdentatus*
- European spruce bark beetle, *Ips typographus*
- Siberian silk moth (SSM), *Dendrolimus pini*
- pine tree lappet (PTL), *Dendrolimus sibricus*
- Masson pine moth (MPM), *Dendrolimus punctatus*

Funding Amount	Total Number of Traps	Cost Per Unit
Proposed = $63,563	Proposed = 350	Proposed= $182
Actual =$63,563	Actual = 350	Actual = $182

1. Survey methodology (trapping protocol):

Nursery Survey:

OPM, PPM, MPM and GOTM:

Wing traps following national protocols developed by APHIS for oak processionary moth (OPM), pine processionary moth (PPM), Masson pine moth (MPM) and green oak tortrix moth (GOTM) will be installed at fifty high risk sites (at or in the vicinity of nurseries, nursery growing yards and Christmas tree farms) beginning the first full week of May. The traps will be serviced every two weeks, and lures replaced as needed according to National Oak and Pine Commodity survey guidelines.

IPS, LPW and MPSB:

Two lindgren 8-funnel traps following national protocols developed by APHIS for sixtoothed bark beetle and European spruce bark beetle (IPS), large pine weevil (LPW) and Mediterranean pine shoot beetle (MPSB) will be installed in fifty high-risk sites (the same nursery and Christmas tree sites as the moth survey) beginning in late April. Traps will be serviced every two weeks and lures replaced as needed, according to National Exotic Wood Boring and Bark Beetle survey guidelines.

SSM and PTL:
Modified milk carton traps following national protocols developed by APHIS for Siberian silk moth (SSM) and pine tree lappet (PTL) will be installed at the same fifty high risk sites. Traps will be checked every two weeks, and the entire trap will be replaced every month.

	Common Name	Scientific Name
Pest:	oak processionary moth	*Thaumetopoea processionea*
	pine processionary moth	*Thaumetopoea pityocampa*
	green oak tortrix moth	*Tortrix viridana*
	large pine weevil	*Hylobius abeitus*
	Mediterranean pine shoot beetle	*Tomicus destruens*
	sixtoothed bark beetle	*Ips sexdentatus*
	European spruce bark beetle	*Ips typographus*
	Siberian silk moth	*Dendrolimus pini*
	pine tree lappet	*Dendrolimus sibricus*
	Masson pine moth	*Dendrolimus punctatus*

	Proposed	Actual
Sites (Locations):	50	50
Traps:	350	350

Number of Counties:	8
Counties:	Litchfield, Fairfield, Hartford, New Haven, Middlesex, Tolland, Windham, New London

2. Survey dates:

	Proposed	Actual
Survey Dates:	April - October	April 22nd – September 24th

3. Benefits and results of survey:

Nursery Survey:
OPM, PPM, MPM and GOTM:
Wing traps for oak processionary moth (OPM) pine processionary moth (PPM), Masson pine moth (MPM) and green oak tortrix moth (GOTM) were installed at 50 sites beginning the week of May 5th. The traps are being serviced every two weeks, and lures replaced as needed according to National Oak and Pine Commodity survey guidelines. A total of 1,344 wing trap collections were sorted and/or screened. No suspect moths were identified.

IPS, LPW and MPSB:
One lindgren 8-funnel trap for the two Ips species and a second lindgren trap for large pine weevil (LPW) and Mediterranean pine shoot beetle (MPSB) were installed at 50 sites beginning the week of April 22nd. Traps were serviced every two weeks and lures replaced as needed, according to National Exotic Wood Boring and Bark Beetle survey guidelines. A total of eight collection visits were made to each site. The Carnegie Museum of Natural History's Biodiversity Services Facility provided the screening and identifying of scolytids collected during this survey. A total of 758 samples were sent. No target scolytids were identified. The ambrosia beetle *Anisandrus maiche* was identified from two August sample collections in Fairfield and New Haven counties. Positive identifications of this beetle previously occurred in both counties during PPQ surveys in 2017 and 2018. *Halyomorpha halys* was identified in a sample collection from Fairfield county.

SSM and PTL:
Modified milk carton traps following national protocols developed by APHIS for Siberian silk moth (SSM) and pine tree lappet (PTL) were installed at 50 sites starting the week of May 5th. Traps were monitored every two weeks, and the entire trap was replaced once a month. A total of 195 traps were collected and screened. No suspect moths were identified.

	Positive	Negative	Total Number
Traps			
Thaumetopoea processionea	0	339	339
Thaumetopoea pityocampa	0	335	335
Tortrix viridana	0	331	331
Hylobius abeitus and *Tomicus destruens*	0	381	381
Ips sexdentatus and *I. typographus*	0	377	377
Dendrolimus pini and sibricus	0	195	195
Dendrolimus punctatus	0	339	339
TOTAL	0		

4. Database submissions:
Was all Pest Detection / CAPS survey data entered into the National Agricultural Pest Information System (NAPIS)? If not, please provide a justification. *ADODRs should consult with the CAPS Accountability Report to confirm data entry.*
Negative survey data and *Anisandrus* identifications were entered into NAPIS on the following dates: 11/6, 11/18, 11/19, and 12/10.

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

C. Where appropriate, explain any cost overruns or unobligated funds in excess of $1,000. * No cost overruns occurred.

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