Pest Detection/CAPS Survey Accomplishment Report

Year:	2023
State:	Connecticut
Cooperative Agreement Name:	Cooperative
Cooperative Agreement Number:	AP23PPQFO000C113
Project Funding Period:	05/01/2023 - 04/30/2024
Project Report:	PD/CAPS Survey Report
Project Document Date:	08/5/2024
Cooperators Project Coordinator:	State Survey Coordinator
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Quarterly Report	
Semi-Annual Accomplishment Report	
Annual Accomplishment Report	\boxtimes

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 exotic pests had entered Connecticut through the nursery and retail plant industry affecting softwoods including pine, spruce, and fir being many of the common, popular Christmas trees and landscape plants.

- Pine Processionary Moth, Thaumetopoea pityocampa
- Masson Pine Moth, Dendrolimus punctatus
- Large Pine Weevil, Hylobius abietis
- Black Fir Sawyer, Monochamus urussovii
- Japanese Pine Sawyer, Monochamus alternatus
- Black Spruce Beetle, Tetropium castaneum
- Brown Spruce Longhorned Beetle, Tetropium fuscum

Funding Amount	Total Number of Traps	Cost Per Unit
Proposed = \$63,613	Proposed = 140	Proposed= \$454.38
Actual = \$63,613	Actual = 132	Actual = \$481.92

1. Survey methodology (trapping protocol):

Nursery Survey:

Large Pine Weevil, Black Fir Sawyer, Japanese Pine Sawyer

Black cross vane panel traps following national protocols developed by APHIS for large pine weevil, black fir sawyer, and Japanese pine sawyer will be installed at thirty-five high risk sites (at or in the vicinity of wholesale and retail nurseries and nursery growing yards) starting early June. These three pests will be targeted for in one trap using a three-component lure: Alpha Pinene UHR Lure, Ethanol Lure, and Monochamol Lure. The traps will be serviced every two weeks, and lures replaced as needed according to Approved Methods for Pest Surveillance. Raw samples will be sent to the Carnegie Museum of Natural History Biodiversity Services Facility for identification and screening.

Black Spruce Beetle, Brown Spruce Longhorned Beetle

Black cross vane panel traps following national protocols developed by APHIS for black spruce beetle, and brown spruce longhorned beetle will be installed at thirty-five high risk sites (at or in the vicinity of wholesale and retail nurseries and nursery growing yards) starting early June. These two pests will be targeted for in one trap using a three-component lure: Ethanol Lure, Geranyl Acetol Lure, and Spruce Blend Lure. The traps will be serviced every two weeks, and lures replaced as needed according to Approved Methods for Pest Surveillance. Raw

samples will be sent to the Carnegie Museum of Natural History Biodiversity Services Facility for identification and screening.

Pine Processionary Moth

Red plastic delta traps following national protocols developed by APHIS for pine processionary moth will be installed at thirty-five high risk sites (at or in the vicinity of wholesale and retail nurseries and nursery growing yards) starting early June. The traps will be serviced every two weeks, and lures replaced as needed according to Approved Methods for Pest Surveillance. Sorted samples containing suspect Lepidoptera will be sent to the Oregon Department of Agriculture Insect Pest Prevention and Management (IPPM) Lab for identification and screening.

Masson Pine Moth

Paper wing traps following national protocols developed by APHIS for masson pine moth will be installed at thirty-five high risk sites (at or in the vicinity of wholesale and retail nurseries and nursery growing yards) starting early June. The traps will be serviced every two weeks, and lures replaced as needed according to Approved Methods for Pest Surveillance. Sorted samples containing suspect Lepidoptera will be sent to the Oregon Department of Agriculture Insect Pest Prevention and Management (IPPM) Lab for identification and screening.

	Common Name	Scientific Name	
Pest: Pine Processionary Moth		Thaumetopoea pityocampa	
	Masson Pine Moth	Dendrolimus punctatus	
	Large Pine Weevil	Hylobius abietis	
	Black Fir Sawyer	Monochamus urussovii	
	Japanese Pine Sawyer	Monochamus alternatus	
	Black Spruce Beetle	Tetropium castaneum	
	Brown Spruce Longhorned Beetle	Tetropium fuscum	

	Proposed	Actual
Sites (Locations):	35	33
Traps:	140	132

Number of Counties:	2
Counties:	Fairfield and New Haven

2. Survey dates:

	Proposed	Actual
Survey Dates:	06/01/2023 - 09/30/2023	06/01/2023 - 08/25/2023

3. Benefits and results of survey:

Large Pine Weevil, Black Fir Sawyer, Japanese Pine Sawyer

Black cross vane panel traps for large pine weevil, black fir sawyer, and Japanese pine sawyer were installed at thirty-three high risk sites starting June 1st. The traps were serviced every two weeks, and lures replaced as needed according to Approved Methods for Pest Surveillance. As of this report, all traps were deployed June 1st and all were concluded by August 25th. The actual end dates were different than the proposed end date due the anticipated replacement of State Survey Coordinator and seasonal worker returning to school full-time, requiring the survey period to be concluded early. The actual number of sites and traps were different than proposed due to unforeseeable construction and inaccessibility at two of the sites. All raw samples were sent to the Carnegie Museum of Natural History Biodiversity Services Facility for identification and screening. All samples were negative for the target pests.

Black Spruce Beetle, Brown Spruce Longhorned Beetle

Black cross vane panel traps for black spruce beetle, and brown spruce longhorned beetle were installed at thirty-three high risk sites starting June 1st. The traps were serviced every two weeks, and lures replaced as needed according to Approved Methods for Pest Surveillance. As of this report, all traps were deployed June 1st and all were concluded by August 25th. The actual end dates were different than the proposed end date due the anticipated replacement of State Survey Coordinator and seasonal worker returning to school full-time, requiring the survey period to be concluded early. The actual number of sites and traps were different than proposed due to unforeseeable construction and inaccessibility at two of the sites. All raw samples were sent to the Carnegie Museum of Natural History Biodiversity Services Facility for identification and screening. All samples were negative for the target pests.

Pine Processionary Moth

Red plastic delta traps for pine processionary moth were installed at thirty-three high risk sites starting June 1st. The traps were serviced every two weeks, and lures replaced as needed according to Approved Methods for Pest Surveillance. As of this report, all traps were deployed June 1st and all were concluded by August 25th. The actual end dates were different than the proposed end date due the anticipated replacement of State Survey Coordinator and seasonal worker returning to school full-time, requiring the survey period to be

concluded early. The actual number of sites and traps were different than proposed due to unforeseeable construction and inaccessibility at two of the sites. Three sorted samples containing suspect Lepidoptera were sent to the Oregon Department of Agriculture Insect Pest Prevention and Management (IPPM) Lab for identification and screening. All samples were negative for the target pest.

Masson Pine Moth

Paper wing traps for masson pine moth were installed at thirty-three high risk sites starting June 1st. The traps were serviced every two weeks, and lures replaced as needed according to Approved Methods for Pest Surveillance. As of this report, all traps were deployed June 1st and all were concluded by August 25th. The actual end dates were different than the proposed end date due the anticipated replacement of State Survey Coordinator and seasonal worker returning to school full-time, requiring the survey period to be concluded early. The actual number of sites and traps were different than proposed due to unforeseeable construction and inaccessibility at two of the sites. No sorted samples containing suspect Lepidoptera were sent to the Oregon Department of Agriculture Insect Pest Prevention and Management (IPPM) Lab for identification and screening. All samples were negative for the target pest.

	Positive	Negative	Total Number
Traps			
Thaumetopoea pityocampa	*	*	33
Dendrolimus punctatus	*	*	33
Hylobius abietis	**	**	33
Monochamus urussovii	**	**	33
Monochamus alternatus	**	**	33
Tetropium castaneum	**	**	33
Tetropium fuscum	**	**	33

(* sorted samples sent to Oregon State, full identification is not available as of this report)

(** raw samples sent to Carnegie Museum of Natural History; full identification is not available as of this report)

4. <u>Database submissions</u>: Was as 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 <u>CAPS Accountability Report</u> to confirm data entry.*

At the time of this report, all negative data was uploaded into the National Agricultural Pest Information System (NAPIS).

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

Two sites were not involved in the survey due to unforeseeable construction and inaccessibility to the survey site. Additionally, the survey period was concluded early due to the anticipated replacement of State Survey Coordinator and seasonal worker returning to school full-

	time.
	☐ Check if objectives were not met due to the impact(s) of the coronavirus COVID-19. Explain how the impacts affected surveys and/or survey operations.
C.	Where appropriate, explain any cost overruns or unobligated funds in excess of \$1,000. *
	No cost overruns have occurred.
*;	indicates information is required per 7 CEP 2016 40 and 7 CEP 2010 51

^{*}indicates information is required per 7 CFR 3016.40 and 7 CFR 3019.51