

Indiana Cooperative Agricultural Pest Survey

2014 Annual Report Exotic Woodborer/Bark Beetle Survey 1 January – 31 December



Department of Entomology at Purdue University
Indiana Department of Natural Resources (IDNR)
United State Department of Agriculture (USDA), Animal and Plant Health Inspection Service
(APHIS), Plant Protection and Quarantine (PPQ)

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CAPS 2014 Annual Report

Year:	2014
State:	INDIANA
Cooperative Agreement Name:	Indiana Agricultural Pest Surveys (CAPS) 2014
Cooperative Agreement Number:	14-8218-0332-CA
Project Funding Period:	1 January 2014 – 31 December 2014
Project Report:	CAPS Exotic Woodborer/Bark Beetle Survey Annual Report
Project Document Date:	31 March 2015
Cooperators Project Coordinator:	Larry W. Bledsoe
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Quarterly Report	<input type="checkbox"/>
Semi-Annual Accomplishment Report	<input type="checkbox"/>
Annual Accomplishment Report	<input checked="" type="checkbox"/>

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.

Objective. Utilize cooperator and APHIS program funding, as outlined in the financial plan within the authorized parameters to collaborate with PPQ on an exotic woodborers/bark beetles survey. Collaboration is survey planning assistance and processing, screening, and archiving samples, and delivering the results to the NAPIS database. The Cooperator seeks to conduct a program that is expected to provide information about the presence or absence of the potentially damaging exotic pests including Japanese pine sawyer beetle, *Monochamus alternatus*, sixtoothed bark beetle, *Ips sexdentatus*, European spruce bark beetle, *Ips typographus*, Mediterranean pine engraver, *Orthotomicus erosus*, sixtoothed spruce bark beetle, *Pityogenes chalcographus*, Oak ambrosia beetle, *Platypus quercivorus*, and European hardwood ambrosia beetle *Trypodendron domesticum*

- a. Exotic woodborers/bark beetle survey. Risk-based survey in cooperation with PPQ (statewide trapping network).

Proposed data = 1,290 records.

Actual data collection = 1,433 records.

Proposed and actual funding was \$4,232.

Cost per unit was \$2.95.

- a1. Survey Methodology (trapping protocol): This survey was an APHIS-PPQ/CAPS collaborative effort. PPQ and CAPS jointly planned the survey. PPQ set up and sampled traps and CAPS processed, identified, and archived samples. SSC uploaded results to NAPIS. Exotic Woodborer/Bark Beetle National Survey Guidelines-July 2011, were followed. One hundred eight wet cup Lindgren traps were deployed at 58 Indiana sites in 28 counties. One additional trap was placed at a high risk site in extreme south west Michigan. Data from this site were transferred to Michigan CAPS. Sites were identified by recognition of apparent risk of receiving target pests through commerce. One to three Lindgren funnel traps containing dilute propylene glycol antifreeze were placed at each site. Traps contained one of the following lures: UHR alpha pinene+ethanol, Chalcogran, Platypus quercivorous lure, lineatin, and IPS Tri-lure. Traps were monitored about biweekly (avg 16 days).

- a2. Trap locations and dates;

1. Bartholomew Co., 3 sites, 3/27 - 10/10; 3/27 - 9/29

2. Brown Co., 1 site, 6/3 - 8/29

3. Clark Co., 3 sites, 3/13 - 10/1

4. Daviess Co., 1 site, 3/29 - 10/2

5. Decatur Co., 2 sites, 3/24 - 9/29

6. Dubois Co. 1 site, 4/13 - 10/2

7. Delaware Co., 1 site, 6/6 - 10/1

8. Elkhart Co., 2 sites, 4/18 - 9/16

9. Gibson Co. 2 sites, 3/27 - 10/1; 3/27 - 10/3

10. Green Co. 1 site, 3/29 - 9/27
11. Hamilton Co., 1 site, 6/4 -10/9
12. Harrison Co. 1 site, 9/19 - 9/26
13. Hendricks Co. 2 sites, 6/9 - 10/2
14. Jefferson Co. 1 site, 5/14 - 9/26
15. Johnson Co. 1 site, 6/2 - 9/30
16. Knox Co. 1 site, 3/25 - 10/1
17. LaPorte Co. 3 sites, 4/11 - 9/10; 4/12 - 9/16, 4/18 - 9/16
18. Madison Co. 2 sites, 6/6 - 10/9; 6/6 - 10/1
19. Marion Co. 6 sites, 6/2 - 9/30; 6/2 - 10/9; 6/2 - 10/1
6/4 - 9/30; 6/4 - 10/1; 6/9 - 9/30
20. Martin Co. 2 sites, 3/29 - 9/27
21. Montgomery Co. 2 sites, 6/9 - 10/2
22. Orange Co. 1 site, 3/20 - 10/1
23. Pike Co. 1 site, 3/25 - 10/2
24. Porter Co. 11 sites, 4/11 - 9/3; 4/18 - 9/3; 4/18 - 9/16; 4/19 - 9/3
4/25 - 9/16; 5/3 - 9/16; 8/12 - 9/8
25. Shelby Co. 2 sites, 6/5 - 10/8; 6/6 - 9/30
26. Starke Co. 1 site, 4/18 - 9/16
27. Vanderburgh Co. 1 site, 3/27 - 10/3
28. Washington Co. 1 site, 3/19 - 10/1

(29.) Berrien Co. Michigan, 1 site, 4/11 - 9/16

a3 . Benefits and results of survey: No high-risk species were recovered.

a4. Database submissions:

Sixtoothed bark beetle, *Ips sexdentatus*

Date Range: 01-01-2014 thru 12-31-2014

Counties 20 Sites 36 Pos 0 Neg 312

European spruce bark beetle, *Ips typographus*

Date Range: 01-01-2014 thru 12-31-2014

Counties 20 Sites 36 Pos 0 Neg 312

Japanese pine sawyer beetle, *Monochamus alternatus*

Date Range: 01-01-2014 thru 12-31-2014

Counties 20 Sites 36 Pos 0 Neg 312

Mediterranean pine engraver, *Orthotomicus erosus*

Date Range: 01-01-2014 thru 12-31-2014

Counties 20 Sites 36 Pos 0 Neg 312

Sixtoothed spruce bark beetle, *Pityogenes chalcographus*

Date Range: 01-01-2014 thru 12-31-2014

Counties 1 Sites 2 Pos 0 Neg 15

Oak ambrosia beetle, *Playpus quercivorus*

Date Range: 01-01-2014 thru 12-31-2014

Counties 16 Sites 20 Pos 0 Neg 204

European hardwood ambrosia beetle *Trypodendron domesticum*

Date Range: 01-01-2014 thru 12-31-2014

Counties 11 Sites 15 Pos 0 Neg 168

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

All objectives for reporting period (1 January to 31 December) were met.

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

All funds were expended with no cost overruns.

D. Supporting Documents (if applicable) none attached

**indicates information is required per 7 CFR 3016.40 and 7 CFR 3019.5*

Approved and signed by

Philip T. Marshall (Cooperator)

Date: _____

Gary W. Simon (ADODR)

Date: _____