

Farm Bill Survey Work Plan - Fiscal Year 2015

Cooperator:	Oklahoma Department of Agriculture Food and Forestry		
State:	Oklahoma		
Project:	Asian Defoliator Survey		
Project funding source:	Farm Bill Survey <input checked="" type="checkbox"/>		
Project Coordinator:	Elizabeth Nguyen		
Agreement Number			
Contact Information:	Address:	2800 North Lincoln Boulevard Oklahoma City OK 73152	
	Phone:	405-227-7624	Fax: 405-522-4584
	Email Address:	elizabeth.nguyen@ag.ok.gov	

This Work Plan reflects a cooperative relationship between the *Oklahoma Department of Agriculture Food and Forestry* (the Cooperator) and the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ). It outlines the mission-related goals, objectives, and anticipated accomplishments as well as the approach for conducting an *Asian Defoliator Survey* and the related roles and responsibilities of the parties [e.g., mutual roles, APHIS role(s), Cooperator role(s)] as negotiated.

I) OBJECTIVES AND NEED FOR ASSISTANCE

What relevant need or problem within the cooperator’s mission area requires a solution in carrying out a public purpose of support or stimulation authorized by a law of the United States? How does the need or problem align with the mission area and strategic goals of APHIS?

Financial assistance from APHIS will facilitate the cooperator in carrying out the goals of the Plant and Animal Disease, Pest Control, and Animal care program number 10.025 by “conducting surveys and inspections to detect and appraise infestations, eradication and control activities, and carry out regulatory actions to prevent interstate spread of infestations and disease.” (Catalog of Federal Domestic Assistance).

Gypsy moth (*Lymantria dispar*) is one of the most destructive pests of fruit, ornamental, and hardwood trees, with the ability to feed on over 500 plant species and spanning over 100 plant families. In recent years, gypsy moth has been successful at increasing its range and expanding its quarantine area. Since 1980, all subspecies of gypsy moth have defoliated over one million acres of forest each year in the U.S. Potentially, with its wide host range and invasive capabilities, all temperate hardwood forests of the U.S. may be susceptible to gypsy moth infestation.

Although Gypsy moth surveys have been conducted in the past, a more inclusive defoliating moth survey has yet to be proposed. With increased commerce and pathways to Asian countries, it is crucial to detect new infestations of defoliating moths before populations become established. Populations of Asian and European gypsy moth have been detected in the U.S., however many other Asian defoliators share the same biology and pathways and have the propensity of establishment in the U.S.

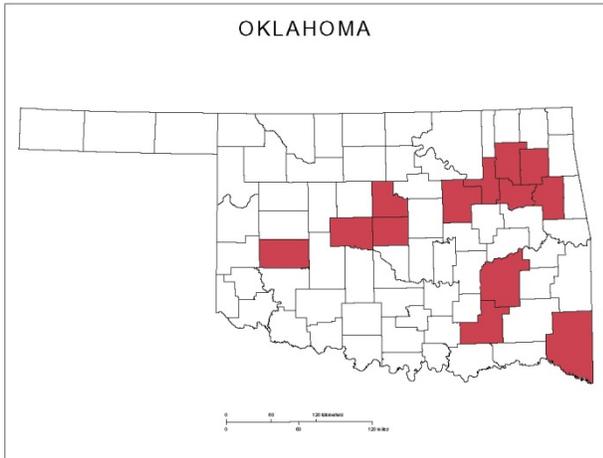


Figure 1. European gypsy moth and Asian Gypsy moth occurrence in Oklahoma.

Since 1987, there have been 23 accounts of European gypsy moth and two accounts of Asian Gypsy moth in Oklahoma. Consequently, it is crucial that early detection surveys are continued and that we determine the geographic extent of our most destructive pests, i.e. Asian gypsy moth. Twelve million acres of Oklahoma (approximately twenty-eight percent of the land) is forested. The forest industry contributes \$2.8 billion to the state's economy annually. However, with the widespread host range of Asian defoliators, most of the state's other agricultural industries would be affected. It is within the mission of the Plant and Animal Disease, Pest Control, and Animal care program number 10.025 by "conducting surveys and

inspections to detect and appraise infestations, eradication and control activities, and carry out regulatory actions to prevent interstate spread of infestations and disease." (Catalog of Federal Domestic Assistance).

II) RESULTS OR BENEFITS EXPECTED

The Cooperator seeks to conduct a program which is expected to result in:

A. What results or benefits will be derived from the cooperative effort? Use of bulleted Statements is acceptable.

The benefit of this survey will be an accurate assessment of Asian Defoliators in Oklahoma. Early detection of any pests invasive to Oklahoma will minimize the impact on Oklahoma's agricultural commodities. Regulatory officials will be able to continue issuing accurate federal and state phytosanitary certificates to ease the movement of plant products out of Oklahoma.

III) APPROACH

What is the plan of action or approach to the work?

The objective of this survey is to determine the presence or absence of Asian defoliating moths in Oklahoma. The pathways by which Asian defoliating moths are spread are through shipping containers and cargo. Areas having the highest potential for the introduction of these moths include military bases and retail suppliers that receive large shipments from Asia.

The approach for the Asian Defoliator Survey includes:

1. Trapping in Oklahoma, targeting high risk areas (based on the Asian Defoliator Pathway-based Survey Reference) that have a high potential for moth introductions (military bases and warehouses with large shipments from Asia)
2. Field personnel will be trained on survey protocol as well as receive survey guidelines in a handbook
3. Monitor traps and visually monitor areas for signs of defoliator damage
4. Samples obtained will be sent to the USDA/APHIS for identification and positive samples will be recorded into IPHIS
5. Data from the survey including observation dates, sample submission dates, GPS locations of traps, and pest status will be recorded into IPHIS
6. Develop and provide reference materials concerning Asian defoliators and the threat in Oklahoma. Reference materials will be distributed to cooperating agencies and stakeholders

The Oklahoma Department of Agriculture Food and Forestry will implement four field personnel to evaluate sites that are high risk areas having a high potential for introduction (people and/or Regulated Articles moving from infested areas into noninfested areas); the area must have a suitable habitat (host trees) to support pest populations.

Based on those qualifications, the Asian Defoliator Survey will focus specifically on the areas surrounding Oklahoma military bases, retail suppliers, airports, and industrial parks that receive large shipments from Asia. Trapping will take place at the following locations:

Military bases:

McAlester Army Ammunition Plant in Pittsburg County (trapping done by the USDA)
Tinker Air Force Base in Oklahoma County
Fort Sill in Comanche County
Vance Air Force Base in Garfield County
Altus Air Force Base in Jackson County.

Distribution Centers:

Hobby Lobby distribution center in Oklahoma City
Dollar General distribution center in Ardmore
Dollar Tree distribution center in Marietta
Family Dollar distribution center in Duncan
Big Lots distribution center in Durant
Walmart distribution center in Pauls Valley
Macy's distribution center in Owasso
Jasco distribution center in Oklahoma City
T&N Asian wholesale distributor in Oklahoma City
Evergreen Asian wholesale distributor in Oklahoma City

Airports:

Will Rogers World Airport in Oklahoma City
Tulsa International Airport in Tulsa

Industrial Parks:
Tulsa Port of Catoosa
MidAmerica Industrial Park in Pryor

The trap density per trapping site will depend on site square mileage.

The Asian Defoliator Survey encompasses trapping for five different pests:

- Asian Gypsy Moth (AGM) – *Lymantria dispar asiatica*
- Japanese Gypsy Moth (JGM) – *Lymantria dispar japonica*
- Hokkaido Gypsy Moth (HGM) – *Lymantria umbrosa*
- White-winged Gypsy Moth (WGM)- *Lymantria postalba*
- Okinawa Gypsy Moth (OGM)- *Lymantria albescens*

Field personnel will set 210 red paper delta traps with Gypsy moth string lure using the USDA/APHIS guidelines for The Asian Defoliator Pathway-based Survey Reference. 10 traps will be set at each military base (50 traps total), distribution center (100 traps total), airport (20 traps total) and industrial park (40 traps total) with the exception of Fort Sill (20 traps), Tulsa Port of Catoosa (20 traps), and MidAmerica Industrial Park (20 traps) due to size. Traps will be set at the beginning of June and removed in August.

The lure of each trap will be replaced once every 180 days after it has been installed. Traps will be monitored and serviced once every two weeks. During the monitoring, the traps will be screened for moths and suspect samples will be submitted to APHIS for identification. Installation dates, sample submission dates, trap removal dates, GPS locations, and pest status information will be collected and submitted to IPHIS. Mid-Year reports will be completed by July 31st. Final reports will be completed by March 31st. Data will be entered by December 1st into IPHIS.

A. The Cooperator and APHIS Mutually Agree to/that:

- 1. The Cooperator will collect samples and submit them to USDA/APHIS for identification*
- 2. The Cooperator will enter data into IPHIS.*

1. What is the quantitative projection of accomplishments to be achieved?

a. By activity or function, what are the anticipated accomplishments by month, quarter, or other specified intervals?

Surveys will be conducted from June to August. Mid-Year reports will be completed by July 31st. Final reports will be completed by March 31st. Data will be entered by December 1st into IPHIS.

b. What criteria will be used to evaluate the project? What are the anticipated results and successes?

Criteria used to evaluate the project will be the timeliness of surveys, locations of inspections, positive and negative data collected about targeted species in Oklahoma, and reports submitted on time.

c. What methodology will be used to determine if:

1. Identified needs are met
GPS coordinates and dates of surveys have been recorded.
2. Results and benefits are achieved
Asian Defoliator populations will be accurately assessed in Oklahoma.

2. **What type of data will be collected and how will it be maintained?**

- a. Address timelines for collection and recording of data.
GPS coordinates for each location and dates of surveys will be recorded.
- b. How will APHIS be provided access to the data?
Data will be entered into IPHIS.

B. The Cooperator will:

1. **By function, what work is to be accomplished?**

(Cite program standards, action plans, or other program guidelines as a standard for conducting the particular functions for this program, as applicable.)

Four field surveyors employed by the cooperator will survey 17 sites for pest presence, obtain GPS coordinates of each survey site and produce a survey map. Samples will be submitted to USDA/APHIS for identification. The field surveyors will also distribute outreach materials supplied by the State Survey coordinator.

2. **What resources are required to perform the work?**

Field personnel, vehicles, computers, GPS units, traps, lure, and outreach materials.

3. **What numbers and types of personnel will be needed and what will they be doing?** Tie these needs back to the activities outlined in III.A

Four field personnel will conduct surveys and one State Survey Coordinator will train the field personnel, collect their data, and supply outreach materials.

4. **What equipment will be needed to perform the work?** Include major items of equipment with a value of \$5,000 or more.

- a. What equipment will be provided by the cooperator? *Vehicles, GPS units, laptops, cellphones*
- b. What equipment will be provided by APHIS? *Traps and lure*
- c. What equipment will be purchased in whole or in part with APHIS funds? *None*
- d. How will the equipment be used? *Travel to work sites*
- e. What is the proposed method of disposition of the equipment upon termination of the agreement/project?

5. **Identify information technology equipment, e.g., computers, and their ancillary components.** All information technology supplies (e.g., small items

of equipment, connectivity through air cards or high speed internet access, GPS units, radios for emergency operations etc.) should be specifically identified.

GPS units, laptops, cellphones

- 6. What supplies will be needed to perform the work?** Identify individual supplies with a cumulative value of \$5,000 or more as a separate item. **All information technology supplies (e.g., small items of equipment, connectivity through air cards or high speed internet access, GPS units, radios for emergency operations) should be specifically identified above.

a. What supplies will be provided by the Cooperator? *None*

b. What supplies will be provided by APHIS? *None*

c. What supplies will be purchased in whole or in part with APHIS funds?
Twine, stapler, staples, sharpies

d. How will the supplies be used? *Twine, stapler, and staples will be used to hang traps and sharpies will be used to write on the traps.*

e. What is the proposed method of disposition of the supplies with a cumulative value over \$5,000 upon termination of the agreement/project?

- 7. What procurements will be made in support of the funded project and what is the method of procurement (e.g., lease, purchase)?**
(Cooperator procurements shall be in accordance with OMB Circulars A-102 or A110, as applicable.)

- 8. What are the travel needs for the project?**

a. Is there any local travel to daily work sites? Who is the approving official? What are the methods of payment? Indicate rates and total costs in the Financial Plan.

Local travel is required to survey each site. The state survey coordinator is the approving official.

b. What extended or overnight travel will be performed (number of trips, their purpose, and approximate dates). Who is the approving official?
Overnight travel is required (5 nights) to set and service traps. The State Survey Coordinator.

c. What is the method of payment? Indicate rates and total cost in the Financial Plan.

None

- 9. Reports:**

a. Submit all reports to the APHIS Authorized Department Officer's Designated Representative (ADODR). Reports include:

1. Narrative accomplishment reports in the frequency and time frame specified in the Notice of Award, Article 4.

2. Federal Financial Reports, SF-425 (replaces SF-269 October 1, 2009) in the frequency and time frame specified in the Notice of Award, Article 4.

10. Are there any other contributing parties who will be working on the project?

- a. List Participating Agency/Institution: USDA APHIS PPQ
- b. List all who will work on the project: USDA APHIS PPQ
- c. Describe the nature of their effort: PPQ is currently performing a delimiting survey of Asian Gypsy Moth at McAlester Army Ammunition Plant in Pittsburg County. Results from that survey will aid in the assessment of Asian Defoliator presence in Oklahoma.
- d. Contribution: Survey work

C. APHIS Will:

1. Outline the Agency's (USDA APHIS PPQ) substantial involvement.

1. (a) Include any significant Agency collaboration and participation

APHIS will provide direction, input, and outreach efforts to The Cooperator. APHIS approved methods will be used during the survey for each insect pest. APHIS PPQ is performing the survey work at McAlester Army Ammunition Plant in Pittsburg County.

1. (b) Project oversight and performance management

APHIS may provide training to field personnel along with the Cooperator. APHIS will review all data entered into IPHIS for accuracy.

2. What equipment will be needed to perform the work? Include major items of equipment with a value of \$5,000 or more.

- a. Will Equipment be loaned or provided by APHIS? Yes No (If Yes, please list:
- b. How will the equipment be used?

IV) GEOGRAPHIC LOCATION OF PROJECT

- A.** Is the project statewide or in specific counties, townships, and/or national or state parks? (List the names of ALL counties, townships, and/or national or state parks, and tribal areas that apply)

Oklahoma, Comanche, Jackson, Carter, Love, Pittsburg, Garfield, Stephens, Bryan, Garvin, Payne, Mayes and Tulsa Counties.

- B.** What type of terrain (e.g., cropland, rangeland, woodland) will be involved in the

project?
Woodland

- C. Are there any unusual features which may have an impact on the project or activity such as rivers, lakes, wild life sanctuaries, commercial beekeepers etc? (list all that apply)

None

- D. Identify the kind of data to be collected:

GPS coordinates, dates of survey

- E. Establish criteria to evaluate the results and successes of the project:

1. Results: *Surveys determine early detection or for confirmation of the negative status of an invasive insect*

2. Successes: *Surveys conducted, samples identified and results entered into IPHIS.*

- F. Methodology used to determine if the results and benefits are achieved:

1. Identified needs are met: *GPS coordinates are taken for each location and maps produced. Inspectors will record dates of each survey.*

2. Results and benefits are achieved: *Insects surveyed for are confirmed present or absent in Oklahoma*

V) DATA COLLECTION AND MAINTENANCE

1. First record for the State and/or County will be entered within **48 hours** of confirmation of identification by a qualified identifier.
2. All other required records must be entered **within two weeks** of the activity or confirmation.
3. All are to be entered into the IPHIS database by **December 1st** of the year of survey, so these data are included in the yearly Statistical Report.

VI) TAXONOMIC SUPPORT

- A. Person or Institution that will screen targets (Name & Contact Information)

OR

- B. Request for taxonomic support.

(If you request taxonomic support the Program managers and PPQ's National Identification Services will use the information you provide in the J-3 Appendix to assign your survey samples to the appropriate taxonomic personnel.)

VII) SIGNATURES

ROAR

Date

ADODR

Date

Detailed Financial Plan (Submit with Work Plan)

COOPERATOR NAME: OKLAHOMA DEPARTMENT OF AGRICULTURE, FOOD, and FORESTRY

TIME PERIOD: January 1st 2015 through December 31st 2015

Financial Plan must match the SF-424A, Section B, Budget Categories

ITEM	APHIS FUNDS		COOPERATOR FUNDS (Show even if zero)
PERSONNEL:			
Detection Survey: 4 field inspectors @ 80 hours (approx. 2 days to visit all sites, traps will be visited 5 times during the survey period) @\$18/hour	\$5,760.00		
Subtotal		\$5,760.00	\$0.00
FRINGE BENEFITS:			
28% of salary for permanent employees	\$1,612.80		\$0.00
Subtotal		\$1,612.80	\$0.00
TRAVEL:			
Detection Survey: 4,000 total miles @\$0.555 per mile	\$2,200.00		
Hotel @ \$80/night for 5 nights	\$400.00		
Per diem @ \$47/night for 5 nights	\$235.00		
Subtotal		\$2,835.00	\$0.00
EQUIPMENT			
	\$0.00		
Subtotal		\$0.00	\$0.00
SUPPLIES			
Twine, stapler, staples, sharpies	\$100.00		\$0.00
Subtotal		\$100.00	\$0.00
CONTRACTUAL (NO IDC)			
	\$0.00		\$0.00
Subtotal		\$0.00	\$0.00
OTHER			
Outreach materials	\$200.00		\$0.00
Subtotal		\$200.00	\$0.00
TOTAL DIRECT COSTS	\$10,507.80		\$0.00
INDIRECT COSTS (18.86% on Total Direct Cost)	\$1,981.77		
TOTAL	\$12,489.57		\$0.00
Cost Share Information	100%		0%