

**Walnut Twig Beetle/Thousand Cankers Disease Survey
Farm Bill Survey Work Plan
July 1, 2017 – June 30, 2018**

Cooperator:	Kansas Department of Agriculture		
State:	Kansas		
Project:	Walnut Twig Beetle/Thousand Cankers Disease Survey		
Project funding source:	Farmbill Survey <input checked="" type="checkbox"/>		
Project Coordinator:	Laurinda Ramonda		
Agreement Number			
Contact Information:	Address:	Plant Protection and Weed Control 6531 SE Forbes Avenue, Suite B, Topeka, Kansas 66619	
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This Work Plan reflects a cooperative relationship between the between the Kansas Department of Agriculture (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 a Walnut Twig Beetle/Thousand Cankers Disease survey and the related roles and responsibilities of the Kansas Department of Agriculture and USDA-APHIS-PPQ as negotiated.

I) OBJECTIVES AND NEED FOR ASSISTANCE

In the most recent (2009) Timber Product Output Report from the Kansas Forest Service: Many people are surprised to learn that Kansas timber harvests contribute to the state’s economy. Though it is a small component of the overall economy (less than 1% of total manufacturing receipts) it is important to the loggers, sawmill operators, and some of secondary manufacturers who process Kansas wood products. There are over 50 sawmills, 40 timber buyers, and 200 secondary manufacturers (cabinet makers, etc.) who rely on local timber harvests. Kansas timber harvests also benefit private landowners and it is not uncommon to make thousands of dollars from periodic timber sales, especially from the sale of black walnut. Timber harvest can also benefit forest health when it releases desirable understory trees or it can lower the quality of the forest if desirable understory does not exist and there is no proper follow up management.

This same report stated: The USDA Forest Service, Northern Research Station, periodically surveys Kansas sawmills to determine the size and composition of the wood that is being

processed. The last Timber Products Output survey was conducted in 2009. It suggests that in 2009 1.7 million cubic feet or 20.4 million board feet was harvested from Kansas forests. This is enough wood to construct an estimated 1,700 homes based on an average of 12,000 board feet of wood per house. However, most Kansas timber is not used for home construction, but ends up as furniture, gunstocks, veneer, pallets, dunnage and other miscellaneous forest products. Black walnut has always driven forest industry in Kansas and accounted for 43% of the timber harvested in 2009. About 55% of the timber harvested in Kansas is processed locally while most of the remaining volume was sent to mills in Missouri and Iowa. In 2009 Kansas mills generated 16.6 thousand green tons of sawdust, slabs, and edgings with about 46% used by the mulch industry and 34% for animal bedding, small dimension specialty products, 10% for residential fuel and 2% industrial fuel.

Surveying for walnut high-consequence pests needs to continue both locally and nationally especially for newly emerging threats that can have an adverse effect on the timber industry in Kansas.

II) RESULTS OR BENEFITS EXPECTED

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

- Identification of pathways so action can be taken to stop further spread of pests.
- Support domestic and foreign exports of walnut trees and wood from Kansas.
- Presence/absence data entered into the National Agricultural Pest Information System (NAPIS) data base.

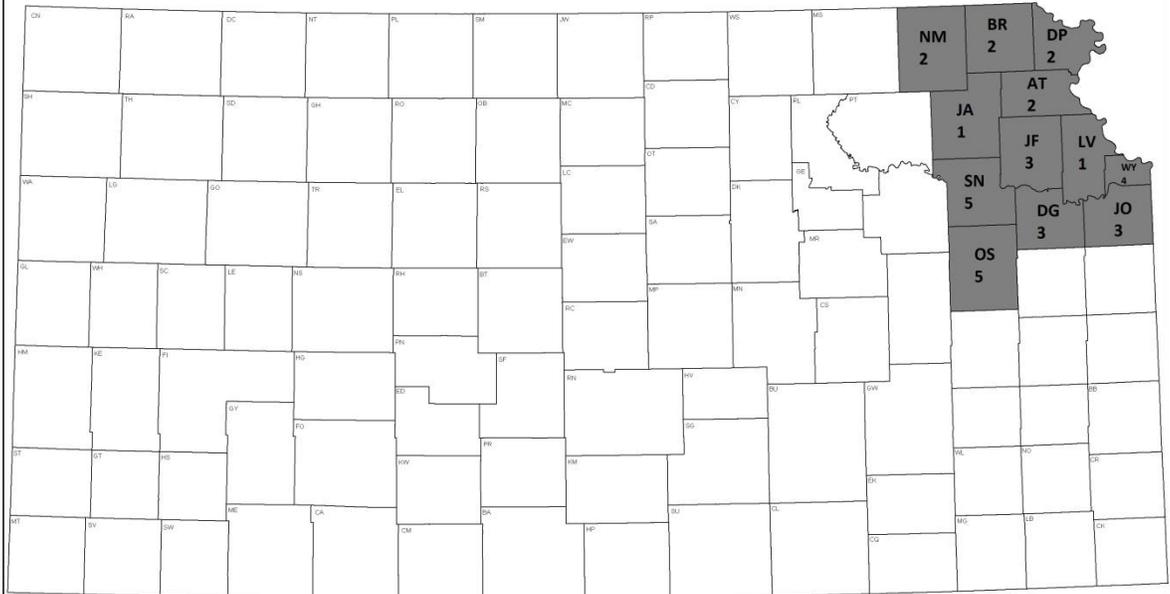
III) APPROACH

What is the plan of action or approach to the work (for bundled survey work plans please include a separate paragraph for each survey detailing survey type, targets, and number of locations)?

The survey will entail trapping 33 sites with 1 trap at each site in 12 northeastern counties using a seasonal staff person from July and August. The traps will be placed in the northeastern counties focusing on areas around saw mills, collection points, plantations and reservoirs with walnut trees. Traps will be check approximately every week.

For walnut twig beetle (*Pityophthorus juglandis*), the state entomologist will screen targets and then send targets to a qualified USDA-APHIS-PPQ identifier. If cankers are found on walnut trees then these samples will be sent to the Great Plains Diagnostic Network (GPDN) at Kansas State University for identification. These samples will be double bagged and brought to the lab.

2017 Walnut Twig Beetle/Thousand Cankers Disease Survey



33 Locations – 12 Counties

A. The Cooperator will:

- Supply GPS equipment.
- Document GPS coordinates for site locations.
- Maintain equipment used in this survey upon completion of project.
- Hire one temporary/seasonal staff person through a hiring agency that has a contract with the state to perform survey.
- Help train season staff and handle samples taken from field.
- Rent vehicle and supply a fuel card for travel to conduct survey and collect data.
- Conduct survey in northeastern Kansas from July 2017 to August 2017.

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

- Survey will be performed by one temporary/seasonal person.
- Temporary/seasonal employee will be trained and monitored by the State Survey Entomologist, State Plant Pathologist and State Survey Coordinator.
- Data will be entered into the NAPIS database when pest identification is confirmed and/or becomes available.
- GPS coordinates will be included in surveys.
- Screening of suspect insects will be done by the state entomologist.

- If suspect *Geosmithia* fungus specimens are found, the samples will be doubled bagged and taken to the GPDN lab at Kansas State University.
- Suspect walnut twig beetle specimens will be sent to a qualified identifier.
- Geographic assessment will occur from data gathered on locations of black walnut populations.

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

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

- Trapping will occur during July and August with traps removed in August.
- Fact sheets, webpage, resources, and pest reporting will be continually updated as new information becomes available.
- Data will be entered into the NAPIS database when pest identification is confirmed and/or becomes available.
- GPS coordinates will be included with surveys.
- Survey and identification of the Walnut Twig Beetle, vector of the *Geosmithia* fungus, if present.
- Survey and identification of the *Geosmithia* fungus, if present.
- Screening of suspect insects will be done by the state entomologist.
- Suspect target pests will be forwarded to a qualified identifier.

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

- Pest detection survey activities completed.
- All data collected from the pest detection survey entered into the NAPIS database.
- SPHD, SPRO, PSS, and SSC meetings on survey issues, if needed.
- Presence or absence of target pests.
- Better knowledge of the pathways that are at high risk for the introduction and establishment of target pests.

3. What numbers and types of personnel will be needed and what will they be doing?

- One temporary/seasonal person to conduct survey.
- KDA permanent staff to help train seasonal employee.
- Data from survey entered into the NAPIS database by the State Survey Coordinator or KDA staff.
- KDA staff will screen target specimens.
- Qualified identifier for specimen identification (APHIS Identifier).
- GPDN lab for suspect samples sent for *Geosmithia* fungus identification.

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?**
 - Computers
 - Microscopes and similar lab equipment
 - b. What equipment will be requested from APHIS on loan?**
 - None planned
 - c. What equipment will be purchased in whole or in part with APHIS funds?**
 - None planned
 - d. How will the equipment be used?**
 - Data entry, documentation, and analysis
 - Screening and identification of pests
 - e. What is the proposed method of disposition of the equipment upon termination of the agreement/project? N/A**
- 5. Identify information technology equipment, e.g., computers, and their ancillary components.**
- GPS units to document locations
 - KDA computers with internet to enter data
- 6. What supplies will be needed to perform the work?**
- GPS units
 - Computers
 - Alcohol
 - Plastic bags
 - Jars
 - Coffee filters
 - Propylene glycol
 - Lindgren funnel traps
 - Walnut twig beetle lure
 - Poles for hanging traps
 - Rope for hanging traps
 - Rental vehicle
 - Fuel for rental vehicle
- a. What supplies will be provided by the Cooperator?**
- GPS units
 - Computers
 - Poles
 - Lindgren funnel traps

- b. What supplies will be requested from APHIS (list supplies)?**
- None planned
- c. What supplies will be purchased in whole or in part with APHIS funds?**
- 70% Alcohol
 - Plastic bags
 - Jars
 - Coffee filters
 - Propylene glycol
 - Plastic bags
 - Rope for hanging traps
 - Walnut Twig Beetle Lure
 - Rental vehicle
 - Fuel for rental vehicle
- d. How will the supplies be used?**
- Planning, implementation, data collection and data submission of survey.
 - Pest detection survey work.
 - Shipping of specimens to identifiers or labs.
- e. What is the proposed method of disposition of the supplies with a cumulative value over \$5,000 upon termination of the agreement/project?**
- None planned
- 7. What procurements will be made in support of the funded project and what is the method of procurement (e.g., lease, purchase)?**
- Supplies for survey work.
 - The Fiscal Department at the Kansas Department of Agriculture will provide most contracts.
 - Seasonal employee will be employed by a temporary employment service that has a contract with the state.
 - Most procurements will be made by purchase order.
 - Some procurements will be made reimbursable personal expense.
- 8. What are the travel needs for the project?**
- a. Is there any local travel to daily work sites? Indicate rates and total costs in the Financial Plan.**
- Travel will be required to survey sites by use of a rental vehicle (shortage of state vehicles).
 - Most procurements will be made by purchase order.

- Some procurements will be made reimbursable personal expense.
- The KDA Plant Protection and Weed Control Plant Program Manager is the approving official.
- Costs are included in the financial plan.

b. What extended or overnight travel will be performed (number of trips, their purpose, and approximate dates)? Indicate rates and total cost in the Financial Plan.

- None planned

9. Reports:

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 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. If so, list other participating institutions/agencies who will work on the project:

- KDA
- USDA/APHIS/ PPQ
- Kansas Forest Service
- GPDN

b. Describe the nature of their effort:

- KDA – trapping, training, screening, specimen collection, lure and trap maintenance (state entomologist, state plant pathologist, CAPS coordinator and temporary/seasonal employees)
- USDA-APHIS- PPQ – funding, support and pest identification
- Kansas Forest Service – walnut tree locations and outreach
- GPDN – *Geosmithia* fungus identification

B. APHIS Will:

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

a. Include any significant Agency collaboration and participation

- Provide walnut twig beetle lure.

- Provide funds to the Cooperator to cover costs outlined in the Financial Plan.
- Make arrangements for Taxonomic support in identification.

b. Project oversight and performance management

- Review of data results submitted to the NAPIS database.
- Review data and submit accomplishment reports to ADODR.
- Provide training, when necessary.

b. Provide the equipment requested by the cooperator in 4.b. & c.

- None planned

c. Provide the supplies requested by the cooperator in 6.b. & c.

- Walnut twig beetle lure
- 70% Alcohol
- Plastic bags
- Jars
- Coffee filters
- Propylene glycol
- Plastic bags
- Rope for hanging traps
- Walnut twig beetle lure
- Rental vehicle
- Fuel for rental vehicle

IV) GEOGRAPHIC LOCATION OF PROJECT

A. Is the project statewide or in specific counties? [List the names of ALL counties and tribal areas that apply (denote counties for each separate survey if this is a bundled survey work plan)].

Counties for trapping: Atchison, Brown, Doniphan, Douglas, Jackson, Jefferson, Johnson, Leavenworth, Nemaha, Osage, Shawnee, Wyandotte

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

- Woodland
- Recreation areas
- Wood processing facilities

C. Are there any unusual geographic features which may have an impact on the project? (list all that apply)

- There could be many unusual features which may have an impact on the project or activity such as rivers, lakes, forests and wildlife sanctuaries.
- Areas might have disruption through human contact and dust, dirt and debris.
- Rattlesnakes and wildlife could have an impact on where to survey.

V) DATA COLLECTION AND MAINTENANCE

Each State is responsible for entering complete, accurate, and timely pest survey data using approved protocol and methodology. All survey data from Pest Detection funded CAPS surveys will be entered into the National Agricultural Pest Information System (NAPIS). NAPIS is the final repository for all Pest Detection survey data.

- First record for the State and/or County will be entered within **48 hours** of confirmation of identification by a qualified identifier.
- All other required records, both positive and negative survey data, must be entered **within two weeks** of confirmation.
- All records are to be entered into the NAPIS database by **December 31st** of the year of survey so these data can be included in the yearly Plant Board Report.

Data will also be entered on the Walnut Twig Beetle Trap Result Reporting – STATE spread sheet which is found in Appendix 4 of the Thousand Cankers Disease Survey Guidelines for 2017. This will then be given to the Forest Service to enter into the Forest Service data base.

VI) TAXONOMIC SUPPORT

A. Person or Institution that will screen targets (Name & Contact Information) and level of screening/identification.

VI) TAXONOMIC SUPPORT

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

State Entomologist
 Kansas Department of Agriculture
 Plant Protection and Weed Control
 6531 SE Forbes Avenue, Suite B
 Topeka, Kansas 66619
 (785) 564-6698

*All insect specimens will be screened by the state entomologist.

State Plant Pathologist
 Kansas Department of Agriculture
 Plant Protection and Weed Control
 1320 Research Park Drive
 Manhattan, Kansas 66502
 (785) 564-6698

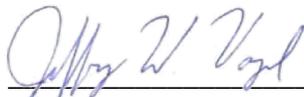
*Walnut fungal samples will be taken to the Great Plains Diagnostic Network at Kansas State University.

OR

B. **Request for taxonomic support.**

For walnut twig beetle confirmation.

VII) SIGNATURES



ROAR

4/28/2017

Date

ADODR

Date

Detailed Farmbill Financial Plan

PROJECT: Walnut Twig Beetle/Thousand Cankers Survey

COOPERATOR NAME: Kansas Department of Agriculture

AGREEMENT NUMBER:

TIME PERIOD: July 1, 2017 – June 30, 2018

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

ITEM			APHIS FUNDS	COOPERATOR FUNDS (Show even if zero)	TOTAL
PERSONNEL:	Hours	Salary			
KDA staff - Paid by Cooperator funds (based on average hourly wage for permanent employees)	10	\$25	\$0	\$250	\$250
Subtotal			\$0	\$250	\$250
FRINGE BENEFITS:	Percent (enter as decimal not %)				
KDA staff - Paid by APHIS funds - 33%	0.33	\$250	\$0	\$83	\$83
Subtotal			\$0	\$83	\$83
TRAVEL:	Cost	Length of time			
SUV rental for temporary staff for 2 months/seasonal staff @ \$979/month (shortage in state vehicles) **	\$979	1.75 months	\$1,713	\$0	\$1,713
Subtotal			\$1,713	\$0	\$1,713
EQUIPMENT:	Cost				
			\$0	\$0	\$0
Subtotal			\$0	\$0	\$0
SUPPLIES:	Cost	Length of time			
Polypropylene glycol and supplies	\$144		\$144	\$0	\$144
Fuel - 2,220 miles per month/20mpg x \$2.50/gallon - for seasonal staff rental vehicles**	\$278	1.75 months	\$486	\$0	\$486
Lure (\$2.75 each x 50)-33 traps - lure comes in 25/pack	\$2.75	50 lure	\$138	\$0	\$138
Traps provided by Cooperator	\$0		\$0	\$0	\$0

Subtotal			\$767	\$0	\$767
CONTRACTUAL:	Cost	Length of time			
Key Staffing (1 temporary staff) \$20.00 x 300 hours (includes data entry time and trap prep)	\$20	300 hours	\$6,000	\$0	\$6,000
Subtotal			\$6,000	\$0	\$6,000
OTHER:	Cost				
Shipping samples to identifier	\$20		\$20	\$0	\$20
Subtotal			\$20	\$0	\$20
TOTAL DIRECT COSTS			\$8,500	\$333	\$8,833
INDIRECT COSTS	Percent (enter as decimal not %)				
Indirect rate- 23.4%	0.234	\$333	\$0	\$78	\$78
TOTAL			\$8,500	\$410	\$8,911
COST SHARE INFORMATION (Percent)			95%	5%	

*Kansas' Negotiated Cost Rate (Salary + Fringe Benefits x %=Indirect Cost)

** There is a shortage of state vehicles. We give the option of renting a vehicle or using personally owned vehicles. If renting we pay for the fuel and if a personal vehicle is used we pay mileage