This Work Plan reflects a cooperative relationship 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 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.

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 forty-four sites with one dry funnel trap at each site in fifteen southern counties using a seasonal staff person from June to August. The traps will be placed in the southeastern counties focusing on areas around saw mills, collection points, plantations and reservoirs with walnut trees. Traps will be check every 1-2 weeks.

For walnut twig beetle (*Pityophthorus juglandis*), the state entomologist will screen targets and then send targets to a qualified USDA-APHIS-PPQ identifier.
County | Number of traps
---|---
Butler | 4
Chase | 4
Chautauqua | 1
Cowley | 4
Elk | 1
Greenwood | 1
Harvey | 4
Lyon | 7
Marion | 1
McPherson | 2
Morris | 4
Reno | 3
Rice | 2
Sedgwick | 5
Sumner | 1
**Total** | **44**
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 seasonal 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 southeastern Kansas from June 2019 to August 2019.

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 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.
- 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?

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

- Trapping will occur during June to 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.
- Screening of suspect insects will be done by the state entomologist.
- Suspect target pests will be forwarded to a qualified identifier.

b. 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).

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?

• None planned

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?
Farm Bill Walnut Twig Beetle Survey Work Plan - March 1, 2019 – February 29, 2020

- GPS units
- Computers
- Alcohol
- Plastic bags
- Throw bag
- Jars
- 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
- Throw bag
- Jars
- 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?**
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:

All Reports will be completed in ezFedGrants. Reports include:

a. Narrative accomplishment reports in the frequency and time frame specified on the Agreement Award Face Sheet.


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

b. Describe the nature of their effort:

- KDA – trapping, training, screening, specimen collection, lure and trap maintenance (state entomologist, CAPS coordinator and temporary/seasonal employees)
- USDA-APHIS-PPQ – funding, support and pest identification

B. APHIS Will:

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

a. Include any significant Agency collaboration and participation

- 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.

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

- None planned

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

- Some bucket traps
- Lures
- Yellow sticky cards
- 70% Alcohol
- Ziploc bags
- Jars
- Twine for hanging traps
- 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: Butler, Chase, Chautauqua, Cowley, Elk, Greenwood, Harvey, Lyon, Marion, McPherson, Morris, Reno, Rice, Sedgewick, Sumner

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 that was obtained using the Approved Methods for Pest Surveillance. The National Agricultural Pest Information System (NAPIS) is the final repository for all Pest Detection and Cooperative Agricultural Pest Survey (CAPS) survey results. As such, all data generated from all Pest Detection/CAPS surveys will be entered into NAPIS at https://napis.ceris.purdue.edu

- 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 no later than the date that the final Accomplishment Report is due, otherwise a justification must be provided in the Accomplishment Report. If results have not been returned from an identifier or diagnostic lab by the time the Accomplishment Report is due, please also notify the National Operations Manager for Pest Detection.

All survey data performed by federal personnel in conjunction with this agreement should be provided to the State Survey Coordinator for entry into NAPIS.

Data will also be entered on the Walnut Twig Beetle Trap Result Reporting – STATE spreadsheet 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

- If you do not need additional assistance taxonomic assistance, list the person(s) or institution who will perform the identification/diagnostics, and do not check B.

- If you need assistance, check B.

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

OR

B. ☑ Request for taxonomic support.

- For walnut twig beetle confirmation.

VII) SURVEY SUMMARY FORM

A Survey Summary Form must be completed to summarize all CAPS surveys funded by the Farm Bill line item.

Lindgren Funnel Trap:
Walnut Twig Beetle (Pityophthorus juglandis)

VIII) SIGNATURES

Detailed Farm Bill Financial Plan

PROJECT: Walnut Twig Beetle Survey
COOPERATOR NAME: Kansas Department of Agriculture  
AGREEMENT NUMBER:  
TIME PERIOD: March 1, 2019 – February 29, 2020

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

<table>
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<tr>
<th>ITEM</th>
<th>APHIS FUNDS</th>
<th>COOPERATOR FUNDS (Show even if zero)</th>
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<tr>
<td>PERSONNEL:</td>
<td>Hours</td>
<td>Salary</td>
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<td>KDA staff - Paid by Cooperator funds (based on average hourly wage for permanent employees)</td>
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<td>FRINGE BENEFITS:</td>
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<tr>
<td>SUV rental for temporary staff for 2 months/seasonal staff @ $750/month (shortage in state vehicles)**</td>
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<tr>
<td>EQUIPMENT:</td>
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<td>Supplies - throw bags, plastic bags, rope, etc</td>
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<td>$51</td>
<td>$0</td>
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<tr>
<td>Fuel - 3,367 miles per month/20mpg x $3.00/gallon - for seasonal staff rental vehicles**</td>
<td>$505</td>
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<td>$1,010</td>
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<tr>
<td>Lure ($3.10 each x 50)-44 traps - lure comes in 25/pack and shipping</td>
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<td>50</td>
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<td>-------------</td>
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<td>Key Staffing (1 temporary staff) $20.00 x 320 hours (includes data entry time and trap prep)</td>
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<td>Shipping samples to identifier</td>
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**TOTAL DIRECT COSTS**

| | **$9,400** | **$499** | **$9,899** |
| INDIRECT COSTS ** | Percent (enter as decimal not %) |
| (18.2% on Total Direct Cost of salary and fringe benefits)* | 0.182 |
| | **$499** | **$0** | **$91** | **$91** |

**TOTAL**

| | **$9,400** | **$590** | **$9,990** |

**COST SHARE INFORMATION**

| (Percent) | 94% | 6% |

*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.