

NAISMA Weed Free Forage & Gravel Certification Program:

Supporting Multi- Jurisdictional Cooperation

**Belle Bergner, Executive Director
Marsha Watland, Becker County, MN; NAISMA Weed Free
Forage and Gravel Committee Chair**

**North American Invasive Species
Management Association**



STOP INVASIVE SPECIES
IN YOUR TRACKS.

Overview

- **What** is the Weed Free Forage and Gravel Program and participation requirements
- **How** does the Weed Free Forage and Gravel Pit Certification Work; Mulch standards being developed
- **Who** can be certified to be a Weed Free Forage or Gravel Inspector
- **When** you can take the training

Who We Are

North American Invasive Species Management Association

Mission: to support, promote, and empower invasive species prevention and management in North America.

Vision: North America's lands and waters are protected from invasive species.

26 Years old: In 2012, name changed from NAWMA to NAISMA to include all taxa.

What We Do

- Promote International Standards
- Support standards, regulation, and certification of weed-free forage, mulch, and gravel producers
- Outreach and Awareness: PlayCleanGo
- Professional Development
- Annual Conference
 - Saratoga Springs, NY: Sept 30, 2019 – Oct 3, 2019



**STOP INVASIVE SPECIES
IN YOUR TRACKS.**

PlayCleanGo.org

Weed Free Forage and Gravel Program

- Started in 1993
- Grassroots group of Western County Land Managers came together
- Goal: ensure that the same noxious weeds were being controlled across jurisdictional boundaries

Weed Free Forage and Gravel Program

- A cooperative program that sets standards for inspection and certification of forage, mulch and gravel producers
- Provides a unified system of inspection and training that is standardized across jurisdictional boundaries.



The Challenge

- Forage and gravel can be pathways of spread for invasive species
- Federal lands and increasing areas of state lands require WFF&G



The Opportunity

- Local county and state inspectors are skilled at being able to identify invasive species
- All states and counties have Weed Laws or other regulations; Federal lands require WFF&G
- No other continent-scale, cooperative program exists for these pathways

The Solution

- Agreed-upon standards
- Cross-jurisdictional agreement and cooperation
- Independent organization, NAISMA, coordinates MOUs and maintains certification records

Weed Free Forage and Gravel Standards and Certification Program

- The only international standards program for these specific pathways
- Relies on cooperation and agreement to uphold standards across jurisdictions

Certification Program

Memorandum of Understanding (MOU)

Weed Free Forage & Gravel
Minimum Certification Standards

Certification Training

Certificate of Inspection Minimum
Standards

Transit Certificate Minimum Standards

Who Is Involved?

- State agency (usually Department of Agriculture) holds MOU with NAISMA
- County Weed Control Staff or Crop Improvement Association Inspectors take the NAISMA training

Who Is Involved?

- NAISMA staff coordinate MOUs, maintain records, and facilitate inspector trainings and certifications
- Guided by a volunteer committee of NAISMA general members and board members
- Changes to the WFF&G program standards must be agreed upon by the committee and voted and approved by the NAISMA membership







North American Invasive Species Management Association
Weed Free Forage and Gravel Program

Memorandum of Understanding

The North American Invasive Species Management Association (NAISMA) Weed Free Forage and Gravel Committee requires the use of this memorandum of understanding to participate in the Weed Free Forage and Gravel Program. Sponsoring State or Provincial agencies or organizations are asked to enter agreement with NAISMA to sponsor the Weed Free Forage and/or Weed Free Gravel Program in their State or Province. This MOU may be printed out and completed with the appropriate information relevant to your state or province.

- Scope of the MOU: (Check box)
- Weed Free Forage
 - Weed Free Gravel
 - Weed Free Forage and Gravel

MEMORANDUM OF UNDERSTANDING

BETWEEN THE NORTH AMERICAN INVASIVE SPECIES MANAGEMENT ASSOCIATION
And

1. Parties. The Memorandum of Understanding hereinafter referred to as "MOU" is made and entered by and between the _____, whose address, phone and email contact is: _____

and The North American Invasive Species Management Association (NAISMA) whose address, phone and email contact is 2025 N. Lake Dr., Milwaukee, WI 53202; 414-967-1350; bbergner@naisma.org

2. Purpose. This agreement, between the above-named parties, is entered to provide some assurance that the forage/mulch or gravel/soil products are certified to be free of weed species named on the applicable NAISMA Weed Free Certification Standards.

3. Term of MOU. This MOU shall commence upon the day last signed and executed by the duly authorized representative of the parties to this MOU, and shall remain in full force and effect until terminated. Termination of this MOU may be made without cause, by either party upon thirty (30) days formal notice.

4. Payment. No payment shall be made to either party by the other party as a result of this MOU.

5. Responsibilities. Responsibilities of NAISMA and the _____ shall be to provide uniform standards and policy of inspection, certificate of inspection, and transit certification procedures as applicable. The designated authority shall complete the required inspection and transit forms per the NAISMA standards.

MOU
NAISMA
Weed Free
Forage &
Gravel
Program



Forage & Gravel Producers Certification

- WFF and WFG each have their own Minimum Certification Standards
- Appendix A: NAISMA WFF & G Prohibited Weed List is the same.
 - To change list the Procedure for Species considered for addition or deletion must be followed which is listed under Appendix A.

Weed Free Forage Minimum Certification Standards

- Crop Improvement Agency & Other Authority may uphold standards as approved by NAISMA
- Updated Standards 10/17/18

NAISMA WEED FREE FORAGE MINIMUM CERTIFICATION STANDARDS

Revised 1/24/97, 9/16/97, 8/8/99, 10/30/02, 10/20/03, 9/21/04, 1/05/05, 10/18/06, 3/31/15, 02/01/16, 10/25/17

INTRODUCTION

There is a growing demand in North America for the use of certified weed free forage and mulch as a preventative program in integrated weed management systems to limit the spread of noxious weeds.

The Standards are designed to:

- Provide some assurance to all participants that forage certified through this program meets a minimum acceptable standard;
- Provide continuity between the various provinces and states in the program;
- Limit the spread of noxious weeds.

Participating jurisdictions may wish to add to these standards within their specific state or province, but must meet the minimum standards outlined in this document to be recognized by NAISMA.

NAISMA Forage Certification Standards may not meet the forage quality standards adopted by the Hay Marketing Task Force of the American Forage and Grassland Council.

DEFINITIONS Revised 1/24/97, 10/30/02, 5/15/08, 9/31/15

Certification

Inspector certification is available at the NAISMA Conference and online. An administrative fee may be applicable for this certification.

Certification Markings

NAISMA approved tags, purple and yellow twine, and galvanized wire.

Cubed hay

Harvested with equipment which forms the hay into small compact self-binding units. These are not considered pellets as defined in this document, and therefore the field of origin must be certified.

Designated authority

- Representative of that state or province's department of agriculture
- Manager of a state, provincial, or local government responsible for managing legislated weed species within their jurisdiction (ex: Weed Supervisor, Weed Superintendent, Ag. Fieldman)
- University Extension Agent

Certification Training

Availability:

- Annual Conference
- Online Year Round

Weed Free Forage

- **Appendix B:** Inspection Certificate Standards:
Requires all 13 areas for forage.
- **Appendix C:**
 1. Transit Certificate Minimum Standards.
 2. Only Original Print / Digital Copy
approved by
Designated Authority Accepted. Accompanies
Certified Forage.

Sample Form for WFF Certificate Minimum Standard Requirements Appendix B: Page 4

- Each WFF MOU has
their own Certificate
of Inspection.

NAPCS/WDA - 69.02 Inspection Date _____ Date: _____
Producer No: _____ NAPCS No. WFF _____

Certificate # _____

WYOMING CERTIFICATE OF INSPECTION
Note: This is not a Transit Certificate

County Weed and Pest Control District _____ Phone: 307- _____

This certifies that the field(s) described herein, have been inspected and found to meet the minimum certification Standards. The objective of this program is to help prevent and stop the spread of weeds which is free of the potential for transport and dispersal of listed weed species.

Meets NAISMA Standards

Producer: _____ **Producer Contact** _____ Phone: _____
Address _____ City _____ State _____ ZIP _____

Field(s) Description: _____ **Legal Description** _____

Acres Inspected: _____ **Hectares, Acres** _____ **Size** _____
Tons/Bales _____ **lbs. or tonnage** _____ Package Type: _____ **Type of Forage** _____
Marking System _____ **FORAGE PRODUCT** _____

A. EXCEEDS requirements of the North American Forage Certification Standards and contains no prohibited or noxious forage plant material. No other plants or weeds noted.

B. MEETS requirements of the North American Forage Certification Standards. This forage contains variable amounts of annual weeds and/or other weeds not listed as prohibited or noxious.
(Weeds noted): _____

C. COMPLIES with MINIMUM requirements of the North American Forage Certification Standards.
This forage contains variable amounts of Prohibited or Noxious weed species which are immature, (no viable seed) when harvested, or were treated to prevent seed formation. These plant parts, although not usually desirable in the forage product, are not considered able to begin new infestations.
(Weeds noted): _____

Additional Comments: _____ **Comment Section** _____

Producer agrees to be on the "certified forage for sale" list.

REQUIREMENTS

Forage must be certified within 10 days of harvesting; and inspected in the Field of Origin by proper officials. Inspection shall include surrounding ditches, fence rows, easements, roads, ect. and loading areas and stackyards.

Certificate shall document included information based on reasonable and prudent inspection. **Expiration Date** _____ in effect for the current season or as specified. Termination Date _____

Certified by: _____ **Designated Authority Signature** _____

Disclaimer: _____
_____ of the Hay Marketing Task Force of the American Forage Producers Association certifies that any forage from non-certified field(s) shall constitute a violation of the Wyoming Weed and Pest Act and prosecution charges may be filed with the proper County Attorney.

* This certificate is Not Transferable, and will not be accepted by Law Enforcing Agencies or Port of Entry Authority. End User Must Have the original white form (NAPCS/WDA- 70) Transit Certificate (no photo copies), or forage must be identified with an approved NAPCS marking system such as special twine or tags. For additional information call the District in your area or the Wyoming Department of Agriculture at 307-777-6585.

White copy - Producer, _____ **Designated Authority Contact** _____
Yellow copy _____



Weed Free Forage

- **Appendix D: *Each MOU Sets Their Method of Marking***

Certification Marking

1. Twine: Purple & Yellow
2. Galvanized Baling Wire
3. Forage Tag

- **Appendix E:**
Field Inspections Minimum Requirements

Gravel Inspection Certification Program



Gravel Inspection Form Minimum Requirements

Appendix B:

- Inspection
Minimum
Standards

Date of Inspection: Inspection Date **Permit Number:** Inspection Number

Inspection of gravel pit, mining operation area, aggregate storage area and surrounding lands.

This certifies that the area described below has been inspected per the NAISMA program is to help prevent the spread of the Prohibited Weeds by providing gravel propagative parts of weed species.

Meets NAISMA
Standards

Owner/Operator: Gravel Pit Owner/Manager **Phone:**

Contact Information

Address: **State/Province:** **Postal Code:**

Pit Address: **City:** **State/Province:** **Postal Code:**

Parcel Number: **Township:** **Section:**

Legal
Description

Number of acres/hectares inspected:

Acres/Hectares

Level of Certification:

EXCEEDS requirements of the NAISMA standards and contains only the specified gravel/borrow material with no plant material noted.

MEETS requirements of the NAISMA standards. This material contains variable amounts of plant material not listed as prohibited weeds.

MINIMUM requirements of the NAISMA standards are met*. This material contains variable amounts of prohibited weeds which were immature or controlled to the satisfaction of the designated authority to prevent propagation.

FAILED

Weeds Noted/Comments:

Comment Section

Requirements

Material must be certified to the NAISMA standards and inspected by the designated authority. Inspection shall include, but not be limited to surrounding ditches, top soil/gravel/sand piles, fence rows, roads, easements, rights-of-ways, working areas, storage areas and buffer zones surrounding the area. Certification shall be based on a reasonable and prudent visual inspection.

This certification terminates on: Date: **Certification Termination Date**

Designated Authority: **Title:**

Signature: **Phone:**

Designated Authority
Contact Information

*Disclaimer: Certified material may have viable seeds from previous years. Plant seeds are not killed by registered pesticides. Some Prohibited Weeds can reproduce by plant parts other than seeds.

Sample Weed Free Gravel Certificate of Inspection

Incorporates state
or province
requirements.



Becker County Gravel Pit Certificate of Inspection (Enforcing Jurisdiction)



Date of Inspection: _____ Registration Number: use parcel number

Inspection of gravel pit, mining operation area, aggregate storage area and surrounding lands.

This certifies that the area described below has been inspected per the NAISMA standards. The objective of the program is to help prevent the spread of the Prohibited Weeds by providing gravel/borrow material that is free* of propagative parts of weed species. *MACAI requires two inspections a year.

Owner/Operator _____ Phone: _____

Address: _____ City: _____ State: _____ Zip Code: _____

Pit Information: Township: _____ Section: _____ Parcel Number: _____

Township: _____ Section: _____ Parcel Number: _____

Number of acres inspected: _____

Level of Certification:

____ EXCEEDS requirements of the NAISMA standards and contains only the specified gravel/borrow material with no plant material noted.

____ MEETS requirements of the NAISMA standards. This material contains variable amounts of plant material not listed as prohibited weeds.

____ MINIMUM requirements of the NAISMA standards are met*. This material contains variable amounts of prohibited weeds which were mature and controlled to the satisfaction of the designated authority to prevent propagation.

____ FAIL

Weed	Comments

Requirements

Material must be certified to the MACAI & NAISMA standards and inspected by the designated authority. Inspection shall include, but not be limited to surrounding ditches, top soil/gravel/sand piles, fence rows, roads, easements, rights-of-ways, working areas, storage areas and buffer zones surrounding the area. Certification shall be based on a reasonable and prudent visual inspection.

This certification terminates on: Date: 5/20/2019

Becker County Agriculture Inspector: Marsha Watland Date: _____

Signature: _____ Phone: 218-846-7360

*NAISMA – North American Invasive Species Management Association

*Minnesota Association of County Agricultural Inspectors

*Disclaimer: Certified gravel/borrow material may have viable seeds from previous years. Plant seed is not killed by registered pesticides. Certification consists of a prudent and visual inspection for that year certification for this pit.

New Gravel/Borrow Pit Inspection

Inspect Buildings

Border: walk or drive

Inspect:

- Entire Border
- Around building & Equipment
- All storage areas
- All work areas

**Material may not be moved from site till there is a completed signed inspection.*

080233000

Detroit

Permitted Gravel Pit Area

13

Inspect Work Areas
-Pasture

080229000

New Gravel/Borrow Pit Inspection



Inspection: Meet with owner to go over area.
Minimum of one inspection required.

State/Province are not limited to one inspection, may require more inspections to meet State/Province standards.



↑
1. First Inspection-check entire border. Follow safety protocol. 8/4/17

2. Second Inspection-follow safety protocol. 9/8/17
→



New Gravel/Borrow Pit Inspection

Roads & parking areas
free of prohibited
weeds



All equipment, crushers and working areas must be inspected.

New Gravel/Borrow Pit Inspection



All piles, equipment areas, work areas, borders and roadways shall be inspected.

9/8/17



8/4/17 NE Corner

Certified Weed Free Forage: Safe for Transport



Prohibited Noxious Weed

Procedure for species considered for addition or deletion.

1.

Petition must be sent to the NAISMA Weed Free Forage and Gravel (WFF&G) Committee from a designated authority as defined in these standards formally requesting a species be added or removed from listing to Appendix A.

Prohibited Noxious Weed

Procedure for species considered for addition or deletion.

2.
Petition shall contain a risk assessment of species proposed to be added with information on its potential and/or actual impacts to natural resources at a state/provincial and/or regional level.

Prohibited Noxious Weed

Procedure for species considered for addition or deletion.

3.

Petition shall contain a risk assessment of species proposed for deletion with information on why the species is no longer considered a potential and/or actual threat to natural resources at a state/provincial and/or regional level.

Prohibited Noxious Weed

Procedure for species considered for addition or deletion.

4.

Designated Authority can only vote once and can vote by proxy.

Prohibited Noxious Weed

Procedure for species considered for addition or deletion.

5.

Petitioner shall send the formal petition to add or delete a species to the NAISMA WFF&G Committee Chair at least **90** days before the committee meets at NAISMA's Annual General Meeting (AGM), generally held annually in September.

Prohibited Noxious Weed

Procedure for species considered for addition or deletion.

6.

NAISMA WFF& G Committee Chair will send the petition to committee members and MOU holders at least 60 days in advance of NAISMA's AGM.

WFF & G Committee Prohibited Noxious Weed

Process of presenting recommendations for vote

7.

NAISMA WFF & G Committee will formulate a recommendation to support or deny the petition to be presented and voted on by MOU holders. The decision (by simple majority) is then presented to the NAISMA Board of Directors (BOD) for their consideration prior to NAISMA's AGM.

WFF & G Committee Prohibited Noxious Weed

Process of presenting recommendations for vote

8.

If the NAISMA BOD supports the Weed Free Forage Committee recommendation on the petition, it will be presented at NAISMA's AGM for approval/rejection by NAISMA's membership.

9.

The Minimum Standards will be modified after the above procedures have been carried out.

NAISMA NEW PROGRAM DEVELOPMENT

WEED FREE MULCH

- Development is initiated in WFF & G Committee
- Follows previous steps 7-9



Program Fees

- Provides minimal support for program administration, communications, testing, and program improvements.
 - Annual fee for MOU holder: \$100
 - Three year certification fee of \$30 for each designated authority inspector. No fee when certified at Annual Conference.

- Alabama
- Alaska
- Alberta
- California
(Inyo-Mono and Shasta Counties)
- Colorado
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Michigan
- Minnesota
- Missouri
- Montana
- Montana
- Nebraska
- New Mexico
- Nevada
- North Carolina
- North Dakota
- Ohio
- Oregon
- South Dakota
- South Carolina
- Utah
- Washington
- West Virginia
- Wisconsin
- Wyoming

Participating States and Provinces



How to Become a Certified Inspector

- Contact your local, relevant agency (Department of Agriculture, Crop Improvement Association, or Other Agency)
- Agency fills out MOU with NAISMA
- Agency contact informs NAISMA of preferred training method – online or in person at annual conference

Summary

Weed Free Forage and Gravel Standards and Certification Program

- The only international standards program for these specific pathways
- Relies on cooperation and agreement to uphold standards across jurisdictions
- Ability to add State Noxious Weed Lists to



SAVE THE DATES
2019 ANNUAL CONFERENCE
September 30 – October 3, 2019
Saratoga Hilton | Saratoga Springs, NY
naisma.org/annual-conference



Department of
Environmental
Conservation

Join Us

- If you are not a current partner and are interested in participating, contact us.

Belle Bergner, Executive Director

414-967-1350

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Marsha Watland, WFF&G Coordinator

218-846-7360

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Thank you



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Marsha Watland, WFF&G Chairperson 218-846-7360
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naisma.org



NORTH AMERICAN INVASIVE SPECIES
MANAGEMENT ASSOCIATION

Our mission is to support, promote, and empower invasive species prevention and management in North America.

www.naisma.org

SLF SURVEY BEST PRACTICES

Leo Donovall, SLF Program Coordinator

USDA APHIS PPQ FO - Pennsylvania



Visual Detection Protocol

- Survey focal point: single 6" or greater Tree-of-Heaven (*Ailanthus altissima*)
- Inspect all woody and non-living material within 10-meter radius (seasonally appropriate)
- Look for appropriate life stage for time of year
 - Look for signs and symptoms: honeydew accumulation, sooty mold growth, fungal mats, wilting, weeping, flagging
- Old egg masses may be present throughout the year



Adults: July - December



**Egg Laying:
September - November**



Eggs: October - June



**Fourth Instar:
July - September**



Third Instar: June - July



Second Instar: June - July



**Hatch and 1st Instar:
May - June**

SLF Life Cycle



Time to use management practices.

SPOTTED LANTERNFLY MANAGEMENT CALENDAR

	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
Destroy egg masses												
Destroy most <i>Ailanthus altissima</i> trees ¹												
Treat most <i>Ailanthus</i> trees with herbicide ^{2,3}												
Use sticky bands to destroy nymphs												
Treat <i>Ailanthus</i> trap trees with systemic insecticides ³												
Registered contact insecticides may be effective ³												
Avoid moving gravid (fertilized) females ⁴												
Avoid moving viable egg masses ⁴												

PEDOMINANT LIFE STAGE PRESENT- (one generation per year in Pennsylvania in 2015 and 2016)

eggs												
nymphs												
adults												

¹ Destroying all *Ailanthus* trees (Tree of Heaven) may result in spotted lanternfly moving to surrounding plants and increase the pest pressure on them. It is recommended about 10% of *Ailanthus* trees are left alive to serve as trap trees to attract the spotted lanternflies. Leave only male trees if possible.

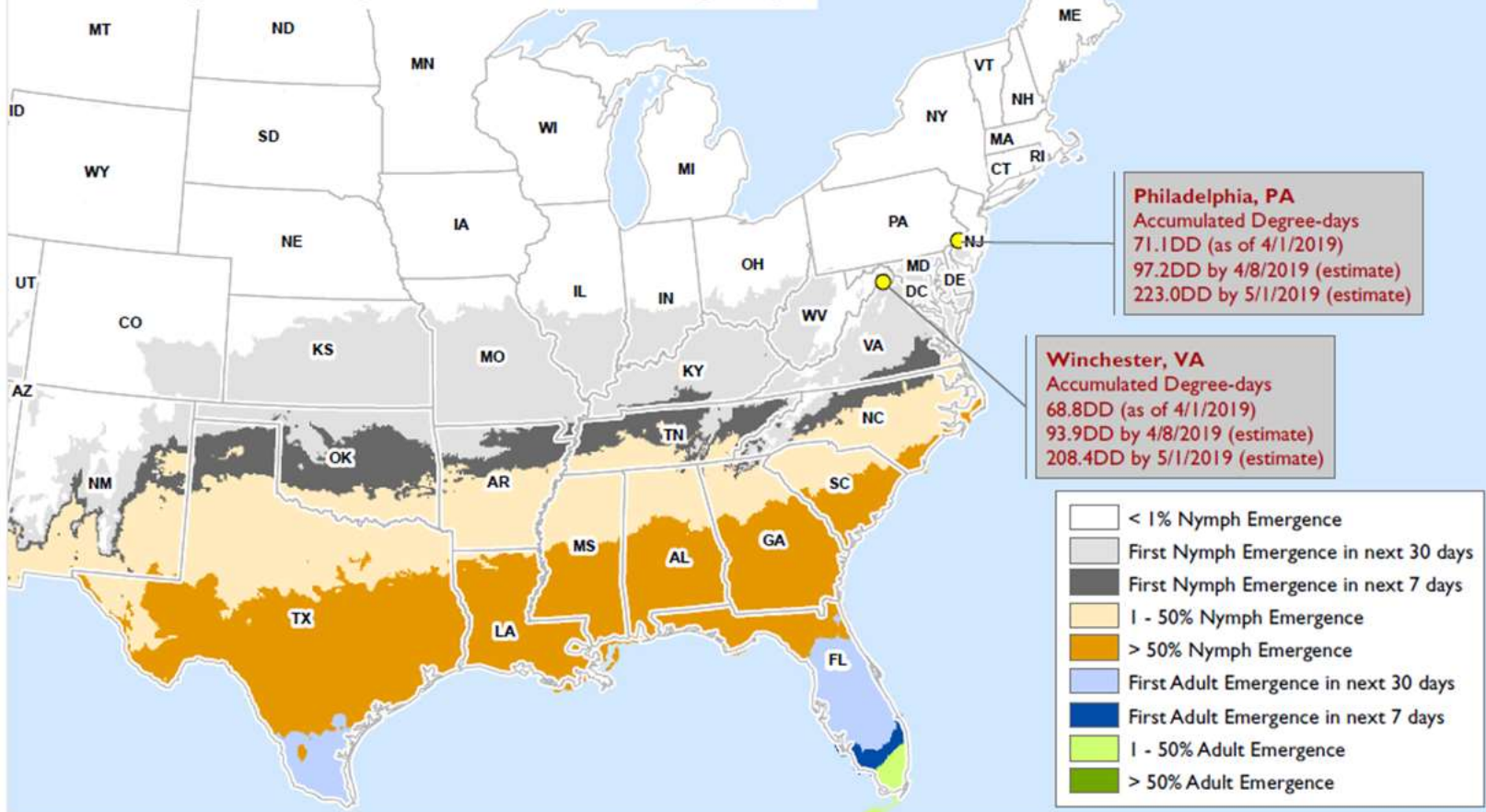
² *Ailanthus* trees will re-sprout vigorously from cut stumps and roots, unless they are treated with a systemic herbicide. Repeat applications of herbicide may be necessary.

³ ALWAYS READ HERBICIDE AND INSECTICIDE LABELS AND FOLLOW THE DIRECTIONS

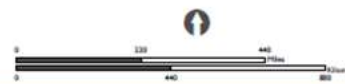
⁴ Before you move outdoor items from the quarantine area, check for spotted lanternfly egg masses, adults, and nymphs and destroy them. Use the checklist at http://www.agriculture.pa.gov/Protect/PlantIndustry/spotted_lanternfly/Documents/SLF%20Checklist%202011-12-2014.pdf

Lycorma delicatula (White): Spotted Lanternfly

First nymphs are likely to be observed at 200 accumulated degree days.
 Peak nymph emergence would likely to occur at 355 accumulated degree days.
 First adults are likely to be observed at 1160 accumulated degree days.
 Peak adult emergence would likely to occur at 1584 accumulated degree days.



Lower Threshold Temperature: 8.14°C
 Upper Threshold Temperature: 30.0°C



Data Source: SAFARI, 2019; PPO, 2017; NDFD, 2019; PRISM, 2019
 Coordinate System: USA Contiguous Albers Equal Area Conic
 Date Created: April 2, 2019
 NCSU CIPM
 1720 Varsity Dr. Suite 110
 Raleigh, NC 27606
 USDA APHIS PPO
 Sacramento, CA
These data and all the information contained herein, have been collected by the U.S. Department of Agriculture's National and Plant Health Inspection Service (APHIS), or by its employees or APHIS field, or national government personnel only and is the sole property of APHIS. See full disclaimer here: aphis.usda.gov/hq/nppl/nppl-disclaimer

Tree-of-Heaven

Ailanthus altissima



Rail, Truck Lines and Intermodal Centers



(C) Bay Fisher Photo



INVASION OF THE SPOTTED LANTERNFLY!

TREE OF HEAVEN

AND THEY BROUGHT THE PEST FROM HELL!



Alan Moores
© DIGITAL FIRST MEDIA





THANK YOU

Images Provided By:

Emelie Swackhamer, PSU
Lawrence Barringer, PDA
Tiffany Mauro, PPQ
Karen Williams, PPQ
SLF Field Crews





2018 CAPS – PPQ – Farm Bill Surveys - Basics

2018 Measures	CAPS	PPQ	Farm Bill	FB Natl Priority
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CAPS & PPQ: Pest Detection funding
Farm Bill: Goal 1 Survey

↑ = increase; ↓ = decrease, ↔ = equal to 2017 metric

2018 Pest Detection Surveys

2018 Measures
Number of 2018 Priority Pests
Number Priority Pests with Survey
Percent Priority Pests with Surveys *
Number Priority Pests with No Survey
Additional Pests Targeted for Survey
Unique Pests Targeted for Survey *

↑ = increase; ↓ = decrease, ↔ = equal to 2017 metric

2018 Farm Bill Surveys

2018 Measures
Number of 2018 Priority Pests
Number Priority Pests with Survey
Percent Priority Pests with Surveys *
Number Priority Pests with No Survey
Additional Pests Targeted for Survey
Unique Pests Targeted for Survey

Removed those pests from the Priority Pest List that appear only in CAPS surveys

* Removed those surveys not defined as National Priority

↑ = increase; ↓ = decrease, ↔ = equal to 2017 metric

2018 Pest Surveillance Surveys

2018 Measures
Number of 2018 Priority Pests
Number Priority Pests with Survey
Percent Priority Pests with Surveys *
Number Priority Pests with No Survey
Additional Pests Targeted for Survey
Unique Pests Targeted for Survey *

⌘ Removed those surveys not defined as National Priority

↑ = increase; ↓ = decrease, ↔ = equal to 2017 metric



2018 CAPS Surveys & Funding

Priority Surveys	#	Funding
Corn Commodity Survey	12	\$ 227,961
Cotton Commodity Survey	2	\$ 42,997
Cyst Nematode Survey	3	\$ 33,737
Woodborer/Bark Beetle Survey	20	\$ 618,146
Oak Commodity Survey	5	\$ 81,026
Pine Commodity Survey	4	\$ 147,549
Small Grains Commodity Survey	7	\$ 121,991
Soybean Commodity Survey	7	\$ 63,070
Terrestrial Mollusk Survey	6	\$ 94,938
Tropical Host Commodity Survey	3	\$ 50,832
Totals	69	\$ 1,482,247

State Bundled Surveys	#	Funding
Citrus Commodity Survey	1	\$ 5,200
Exotic Phytoplasma Survey	1	\$ 18,542
Field Crops Pest Survey	7	\$ 137,667
Forest Pest Survey	13	\$ 396,224
General Nematode Survey	3	\$ 83,551
Nursery & Retail Plants Pest Survey	19	\$ 397,159
Palm Pest Survey	1	\$ 6,000
Rice Pest Survey	2	\$ 30,550
Solanaceous Crops Survey	1	\$ 3,000
Vegetable Crops Pest Survey	3	\$ 42,801
NY Tribes	2	\$ 10,000
Totals	53	\$ 1,130,694

Total CAPS Survey	122	\$ 2,612,941
Total CAPS Infrastructure	50	\$ 3,693,843
Identification Support	4	\$ 248,384

Total CAPS	\$ 6,555,168
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2019 CAPS Surveys & Funding

Priority Surveys	#	Funding
Corn Commodity Survey	14	\$ 340,131
Cotton Commodity Survey	2	\$ 31,006
Cyst Nematode Survey		
Woodborer/Bark Beetle Survey	15	\$ 519,124
Oak Commodity Survey	7	\$ 121,979
Pine Commodity Survey	3	\$ 124,660
Small Grains Commodity Survey	8	\$ 160,641
Soybean Commodity Survey	7	\$ 72,368
Terrestrial Mollusk Survey	6	\$ 120,248
Tropical Host Commodity Survey	3	\$ 54,772
Totals	65	\$ 1,544,929

State Bundled Surveys	#	Funding
Citrus Commodity Survey	1	\$ 5,200
Exotic Phytoplasma Survey	2	\$ 24,292
Field Crops Pest Survey	5	\$ 88,174
Forest Pest Survey	12	\$ 297,354
General Nematode Survey	2	\$ 13,424
Nursery & Retail Plants Pest Survey	17	\$ 449,691
Palm Pest Survey	1	\$ 6,000
Pulse Crops Pest Survey	1	\$ 27,296
Rice Pest Survey	3	\$ 64,496
Solanaceous Commodity Survey	1	\$ 3,000
Stone Fruit Commodity Survey	1	\$ 22,519
Vegetable Crops Pest Survey	2	\$ 34,526
NY Tribes	2	\$ 8,000
Totals	50	\$ 1,043,972

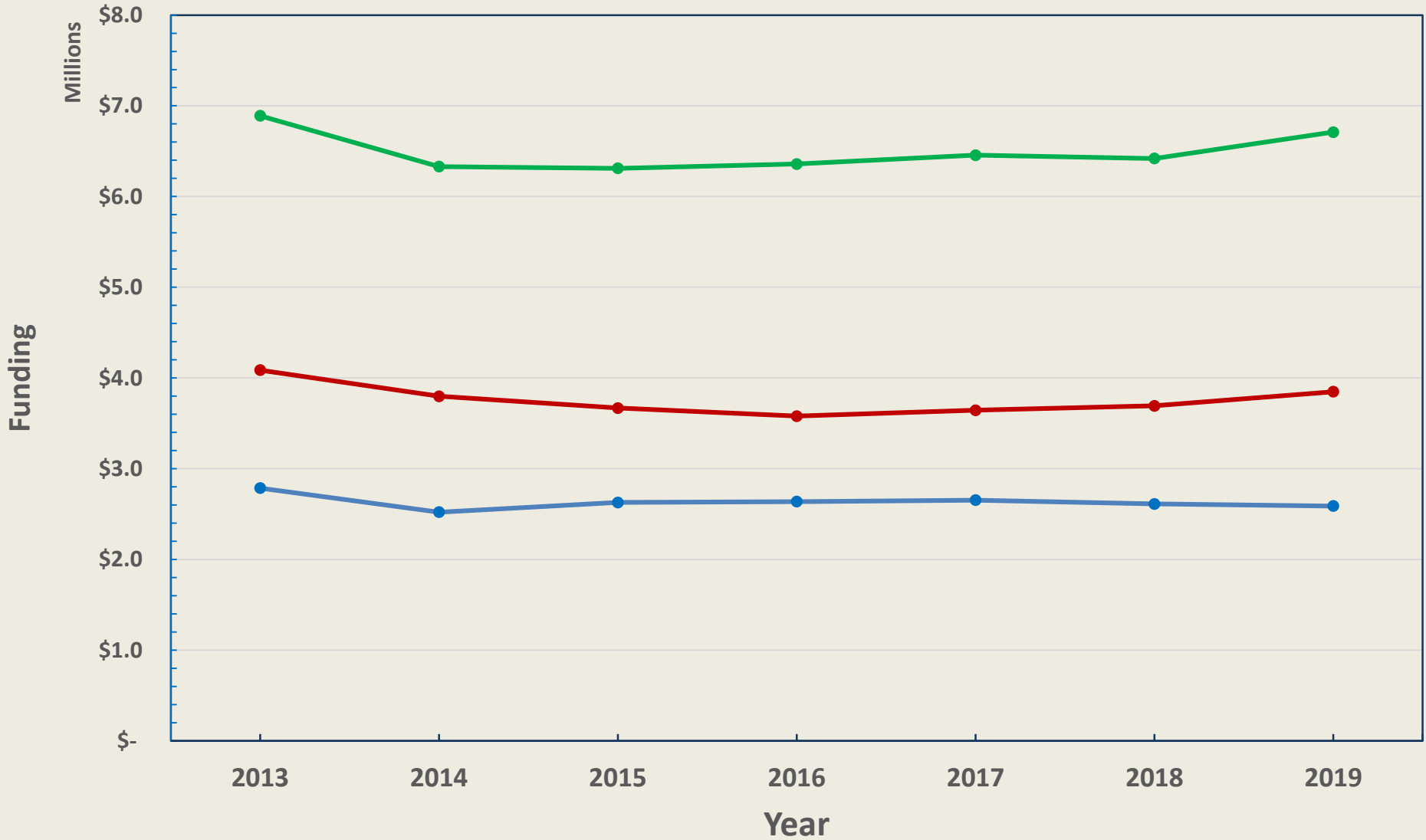
Total CAPS Survey	115	\$ 2,588,901
Total CAPS Infrastructure	51	\$ 3,848,944
Identification Support	4	\$ 232,500

Total CAPS	\$ 6,670,345
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CAPS Funding 2013 - 2019

● Total CAPS ● Infrastructure ● Surveys





Pest Detection Survey Support

PDEP Support	2015	2016	2017	2018	2019
CERIS, Purdue	\$ 460,917	\$ 475,000	\$ 475,000	\$ 475,000	\$ 475,000
USDA, ARS, SEL	\$ 150,500	\$ 150,500	\$ 150,000	\$ 150,000	\$ 150,000
Survey Supplies	\$ 160,000	\$ 225,000	\$ 210,000	\$ 305,320	\$ 425,000
Otis Lab, Lures	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
	\$ 771,417	\$ 900,500	\$ 885,000	\$ 980,320	\$ 1,100,000



2017-18 Farm Bill National Priority Surveys

Surveys	2017		2018	
	#	Funding	#	Funding
Asian Defoliator Survey	13	\$ 1,165,702	11	\$ 1,149,394
Cyst Nematode Survey	8	\$ 345,188	6	\$ 209,700
EWB/BB - Forest Pests	9	\$ 435,205	14	\$ 499,800
Grape Commodity Survey	17	\$ 725,690	13	\$ 596,474
Nursery and Ornamental Survey	2	\$ 185,000	5	\$ 261,000
Orchard / Apple / Fruit Survey	11	\$ 460,852	9	\$ 327,935
Palm Commodity Survey	10	\$ 676,146	6	\$ 340,000
Pathway Survey for Pests of Multiple Agricultural Systems	2	\$ 135,220	5	\$ 331,000
Small Fruit / Mixed Berry Commodity Survey	5	\$ 134,510	5	\$ 135,344
Solanaceous/Tomato/Potato Commodity Survey	18	\$ 684,777	16	\$ 637,134
Stone Fruit Commodity Survey	10	\$ 542,768	9	\$ 732,568
Terrestrial Mollusk Survey	1	\$ 18,145	4	\$ 213,000
Vegetable Crops Pest Survey	1	\$ 10,838	4	\$ 48,705
Totals	107	\$ 5,520,041	107	\$ 5,482,054
Percent of Total G1S	56.0%	35.0%	56.6%	31.8%
Percent of Total Farm Bill	22.2%	10.2%	20.6%	8.8%

Cooperative Agricultural Pest Survey vs PPA 7721 G1S

- **2 Separate Programs**
- **2 Different Teams**
- **2 Separate Spending Plans**
- **2 Different Funding Sources**
- **2 Different Sets of Policies, Processes, etc.**
- **1 Early Pest Detection Mission**

- **What Could Go Wrong!?**

CAPS vs PPA 7721

- **What are the Challenges?**
- **How are things working?**
- **What are the impacts?**
- **What is good and what is not?**
- **How are decisions made in your state?**
- **What are your overall impressions?**
- **How would you make things better for your state?**

Pest Surveillance and the Detection of Exotic Pests In the United States



***John H. Bowers, Ph.D.
National Policy Manager – Pest Detection
USDA, APHIS
Plant Protection & Quarantine
Riverdale, MD***



USDA Cooperative Agriculture Pest Survey CAPS



NAPIS

National Agricultural Pest Information System

National CAPS Guidelines

- [Survey Plans/Guides/Manuals](#)

Organism Information

- [Pest News & Survey Activity](#)
- [State News & Survey Activity](#)
- [Biological Control Agents](#)
- [Soybean Rust: Maps Reports USDA SBR Site Spray](#)
- [Data Entry](#)
- [State Pest Lists](#)
- [Pest Risk Assessments](#) [04](#) [05](#) [06](#)

New Horizons

- [Emerging Pest Issues](#)
- [Biological Security](#)
- [Draft Commodity Survey For Review](#)
- [Safeguarding Report](#)

PPQ

- [PDMP Hot Issues](#)
- [SITC Pest Alerts](#)
- [SPRO Letters](#)
- [PPQ Fact Sheets](#)
- [APHIS Press Releases](#)
- [APHIS Environmental Manual](#)
- [CFR Domestic Quarantine Updates](#)
- [NAPIS-CAPS](#)

[What's New](#)

[Site Map](#)

[Report A Broken Link](#)

[Agriculture Federal Register](#)

[Site Search](#)

[Agricultural Links](#)

[CAPS Contacts](#)

[CAPS Committee Contacts](#)

[CAPS Committee Meetings & Documents](#)

[CAPS Roles/Responsibilities](#)

[Pest Detection](#)

[Management Program Staff](#)

[Napis Forum](#)

(you need to register)

[NAPIS Database](#)

(NAPIS account required)

[NAPIS Data File Format](#)

*NAPIS is a USDA/APHIS/PPQ/CAPS sponsored database within
the Center for Environmental and Regulatory Information Systems, Entomology Department, Purdue University.
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*Maintained by:
napis@ceris.purdue.edu*

USDA/CAPS Manuals, Documents, Survey Plans & Publications

| [Home](#) | [Pests](#) | [States](#) | [Agriculture Links](#) |

2008 National CAPS Guidelines

Suggested Steps to Choose Pests for Survey

- **CAPS National Survey Guidelines for 2008**

[includes links to appendices]

- [National Pests of Concern](#)
- [State Pests of Concern](#)
- [Hosts of Prioritized Pests](#)
- [Pest Risk Maps of Top 50 Pests](#)
- [Survey Methods and Diagnostics of Top 50 Pests](#)
(a link to the pest matrix is in the introduction)
- **Pest Prioritization Explained**

- **CAPS Agreements** [with links to forms]

CAPS Draft **Volunteer Guidebook** (PDF, 30 pgs)

- **Survey Plans**

Commodity

- Citrus: [Reference](#) [Survey Guide](#) Risk Maps
- Oak: [Reference](#) [Survey Guide](#)
- Soybean: [Reference](#) [Survey Guide](#)

National

- [Cactus Moth](#) May 2005 [PDA Guide](#) June 2005 33 pg pdf
- [Exotic Woodboring/Bark Beetles](#) 125 pg .pdf
- [Fruit Fly Exclusion and Detection Programs](#) Feb 2006
- [Karnal Bunt](#) 21 pg .pdf
- [State Coordinators](#) March 2004
- [Ralstonia](#) 2004
- [P. ramorum \(Sudden Oak Death\)](#) April 2007

- **Program Manuals - USDA**

- [Domestic Programs](#)

- **Previous National Guides**

CAPS 2003 Program Guidebook: [DOC](#) [PDF](#)

Eastern Region

- [2007 Eastern Guide](#) [PDF](#) [Past Years](#)
- [2006 Workplan Example\(s\)](#) [DOC](#)
- [Bark Beetle Submission Protocol](#) [DOC](#)

Western Region

- [2007 Western Guide](#) [Summary](#) [DOC](#) [Past Years](#)
[Appendix A](#) [Appendix B](#) [Appendix C](#)
[Appendices D - U](#)
- 2004 Area Surveys: [Rice](#) [Nematodes](#) [Tree Fruit](#)

- **Previous National CAPS Targeted Pests**

-[FY 2007 Target List PPQ](#)

-[FY 2006 Target List](#)

-[FY 2005 Target List-PRAs](#)

-[FY 2004 Target List-PRAs](#)

- **Other Related Publications**

- [CAPS Brochure](#)
- **Forms**
 - [Otis Lure Order](#) [2004]
 - [PPQ Specimen for Determination](#) #391 [MS-Word fillable form]

- **Reference Publications**

- [PPQ Fact Sheets](#)
- [APHIS Press Releases](#)
- [CFR Domestic Quarantine Updates](#)
- [Pest Detection and Management Programs \(PDMP\)](#)

CAPS

- [Home](#)
- [CAPS Directories](#)
- ▶ [CAPS Recognition](#)
- [National CAPS Committee](#)
- ▼ [Survey](#)
 - ▶ [Guidelines](#)
 - [Resources](#)
 - [Pest Lists](#)
 - [Approved Methods](#)
 - [Manuals](#)
 - [Supply Procurement](#)
 - [Archive](#)
- [Webinars](#)
- ▶ [Taxonomic Services](#)
- ▶ [Outreach](#)
- [NPAG Notices](#)
- [New Pest Response Guidelines](#)
- [Pest Tracker](#)
- [Partner Links](#)

Farm Bill

- ▼ [Farm Bill](#)
 - [2017 Farm Bill](#)
 - [2016 Farm Bill](#)
 - [2015 Farm Bill](#)

CAPS Resource and Collaboration Site






The Pest Detection program supports APHIS' goal of safeguarding U.S. agricultural and environmental resources by ensuring that new introductions of harmful plant pests and diseases are detected as soon as possible, before they have a chance to cause significant damage. A strong domestic agricultural pest detection system is an essential element in providing a continuum of checks from offshore preclearance programs, domestic port inspections, and surveys in rural and urban sites across the United States.... [Read more](#)

CAPS Recognition

Individuals receive recognition from their peers and the CAPS community for being continually engaged in the CAPS Program at a high level, and for their contributions and outstanding efforts in support of the CAPS Program in their states. The CAPS Recognition pages showcase the individuals and their achievements: [2017](#) [2016](#) [2015](#) [2014](#) [2010](#)



Welcome

	Ekaterina Nikolaeva enikolaeva@pa.gov	CAPS Coordinator Pennsylvania Department of Agriculture
<p>Katya Nikolaeva is Pennsylvania CAPS Coordinator with Pennsylvania Department of Agriculture. Katya received her PhD in Cell Biology from Moscow State University. In 2004, she came to PDA Plant Health Division as a PSU Postdoc to support department with development and deployment of modern diagnostic tools and to conduct state and national surveys for high-risk plant pathogens. Three years ago, she joined PDA Plant Health Division and now is serving as Plant Inspection Program Specialist and Molecular Plant Pathologist. Katya loves to travel inside the US and internationally. At home, she enjoys decorating, organic gardening, and canning food.</p>		
	Tom Gere tom.gere@state.sd.us	State Plant Regulatory Officer South Dakota
<p>Tom Gere has been with the SD Department of Agriculture for 13 years and is the Assistant Director of Division of Agricultural Services. He previously held the position of Agronomy Services Manager for the Feed, Fertilizer, Pesticide and Recycling programs within the department. He is currently a Certified Crop Advisor (CCA) and has a position on the SD CCA Board of Directors. He has been married for 18 years and has two sons, ages 16 and 13. He enjoys hunting, fishing, and golfing.</p>		
	Tiffany Pahs tpahs@agr.wa.gov	State Survey Coordinator Washington

CAPS Partner Login

Enter your Username and Password

Username or Email:

Password:

LOGIN

[Request New Password](#)

[Create a new user account](#)



QUICK LINKS



Data Req



Guidelines



Manuals



Pest Lists



Resources



Webinars

CAPS Program Resource and Collaboration Site

The Cooperative Agricultural Pest Survey (CAPS) pest detection program supports the [USDA Animal and Plant Health Inspection Service](#) (APHIS) as it works to safeguard U.S. agricultural and environmental resources by ensuring that new introductions of harmful plant pests and diseases are detected as soon as possible. Early detection often reduces the chances these pests have to cause significant damage.

[CAPS Introductory Guidebook](#) and [Trapping Videos](#) are now available.

The [CAPS Introductory Guidebook](#) is now available for the CAPS Community. The purpose of the CAPS Introductory Guidebook is to provide to those both new and seasoned an overview of CAPS program and operations that includes: the funding stream, organizational structure, general workflow, and various required tasks necessary for successful operation of a CAPS program in your state. In each section of the guide you will find descriptions of the tasks and even suggestions for best practices in accomplishing those tasks.

In addition to the CAPS Introductory Guidebook, three new trap construction and placement [videos](#) also are available. These cover the modification of the cross-vane panel trap, construction of the Lindgren multi-funnel trap, and the placement of these traps in the field. The Introductory Guidebook and trap videos were made possible through a Farm Bill-funded project with Texas A&M University.



UPDATES

[CAPS Introductory Guidebook](#) and [Trapping Videos](#) are now available.

Online Work and Financial Plan

Survey Summary Form functionality

Save as you go

Produce pdf

Ability to generate reports, metrics, etc.

Available for 2021 CAPS and PPA 7721

Pest Detection / CAPS Survey Work Plan - Fiscal Year 20__

Submitter Information

Cooperator

State

Project

Project funding source

Project Coordinator

Agreement number

Contact information

Address

Phone Fax

Email address

Work Plan Description

Dialog box

SSF

SAVE

CAPS COMMUNICATION NETWORK



The NCC represents PPQ and State Cooperators at the national and state level, and provides guidance for APHIS' Pest Detection Program.

NCC Bylaws

National Cooperative Agricultural Pest Survey Committee Bylaws

Purpose of the Bylaws

To establish rules of operation for the National Cooperative Agricultural Pest Survey (CAPS) Committee (NCC).

CAPS Mission

The mission of the Cooperative Agricultural Pest Survey (CAPS) program is to provide a survey profile of exotic plant pests in the United States deemed to be of regulatory significance to the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ), State Departments of Agriculture, tribal governments, and other cooperators through early detection and surveillance activities by:

- Confirming the presence or absence of environmentally and/or economically harmful plant pests that impact agriculture or the environment, and that have potential to be of phytosanitary significance; and
- Establishing and maintaining a comprehensive network of cooperators and stakeholders to facilitate our mission and to safeguard our American plant resources.

NCC Purpose

The NCC represents CAPS cooperators at the national and state level and provides guidance for the Pest Detection program.



National CAPS Committee - 2019

John Bowers	PPQ PHP	National	National Policy Manager - PD
Lisa Jackson	PPQ FO	National	National Operations Manager - PD
Alison Neeley	PPQ S&T	National	S&T PERAL - CAPS Support
Feridoon Mehdizadegan	PPQ FO	National	Plant Protection Act 7721
Eric Ewing	PPQ FO	West Virginia	State Plant Health Director
Greg Rentschler	PPQ FO	Illinois	State Plant Health Director
Megan Abraham	State	Indiana	Central Plant Board - SPRO
Kimberly Rice	State	Maryland	Eastern Plant Board - SPRO
Joy Goforth	State	North Carolina	Southern Plant Board - SPRO
Helmuth Rogg	State	Oregon	Western Plant Board - SPRO
Tiffany Mauro	PPQ FO	New Jersey	Pest Survey Specialist
Chris Pierce	PPQ FO	Missouri	Pest Survey Specialist
Dale Anderson	State	South Dakota	Central Plant Board - SSC
Emilie Inoue	State	Vermont	Eastern Plant Board - SSC
Brad Danner	State	Florida	Southern Plant Board - SSC
Ian Foley	State	Montana	Western Plant Board - SSC



Name	2017	2018	2019	2020	2021	
John Bowers	x	x	x	x	x	
Lisa Jackson	x	x	x	x	x	
Alison Neeley	x	x	x	x	x	
Feridoon Mehdizadegan	x	x	x	x	x	
Eric Ewing		x	x	x		1st Term
Greg Rentschler	x	x	x			1st Term
Megan Abraham	x	x	x			1st Term
Kimberly Rice		x	x	x		1st term
Joy Goforth			x	x	x	1st Term
Helmuth Rogg		x	x	x		1st term
Tiffany Mauro	x	x	x			1st Term
Chris Pierce			x	x	x	1st Term
Dale Anderson		x	x	x		2nd Term
Emilie Inoue			x	x	x	2nd Term
Brad Danner			x	x	x	1st Term
Ian Foley	x	x	x			2nd term

View From the NPB 2019

Regional Plant Board Meetings

Presented by Ann Gibbs, NPB President - Maine DACF

NPB Leadership



Ann Gibbs ME
President



John Caravetta AZ
Vice President



Julie Van Meter NE
Secretary/Treasurer



Joe Collins KY
Past President

Aurelio Posadas
Exec. Secretary



Board of Directors



New SPROs

- ▶ DE - Jessica Inhof
- ▶ MS - Kacey Colquitt
- ▶ AR - Mark Stoll
- ▶ VA - David Gianino
- ▶ WY - Kent Drake
- ▶ HI - Kevin Hoffman
- ▶ CA - Nick Condos (returning)

NPB Administration

- ▶ Phishing emails
- ▶ Website overhaul
- ▶ Liability insurance
- ▶ Officer monthly calls
- ▶ Executive Secretary Search

Executive Secretary Search

- ▶ Developed a job description
- ▶ Auditing the NPB finances
- ▶ Hiring an association management firm
 - ▶ Sent out an RFP and received 10 proposals to date
 - ▶ Have had some useful conversations prior to submitting proposals
 - ▶ Deadline for submitting proposals is April 8, 2019
 - ▶ We will be starting to interview candidate firms in the next couple of weeks
 - ▶ Hope to make a decisions sometime in late May early June

Meetings and events

- ▶ NAPPO in Arizona - sea containers, e-commerce, e phyto and drone demonstrations
- ▶ P. ramorum working group - new leadership
- ▶ New SPHD training
- ▶ Pink Bollworm Eradication
- ▶ National Potato Council/PAA annual meeting - Seed Potato National Harmonization Plan (SNHP) changes reinvigorated
- ▶ SANC annual meeting



SPEEDY

STREET
TACOS

Taqueria

231-0800

DO YOU

Discussions with NASDA

- ▶ New Liaison very engaged - Aline Delucia
- ▶ Participate on the APHIS monthly calls
- ▶ Discussions regarding hemp and e-commerce and how we can complement efforts
- ▶ Initiated subcommittee calls



PPQ/NPB conversations

- ▶ CFIA interest in Japanese Beetle Harmonization Plan
- ▶ Spotted lantern fly expanded the regulated area to include other states
- ▶ European cherry fruit fly technical working group
- ▶ Emerald ash borer proposed deregulation
- ▶ Special Topic Calls
 - ▶ Fruit Fly Exclusion & Detection Plan update
 - ▶ *Dickeya solani*
 - ▶ Prep for the next Federal shutdown
- ▶ Cooperative agreement processing

IRC Progress and Next Steps

- ▶ Discussion of the Interagency Relations Committee progress didn't occur because of the federal shutdown, but will occur in June
- ▶ Some accomplishments
 - ▶ Revised NPB 101 to include NPB and PPQ content
 - ▶ NPB reviewed and revised our strategic plan
 - ▶ Training for NOMS and SPHDS
 - ▶ Revitalizing the PPA training through PDC
 - ▶ Communication protocols are being socialized through PPQ core function areas
 - ▶ NPB developed a process for communicating and training new SPROs
 - ▶ SOPs for submitting samples for diagnostics and receiving results

NPB President Requests

- ▶ Pink Bollworm Eradication Ceremony
- ▶ Tomato seeds and potato spindle tuber viroid (PSTV)
- ▶ Allium leaf miner and Onion Growers Association
- ▶ White House Initiative on Biosecurity
- ▶ Pest Evaluation Committee recommendations
- ▶ *P. ramorum* Pest Risk Assessment support



Pink Bollworm Declared Eradicated

EAB Deregulation and firewood:

- In 2017, APHIS approached NPB membership about interstate firewood movement in the absence of an EAB regulation.
- NPB members favored development of a firewood quarantine template and toolkit that states could use to develop their own approach to the pathway.
- In 2018, a workgroup was formed to begin development of materials.
- Final product expected in 2019.

Firewood Working Group Members:

Co-chairs: Ann Gibbs, Maine and Piera Siegert, New Hampshire

Support & Facilitation: Lora Katz, Steve Shearer, and Paula Henstridge, APHIS PPQ

Regulatory:

- Helmuth Rogg, Oregon
- Steve Hildebrandt, Florida

Best Management Practices:

- Dan Kenny, Ohio
- Anni Self, Tennessee

Outreach Techniques:

- Piera Siegert, New Hampshire
- Tim Allen, Wisconsin
- Leigh Greenwood, Don't Move Firewood, The Nature Conservancy





Photo: NW Siegert, USFS

Firewood Working Group:

- Charged with developing a framework of activities for states to help prevent the movement of pests on firewood.
- Provide firewood resources to states.
- Suggest best practices for states in:
 - ❖ Regulation
 - ❖ Best management practices
 - ❖ Outreach strategies
- Make information available to states to **promote and enable**, but **not require**, a more unified approach to firewood pathway.

This effort will **NOT**:

- Require states to implement an exterior firewood quarantine.
- Dictate how a state regulates firewood, or doesn't.
- Supersede existing state or federal quarantines with a firewood component.
- Provide funding or resources for firewood-pathway activities.



Future Activities

- ▶ Guidance for states dealing with federal shutdown
- ▶ Develop a list of special topics to continue discussions with PPQ
- ▶ Hiring and training a new Executive Secretary

Questions?

Later email - ann.gibbs@maine.gov





Social Media Best Practices

Alan Bennett, University of Southern Maine

Who am I?

Alan Bennett

Digital & Social Media Specialist,
University of Southern Maine

Manages USM social media accounts, creates digital news content and produces monthly TV show

- B.A. Journalism, University of Maine, 2016
- Certificate, Summer Intensive in Digital Skills, CUNY Graduate School of Journalism, 2015



USM Social Media Accounts

Account	Number of Followers
Facebook	17,008
Twitter	7,051
Instagram	3,383
LinkedIn	37,155
	Total: 64,597

Our combined social media platforms have a minimum potential reach of **64,597 each day** — a little less than the population of the city of Portland.

This amounts to hundreds of thousands each week.



What is the purpose of social media for a brand?

1. Promote your organization to a wide audience
2. Meet your audiences where they currently seek out news
3. Engage directly with your audiences — two-way communication
4. Respond to crisis situations



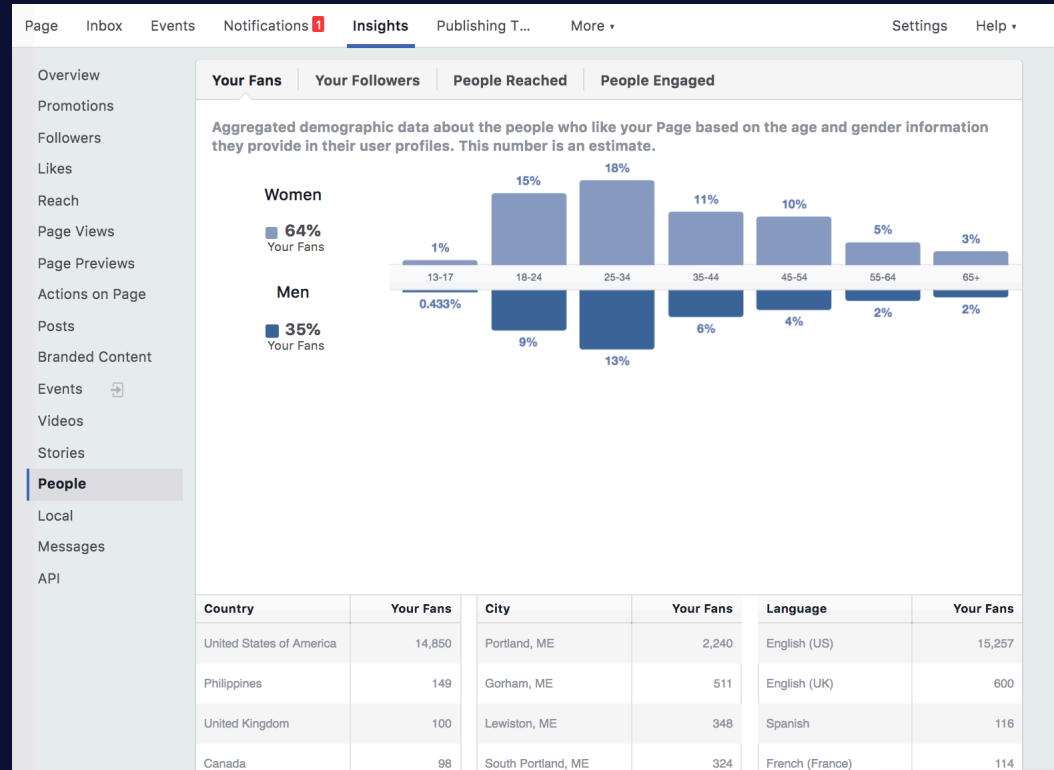
Best Practices

Targeting Your Audience

- Understand who engages with your content, and that this varies by platform.
- Facebook = older audiences
- Twitter and Instagram = younger
- Facebook and Instagram = visual, more time to engage with content
- Video encouraged on all platforms

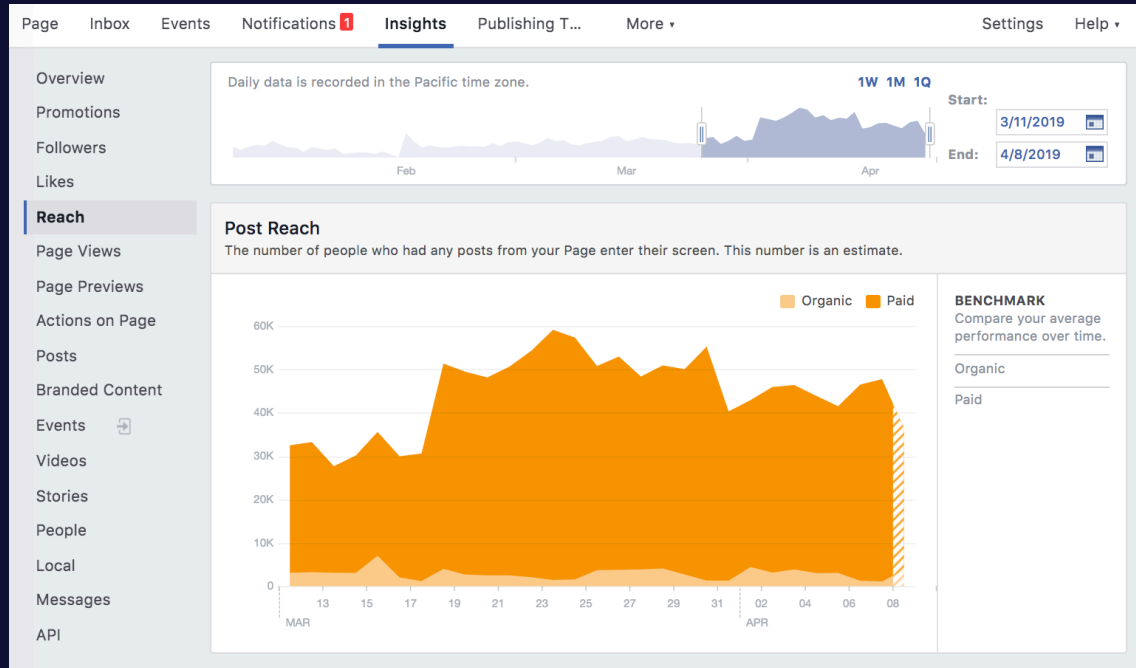
Tools for Targeting

- **Facebook Insights**
- Facebook has a tool called Insights, available at the top of your page.
- On the left, click “People”
- This shows your fans’ demographics.
- Helps you tailor posts based on region, age and gender of fans.



Tools for Targeting

- **Facebook Insights**
- Insights also allows you to see the reach of your posts.
- Reach = measure of a potential audience size.
- Check this several times weekly to see if you are posting enough content to keep your fans' interest.



Tools for Targeting

- **Boosting Posts**
- “Boosting” allows you to turn any post into an advertisement.
- You can select where you want posts to be seen, who you want to see the posts (age, gender, and more detailed targeting).
- Duration of boost determines potential reach.

The image shows a Facebook post from the University of Southern Maine (USM) about student Sabrina Freeman, with a 'Boost Post' dialog box overlaid on top. The dialog box allows for customizing the boost's goal, button, and target audience.

Boost Post Configuration:

- CHOOSE YOUR GOAL:**
 - Send people to your website** (Website visitors - From \$1 a day)
 - Get more people to react, comment and share** (Post engagements - From \$1 a day)
 - All Options
- ADD A BUTTON (OPTIONAL):**
 - Learn More
 - This button will lead to the link in your post.
- WHO SHOULD SEE YOUR AD?:**
 - People you choose through targeting** (Edit)
 - Location - Living in United States: Maine, Age 18 - 65+
 - People who like your Page
 - People who like your Page and their friends
 - People in your local area

Post Details:

- Post:** First-year social work student Sabrina Freeman never thought she was college material. But with confidence gained through Early College courses and financial assistance from USM's Promise Scholarship, Freeman isn't just living her dreams — she wants to help others live theirs. cc: School of Social Work at the University of Southern Maine
- Boosted Post:** USM student Sabrina Freeman: College aspirations made reality | Office of Public Affairs | University of Southern Maine
- Performance:** 4,135 People Reached, 226 Engagements
- Targeting:** USM.MAINE.EDU, USM student Sabrina Freeman: College aspirations made reality | Office of Public Affairs | University of Southern Maine

Notice reach of “organic” post. If we paid for this post to run, it would reach up to 920,000.

Creating engaging content: What does USM share on social media?

- News about USM, created by our office, or shared from our media partners' coverage
- **Digital Media:** interactive pieces and videos to showcase USM messaging
- **Campus Alerts:** These include emergency situations, campus closures and snow delays.
- **“The USM Update” TV show:** a monthly show hosted by President Cummings that airs on cable access stations statewide.
- All content is shared to support our mission as a community-engaged and student-centered organization.

Create More Engagement

- **Post a variety of content to keep your accounts interesting, 2-3 times a day**
 - Effective posts will include a variety of photos, videos, text and links to external sites.
- **Tag each other, and related accounts.**
 - Tagging related accounts (such as governmental organizations and news media, if applicable) allows users of all accounts to see content.
 - Use the @ symbol and start typing a page's name to do this
- Help followers become experts. If you see the same questions over and over again, considering crafting posts with those questions in mind.
- Follow social media trends — use memes and hashtags (where appropriate). More on that later.
- Be timely, but also strategic. Best window of time to post is typically very early morning and around 7-8 p.m.

Set yourself up for success

- **Utilize social listening tools**
 - Social listening = process of monitoring accounts for customer feedback, keywords, mentions, messages, etc.
 - Hootsuite, Sprout Social, etc. (free or paid).
- **Research all trends/hashtags before using them;** don't attract attention to your brand for the wrong reasons.
- Avoid using jargon, practice brevity and humanize your brand. Be personable, but also professional.
- Share each other's content and encourage employees/volunteers to share. Establishes network of pages, strengthens online presence.
- Consider adopting a social media policy, if you haven't.
- Share branding among pages.
- **Don't overshare.** Find the right balance of posts for your specific audience. If you're posting a lot and not getting traffic, you could be wearing out your fans.

Questions and further reading

For more information on social media best practices, I encourage you to explore USM's Social Media Toolkit, a guide to establishing/managing social media accounts at the university.

Available at
usm.maine.edu/publicaffairs

Contact me: *alan.bennett@maine.edu*

The screenshot shows the website for the Office of Public Affairs at the University of Southern Maine. The navigation bar includes links for MAJORS, MINORS, & PROGRAMS; COSTS & FINANCIAL AID; ADMISSIONS; ATHLETICS; RESEARCH; NEWS & EVENTS; and an Apply Now button. The main content area features a sidebar with expandable sections: TODAY'S HOURS (APRIL 8, 2019, Office Hours 9:00AM - 5:00PM, with a note that hours may be affected by a current alert), CONTACT, Home, Overview, People, USM News, News Media Resources, Public Relations and Marketing Resources, Social Media, and Emergency Alerts and School Cancellations. The main content area is titled OFFICE OF PUBLIC AFFAIRS and includes a description of the office's role, a USM News and Events section with a Read More button, and two featured articles: Resources for News Media and Social Media Toolkit, both with Read More buttons.

Recent Developments from a Novel Survey Technique



Marc DiGirolomo, Michael Bohne &
Kevin Dodds
USDA Forest Service

Joe Charap & Sara Evans
Green-Wood

Andrew Gapinski & John DeI Rosso
Arnold Arboretum, Harvard
University

190 forest entomologists, forest pathologists, foresters and technical staff

9 Regions





United States
Department
of Agriculture
Forest Service
FS-750
Revised
May 2011



The Principal Laws Relating to USDA Forest Service State and Private Forestry Programs

- The Cooperative Forestry Assistance Act of 1978, As Amended Through 2008
- Economic Action and Rural Development Program Authorities
- Forest Products, Conservation and Recycling Program Authorities
- Watershed Restoration and Enhancement (Wyden Amendment)
- Biomass Commercial Utilization Grant Authorities
- Tribal Watershed Forestry Assistance Authorities

Pages
18-20

- (1) conduct surveys to detect and appraise insect infestations and disease conditions and man-made stresses affecting trees and establish a monitoring system throughout the forests of the United States to determine detrimental changes or improvements that occur over time, and report annually concerning such surveys and monitoring;
- (2) determine the biological, chemical, and mechanical measures necessary to prevent, retard, control, or suppress incipient, potential, threatening, or emergency insect infestations and disease conditions affecting trees;
- (3) plan, organize, direct, and perform measures the Secretary determines necessary to prevent, retard, control, or suppress incipient, potential, threatening, or emergency insect infestations and disease epidemics affecting trees;
- (4) provide technical information, advice, and related assistance on the various techniques available to maintain a healthy forest and in managing and coordinating the use of pesticides and other toxic substances applied to trees and other vegetation, and to wood products, stored wood, and wood in use;
- (5) develop applied technology and conduct pilot tests of research results prior to the full-scale application of such technology in affected forests;
- (6) promote the implementation of appropriate silvicultural or management techniques that may improve or protect the health of the forests of the United States; and
- (7) take any other actions the Secretary determines necessary to accomplish the objectives and purposes of this section.

- (1) conduct **surveys to detect and appraise insect infestations and disease conditions** and man-made stresses affecting trees and establish a monitoring system throughout the forests of the United States to determine detrimental changes or improvements that occur over time, and report annually concerning such surveys and monitoring;
- (2) determine the biological, chemical, and mechanical measures necessary to prevent, retard, **control, or suppress** incipient, potential, threatening, or emergency insect infestations and disease conditions affecting trees;
- (3) plan, organize, direct, and perform measures the Secretary determines necessary to prevent, retard, **control, or suppress** incipient, potential, threatening, or emergency insect infestations and disease epidemics affecting trees;
- (4) **provide technical information, advice**, and related assistance on the various techniques available to maintain a healthy forest and in managing and coordinating the use of pesticides and other toxic substances applied to trees and other vegetation, and to wood products, stored wood, and wood in use;
- (5) **develop applied technology and conduct pilot tests of research** results prior to the full-scale application of such technology in affected forests;
- (6) promote the implementation of appropriate **silvicultural or management techniques** that may improve or protect the health of the forests of the United States; and
- (7) take any other actions the Secretary determines necessary to accomplish the objectives and purposes of this section.

Forest Health Activities

1. Survey and Monitoring
2. Prevention, Suppression, Eradication
3. Technical Information and Advice
4. Applied Research and Methods Development
5. Forest Health Silvicultural or Management Techniques

Cooperative and Federal Programs

Forest Health Activities

1. Survey and Monitoring
2. Prevention, Suppression, Eradication
3. Technical Information and Advice
4. Applied Research and Methods Development
5. Forest Health Silvicultural or Management Techniques

Cooperative and Federal Programs

Survey and Monitoring

Remote sensing for forest health issues

- Visual, plane or satellite sensors

Trapping surveys for general and specific forest pests

- Firewood, arboreta, southern pine beetle, forest tent caterpillar, oak wilt

Visual and plot surveys to monitor forest health conditions

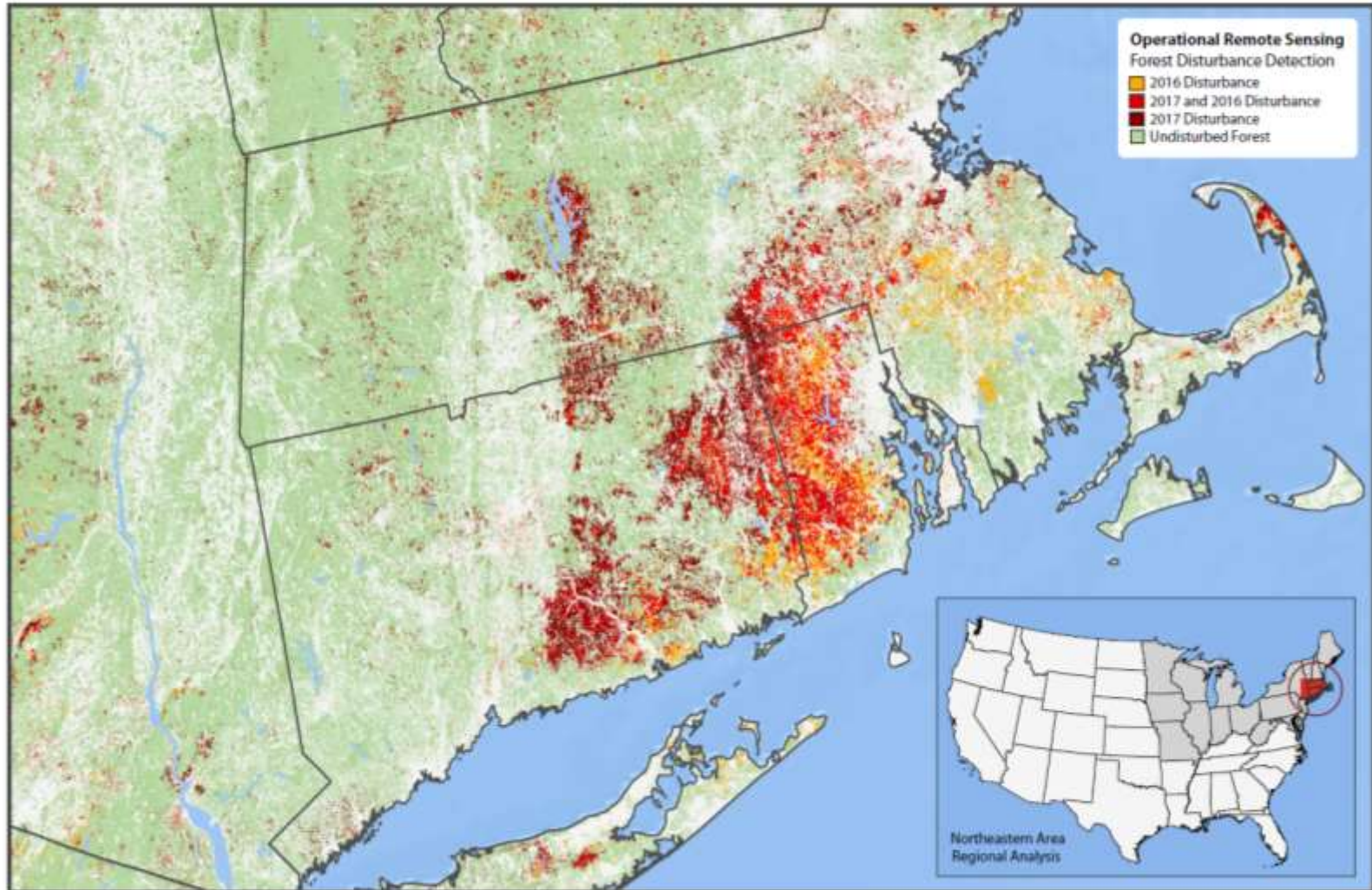
- Invasive plants, deer overabundance, emerald ash borer, southern pine beetle, hemlock woolly adelgid, pine health, chaga, etc



Cessna N166Z used for Forest Health remote sensing.



FOREST HEALTH ASSESSMENT AND APPLIED SCIENCES TEAM 2017 and 2016 Gypsy Moth Defoliation*



July 2017



FHAAS's Forest Disturbance Mapper (FDMapper) uses a library of Landsat and Sentinel-2 imagery to compare greenness and other forest characteristics between one or two analysis years and several baseline years. Using this technique, called a Z-score algorithm, we can detect areas of greenness decline which correspond to defoliations, mortality, or other disturbances. *Includes other disturbances.





Ips grandicollis on a malaise trap. Photo: Marc DiGirolomo

Recent Developments from a Novel Survey Technique



Marc DiGirolomo, Michael Bohne &
Kevin Dodds
USDA Forest Service

Joe Charap & Sara Evans
Green-Wood

Andrew Gapinski & John DeI Rosso
Arnold Arboretum, Harvard
University

Novel Technique

- **Monitoring in arboreta located in urban environments**



Rearing Barrels

- Established method for detection and monitoring of wood inhabiting insects
 - Firewood transportation
 - Host associations
 - Biology and phenology



Arboreta

- Proximity to busy ports of entry
- “Oasis” of forest within an urban landscape
- Large variety of tree species
- Concentrations of uncommon and non-native tree species



Detection

- Initial setup at Arnold Arboretum in 2014 to survey for difficult to detect beetles
- Example: Oak Splendor Beetle (*Agrilus biguttatus*)
 - Not yet detected in USA
 - High invasive potential, serious damage to oaks
 - Boston area is highly susceptible
 - No known lures or effective traps, surveys are visual/collection based
 - Arnold Arboretum contains a large number of *Quercus* sp., including native European hosts





■ Arnold Arboretum

- Boston, MA
- Founded in 1872
- 281 acres
- Oldest public arboretum in US
- 2,139 species in 367 genera
- <10km from the port of Boston

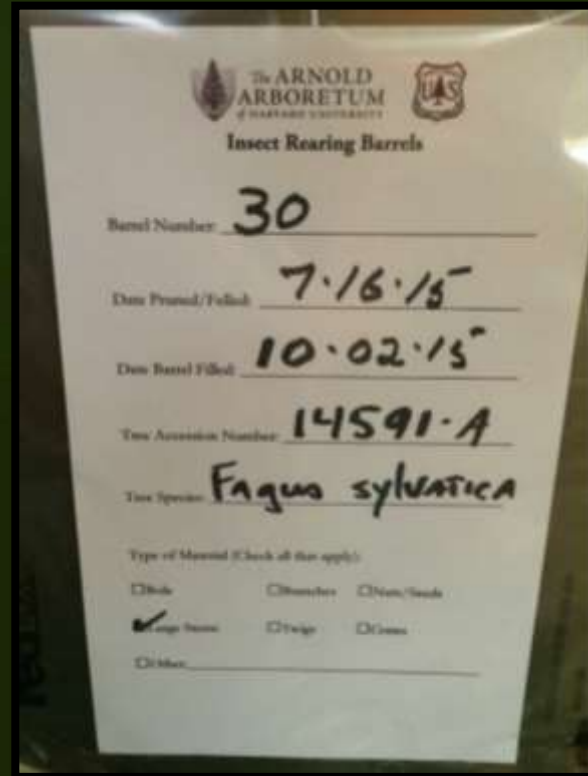
• Green-Wood Cemetery

- Brooklyn, NY
- Founded in 1838
- 478 acres
- Arboretum accreditation in 2015
- 172 species in 72 genera
- <1km from several major terminals

Methods

- ~50 fiber drums with lids and collection jars at each site
- Arborists are informally trained on what state of material is likely to harbor developing insects
- Arborists selectively choose material to place in barrels throughout the year
- Once a barrel is filled, the material remains inside for up to two years
- Basic data is recorded for the material
 - **Accession number is most important**
- Collections occur periodically from wet cups, and a final sweep of the barrel contents once insects stop emerging





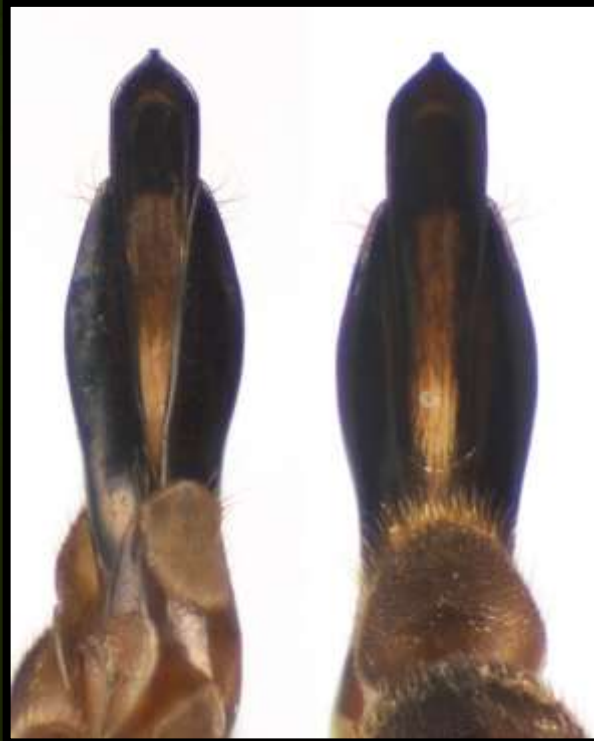
Results

- **Over 1500 beetles comprising 115 species... and counting**
- **Some scolytinae that are rarely collected from traditional trapping methods**
 - Male xyleborini
- **New host associations**
 - *Astylopsis macula*, *Ambrosiophilus atratus*, *Dryoxylon onoharaense*, *Scolytus mali* from *Amelanchier* sp.
 - *Xyleborinus saxesenii*, *Xylosandrus germanus* in *Enkianthus chinensis* (Chinese enkianthus)
 - *Anthaxia quercata* in *Picea asperata* (Dragon Spruce)
 - *And more...*



Agrilus roscidus, a new exotic polyphagous beetle infesting beech in Brooklyn, New York

- Collected from *Fagus sylvatica* in Green-Wood
 - Keys to *A. cuprescens*, however this species is much larger, has a very different aedeagus shape, and is not known to feed on *Fagus*.
- Specimens were sent to Rick Hoebeke (University of Georgia) for a second opinion.
 - Rick's diagnosis was not promising. Suggested looking at Palearctic species.



The American *roscidus*



Eduard Jendek,
Faculty of Forestry and
Wood Sciences, Czech
University of Life
Sciences

Bulletin of Entomological Research, Page 1 of 12
© Cambridge University Press 2018

doi:10.1017/S0007485318000330

First molecular phylogeny of *Agrilus* (Coleoptera: Buprestidae), the largest genus on Earth, with DNA barcode database for forestry pest diagnostics

I. Kelnarova¹, E. Jendek², V.V. Grebennikov^{3*} and L. Bocak¹

¹Department of Zoology, Faculty of Science UP, Olomouc, Czech Republic:

²Department of Forest Protection and Entomology, Faculty of Forestry and
Wood Sciences, Czech University of Life Sciences, Kamýcká 1176, CZ-165 21,
Prague 6-Suchbát, Czech Republic: ³Canadian Food Inspection Agency, 960

Carling Avenue, Ottawa, ON K1A 0Y9, Canada



Vasily Grebennikov
Research Scientist, Canadian
Food Inspection Agency

The American *roscidus*



- One of the most demanding complex in *Agrilus* with several unsolved taxonomic and nomenclatural problems
- No members of *A. roscidus* species-group is known from *Fagus* (or any other Fagaceae for that matter)
- Aedeagus is unique within this group
- Compare results to the library of known DNA barcodes from world *Agrilus* species.

Top 20 Matches

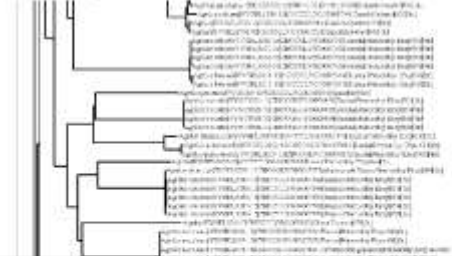
Display option:

Phylum	Class	Order	Family	Genus	Species	Subspecies	Similarity (%)	Status
Arthropoda	Insecta	Coleoptera	Buprestidae	Agrilus	roscidus		95.74	Early-Release
Arthropoda	Insecta	Coleoptera	Buprestidae	Agrilus	viridicaerulans	viridicaerulans	95.72	Private
Arthropoda	Insecta	Coleoptera	Buprestidae	Agrilus	roscidus		95.72	Private
Arthropoda	Insecta	Coleoptera	Buprestidae	Agrilus	roscidus		95.81	Early-Release



Arthropoda	Insecta	Coleoptera	Buprestidae	Agrilus	roscidus		94.65	Published
Arthropoda	Insecta	Coleoptera	Buprestidae	Agrilus	graecus		94.19	Published
Arthropoda	Insecta	Coleoptera	Buprestidae	Agrilus	roscidus		94.19	Published
Arthropoda	Insecta	Coleoptera	Buprestidae	Agrilus	roscidus		94.19	Published
Arthropoda	Insecta	Coleoptera	Buprestidae	Agrilus	lubani		94.19	Private
Arthropoda	Insecta	Coleoptera	Buprestidae	Agrilus			94.08	Published
Arthropoda	Insecta	Coleoptera	Buprestidae	Agrilus	vivaximus		94.04	Private

Search: Sat Sep 15 12:31:22 2018 Page 2 of 4





- *A. roscidus* is paraphyletic with respect to two records:
 - *viridicaerulans*|VVG C353-09|CNCCOLVG00000350|
 - *graecus*|VVG C370-09|CNCCOLVG00000368|
- which is normally *not* expected from “good” species
- Also, our specimen from NY forms a sister to the rest of paraphyletic *roscidus*
- This either means that...
 - the American *roscidus* is a new species
 - These species are all, or in part, synonyms and exhibit different morphology based on host

Agrilus roscidus

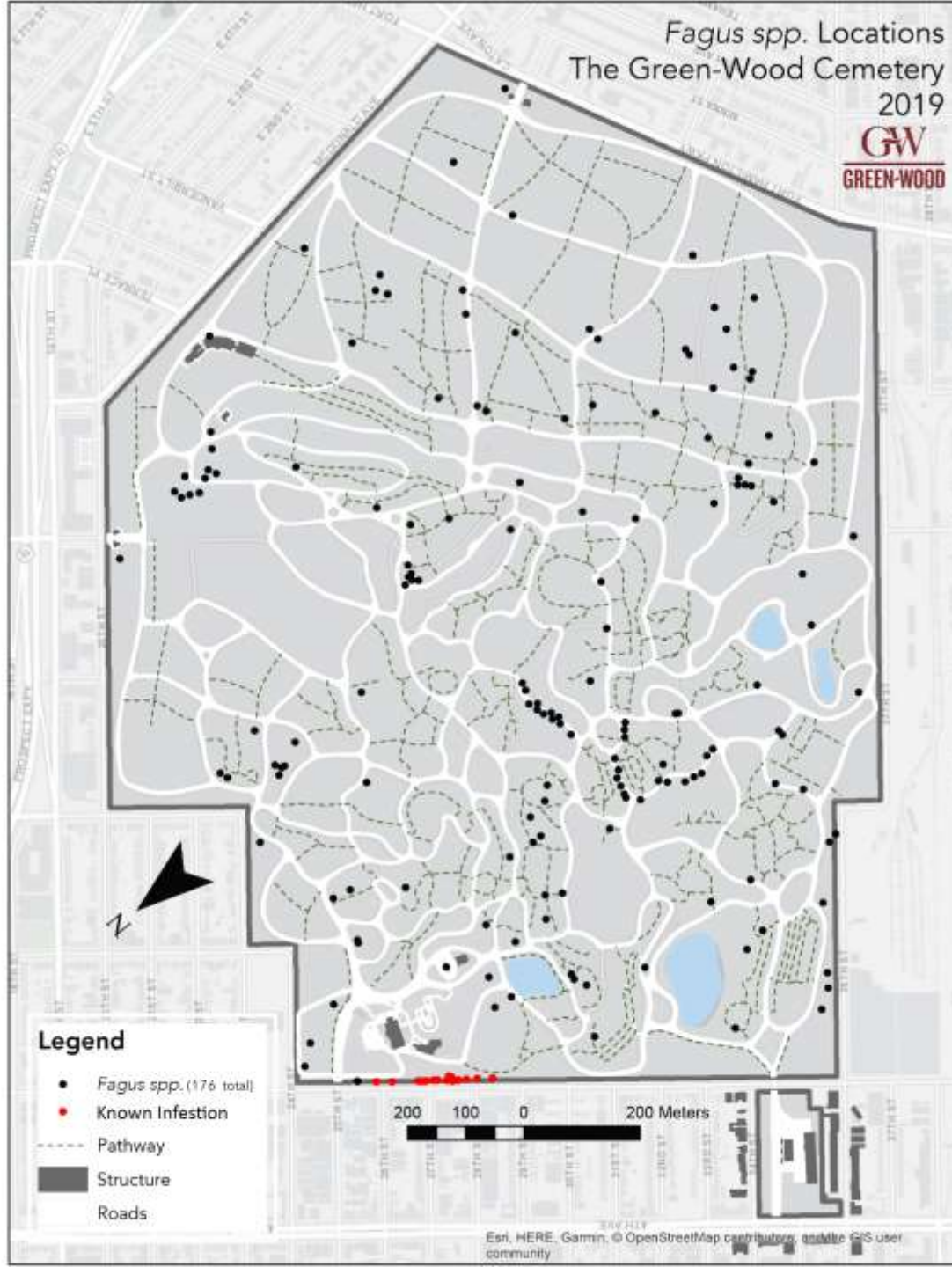


- Generally known as a pest of rose and fruit trees in Europe and Northern Africa
- Cited on 85 hosts on genus or genus-species level; 25 are cited as larval hosts.
- Known hosts: Cornaceae (*Cornus*); Rhamnaceae (*Frangula*, *Rhamnus*) and Rosaceae (*Amygdalus*, *Armeniaca*, *Crataegus*, *Malus*, *Prunus*, *Pyrus*, *Rosa*) (Jendek and Poláková 2003).
- Outbreak was recently documented in an Almond orchard in Turkey (Özgen 2010).
- Heavily infesting European beech in Brooklyn, NY.





Fagus spp. Locations The Green-Wood Cemetery 2019



- Legend**
- *Fagus* spp. (176 total)
 - Known Infestation
 - - - Pathway
 - Structure
 - Roads

200 100 0 200 Meters

Next steps...

- Applied to Farm Bill and Forest Service.
- Describe the life history of *A. roscidus* in European beech in North America.
- Evaluate the current outbreak of *A. roscidus* in greater Brooklyn.
- Survey for other potential hosts of *A. roscidus* in North America.





***Dacne picta* Crotch**

- New continental record
- Native to Asia where it is one of the most important pests of log-cultivated shiitake mushrooms.
- Collected in a funnel trap targeting nitidulid beetles baited with fermenting wort in Brooklyn, NY.

Dendroctonus frontalis

- First detection of southern pine beetle in New York City. First report on *Pinus thunbergii*.

Bretziella fagacearum

- First detection of oak wilt in New York City.

What about pathogens?

A global, reciprocal sentinel gardens approach to assess risk of invasion by alien pathogens and insect pests of important woody plant species

- Pierluigi (Enrico) Bonello (OSU – Ohio State University) and Isabel Munck (US Forest Service, Durham, New Hampshire)
- European Collaborators: Michelle Cleary (SLU – Swedish University of Agricultural Sciences) and Alberto Santini (Italian National Research Council and University of Florence, Italy)
- Chinese Collaborators: Hui Sun and De-Jun Hao (Nanjing Forestry University)

Office of Field Operations

Agriculture Programs and Trade Liaison



Eastern Plant Board
April 8-11, 2019



U.S. CUSTOM AND
BORDER PROTECTION



FIELD OPERATIONS

All Threats Operational Awareness Training

CBPAS Increasing Capabilities:

- Identify Bio/Agro terrorism
- Enhance interviewing skills
- Enhance fraudulent document detection
- Refine inspection techniques and data recordation



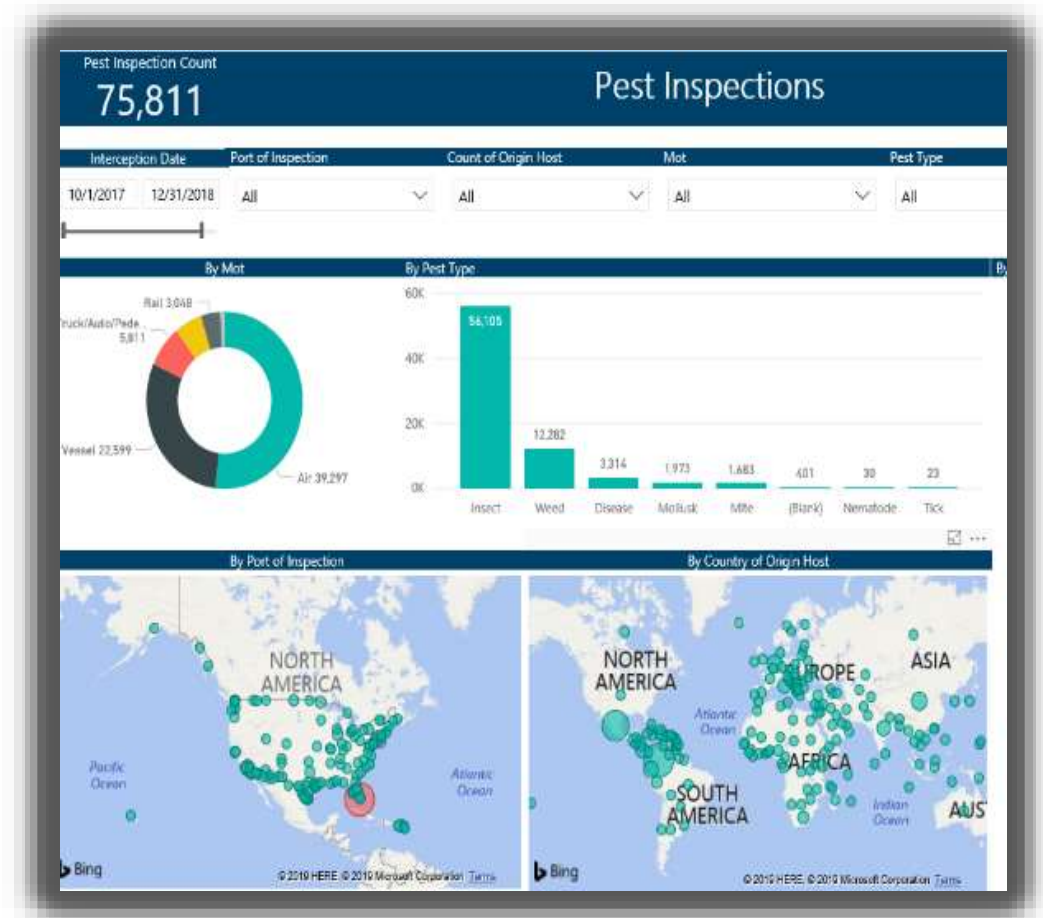
U.S. CUSTOM AND
BORDER PROTECTION

FIELD OPERATIONS



NAT Dashboard

- Access to CBP Data warehouse
- Reports specific to activities
- Strengthen ability to detect and analyze trends



U.S. CUSTOM AND
BORDER PROTECTION



FIELD OPERATIONS

National Agriculture Cargo Targeting Unit

Targeted smuggling networks:

Meals ready-to-eat (MRE) network

Live insects trading network

Chinese commercial food product smuggling network

Ongoing targeting initiatives:

African Swine Fever

Asian Gypsy Moth



U.S. CUSTOM AND
BORDER PROTECTION

FIELD OPERATIONS



Recent NACTU Passenger Operations

Targeted inbound passengers /baggage:

- With previous ECC EAN seizures
- With previous Mail 287 seizures
- Passengers previously given an ag warning



U.S. CUSTOM AND
BORDER PROTECTION

FIELD OPERATIONS



Current NACTU Cargo Operations

1. Express Consignment Hub Hotlist
2. International Mail Agriculture Targeting Assessment
3. African Swine Fever (ASF)
4. Asian Gypsy Moth (AGM)



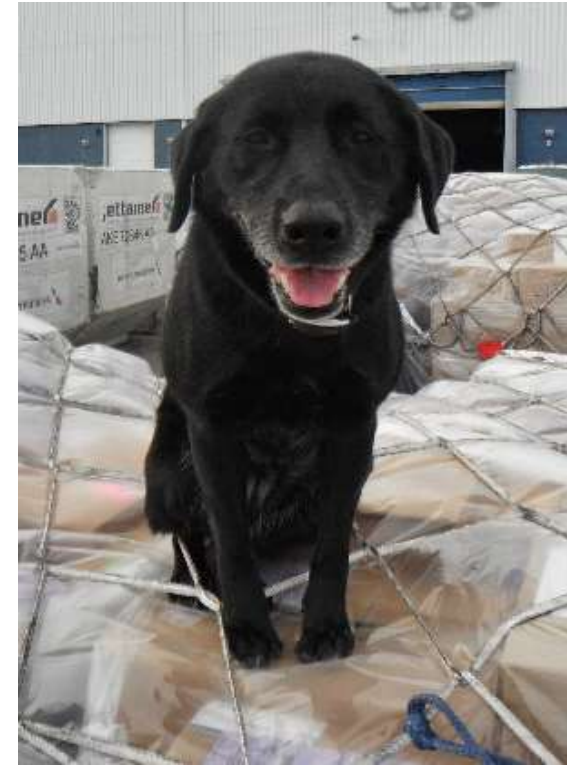
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BORDER PROTECTION

FIELD OPERATIONS



Sweeping results – AK9 Brie – JFK

- Shipment from Nepal
- Prohibited agriculture items
- Missing required documents



U.S. CUSTOM AND
BORDER PROTECTION



FIELD OPERATIONS

Not Tea - Agriculture Canine Haire-Baltimore

- Passenger from China
- Ag K-9 Alert
- Prohibited Agriculture Items



U.S. CUSTOM AND
BORDER PROTECTION



FIELD OPERATIONS

CBP/PPQ Risk Based Sampling

- Adjust the intensity of exams
- Facilitate movement of commodities
- Determine pest load per shipment
- Leverage analytics
- Modernize Ops
- Align with intent of IPPC standards



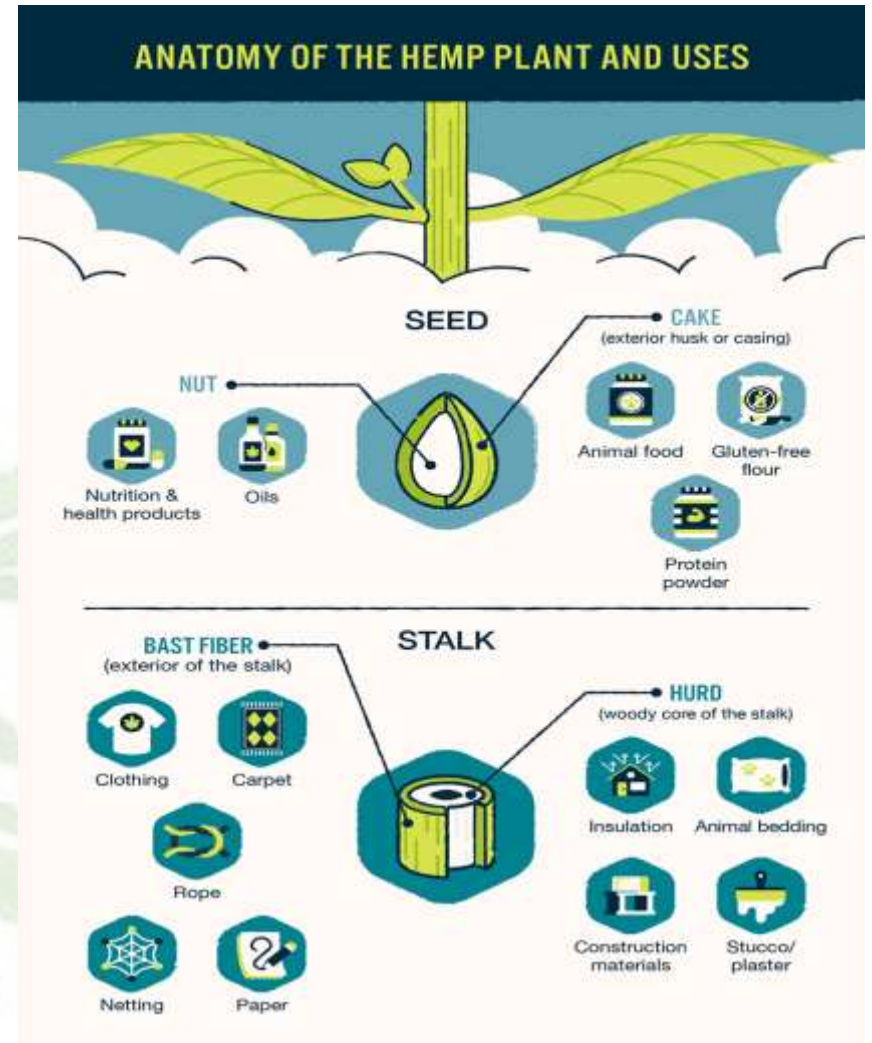
U.S. CUSTOM AND
BORDER PROTECTION



FIELD OPERATIONS

Industrial Hemp

- The 2018 Farm Bill **removed** industrial hemp from the definition of “marijuana” in the Controlled Substances Act.
- CBP is working with PGAs (such as AMS and DEA) to determine import requirements for viable hemp seed.
- APTL will communicate updates to importation requirements (to state, federal, and private importers) when they are received.



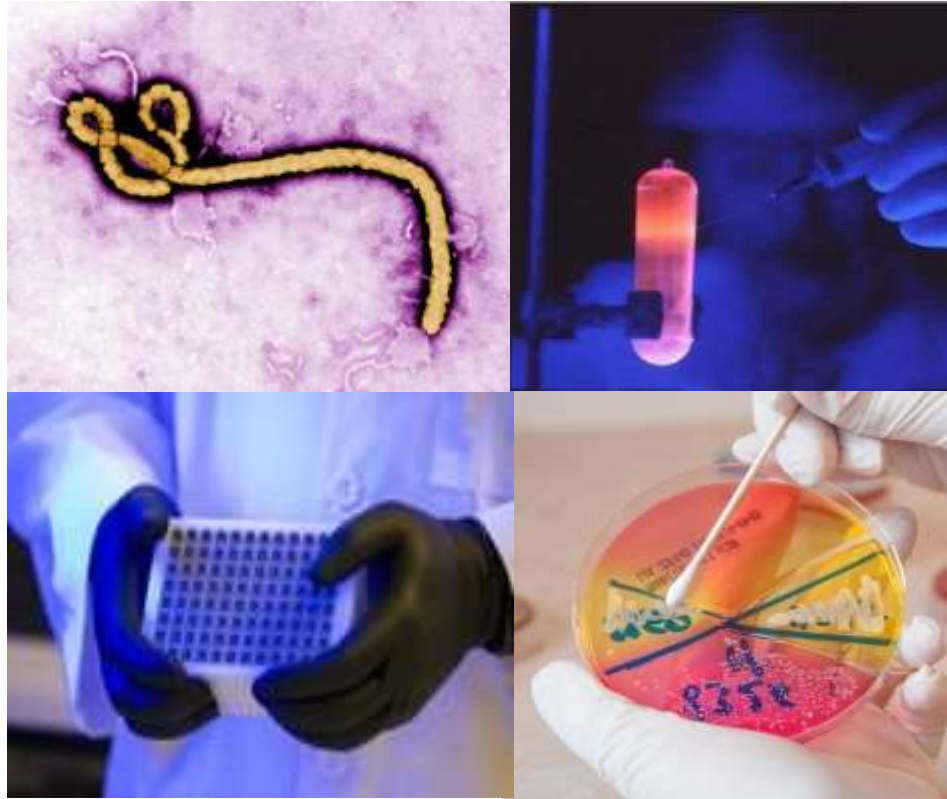
U.S. CUSTOM AND
BORDER PROTECTION

FIELD OPERATIONS



Agro/Bio-Terrorism Countermeasures

Biological Threat Exclusion Coordinator (BTEC)



U.S. CUSTOM AND
BORDER PROTECTION

FIELD OPERATIONS



Scenario of Interest

- Express Shipment
- Label anomalies
- APHIS contacted



U.S. CUSTOM AND
BORDER PROTECTION



FIELD OPERATIONS

Scenario of Interest

- Express shipment
- Labeled as “Harmless Biological Samples”
- PPQ 526 declaring *Ralstonia solanacearum*



U.S. CUSTOM AND
BORDER PROTECTION

FIELD OPERATIONS





Before you go...Any Questions ?



U.S. CUSTOM AND
BORDER PROTECTION

FIELD OPERATIONS





Canadian Food
Inspection Agency

Agence canadienne
d'inspection des aliments

Canada – EAB Report

Gordon Henry, National Manager

Potato and Forestry Section

Portland, Maine

April 10, 2019



11638422

Canada

History of EAB in Canada

- First detected in Canada, Windsor Ontario in summer 2002.
- Devastating impact to ash resources in eastern Canada



Southern Ontario summer 2002

Toronto Nov 2007

Southern Quebec 2008

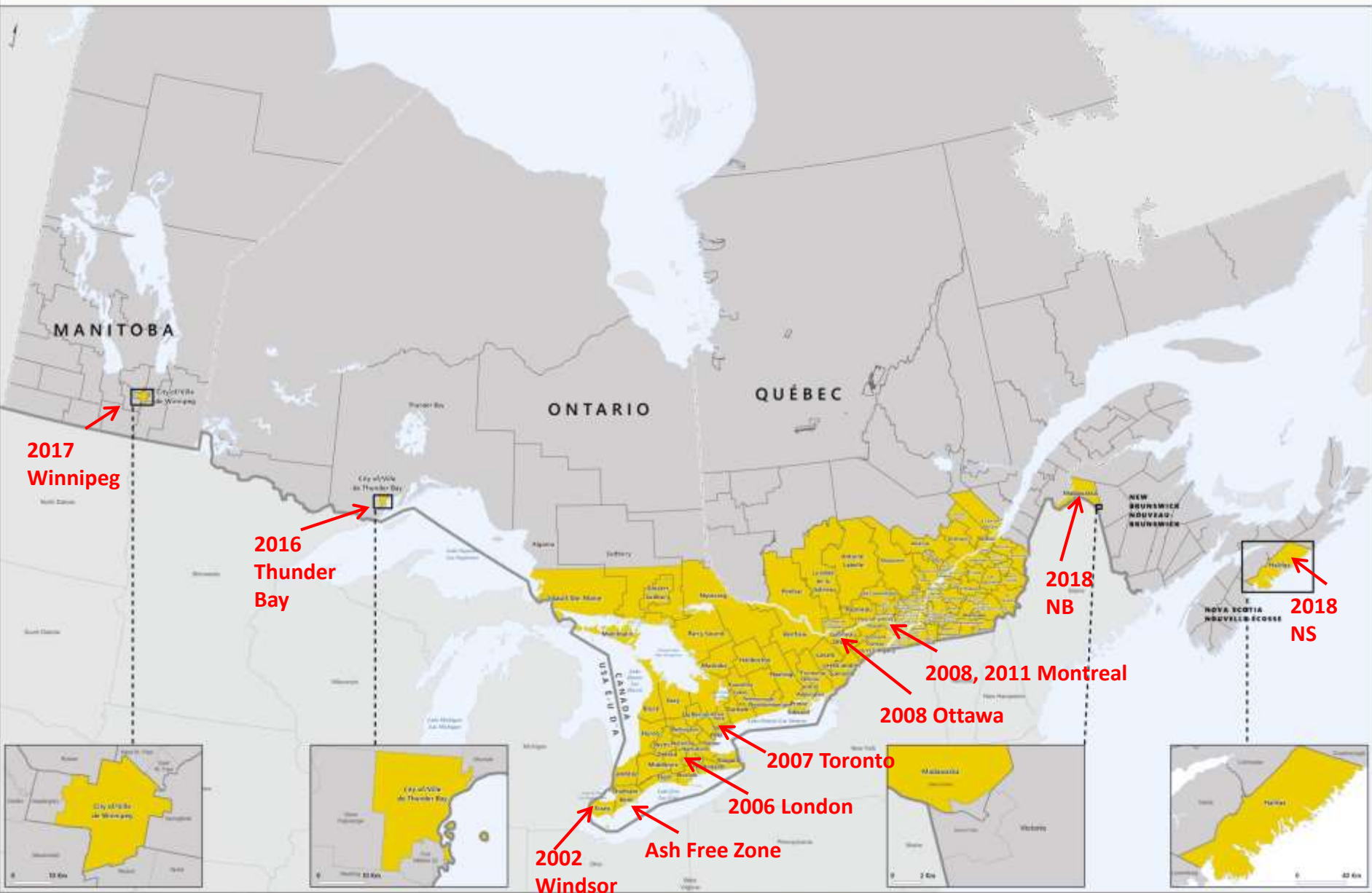
Thunder Bay, June 2016

Winnipeg, Manitoba, November 2017

Bedford, NS Sept 2018

Edmundston, NB May 2018





0 100 200 400 Km
 0 100 200 400 Mi
 Map Projections: Canada: Albers Equal Area Conic | Projections cartographiques: composites équivalentes d'Albers Canada

Areas regulated | Lieux réglementés

10/10/2019
 M3/M: 01
 © 2019. The Canadian Food Inspection Agency (CFIA), Mapping and GIS Services, London, Ontario. (L'Agence canadienne d'inspection des aliments, Cartographie et services SIG, London, Ontario)

Regulatory Tools

- Federal Plant Protection Act & Regulations
 - Examples: regulated pest, reportable, inspector authorities, official notices
- Phytosanitary policy (D-03-08)
 - Regulatory policy
 - Domestic and Import requirements
 - AIRS – online import tool (all commodities)
- EAB Survey Protocol



Response

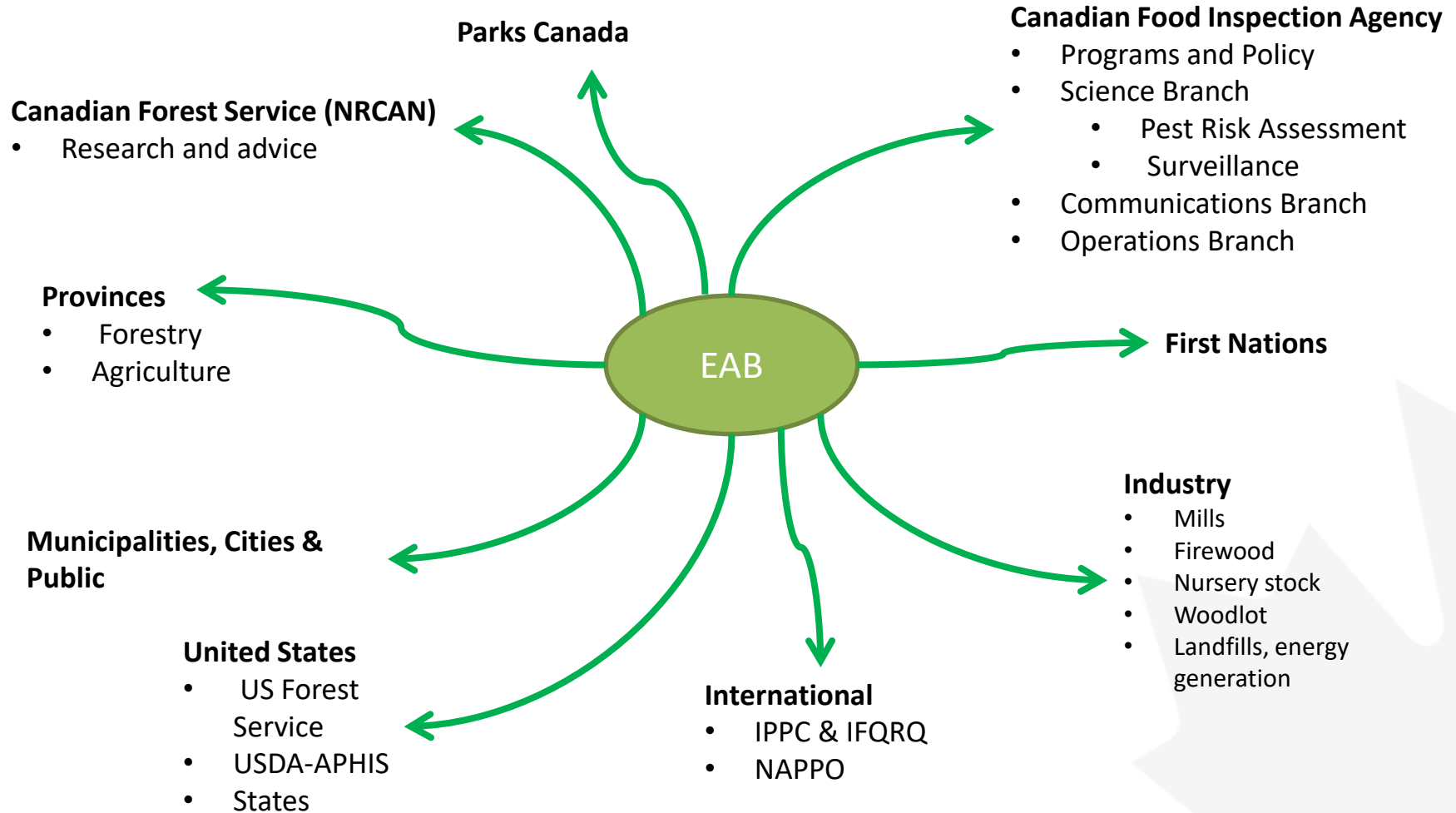
- 2002 – contain and control objective
 - significant tree removal activities in southern Ontario
 - Ash free zone
- By mid 2000s EAB had proved to be established and was successful in rapidly spreading
 - Limited ability to detect, visual
 - Long distant spread (human assisted)
 - firewood, logs, ash products with bark
 - Local spread: significant host range in Eastern Canada, no apparent biological constraints



Current Approach: Slow-the-spread

- Partnerships, communication & awareness
 - Utilized data from partners such as tree and forest inventories, trapping locations, general knowledge of ash trees and decline
 - Information network, pest notification
- Intensive surveys & surveillance
 - Cooperative surveillance
- Regulatory activities - prohibit/ restrict movement from infested areas
- Minimize impact to affected industries
- Research

Partners in Canada



National & Targeted Survey Program

Surveys along leading edge

- Within infested provinces
- visual – ash trees in general decline/ dying
- Green prism traps, baited with leaf volatiles (z-3-hexenol lure, Lactone pheromone)
- Collaborative trapping (eg, CFS, Province, cities)

Focus on urban centers and high risk sites

- Annual survey workplan
- Surveillance in non-infested provinces as well
- High risk sites: mills, products, camping grounds, rest stops, importers
- Partnerships



Regulatory Actions



Confirm **presence** (DNA analysis for larval) and issue **notices** of prohibition of movement (PPA)

Conduct **site characterization** and intensive surveillance

Investigation – trace out activities

Consult and regulate - **county level**

Amend D-03-08 and notification

- Publish Map (PPA)
- USDA-APHIS
- Phytosanitary alert system (NAPPO)

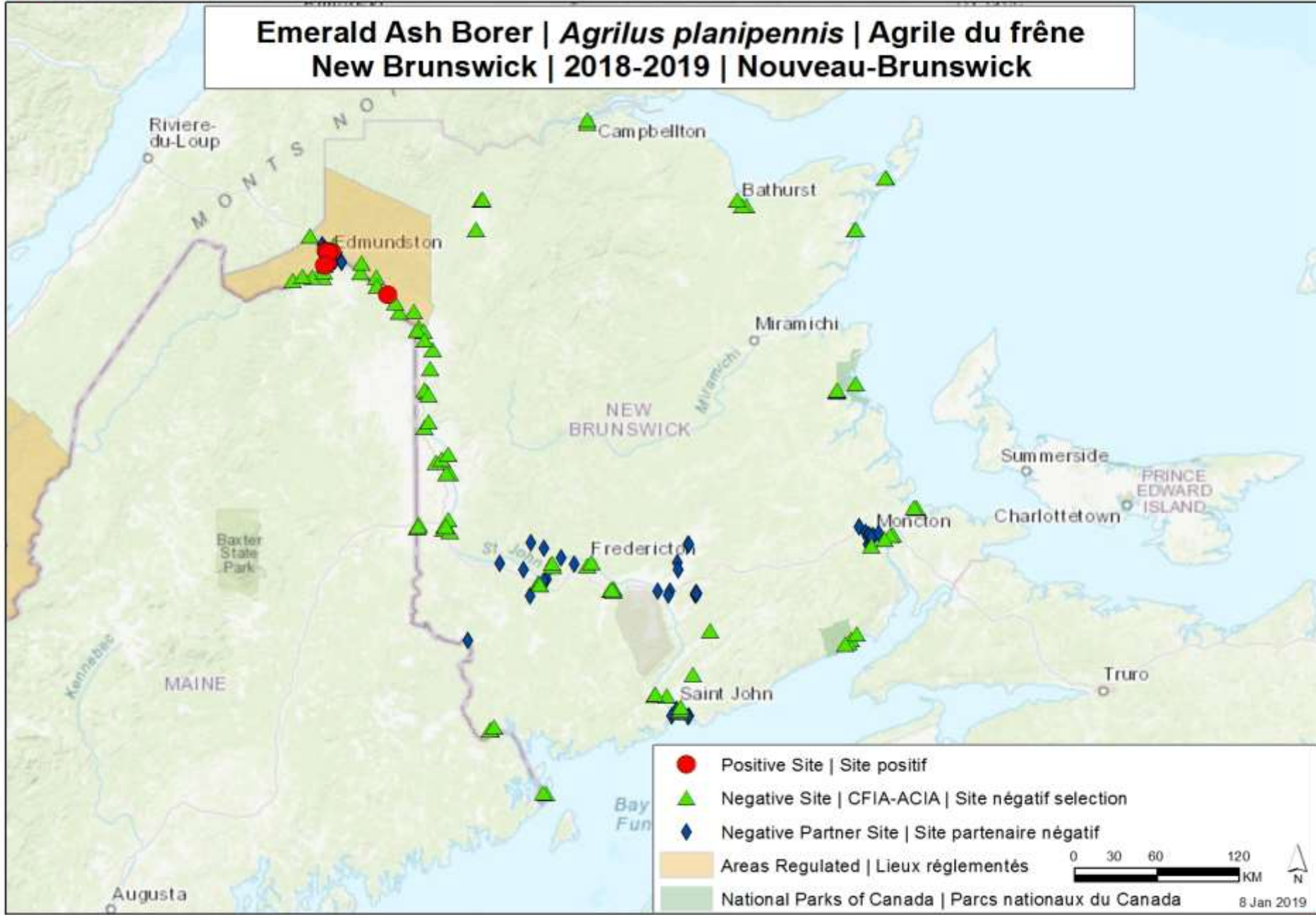
Note: List of regulated areas is maintained officially on CFIA Website

New Brunswick

- EAB detected in May 2018
- Site characterization and surveillance work: EAB confirmed on a number of sites in the city of Edmundson
- Madawaska county regulated in July 2018



Emerald Ash Borer | *Agrilus planipennis* | Agrile du frêne New Brunswick | 2018-2019 | Nouveau-Brunswick



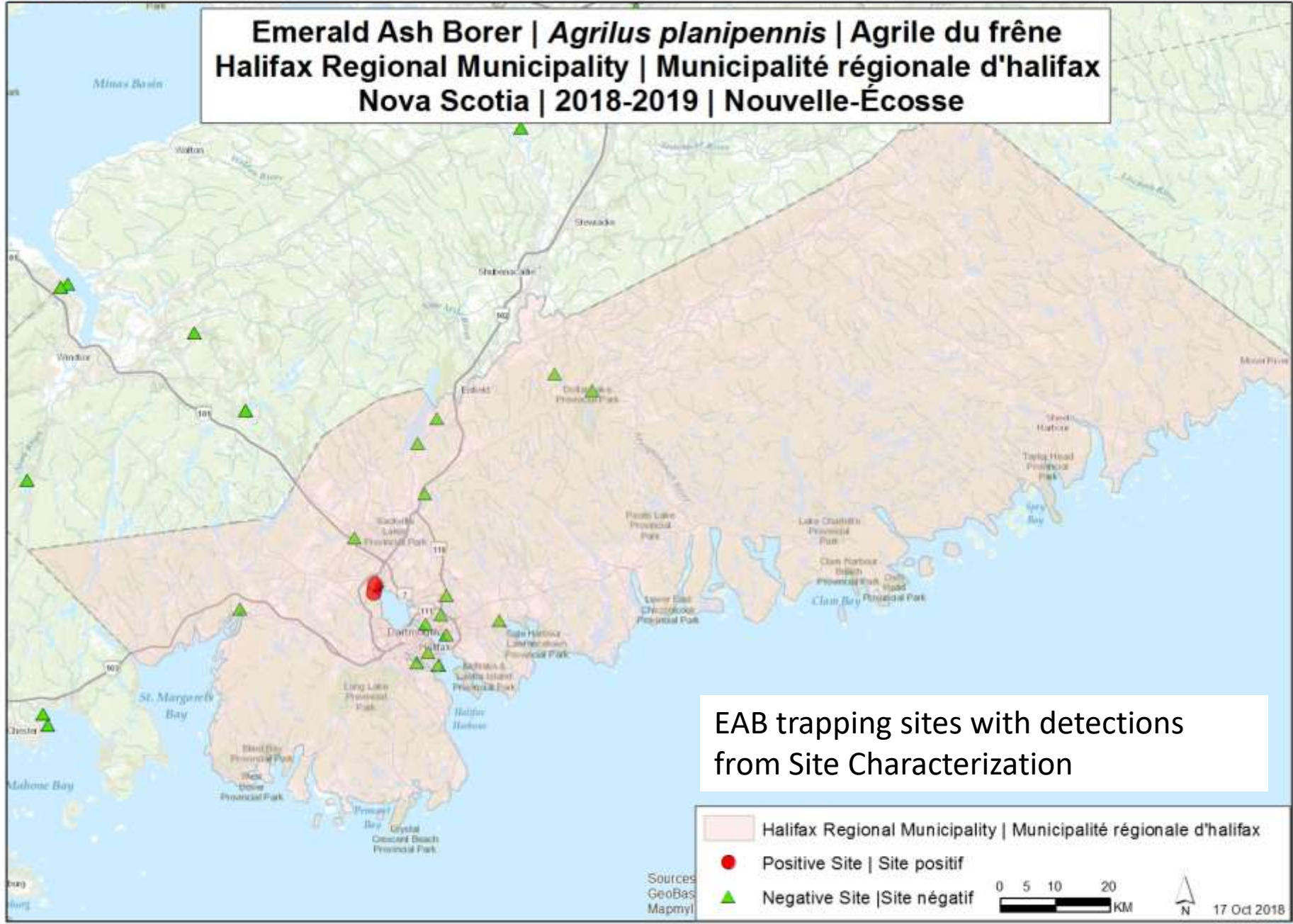
8 Jan 2019

Nova Scotia

- Detection September 7, 2018
- Site characterization and surveillance work: 13 trees confirmed on 21 properties, 20 other trees suspect
- Halifax County regulated on April 1, 2019



Emerald Ash Borer | *Agrilus planipennis* | Agrile du frêne Halifax Regional Municipality | Municipalité régionale d'halifax Nova Scotia | 2018-2019 | Nouvelle-Écosse



EAB trapping sites with detections from Site Characterization

Sources: GeoBas, Mapmyl

Movement Restrictions

Regulated Article from Regulated Area	High Risk Period (April 1 to Sept 30)	Low Risk Period (Oct 1 to Mar 31)
Ash Nursery Plants	Prohibited	
Ash Firewood	Prohibited	
Non-Ash Firewood	Ash Exclusion Process *	
Ash Material <ul style="list-style-type: none"> • Logs • Bark, Chips, Branches • Fuelwood • Ash Lumber • Ash Wood Packaging 	Heat Treatment	Heat Treatment or Shipped to Approved Facility for treatment

Note: Affected facilities within a regulated area will operate under a compliance program to address EAB risk

Research

CFIA Areas of focus



- Developing diagnostic & survey tools for Emerald Ash Borer and its relatives
 - Host tree volatiles and trapping
- Taxonomic studies on *Agrilus* – 3,000 species
- *Biology of Agrilus spp*, and potential as invasive pests
- Heat treatment and forestry commodities (Canadian Forestry Service)

2019 Other Forestry Files

- Firewood
- Oak Wilt
- Dunnage
- Pine Shoot Beetle
- European Gypsy Moth
- Hemlock Woolly Adelgid

Links

- Automated Import Reference System (AIRS):
 - <http://inspection.gc.ca/plants/imports/airs/eng/1300127512994/1300127627409#>
- EAB Regulated Areas:
 - <http://www.inspection.gc.ca/plants/plant-pests-invasive-species/insects/emerald-ash-borer/areas-regulated/eng/1347625322705/1367860339942>



Agriculture and Markets

EUROPEAN CHERRY FRUIT FLY TRAP PROGRAM 2018-2019 OVERVIEW

New York State Department of Agriculture and Markets Division of Plant Industry

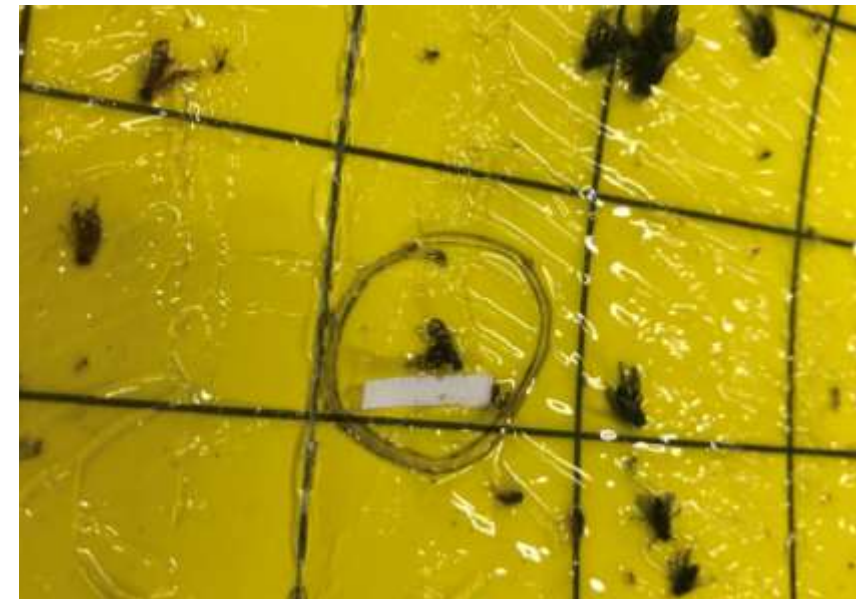
November 2018



ECFF TRAPS AND WHAT TO LOOK FOR

ECFF TRAPS 2018 OVERVIEW

- A total of 43,787 traps were collected by PPQ, NYSDAM and the Tuscarora and processed by Cornell.
- The survey resulted in 5,002 positive flies captured by PPQ distributed across 617 locations and 80 survey grids, 5 positive flies captured by NYSDAM in 2 locations and 2 survey grids, and 106 positive flies captured by the Tuscarora across 2 locations and 1 survey grid.

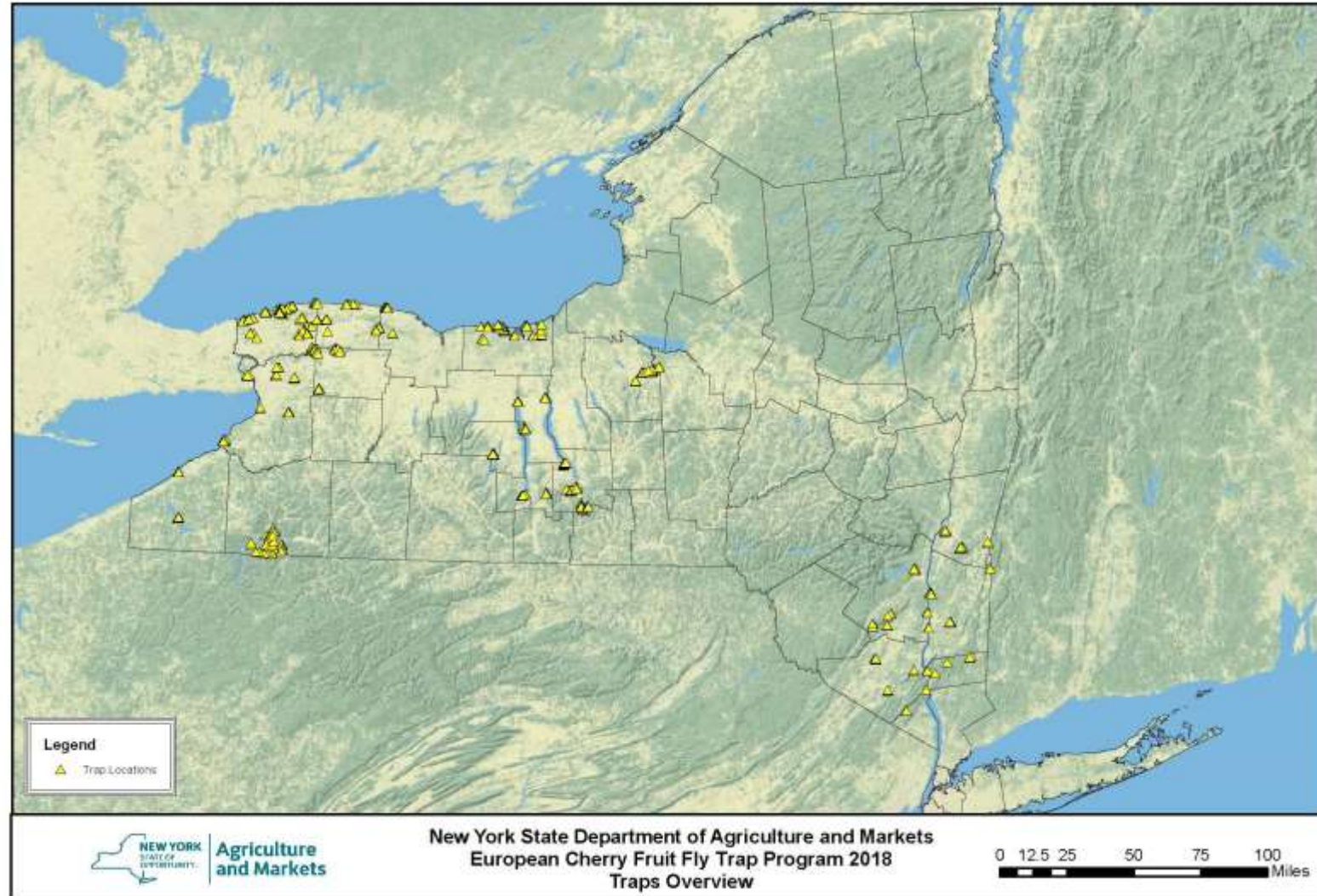


ECFF TRAPS 2018 OVERVIEW

672 ECFF Traps were
placed

Traps were serviced
from 6/7/2018-
10/22/2018

3,655 Traps were
serviced for ECFF

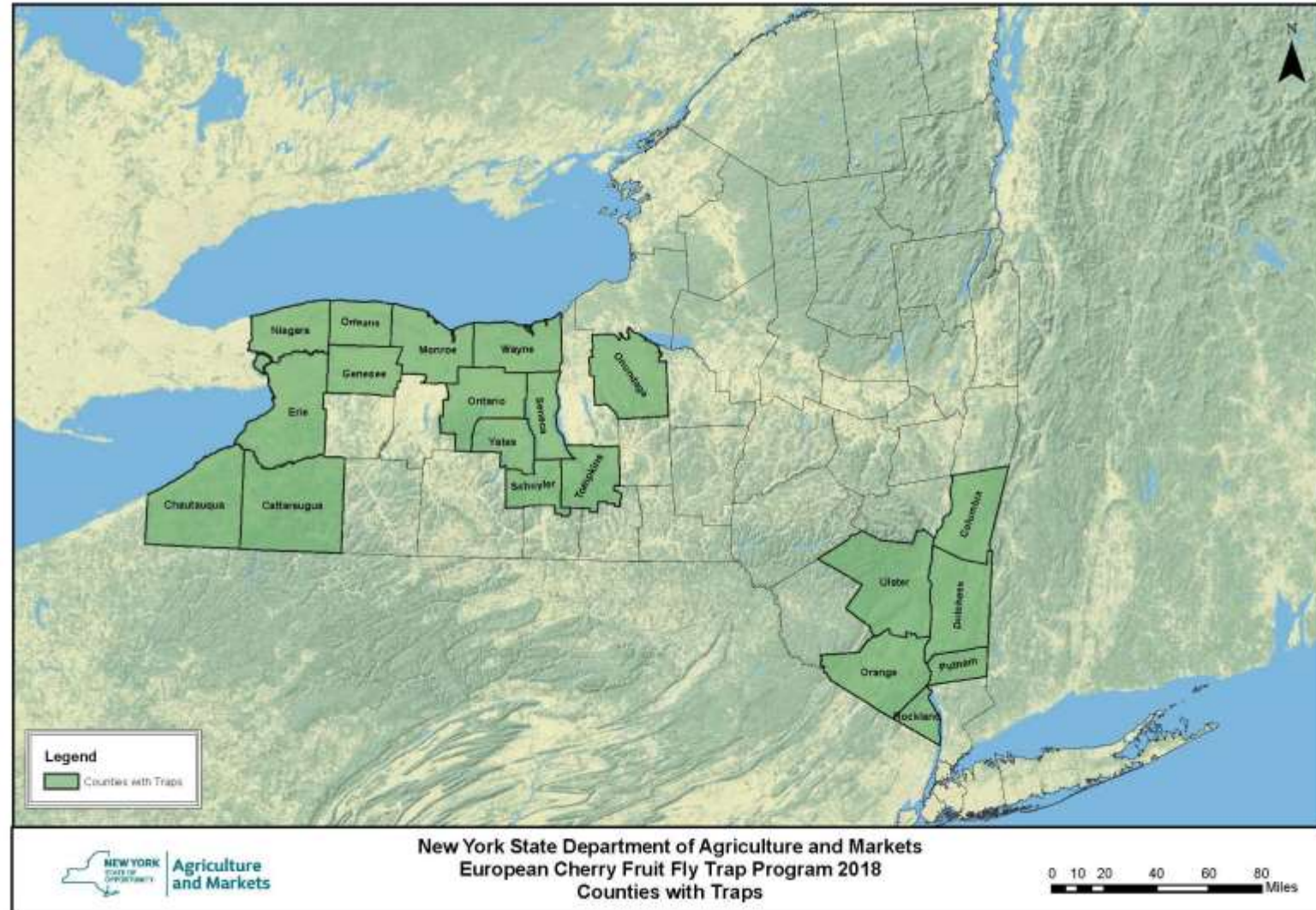


ECFF TRAPS 2018 OVERVIEW

20 Counties through
out New York State had
ECFF Traps

Counties with Traps:

- Cattaraugus, Chautauqua, Columbia, Dutchess, Erie, Genesee, Monroe, Niagara, Onondaga, Ontario, Orleans, Orange, Putnam, Rockland, Seneca, Schuyler, Tompkins, Ulster, Wayne, Yates



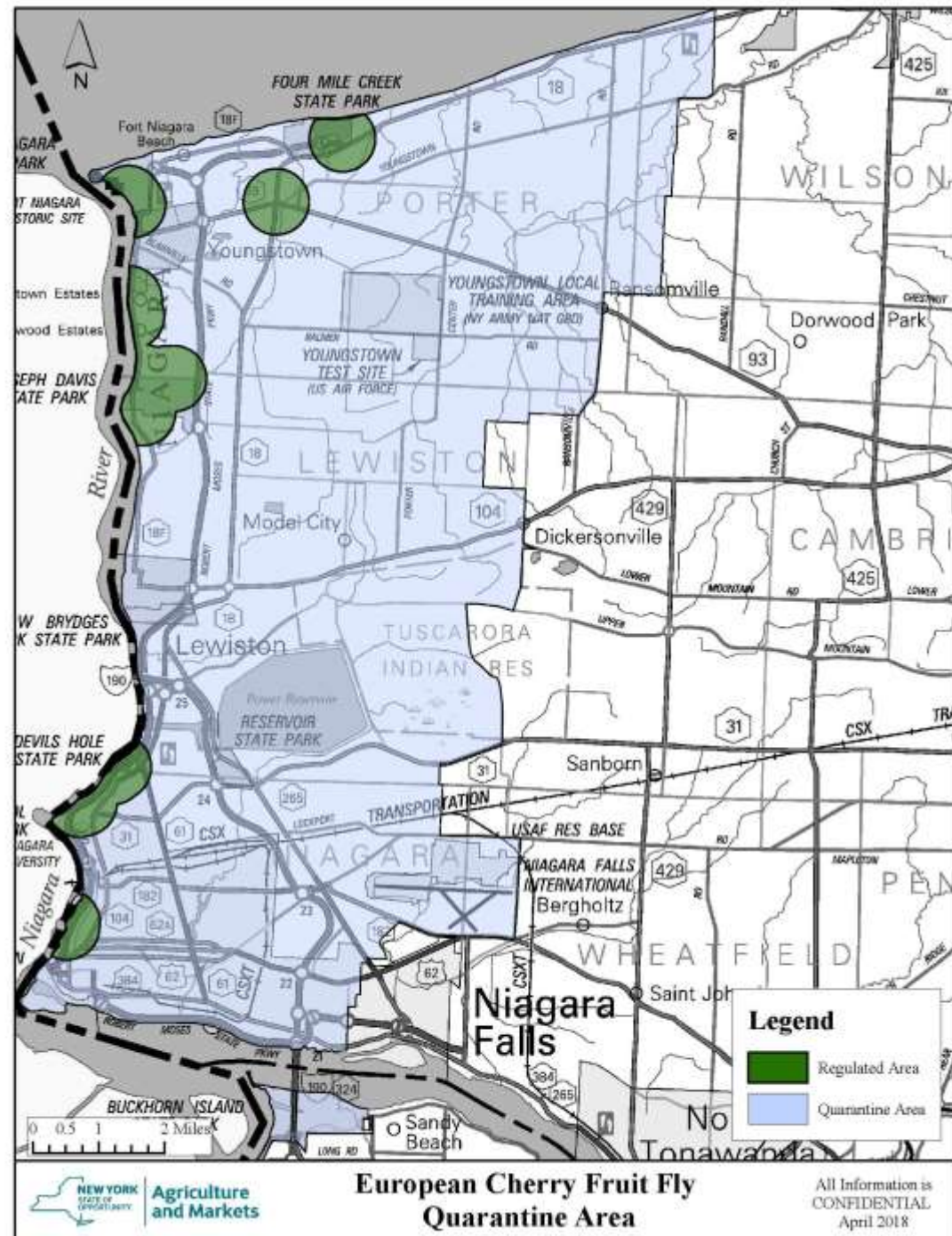
ECFF 2018 REGULATED AND QUARANTINE

The Regulated Area is a 0.5 mile buffer around the 2017 positive ECFF detections

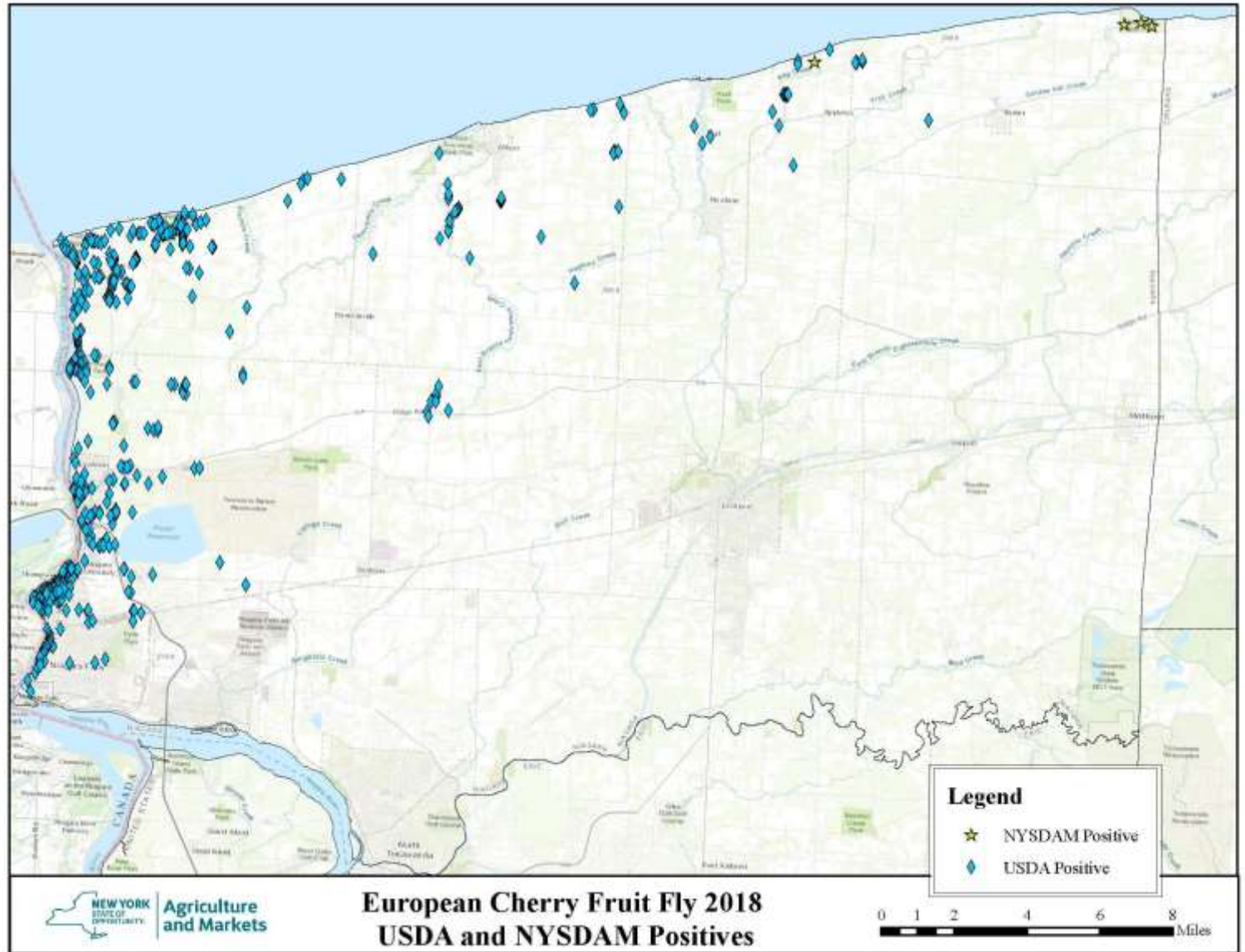
The Quarantine Area is a 4.5 mile buffer around the 2017 positive ECFF detections

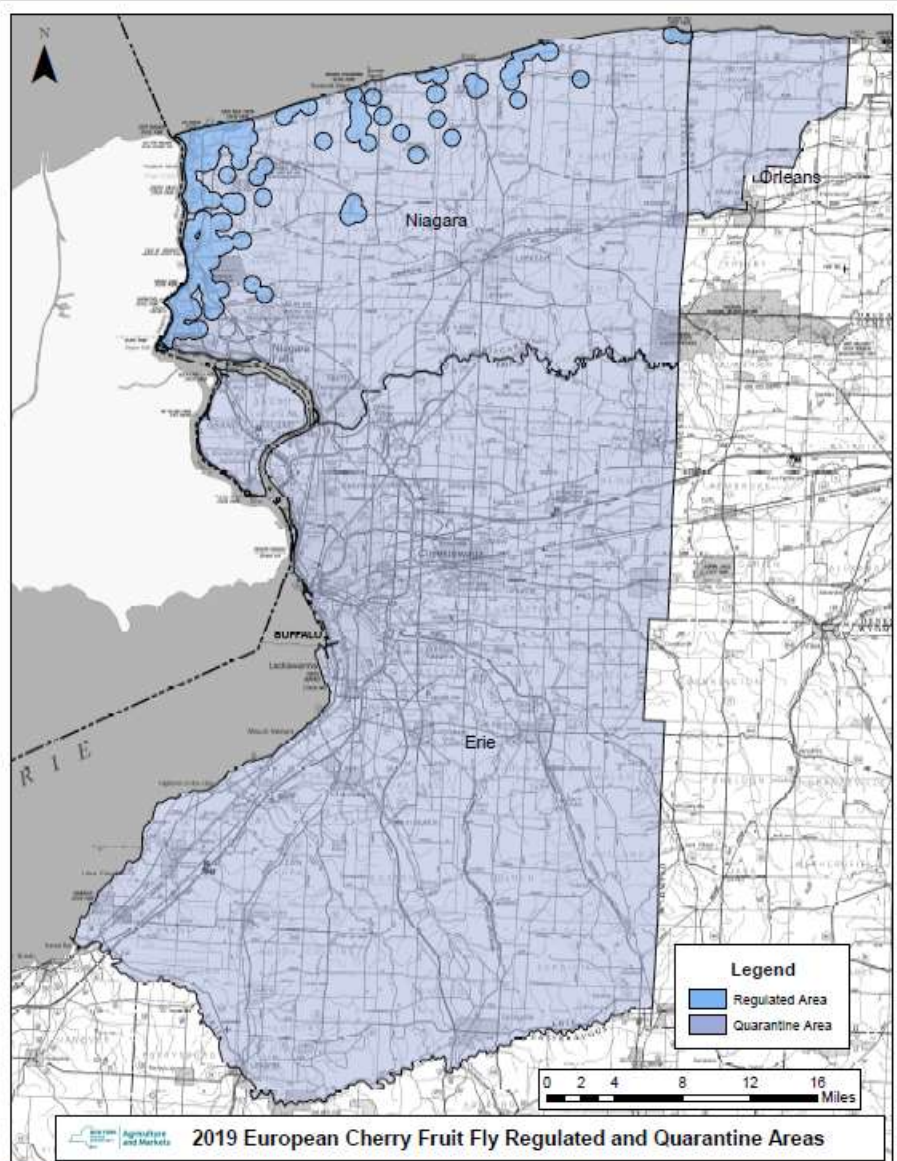
7 Niagara county growers fell within these restricted areas: 2 in the Regulated Area and 5 within the Quarantine Area

Growers within these areas had to enter into a compliance agreement



USDA AND NYSDAM POSITIVE DETECTIONS





Adobe Export PDF

Convert PDF Files to Word or Excel Online

Select PDF File

2019 ECFF ...e Areas.pdf x

Convert to

Microsoft Word (*.docx) v

Document Language: English (U.S.) Change



Convert and edit PDFs with Acrobat Pro DC

Start Free Trial

2019 REGULATED/QUARANTINED AREA

- Regulated Area (.5 Mile) Niagara County
 - 16 Growers
 - 57 Blocks
 - 186.15 Acres
 - Quarantined Area
 - Niagara County 31 growers, 112 Blocks, 268.64 Acres
 - Orleans County 19 growers, 48 Blocks, 58.13 Acres
 - Context: State 2,600 acres tart cherries and 750 Acres of sweet cherries

ECFF 2018 SYSTEMS APPROACH WITH GF-120 NATURALYTE

ACCEPTED
FOR REGISTRATION
APRIL 23, 2018

New York State Department
of Environmental Conservation
Division of Materials Management
Pesticide Product Registration

Doc ID 556649

**Product
Bulletin**

Dow AgroSciences

Dow AgroSciences LLC 9339 Zionsville Road Indianapolis, IN 46268-1054 USA

GF-120® NF Naturalyte® Fruit Fly Bait
EPA Reg. No. 62719-498

EPA 24(c) Special Local Need Registration SLN NY-180004
This label expires and must not be distributed or used after December 31, 2024

For Use Only in Regulated Areas Under Quarantine

For use only by or under the direct supervision of the state/federal cooperative program officials involved in the control of exotic fruit fly members of the family Tephritidae, such as the European Cherry Fruit Fly

For eradication/suppression efforts in the 200-meter zone around positive detections.

ATTENTION

- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- This labeling must be in the possession of the user at the time of application.
- Read this SLN labeling and the label affixed to the container for GF-120 NF Naturalyte Fruit Fly Bait before applying. All applicable use directions, precautions and restrictions on this SLN labeling and the labeling affixed to the container must be followed.
- For ground application only. Aerial application is prohibited.
- This product is toxic to bees exposed to direct treatment. Avoid applying this product or allowing it to drift to blooming crops or weeds if bees are foraging within the treatment area.
- The state/federal cooperative program shall ensure that all beekeepers that operate hives in the treatment area are notified about the application at least 48 hours in advance of a planned treatment.

Refer to product label for GF-120 NF for General information, Mixing and Application directions.

GF-120 NF Naturalyte Fruit Fly Bait is a bait concentrate that should be diluted with water prior to application.

- Once diluted, GF-120 NF Naturalyte Fruit Fly Bait should be used within 24 hours.
- A large droplet spray of 4000 to 6000 um (4 to 6 mm) is recommended to optimize length of bait attract ability.
- Direct spray application to bottoms of leaves and leaves inside the foliage canopy to reduce direct exposure to sun and rain. This product resists wash off, but will lose effectiveness if exposed to rain and overhead irrigation.
- Begin applications as soon as monitoring traps indicate flies are present. Repeat applications every 7-14 days are recommended, however spot spray applications may be made as frequently as every two days when program monitoring determines a need for more applications. Spot spray applications may be shortened to daily after unanticipated rainfall events.

Specimen Label



Ingredient List
Trade name of Dow AgroSciences LLC

For selective attraction and control of multiple species of pestiferous fruit flies including any from, fruit, nut, seed, vegetable or food crop and ornamentals, and on vegetation which may serve as nesting sites for adult flies

Group	%	Effect/Action
Active Ingredients:		
atrazinylol (a mixture of isomers A and B)	0.02%	
spinetorin Di	0.02%	
Other ingredients: includes water, sugars, and plant extracts	99.96%	
Total	100.00%	
Contains 0.02% atrazine equivalent on a weight basis - 0.02 lb a per gallon		

For Organic Production
OMRI
Listed by the Organic Materials Review Institute (OMRI) for use in organic production.

Precautionary Statements
Hazards to Humans and Domestic Animals
EPA Reg. No. 62719-498

CAUTION
Hazard if swallowed
Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE)
Applications and other handlers must wear:
• Long sleeves and long pants
• Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations
• Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

First Aid
If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-368-5898 for emergency medical treatment information.

Environmental Hazards
This product is toxic to aquatic invertebrates. Do not apply directly to water, to water where surface water is present, or to terrestrial areas below the normal high water mark. Do not contaminate water when cleaning equipment or when disposing of equipment washwaters. Do not apply where birds or bees may be present. Do not apply when weather conditions favor drift from treated areas. Do not apply to areas where birds or bees are nesting, foraging, or roosting. Apply this product only as specified on the label.

Directions for Use
It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
Read all Directions for Use carefully before applying.
Do not apply this product in a way that will contact workers or other persons, either directly or through drift. This restriction includes any

in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements
Use this product only in accordance with its labeling and with the Worker Protection Standard (40 CFR Part 170). The Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry intervals. The requirements in this label only apply to uses of this product that are covered by the Worker Protection Standard.
Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.
PPE required for entry into treated areas that is prohibited under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is:
• Coveralls
• Waterproof gloves
• Shoes plus socks

Non-Agricultural Use Requirements
This registration is for use only in uses of this product that are not within the scope of the Worker Protection Standard for Agricultural Pesticides (40 CFR Part 170). The WPS applies when this product is used to protect agricultural plants on farms, forests, nurseries, or greenhouses.

Entry Restrictions for Non-WPS Users These are no specific entry requirements following application of this product when applied by government agencies in abatement, eradication and prevention programs.

Storage and Disposal
Do not contaminate water, food or feed by storage or disposal.
Pesticide Storage Store in original container only. In case of leak or spill, contain material with absorbent material and dispose as waste.
Pesticide Disposal Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Refillable containers 5 gallons or less:
Container Handling Reusable containers: Do not reuse or refill this container.

Triple rinse or pressure wash container to avoid emptying completely after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure wash as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Spray pressure washing nozzle at the side of the container, not into it, at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or for secondary disposal, or by incineration, or by other procedures allowed by state and local authorities.

Refillable containers 5 gallons or larger:
Container Handling Reusable containers: Fill this container with liquid only. Do not refill this container for any other purpose. Cleanse the container before final disposal to the responsibility of the person disposing of the container. Cleanse before refilling to the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents into application equipment or a mix tank. Fill the container about 1/4 full with water and, if possible, spray all interior surfaces with it. If practical, spray thoroughly or recirculate water with the pump for two cycles. Pour or wash rinsate into application equipment or recirculation system. Repeat this cleaning procedure two more times. Then offer for recycling if available, or pressure wash and dispose of in a secondary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Refillable containers 5 gallons or larger:
Container Handling Reusable containers: Do not reuse or refill this container.

Triple rinse or pressure wash container to avoid emptying completely after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Shake and drain. Repeat this cleaning procedure two more times. Then offer for recycling if available, or pressure wash and dispose of in a secondary landfill, or by incineration, or by other procedures allowed by state and local authorities.

FUTURE?

- As you travel east along the lake and consider the impact of regulations:
- Monroe County has many nursery growers and dealers that potentially carry regulated plants
- Wayne County is the largest production area for tart cherries



New York Invasive Species Map

[Instructions](#) [Generate Reports](#) [Data Entry](#) [Links](#) iMapinvasives.org

Welcome back, **Chris**
(chrlogue, User Level 5) 2.13

[Home](#) [Log Out](#)

Search by Species, Location, or ID #

Distribution Legend

Observation Data Source

iMap NYFA

Species

Animal Insect Plant All

By Common Name
Honeysuckle (species unknown)

By Scientific Name
Lonicera spp (species unknown)

More Information for Selected Species

Layers County Shown

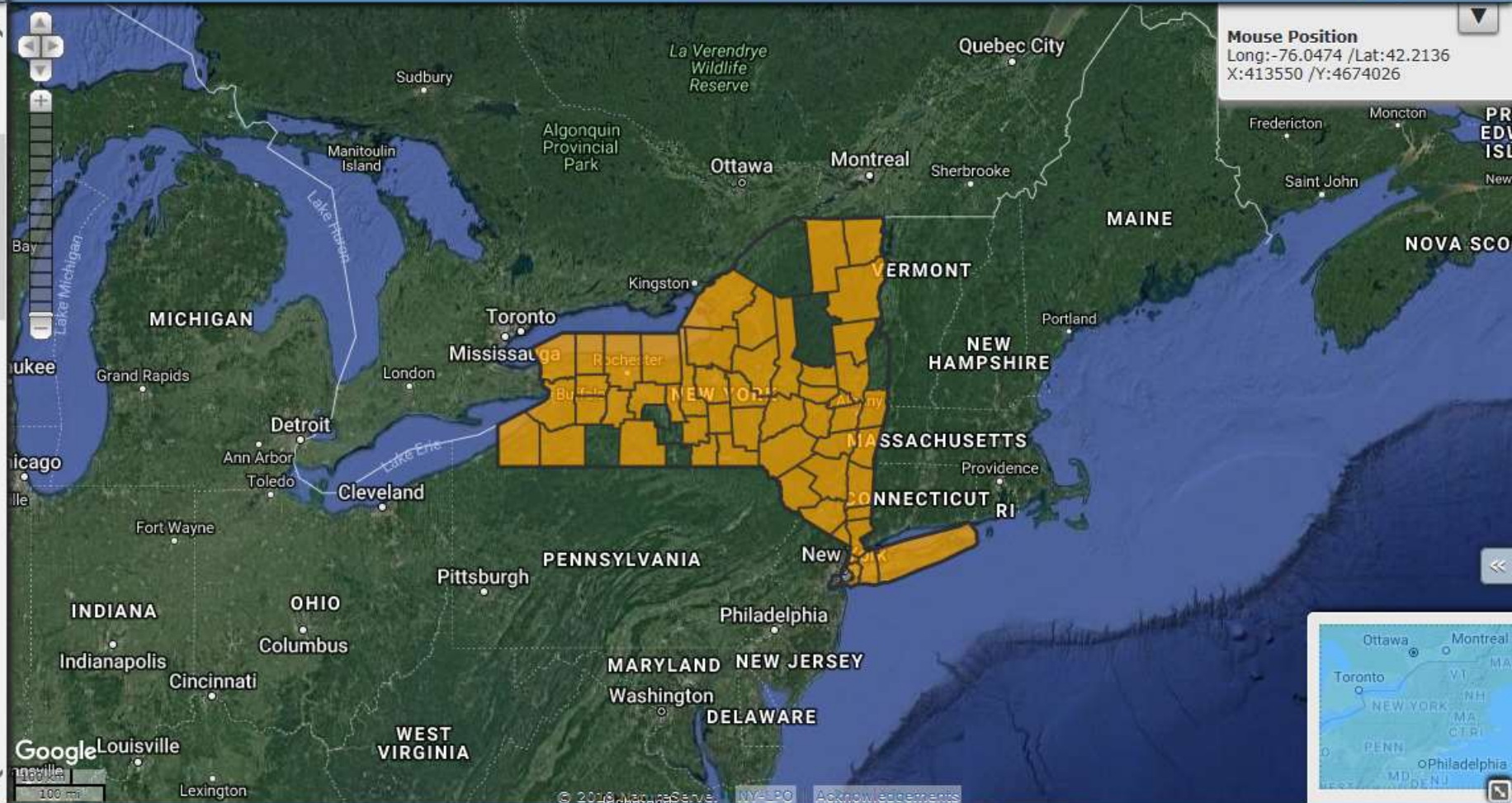
County Watershed PRISM Hide

By ID

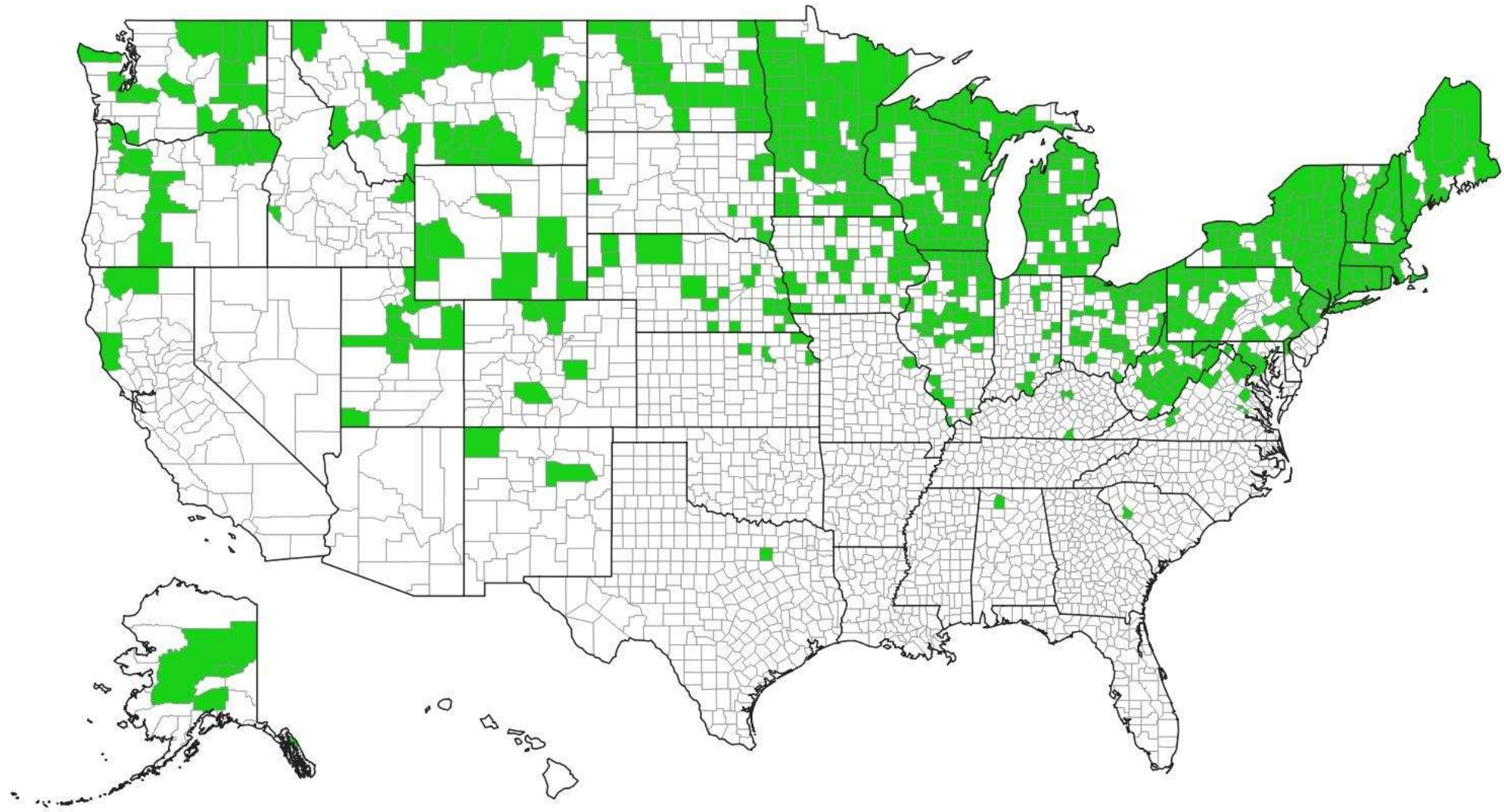
ID Type
Observation

ID

Show Zoom Clear ID



Tatarian honeysuckle (*Lonicera tatarica*)



Legend

- No Data
- Species Reported

AREAS FOR FUTURE CONSIDERATION

- Almost 12,000 honeysuckle observations in NYS in Imap Invasives
- What is the required national trapping protocol-orchard vs. untreated areas
- Can we utilize abandoned orchards to determine if ECFF can and does use the tart and sweet cherries for egg laying in northern conditions?
- Consideration of standard control measures that growers are using for management of other *Rhagoletis*. Can these materials meet quarantine standards? What are the recordkeeping requirements?

NAPIS - National Agricultural Pest Information System

Cindy Music, Purdue University



➤ **WHAT**

- **The repository for CAPS survey data**
- **The product of planning, approval, supply procurement, survey and data processing**

➤ **WHY**

- *The mission of the CAPS program is to provide a survey profile of exotic plant pests in the United States deemed to be of regulatory significance through early detection and surveillance activities.*
- **Agricultural Impact**
- **Archive**

➤ **WHEREFORE**

➤ **Reports**

➤ **Maps**

➤ **Accountability report**

➤ **Tools**

➤ **Results**

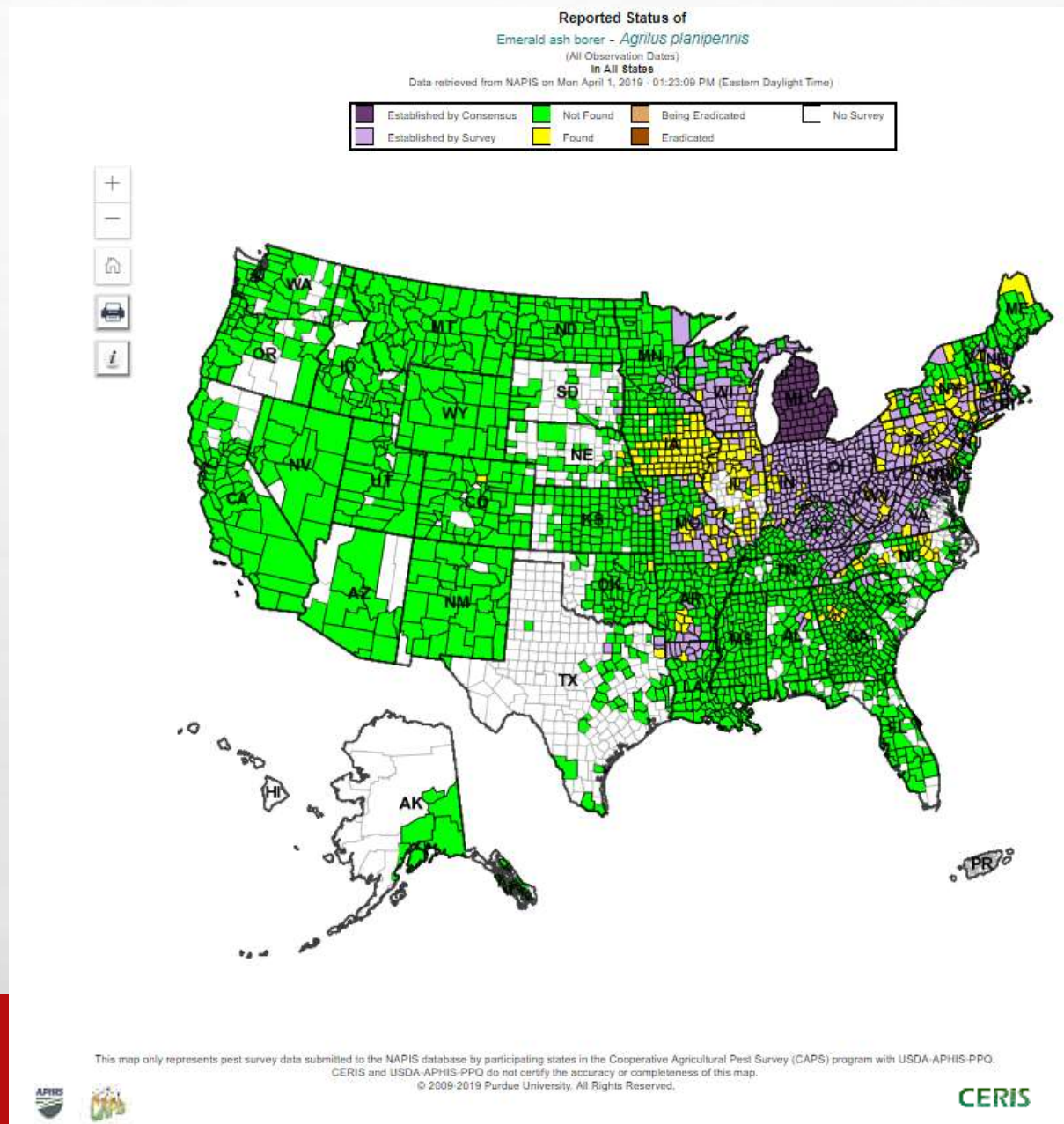
Reports:

Record Summary

- emerald ash borer
- by state
- by survey method

Filter	Value			
Observation Dates	All Dates			
Pest	Emerald ash borer ~ Agrilus planipennis			
Region	All U.S.			
Summarized by	Record Count			
State	Survey Method	Positives	Negatives	Total
Alabama	General Trapping Procedure	3	20	23
Alabama	Trap;EAB Purple Prism	0	142	142
State TOTAL		3	162	165
Alaska	Emerald Ash Borer Visual Survey	0	4	4
Alaska	Trap;EAB Purple Prism	0	60	60
State TOTAL		0	64	64
Arizona	Trap;EAB Purple Prism	0	43	43
State TOTAL		0	43	43
Arkansas	Emerald Ash Borer Visual Survey	3	0	3
Arkansas	General Pest Observation; Lab Confirmed	1	0	1
Arkansas	General Trapping Procedure	1	0	1
Arkansas	Trap;EAB Purple Prism	8	654	662
Arkansas	Trap;Flight Intercept Trap-Bark Beetles	0	1	1
Arkansas	Trap;Lindgren Multi-Funnel EWB/BB	0	5	5
State TOTAL		13	660	673
California	Sweep;5 Total;5-10 Sites	0	34	34
California	Trap;EAB Purple Prism	0	93	93
California	Trap;Lindgren Multi-Funnel EWB/BB	0	121	121
State TOTAL		0	248	248
Colorado	Emerald Ash Borer Visual Survey	0	23	23
Colorado	General Nursery Inspection	0	310	310
Colorado	General Pest Observation; Lab Confirmed	1	44	45
Colorado	Trap;EAB Purple Prism	0	674	674

EAB map



Tools

- Interface
 - Source, Year
 - Survey, Target, State
 - Query
- Tools
 - Side arrow
 - Check, dash
 - Activity

Accountability Report

This report is a CAPS tool to evaluate states' fulfillment of the cooperative agreements. Survey data entered into NAPIS is matched by pest and state against the funded targets for each state, and is updated daily. States can use the report to verify the target and contact Field Operations to reconcile discrepancies. If survey data has been entered and does not match to the target as expected please contact napis@ceris.purdue.edu.

Source: Year: State:

Survey: Target:

STATE	✓	SURVEY NAME	SURVEY TARGET	+	-	ACTIVITY
▶ Alabama		State Total		0	0	
▶ Arkansas	✓	State Total		0	296	2019-03-29
▶ Colorado	-	State Total		0	309	2019-02-27
▶ Connecticut	-	State Total		0	279	2018-12-24
▶ Delaware	✓	State Total		7	644	2019-01-24
▶ Florida	-	State Total		0	6308	2019-03-27
▶ Georgia	✓	State Total		0	706	2019-02-15
▶ Guam		State Total		0	0	
▶ Hawaii		State Total		0	0	
▶ Idaho	✓	State Total		0	301	2018-12-20
▶ Illinois	✓	State Total		0	349	2019-03-08
▶ Indiana	✓	State Total		73	6966	2019-03-01
▶ Iowa	✓	State Total		0	60	2018-12-19
▶ Kansas	✓	State Total		40	672	2018-10-26
▶ Kentucky	✓	State Total		0	295	2018-12-12
▶ Louisiana	-	State Total		0	140	2019-02-05
▶ Maine	✓	State Total		0	150	2019-01-07

-	State Total		0	77	2019-01-10
	Corn Commodity Survey	<i>Autographa gamma</i>	0	5	2019-01-10
		<i>Helicoverpa armigera</i>	0	5	2019-01-10
		<i>Spodoptera litura</i>	0	5	2019-01-10
		<i>Thaumatotibia leucotreta</i>	0	5	2019-01-10
	Exotic Wood Borer/Bark Beetle Survey	<i>Hylurgops palliatus</i>	0	9	2019-01-10
		<i>Hylurgus ligniperda</i>	0	9	2019-01-10
		<i>Ips sexdentatus</i>	0	9	2019-01-10
		<i>Ips typographus</i>	0	9	2019-01-10
		<i>Lycorma delicatula</i>	0	3	2019-01-10
		<i>Orthotomicus erosus</i>	0	9	2019-01-10
		<i>Pityogenes chalcographus</i>	0	9	2019-01-10
		<i>Sirex noctilio</i>	0	0	
	<i>Trichoferus campestris</i>	0	0		

Data Entry Error - Funding Source

✓	State Total		0	95	2019-04-01
	Corn Commodity Survey	<i>Autographa gamma</i>	0	5	2019-01-10
		<i>Helicoverpa armigera</i>	0	5	2019-01-10
		<i>Spodoptera litura</i>	0	5	2019-01-10
		<i>Thaumatotibia leucotreta</i>	0	5	2019-01-10
	Exotic Wood Borer/Bark Beetle Survey	<i>Hylurgops palliatus</i>	0	9	2019-01-10
		<i>Hylurgus ligniperda</i>	0	9	2019-01-10
		<i>Ips sexdentatus</i>	0	9	2019-01-10
		<i>Ips typographus</i>	0	9	2019-01-10
		<i>Lycorma delicatula</i>	0	3	2019-01-10
		<i>Orthotomicus erosus</i>	0	9	2019-01-10
		<i>Pityogenes chalcographus</i>	0	9	2019-01-10
		<i>Sirex noctilio</i>	0	9	2019-04-01
	<i>Trichoferus campestris</i>	0	9	2019-04-01	

Thank you

Cindy Music

765-496-8126

NAPIS@purdue.edu

CAPS Information Services

– Providing continuous maintenance, process improvements, and a high level of customer support

HOW CAMPERS' BELIEFS ABOUT FOREST PESTS AFFECT FIREWOOD TRANSPORT BEHAVIOR

John J. Daigle, Jessica Leahy, Sandra De Urioste-Stone, and Darren Ranco

University of Maine

Orono, Maine

Crista Straub

US Geological Survey

Fort Collins, Colorado

Nate Siegert

US Forest Service

Durham, New Hampshire



social sciences

How Campers' Beliefs about Forest Pests Affect Firewood Transport Behavior: An Application of Involvement Theory

John J. Daigle[○], Crista L. Straub, Jessica E. Leahy, Sandra M. De Urioste-Stone[○],
Darren J. Ranco[○], and Nathan W. Siegert

We conducted a survey of 272 campers at 18 private and public campgrounds in Maine ($n = 101$), New Hampshire ($n = 88$), and Vermont ($n = 83$) to learn about their firewood movement behavior, and knowledge and beliefs about invasive forest pests. More than 25 percent of respondents reported that they often or always brought firewood from home for camping. Most (92 percent) had heard of invasive forest pests, but <25 percent could name an example without being prompted, affirming a need for increasing exposure of outreach materials to facilitate activation of attitudes associated with forest pests and transport of firewood. Campers provided helpful suggestions to improve current outreach and education efforts such as illustrating more of the detrimental impacts forest pests have on trees near homes or recreation areas. For campers who believe their wood is safe and therefore okay to transport regardless of regulations, a need exists to re-message arguments. Furthermore, results suggest that some campers with low involvement who are less engaged and less inclined to seek out information may additionally need more direct approaches. Actions to better capture the attention of these campers could potentially include confiscating illegally transported firewood at check stations, issuing warnings, or administering fines for moving nonlocal or nonheat-treated firewood in order to obtain compliance with protective firewood regulations.

Keywords: *Agrilus planipennis*, *Anoplophora glabripennis*, Asian longhorned beetle, emerald ash borer, firewood movement

The movement of firewood is a documented invasion pathway for invasive forest pests that affect or threaten many of our North American forests (Reid and Marion 2005,

well as transporting noncommercial firewood for camping and other outdoor recreational activities (e.g., Haack et al. 2010b, Jacobi et al. 2011, Siegert et al. 2015b). Although commercial

INVASIVE FOREST PESTS

Asian Longhorn Beetle (ALB)



Emerald Ash Borer (EAB)

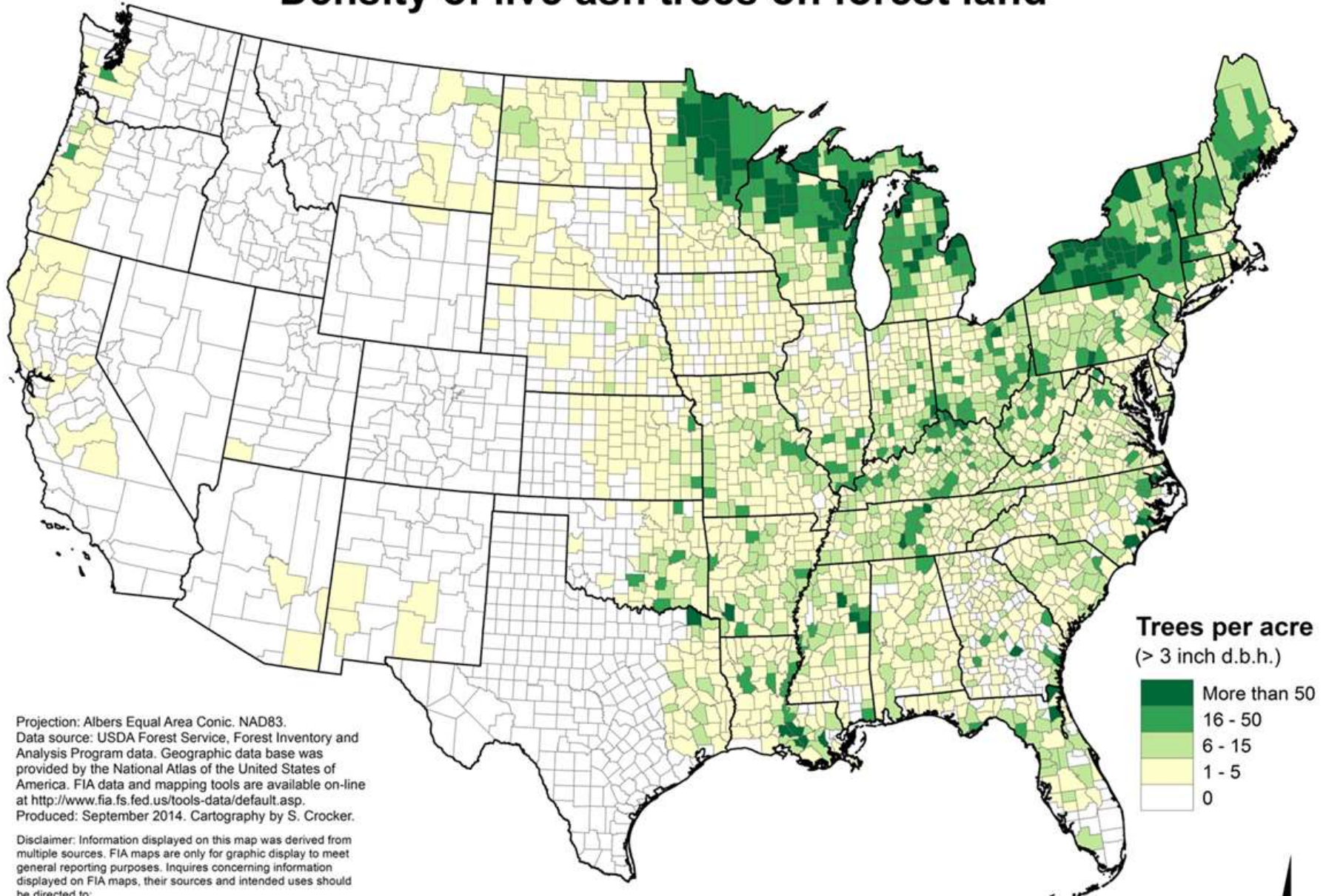




CAMPGROUNDS IN THE UNITED STATES



Density of live ash trees on forest land



Projection: Albers Equal Area Conic, NAD83.
Data source: USDA Forest Service, Forest Inventory and Analysis Program data. Geographic data base was provided by the National Atlas of the United States of America. FIA data and mapping tools are available on-line at <http://www.fia.fs.fed.us/tools-data/default.asp>.
Produced: September 2014. Cartography by S. Crocker.

Disclaimer: Information displayed on this map was derived from multiple sources. FIA maps are only for graphic display to meet general reporting purposes. Inquires concerning information displayed on FIA maps, their sources and intended uses should be directed to:



USDA Forest Service
Northern Research Station
1992 Folwell Ave., St. Paul, Minn.



0 80 160
Miles



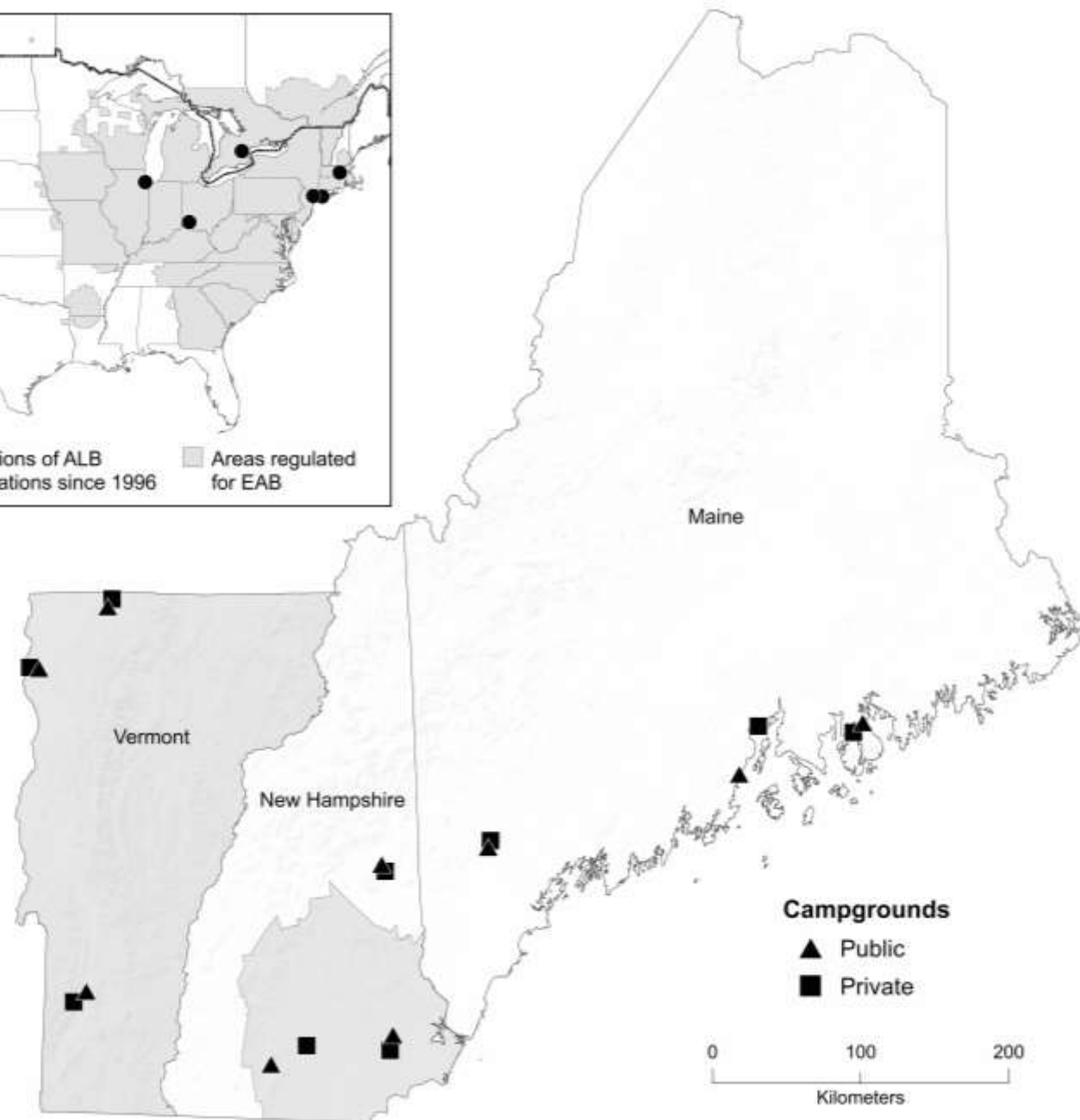
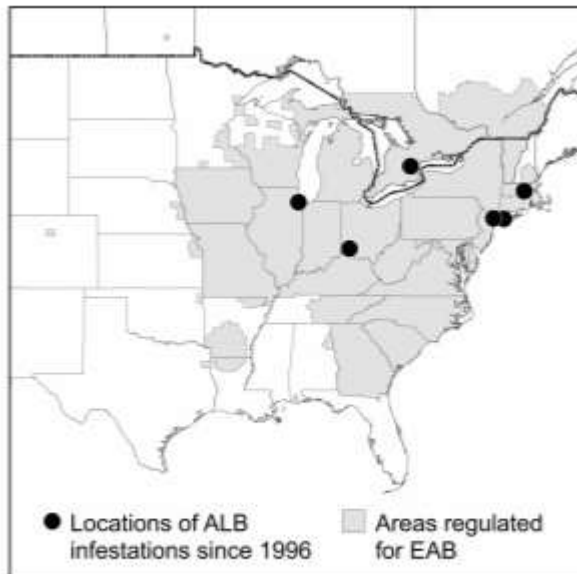
**BAN OF OUT-OF-STATE
FIREWOOD COMING INTO MAINE**



RESEARCH METHODS

- Onsite interviews with campers at their campsite
- 18 Public and Private campgrounds in Maine, New Hampshire, and Vermont
- 35 questions and carefully sequenced to obtain information about forest pests and at the end of interview feedback on outreach materials for each state





RESULTS

Campground State			
		Response	%
Maine		101	37%
New Hampshire		88	32%
Vermont		83	31%
Total		272	100%

RESULTS

Campground Status			
		Response	%
Public		193	71%
Private		80	29%
Total		273	100%

RESPONDENT CHARACTERISTICS

Is this your first time in this state?			
		Response	%
Yes		24	9%
No		248	91%
Total		272	100%









RESPONDENT CHARACTERISTICS

How many nights did you spend at a campground in this state last year?			
		Response	%
Zero nights		44	16%
One night		29	11%
2-5 nights		69	25%
6-10 nights		44	16%
More than 10 nights		88	32%
Total		274	100%

RESPONDENT CHARACTERISTICS

Home State	Response	%
New Hampshire	63	25%
Massachusetts	52	20%
Maine	46	18%
Vermont	39	15%
New York	14	5%
I do not reside in the United States	8	3%
Connecticut	8	3%
Florida	7	3%
New Jersey	4	2%
Illinois	2	1%
Ohio	2	1%
Rhode Island	2	1%
Pennsylvania	2	1%
Virginia	2	1%
Total	256	100%

RESPONDENT CHARACTERISTICS

Home State	Response	%
New Hampshire	63	25% 
Massachusetts	52	20% 
Maine	46	18%
Vermont	39	15%
New York	14	5%
I do not reside in the United States	8	3%
Connecticut	8	3% 
Florida	7	3%
New Jersey	4	2% 
Illinois	2	1% 
Ohio	2	1% 
Rhode Island	2	1%
Pennsylvania	2	1% 
Virginia	2	1% 
Total	256	100%

FREQUENCY OF TRANSPORTING FIREWOOD

How often do you bring firewood?			
		Response	%
Never		161	59%
Rarely		26	10%
Sometimes		24	9%
Often		18	7%
Always		44	16%
Don't know		0	0%
Total		273	100%

TRANSPORTING FIREWOOD THIS VISIT

Did you bring firewood today?			
		Response	%
Yes		77	28%
No		197	72%
Total		274	100%

HEARD OF FOREST PESTS?

Have you heard of forest pests?			
		Response	%
Yes		251	92%
No		23	8%
Total		274	100%

UNPROMPTED IDENTIFICATION

Which forest pests have you heard of?	ME n (%)	NH n (%)	VT n (%)	Overall n (%)
Emerald Ash Borer	18 (19%)	11 (14%)	25 (33%)	55 (22%)
Asian Longhorn Beetle	15 (15%)	21 (28%)	17 (23%)	54 (22%)
Other	19 (20%)	8 (11%)	11 (15%)	38 (15%)
Yes, but can't name specifically	57 (59%)	45 (59%)	40 (53%)	143 (57%)

INVASIVE FOREST PESTS INCLUDE INSECTS THAT ARE NATIVE TO ANOTHER REGION AND WHEN BROUGHT TO ANOTHER AREA, SPREAD WIDELY AND CAUSE HARM TO TREES. ON A SCALE OF 1 TO 5, WOULD YOU SAY THAT INVASIVE FOREST PESTS ARE:

	ME	NH	VT			
Of concern to me	1.64	1.94 ^a	1.53 ^a			
Matters to me	1.62 ^b	1.59	1.29 ^b			
Impacts community where campground is located	2.53	2.74	2.51			
Impacts my community	2.71	3.19 ^a	2.43 ^a			
Impacts me or my family	3.70	4.14 ^a	3.31 ^a			
Measurements						
Of concern to me	1	2	3	4	5	Of no concern to me
Impacts me or my family	1	2	3	4	5	Does not impact me or family

LEVEL OF INVOLVEMENT ACROSS FIVE AREAS OF FOREST PESTS

Level of involvement			
		Total number of respondents	%
Low (16-25)		44	16%
Medium (13-15)		29	11%
High (9-12)		69	25%
Very high (5-8)		44	16%
Total		274	100%

ATTITUDES TOWARD FOREST PESTS AND LEVEL OF INVOLVEMENT

	Low	Medium	High	Very High
There is not much one individual can do about invasive forest pests brought in by firewood	1.85	1.53	1.38	1.50
I don't think invasive forest pests brought in by firewood are very important	1.63 ^a	1.25	1.19 ^b	1.36
The threat of invasive forest pests brought in by firewood is serious	3.94 ^a	4.53 ^b	4.84 ^b	4.95 ^c
As long as other people continue to bring firewood from home, my efforts to prevent invasive forest pests are useless	2.63 ^a	2.17	2.09	1.83 ^b
The invasive forest pest risk from firewood is exaggerated	2.32 ^a	1.37 ^b	1.47 ^b	1.37 ^b
In the long run, things will balance out with invasive forest pests	2.46	1.98	2.34	1.81

**PROMPTED FAMILIARITY WITH EMERALD
ASH BORER AND ASIAN LONGHORN BEETLE**

Have you heard of Emerald Ash Borer and Asian Longhorn Beetle?	ME n (%)	NH n (%)	VT n (%)	Overall n (%)
Emerald Ash Borer	52 (51%)	40 (45%)	49 (59%)	142 (52%)
Asian Longhorn Beetle	74 (73%)	70 (80%)	65 (78%)	210 (77%)

TRANSPORTING FIREWOOD THIS VISIT

Did you bring firewood today?			
		Response	%
Yes		77	28%
No		197	72%
Total		274	100%

**HAVING HEARD ABOUT EAB AND
WHETHER CAMPERS BROUGHT
FIREWOOD**

	Did you bring firewood with you on this weekend's trip to ME, NH, or VT?		
	Yes	No	Total
Have you heard of Emerald Ash Borer?			
Yes	48	94	142
No	29	103	132
Total	77	197	274

**HAVING HEARD ABOUT ALB AND
WHETHER CAMPERS BROUGHT
FIREWOOD**

	Did you bring firewood with you on this weekend's trip to ME, NH, or VT?		
	Yes	No	Total
Have you heard of Asian Longhorn Beetle?			
Yes	64	146	210
No	13	51	64
Total	77	197	274

REVIEW AND IMPLICATIONS OF FINDINGS

- 72% of campers indicated they DID NOT transport firewood on this visit
- 41% indicated at times they bring firewood and 23% indicated often or always
- Many campers are coming from states that have known detections of EAB - now we need to consider more recent detections in VT and ME
- Most campers have concerns about invasive pests but do not have a high memory access to specific pest names
- When prompted there is a higher memory association of EAB and ALB with forest pests
- Important is that many of those indicating they had heard of EAB and ALB indicated they transported firewood to the campground!

REVIEW AND IMPLICATIONS OF FINDINGS

- There is a broad range with campers and their level of involvement with the issue of forest pests
- Campers who have high levels of involvement have stronger beliefs toward actions to prevent the spread of invasive forest pests
- Although forest pests are a concern and matter to campers, many do not associate them impacting their community, campground, or family
- State agency officials were the most common source for information about EAB and ALB. The media, especially TV news, was the frequently identified format, some included witnessing devastation first hand, and seeing purple traps

RECOMMENDATIONS AND FUTURE RESEARCH

- Campers rated the presented outreach materials highly, especially materials with clear pictures of the insects. (prefer less text)
- Comments suggested that materials showing effects of the insects on the landscape would be especially effective in convincing people not to move firewood
- In order for an argument to be effective (measured by a change in belief), three argument attributes must be present:

NOVELTY: The argument must present a new side to the issue that the receiver hadn't previously thought of.

STRENGTH: Even if the argument is new, unless it is also strong the receiver will not be sufficiently motivated to change his/her belief.

RELEVANCE: Even the strongest, novel arguments are doomed to failure if they are not relevant to the problem. The argument **MUST** specify and address issues around which the advocated position.

ASSESS NEW PERSUASIVE ARGUMENTS

- Homeowners are willing to pay up to 10% more knowing their home heating firewood is safe from harmful forest pests
- Help prevent losing our Ash trees and buy firewood where you burn it
- Sustaining Ash Trees and Maine Wabanaki Traditions depends on YOU - Buy firewood where you burn it
- Our wildlife needs Ash trees more than invasive forest pests – please buy firewood where you burn it
- It's easy to purchase firewood locally for camping – please buy firewood where you burn it
- Think your firewood is safe? Think again as forest pests can remain hidden under the bark – please buy firewood where you burn it

**SAFETY, AESTHETICS, AND
ECONOMIC IMPACTS**





REVIEW AND IMPLICATIONS OF FINDINGS

- Continued research needed to ultimately assess the efficacy of Outreach materials and other efforts to have campers not transport firewood
- We need to examine the influence of invasive forest pests as impacts become realized and does this further influence involvement and attitudes toward beliefs of transporting firewood
- Assess additional frameworks such as theory of planned behavior of examining behavior change of campers and transport of firewood
- Research to prioritize efforts that may influence campers and how best to integrate into outreach materials and other planning efforts

Thank you!



John Daigle
School of Forest Resources
University of Maine
jdaigle@maine.edu

Questions?



United States Department of Agriculture

Export Certification, Trade and Accreditation

Eastern Plant Board Portland ME

Laney Campbell

Accredited Certifying Officials (ACO's) issued 699,900 plus phytosanitary certificates.

The total value of U.S. Exports totaled \$23 billion.

- **Federal 200,722;**
- **County 234,781;**
- **State 289,371**



Field Operations Staff assisted with twelve Foreign Visits Nation Wide. Commodity visits included; Stone fruit, Christmas Trees, Strawberries, Grain, Apples, Cherries, Papaya , Potatoes, National Seed Lab etc....



Top 10 Exported Commodities

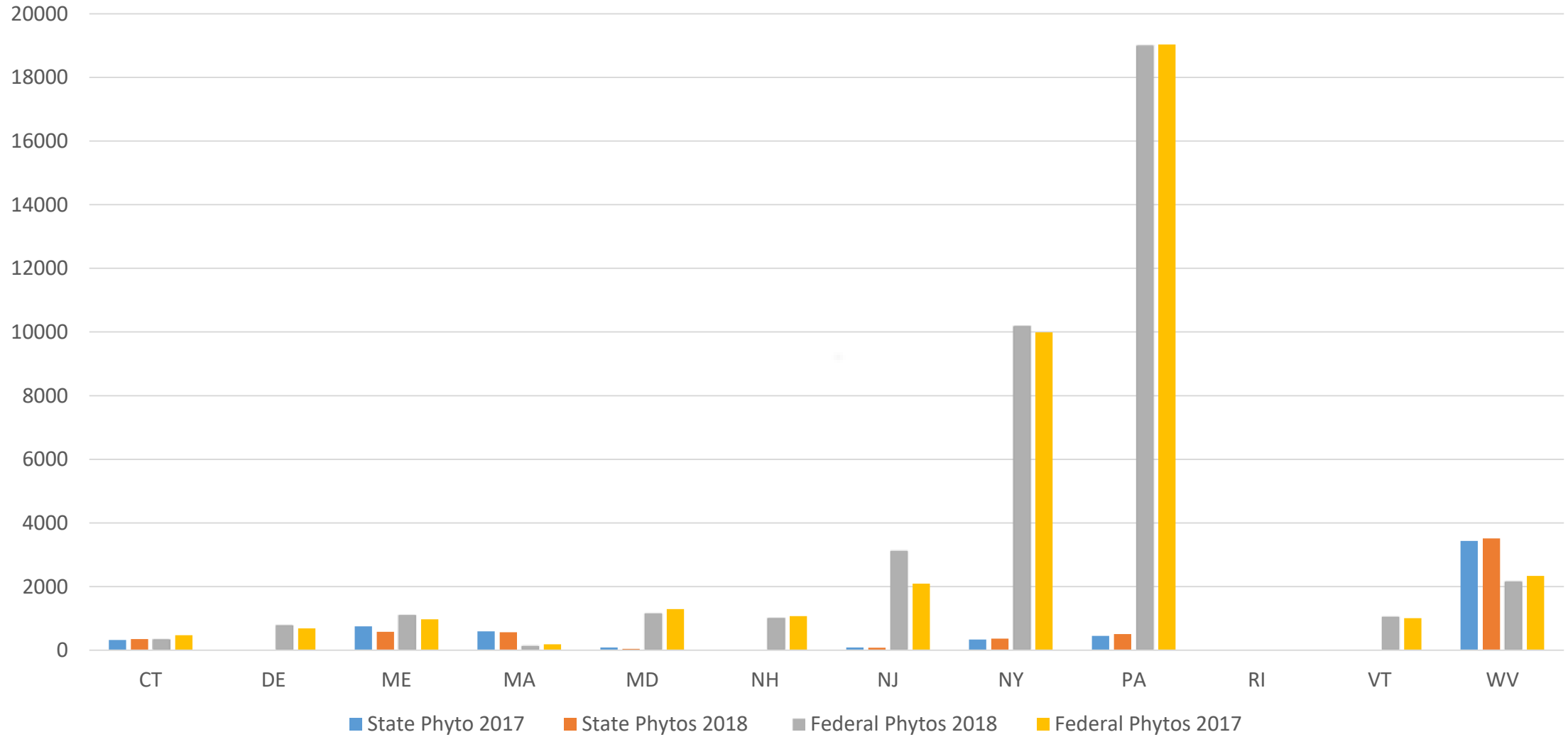
Common Names	Botanical Name	Number of Certificates Issued
Apple	Malus sp.	45,039
Corn	Zea Mays	36,360
Grape	Vitis vinifera	27,359
Almond	Prunus dulcis	25,932
Strawberry	Fragaria sp.	23,203
Soybean	Glycine max	23,146
Red Oak(lumber)	Quercus rubra	21,700
Potato	Solanum tuberosum	20,829
Broccoli	Brassica oleracea	18,726
Orange(fruit)	Citrus sinensis	18,696



State	EPB 2018	State Phytos 2018	State Phyto 2017	Difference	Federal Phytos 2018	Federal Phytos 2017	Difference
CT		350	320	30	333	472	139
DE		1	1	0	776	687	89
ME		578	750	172	1,100	970	130
MA		561	590	29	129	188	59
MD		45	89	44	1,150	1,296	146
NH		9	10	1	1,004	1,074	70
NJ		79	88	9	3,115	2,091	1,024
NY		363	335	28	10,175	9,986	189
PA		509	448	61	18,984	19,039	55
RI		1	1	0	0	0	0
VT		13	8	5	1,043	1,005	38
WV		3,511	3,431	80	2,152	2,337	185



EPB States 2017-2018 phyto numbers





State EPB 2018

Top Five Exports From Each State

CT	Nicotina, Malus, Juglana, Quercus, Rhododendron,
DE	Vitis, Prunus, Vaccinium, Taxus, Mangifera,
ME	Hordeum, Solanum, Pinus, Triticum, Secale,
MA	Fragaria, Coffea, Vaccinium, Rubus, Liriodendron,
MD	Triricum, Glycine, Quercus, Arachis, Pinus,
NH	Tsuga, Pinus, Quercus, Acer, Fraxinus
NJ	Glycine, Vitis, Tulipa, Vaccinium, Calibrachoa
NY	Malus, Glycine, Quercus, Fraxinus, Hordeum
PA	Fraxinus, Quercus, Spinacia, Nicotiana, Prunus
RI	Rhododendron
VT	Quercus, Fraxinus, Pinus, Acer, Prunus
WV	Quercus, Liriodendron, Carya, Acer, Tilia

Guidance on Cannabis sativa from Office of General Council (OGC) states: Regarding: Phytosanitary export certificates for Cannabis sativa plants and plant parts.

APHIS may issue PCs for exports. The exporter, however, must comply with applicable requirements, such as the Controlled Substances Act (CSA) and DEA regulations. APHIS, however, shouldn't convey advice with regards to other Department's statutory/regulatory authorities.

APHIS shouldn't provide guidance to exporters on applicable Federal Requirements; this resource may help the states assist exporters:

<https://www.dea.gov/druginfo/csa.shtml>



APHIS shouldn't provide guidance to exporters on applicable Federal Requirements; this resource may help the states assist exporters:

<https://www.dea.gov/druginfo/csa.shtml>

If the exporter can meet all the phytosanitary requirements on an import permit certify.

Additionally all non-phytosanitary requirements must be met, but these are not the responsibility of APHIS-PPQ. It is the responsibility of the exporter to identify, understand and meet those non-phytosanitary requirements.



Commodity Requirements

COMMODITY	PART	Country
Cannabis sativa	Bud stems	Cook Islands, Niue, Saint Lucia
Cannabis sativa	Buds	Cook Islands, Niue, Saint Lucia
Cannabis sativa	Leaves	Cook Islands, Niue, Peru, Saint Lucia
Cannabis sativa	Rooted plant cuttings	Cook Islands, Niue, Saint Lucia
Cannabis sativa	Roots	Cook Islands, Niue, Saint Lucia
Cannabis sativa	Rootstock	Cook Islands, Niue, Saint Lucia
Cannabis sativa	Seeds	Argentina, Canada, Cook Islands, Dominica, Grenada, New Zealand, Niue, Saint Lucia, Tanzania, United Republic of
Cannabis sativa	Stems	Cook Islands, Niue, Saint Lucia



Report Summary: October 1, 2017 to March 15, 2019

Commodity Name	Plant Part	Total Quantity
Cannabis sp.(Cannabis sp.)	Seeds	1 Bags
	Seeds	210 Pounds

Greece					
Total Certificates: 1					
Commodity	Plant Part	Quantity	Certificate Number		
Cannabis sp.(Cannabis sp.)	Seeds	1 Bags	F-S-41047-08034945-7-N	Issued out of OR	Meristem Farms Morrisville VT
Uruguay					
Total Certificates: 1					
Commodity	Plant Part	Quantity	Certificate Number		
Cannabis sp.(Cannabis sp.)	Seeds	210 Pounds	F-S-21067-07905715-7-N	Issued out of KY	Sunstrand LLC Louisville KY



United States Department of Agriculture

FRSMP and DEEP Basics

Erin Otto

National Coordinator for Official Control





Acronyms

- FRSMP

Federally Recognized State Managed Phytosanitary Program
(pronounced 'Free-Stamp')

- DEEP

Deregulation Evaluation of Established Pests



Background

- The IPPC (ISPM 5) states that if a country has a pest established within its territory, it may not take action against it at ports of entry unless the pest is under *official control*.
- The FRSMP program is considered a type of official control.
- In the United States, we have a number of pests established (and NOT under official control) for which we still take action at ports of entry.
- The DEEP process was established for PPQ to consult and collaborate with the States to resolve the statuses of these pests.



When is FRSMP of interest to a State?

- When a pest is considered **non**-actionable at ports of entry*
BUT
- State(s) want to keep action against that pest at ports of entry

** or is about to change status to non-actionable through DEEP process*



FRSMP Petition

Petition Requirements

- State demonstrates that a pest of consequence is under a phytosanitary program
- State has or is able to obtain legal authority to act on the pest
- Exclusion/containment/eradication is possible

Official Control Advisory Panel (OCAP)

- Group charged with reviewing petitions
- NPB representation



Current FRSMP Programs

Florida

- Potato psyllid (*Bactericera cockerelli*)
- Bagrada bug (*Bagrada hilaris*)

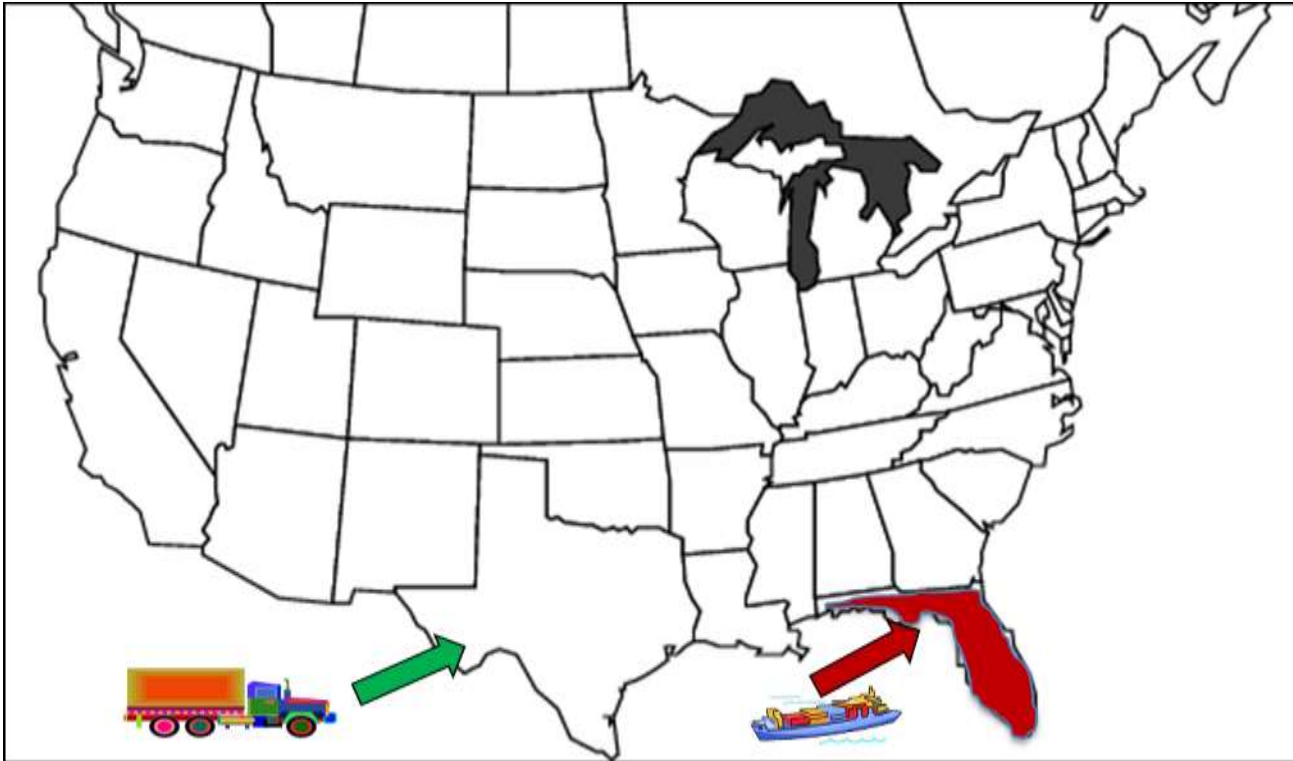
California

- Allium leafminer (*Phytomyza gymnostoma*)

FRSMP at Ports of Entry (POEs)

- Options if pest is found at a POE within the participating State:
 - Treatment (if available)
 - Re-exportation
 - Destruction
 - Re-direct and Avoid
- Option if pest is found at a POE outside the participating State:
 - Avoid

FRSMP at POEs (cont.)





DEEP Process

- PPQ presents 5-10 pests a year to the National Plant Board for input.
- NPB provides feedback to PPQ.
- PPQ takes that feedback into consideration and engages States with concerns.
- States have expressed interest in petitioning.
- 105 of these pests have changed status to non-actionable.



Contact Information and Helpful Links

- Erin Otto/National Coordinator for Official Control
Erin.m.otto@usda.gov, (301) 851-3881
- Betsy Randall-Schadel, National Operations Manager
betsy.randall-schadel@usda.gov , (919) 855-7544
- FRSMP website
<http://www.aphis.usda.gov/frsmp>
- FRSMP manual
https://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/frsmp.pdf



**Agriculture
and Markets**

Spotted Lanternfly

Compliance Checks

Ethan Angell Co-Incident Commander NYS SLF Response

2018 Regulatory Plan

- Check points
- Nursery Grower and Dealer Inspection
- Stone Yards
- Wood Products
- Campgrounds
- Christmas Tree Vendors and Tree Lots
- Warehouses, Distributions Centers, and Parcel Facilities
- Rail Yards

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Growers / Dealers												
Check Points												
Campground												
Christmas Tree												
Wood Products												
Stone Yards												
WDCIP												
Rail Yards												

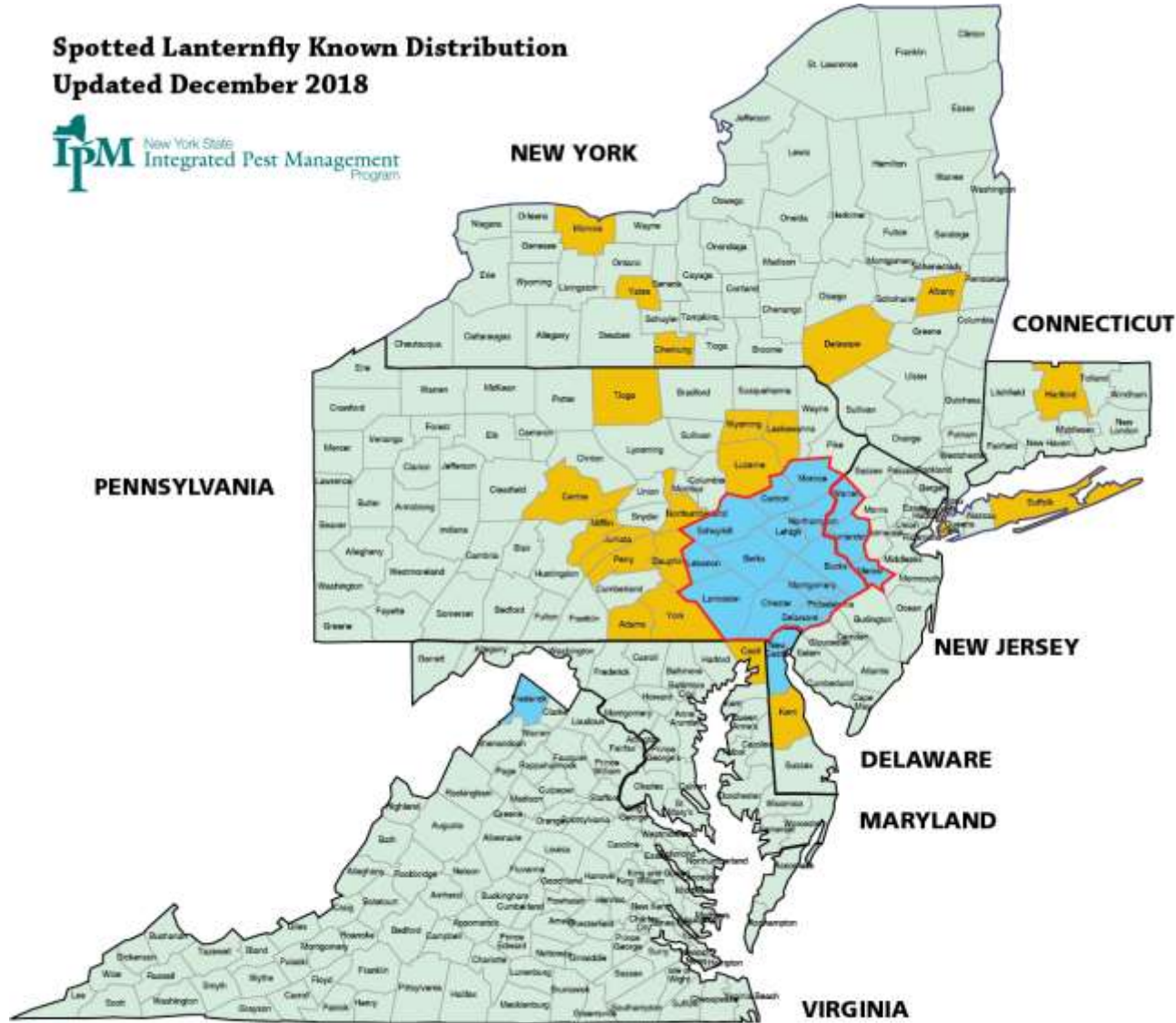
Spring Results of Operation Spotlight

- 6 checkpoints conducted
- 208 commercial vehicles inspected
- Only 5 aware of spotted lanternfly
- 24 were from PA quarantine area
- Only 3 were compliant



Result: Fall of 2018 NYS put into place an exterior quarantine for SLF

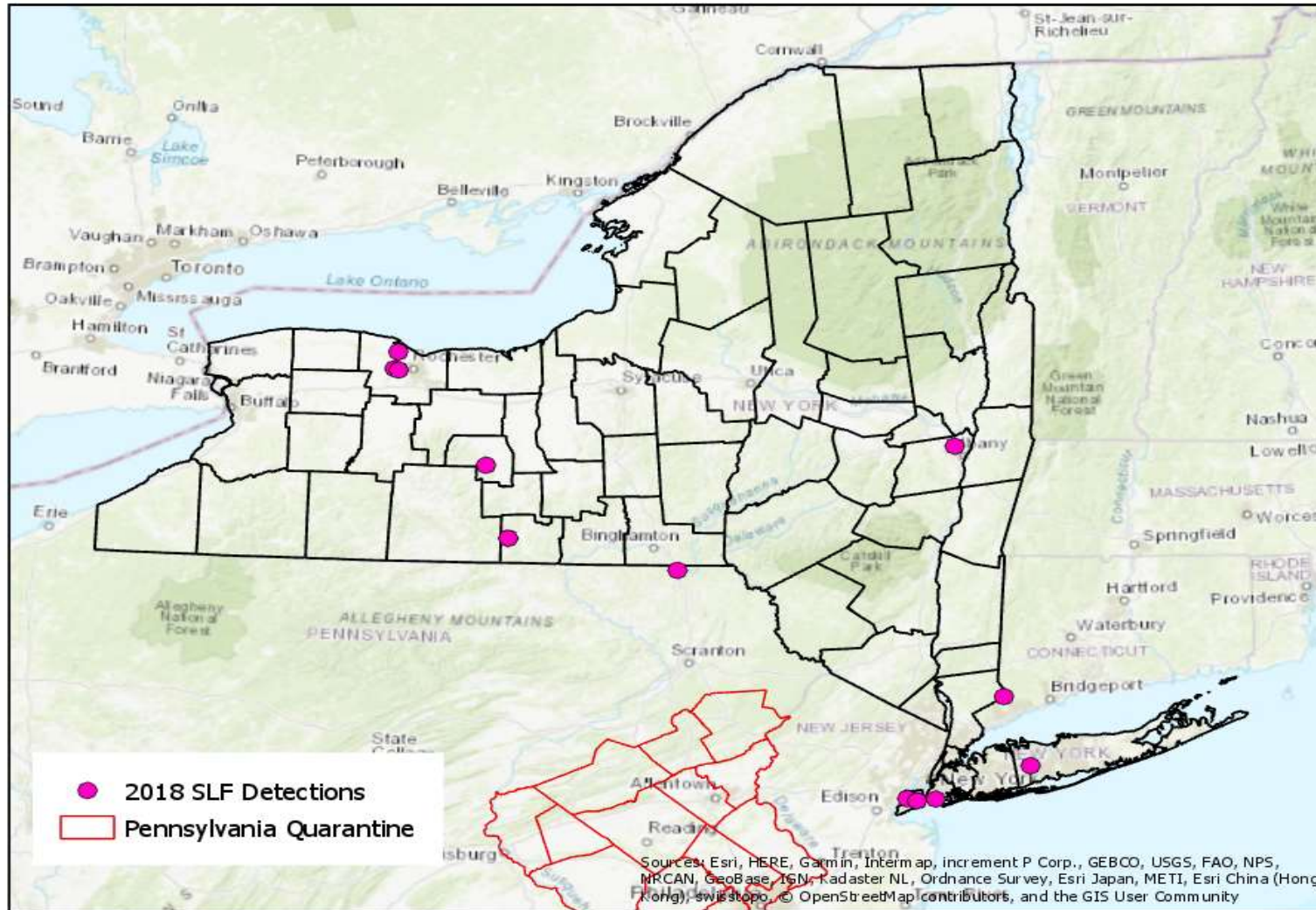
Spotted Lanternfly Known Distribution
Updated December 2018



NY external quarantine areas. Spotted lanternfly infestation found.
 Spotted lanternfly found, no infestation.

Internal state quarantine areas.

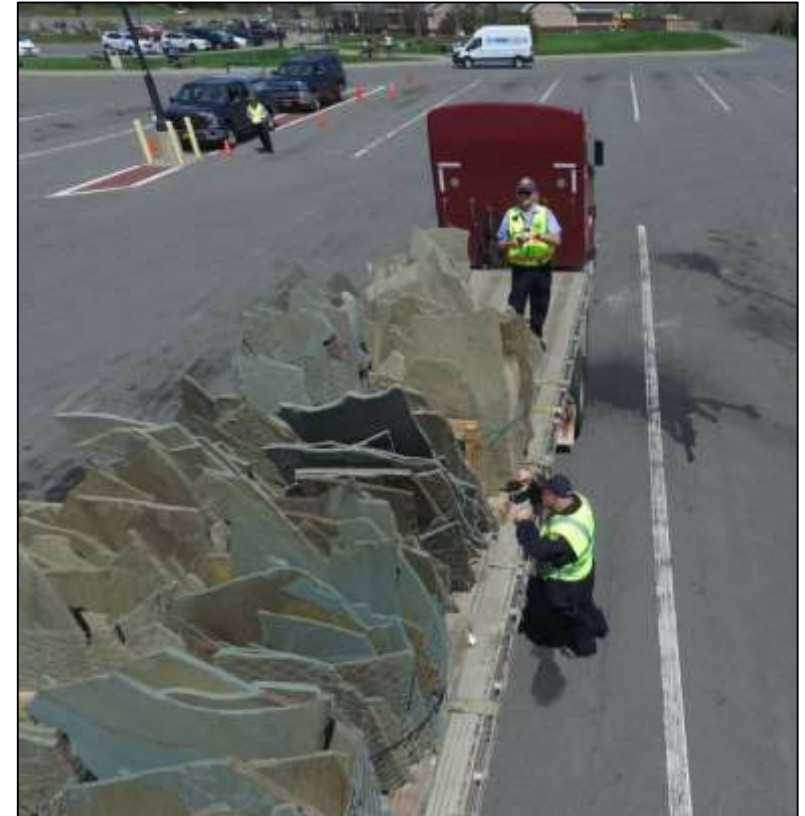




Collection Date	Town	County	Adult Dead	Adult Alive	Larvae Dead	Egg Mass
8/17/2018	Colonie	Albany	1			
8/31/2018	Penn Yan	Yates	1			
9/19/2018	Kirkwood	Broome	1			
10/2/2018	Rochester	Monroe	1			
10/5/2018	Rochester	Monroe	1			
10/9/2018	Rochester	Monroe	1			
10/10/2018	Dix Hills	Suffolk	12	1		
10/23/2018	Horseheads	Chemung	3			
10/23/2018	South Salem	Westchester	1			
10/23/2018	Brooklyn	Kings				1
12/7/2018	Horseheads	Chemung	1			
12/7/2018	Horseheads	Chemung	1			
12/21/2018	Rochester	Monroe	24			

2018 Regulatory Inspections

- A total of nine SLF detections were made in 2018 during regulatory inspections
- Regulatory inspections were conducted to enforce the external quarantine and to inspect various articles for signs of SLF. During regulatory inspections, staff inspected:
 - 26 stone yards
 - 3368 nursery growers and dealers
 - 83 Christmas tree vendors
 - 1 wood pallet facility
 - 455 vehicles at 13 commercial vehicle checkpoints.
 - 67 from SLF quarantined areas
 - 30 rejections issued



Checkpoints: What we see and look at!



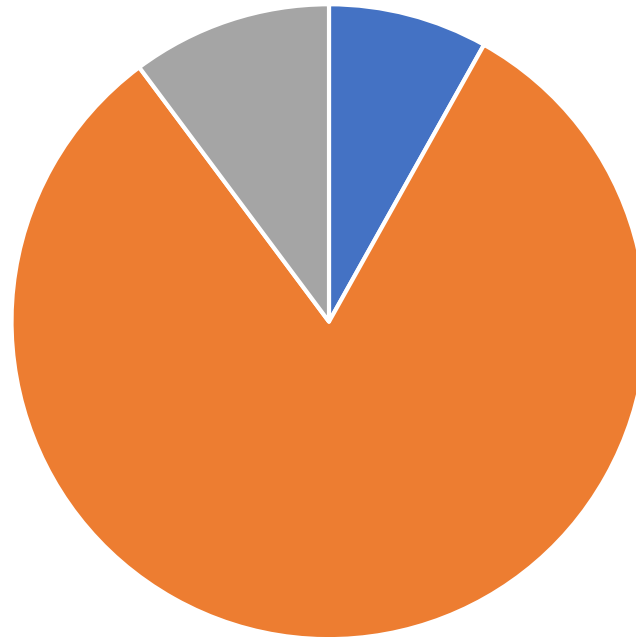
Training of other Regulators



- CBPAS at land ports of Buffalo, Alexandria Bay, and Champlain have been trained on SLF and inspection procedures
- ECHIS sent members from their interstate inspection meeting to participate in training on SLF inspections of trucks.

Inspector's Time

Time Spent by NYS Inspectors



■ Outreach ■ Survey ■ Regulatory

Thank You!

Ethan Angell

SLF Co-Incident Commander

New York State Department of Agriculture and Markets

ethan.angell@agriculture.ny.gov



Plant Protection Act Sec. 7721

FY 19 Spending Plan & FY 20 Update

Eastern Plant Board
March 9, 2019



Feridoon Mehdizadegan, National Operations Manager
Mike Tadler, National Policy Manager
Ronal Weeks, PPA Science & Technology
Monica Montero, Management & Program Analyst

Farm Bill – Sec. 10007-No more

APHIS Plant Protection and Quarantine

- Sec. 10007 of the 2014 Farm Bill charged APHIS with allocating funds to strengthen the nation's infrastructure for pest detection and surveillance, identification, and pest risk mitigation, while working to safeguard nursery production systems.
- This authority was codified in Sec. 7721 of the Plant Protection Act (PPA). APHIS have access to \$75 million to fund cooperators and projects for safeguarding domestic plant health.

PPA – Sec. 7721

APHIS Plant Protection and Quarantine

- PPA Sec. 7721 funding supports:
 - The **Plant Pest and Disease Management and Disaster Prevention Program** strengthens APHIS' ability to protect agriculture and natural resources from plant pest threats by funding projects that expand or enhance pest survey, identification, inspection, mitigation, risk analysis, and public education and outreach.
 - The **National Clean Plant Network** provides high quality asexually propagated plant material free of targeted plant pathogens/pests to protect the environment and ensure U.S. global competitiveness of specialty crops.

PPA – Sec. 7721

APHIS Plant Protection and Quarantine

Both Programs are Strategically Aligned with -

USDA Strategic Goal #2: Maximize the Ability of American Agricultural Producers to Prosper by Feeding and Clothing the World

Objective 3: Protect agricultural health by preventing and mitigating the spread of agricultural pests and diseases.



Plant Pest and Disease Management and Disaster Prevention Program

- **Clear and Transparent Process**
- **Broad Stakeholder Collaboration**
 - **Federal**
 - **State Government(s)**
 - **Tribal Nation(s)**
 - **Academia**
 - **Industry**
 - **Private /Non Profits Entities**

Stakeholder Collaboration

Plant Pest and Disease Management and Disaster Prevention Program

- **Stakeholder Project Suggestion Reviewer Team Members:**
 - **State Plant Regulatory Officials:** Oregon, Ohio, Florida, New York, California, Indiana, Texas, Pennsylvania, Illinois, Maine, Tennessee, Connecticut, and Washington
 - **Other State Plant Health Officials:** Kansas, Maryland, and South Carolina
 - **Academics from the agriculture programs:** Universities in Texas, California, Maryland, Pennsylvania
 - **Specialty Crop Industry representatives**
 - **U.S. Forest Service officials**



Review Process: Evaluation Criteria

Plant Pest and Disease Management and Disaster Prevention Program

- **Strategic Alignment** – Does the suggestion align with the strategic objectives of PPA's Sec. 7721?
- **Impact/Outcome** – Will the project make an impact and produce results as defined by the individual goal area?
- **Feasibility** – Can the project be accomplished based on key factors such as resources, collaborative partnerships, and clearly defined process?
- **Past Performance, Best Practices and Innovation** – Will the project be successful based on previous experience in similar endeavors or to the extent in which the project utilizes best practices and innovation to achieving success?

PPA Review Process

Review Teams:

- SME review teams across from State and Federal governments, Industry, and academia review nearly 800-1000 suggestions in a given year
- Thorough review & evaluation to determine merits of each suggestion
- Using Decision Lens metrics to weigh value/cost of each suggestion

PPA Review Process: Decision Lens

Cost-benefit Analysis for all criteria: Value Return on Investment Index (VROI)



Goal Area Objectives

Goal 1: Analysis

Identify risk factors and high-risk pathways through analysis of available data.

Develop risk based models and decision support tools to reduce the arrival and establishment of exotic plant pest species. **3.4%**

Goal 1: Survey

Target multiple, high priority pests for survey along national and local high-risk pathways.

Fund high priority nationally-coordinated pest surveys in support of specialty crops, trade, and regulatory activities.

Fund state-specific pest surveys in support of state pest risk and priorities. **22%**

Goal Area Objectives

Goal 2: Target domestic inspection activities at vulnerable points in the safeguarding continuum

Promote and expand inland inspections of containers and mail facilities, where possible.

Expand the use of canine teams for domestic inspection activities emphasizing regulatory activities.

Promote increased levels of inspection for regulated articles for interstate movement. 9%

Goal 3: Enhance and strengthen pest identification and technology

Improve all aspects of early detection technologies and resources.

Enhance diagnostic and taxonomic capacity building and related technologies. 9.8%

Goal Area Objectives

Goal 4: Safeguard nursery production

Develop science-based best management practices and risk mitigation practices to exclude, contain, and control regulated pests from the nursery production chain.

To develop and harmonize audit-based Nursery Certification Programs, including the harmonization of different certification programs, audit and inspection training for cooperators, and program launching. **3.3%**

Goal 5: Conduct outreach/education to increase understanding, acceptance, and support of plant pest and disease management efforts

Prevent the introduction or spread of high-consequence pests into and around the United States, particularly in high-risk areas.

Develop people to strengthen the safeguarding system.

Increase the number of people actively looking for and reporting high-consequence pests at vulnerable points along high-risk pathways. **5.9%**

Goal Area Objectives

Goal 6: Enhance mitigation capabilities

Improve the mechanism to assess and implement an appropriate short term course of action to a new pest.

Utilize initial response protocols for the overarching goals of containment, control, or eradication at the onset of plant health emergencies.

Prepare the agency and cooperators in the use of the Incident Command System (ICS).

Provide technical assistance prior to, during, and immediately following the development of a plant health emergency , including the development of New Pest Response Guidelines **19.5%**

FY19 Budget

	Plant Pest & Disease Management	National Clean Plant Network	Total
Appropriated	68,500,000	6,500,000	75,000,000
Sequester %	6.20%	0%	
Sequester Amount	4,650,000	n/a	
Net to APHIS	63,850,000	6,500,000	70,350,000
APHIS Indirect %	(4.85%)	(4.85%)	
APHIS Indirect	n/a	n/a	
Net to PPQ	63,850,000	6,500,000	XXX

FY19 Projects Received/Funded

Plant Pest and Disease Management and Disaster Prevention Program

FY19 Goal	Requested		Supporting	
	Projects	Funding	Projects	Funding
1 Analysis	62	\$6,069,730	18	\$2,110,939
1 Survey	215	\$23,075,492	150	\$14,438,976
2	5	\$7,990,612	5	\$5,749,907
3	174	\$13,168,814	50	\$6,386,504
4	32	\$3,107,992	14	\$2,016,350
5	121	\$9,235,063	61	\$3,950,000
6	182	\$35,847,682	68	\$12,518,619
**RR	16	\$18,975,777	17	\$16,189,338
NCPN	30	\$7,583,876	26	\$6,024,227
Total	837	\$125,055,038	409	\$69,384,860

\$63,850,000 PPDMDPP + \$6,024,227 NCPN = 69,874,227 Total

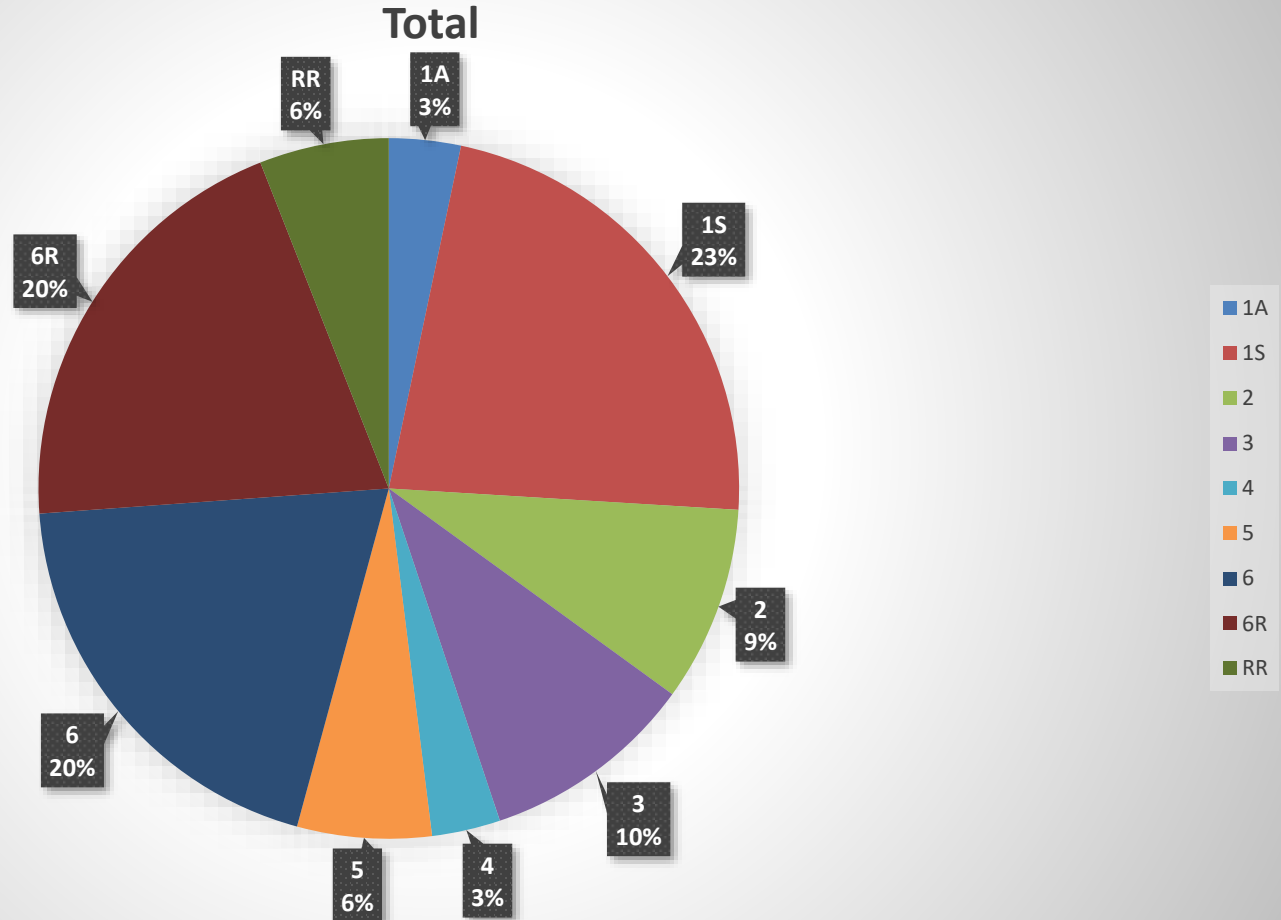
*\$489,367 direct costs (salaries & travel); Goal 1–7 & funded RR subtotal \$59,857,978

**RR=remaining \$3,992,022 RR balance available for new emergency program

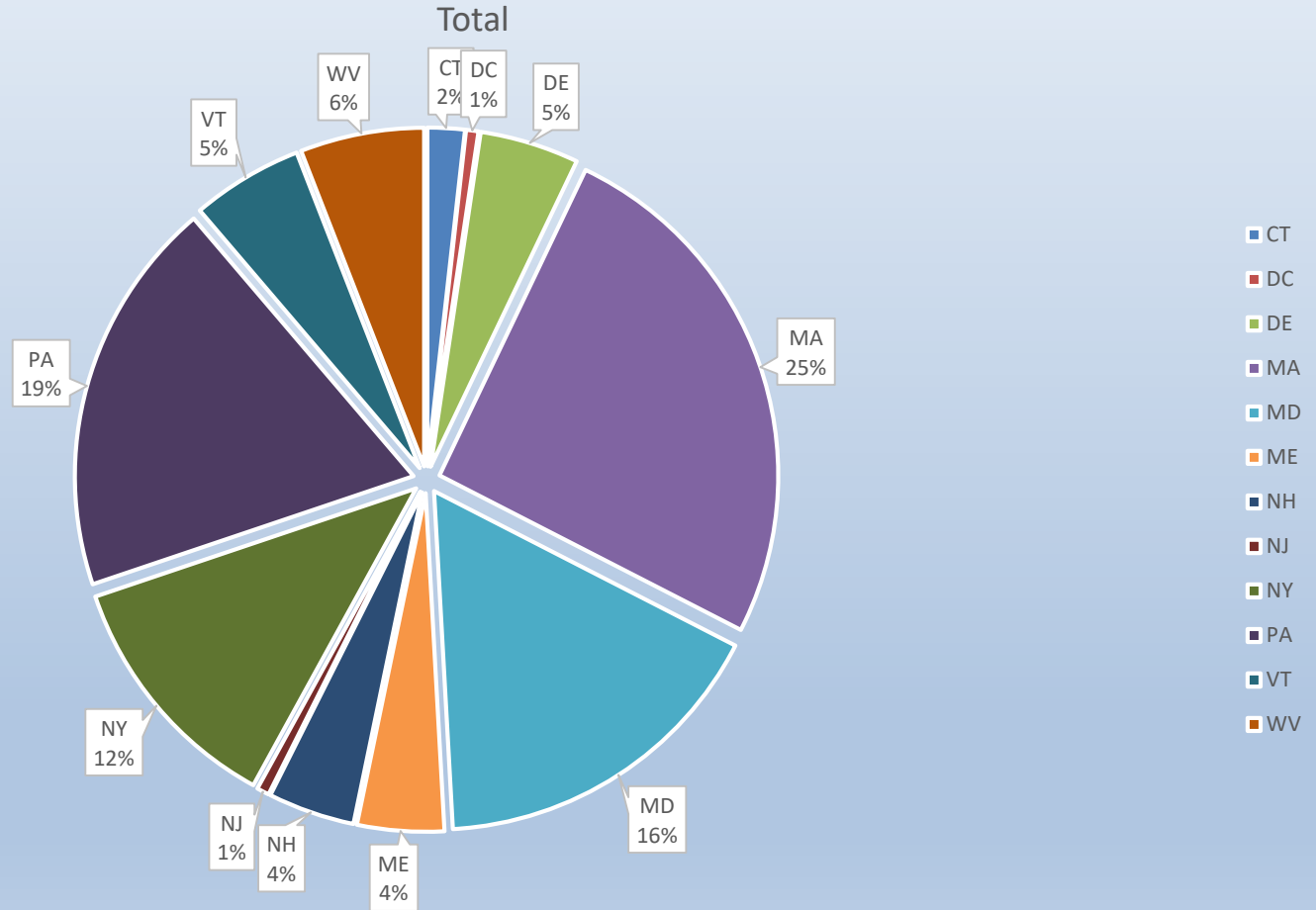
FY19 Budget vs. FY18 Budget Recommended Funding by Cooperator Type

Cooperator	FY19 # Projects	FY19 Funding	FY18 # Projects	FY18 Funding
Academia	132	\$18,225,850	152	\$14,515,721
APHIS	20	\$3,826,700	50	\$3,449,012
RR	1	\$3,710,495	1	\$14,238,558
Foreign	1	\$99,750	0	0
Industry	0	0	2	\$199,612
Non-APHIS- Federal	18	\$2,405,119	30	\$2,340,311
Non-Profit	19	\$2,129,396	14	\$1,715,592
Private Entity	2	\$480,163	4	\$736,222
State Government	187	\$32,541,219	212	\$25,836,478
Tribal Nation	2	\$431,308	5	\$518,494
Totals	382	\$63,850,000	470	\$63,550,000

FY 2019 PPA Funding



Eastern Region PPA Share



Pre-PPA Cycle Activities

- Lessons learned session
- Develop Implementation Plan
- Communicate with NPB, Specialty Crops for representation
- Establish Goal teams
- Prepare webinar documents
- Work With LPA to reach out to congress, Stakeholders, media

Post-Announcement PPA Activities

- Prepare individual state allocations
- Communicate with funded /unfunded suggestors through ADODRs & PPA Team
- Provide feedback to the internal and external stakeholders on funding/program update & requirements through Regional and National Plant Board meeting
- Begin discussion on new implementation Plan-
-We welcome comments on how to improve

Review Process Improvement

- Guidance on team review funding determination process
- More direct involvement of Cross functional working Groups
- Spending Plan Timing Release
- Communication with internal and external teams
- Revise job aids for the review teams/SPHD/SPRO



Imported Fire Ants

HIS Eastern Chapter 2019
Hitch-hiking Pests Roundtable

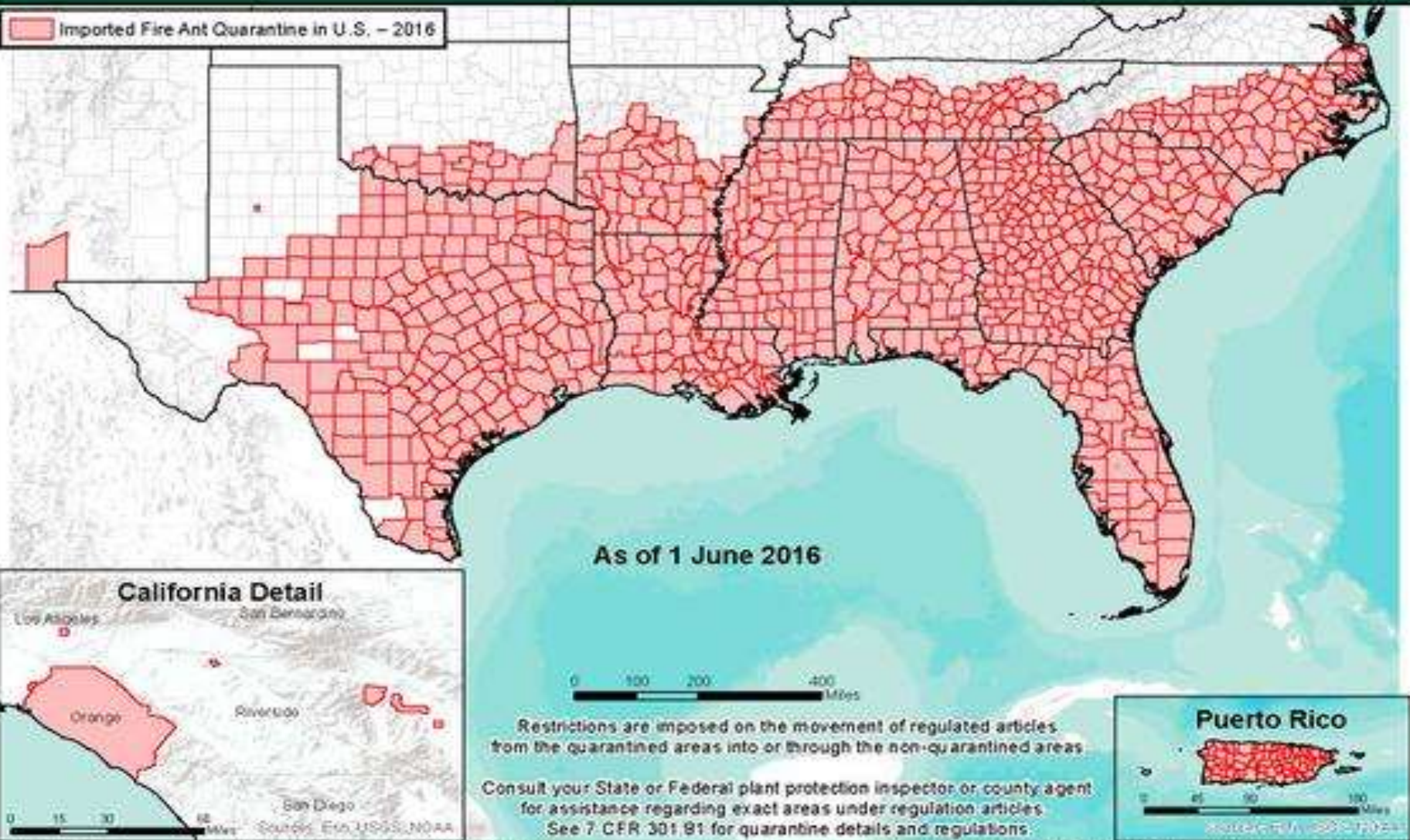
Delaware-Lianmarie Colon

Maryland-Deb Hayes and Jaime Tsambikos

Why significant:

- Agricultural-pest of crops feeding on young growth, damage to root system
- Urban-mound building, nesting can occur around homes and other areas
- Environmental-impact on other ground nesting species, displace native insects
- Medical-will sting if disturbed!

Imported Fire Ant Quarantine Detail



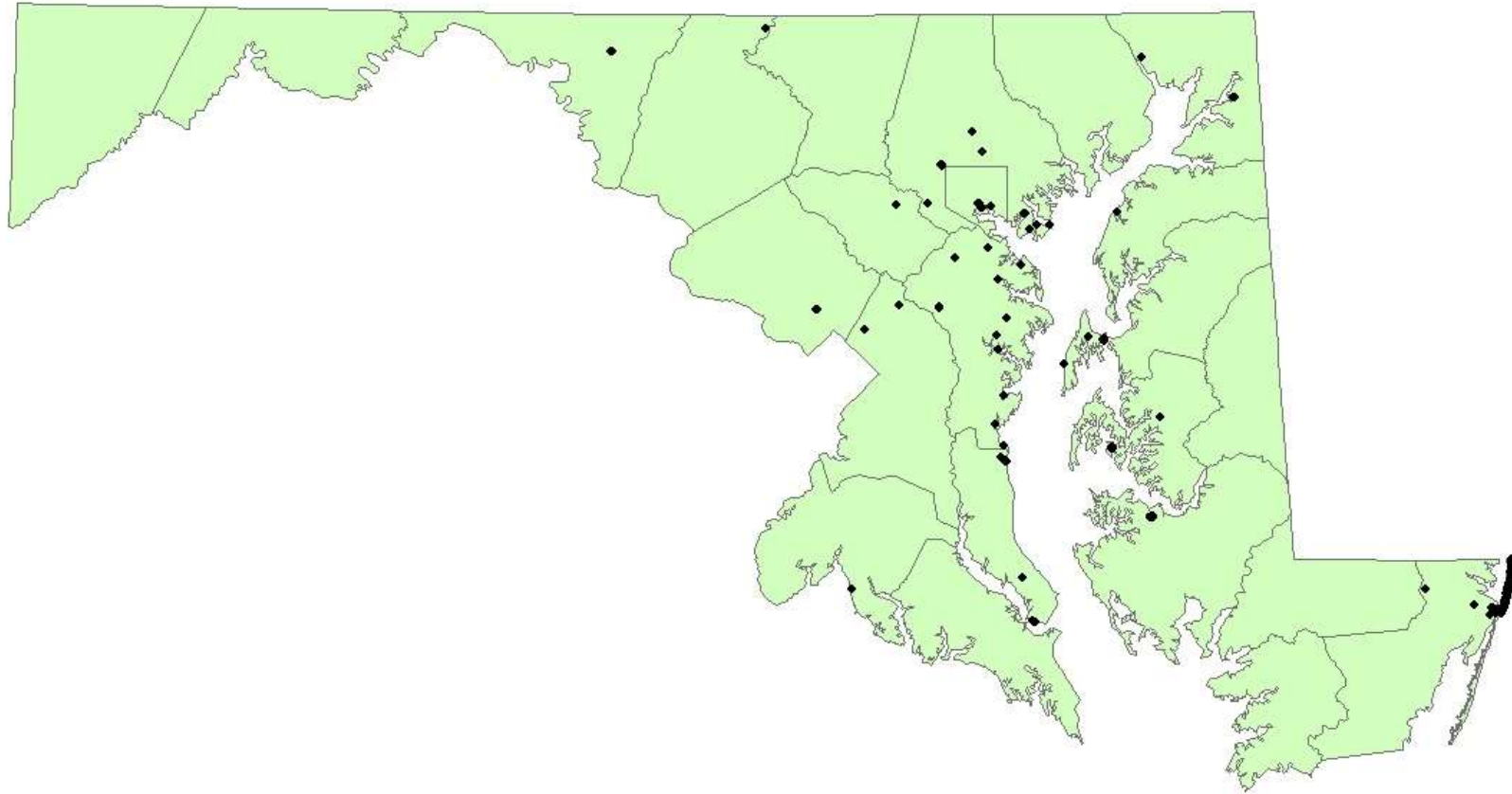
USDA, APHIS, PPQ
GIS Specialist
1000 Pinedale Drive, Suite 200
Cary, NC 27513

Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
Projection: Mercator/Auxiliary Sphere
Datum: WGS 1984
Data Source: PPQ, ESRI



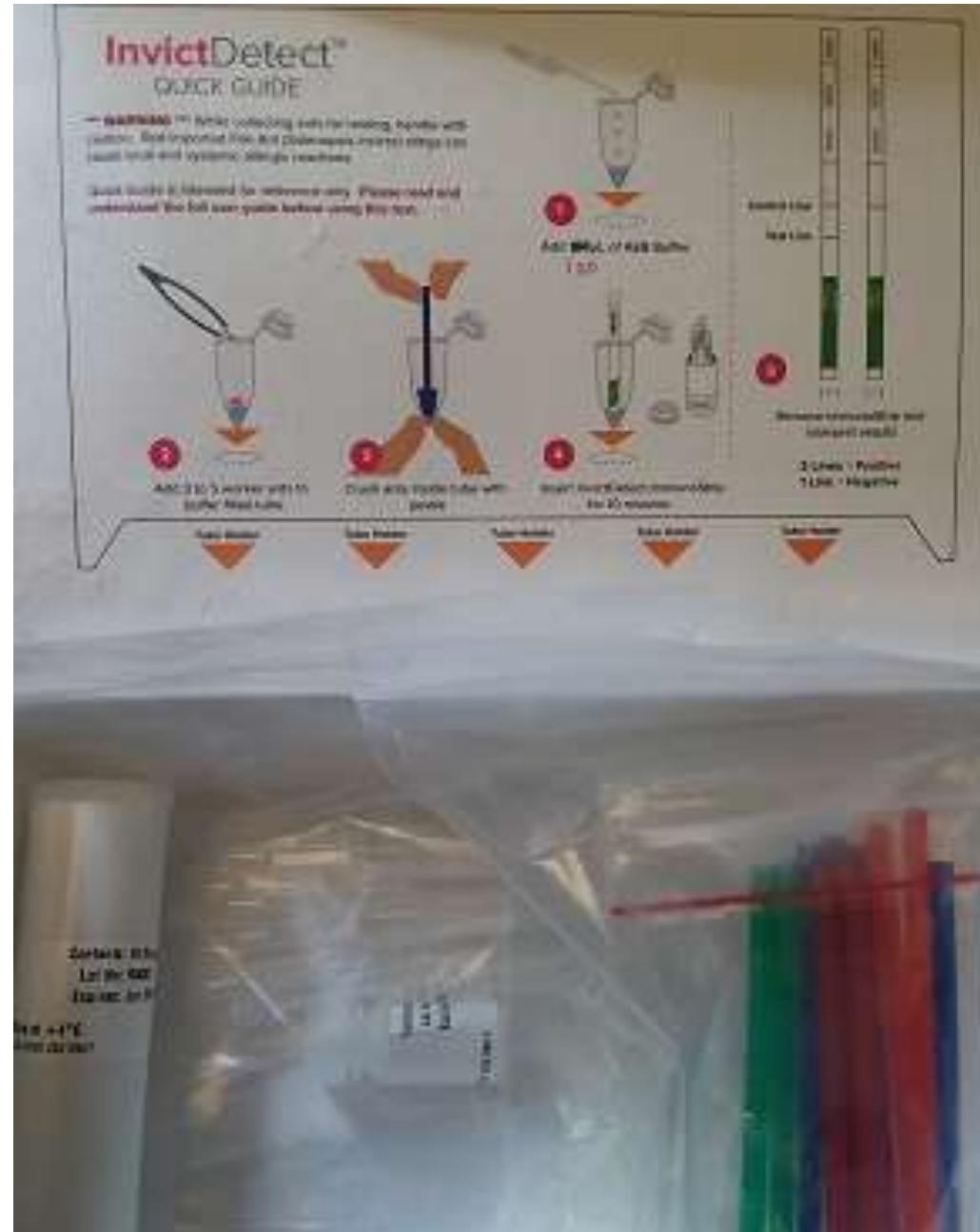
This data, and all the information contained therein, has been collected by the U.S. Department of Agriculture Animal and Plant Health Inspection Service (APHIS) under the authority of the Plant Protection Act (7 U.S.C. 1621) and the Federal Plant Quarantine Act (7 U.S.C. 1622). It is made available to you as a courtesy and is not intended to be used for any purpose other than that for which it was collected. This data is subject to change without notice and may not be used for any purpose other than that for which it was collected. The U.S. Department of Agriculture is not responsible for any errors or omissions in this data. The U.S. Department of Agriculture is not responsible for any errors or omissions in this data. The U.S. Department of Agriculture is not responsible for any errors or omissions in this data.

Maryland Fire Ant Survey Sites 2003-2017



Maryland 2018 survey:

- Fire ant early detection kit used
- Multiple large sites in Ocean City over 3 day period in early August
- Other sites around state surveyed over remainder of season



How we survey:

Spread bait around plants

Potato chips and cookies

Allow bait to sit for at least 15 minutes

Collect all ants attracted into film canisters



Maryland scenario:

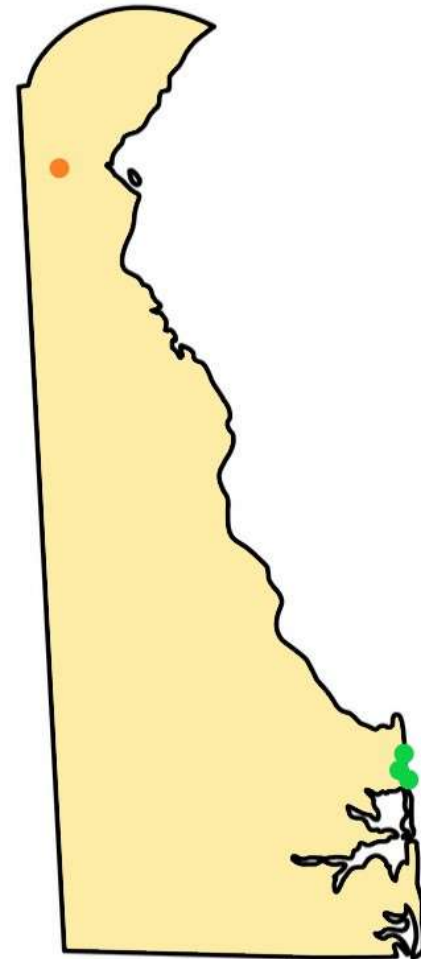
- Swimming pool company acting as plant dealer with appropriate license
- 2 years finding fire ants
- IES involved



Delaware Fire Ant Survey Find Locations

Green-confirmed finds

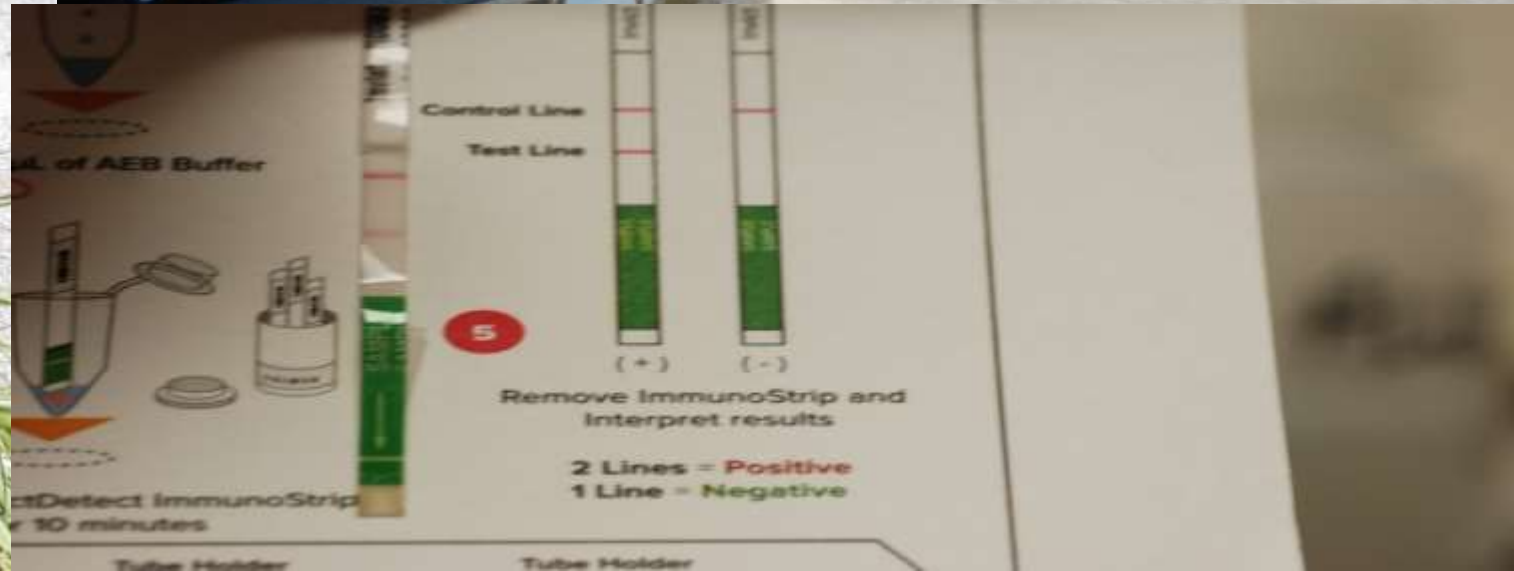
Orange-suspected find



Delaware Scenario

- Delaware found fire ants in various shipments of palm trees over the past couple of years
- Two locations receive palm trees in the summer for decoration along property
- One location is a mini-golf course and the other a mini water park.
- IES pursued investigations and relied on the testimony of DDA staff to prosecute the company sending palms to DE.









Challenges:

- Lack of awareness of quarantine and the pest
- Confirmed ID takes time
- Human assisted movement
- Easily transported in nursery stock undetected

Find “fly by nite” operators



Build relationships with importers



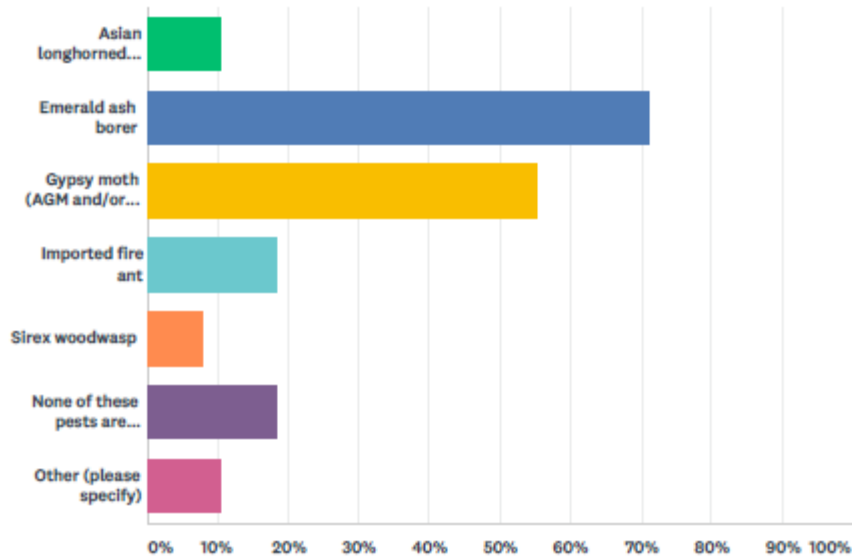
Firewood Kiln Certification Activities Survey

Jan. 14, 2019

-
- 15 Questions about firewood quarantines, heat-treatment standards, kiln-certification activities, and kiln-certification needs
 - Took about 8.5 min to respond to survey
 - 38 states provided responses between 1/3/19-1/14/19

Q3 Are any of the following federally-regulated pests with firewood concerns present in your state? (Select all that apply.)

Answered: 38 Skipped: 0

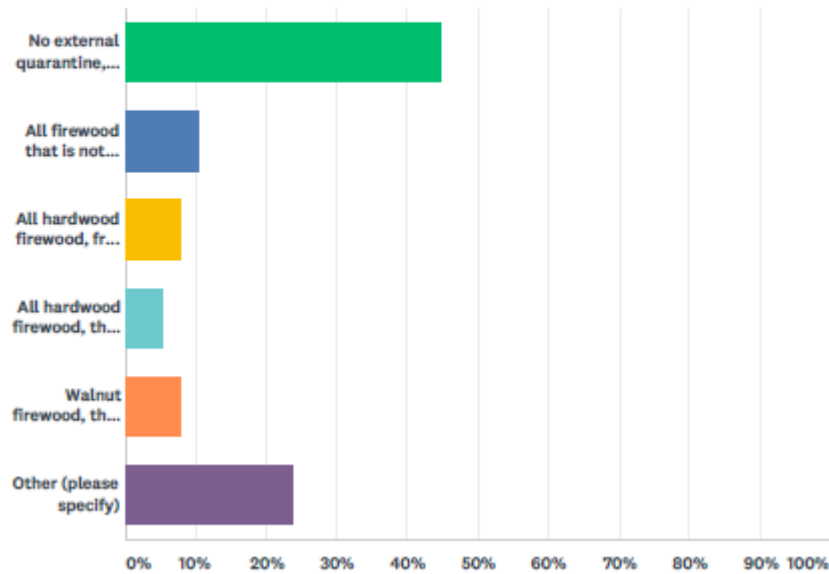


ANSWER CHOICES	RESPONSES
Asian longhorned beetle	10.53% 4
Emerald ash borer	71.05% 27
Gypsy moth (AGM and/or EGM)	55.26% 21
Imported fire ant	18.42% 7
Sirex woodwasp	7.89% 3
None of these pests are present	18.42% 7
Other (please specify)	10.53% 4
Total Respondents: 38	

#	OTHER (PLEASE SPECIFY)	DATE
1	SLF	1/10/2019 5:41 PM
2	TCD	1/8/2019 3:29 PM
3	Thousand Canker Disease	1/4/2019 3:37 PM
4	Pine Shoot Beetle	1/3/2019 12:24 PM

Q4 Does your state have an EXTERNAL firewood quarantine prohibiting the entry of out of state firewood? If so, what specifically does it prohibit?

Answered: 38 Skipped: 0



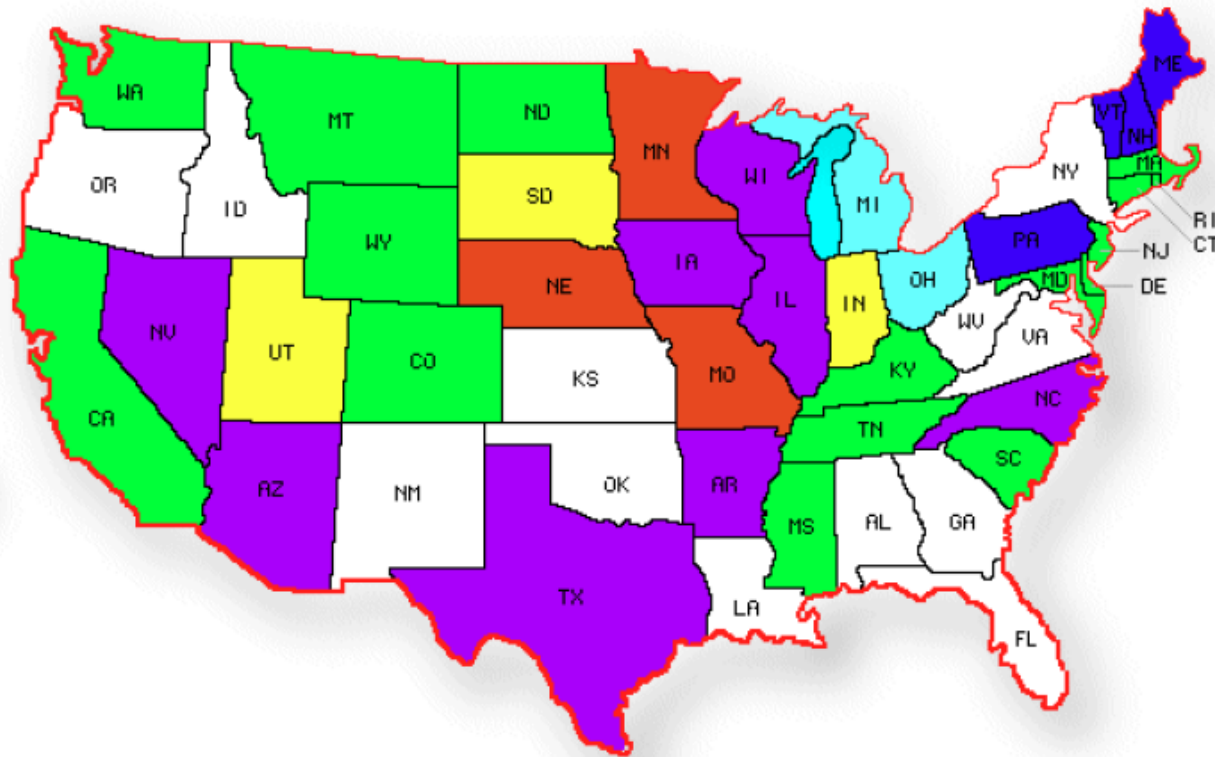
ANSWER CHOICES	RESPONSES	
No external quarantine, held by a state authority, on any type of firewood	44.74%	17
All firewood that is not heat-treated is prohibited	10.53%	4
All hardwood firewood, from any state, that is not heat-treated is prohibited	7.89%	3
All hardwood firewood, that is not heat-treated, and which originates in a TCD state is prohibited	5.26%	2
Walnut firewood, that is not heat-treated, and that originates in a TCD state is prohibited	7.89%	3
Other (please specify)	23.68%	9
TOTAL		38

#	OTHER (PLEASE SPECIFY)	DATE
1	Firewood from EAB, ALB, IFA requires treatment certification	1/11/2019 2:22 AM
2	No quarantine, we rely on existing federal quarantines	1/10/2019 5:29 PM
3	Firewood from states with GM must be inspected/treated	1/10/2019 4:05 PM
4	We have an external quarantine for TCD. The only other firewood related regulation we have is a firewood importer registration.	1/10/2019 3:24 PM
5	Current regs allow us to quarantine infested firewood; working on new quarantine language	1/8/2019 12:48 PM
6	Wisconsin has external quarantines that exclude firewood from states with MPB and TCD. It also excludes hardwood firewood from areas with ALB, Sudden Oak Death, GM, and hemlock firewood from area with HWA.	1/4/2019 1:35 PM
7	Prohibition on the movement of pecan firewood in our Nut Pest rules	1/3/2019 2:28 PM
8	Firewood from states in which walnut twig beetle are known to occur must be kiln dried or heat treated.	1/3/2019 2:17 PM
9	If infested with GM, TCD, it is not allowed here. No broad treatment designations.	1/3/2019 1:06 PM

- 21 states had some firewood regulations
- 17 states had no firewood regulations
- 14 states & territories did not respond

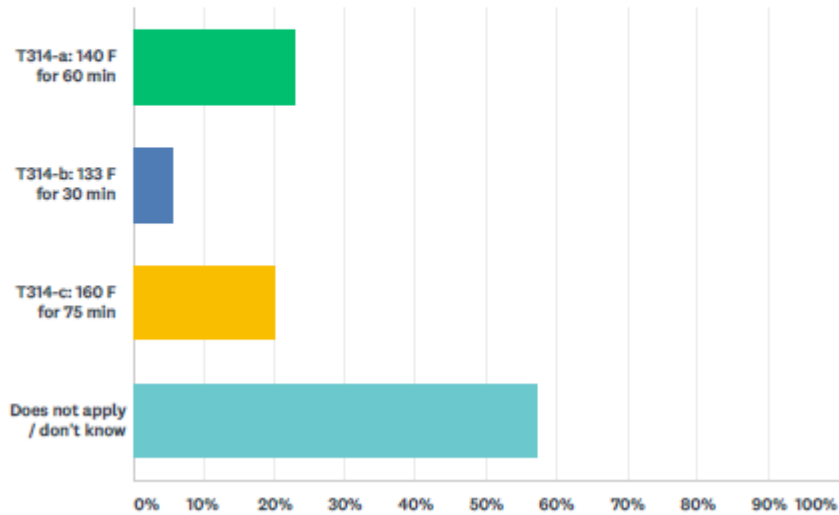
External Firewood Quarantine

- - No ext. quarantine
- - All FW, not HT
- - All HW FW, not HT
- - All HW FW, TCD state
- - Walnut FW, TCD state
- - Other



Q5 If your state does have any of the external firewood quarantines listed in the preceding question, what standards for heat treatment of firewood are referenced? (Select all that apply.)

Answered: 35 Skipped: 3

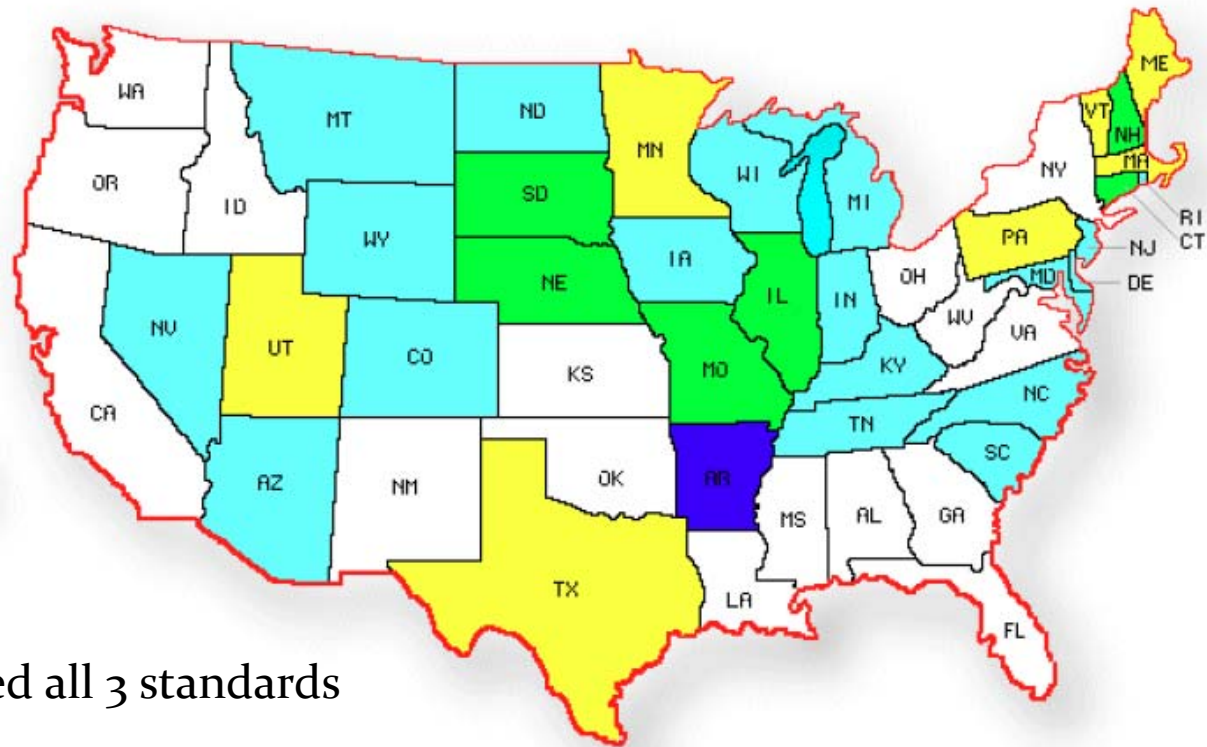


ANSWER CHOICES	RESPONSES	
T314-a: 140 F for 60 min	22.86%	8
T314-b: 133 F for 30 min	5.71%	2
T314-c: 160 F for 75 min	20.00%	7
Does not apply / don't know	57.14%	20
Total Respondents: 35		

- 8 states reference T₃₁₄-a
- 2 states reference T₃₁₄-b
- 7 states reference T₃₁₄-c
- 20 states do not reference treatment standards
- 17 states & territories did not respond

Treatment standards referenced in quarantine

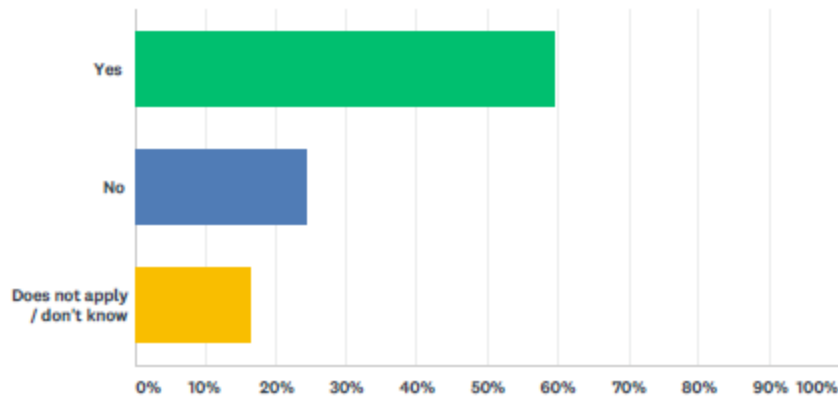
- - T314-a: 140 F, 60 m
- - T314-b: 133 F, 30 m
- - T314-c: 160 F, 75 m
- - Don't know / NA



1 state referenced all 3 standards

Q6 Are firewood kilns used to heat treat firewood in your state?

Answered: 37 Skipped: 1

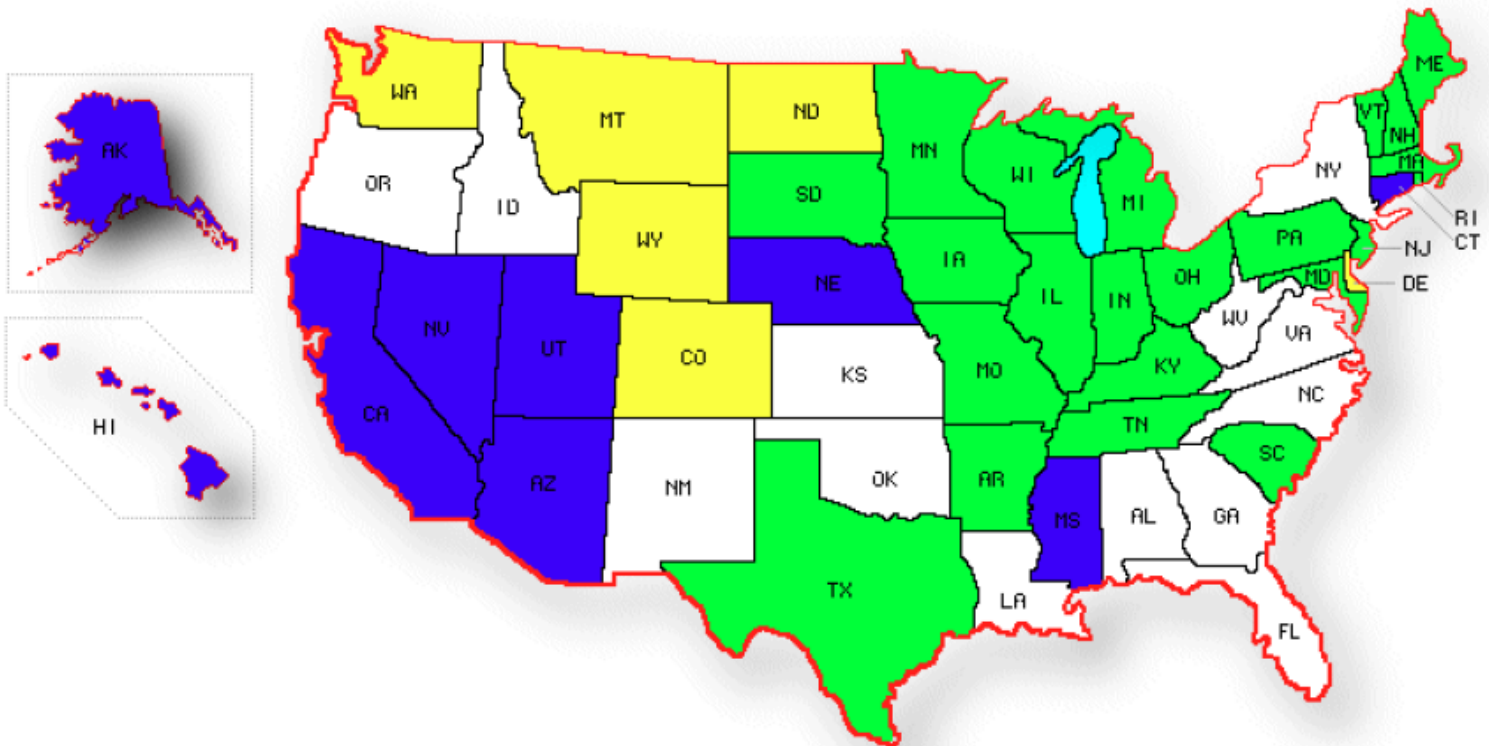


ANSWER CHOICES	RESPONSES	
Yes	59.46%	22
No	24.32%	9
Does not apply / don't know	16.22%	6
TOTAL		37

- 22 states with firewood kilns used to heat treat firewood
- 9 states without firewood kilns used to heat treat firewood
- 6 states do not know/does not apply
- 15 states & territories did not respond

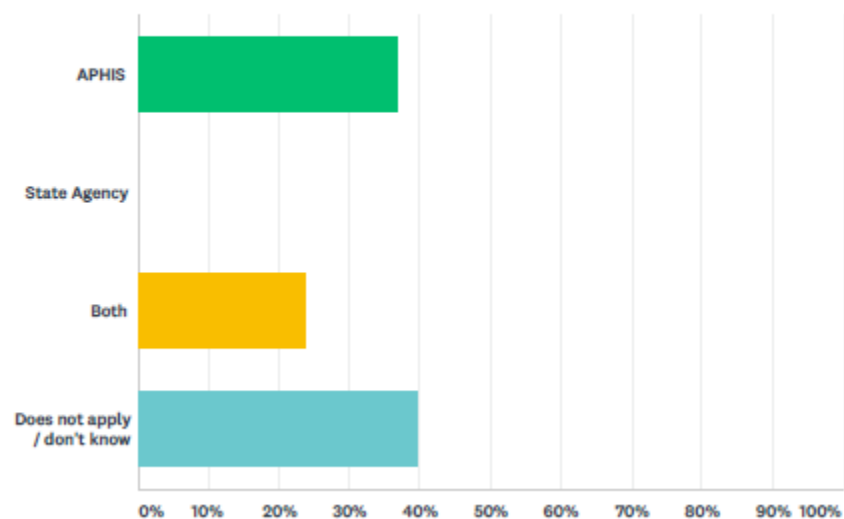
Are firewood kilns used to heat treat firewood?

- - Yes
- - No
- - Don't know / NA



Q7 Which agency is certifying firewood kilns in your state?

Answered: 38 Skipped: 0

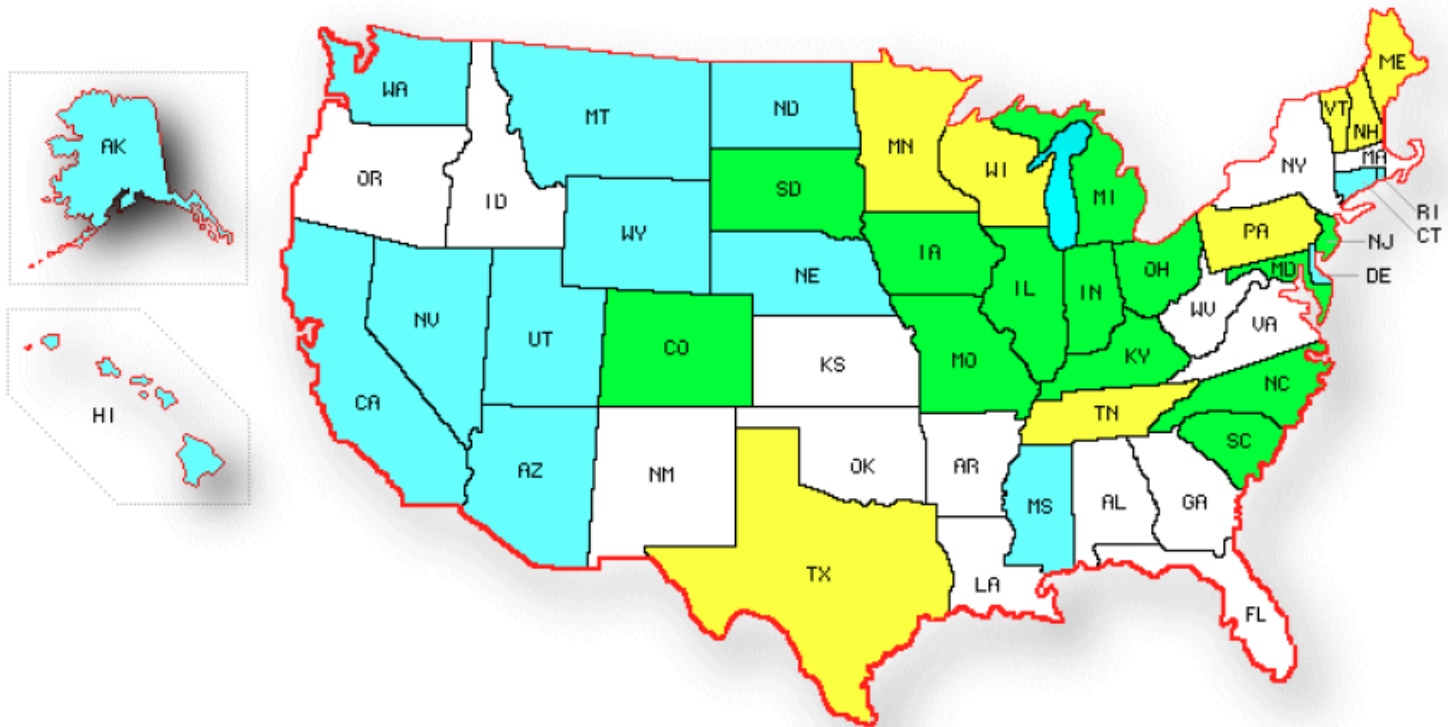


ANSWER CHOICES	RESPONSES	
APHIS	36.84%	14
State Agency	0.00%	0
Both	23.68%	9
Does not apply / don't know	39.47%	15
TOTAL		38

- 14 states where APHIS is providing kiln certification
- 9 states where APHIS and the state department of Ag are both providing kiln certification firewood
- 15 states do not know/does not apply
- 14 states & territories did not respond

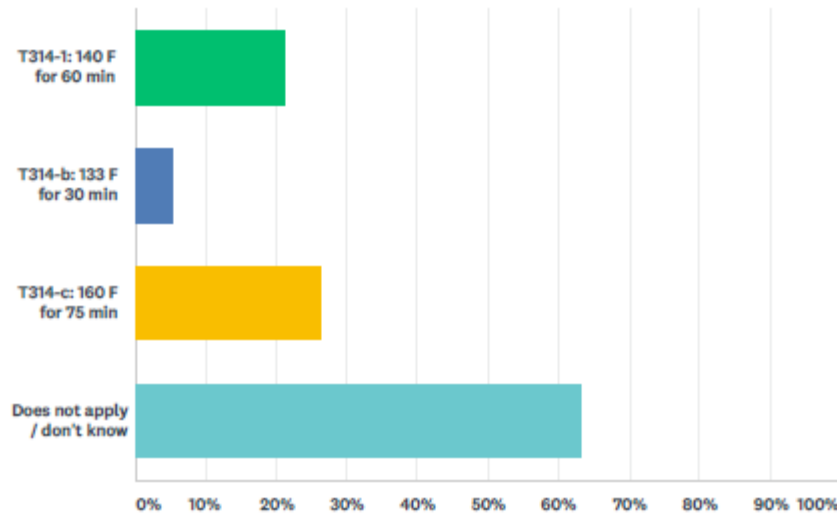
Who is certifying Firewood Kilns?

- - APHIS
- - APHIS & State Ag
- - Don't know / NA



Q8 If your state provides heat-treatment certification for firewood exports, what heat treatment standards are used for certification? (Select all that apply.)

Answered: 38 Skipped: 0

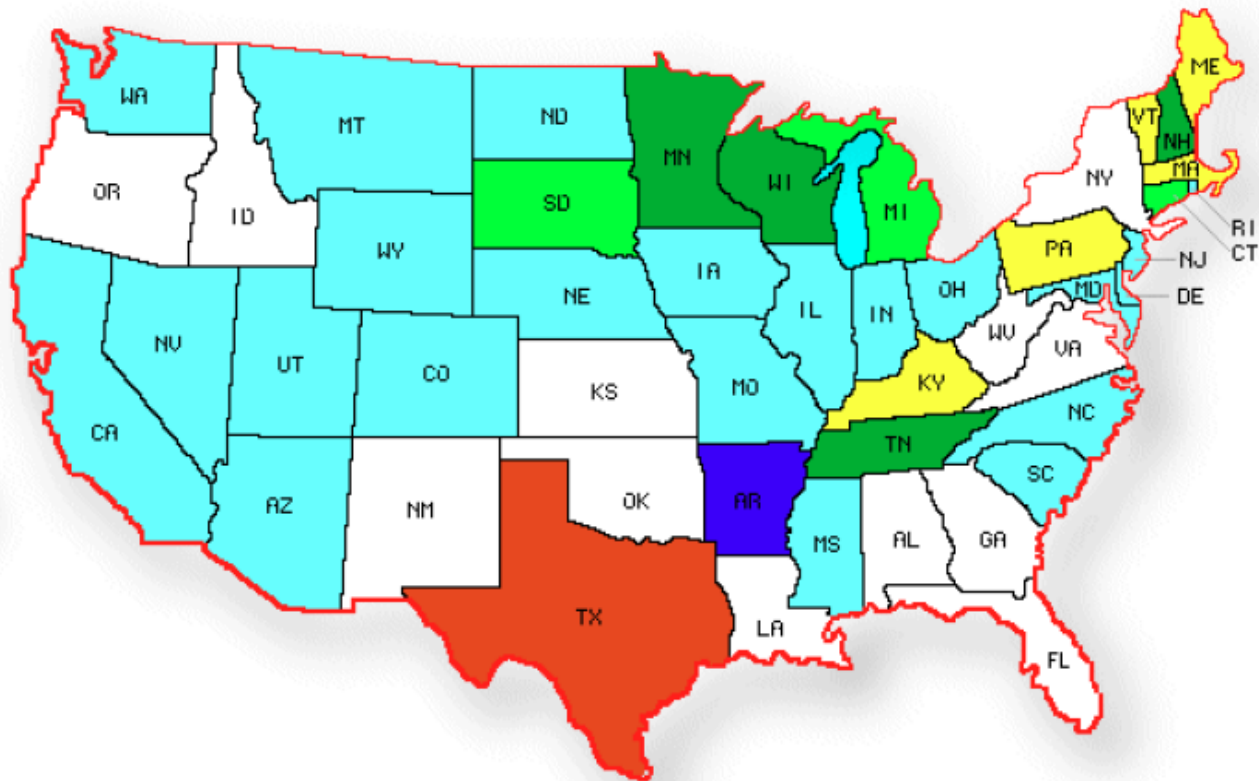


ANSWER CHOICES	RESPONSES	
T314-1: 140 F for 60 min	21.05%	8
T314-b: 133 F for 30 min	5.26%	2
T314-c: 160 F for 75 min	26.32%	10
Does not apply / don't know	63.16%	24
Total Respondents: 38		

- 3 states certify at 140 F for 60 min
- 1 state certifies at 133 F for 30 min
- 5 states certify at 160 F for 75 min
- 4 states certify at both 140 F for 60 min AND 160 F for 75 min
- 1 state certifies at all treatment levels
- 24 states do not know/does not apply
- 14 states & territories did not respond

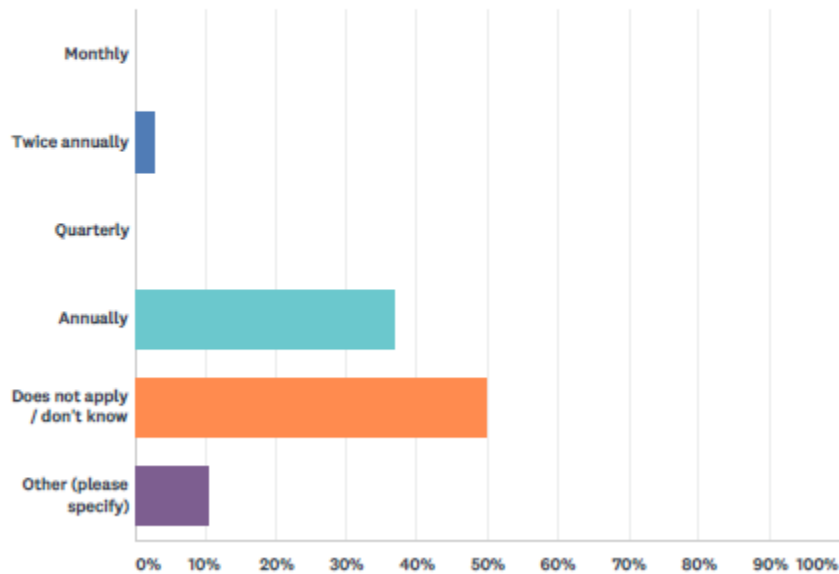
Treatment requirements used to certify firewood exports

- - T314-a: 140 F, 60 m
- - T314-b: 133 F, 30 m
- - T314-c: 160 F, 75 m
- - Don't know / NA
- - T314-a & T314-c
- - All treatment levels



Q9 How often are firewood heat treatment facilities visited to maintain certification?

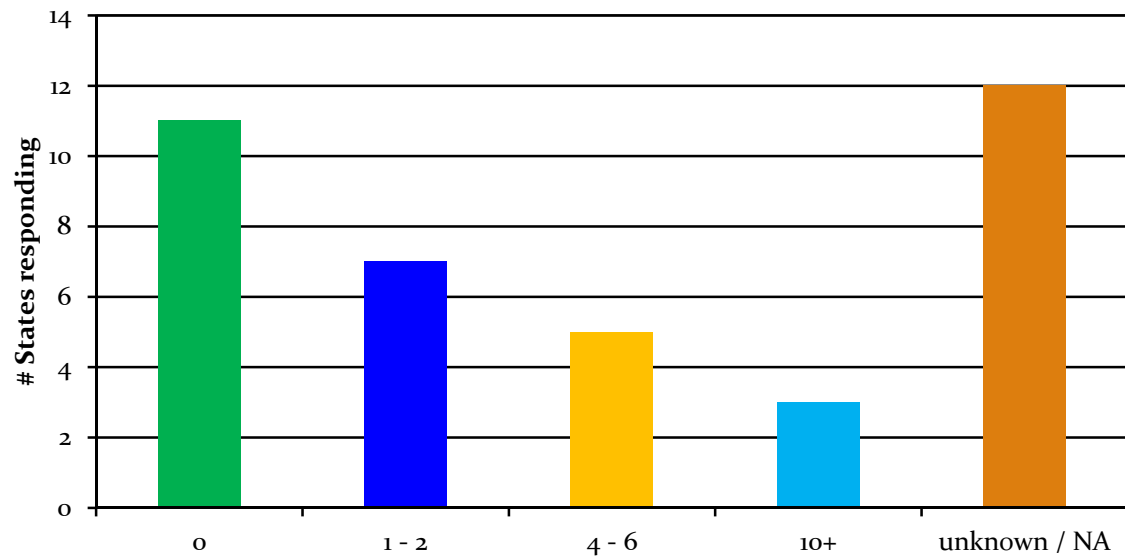
Answered: 38 Skipped: 0



ANSWER CHOICES	RESPONSES	
Monthly	0.00%	0
Twice annually	2.63%	1
Quarterly	0.00%	0
Annually	36.84%	14
Does not apply / don't know	50.00%	19
Other (please specify)	10.53%	4
TOTAL		38

- 1 state indicated kilns were visited 2x annually to maintain certification
- 14 states indicated kilns were visited annually to maintain certification
- 19 states do not know/does not apply
- 4 states indicated “other” schedules. From comments it looks like 2 would be annually, and 2 do not know
- 14 states & territories did not respond

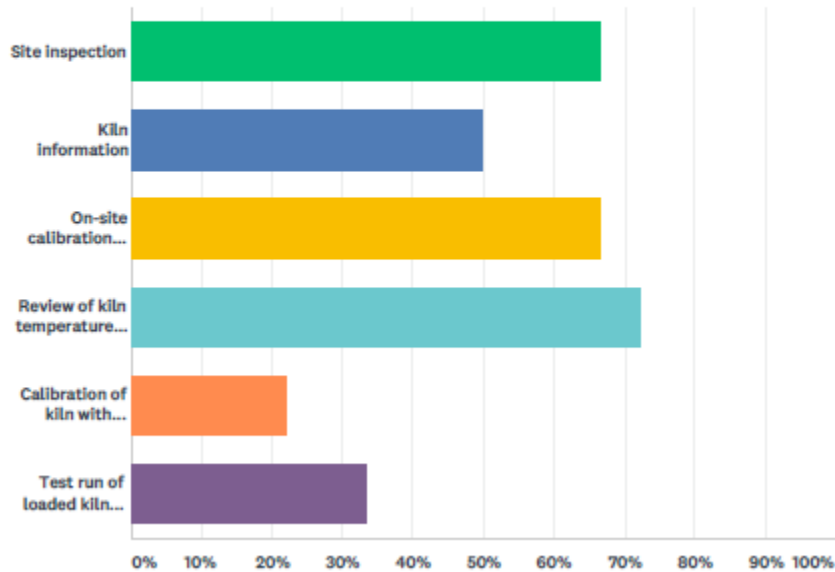
Q10: How many firewood heat treatment facilities are currently certified in your state?



- 11 states indicated no heat treatment kilns were certified
- 7 states indicated 1 or 2 kilns were certified
- 5 states indicated 4 – 6 kilns were certified
- 3 states (MN, NH, WI) indicated 10 or more kilns were certified
- 12 states do not know/does not apply
- 14 states & territories did not respond

Q11 What information is collected during certification of a firewood heat treatment facility?

Answered: 18 Skipped: 20



- 18 states provided description of their kiln certification activities.
- About 2/3 of the responding states include a site inspection, review of on-site calibration records, and a review of kiln temperature data for individual heat treatment cycles as part of certification.
- About half of the responding states gather kiln information.
- Fewer than 1/3 of the states do an independent calibration of the kiln or a test run of the loaded kiln under direct supervision.

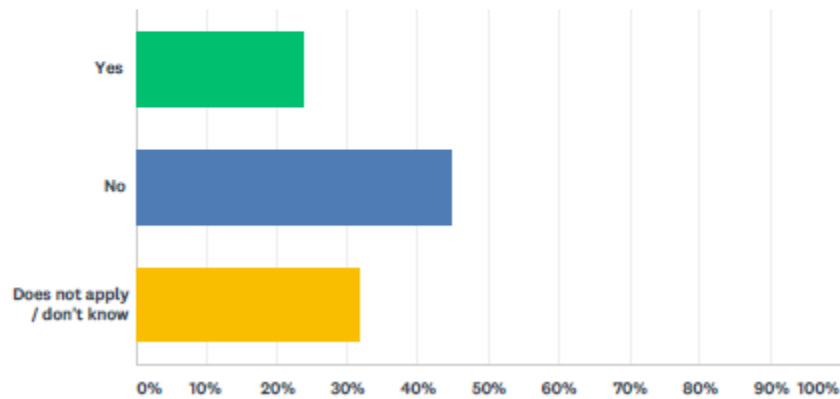
ANSWER CHOICES	RESPONSES	
Site inspection	66.67%	12
Kiln information	50.00%	9
On-site calibration records	66.67%	12
Review of kiln temperature data for individual heat treatment cycles	72.22%	13
Calibration of kiln with independent monitoring equipment	22.22%	4
Test run of loaded kiln under direct supervision	33.33%	6
Total Respondents: 18		

States that indicated that calibration equipment used was:

- 10-30 probes depending on the size of the kiln
- 8 HOBOware probes per kiln
- Onset data loggers with HOBOware software
- 10 or 12 probes per kiln, Onset HOBO 5" probe temperature data logger
- It was clear from answers that these loggers are those being used by USDA

Q12 If APHIS stops certifying firewood heat treatment facilities (due to EAB deregulation) does your state have the capacity to assume that workload and certify all working firewood heat treatment facilities?

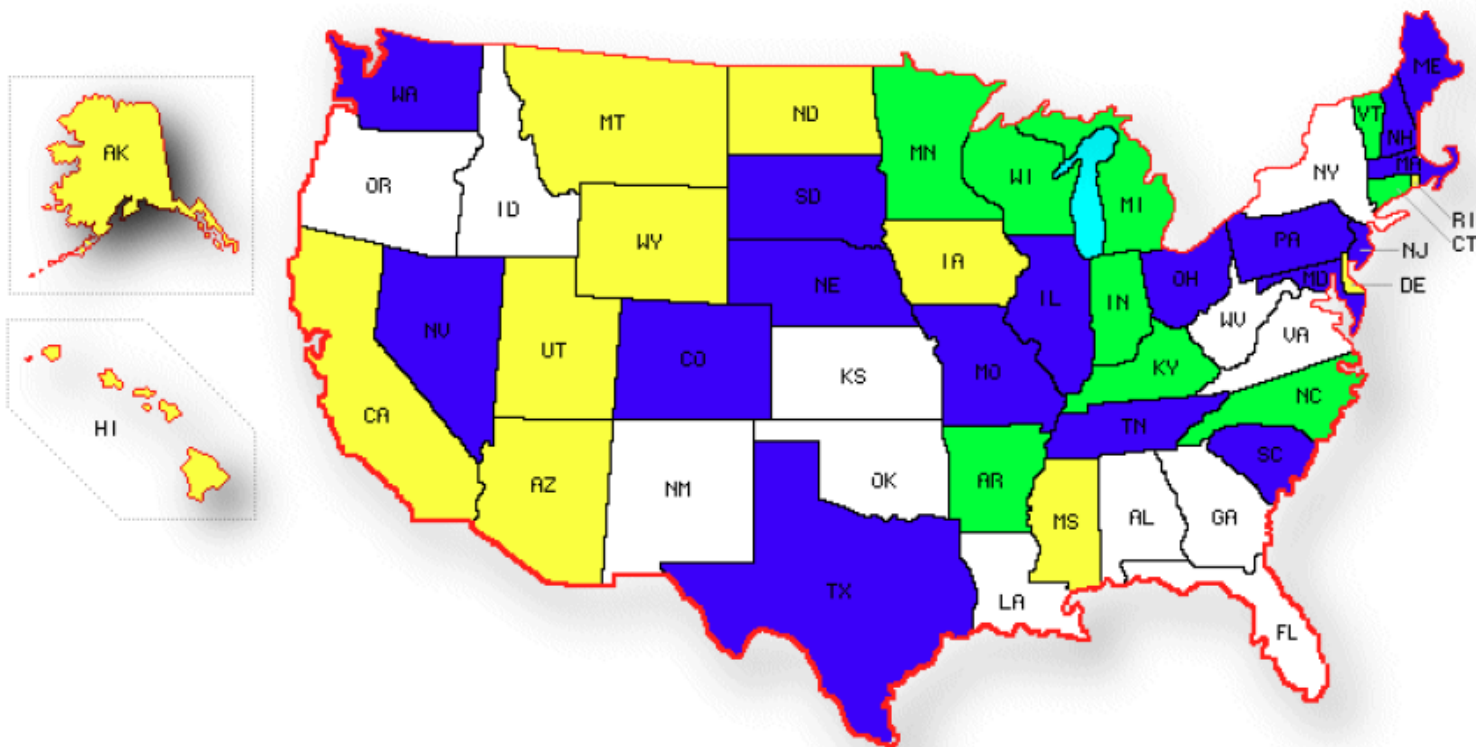
Answered: 38 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	23.68%	9
No	44.74%	17
Does not apply / don't know	31.58%	12
TOTAL		38

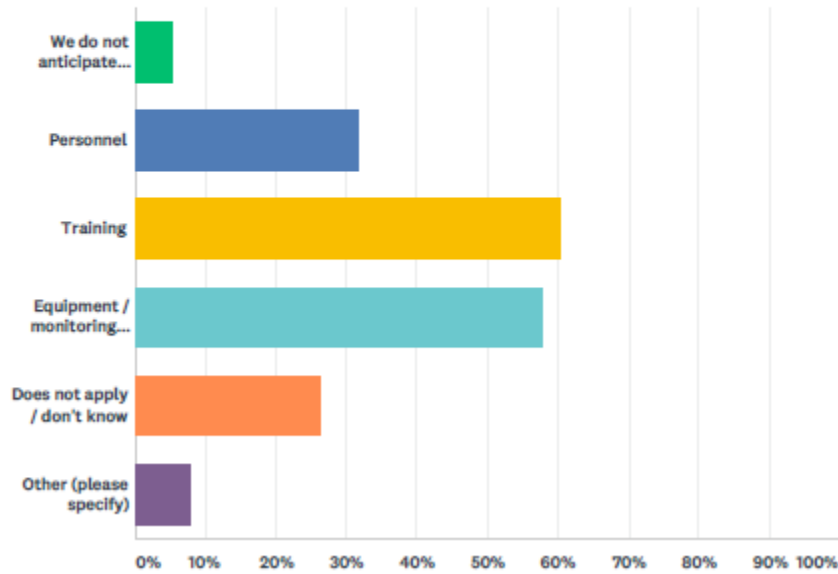
If APHIS stops certifying kilns will states be able to certify

- - Yes
- - No
- - Don't know / NA



Q13 What type of assistance would you need in order to be able to assume the workload to certify all firewood heat treatment facilities in your state? (Select all that apply.)

Answered: 38 Skipped: 0



ANSWER CHOICES	RESPONSES	
We do not anticipate needing assistance	5.26%	2
Personnel	31.58%	12
Training	60.53%	23
Equipment / monitoring probes to calibrate kilns	57.89%	22
Does not apply / don't know	26.32%	10
Other (please specify)	7.89%	3
Total Respondents: 38		

- 36 states indicated needing assistance to conduct kiln-certification activities
- 12 states described needing personnel
- 23 states described a need for training
- 22 states indicated a need for equipment/monitoring probes in order to calibrate kilns
- 1 state indicated a need for funding (under the other category)
- 10 states indicated that this does not apply or that they did not know.

Q14 Please describe any firewood certification programs, treatments, or methods, other than heat treatment that your state oversees. (Examples could include: wood was harvested from an area free from gypsy moth, OR wood was debarked, OR wood was seasoned for greater than two years.)

Answered: 26 Skipped: 12

12 states indicated that they had these types of programs in place.

Debarked and inspected from IFA free EAB, regulated areas.

GM

ALB,TCD and GM quarantine enforcement

We do maintain an internal gypsy moth quarantine, so we work with loggers and producers on education and outreach, but we do not have a large amount of firewood leaving the state so it's heavy on the local focus.

Wood debarked and milled Wood chipped to 1"x 1" x X

We have had a debarking CA at some point in the past but for the most part they are heat treatment.

We issue state phytosanitary certificates for firewood to other states based on Montana pest free areas.

wood debarked Methyl bromide

Fumigation for entry of pecan firewood.

fumigation, chipping, debarking

Wisconsin will certify firewood for in-state movement if it has been seasoned for 24 months.

Firewood being sold at state parks needs to be under compliance currently we maintain just under 200 state compliance agreements for firewood

Q15 Any additional comments or thoughts that you would like us to make us aware of?

We do need to standardize based on the most efficacious method for the high risk pests.

SD Game Fish and Parks does not allow any firewood from outside the state park system inside their state park.

At one point we certified a heat treatment kiln here in Utah, however they have since stopped production and no longer request the heat treatment certification. UDAF had certified them in the past, being no federal quarantine pest are found here in Utah that require federal certification.

Certification of kilns is not a Plant Regulatory task and should be a third party certification or carried out by the same agency/group that certifies scales. Uniform application nationally is critical to prevent this from becoming another marketing certification carried out by Regulatory.

Thank you for working on this, most of this survey is not applicable to AK. Be good to see if states have the capacity to enforce a firewood quarantine. We would be able to since not much is imported into the state and we did a firewood survey in years past that has provided us with good data. We also have the AK Canada border, which helps with tracking things at the border. Mia

Outreach for tourists, visitors, students and military through media, welcome stations, road stations, etc.

Our agency has not, in the past, supported purchase of equipment for kiln calibration. This may change due to the heightened awareness of invasives within the agency and the increased responsibility that will fall on us once the Federal government deregulates EAB.

While we currently do not have a external quarantine, we are in discussions on the possibility of implementing.

Because Nevada has no EAB, we are designing our quarantines around inspection of incoming firewood. We have not needed to regulate outgoing firewood. Treatment of infested firewood would be our biggest concern.

We need to learn how to certify kilns and get the equipment/resources in place to do so. Not sure where to start.

Heat treatments are an extremely valuable tool for treating firewood. Many other woodboring pests besides EAB may be found within untreated firewood. Pests such as Lyctid, Anobiid, Cerambycid, and Curculionid beetles, Siricid wood wasps, and termites to name a few, are easily transported in firewood and cause significant economic damage within the United States each year. Decreasing or discontinuing kiln certification will increase both the instances and number of woodboring pests that are spread throughout the United States and its territories. This will put many native plant and tree species at risk for significant losses. Furthermore, the decreasing or discontinuation of kiln certification will also leave the United States to play "catch up" once again to make sure kilns are working properly when the next significant wood boring pest is introduced. The State of Hawaii has had several instances of pestiferous wood boring beetles being intercepted on firewood imported from the continental United States. Doubtless this happens to other states as well and should be avoided if at all possible. Thank you for giving me the opportunity to provide comments on this matter. Sincerely, Christopher Kishimoto Hawaii Department of Agriculture Plant Quarantine Branch

Heat Treatment Certification Programs

- Essential elements and how to conduct.

Certification process: Overview

- Request for certification – to local PPQ / EAB personnel
- PPQ staff meet with facility operator discuss certification – test runs etc.
- Facility submits operational plan for review to PPQ
- Certification / thermo mapping test performed by PPQ
- Compliance agreement issued by PPQ upon successful certification test
- Recertification annually

Current APHIS Schedules: Treatment Manual Chapter 5

Gypsy Moth: 56°C / 30 min

EAB: 60°C / 60 min

...changed from 71°C / 75 min

Some states require 71°C / 75 min

ALB Schedule?

Treatment Schedules T300 - Schedules for Miscellaneous Plant Products
 T314—Logs and Firewood

T314—Logs and Firewood

These heat treatment procedures may employ steam, hot water, kilns, or any other method that raises the temperature of the **center** of the log to the minimum required temperature for the time specified. Procedures for obtaining internal log temperature can be found in the chapter "Methyl Bromide-Tarpaulin", section *Logs and Lumber* on page 2-4-15.

The heat treatment must be performed at an approved facility that maintains a current compliance agreement. The PPQ official will review facility treatment records to ensure the treatment temperature and duration requirements have been met.

Contact USDA-APHIS-CPHST-PPQ Pest Survey Detection and Exclusion Laboratory at 508-563-9303 ext. 259 for a list of approved facilities, temperature monitoring equipment and operational guidelines.



For annual facility certification guidelines, follow the procedures in "Certifying Facilities for the Heat Treatment of Firewood" on page 5-3-1.

Important

T314-a

Regulated Wood Articles⁴, including *Fraxinus* (Ash Logs and firewood) and all Hardwood Firewood from Emerald Ash Borer quarantine areas

Pest: *Agrilus planipennis* (Emerald Ash Borer)

Treatment: T314-a—Heat treatment

Unit	Temperature	Time (minutes)
°F	140.0	60
°C	60.0	60

T314-b

All logs (including firewood) from Gypsy Moth quarantine areas⁵

Pest: *Lymantria dispar* (Gypsy Moth egg masses)

Treatment: T314-b—Heat treatment

Unit	Temperature	Time (minutes)
°F	132.8	30
°C	56.0	30

⁴ Emerald Ash Borer regulated articles include: firewood of all hardwood (non-coniferous) species; nursery stock, green lumber, and other material being, dead, cut, or fallen, including logs, stumps, roots, branches, and composted and uncomposted chips of the genus *Fraxinus* (7 CFR 301.55-2).

⁵ If the regulated article originates from areas quarantined for DGT's gypsy moth and emerald ash borer, use T314-a.

5-4-38

Treatment Manual

01/2011-03

T314-c

Regulated Wood Articles⁶

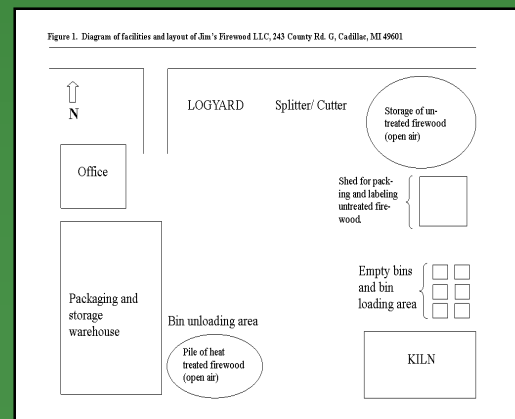
Pest: Various Wood Pests

Treatment: T314-c—Heat treatment

Unit	Temperature	Time (minutes)
°F	160.0	75
°C	71.1	75

Submit a written treatment “Plan” to PPQ to include:

- The layout of the facility
- Describes the flow of untreated and heat treated firewood through the facility
- Outlines the physical specifications of the kiln /heat chamber
- Firewood load specifications, containers, and duration of treatments etc.
- Temperature monitoring equipment



Site Inspection

- Prior to site inspection make sure that the facility has provided the “Operational plan”.
- Request test run data to verify that the facility is operational and can meet the target for heat treatment.
- Verify that the facility has the required amount of data loggers for their size chamber.
- Make sure that there is no danger of treated and not treated firewood comingling.

Do not conduct certification and thermo- mapping if requirements aren't met.

- Correct number of data loggers
- Facilities ability to make temperature

Conducting the certification

- Choose a large piece
- Drill holes in firewood
- Place firewood with inserted data logger in the center of the bin.



Hobo Data logger U12-015 and U12-015-02



Placing the firewood and sensor



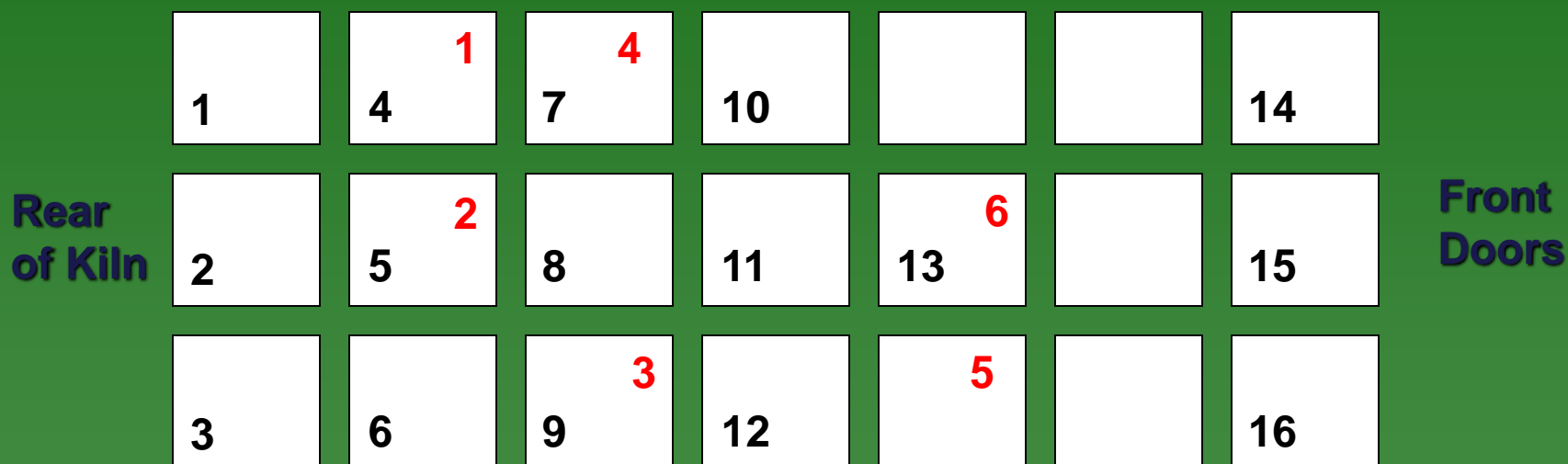
Placing the firewood and sensor





Thermal Mapping Procedure

Kiln diagram and sensor placement.



Black numbers indicate location of USDA loggers

Red numbers indicate location of facility temperature probes

Field Chart of sensor placement with temperatures added

Hauger
 Medina
 Feb 2017

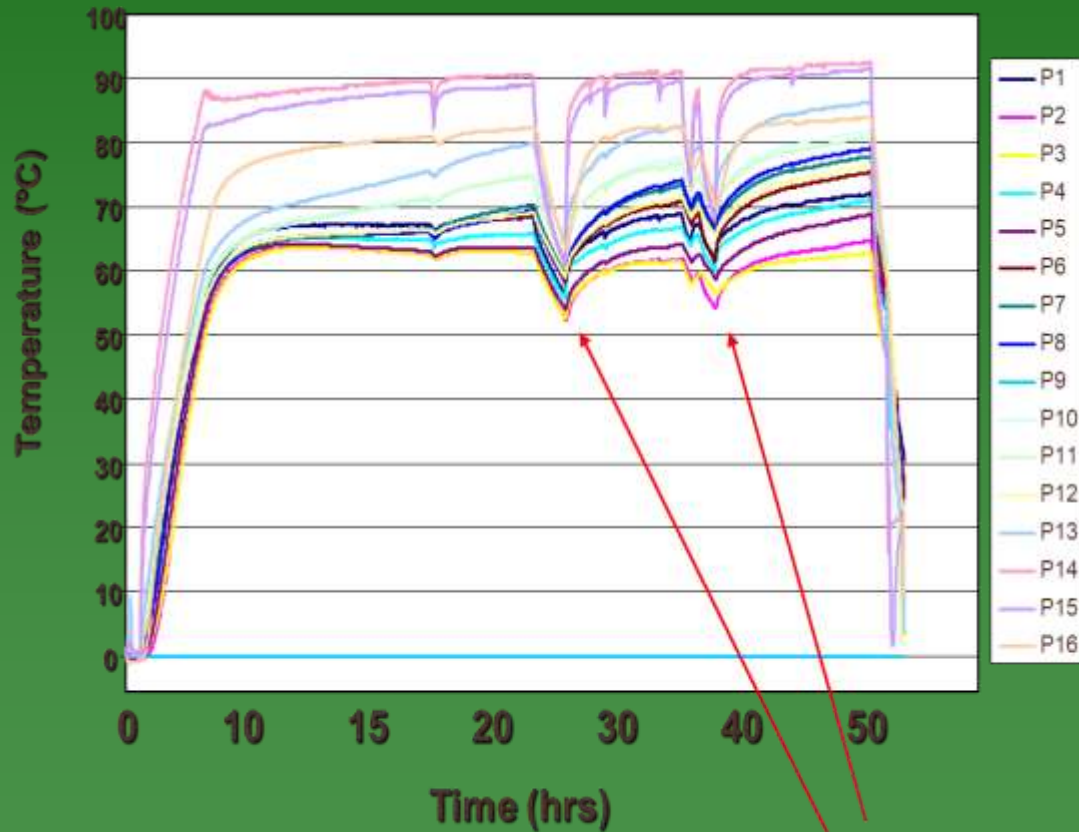
Top	Bottom	Top	Bottom
149.9°F	161.5°F	#1	1
161.9°F	179.0°F	#2	1
157.9°F	174.6°F	#3	2
156.3°F	168.3°F	#4	2
150.7°F	149.4°F	#5	3
182.1°F	204.4°F	#6	3
170.8°F	193.1°F	#7	4
157.7°F	185.6°F	#8	4
169.9°F	177.4°F	#9	5
172.5°F	202.0°F	#10	5
175.9°F	192.6°F	#11	6
159.7°F	183.7°F	#12	6

Reviewing Certification Test Data

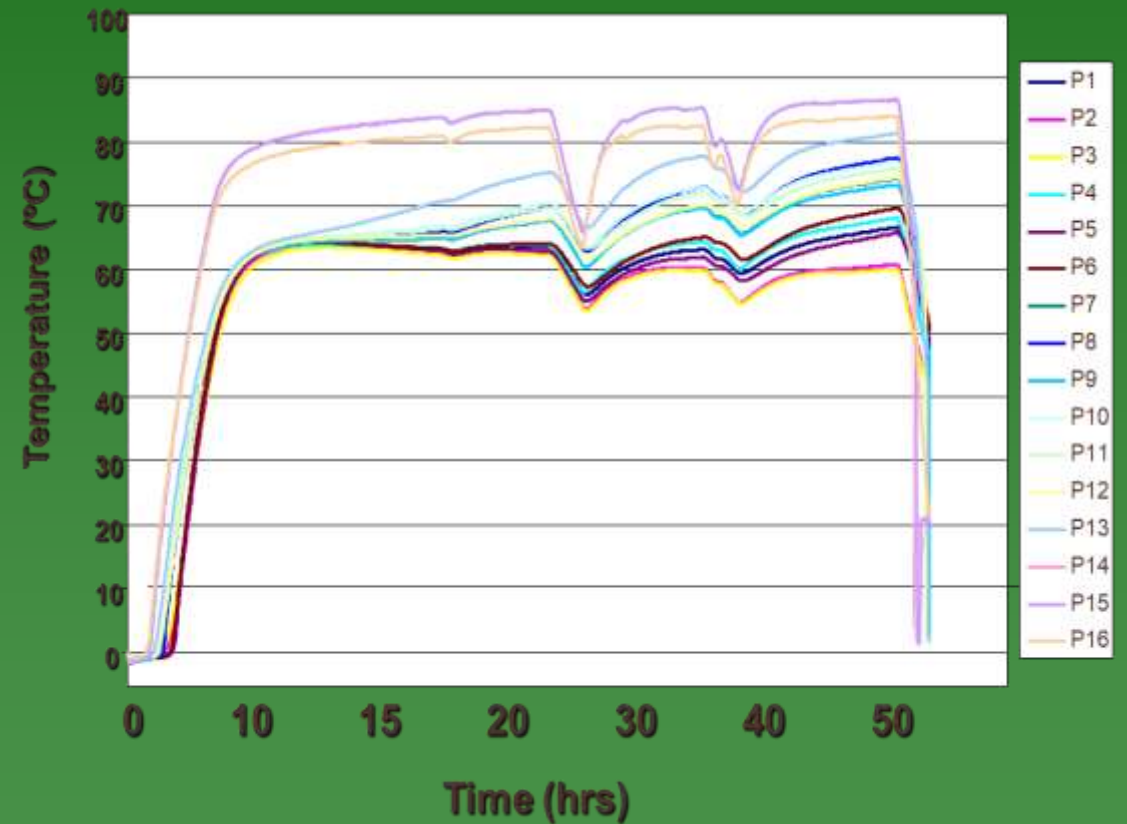
Size16Sticks vert data 4-14-2008.xls - Microsoft Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1																				
2		Probs #																		
3		max temperature	82.7	81.1	74.9	71.2	76.7	77.8	79.9	84.4	80.2	81.6	79.0	76.7						
4		Max Temp of Sizzle	84.4	84.1																
5		Time to Max Temp (hrs)	20.1	19.7	19.0	20.3	19.7	20.0	20.0	19.0	19.7	19.7	20.2	19.8						
6		Temp GMT-04:00	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C	Temp °C						
7	elapsed time (hrs)	Probs #																		
172	13.7	4/15/2008 0:40	73.7	74.0	63.9	59.2	66.3	67.2	68.1	73.1	68.5	72.2	66.5	67.5						
173	13.8	4/15/2008 0:45	71.9	74.1	64.1	59.5	66.4	67.4	68.3	73.3	68.7	72.4	66.8	67.7						
174	13.8	4/15/2008 0:50	72.1	74.3	64.2	59.7	66.6	67.5	68.5	73.5	69.0	72.6	67.0	67.9						
175	13.9	4/15/2008 0:55	72.3	74.4	64.4	59.9	66.8	67.7	68.7	73.7	69.2	72.7	67.1	68.1						
176	14.0	4/15/2008 1:00	72.5	74.6	64.6	60.1	66.9	67.9	69.0	74.0	69.4	72.8	67.3	68.2						
177	14.1	4/15/2008 1:05	72.7	74.7	64.8	60.3	67.1	68.1	69.2	74.2	69.6	73.0	67.6	68.4						
178	14.2	4/15/2008 1:10	72.9	74.9	65.0	60.5	67.3	68.3	69.4	74.4	69.8	73.2	67.8	68.7						
179	14.3	4/15/2008 1:15	73.2	75.0	65.2	60.8	67.6	68.6	69.6	74.6	70.1	73.4	68.0	68.9						
180	14.3	4/15/2008 1:20	73.4	75.2	65.5	61.0	67.8	68.7	69.8	74.8	70.3	73.6	68.2	69.1						
181	14.4	4/15/2008 1:25	73.6	75.4	65.6	61.2	67.8	68.9	70.0	75.0	70.5	73.7	68.4	69.3						
182	14.5	4/15/2008 1:30	73.7	75.6	65.8	61.4	68.1	69.1	70.2	75.2	70.7	73.8	68.6	69.5						
183	14.6	4/15/2008 1:35	74.0	75.6	65.9	61.5	68.3	69.3	70.4	75.4	70.8	73.9	68.9	69.6						
184	14.7	4/15/2008 1:40	74.2	75.7	66.0	61.8	68.6	69.4	70.6	75.6	71.0	73.9	69.1	69.7						
185	14.8	4/15/2008 1:45	74.4	75.8	66.1	61.9	68.6	69.6	70.7	75.7	71.2	73.9	69.3	69.8						
186	14.8	4/15/2008 1:50	74.5	75.8	66.3	62.1	69.0	69.7	70.9	75.9	71.3	73.8	69.5	69.9						
187	14.9	4/15/2008 1:55	74.7	75.9	66.5	62.3	69.3	69.9	71.0	76.0	71.5	73.6	69.8	70.0						
188	15.0	4/15/2008 2:00	74.9	75.9	66.7	62.4	69.1	70.0	71.1	76.2	71.7	73.7	70.0	70.1						
189	15.1	4/15/2008 2:05	75.0	75.9	66.8	62.6	69.4	70.1	71.2	76.3	71.9	73.7	70.3	70.2						
190	15.2	4/15/2008 2:10	75.1	75.9	66.9	62.7	69.7	70.2	71.3	76.5	72.0	73.8	70.5	70.3						
191	15.3	4/15/2008 2:15	75.2	76.0	67.1	62.9	70.0	70.4	71.4	76.6	72.3	73.9	70.8	70.4						
192	15.3	4/15/2008 2:20	75.4	76.1	67.2	63.0	70.2	70.5	71.6	76.7	72.4	74.0	71.0	70.6						
193	15.4	4/15/2008 2:25	75.4	76.1	67.4	63.2	70.4	70.7	71.7	76.9	72.6	74.2	71.3	70.7						
194	15.5	4/15/2008 2:30	75.6	76.2	67.5	63.3	70.6	70.8	71.9	77.0	72.8	74.3	71.5	70.9						
195	15.6	4/15/2008 2:35	75.7	76.3	67.7	63.5	70.8	71.0	72.0	77.1	73.0	74.5	71.7	71.0						
196	15.7	4/15/2008 2:40	75.8	76.5	67.9	63.6	71.0	71.1	72.2	77.3	73.1	74.7	71.9	71.2						
197	15.8	4/15/2008 2:45	75.9	76.6	68.0	63.8	71.2	71.3	72.4	77.5	73.3	74.9	72.1	71.3						
198	15.8	4/15/2008 2:50	76.1	76.7	68.2	63.9	71.3	71.4	72.5	77.6	73.5	75.1	72.3	71.4						
199	15.9	4/15/2008 2:55	76.2	76.9	68.4	64.1	71.4	71.6	72.7	77.7	73.6	75.3	72.4	71.6						
200	16.0	4/15/2008 3:00	76.4	76.9	68.5	64.2	71.6	71.7	72.9	77.9	73.8	75.5	72.6	71.7						
201	16.1	4/15/2008 3:05	76.6	77.1	68.6	64.4	71.7	71.8	73.1	78.0	74.0	75.6	72.8	71.8						
202	16.2	4/15/2008 3:10	76.7	77.1	68.8	64.5	71.8	72.0	73.3	78.2	74.1	75.6	73.0	71.9						
203	16.3	4/15/2008 3:15	76.9	77.3	69.0	64.7	71.9	72.1	73.5	78.4	74.3	75.9	73.1	72.1						
204	16.3	4/15/2008 3:20	77.0	77.3	69.1	64.9	72.0	72.2	73.6	78.5	74.4	76.1	73.3	72.2						
205	16.4	4/15/2008 3:25	77.1	77.4	69.2	65.0	72.1	72.3	73.7	78.6	74.5	76.2	73.4	72.3						
206	16.5	4/15/2008 3:30	77.3	77.4	69.3	65.2	72.1	72.4	74.0	78.8	74.7	76.3	73.5	72.4						
207	16.6	4/15/2008 3:35	77.4	77.6	69.5	65.3	72.1	72.6	74.2	78.9	74.8	76.5	73.7	72.5						
208	16.7	4/15/2008 3:40	77.5	77.6	69.6	65.5	72.2	72.7	74.3	79.0	75.0	76.6	73.8	72.6						
209	16.8	4/15/2008 3:45	77.7	77.7	69.8	65.6	72.4	72.8	74.5	79.2	75.1	76.8	74.0	72.7						
210	16.8	4/15/2008 3:50	77.8	77.8	69.9	65.8	72.4	72.9	74.6	79.3	75.3	76.9	74.1	72.9						
211	16.9	4/15/2008 3:55	77.9	77.9	70.1	65.9	72.6	73.1	74.8	79.5	75.4	77.1	74.2	73.0						
212	17.0	4/15/2008 4:00	78.1	77.9	70.3	66.1	72.7	73.2	75.0	79.7	75.6	77.2	74.3	73.1						
213	17.1	4/15/2008 4:05	78.2	78.2	70.4	66.2	72.8	73.4	75.1	79.8	75.7	77.4	74.5	73.3						
214	17.2	4/15/2008 4:10	78.3	78.3	70.6	66.4	72.9	73.5	75.3	80.0	75.9	77.5	74.6	73.4						
215	17.3	4/15/2008 4:15	78.5	78.3	70.7	66.5	73.0	73.7	75.4	80.1	76.1	77.7	74.8	73.6						
216	17.3	4/15/2008 4:20	78.6	78.6	70.9	66.7	73.1	73.9	75.6	80.3	76.2	77.9	74.9	73.7						
217	17.4	4/15/2008 4:25	78.8	78.7	71.0	66.8	73.2	74.0	75.7	80.4	76.4	78.0	75.0	73.8						
218	17.5	4/15/2008 4:30	78.9	78.8	71.2	67.0	73.3	74.2	75.9	80.6	76.5	78.2	75.2	73.9						
219	17.6	4/15/2008 4:35	79.0	78.9	71.3	67.1	73.4	74.3	76.0	80.8	76.6	78.4	75.3	74.0						

Ambient Temperatures



Core Temperatures



Cold Spots

- If cold spots exist, but all sensors meet the HT standard we will require the facility to monitor in those colder parts of the chamber
- If a sensor does not meet the requirement, the facility will have to make adjustments and schedule another attempt at certification.

Common Problems - Failed Certifications

- Fans not working / poor air flow
- Packaging material restricts air flow
- Facility sensors not calibrated
- Facility sensors not properly located in the center of stacks

Certification

- If the facility has met the requirements issue a compliance agreement.
- Monitor the facility to confirm that they are compliant.
- Conduct an annual recertification.

Certification process: Overview

- Request for certification – to local PPQ / EAB personnel
- PPQ staff meet with facility operator discuss certification – test runs etc.
- Facility submits operational plan for review to PPQ
- Certification / thermo mapping test performed by PPQ
- Compliance agreement issued by PPQ upon successful certification test
- Recertification annually

Contact Information

- Mitchell Dykstra
- PHSS
- USDA-APHIS-PPQ
- 412-477-2281
- Mitchell.c.Dykstra@aphis.usda.gov

CULTURAL IMPACTS OF LOSING BLACK ASH



Eastern Plant Board
April 20, 2019
Portland, ME

Presented by:
Darren Ranco, PhD, University of
Maine
Jennifer Neptune, Penobscot
Nation, Maine Indian
Basketmakers Alliance



ASSESSING AND RESPONDING TO SOCIO-CULTURAL IMPACTS OF EMERALD ASH BORER:

Work Done, in part, because of a Cooperative Agreement with the US Forest Service (2016) (Thanks to Marla Emery).


“In the proposed research, we seek to understand the socio-cultural impacts of EAB on tribal basketmakers and their communities and cultures in Michigan, New York, and Maine, as well as identify a set of collective responses that will slow down and possibly reverse some of these impacts.”



ASSESSING AND RESPONDING TO SOCIO-CULTURAL IMPACTS OF EMERALD ASH BORER: ADAPTATION PLANNING OVERVIEW

Research Design/Workplan:

- Consultation with key expert tribal and agency partners (today and tomorrow)
- Focus groups at key locations in the black ash basketmaking range (Michigan (June), Akewesasne (September), and Maine (October)).
- In consultation with expert tribal partners, Principle Investigators will develop a draft EAB socio-cultural adaptation plan based on focus group results (Presented Today).



ASSESSING AND RESPONDING TO SOCIO-CULTURAL IMPACTS OF EMERALD ASH BORER: ADAPTATION PLANNING OVERVIEW CONT.

- Representatives from each of the communities involved in initial focus groups will come together with expert tribal partners and Principle Investigators in a central location to review and revise the draft EAB socio-cultural adaptation plan, Burlington, VT 2017.
- Model adaptation plan dissemination: In consultation with expert tribal partners, the Principle Investigators will develop and execute a dissemination strategy (Today and into the future).

Socio-cultural vulnerability to EAB

- Cultural identity: knowledge, skills, expression
- Culturally relevant livelihood
- Relationships with non-human Nature
- Relationships between Native peoples
 - Multi-generational
 - Community
 - Inter-tribal



Jeremy Frey
Yankee Magazine

Cross-cultural experience

- Michigan tribes (2002)
- New York tribes (west 2009, east 2015)
- Maine (not yet)



Basket by Kelly Church, Grand Traverse Band Ottawa & Chippewa

<http://www.woodlandarts.com>

Strategizing adaptation

- Tribal expert consultation
- Multi-territory workshops
- Adaptation plan development & review
- Adaptation plan dissemination



Marita Skidder (center, St. Regis Mohawk, deceased), Cornwall Island, Akwesasne
Photo by Marla R. Emery

Research Frames: “Cultural Keystone Species” and Indigenous Science



Cultural Keystone Species

- Garibaldi, Ann and Nancy Turner. 2004. “Cultural Keystone Species: Implications for Ecological Conservation and Restoration.” *Ecology and Society* 9(3): 1–18.
- “In human cultures everywhere, there are plants and animals that form the contextual underpinnings of a culture, as reflected in their fundamental roles in diet, as materials, or in medicine.”
- “These species often feature prominently in the language, ceremonies, and narratives of native peoples and can be considered cultural icons.”



GLOOSKAP SETTING HIS DOGS ON THE WITCHES.

Wabanaki

Gluskabe—Cultural Hero



Wabanaki
Ash Tree Creation Story

What is Indigenous Science/

Traditional Ecological Knowledge (TEK)?

- Berkes: “a body of culturally transmitted knowledge and beliefs about the relationships of living beings (including humans) with one another and with their environment” (187-8).
- McGregor: “A system of classification, a set of empirical observations about the local environment, and a system of self-management that governs resource use” (188).
- Cajete: “Known within all four aspects of being: mind, body, emotion, and spirit” (188).
- Houde: “Factual observations and practical experiences within a historical context, guided by spiritual beliefs, and implemented through traditions and cultural stories, interpersonal teaching, and practice” (188).



•Collective Goals

- The need for documentation/protection/saving for future generations of gathering methods
- Education for youth--within and cross communities
- Urgency to return to traditional teachings
- Access to trees--Education for landowners/agencies (certification); cooperative agreements; mapping of basket quality ash; other territories
- Storage of materials--how long and how much
- Processing of materials
- Exchange of materials

•Collective Goals, cont.

- Saving seeds, identifying, locating and protecting female trees
- Working with landowners



• Documenting Impacts

Socio-cultural IMPACTS

- Traditional gathering practices have been impacted. Some families maintain traditional way of taking only what is needed and sharing, while others taking everything and hoarding it.
- There have been problems with healthy stands being cut prematurely by people thinking they could make money selling it to the basketmakers due to its impending scarcity. Wasteful harvesting practices.
- Harvestable black ash is gone from lower Michigan, weavers have to travel to the Upper Peninsula to harvest in new areas, mainly on public lands. Expense of having to travel and take more time to harvest.

• Documenting Impacts

Socio-cultural IMPACTS, continued

- Expectation for weavers and harvesters to do seed collection, but there is no money or grants available for individuals to do this work.
- Harder to find good basket quality trees, many harvesters travel for hours to harvest on lands belonging to neighboring tribes.
- Can be difficult to secure permission from other tribal governments and difficult to find good areas to harvest from.

The need to adapt/store/innovate—Adaptation



Processing

The need to adapt/store/innovate—Adaptation



Storage



Processing



ASSESSING AND RESPONDING TO SOCIO-CULTURAL IMPACTS OF EMERALD ASH BORER: ADAPTATION PLANNING OUTCOMES

Identify ACTIONS and TIME FRAME FOR NEXT STEPS

- Current and future adaptations to EAB, including:
 - Improved access to trees on private and public lands
 - Education for landowners/agencies
 - Certifications and cooperative agreements for access
 - Mapping tools for locating basket quality brown ash
 - Plans for medium and long-term storage of basket materials
 - Plans for processing large influxes of threatened brown ash
 - Plans for exchanging/sharing materials across tribal nations
 - Plans for including/education youth in adaptation plans



Identify ACTIONS and TIME FRAME FOR NEXT STEPS

- Short Term
 - Grants for education/youth
 - Grants for research? What
 - Experiments for other kinds of trees?
 - Other?
- Medium Term
 - Cooperatives
 - Sample MOUs/education materials?
 - Grants for education and research?
 - Other?
- Long Term
 - Grants
 - Other?



ASSESSING AND RESPONDING TO SOCIO-CULTURAL IMPACTS OF EMERALD ASH BORER: ADAPTATION PLANNING OUTCOMES

Dissemination of Report:

- Besides the Report, What Will Be Disseminated?
- To Whom?
- To Where?
- How?
- Dissemination Partners?
- Other Versions for More Impact?
- Who is Responsible?

Deep Partnerships and Relationships





Decision Workflows in Pest Programs: Communication and Engagement with States

Eastern Plant Board Meeting

April 8-13, 2019

History

Interagency Relations Committee (IRC)

- Originally assembled in 2008
- Strategic Alliance Priority in 2016

Working Groups and Projects

1. Roles and Responsibilities
2. Orientation and Training
3. Protocols and Processes
4. **Consultation and Engagement/Emerging Pest Issues**
5. Collaborative Outreach

Objectives of project #4

Issue to resolve: PPQ does not always engage the NPB:

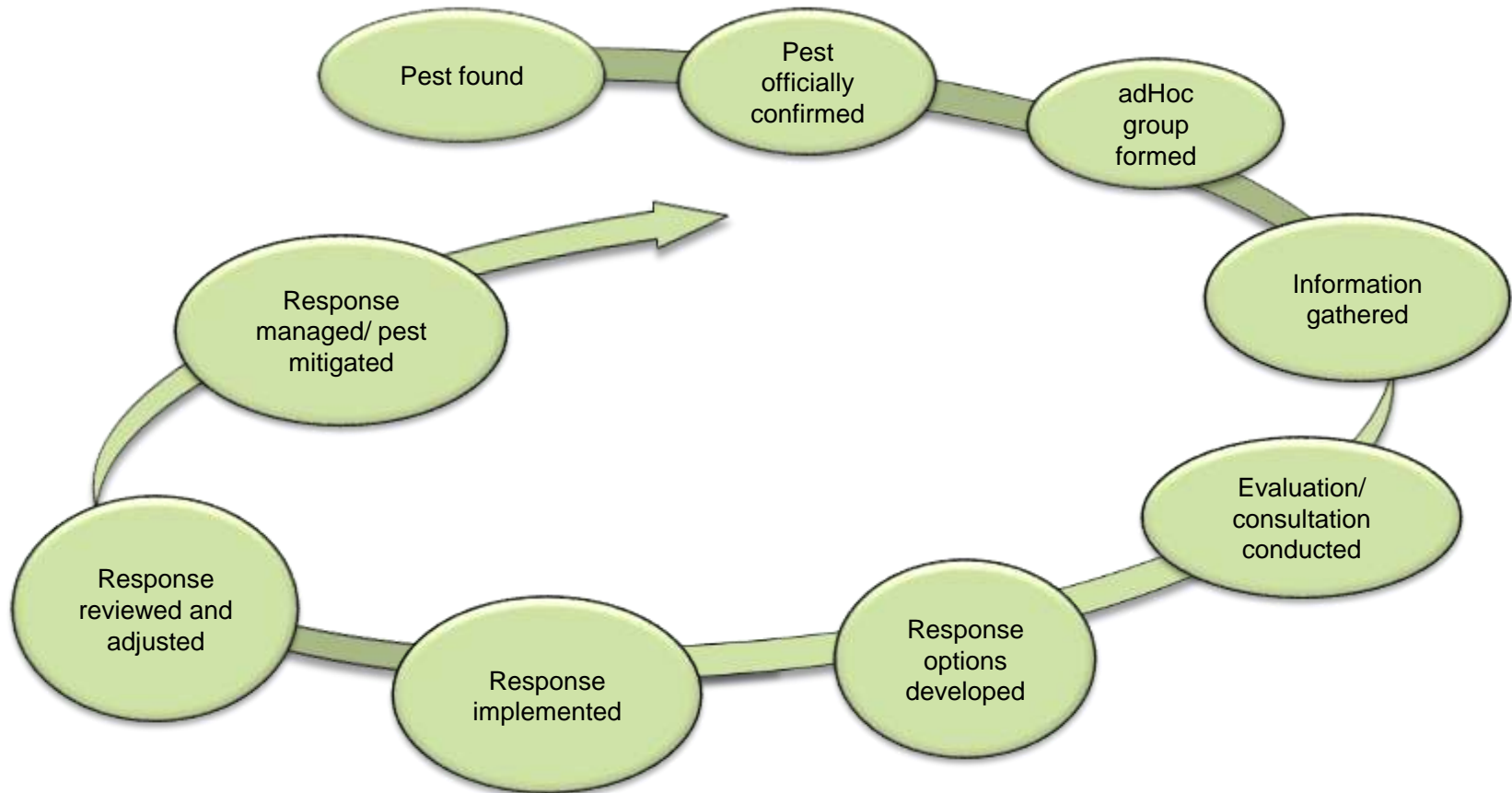
- Develop protocols and processes to support engagement, sustained communication and effective decision making on emerging issues.
- Develop a process to determine when PPQ would provide support for pests not of federal regulatory significance.
- Include as a topic at regional and national Plant Board meetings.

Working Group Discussions

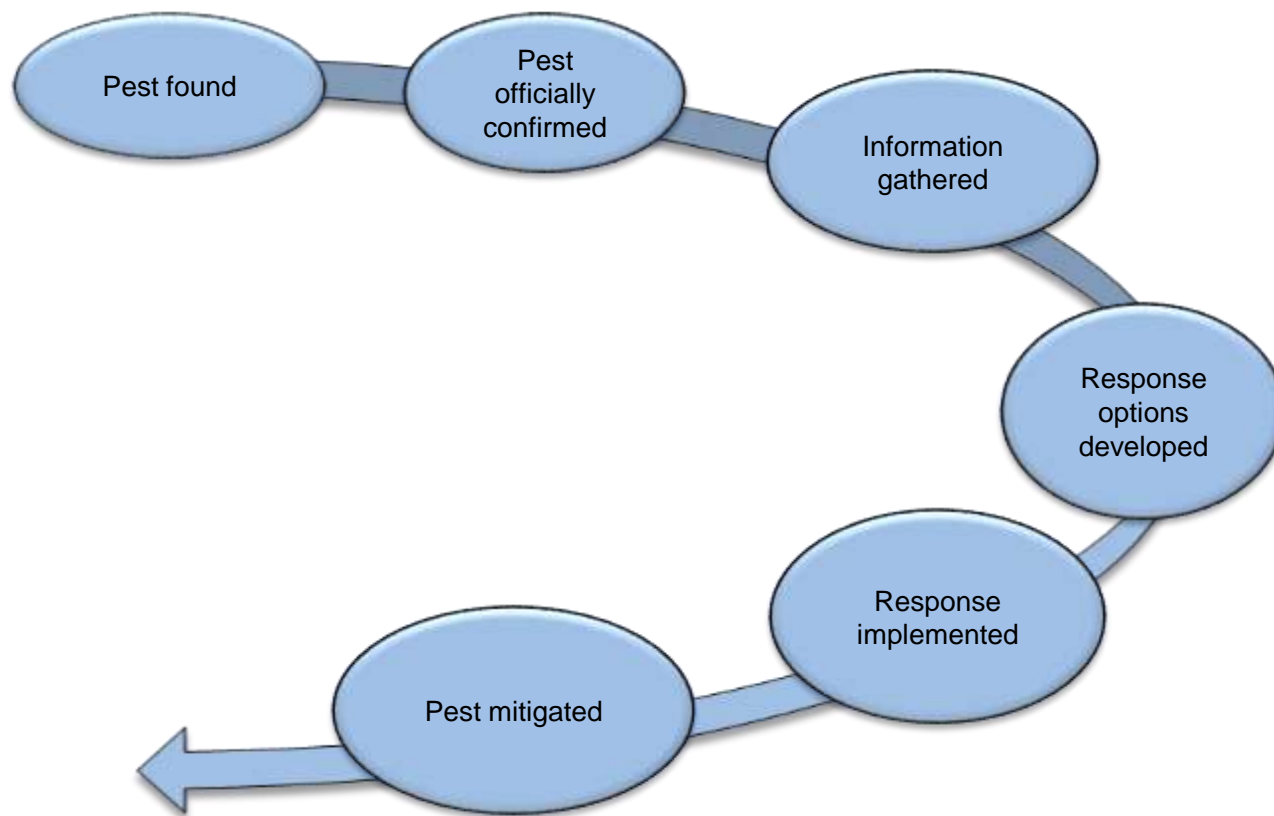
Engagement needed in three fields:

- *Federal* quarantine pests in environment.
- *Federal* quarantine pests in commerce.
- *Federal* NON-quarantine pests in environment.

Federal Quarantine Pests in Environment



Federal Quarantine Pests in Commerce



Federal Non-Quarantine Pests in Environment

Some opportunities for PPQ to help:

- Coordination and facilitation of discussions
- Provide guidance for PPA 7721 funding
- Develop scientific documentation (survey, best practices)
- Participate on working groups as SME

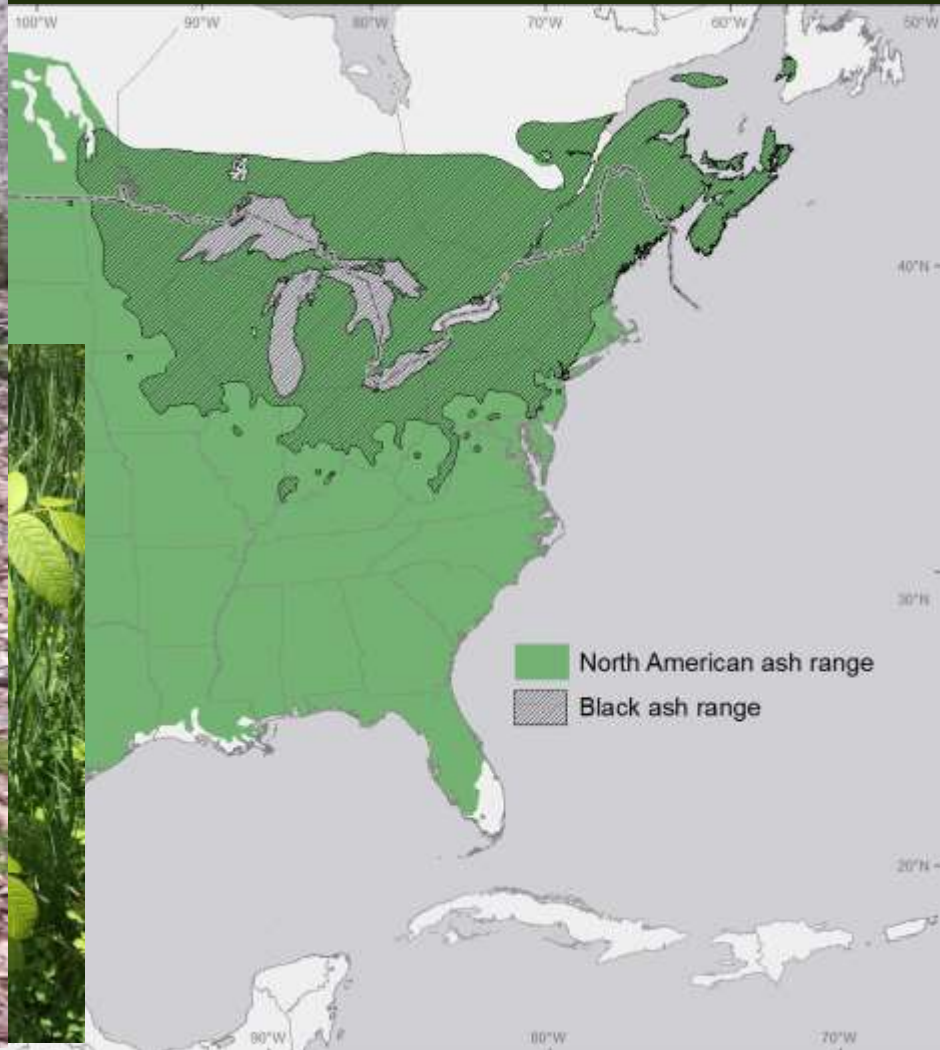


**Emerald Ash Borer:
Cultural Impacts,
Recreational Firewood, &
the Native American
Basketry Tradition**

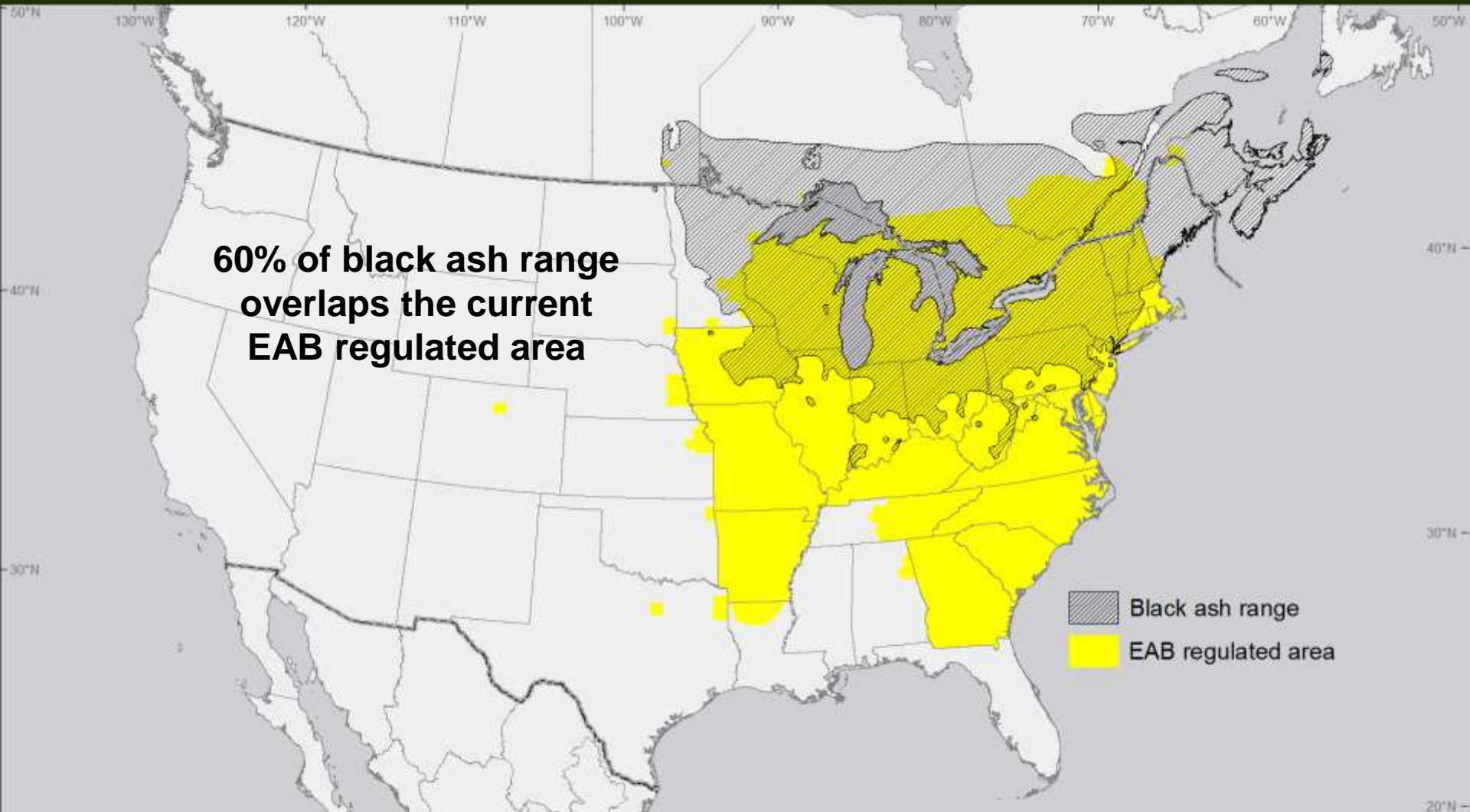
NATHAN W. SIEGERT

US FOREST SERVICE, STATE & PRIVATE FORESTRY, FOREST HEALTH PROTECTION

Black Ash



Emerald Ash Borer

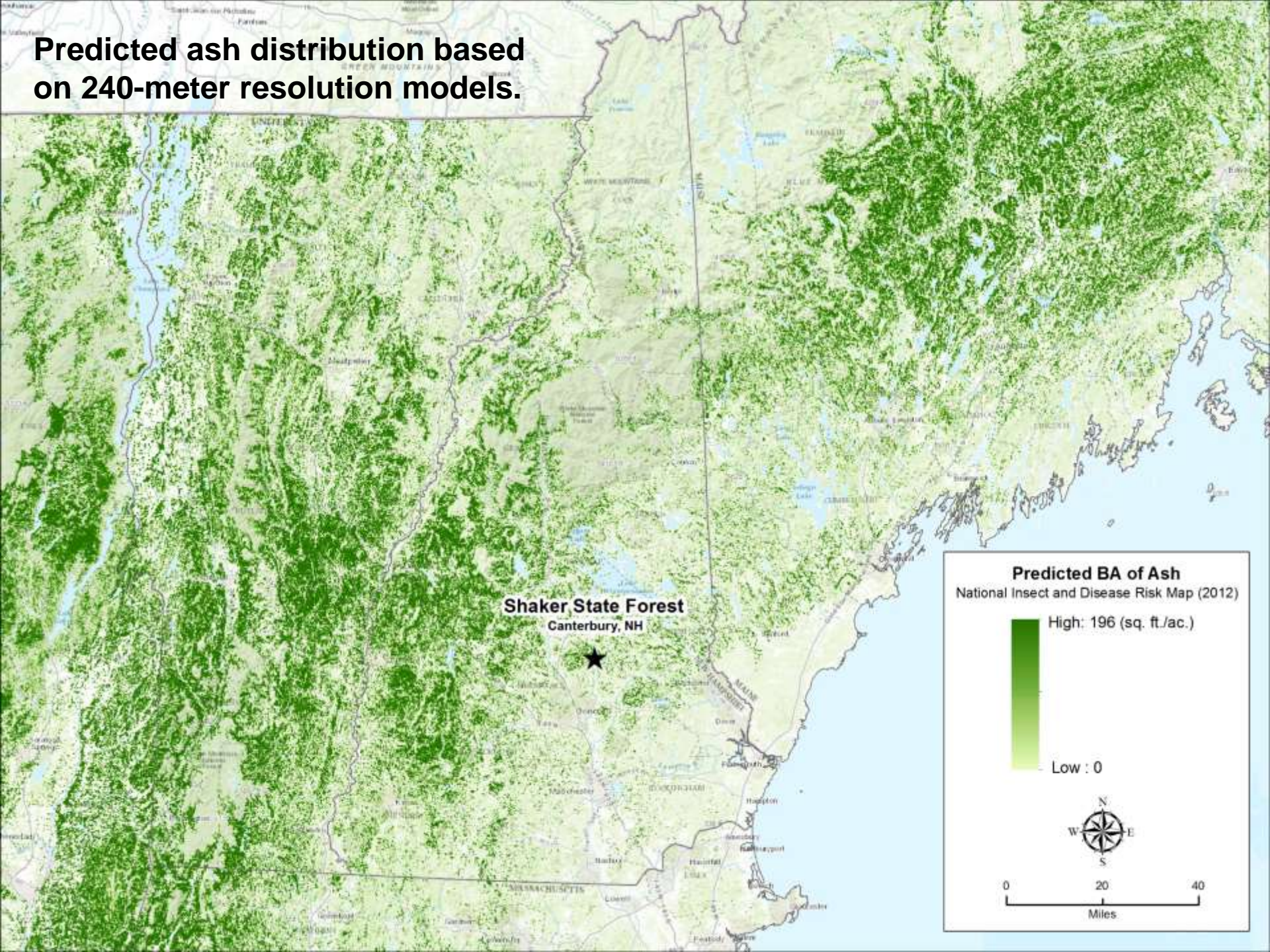


Emerald Ash Borer



- **Black ash is highly susceptible to EAB.**
- **EAB threatens to functionally extirpate black ash in North America.**
- **The Global Tree Specialist Group completed their threat assessment for *Fraxinus* in 2018 and considered black ash as critically endangered.**

Predicted ash distribution based on 240-meter resolution models.



Shaker State Forest
Canterbury, NH



Shaker State Forest
Canterbury, NH

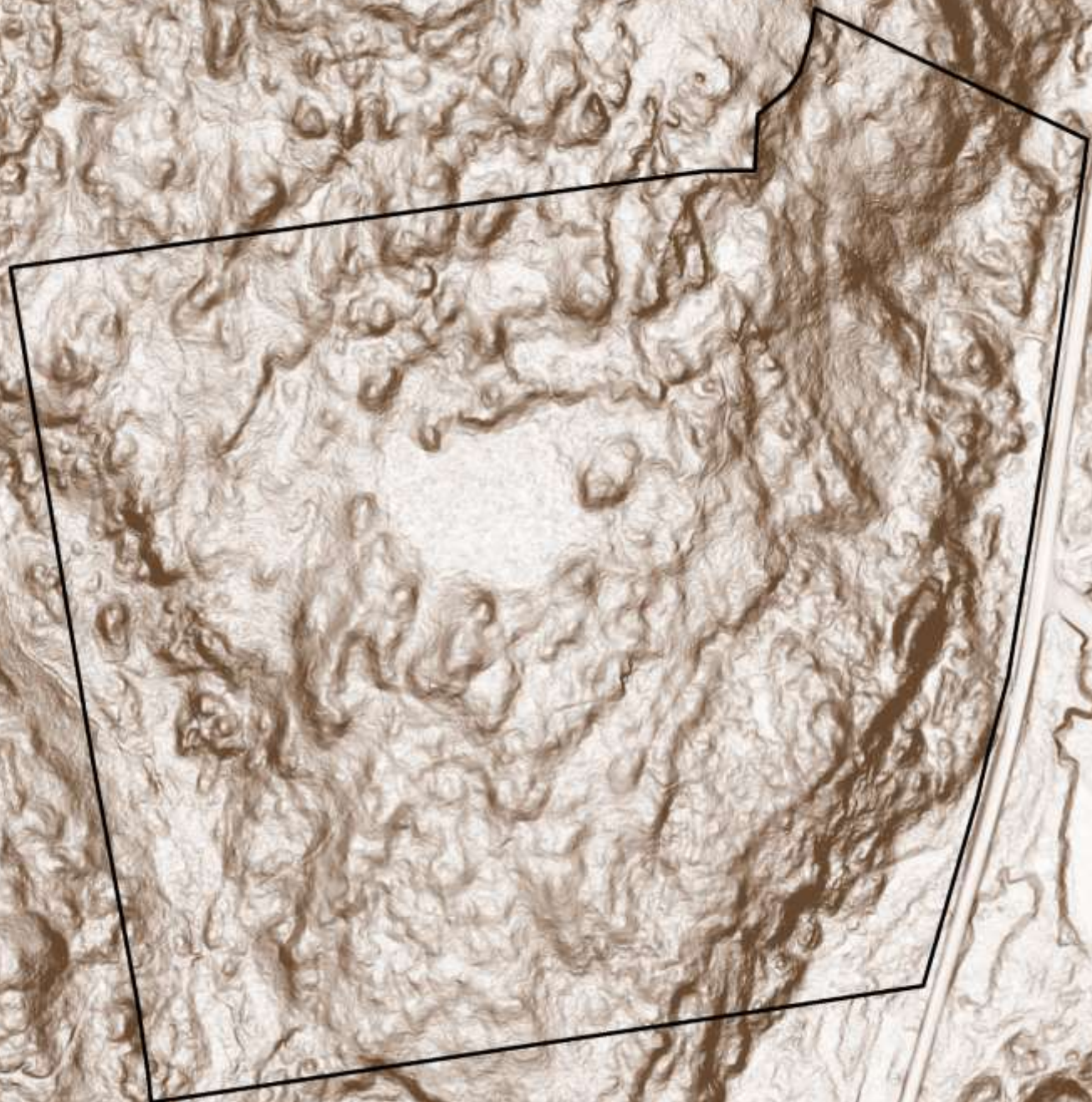
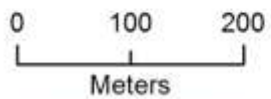


- 226 ac (91 ha)
- Girdled trees in 2014-2015.
- EAB present, but light infestation. Present 1-2 years prior.
- Timber harvest in Jan-Feb 2015.
- Ash health assessment in 2017.



Shaker State Forest
Canterbury, NH

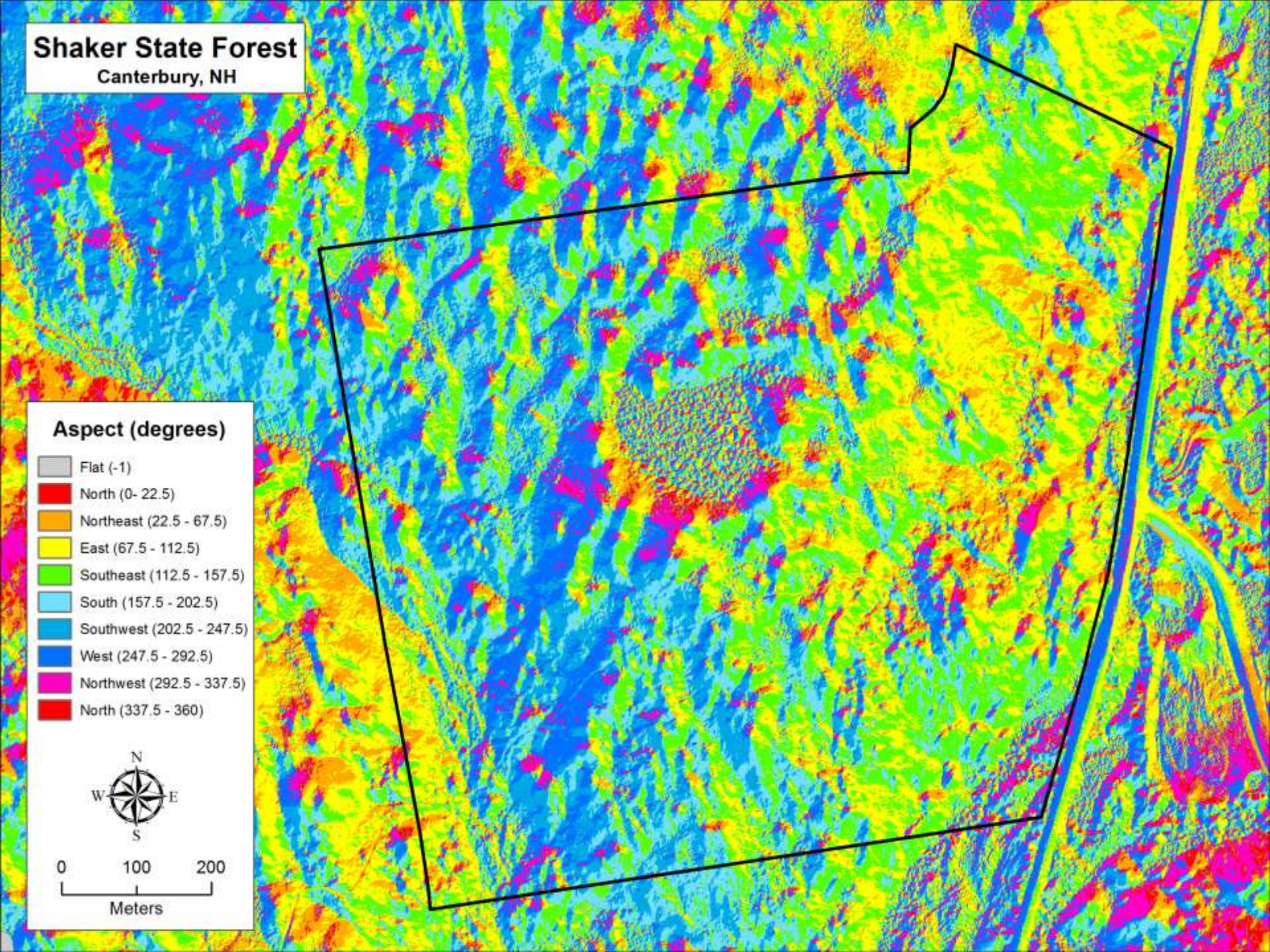
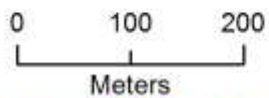
Slope (degrees)



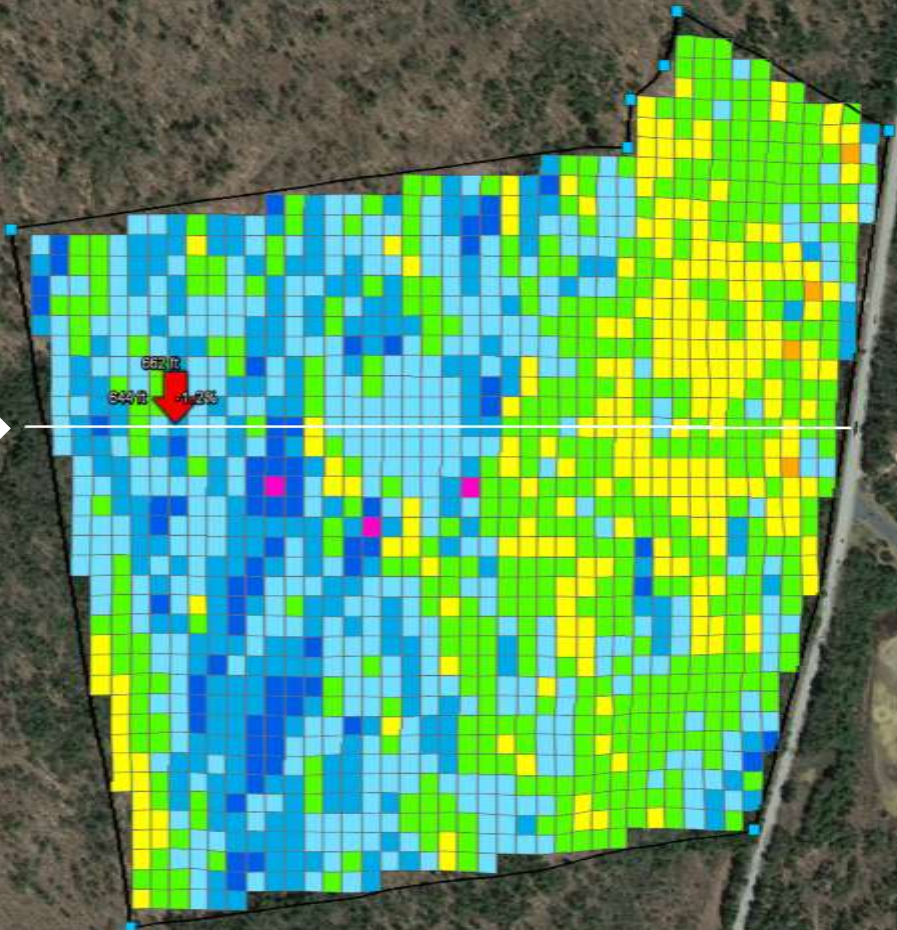
Shaker State Forest

Canterbury, NH

Aspect (degrees)



Elevation profile path (west to east) →



Google Earth

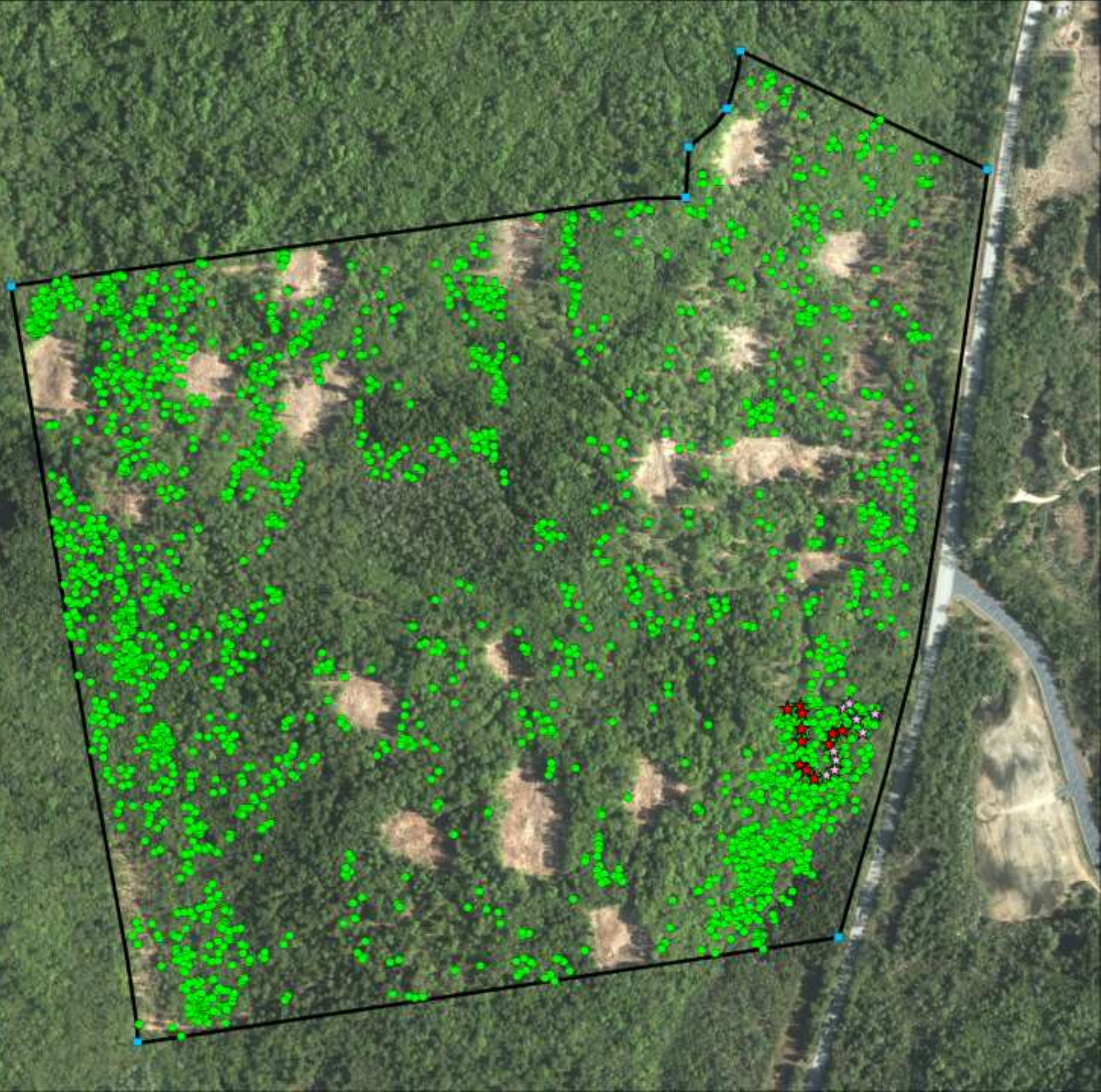
Imagery Date: 4/27/2016 19 T 299815.87 m E 4805709.09 m N elev 662 ft eye alt 7808 ft

Graph	Min	Avg	Max	Elevation	513	662	732 ft				
Range Totals	Distance	0.66 mi	Elev Gain/Loss	154 ft	-307 ft	Max Slope	76.2%	-40.5%	Avg Slope	10.4%	-13.4%



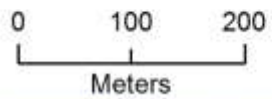
Shaker State Forest

Canterbury, NH



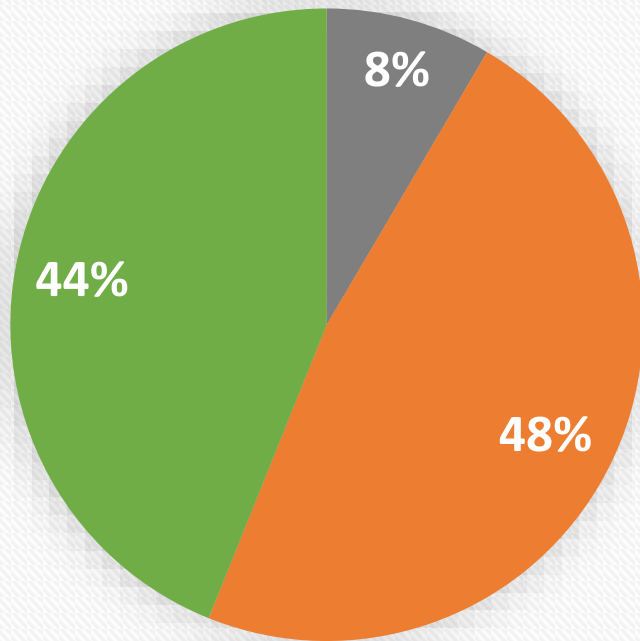
Legend

- Ash tree
- Property corner
- ☆ 2016 Biocontrol release
- ★ 2015 Biocontrol release



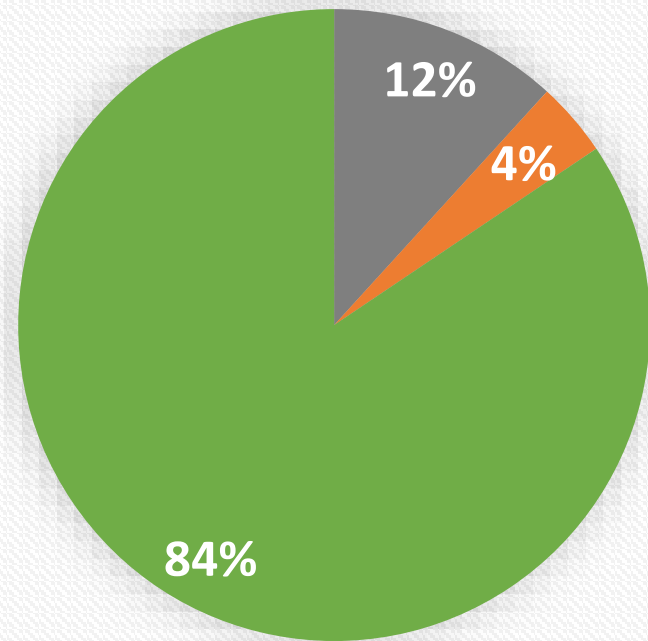
Susceptibility of Black Ash

Black ash (n = 189)



■ Dead (prior to EAB) ■ Dead (EAB-killed) ■ Live

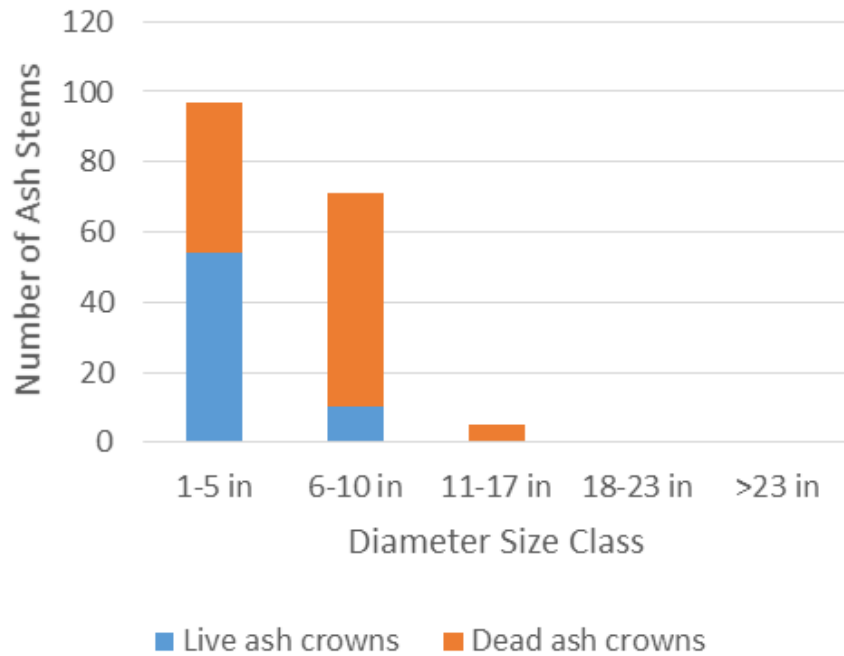
White ash (n = 2363)



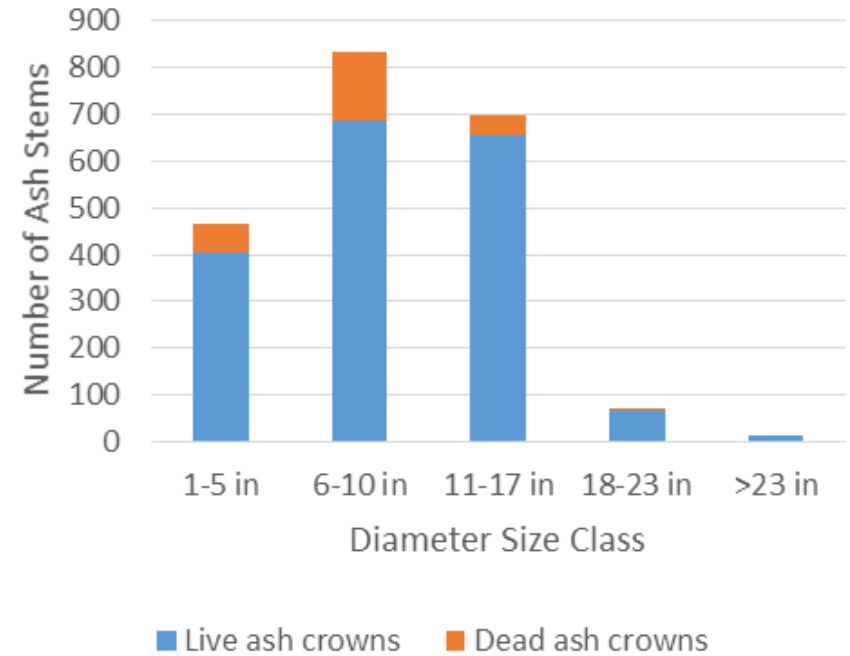
■ Dead (prior to EAB) ■ Dead (EAB-killed) ■ Live

Susceptibility of Black Ash

Black Ash (n = 173)

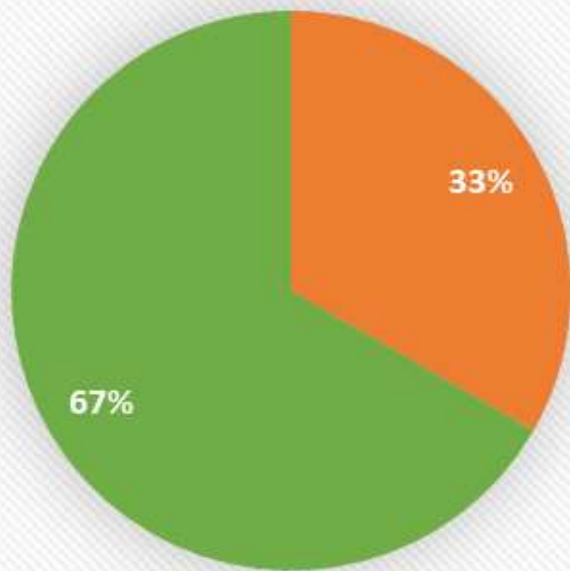


White Ash (n = 2085)



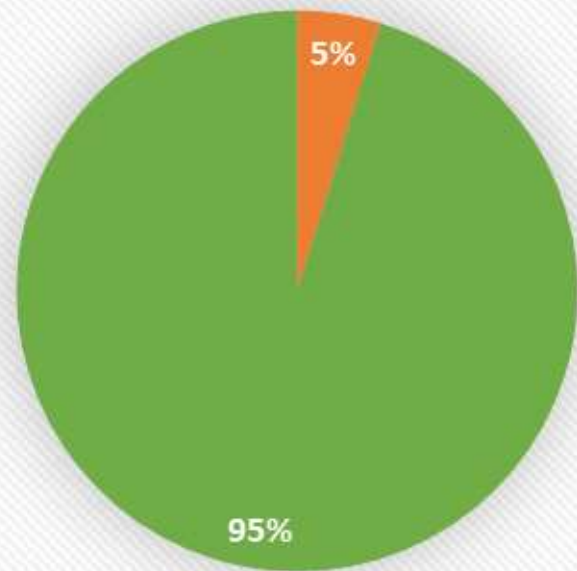
Susceptibility of Black Ash

Black ash (n = 66)



Dead (EAB-killed) Live

White ash (n = 208)



Dead (EAB-killed) Live

No Surviving Black Ash Stump Sprouts




Role as a Cultural Keystone Species



Cultural keystone species: species of exceptional significance to a culture or a people. These species influence social systems and culture and are a key feature of a community's identity.

Native American Basketry



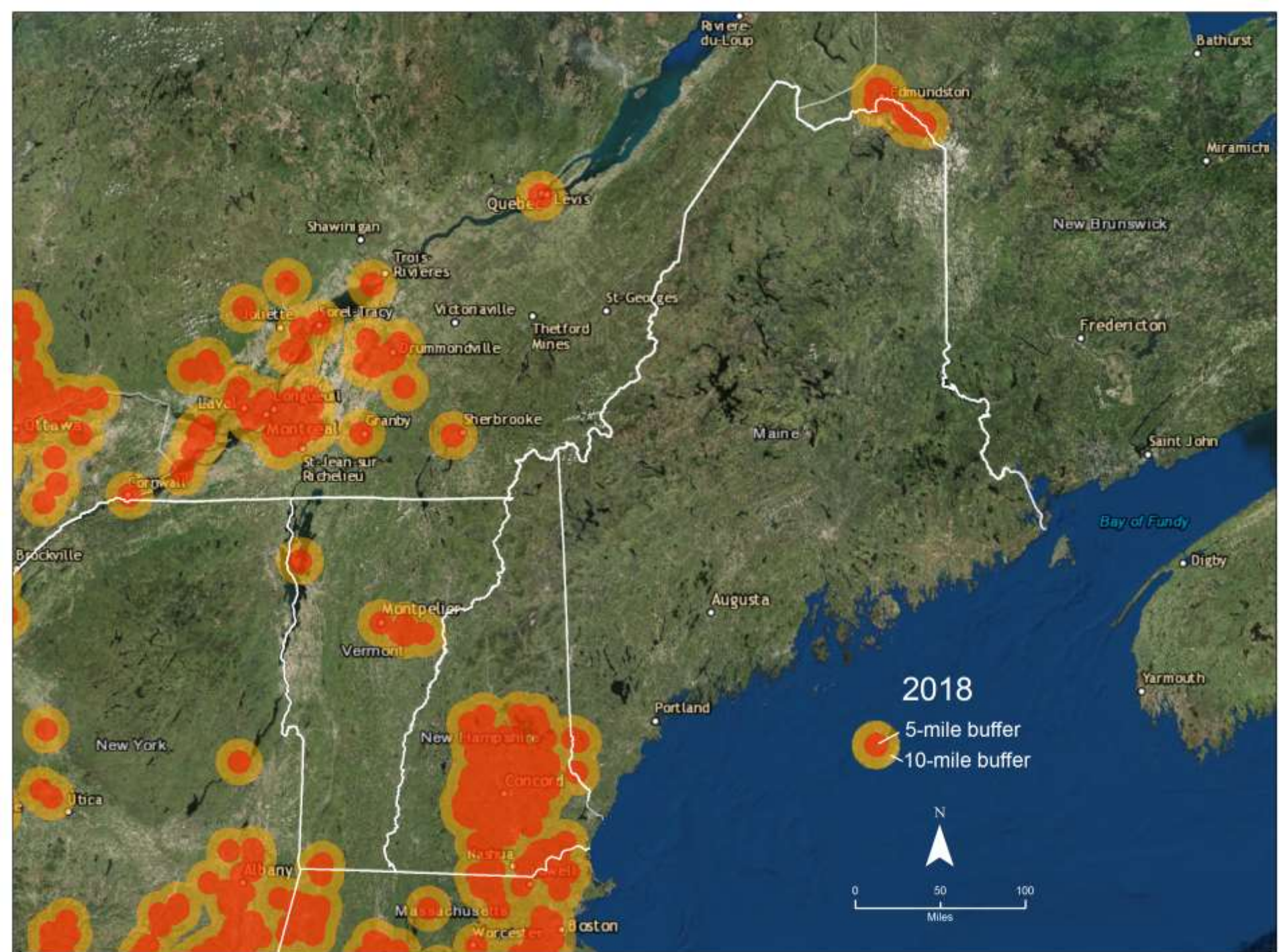
Wabanaki creation story

Marriage ceremonies

Birth & death ceremonies

Native American Basketry





Recreational Firewood



Recreational Firewood

APPLIED RESEARCH

For. Sci. XX(XX):1–10

doi: 10.1093/forsci/fxy056

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social sciences

How Campers' Beliefs about Forest Pests Affect Firewood Transport Behavior: An Application of Involvement Theory

John J. Daigle^o, Crista L. Straub, Jessica E. Leahy, Sandra M. De Urioste-Stone^o,
Darren J. Ranco^o, and Nathan W. Siegert

We conducted a survey of 272 campers at 18 private and public campgrounds in Maine ($n = 101$), New Hampshire ($n = 88$), and Vermont ($n = 83$) to learn about their firewood movement behavior, and knowledge and beliefs about invasive forest pests. More than 25 percent of respondents reported that they often or always brought firewood from home for camping. Most (92 percent) had heard of invasive forest pests, but <25 percent could name an example without being prompted, affirming a need for increasing exposure of outreach materials to facilitate activation of attitudes associated with forest pests and transport of firewood. Campers provided helpful suggestions to

Saint Regis Mohawk Tribe EAB Delimitation Survey



Black Ash Consortium



Group of tribal, state, federal and university partners to conduct ecological and sociological research on black ash, impacts, and improve management.

Black Ash & Tribes Workshop

Assessing the Future of Black Ash Following
Emerald Ash Borer Invasion

Where: Burlington, VT

When: May 7-8th 2019

More Info: <http://go.uvm.edu/ash-colloquium>



Organizers: US Forest Service, USDA Animal and Plant Health Inspection Service,
Northeast Climate Adaptation Science Center, and University of Vermont



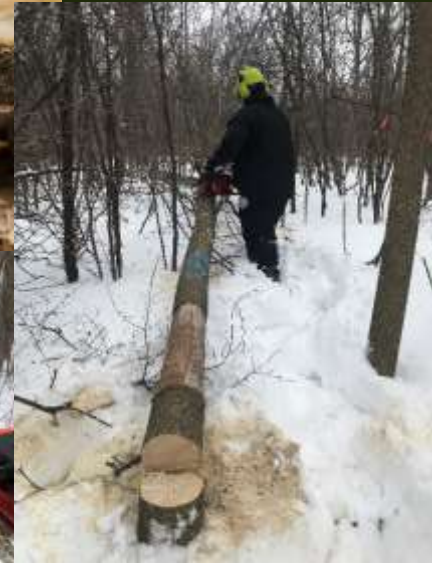
THE UNIVERSITY OF VERMONT
FORESTRY



NECASC
Northeast Climate Adaptation Science Center

Saint Regis Mohawk Tribe EAB:

Background, Results, & Next Steps Following Delimitation of the Infestation



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US FOREST SERVICE, STATE & PRIVATE FORESTRY, FOREST HEALTH PROTECTION



ENVIRONMENT DIVISION

449

MOHAWK TRIBE

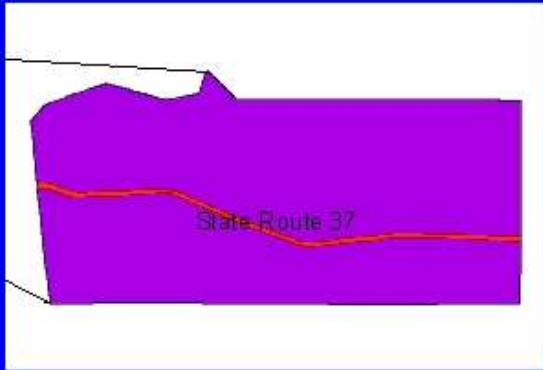
Tom Colarusso, APHIS PPQ

Les Benedict, Environment Division

St. Regis Mohawk Tribe Locator map

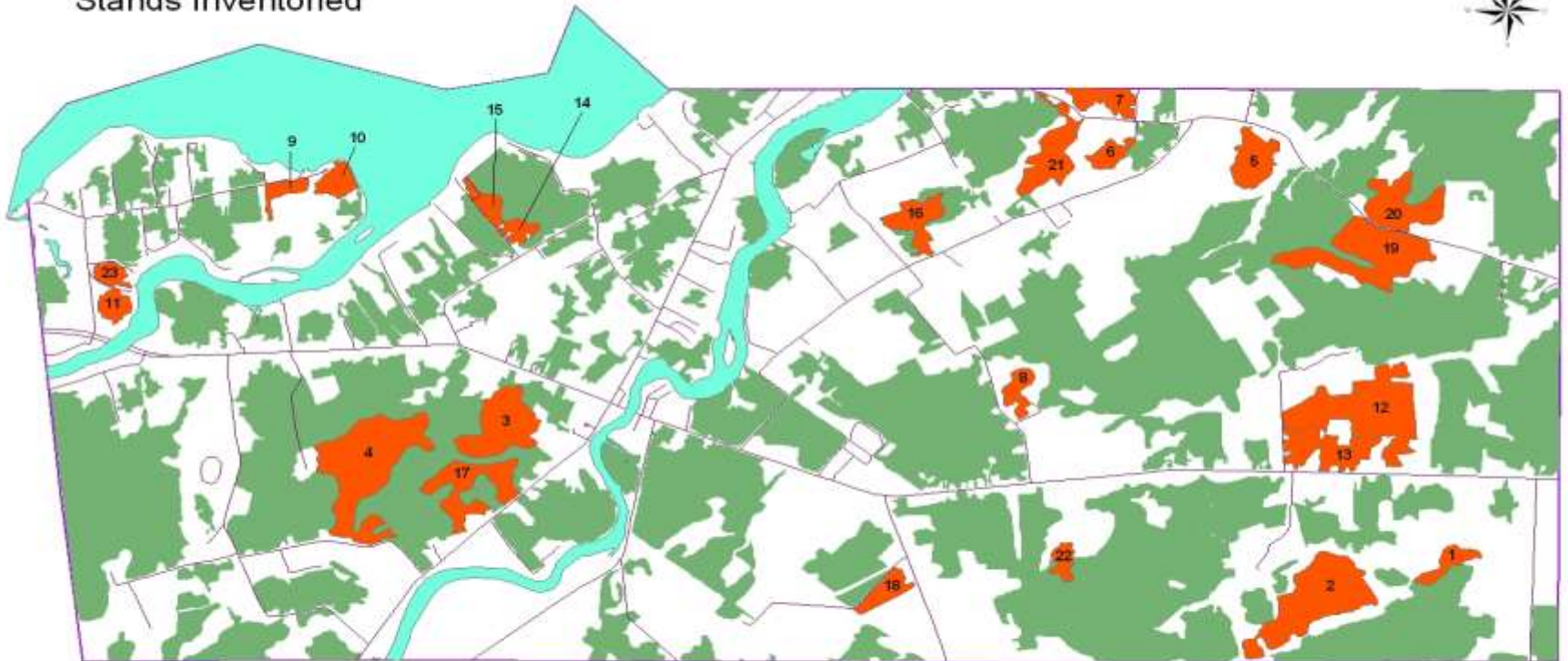




St. Regis Mohawk Reservation



Akwesasne Forests

Stands Inventoried



 Stands Inventoried
 Reservation Boundary

 River
 Road

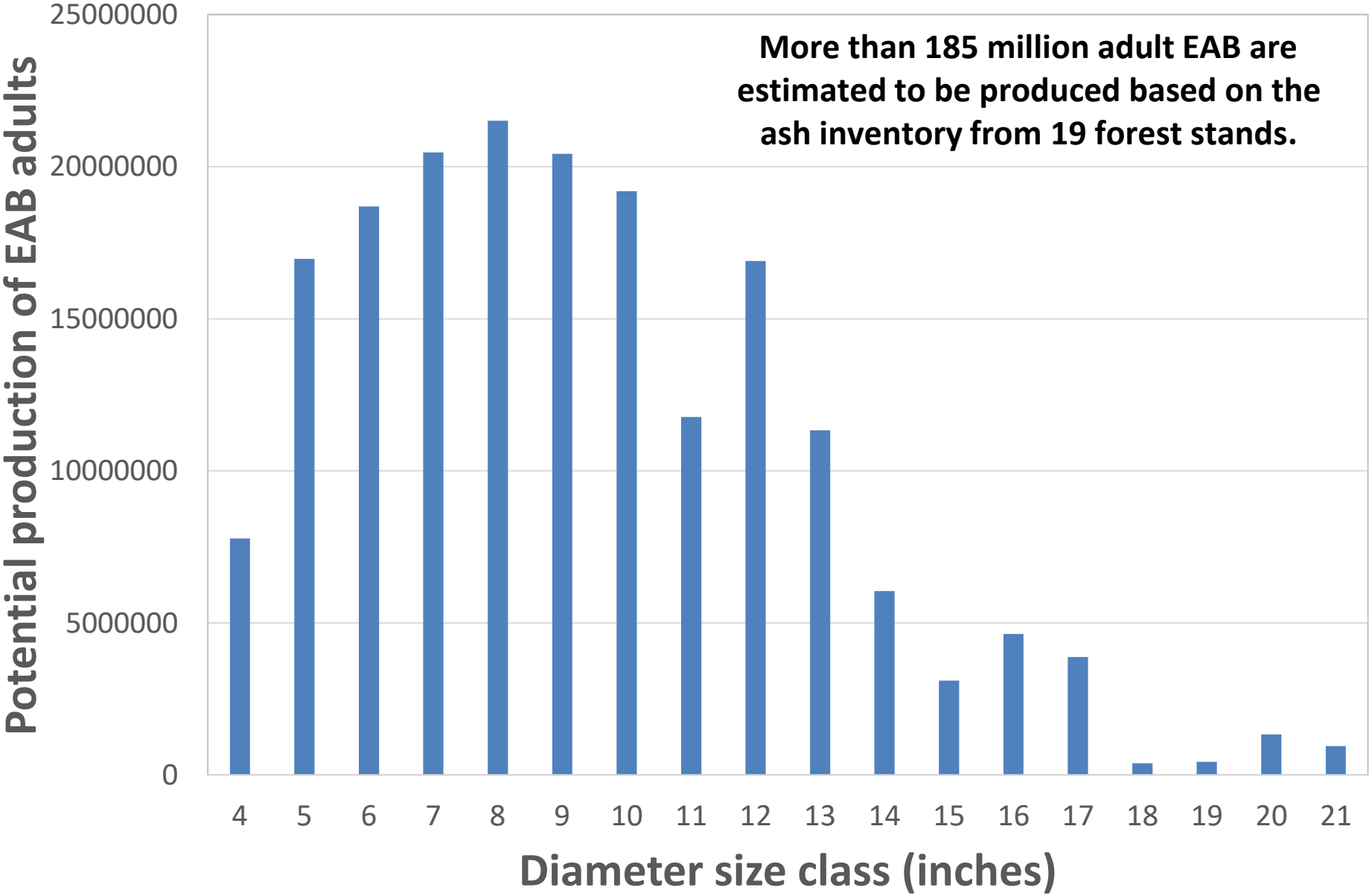


Ash Inventory from 19 Forest Stands on the Saint Regis Mohawk Nation

**Stands range from 12-131 acres in size, and average <40 acres.
Inventory includes 295,580 total ash stems,
about a third of the total inventory.**



Potential EAB Production Based on Ash Inventory at the Saint Regis Mohawk Nation



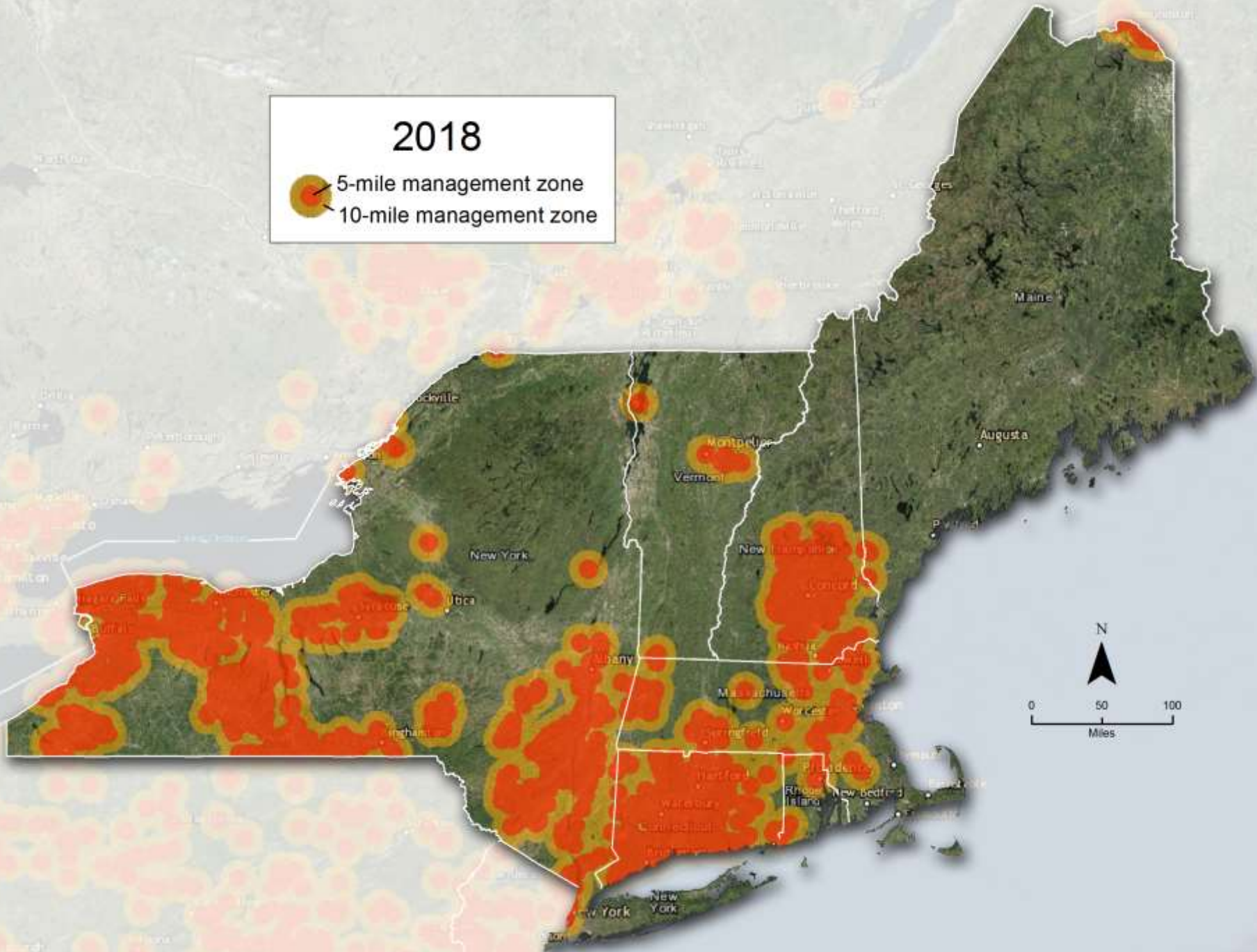




Past EAB work included survey and monitoring, preparedness plans, and revision of BIA forest management plan to reflect current tools and strategies.

2018

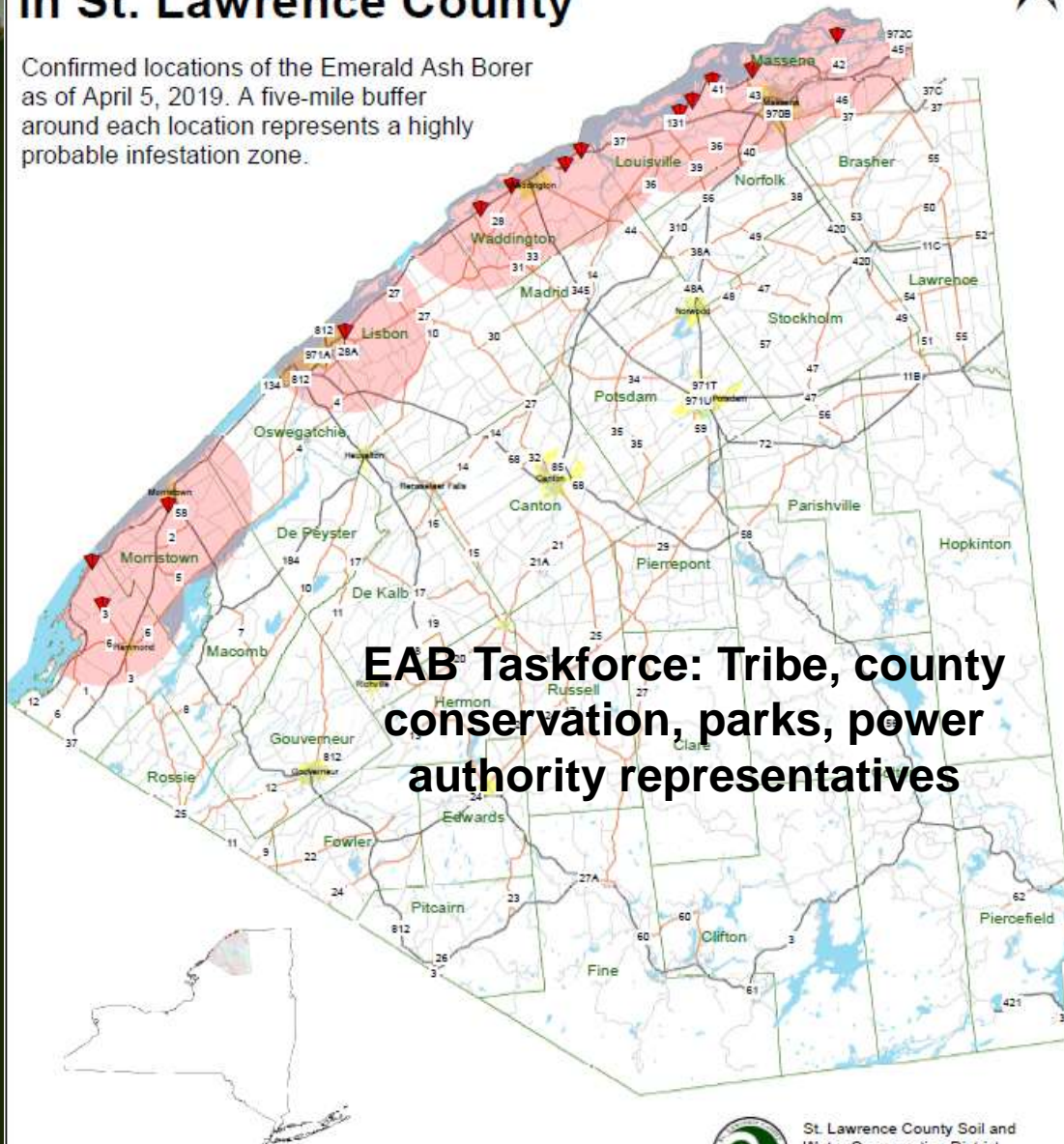
- 5-mile management zone
- 10-mile management zone



Known Locations of EAB in St. Lawrence County



Confirmed locations of the Emerald Ash Borer as of April 5, 2019. A five-mile buffer around each location represents a highly probable infestation zone.



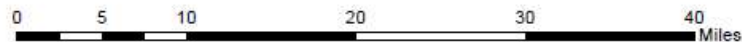
Legend

- EAB
- 5 mile buffer
- County Route
- Villages
- State Highway

1 in = 8 miles



St. Lawrence County Soil and Water Conservation District
source: data from iMap Invasives
www.imapinvasives.org/

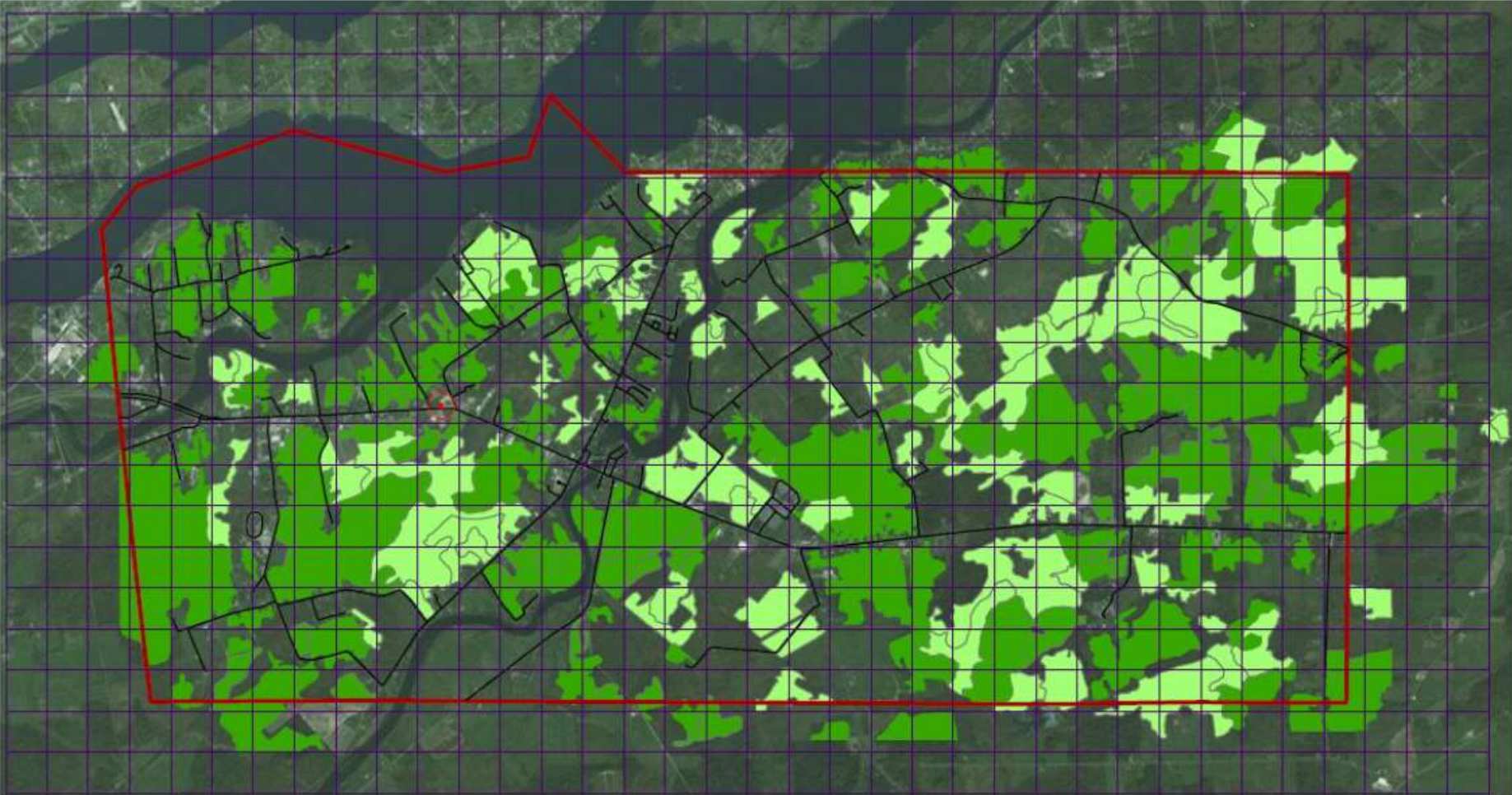




EAB identified in late 2017.

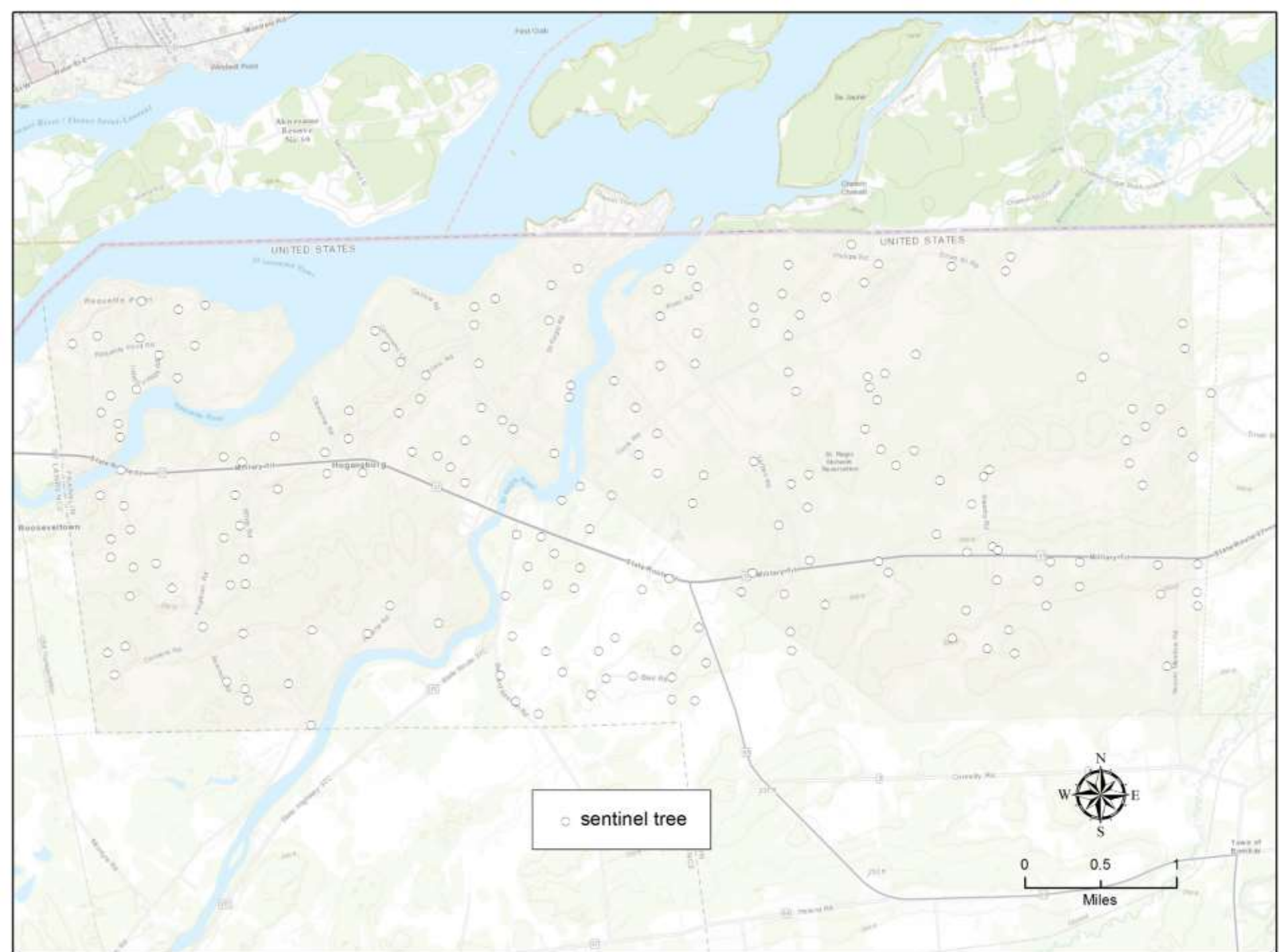
Delimitation survey 2018-19.

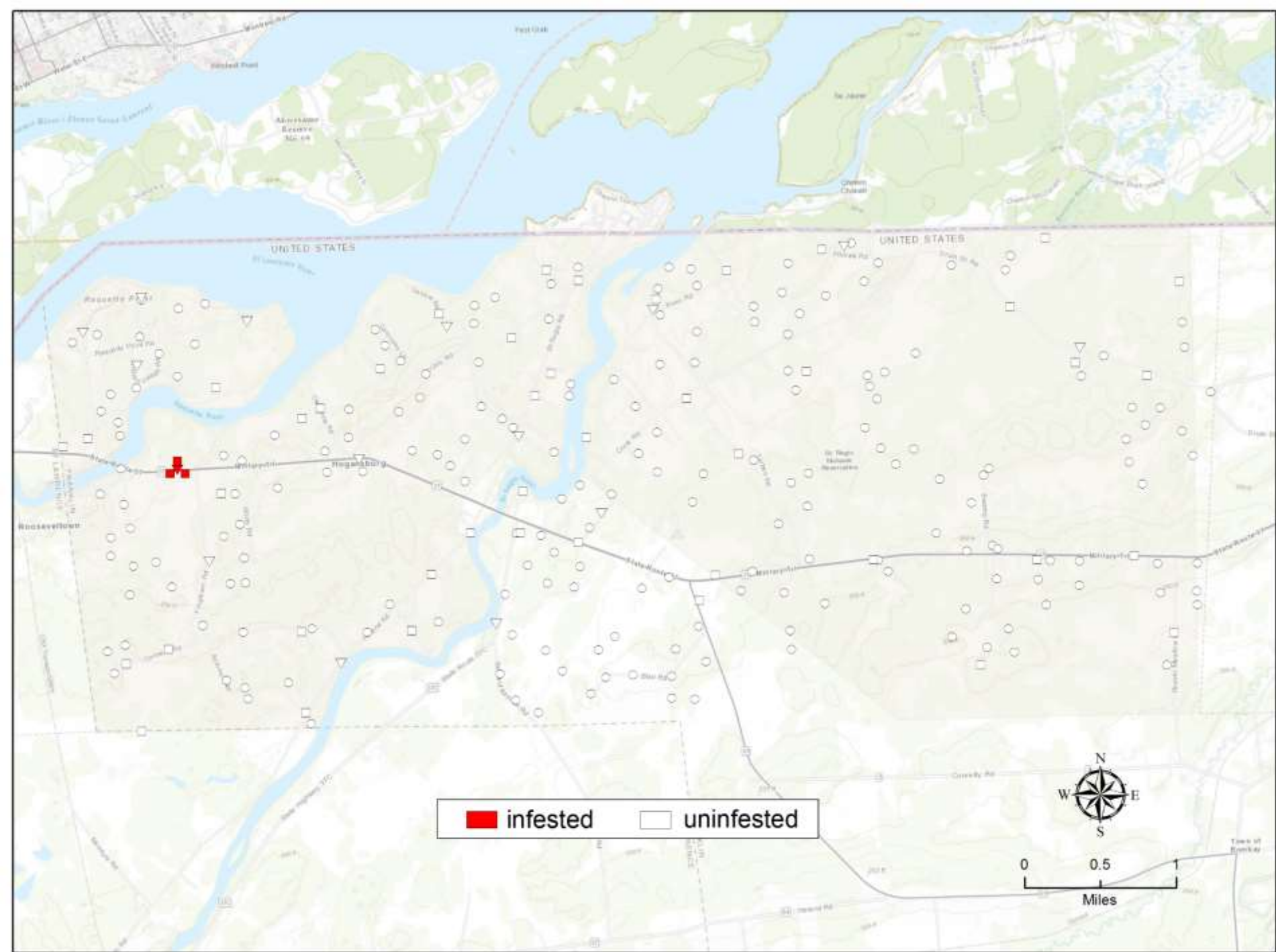
Grid Map of Reservation









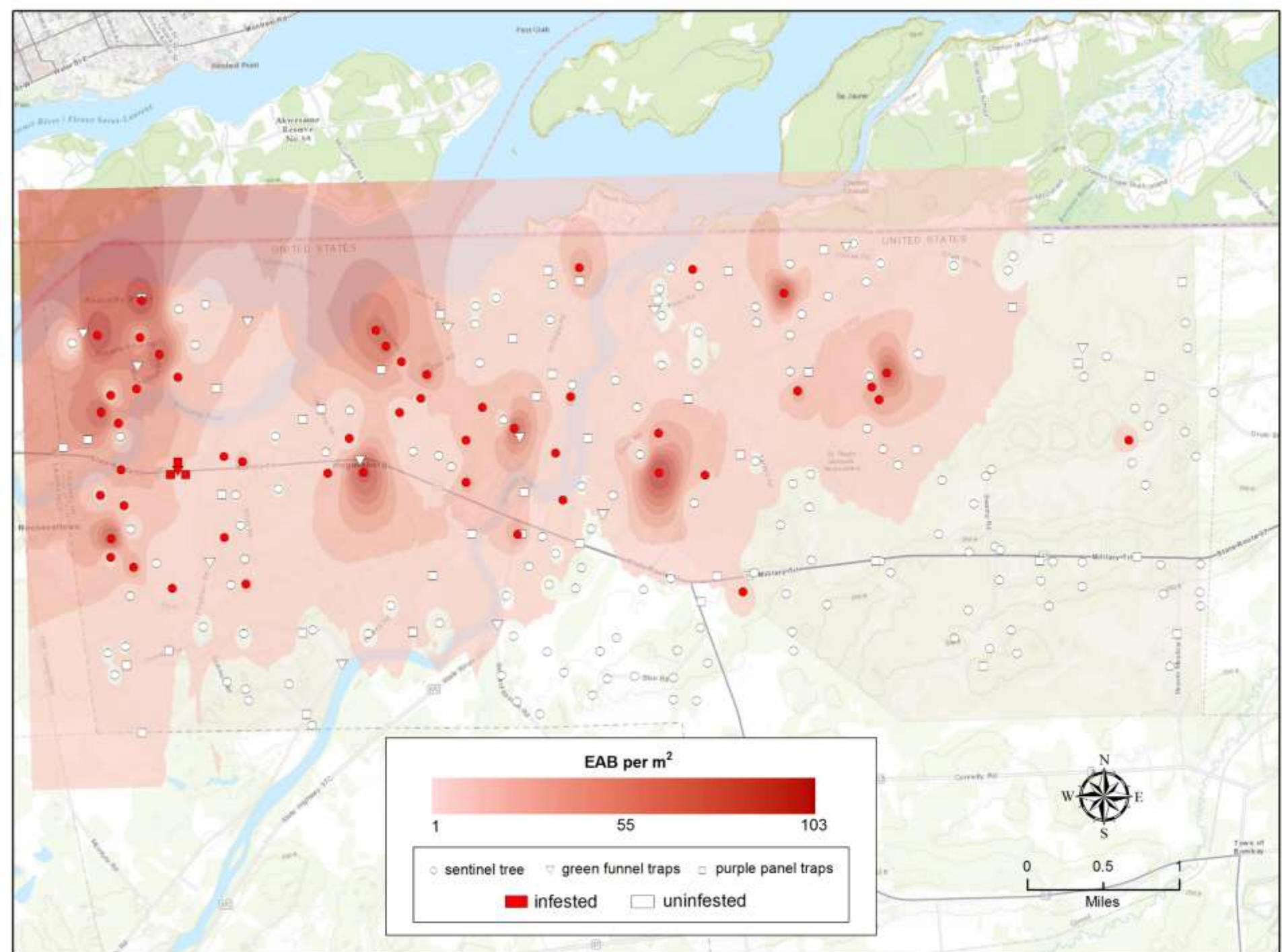




- 200 girdled trap trees felled following the government shutdown in February 2019.
- Utilized the Fire Compact to bring in additional assistance with felling and sampling girdled trees.
- 600 ash samples collected and examined for EAB.
- ICS implemented for this phase of the delimitation.







Targeted Ash Removal



Biological Control

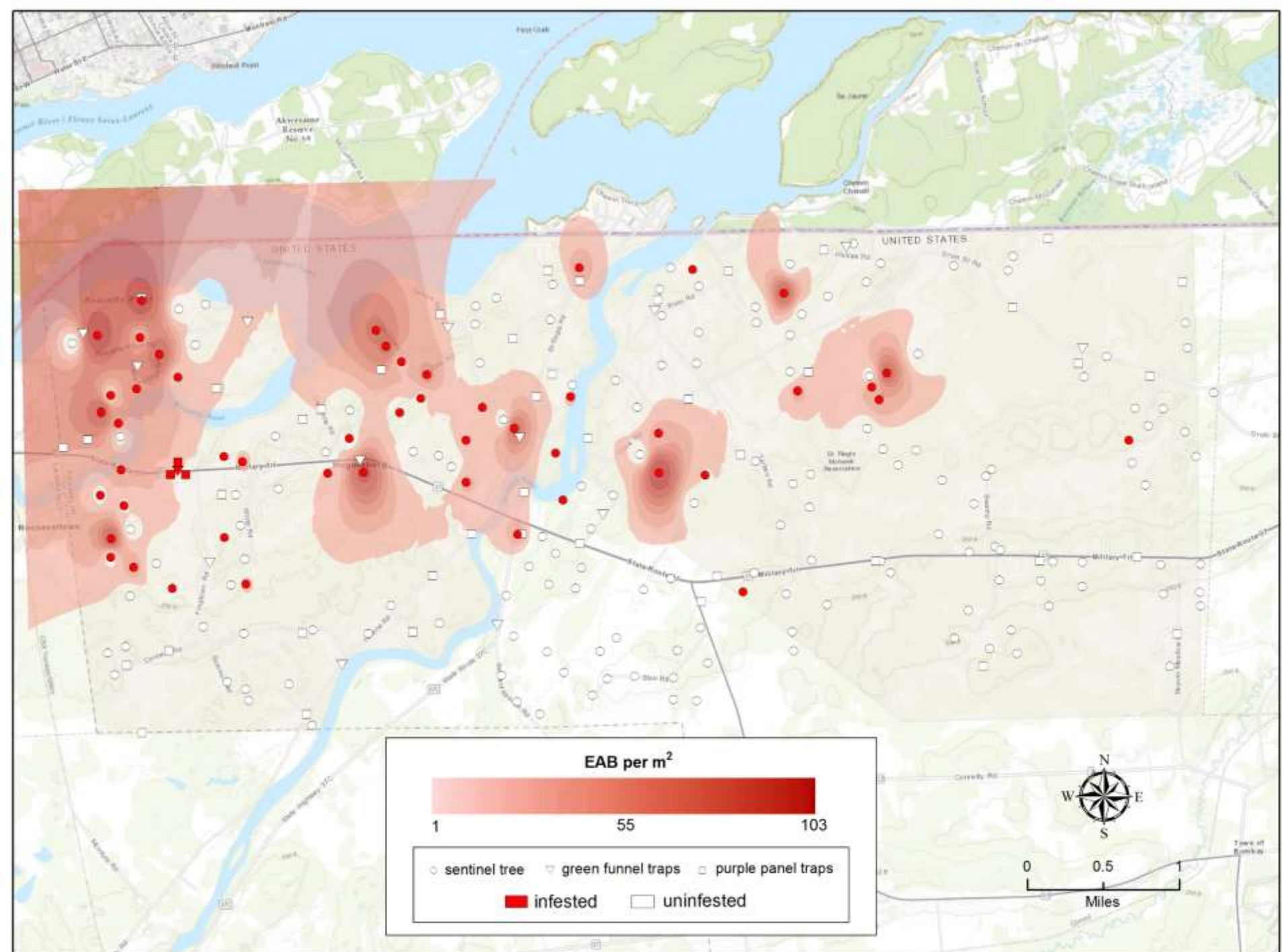


Girdled Ash Trees

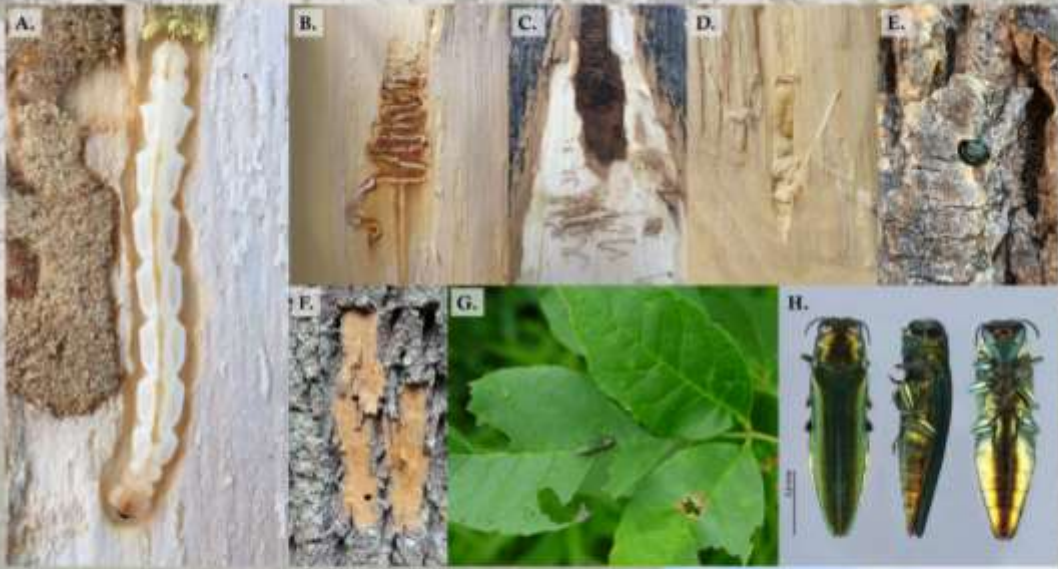


Insecticide Treatment





Emerald Ash Borer (*Agrilus planipennis*)



- A. Late-instar emerald ash borer (EAB) larvae
- B. Characteristic serpentine EAB larval gallery
- C. Multiple stages of larval development are commonly present
- D. EAB larvae in sapwood prior to developing into an adult beetle
- E. Emerging EAB adult beetle
- F. D-shaped exit holes from emerged EAB adults
- G. Adult EAB on ash leaf with feeding along leaf margins
- H. Adult EAB (dorsal, lateral, & ventral views)
- I. EAB-infested ash trees with thinning crowns



Photo Courtesy: Photo of the US Department of Agriculture (USDA) and other sources by © W. Siegert (2012)

www.emeraldashborer.info
Nathan.W.Siegert@usda.gov



Detection of exotic wood borers in woodcrafts from Israel

Piera Siegert, NH Dept. Agriculture,
Markets & Food

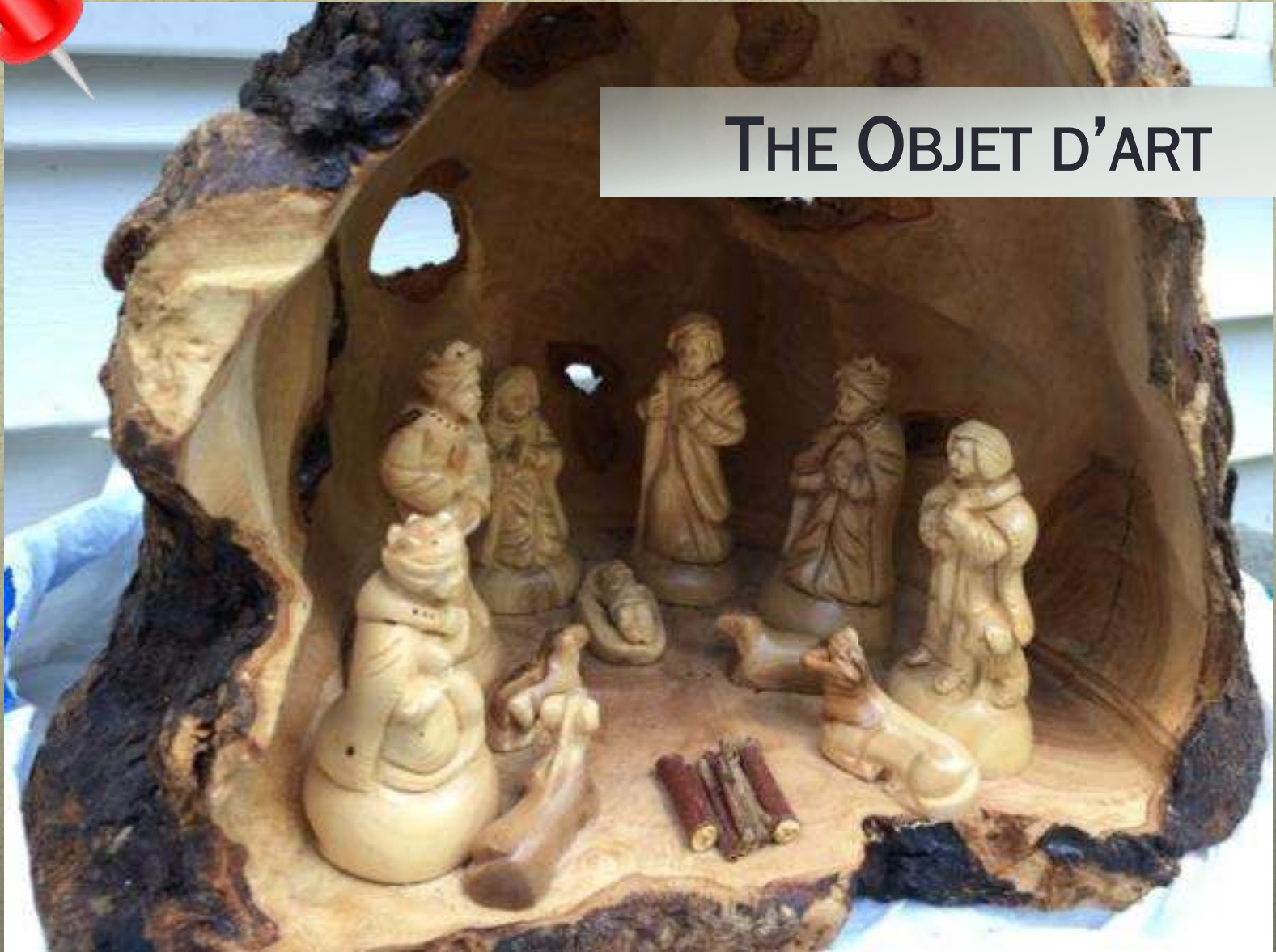
Stephen Lavallee, USDA APHIS PPQ

CASE NOTES

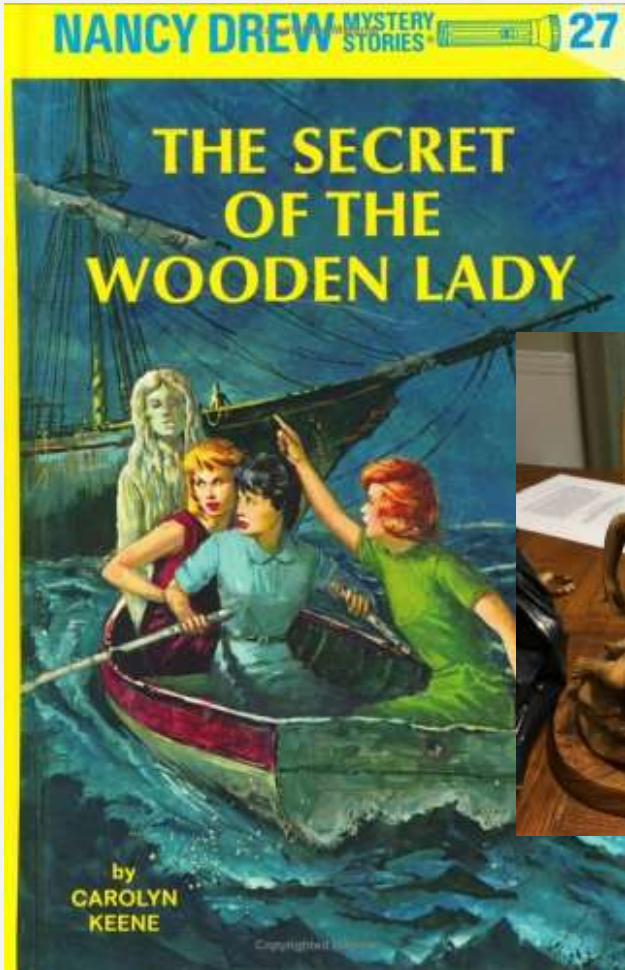
- NH resident reported insects in imported wood craft
- Identification of *Xylotrechus smei*
- Evidence of bark beetles
- USDA response
- Communication
- Next steps



THE OBJET D'ART



THE SLEUTH



THE EVIDENCE



Made In
Bethlehem
Holy Land

THE SMOKING GUN



- Observations of caged nativity scene.
- Live *X. smei* emerged.

THE INVESTIGATION



Wooden products were determined to be enterable

PPQ made contact with 49 entities in five states where items were sold. Churches and parishes were asked to include information in newsletters. A letter & poster were sent by NH DPI to NH churches and shared with other states.

A small number of items were reported to have been purchased by churches

THE INVESTIGATION

WHAT'S IN YOUR IMPORTED WOODEN CRAFT?

Invasive insects that threaten agriculture, forestry, and the environment can hitch a ride in imported wooden crafts. Know what to look for and what to do to reduce the risk of these pests escaping and establishing.



WHAT TO LOOK FOR:

- Insects or sound of chewing
- Weak spots in wood which when opened reveal an adult, pupal, or larval insect.
- Boring dust or frass (looks like sawdust).



- Small or large exit holes.



WHAT TO DO:

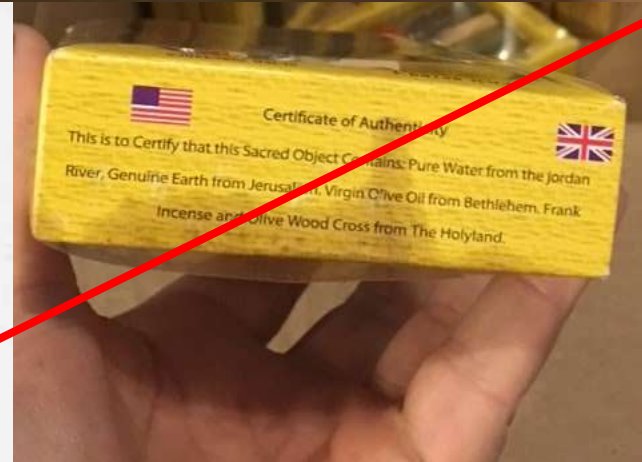
- Take photos.
- Secure the wood craft to prevent insect release using suitable containers. Use tightly sealed containers, or double bag the item using heavy-duty garbage bags. Seal any holes with tape.
- Capture any live insects and place in cold storage.
- Report to: 603-271-2561.

Poster with information about reporting suspect insects.

THE INVESTIGATION



THE INVESTIGATION



THE MITIGATION



THE MITIGATION



THE NOTIFICATION



January 15, 2019

United States
Department of
Agriculture

Animal and
Plant Health
Inspection
Division

Plant Protection and
Quarantine

Smuggling
Investigation and
Trade Compliance

1 Plaza Suite 204
Suite 204
Buffalo, NY 14213

716.249.3367 phone
716.866.1782 fax



The mission of the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) is to safeguard agriculture and natural resources from the entry, establishment and spread of invasive plant pests; and to support trade and export of U.S. agricultural products. To accomplish this mission, Congress granted APHIS the authority to administer regulations that establish detailed rules and procedures to be uniformly carried out by the Agency.

In October 2017, an individual in Troy, NH purchased a carved, birchwood activity case from your company, Three Kings Bethlehems, during a vendor event that you participated in at a local church. The wooden piece originated in Bethlehem, Israel. In July 2018, after storing the activity case in her china cabinet since purchasing, the customer noticed that beetles had bored their way out of the piece and had died shortly after emerging. Beet holes were present in the piece, as well as insect frass. New Hampshire Cooperative Extension and New Hampshire Department of Agriculture, Markets and Food (NHDA/MF) were contacted; the insects were collected, and the activity set was safeguarded. USDA-APHIS's Plant Protection and Quarantine (PPQ) was then contacted and on behalf of the NHDA/MF, PPQ submitted the collected specimens to USDA's Systematic Entomology Lab at the National Museum of Natural History, Washington, DC, for official identification (Interception Number APENR181945756001). The official identification came back on July 23, 2018 as *Lytobrycher zeni* (Cerambycidae), a reportable pest in the United States.

PPQ reached out to USDA-APHIS-PPQ's Smuggling Investigation & Trade Compliance (SITC) to conduct follow-up with Three Kings Bethlehems. On October 18, 2018, I, SITC Officer Margaret Palczynski (Badge #5675), visited your residence/registered company address of 25 W. Onondia Street, Oswego, NY 13126. You were both present at the time of the visit, listened intently as I explained the situation and willingly allowed me to view your entire inventory of wood carvings from Bethlehem. Upon thorough inspection, I saw absolutely no additional signs of insect presence, damage or infestation. Import regulations were thoroughly discussed and a sales list was voluntarily provided to SITC for all vendor events conducted between August 2017 and October 2018. In USDA-APHIS-PPQ's Miscellaneous & Processed Products (MPP) manual, the carvings, categorized as wooden handicraft (not machine smooth on all sides) are admissible into the US, only requiring a federal inspection by U.S. Customs & Border Protection Agriculture Specialist upon entry.

Upon viewing other items in your inventory, two items containing soil from Bethlehem (crucifix and decorative vase) were discovered. Under Title 7 Code of Federal Regulations 330.300, foreign soil that is incorporated into handicrafts (including religious articles) requires a soil permit (PPQ Form 525) and a Phytosanitary Certificate (PC) from the government of the country of origin declaring that the soil was heat treated at 250°F for 2



United States Department of Agriculture
Animal and Plant Health Inspection Service
Safeguarding American Agriculture

Page 1 of 2

Letter of Information issued

NEXT STEPS...

New Pest Advisory Group (NPAG) Report compiled for *X. smei*



Photo: Udo Schmidt: Wikimedia Commons