



37th National Indian Timber Symposium



"Overcoming Obstacles in Pursuit of Sustainability"



June 10-13, 2013



Keshena, WI



Intertribal Timber Council

Mobilizing Diverse Interests to Address Invasive Species Threats to Coupled Natural/Human Systems: The Case of the Emerald Ash Borer in Maine



2013 Annual National
Indian Timber Symposium

Presented by:

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University of Maine

and

Butch Jacobs

Maine Indian Basket Makers
Alliance

What is Motivating this Research?

The Emerald Ash Borer



Emerald Ash Borer (EAB), *Agrilus planipennis* (Coleoptera: Buprestidae)
Native to eastern Russia, northern China, Japan, and Korea
First North American Detection: Detroit, MI (2002)
Believed to have been imported from China in the 1990s in wood shipping pallets

The Emerald Ash Borer: Coming to Maine



Emerald Ash Borer (EAB), *Agrilus planipennis* (Coleoptera: Buprestidae)

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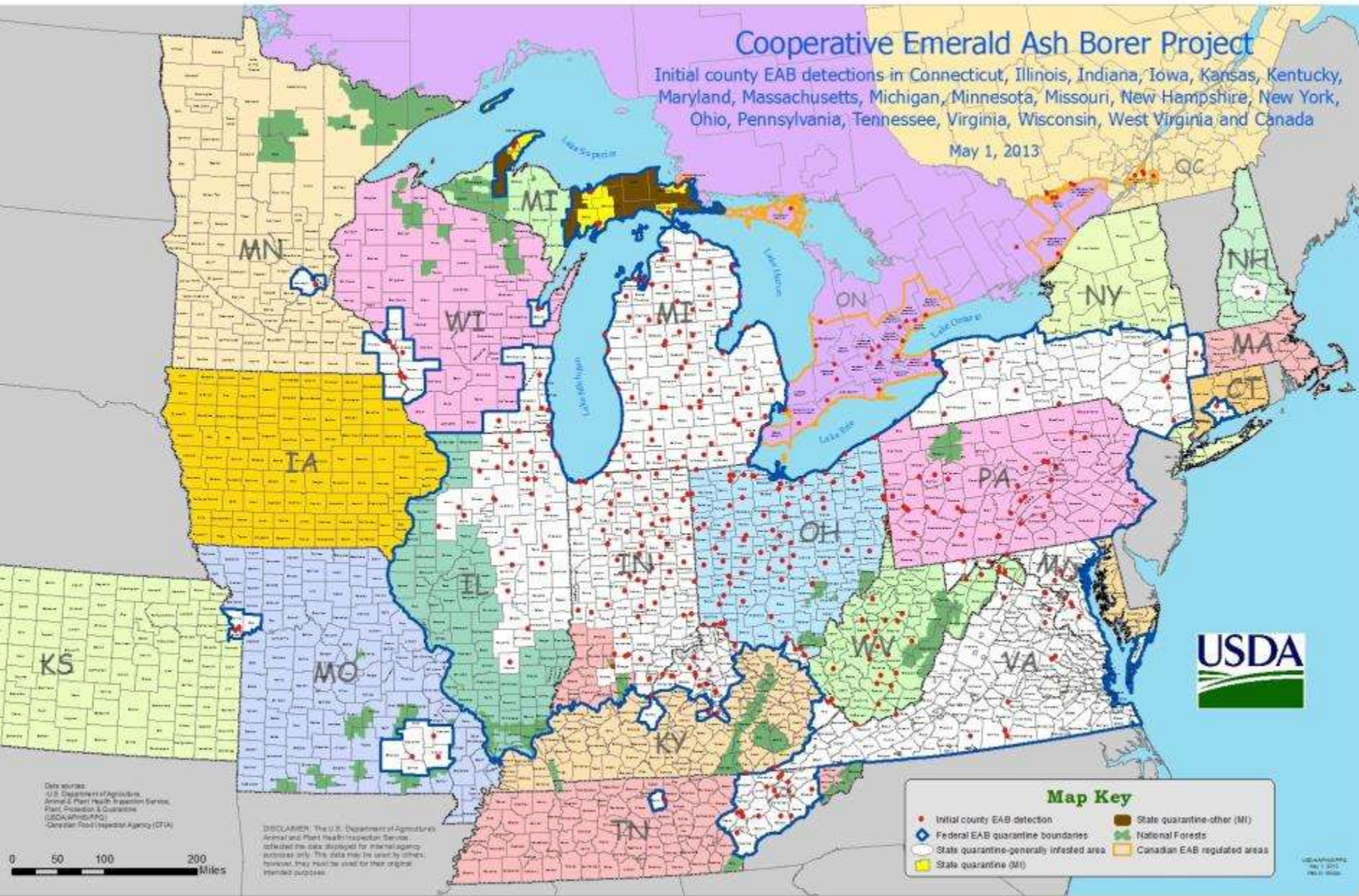
First North American Detection: Detroit, MI (2002)

Believed to have been imported from China in the 1990s in wood shipping pallets

Cooperative Emerald Ash Borer Project

Initial county EAB detections in Connecticut, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New York, Ohio, Pennsylvania, Tennessee, Virginia, Wisconsin, West Virginia and Canada

May 1, 2013



Data sources:
U.S. Department of Agriculture,
Animal & Plant Health Inspection Service,
Plant Protection & Quarantine
(USDA APHIS/PPQ)
Canadian Food Inspection Agency (CFIA)

DISCLAIMER: The U.S. Department of Agriculture's
Animal and Plant Health Inspection Service
collected the data displayed for internal agency
purposes only. This data may be used by others,
however, they must be used for their original
intended purposes.

USDA/APHIS/PPQ
May 1, 2013
100 x 100 Miles



Emerald Ash Borer-Brown Ash: Problem Context

Ecological context

Emerald Ash Borer, and invasive beetle from Asia, kills ash trees, both sick and healthy (near 100% mortality rate).

Social context

Indian Basketmakers rely on brown ash (*fraxinus nigra*) for ancient arts tradition that has cultural and economic salience—it is a cultural keystone species.

Knowledge ↔ Action context

Develop collective action for: monitoring, response, mitigation, and long term recovery.

Cultural minority interests often ignored in emergency response to invasive species.

Collaborative history of key stakeholders: Maine Indian Basketmakers Alliance, Tribal Governments, Maine State Forest Service, Maine Dept. of Agriculture, US Forest Service, USDA-APHIS.

What is Motivating this Research?

Wabanaki Basketmaking Traditions

INDIAN BASKETS
SOLD HERE

























Emerald Ash Borer-Brown Ash Team: Developments and Lessons

- **Progress/Lessons:** 1. Convening our group. 2. **Building/re-establishing trust.** 3. Identifying Research Needs. 4. Emergency Response White Paper. 5. Trap Tree Network, 6. Mapping Characteristics of Basket Ash. 7. **Maintaining work as a Boundary Organization.**
- **Challenges:** 1. **Time required for engaged research.** 2. Not overwhelming Native partners for research and other activities. 3. Creating more synergy with other teams. 4. **Our “stakeholders” are also critical keepers of knowledge—their work is beyond problem identification!**
- **Current Developments (last year):** 1. **Funding for Evaluation Efforts from Forest Service.** 2. **MOUs in development between tribes and USDA-APHIS (in draft, next step: Tribal Council approval).**







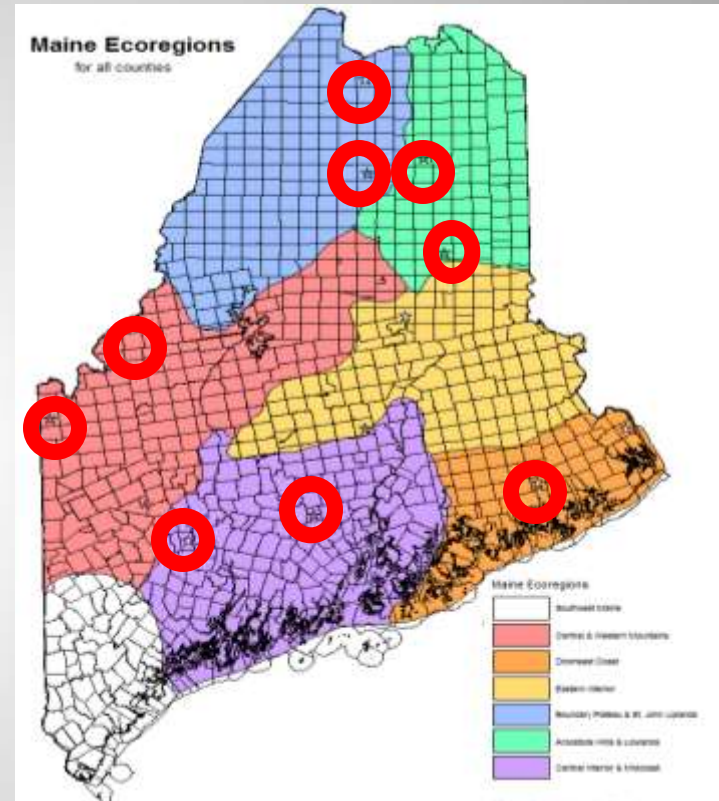
Integrate Spatial & Expert/Indigenous Knowledge



Emerald Ash Borer-Brown Ash: SES Research

Map locations of basket quality brown ash trees

- 10 Townships Sampled So Far (24 Goal)
- Approx 850 cores collected from 400 trees
- Findings positive: More black ash and wider increment growth than expected
- Tribal harvesters for ground-truthing of data—growth rate, site conditions, health of tree
- Study protects harvest sites, provides more for harvests, and will include videos of harvesting stories and techniques.





Emerald Ash Borer-Brown Ash: Accomplishments

Intellectual merit

Ranco, Darren, Amy Arnett, Erika Latty, Alysa Remsburg, Kathleen Dunckel, Erin Quigley, Rob Lilieholm, John Daigle, Bill Livingston, Jennifer Neptune, and Theresa Secord. 2012. “Two Maine Forest Pests: A Comparison of Approaches to Understanding Threats to Hemlock and Ash Trees in Maine. *Maine Policy Review* 21(1): 76-89.

“Adaptive Partnerships for Invasive Species Policy: State-Level Emergency Response Planning for the Emerald Ash Borer” Under revision after submission.

Progress towards solutions

Firewood Law Testimony (2010)—Firewood Law Passed, April, 2010
Emergency Response White Paper (2011).

Trap Tree Network (2011, 2012, 2013).

Conference Reports (2009, 2010, 2011, 2012).

Emergency Response Table Top Exercises (2012).

Memoranda of Understanding (2013, ongoing).





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