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:
Dr. John J. Daigle
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


Believed to have been imported from China in the 1990s in wood shipping pallets
The Emerald Ash Borer: Coming to Maine

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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
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
Emerald Ash Borer-Brown Ash Team: Developments and Lessons


- **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**


**Progress towards solutions**
- Firewood Law Testimony (2010)—Firewood Law Passed, April, 2010
- Emergency Response Table Top Exercises (2012).
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