

Emerald Ash Borer is Coming to Town



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Exotics we have known



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ALB vs EAB How serious?

-  **ALB destroyed 1500 trees in Chicagoland**
-  **EAB destroyed 15,000,000 ash trees in Michigan so far, 20,000,000 all together**
-  **ALB is big, slow and stupid**
-  **EAB a good flier, is prolific and ravenous**
-  **ALB was found shortly after arrival**
-  **EAB was likely present in Michigan and Canada for 10 or more years before detection**

ALB vs. EAB

- Huge exit holes



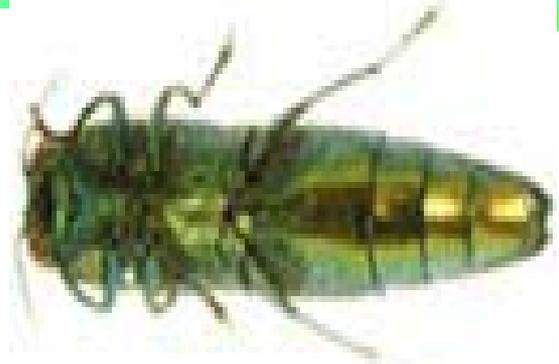
- “D” shaped, 1/8 inch



Meet the emerald ash borer



1/2" long
1/8" wide





Biology

- ◆ **From China, though not a pest there**
- ◆ **Believed to affects all ash, and a few obscure species**
- ◆ **Beetles emerge in May through June, feed on ash foliage**



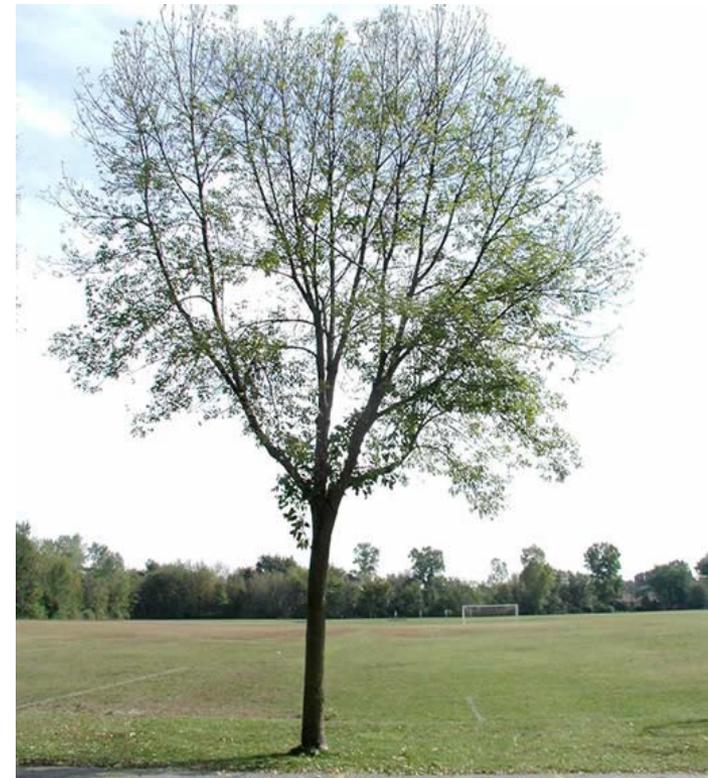
Biology

- ◆ Females can lay 65 – 90 eggs in its lifetime, laid in bark crevices
- ◆ Hatch in 7 –10 days, larvae chew through bark
- ◆ First instar (larva) feeds on phloem and causes the damage
- ◆ Insect over winters in the phloem
- ◆ Emerges as an adult the following May - June

Diagnosing EAB

Resembles common ash problems

- Ash decline and native ash borers
- similarity delayed identification in MI for 5 –10 years



EAB Damage

Cuts off flow of water and nutrients

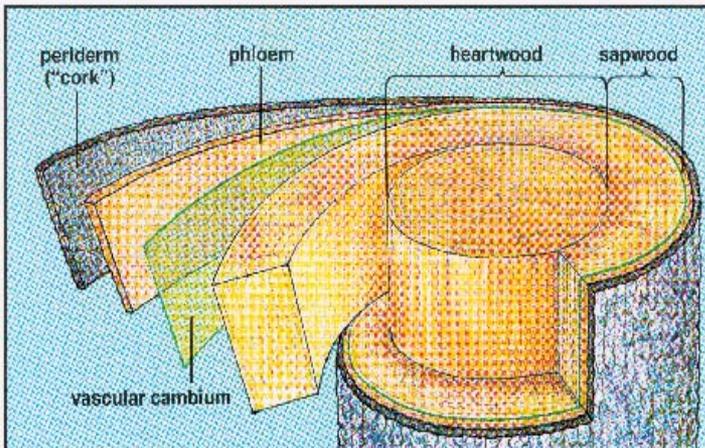
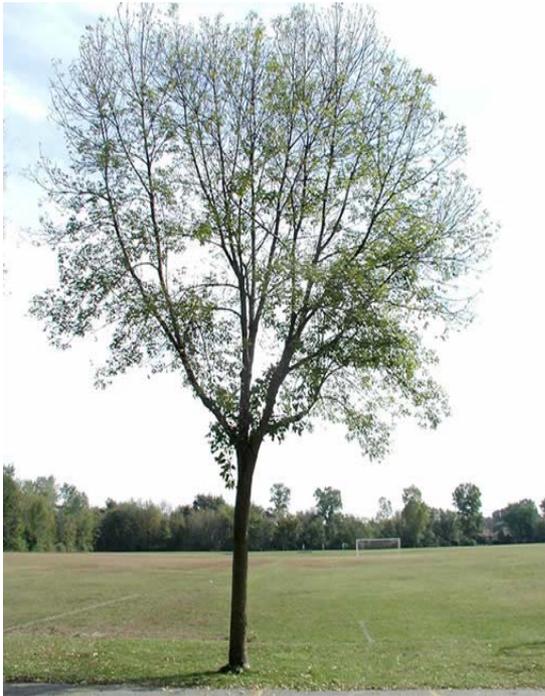


Fig. 29.20 Structure of a woody stem.



EAB damage



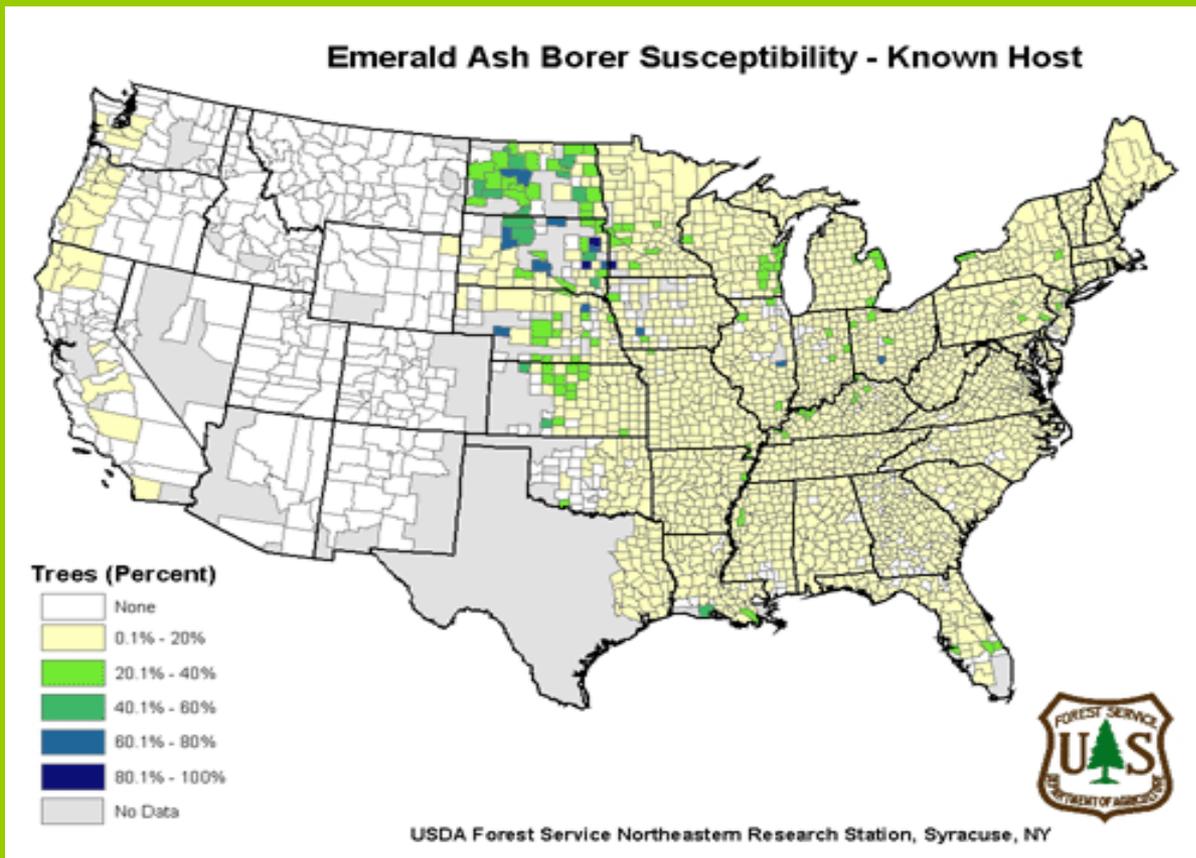
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EAB damage

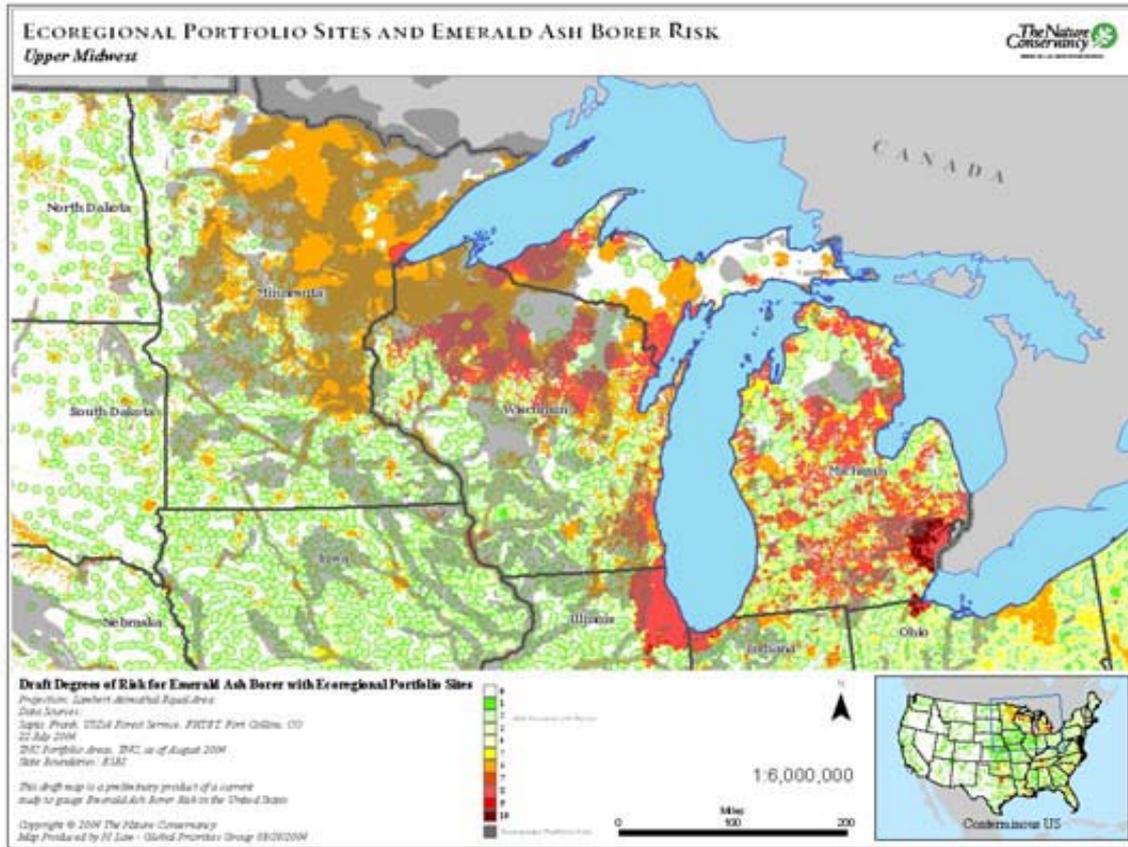


What is at risk?

The urban forest in the Chicago area is 20% ash!



Northeast IL at Risk from:



- **Firewood! –**
 - not regulated in IL (nor other states)
- **Wood processors & mills**
- **Nurseries**
- **Recent ash plantings**
- **Shipping hubs**

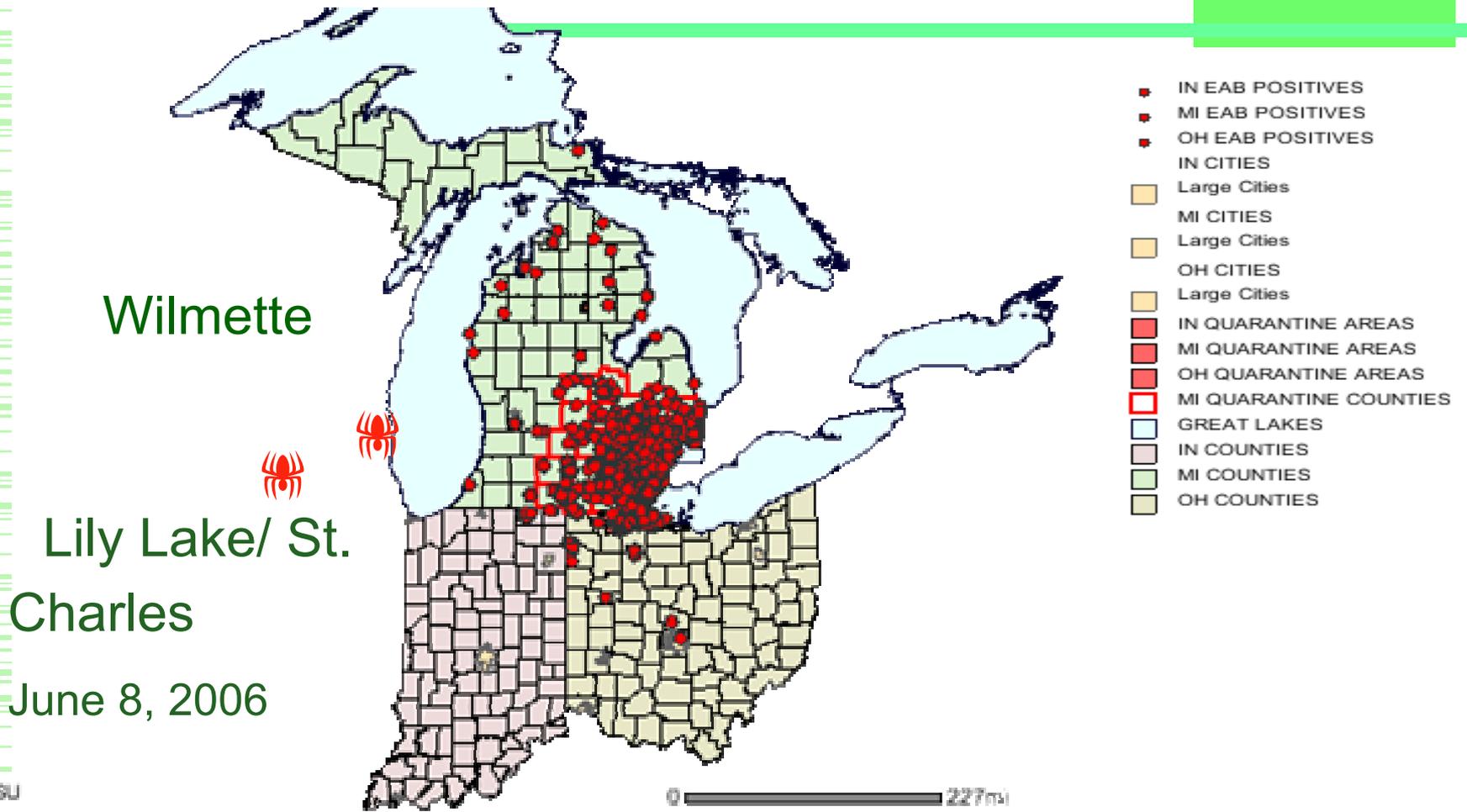
The infestation

- ◆ First identified in Detroit area in July 2002
- ◆ Found in Windsor, Canada October 2002
- ◆ Michigan quarantined 6 counties in 2002, estimated that 6,000,000 ash trees were killed
- ◆ Michigan added 7 more counties in August 2003, estimated **12,000,000** trees were killed

The infestation

- ◆ Found in 3 counties in Ohio in 2003
- ◆ One limited infestation occurred in Maryland in September 2003
- ◆ Found in St. Joseph, MI in January 2004
- ◆ Found in eastern Indiana in 2004
- ◆ 34 counties in Michigan have EAB in 2005
- ◆ Found near Indianapolis, IN in January 2006
- ◆ FOUND in a subdivision west of St. Charles Illinois, June 8, and Wilmette, July 13, 2006

Where is EAB?



Magnitude of Infestation

- **Michigan has 30 counties affected**
 - almost **15,000 sq miles** under quarantine
 - **Lost 15,000,000 trees**
- ◆ **Ohio has 14 counties affected**
 - had (2004) **460 sq miles** in under quarantine
 - **lost 29,000 trees (August 2004)**
- **Indiana has 7 counties affected**
 - had about **100 sq miles** under quarantine
- **Maryland had 1 contained infestation and lost 900 trees**

Regional Response

- ◆ **Ontario – Ash-Free Zone**
- ◆ **Michigan – Containment Zones**
- ◆ **Virginia – 1 contained infestation!**
- ◆ **Indiana – impact of decision not to eradicate**
- ◆ **Regional Firewood Forum – May 2006**

- ◆ **Federal funding request 2006 - \$60 million**
- ◆ **Federal appropriation \$8 million**

EAB is inevitable in Illinois



- Magnitude of Devastation in Midwest
- Proximity to Michigan
- Prevalence of Ash

But we have the advantage of:

- ALB Experience
- 2 ½ years of Planning & Collaboration

Readiness Planning Since 2003

- ◆ Assembled Readiness Planning Team - 36 organizations
- ◆ Established network for communication
- ◆ Assessed resources and needs
- ◆ Drafted Readiness Plan
- ◆ Now implementing plan
 - Cooperation, surveys, outreach, education, risk analysis, firewood policy,

Who is in Charge?

- ◆ **Illinois Department of Agriculture (IDA)** is *the* lead agency for all regulatory action
- ◆ **USDA APHIS PPQ** will assist with regulatory and control action at the request of the state
- ◆ **US Forest Service (USFS)** provides support through research, administrative coordination, and possibly funding.
- ◆ **Illinois Department of Natural Resources (IDNR)** is the state level supportive agency, no regulatory authority.

Illinois' Response - APHIS Recommends:

- ◆ Detection
 - Trap trees best – dissect trees when possible
 - Visual surveys not effective
- ◆ Regulation
 - Quarantine – at full county level, federal and state
- ◆ Control
 - Eradication is only proven control – all infested trees and $\frac{1}{2}$ to $1 \frac{1}{2}$ miles beyond is suggested
 - Pesticides not endorsed
- ◆ Research
- ◆ Operations
- ◆ Outreach

What happens when it is found?

- Delimiting survey by APHIS and IDA agriculture
- IDA to 'declare EAB a nuisance', set quarantine zones, may also be federal quarantine
- Public hearing held at all stages of regulation
- Actual Eradication efforts to be determined, dependent upon resources, public input
- Plan is to follow federal guidelines, cut all infested ash and ½ to 1 ½ miles beyond, after adult flight season (fall)

Community Response

- IDNR has prepared a detailed Community Readiness Plan based on National Incident Mgmt. System to guide planning & response



What do we do?

- Educate Public & Respond to possible sitings
- Be Aware of Firewood Operations
- Cooperate with Detection Survey
- Inventory tree population
- Manage for future ash loss
- Be calm and prepared





Thanks to

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- ◆ The IL EAB Readiness Team for its hard work