

# WOOD UTILIZATION

*Where We Were... Where We Are... Where We Are Going...*

*Presentation by: Jessica Simons*



**September 30, 2009**  
**Coping with the Costs**  
**Morton Arboretum**  
**Lisle, IL**

*Southeast Michigan*  
Resource Conservation  
& Development Council

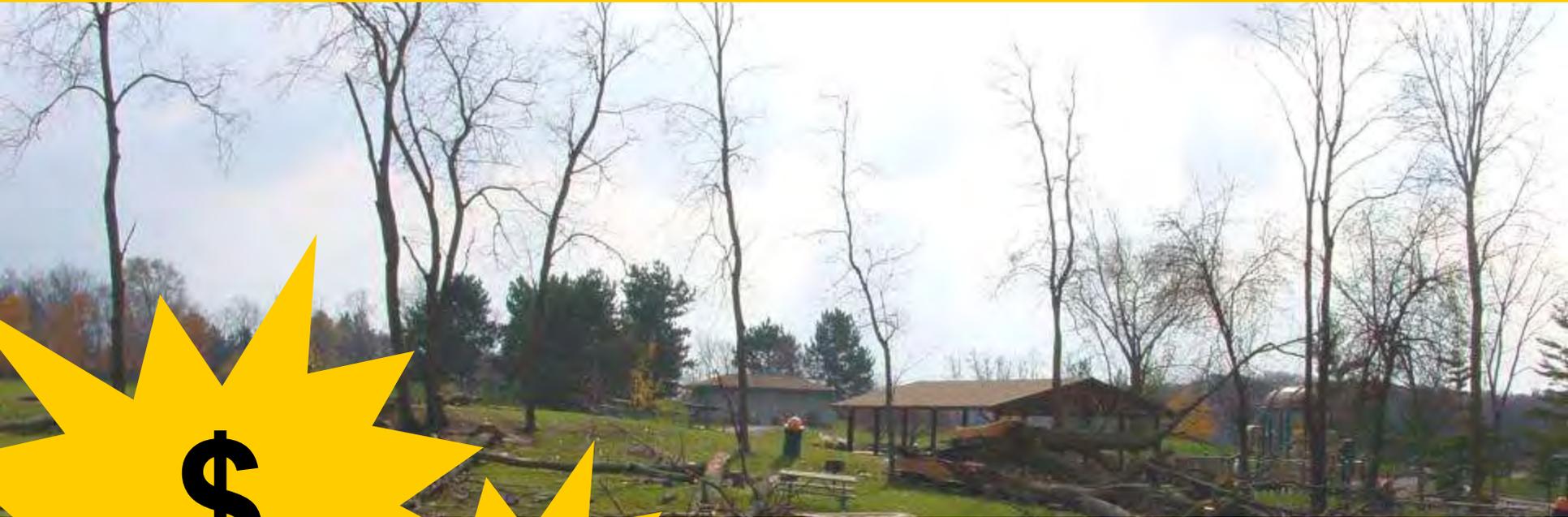


# Where We Were...

How many dead trees are we talking about?

Where is all of this wood going to go?

How much is this going to cost?



\$

\$

Isn't there ANY good news?



# Creating the Ash Utilization Options Project

## Plan of Attack:

- Characterize & Secure the Wood
- Identify Products & Processors
- Locate & Develop Markets

## Strategies:

- Research
- Demonstrations
- Trainings
- Outreach
- Networking

## Primary Partners:

- SE MI RC&D Council
- US Forest Service
- Michigan DNR

- **Find VALUE (wood ≠ waste)**
- **Demonstrate safe use**
- **Better disaster response**
- **Use EAB as catalyst for urban wood recovery**
- **Reduce disposal costs**
- **Strengthen wood industries**
- **Create positive outcome**

**OPPORTUNITY**





**2005  
SE Michigan  
Wood Residue  
Inventory**

**SE Michigan Urban Wood:  
*both "green" & "brown"***

**2,600 companies  
7.5 million cu yds/yr**

**Disposal cost = \$8.8 million  
28% landfilled**

**So, how much wood is that, anyway?...**

**Enough to fill 354 football fields 10 ft deep!**



# But is there any quality wood?

Recycling the dead trees in SE Michigan's communities could produce

**4.7 million**

board feet of lumber

each year, or enough wood to build

**362**

average-sized homes.

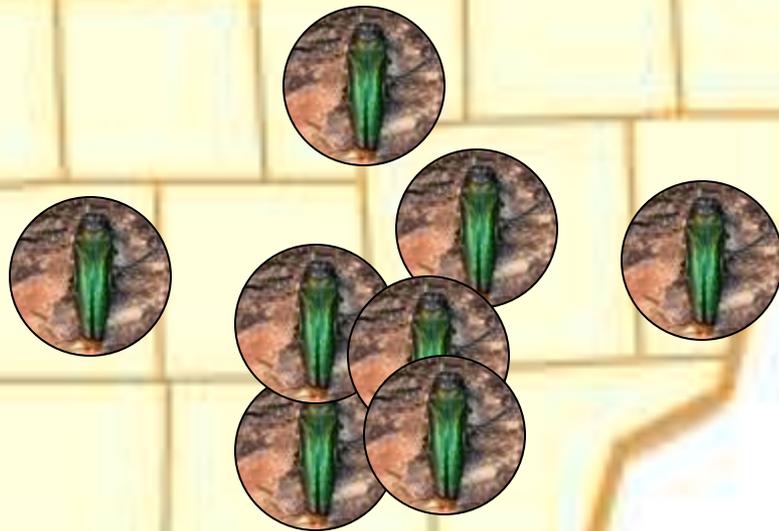
Most treat this wood as waste.

EAB only boosted tree removals by

**~10%**

We have an ongoing wood residue problem.

# Wood Disposal Yards



- Early EAB response: eight yards opened to contain affected wood
- Most wood used as biomass fuel
- More opportunities:
  - SE Michigan's ~1100 wood yards
  - Recover only 30%
  - Currently \$40M industry

# How can we show higher value uses?



**Community  
wood use  
projects**

**Equipment  
purchases  
at small  
businesses**



**Public-private  
partnership  
development**

**Woodworking  
art exhibits**





**Ann Arbor District Library**  
as featured in  
***“Up From Ashes”***

# Training Programs

**Help industry & cities:**

- **Understand wood value**
- **Learn new skills**
- **Improve business practices**
- **Network**

**Since 2004:**

- **41 full days of workshops**
- **175 participants**
- **Over 275 trees removed**





[Home](#) » [Store](#)



Species: Ash  
Product Type: Other  
Quantity: 1  
Price each: \$1450.00  
Character Description: Rustic  
(some knots)  
Moisture: Kiln-dried  
Finishing/surfacing: S2S  
Thickness: 7/4  
Widths available: 12 in. +  
Mill: [John Haling](#)  
ID: JHAL080922.1

## Harvesting Story

This ash tree was removed from a back yard on Franklin St. in Ann Arbor, MI. It was killed by the emerald ash borer.

## Notes

This ash slab has been sanded and several coats of oil-based urethane have been applied. Natural edges and visible staining from metal in the tree add to the beauty of this one-piece slab. This is a one of a kind.



# MICHIGAN WOOD ENERGY

a smart fuel choice



[Home](#)

[Calculator](#)

[FAQ](#)

[Report](#)

[About](#)

[Contact](#)

Is wood fuel right  
for your boiler?

- ▶ [Calculate Costs](#)
- ▶ [Learn More](#)

WOOD

The local, clean, renewable,  
affordable, **sustainable**  
fuel choice.



- **Learn about wood energy options, view resources**
- **See report of 2,000 potential sites for wood energy**
- **Use calculator to estimate savings at your site**
- **Coming soon: reports from local assessments**

## Welcome to the Ash Utilization Options Project of Southeast Michigan

The [Southeast Michigan RC&D Council](#) is addressing the emerald ash borer infestation (EAB) in Southeast Michigan in a positive way by implementing an Ash Utilization Options Grant funded by the USDA Forest Service [Wood Education & Resource Center](#).

Through [demonstration projects](#), [training](#), a [research program](#), and education and outreach efforts, the Council is helping communities and businesses to develop value-added products from urban trees removed due to the emerald ash borer and other causes.

Be sure to visit our [resources](#) page for helpful information, including links to urban wood guides for homeowners, and resources for



### Ash Trees and More: Your Source for Urban Wood Use News

A report from the Southeast Michigan RC&D Council's Ash Utilization Options Project  
Primary project funding is from the USDA Forest Service Wood Education & Resource Center

August 2008

In this issue...

Greetings from the Southeast Michigan RC&D Council

Let's start with the bad news... the emerald ash borer is marching on. [Michigan's Upper Peninsula](#), [Wisconsin](#), and [Illinois](#) have all found new outbreaks and are quickly implementing response strategies.

But, there is good news: We're learning more about the pest every day, developing new ways to slow the spread, and doing a much better job of [sharing information](#). We hope this newsletter will be of help to those of you who have been in the bug for a while already, as well as to those of you who are just entering the battle. As you read on, you'll find some very positive stories following the EAB crisis. By finding new uses for dead ash, along with other removed urban trees, we can value back to our communities in these tough economic times. Ideas from this newsletter pique your interest, be sure to visit the [Ash Utilization Options Project](#), [Michigan Wood Education & Resource Center](#), and [Urbanwood](#) websites for even more information.

So, what are you planning to do with your dead trees?



### Community Urban Wood Utilization Planning Worksheet

Developing a wood utilization plan for a community may seem complicated and is often viewed as unnecessary, especially when wood disposal is still affordable and straightforward. But in reality, finding value-added uses for wood generated through urban forestry practices can be quite simple and may have many beneficial results for a community. Despite the common assumption that "urban" wood has no value beyond its uses as firewood, mulch, or compost, recent studies in Southeast Michigan have shown that the wood from our region's dead and dying trees could produce nearly five million board feet of quality lumber (enough to build 362 average-sized homes) each year. Finding a wider variety of uses for removed trees not only promotes better resource stewardship, it has the opportunity to lower wood disposal costs, create public-private partnerships that can more efficiently handle widespread tree mortality (such as from the emerald ash borer), and produce high-quality, sustainable products suitable for use in community projects and green building programs.

This worksheet is intended to help walk you through some of the issues you might consider in developing a wood utilization plan. While it might seem overwhelming at first, the questions posed below are merely intended to help you think about what objectives are most important for your own community. These steps make an attempt to identify many of the major issues, opportunities, and challenges that you are likely to encounter. However, a successful plan may be developed by addressing only a very small portion of what you see below. The key is to investigate the capacity and partners that you have available and to use them to better meet your own community's unique needs.



**Where we are...**

# **Wood Utilization Challenges**

- **Location**
- **Wood industry slowdown / poor ash markets**
- **Inefficient scale / inconsistent supply**
- **Short timelines for tree removals**
- **Transportation**
- **Lack of support from industry and communities**

# Market Realities



- **Niche, NOT commodity**
  - **Log *buyers* are rare**
- **Add value when possible**
- **Sell the story and character**
  - **Create local markets**
    - **Go green**

# Best value: Address community needs

## Plan will differ depending on products:

### Lower Value

Firewood

Mulch

Compost

Biomass fuel

### Higher Value

Railroad ties

Landscape timbers

Rough-sawn lumber

(truck sideboards,  
trail borders,  
barricades, etc.)

### Highest Value

Artistic pieces

Planed lumber

Finished products

(flooring, paneling,  
furniture, etc.)

High volumes used

Plenty of resource

Low processing/skill

Lower value



Low volumes used

More limited resource

High processing/skill

Higher value



# Wood Utilization Benefits

- Lowered disposal costs
- Affordable (free?) wood products
- New public-private partnerships
- “Full-circle” urban forestry
- Resource stewardship
- Carbon-smart
- Positive story for public

One success story:  
**City of Monroe**



# Where we are going...

- **Tri-state urban wood marketing plan**
- **Large-scale urban wood use demo**
- **Cost-benefit and life-cycle analyses**
- **Pellet fuels workshops**
- **New firewood debarking system**
- **Public wood boiler installation**





**These projects are made possible by generous grants and significant technical support from**



**Wood Education  
& Resource Center**

**Northeastern Area  
Rural Development Through  
Forestry Program**

**Economic Action Program**

---

**Federal State  
Marketing  
Improvement Program**

