

USDA Forest Service

URBAN FOREST CONNECTIONS

webinar series

Second Wednesdays | 1:00 – 2:15 pm ET

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REMOVE AND REPURPOSE: INCREASING THE VALUE OF URBAN WOOD



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Cincinnati Parks

Urban Timber Program 2015



Cincinnati Parks...the best at getting better



Cincinnati Park Board

- Six regional parks
- 70 neighborhood parks
- 34 nature preserves
- 5000 acres of forests
- 85,000 street trees
- 60 miles hiking trails
- 10% of the land in Cincinnati



Cincinnati Parks...*the best at getting better*







Urban Timber Program

The Urban Timber Program was initiated in 2007 when Emerald Ash Borer was found in Cincinnati and it became necessary to remove approximately 10,000 ash street and park trees.

A task force was created and included park staff, members of the Urban Forestry Advisory Board, the University of Cincinnati, the Ohio Department of Natural Resources, and the Hamilton County Solid Waste Department. The goal was to establish a methodology to process and market products from urban timber.





Urban Timber Goals

- Divert valuable wood from being ground into mulch and put it to the highest use.
- Provide quality lumber at below market cost
- Remove carbon through tree growth and retain it through storage in useful products
- Assist in reaching LEED certification
- Proceeds to be used for reforestation





Urban Timber

Species Harvested for Timber

Oak

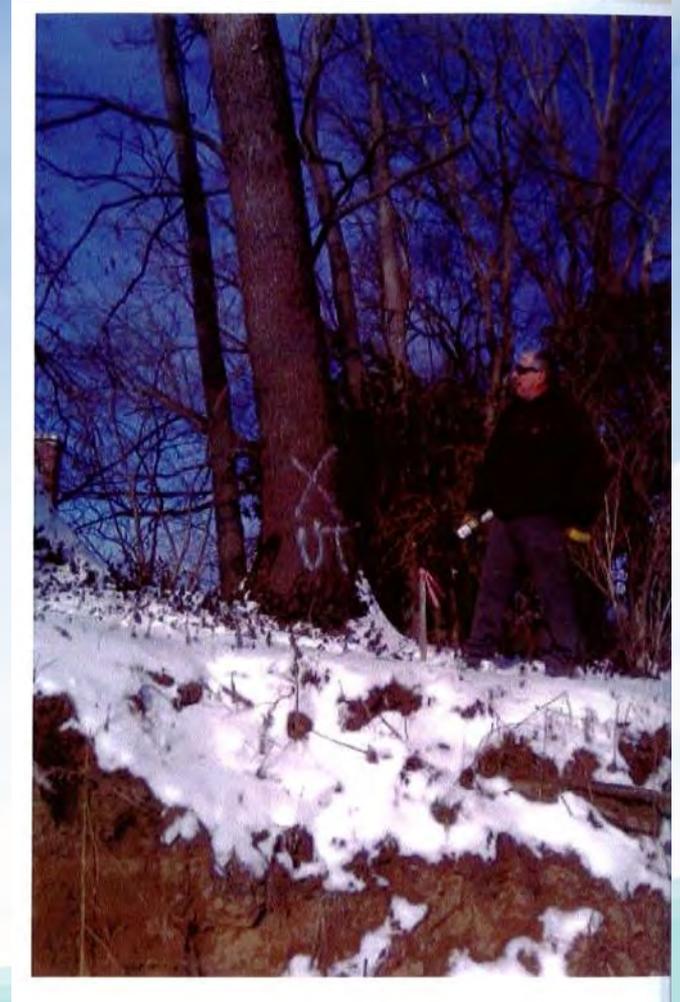
Ash

Walnut

Cherry

Osage Orange

Black Locust





Urban Timber Challenges

There were two significant challenges to the implementation of the urban timber program:

1. Hamilton County was under a quarantine that prohibits the movement of logs outside of the county. Because Hamilton County is urban, there are no sawmills that could mill the lumber to remove bark which would make it legal to transport.

The solution was to write a contract for a portable sawmill that could be transported to a city park where the log could be milled within the county and then transported legally to the mill that would kiln dry the lumber.





Urban Timber Challenges

2. The most significant challenge was developing a market for ash lumber. Cincinnati Public Schools (CPS) were in the process of rehabbing their aging school facilities. A major guiding principle of their plan is to have most of the buildings qualify for Leadership in Energy and Environmental Design (LEED) certification. GBBN, the lead architecture firm for CPS, designed furnishings constructed of urban timber. The end result was a contract with CPS to provide up to 20,000 board feet of urban timber annually.





Urban Timber

Memorandum of Understanding
Regarding an Agreement Between
Cincinnati Public Schools
and

The City of Cincinnati Board of Park Commissioners
For the
Urban Timber Partnership Program

This Memorandum of Understanding ("MOU"), effective March 3, 2008 by and among the Board of Education of the City of Cincinnati Public Schools ("CPS"), the City of Cincinnati Board of Park Commissioners ("Park Board"), concerning certain matters regarding the implementation of an Urban Timber Partnership Program ("The Program") is as follows:

WHEREAS, CPS is involved with an Ohio School Facilities Commission Accelerated Urban Initiative Program Project as part of its Facilities Master Plan ("FMP"); and

...





Wood-Mizer
Hydraulic



CPS

CPS

Process: Panelization



- Glued up 18" wide
- Clamped to dry
- Final Sanding



Process: Furniture Assembly



Process: Furniture Assembly



Rivers	Lakes
They cut great canyons and valleys into the land.	When water flows into a basin, it creates one of these.
The longest one in the world is the Nile, which travels over 4,000 miles through Africa.	Many of them were formed thousands of years ago by glaciers.
They are formed when small streams meet and flow together.	The biggest one in the world is the Caspian Sea, between Asia and Europe.

Cause	Effect



A wooden rolling bookshelf with four shelves. The top shelf holds a green educational chart and a yellow chart. The second and third shelves are filled with books, including a set of blue encyclopedias. The bottom shelf contains a stack of papers and a colorful book cover.



A wooden cabinet with multiple drawers. The top drawer is labeled 'Atmosphere'. Below it, there are several more drawers, some with labels like 'Oceans' and 'Continents'. A colorful map is placed on top of the cabinet.



Urban Timber

In 2012, CPS informed the Park Board that they had constructed enough shelving units and that they no longer had a need for Urban Timber.

From 2008 – 2012 Parks supplied 40,000 board feet of lumber, primarily ash and oak.





Urban Timber

- In January 2103, park staff began to work on a new flooring product that would be an efficient use of Urban Timber and that could be counted toward Leadership in Environmental Design (LEED) credits for construction or renovation of homes and buildings. The flooring is moderately priced, durable, beautiful, and can be milled into 3 different widths. It is a local product that is sustainably harvested and is eligible for LEED credit in 4 categories.
- LEED Credits: MRc3.1, MRc3.2, MRc4, MRc5





Urban Timber

Agreement - Wilhelm Lumber Price Sheet

Scope of Services:

- Arrange for, schedule, and load logs from Cincinnati Park locations (primarily Mt Airy Forest) and haul to Wilhelm Lumber location for processing. Wood to be sawn into agreed upon thickness, seasoned, and graded. Most wood to be formed into grade lumber (unless otherwise specified) and milled into $\frac{3}{4}$ " thick flooring.





Urban Timber

1" rough sawn seasoned dimensional lumber. Lumber to be random lengths and widths cut to minimize defects. Lumber to be graded. Quantity to be determined.

Unseasoned dimensional lumber. Lumber such as osage orange, white oak, and black locust may be cut into 4"x 4", 6" x 6", or other common dimensions for trail use. Wood to be rough sawn.





Urban Timber

$\frac{3}{4}$ " Tongue and Groove Flooring – Lumber selected for flooring to be solid, with minimal amount of defects. Flooring to be cut in random lengths, and may contain some small defects such as knot holes. Flooring to be bid at the square foot rate based on deliverable product.

Random width $\frac{3}{4}$ " tongue and groove flooring One third of each – 3", 4", and 5". Estimated quantity 5,000 square feet





Agreement - Wilhelm Lumber Price Sheet

Scope of Services:

Arrange for, schedule, and load logs from Cincinnati Park locations (primarily Mt Airy Forest) and haul to Wilhelm Lumber location for processing. Wood to be sawn into agreed upon thickness, seasoned, and graded. Most wood to be formed into grade lumber (unless otherwise specified) and milled into 3/4" thick flooring. A small percentage to be milled into dimensional lumber, quantities to be determined. Wilhelm to provide for short term storage of logs and lumber (up to 8 months). Wilhelm to be paid directly by the City of Cincinnati for labor and materials incurred under the scope of services for deliverable product in either square foot or board foot measurements. Quantities below are based on annual estimated amounts.

Wood Products

1. 3/4" Tongue and Groove Flooring – Lumber selected for flooring to be solid, with minimal amount of defects. Flooring to be cut in random lengths, and may contain some small defects such as knot holes. Flooring to be bid at the square foot rate based on deliverable product.

- a. Random width 3/4" tongue and groove flooring One third of each – 3", 4", and 5". Estimated quantity 5,000 square feet

Price per square foot \$ 2 10

- b. Three inch width flooring. Estimated quantity. Estimated quantity 5,000 square feet.

Price per square foot \$ 2 60

- c. Four inch width flooring. Estimated quantity 5,000 square feet.

Price per square foot \$ 2 60

- d. Five inch width flooring. Estimated quantity 5,000 square feet.

Price per square foot \$ 2 60

2. 1" rough sawn seasoned dimensional lumber. Lumber to be random lengths and widths cut to minimize defects. Lumber to be graded. Quantity to be determined.

- a. Price per board foot: = 68¢

3. Unseasoned dimensional lumber. Lumber such as osage orange, white oak, and black locust may be cut into 4" x 4", 6" x 6", or other common dimensions for trail use. Wood to be rough sawn.

- a. Price per board foot: = 48¢ (Hauling Charge Not Included)





BEAUTIFUL • ECONOMICAL • SUSTAINABLE



The Urban Timber program is a collaborative between the Cincinnati Park Board, Wilhelm Lumber, and many other local partners. The goal is to repurpose sustainably harvested municipal logs into affordable, high quality hardwood flooring and lumber products. A portion of the proceeds is used to plant public trees.

For more information please visit www.urbantimberohio.com.



g better 









