

Cincinnati Urban Wood Utilization Program

Using Park Trees for School Lockers

The Challenge

Urban forests in the United States produce an estimated 200 million cubic yards of residue annually, according to The Urban Hardwood Recovery Project. Tree removals due to pests, storms, and safety hazards are creating these vast amounts of urban “waste” wood. In addition, removing this urban wood to a landfill can take up a significant portion of an urban forester’s budget and reduce longevity of landfills. Overall, wood waste accounts for about 17 percent of the total waste received at municipal solid waste landfills in the United States, according to the Forest Products Laboratory of the Forest Service.

The Solution

The Northeastern Area State and Private Forestry provided initial funding to the Cincinnati Parks urban forester to reuse and recycle trees removed from Cincinnati’s urban forest. Since 2001, the city has been involved with projects to convert waste wood into durable products, such as cabinets, rather than disposing of the trees in a landfill or grinding them into mulch.

An innovative partnership of Cincinnati’s Parks Department, Solid Waste District, and Public Schools, and River City Furniture conducts this model urban wood utilization program. The partnership mills trees that are felled from public and private properties into usable lumber, which is fashioned into cubbies and lockers for the public schools.

Many of the trees are dead and dying ash that have been infested with emerald ash borer and must be removed. The logs are stored in marshalling yards until a sawyer with a portable mill is available to saw the lumber. It is then transported to a kiln and dried. Standard dimension pieces are glued together from the boards. This material is sent to the cabinet manufacturer where the cabinets are assembled.



Cabinets at Mt. Airy Elementary School, Cincinnati, are made from urban wood waste.

Demand for these unique cabinets is generated through the Ohio Schools Facility Commission, which recently adopted LEED Certification standards as part of their “Green Schools” Initiative. An article in Contracting Profits stated that buildings funded by the Commission will be encouraged to meet Gold Certification (Trade Press Media Group, 2011. <http://www.cleanlink.com/cp/Links:Archives/October2007/newsbriefs>).

GBBN Architects and River City Furniture are working on expanding the product line and distribution of the recycled wood furniture.

Resulting Benefits

- Urban waste wood is diverted from a landfill to become value-added products for schools.
- Partnerships between Federal, State, and city agencies have increased.
- Recycling natural materials for the greatest benefit promotes sustainability of natural resources.

Sharing Success

The Northeastern Area State and Private Forestry and the city of Cincinnati are sharing their ideas with the Ohio Division of Natural Resources, the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture, and Ohio State University Extension, to establish urban waste wood recycling programs in other areas of the State.

Mention of commercial enterprises is for information only and does not imply endorsement by the U.S. Department of Agriculture.

LEED (Leadership in Energy and Environmental Design) Certification is bestowed on buildings that meet specifications for land use, water and energy efficiency, construction materials, and indoor air quality. Four different levels of certification—Certified, Silver, Gold, and Platinum—are available.



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