Woodchips or Treasures?

Garden sustainability through wood reutilization

Landscape To Harvest: Creative, Innovative And Engaging Uses Of Your Garden's Bounty

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Details of Michigan State University Campus

- *2,100 acres of developed campus*
- *3,000 acres of farms*
- *Over 20,000 trees*
- *956 Taxa & 84 Genera*

Data recording for trees & shrubs

Research

Teaching

Outreach

Previous Wood Utilization

- ~ 300 trees lost each year
- Trees & branches were chipped
- Used as landscaping mulch or burned in power plant
- Both methods release CO_2 into the atmosphere.
- Sold as firewood at MSU Surplus Store

Sustainability on Campus Began….

- *Power plant converted to natural gas*
- *Sparked a conversation….*
  - *Paradigm Shift: Can we repurpose or reutilize wood from downed trees?*
  - *Some trees of historic significance to campus*
  - *What partnerships would be needed?*
- *Grant & other funds secured to purchase a saw mill and refurbish existing kilns*

Partnerships: Spartan Shadows

- Infrastructure Planning & Facilities, Landscape Services
- MSU Department of Forestry
- W.J. Beal Botanical Garden and Campus Arboretum
- MSU Surplus Store
- Local Artisans

The Goals: Sustainable Use of Resources.

Director of Campus Arboretum, Dr. Frank Telewski, along with arborists examining a recent downed tree.

Logs from campus reserved for milling

The Goals: Education

Students learning to scale a log

Dan Brown, Sustainable Bioproducts Specialist demonstrating the milling process.

Forestry student internships

The Goals: Community Outreach

Engaging youth from
Greening of Detroit Program

MSU Tiny House constructed by students and the community.

The Process

Average of 300 trees/year removed

Logs are put into ‘holding’. All are tagged.

Wood is milled

The Process

Boards are moved to the kiln for drying

- Dried for approximately 3 months to a moisture content of 8%
- Artists chose their material

After kiln dried

The Goals: Heirloom Quality Craftsmanship

Crafted by local artesian wood artists

MSU Spartan Shadows

Custom made furniture for on Campus

- Using for construction and remodeling
- Assist with LEED Certification

From the revenue of the craftsmanship….

Planting more trees

Fund student internships

This board is in excess of 350 years old!!

Campus and our Trees:

- Protect from construction (traffic)
- Treatment (EAB, DED, blight)
- Do not grow to harvest

We're preserving what's remaining. Tree 'adopted' by College of Arts & Letters. ..exhibits resiliency!

Fostering a sustainable “cradle to grave” or “nursery to wood product” philosophy at MSU

consistent with USDA forest service urban wood reutilization program

- *https://www.fs.usda.gov/naspf/programs/wood-education-and-resource-center/urban-wood-utilization*
- *https://msusurplusstore.com/msu-shadows/*
- *http://urbanwood.org/about/details/recycle-ann-arbor/*

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- Richard Kobe[4]
- Daniel Brown[4]
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