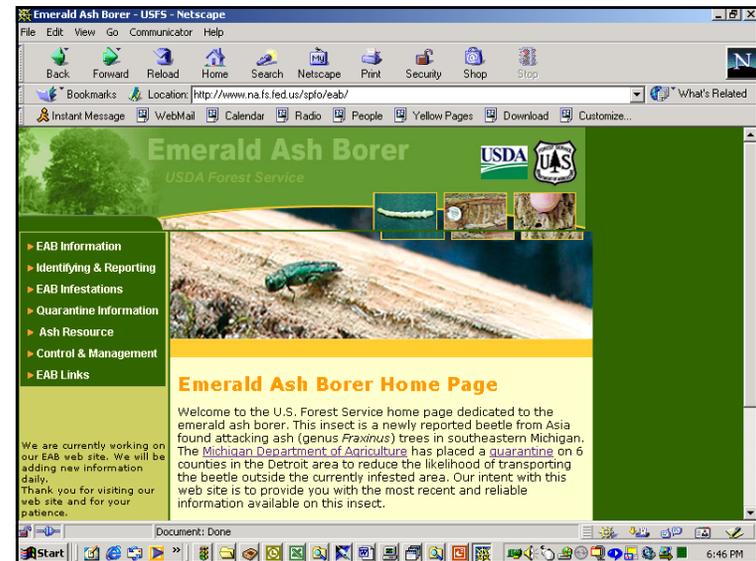


## Tree Selection for Urban Communities Natives, Exotics, and Common Sense

Bert Cregg  
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Department of Horticulture  
Department of Forestry

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EXTENSION



Ashes made up 25% or more of the tree cover in many SE Michigan communities

- Why did we plant so many ashes?
  - Easy to grow
  - Desirable ornamental characteristics
  - Tough trees
  - Few pest problems



## Common environmental stresses

- Temperature
  - Heat
  - Cold



## Common environmental stresses

- Water
  - Flooding
  - Drought



## Common environmental stresses

- Chemical exposure
  - De-icing Salt
  - Pollution



## Common environmental stresses

- Adverse soil conditions
  - Alkaline pH
  - Loss of topsoil
  - Poor drainage



## Common environmental stresses

- Adverse soil conditions
  - Alkaline pH
  - Loss of topsoil
  - Poor drainage

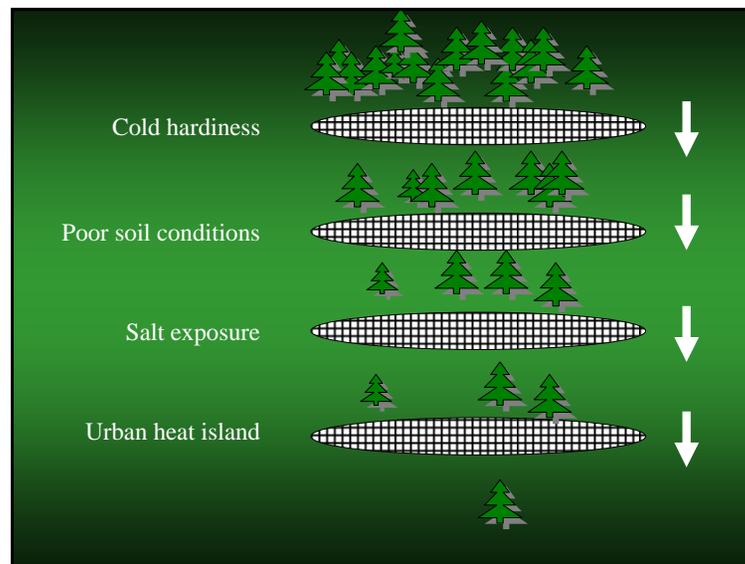


## Generalizations about environmental factors and tree selection

- Tolerance of minimum winter temperature is the single biggest determinant of whether a tree will grow in a given location

## Generalizations about environmental factors and tree selection

- Trees adapted to wet areas (i.e., flood plain species) can usually tolerate some level of drought
- Trees adapted to uplands may not be able to tolerate any flooding



## Why not just plant natives?

- Native environmental conditions no longer exist in urban and suburban areas
- Exotic pests
- Production system/transplanting issues
- Still need diversity

## So where does this leave us?



## Right tree, Right place

- Hardiness
- Soil conditions
- Pest resistance
- Exposure
- Height/growth limitations
- Diversity
- Native



## Selecting a diversified portfolio



## Freeman maple *Acer x freemanii*

- Zone 3
- Height: 50'
- Broadly oval crown
- Dark green leaves
- Long lasting fall color



State street maple  
*Acer miyabi*  
'State street'

- Hardy to zone 4
- Upright –oval
- 40'-50'



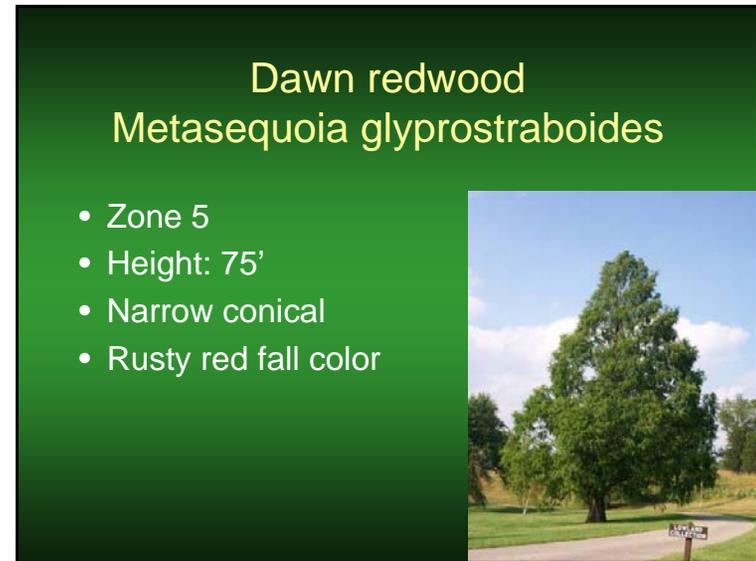
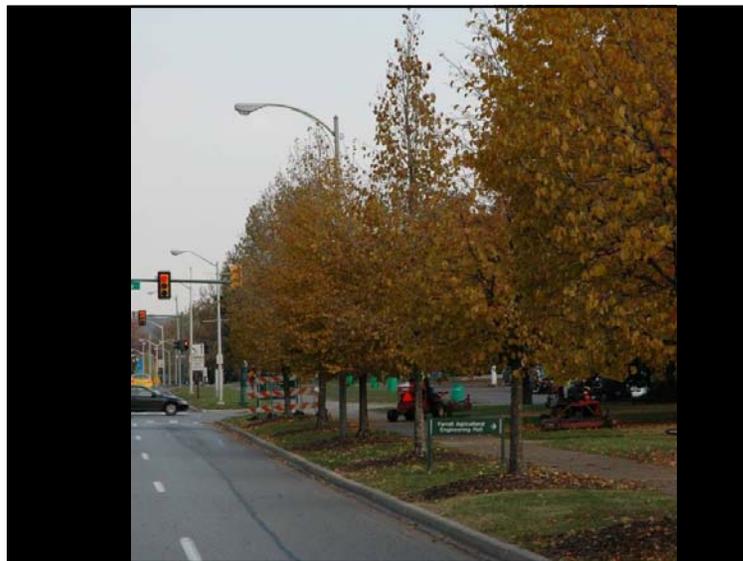
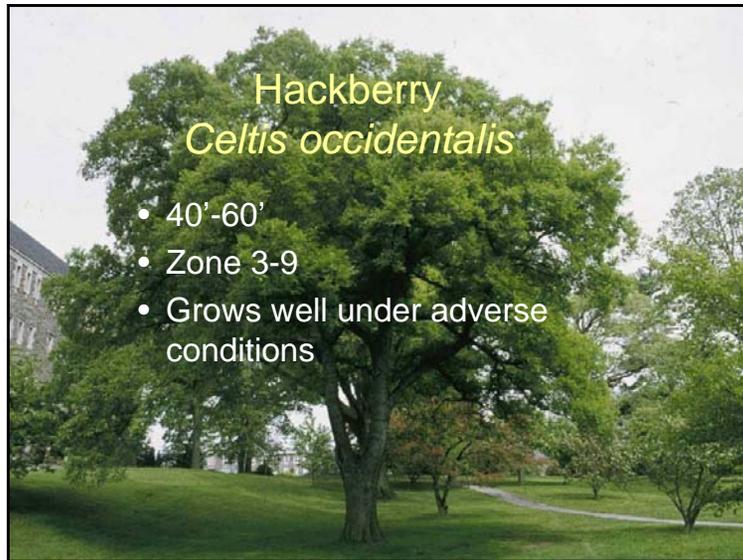
State street maple  
*Acer miyabi* 'State street'



Red horsechestnut  
*Aesculus x carnea*

- Zone 4
- Height 30'
- Spread 35'
- Flowers dark red,  
10" long clusters







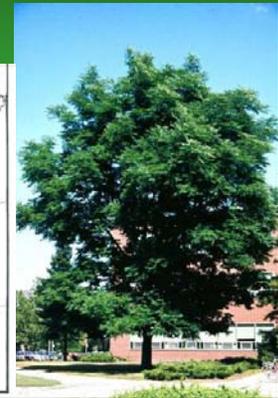
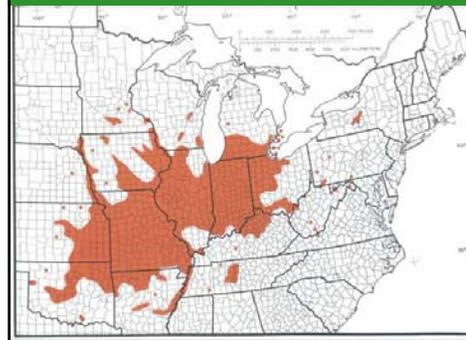
## Baldcypress *Taxodium distichum*



- Zone 5
- Height 55'
- Pyramidal
- Coarser branch structure than dawn redwood



## Kentucky coffeetree *Gymnocladus dioica*





Swamp white oak  
*Quercus bicolor*



Sweetgum  
*Liquidambar styraciflua*

- Medium to fast growing tree
- Fruit can be messy
- Cultivars to look for:
  - 'Worplesdon'
  - 'Urbanite'



Scarlet oak  
*Quercus coccinea*

- Zone 4
- 50'
- Dark green, glossy foliage
- Deep red fall color





## Black tupelo *Nyssa sylvatica*



Urban Horticulture Institute, Department of Horticulture, Cornell University - Windows Internet Explorer

http://www.hort.cornell.edu/UrbanTrees/sectree/index.html

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Urban Trees

### Recommended Urban Trees

The Assessment and Tree Selection for Stress Tolerance

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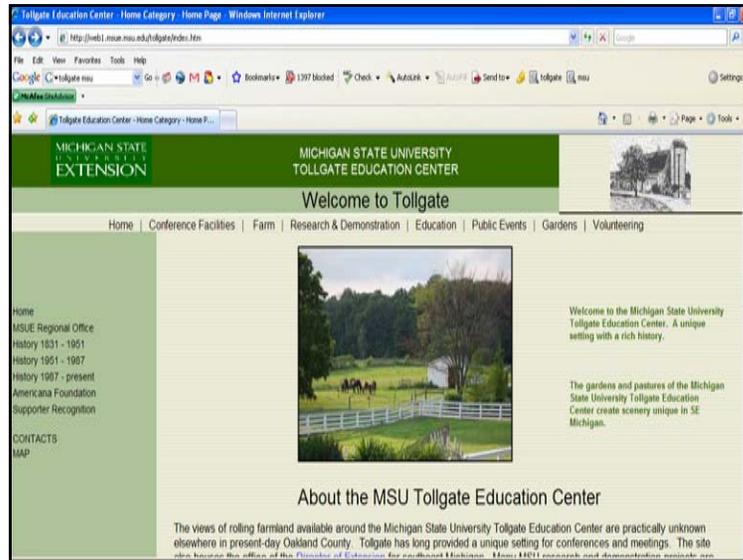
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[Completing the site assessment checklist](#)  
[USDA plant hardiness zone map](#)

Recommended urban trees for USDA plant hardiness Zone 6 and colder:

- I. **Small trees** (less than 30') suitable for city environment plantings under low overhead utility wires or in restricted spaces
- II. **Medium to large trees** (greater than 30') suitable for city environment plantings

Trees assessed by the site assessment conditions.





Questions?  
Comments?